Offering Circular dated 31 July 2019

TRAFIGURA GROUP PTE. LTD.

(incorporated with limited liability in Singapore)

EUR 262,500,000
Perpetual Resettable Step-up Subordinated Securities

The Perpetual Resettable Step-up Subordinated Securities (the "**Securities**") will be issued in an initial aggregate principal amount of EUR 262,500,000 by Trafigura Group Pte. Ltd., a limited liability company incorporated and existing under the laws of Singapore (the "**Issuer**" or "**Trafigura**") on 31 July 2019 (the "**Issue Date**"). The Securities bear interest from, and including, the Issue Date payable, subject to the provisions relating to interest deferral, semi-annually in arrear on 31 January and 31 July in each year commencing on 31 January 2020 (each, an "**Interest Payment Date**"), as provided in "*Terms and Conditions of the Securities – Interest"*. The period commencing on, and including, the Issue Date to, but excluding, the first Interest Payment Date and each successive period commencing on, and including, an Interest Payment Date to, but excluding, the next succeeding Interest Payment Date is called an "**Interest Period**".

The rate of interest per annum ("**Interest Rate**") applicable to the Securities shall be: (i) in respect of the period from, and including the Issue Date to, but excluding, the Interest Payment Date falling on 31 July 2024 (the "**Initial Reset Date**"), the Initial Interest Rate (as defined in "*Terms and Conditions of the Securities – Interest* "), being 7.50 per cent. per annum; and (ii) in respect of each Interest Period from, and including, the Initial Reset Date, unless previously redeemed, the aggregate of the Relevant Reset Interest Rate and the Step-Up Margin (each as defined in "*Terms and Conditions of the Securities – Interest*").

The Issuer may, at its sole discretion, elect to defer (in whole but not in part) any interest which is otherwise due to be paid on an Interest Payment Date by providing holders of the Securities ("**Securityholders**") with not more than 30 nor less than five Business Days' (as defined in "*Terms and Conditions of the Securities – Interest*") notice prior to the relevant Interest Payment Date, unless, during the relevant Observation Period (as defined in "*Terms and Conditions of the Securities – Interest*") a "**Compulsory Interest Payment Event**" has occurred. A Compulsory Interest Payment Event means the occurrence of any of the following events: (a) a dividend, distribution or other payment has been paid, made or declared by the Issuer on or in respect of any Pari Passu Obligations or Subordinated Obligations; (each as defined in *Terms and Conditions of the Securities*); or (b) the Issuer or any Subsidiary (as defined in "*Terms and Conditions of the Securities – Interest* ") of the Issuer has purchased, redeemed or otherwise acquired any Securities, Pari Passu Obligations or Subordinated Obligations; save, in each case, for certain exceptions as described in "*Terms and Conditions of the Securities – Interest* ". Any interest so deferred shall remain outstanding in full and constitute "**Arrears of Interest**" and shall be subject to the restrictions and provisions as described in "*Terms and Conditions of the Securities – Interest* ". Each amount of Arrears of Interest shall bear interest from and including the date on which (but for such deferral) it would have been due to be paid as if it constituted the principal of the Securities at the prevailing Interest Rate and the amount of such interest (the "**Additional Interest Amount**") with respect to Arrears of Interest shall be due and payable pursuant to "*Terms and Conditions of the Securities – Interest*" and shall be calculated by applying, in respect of each Interest Period, the applicable Interest Rate to the amount of the Arrears of Interest and otherwise *mutatis mutandis*. The Additional Interest Amount accrued up to any Interest Payment Date shall be added, for the purpose of calculating the Additional Interest Amount accruing thereafter, to the amount of Arrears of Interest remaining unpaid on such Interest Payment Date so that it will itself become and constitute Arrears of Interest. See "*Terms and Conditions of the Securities – Interest* ".

The Securities are perpetual securities and have no fixed redemption date. The Issuer may at any time redeem all, but not some only, of the Securities during the Relevant Period (as defined in "*Terms and Conditions of the Securities – Redemption and Purchase*) by providing notice to the Holders specifying the date in the Relevant Period on which redemption shall occur, or on any Interest Payment Date falling after the Initial Reset Date in each case, as at the relevant Early Redemption Amount (as defined in "*Terms and Conditions of the Securities – Redemption and Purchase*"), as further set out in "*Terms and Conditions of the Securities*". The Securities may also be redeemed in whole, but not in part, at the option of the Issuer upon the occurrence of a Withholding Tax Event, an Income Tax Deduction Event, an Accounting Redemption Event or a Sweep-up Redemption Event (each as defined in "*Terms and Conditions of the Securities – Redemption and Purchase*") in each case at the relevant Early Redemption Amount (as defined in "*Terms and Conditions of the Securities – Redemption and Purchase*") which shall include any Arrears of Interest, Additional Interest Amounts and interest accrued to the date fixed for redemption.

The Securities will constitute direct, unsecured and subordinated obligations of the Issuer as described in "*Terms and Conditions of the Securities – Status, Subordination and Winding-up* ".

There is currently no public market for the Securities. Application has been made for the listing of the Securities on the Official List of the Singapore Exchange Securities Trading Limited ("**SGX-ST**"). The SGX-ST assumes no responsibility for the correctness of any of the statements made or opinions expressed or reports contained herein. Admission to the Official List of the SGX-ST or quotation of any Securities on the SGX-ST is not to be taken as an indication of the merits of the Issuer, its Subsidiaries, or the Securities. This Offering Circular has not been registered as a prospectus with the Monetary Authority of Singapore ("**MAS**"). See "*Subscription and Sale*".

The denominations of the Securities shall be EUR 100,000 and integral multiples of EUR 1,000 in excess thereof.

The Securities will initially be represented by a global security in registered form (the "**Global Security**") and will be registered in the name of a nominee of a common depositary for Euroclear Bank SA/NV ("**Euroclear**") and Clearstream Banking S.A. ("**Clearstream, Luxembourg**"). The Securities have not been, and are not intended to be, rated.

The Securities will be issued pursuant to the Scheme and the Restructuring (each as defined in the section entitled "*Recent Developments*").

Prospective investors should have regard to the factors described under the section headed "*Risk Factors*" in this Offering Circular.

CONTENTS

IMPORTANT NOTICES

The Issuer accepts responsibility for the information contained in this Offering Circular and declares that, having taken all reasonable care to ensure that such is the case, the information contained in this Offering Circular to the best of its knowledge is in accordance with the facts and contains no omission likely to affect its import.

The Issuer has confirmed that this Offering Circular contains all information regarding the Issuer and its consolidated subsidiaries (together the "**Group**") and the Securities which is (in the context of the issue of the Securities) material; such information is true and accurate in all material respects and is not misleading; any opinions, predictions or intentions expressed in this Offering Circular on the part of the Issuer are honestly held or made and are not misleading; this Offering Circular does not omit to state any material fact necessary to make such information, opinions, predictions or intentions (in such context) not misleading in any material respect; and all proper enquiries have been made to ascertain and to verify the foregoing.

The Issuer has not authorised the making or provision of any representation or information regarding the Issuer or the Securities other than as contained in this Offering Circular or as approved for such purpose by the Issuer. Any such representation or information should not be relied upon as having been authorised by the Issuer.

Neither Citicorp Trustee Company Limited (the "**Trustee**") nor any of its respective affiliates have independently verified the information contained herein or authorised the whole or any part of this Offering Circular. Accordingly, no representation, warranty or undertaking, express or implied, is made and no responsibility or liability is accepted by the Trustee as to the accuracy, completeness or sufficiency of the information contained or incorporated in this Offering Circular or any other information provided by the Issuer in connection with the offering of the Securities.

To the fullest extent permitted by law, the Trustee does not accept any responsibility for the contents of this Offering Circular or any other information provided by the Issuer in connection with the offering of the Securities or their distribution. The Trustee accordingly disclaims all and any liability whether arising in tort or contract or otherwise, which it might otherwise have in respect of this Offering Circular or any such statement. The Trustee has not undertaken to review the financial condition or affairs of the Issuer or the Group for so long as the Securities remain outstanding or to advise any investor or potential investor in the Securities of any information coming to the attention of the Trustee.

No person is authorised to give any information or to make any representation not contained in this Offering Circular and any information or representation not so contained must not be relied upon as having been authorised by or on behalf of the Issuer or the Trustee. Neither the delivery of this Offering Circular nor any sale or exchange made in connection herewith shall, under any circumstances, create any implication that there has been no change in the affairs of the Issuer or the Group since the date hereof or the date upon which this Offering Circular has been most recently amended or supplemented or that there has been no adverse change in the financial condition of the Issuer or the Group since the date hereof or the date upon which this Offering Circular has been most recently amended or supplemented or that the information contained in it or any other information supplied in connection with the Securities is correct as of any time subsequent to the date on which it is supplied or, if different, the date indicated in the document containing the same.

This Offering Circular is not intended to provide the basis of any credit or other evaluation, nor should it be considered as a recommendation by the Issuer or the Trustee that any recipient of this Offering Circular should purchase the Securities. Each potential purchaser of the Securities should determine for itself the relevance of the information contained in this Offering Circular and its purchase of the Securities should be based upon such investigations with its own tax, legal and business advisers as it deems necessary.

In making an investment decision, investors must rely on their own examination of the Issuer, the Group and the terms of the offering of the Securities, including the merits and risks involved. See "*Risk Factors*" for a discussion of certain factors to be considered in connection with an investment in the Securities.

This Offering Circular does not constitute an offer to sell or the solicitation of an offer to buy the Securities in any jurisdiction or to any person to whom it is unlawful to make an offer or solicitation in such jurisdiction. The distribution of this Offering Circular and the offering, sale and delivery of Securities in certain jurisdictions may be restricted by law. Persons into whose possession this Offering Circular comes are required by the Issuer to inform themselves about and to observe any such restrictions. In particular, there are restrictions on the distribution of this Offering Circular and the offer and sale of the Securities in the United States, the United Kingdom, Jersey, the European Economic Area, Singapore, Australia, Belgium, Denmark, France, Germany, Italy, Spain, Switzerland, Hong Kong, Japan, Norway, Luxembourg, Korea, the People's Republic of China, the Republic of China, the United Arab Emirates and Dubai International Financial Centre.

The Securities have not been and will not be registered under the United States Securities Act of 1933 (as amended) (the "**Securities Act**") or with any securities regulatory authority of any state or other jurisdiction of the United States and may not be offered or sold in the United States or to, or for the account or benefit of, U.S. persons (as defined in Regulation S) other than pursuant to an exemption from the registration requirements of the Securities Act. Accordingly, the Securities are being offered and sold only: (a) to a person who confirms (i) that it is an Accredited Institutional Investor within the meaning of Rule 501(a)(1), (2), (3), (7) or (8) under the Securities Act, (ii) that it is purchasing the Securities for its own account or for one or more separate accounts maintained by such investor or for the account of one or more pension or trust funds and not with a view to the distribution thereof and (iii) that it understands and acknowledges the risks involved in purchasing the Securities, and has carried out a detailed independent due diligence exercise in connection with the Issuer and the Securities and (b) to non-US persons outside the United States in reliance upon Regulation S under the Securities Act.

PROHIBITION OF SALES TO EEA RETAIL INVESTORS – The Securities are not intended to be offered, sold or otherwise made available to and should not be offered, sold or otherwise made available to any retail investor in the European Economic Area ("**EEA**"). For these purposes, a retail investor means a person who is one (or more) of: (i) a retail client as defined in point (11) of Article 4(1) of Directive 2014/65/EU (as amended, "**MiFID II**"); or (ii) a customer within the meaning of Directive 2016/97/EU (as amended or superseded), where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II. Consequently no key information document required by Regulation (EU) No 1286/2014 (as amended, the "**PRIIPs Regulation**") for offering or selling the Securities or otherwise making them available to retail investors in the EEA has been prepared and therefore offering or selling the Securities or otherwise making them available to any retail investor in the EEA may be unlawful under the PRIIPS Regulation.

MIFID II product governance / Professional investors and ECPs only target market – Solely for the purposes of each manufacturer's product approval process, the target market assessment in respect of the Securities has led to the conclusion that: (i) the target market for the Securities is eligible counterparties and professional clients only, each as defined in MiFID II; and (ii) all channels for distribution of the Securities to eligible counterparties and professional clients are appropriate. Any person subsequently offering, selling or recommending the Securities (a "**distributor**") should take into consideration the manufacturers' target market assessment; however, a distributor subject to MiFID II is responsible for undertaking its own target market assessment in respect of the Securities (by either adopting or refining the manufacturers' target market assessment) and determining appropriate distribution channels.

Notification under Section 309B of the Securities and Futures Act, Chapter 289 of Singapore – The Securities are prescribed capital markets products (as defined in the Securities and Futures (Capital Markets Products) Regulations 2018) and Excluded Investment Products (as defined in MAS Notice SFA 04-N12: Notice on the Sale of Investment Products and MAS Notice FAA-N16: Notice on Recommendations on Investment Products).

FORWARD-LOOKING STATEMENTS

This Offering Circular contains statements that are, or may be deemed to be, "forward looking statements".

All statements other than statements of historical facts included in this Offering Circular may constitute forward-looking statements. In addition, forward-looking statements generally can be identified by the use of forward-looking terminology such as "may", "will", "expect", "project", "plan", "schedule", "intend", "estimate", "anticipate", "believe", "continue", "could", "should", "would" or similar words or expressions. Such forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause the actual results or performance or achievements of the Issuer and the Group to differ materially from those expressed or implied by such forward-looking statements. These factors include those set forth in the section of this Offering Circular entitled "*Risk Factors*". Such forward-looking statements are based on numerous assumptions regarding the Group's present and future business strategies and the environment in which the Group will operate in the future. The risks described in this Offering Circular are not the only risks investors should consider. New risk factors emerge from time to time and it is not possible for the Issuer to predict the effect of all such risk factors on its business and that of the Group or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward looking statements. Given these risks and uncertainties, investors should not place any undue reliance on forward looking statements as a prediction of actual results, performance or achievements. The Issuer undertakes no obligation to update the forward looking statements contained in this Offering Circular or any other forward looking statements it may make. All subsequent written and forward-looking statements attributable to the Issuer or persons acting on its behalf are expressly qualified in their entirety by such cautionary statements.

INFORMATION REGARDING THE GROUP'S MARKETS AND INDUSTRY

Market data and certain industry forecasts used throughout this Offering Circular have been obtained from internal surveys, market research and publicly available information and industry publications. Industry publications generally state that the information that they contain has been obtained from sources believed to be reliable but that the accuracy and completeness of that information is not guaranteed. Similarly, internal surveys, industry forecasts and market research, while believed to be reliable, have not been independently verified, and the Issuer does not make any representation as to the accuracy of that information.

Substantially all the information contained in this Offering Circular concerning the Group's position vis-à-vis its competitors is based on internal analyses derived from publicly available information. The Issuer believes that these sources and estimates are reliable, but the Issuer has not independently verified them. Any discussion of matters relating to the Group's competitive position in this Offering Circular is, therefore, subject to uncertainty due to concerns about the completeness or reliability of available official and public information.

CURRENCY INFORMATION, ROUNDING AND OTHER FINANCIAL INFORMATION

In this Offering Circular, unless otherwise specified or the context otherwise requires, all references to "**Singapore**" are references to the Republic of Singapore, all references to the "**U.S.**", "**U.S.A.**" and "**United States**" are references to the United States of America and all references to the "**UK**" are references to the United Kingdom. All references to "**U.S. dollars**" or "**USD**" are to the lawful currency of the United States of America and all references to "**Euro**" or "**EUR**" are to the currency introduced at the start of the third stage of European economic and monetary union as defined in Article 2 of Council Regulation (EC) No 974/98 of 3 May 1998 on the introduction of the euro, as amended.

Certain monetary amounts in this Offering Circular have been subject to rounding adjustments; accordingly, figures shown as totals in certain tables may not be an arithmetic aggregation of the figures which precede them.

References herein to "**billions**" are to thousands of millions.

OVERVIEW OF OFFERING

The following overview is qualified in its entirety by the remainder of this Offering Circular.

Issuer:	Trafigura Group Pte. Ltd.
Securities:	EUR Perpetual Resettable Step-up Subordinated Securities.
Maturity:	The Securities are perpetual securities in respect of which there is no fixed redemption date.
Principal Paying Agent and Calculation Agent:	Citibank N.A., London Branch
Trustee:	Citicorp Trustee Company Limited
Registrar:	Citigroup Global Markets Europe AG
Issue Date:	31 July 2019
Issue Price:	N/A
Form of Securities, Initial Delivery of Securities and Clearing Systems:	The Securities will initially be represented by a global security in registered form (the "**Global Security**") and will be registered in the name of a nominee of a common depositary for Euroclear Bank SA/NV ("**Euroclear**") and Clearstream Banking S.A. ("**Clearstream, Luxembourg**"). See also "*Summary of Provisions relating to the Securities while in Global Form*".
Denominations:	EUR 100,000 and integral multiples of EUR 1,000 in excess thereof.
Status of the Securities:	The Securities will constitute direct, unsecured and subordinated obligations of the Issuer as described in "*Terms and Conditions of the Securities – Status, Subordination and Winding-up* ".
Interest:	The Securities bear interest from, and including, the Issue Date payable, subject to the provisions relating to interest deferral, semi-annually in arrear on 31 January and 31 July in each year commencing on 31 January 2020, (each, an "**Interest Payment Date**") provided that if any Interest Payment Date is not a Business Day, payment shall be made on the next subsequent Business Day. The period commencing on, and including, the Issue Date to, but excluding, the first Interest Payment Date and each successive period commencing on, and including, an Interest Payment Date to, but excluding, the next succeeding Interest Payment Date is called an "**Interest Period**". See "*Terms and Conditions of the Securities – Interest* ".
Interest Rate:	The rate of interest per annum ("**Interest Rate**") applicable to the Securities shall be: (i) in respect of the period from, and including, the Issue Date to, but excluding, the Interest Payment Date falling on 31 July 2024 (the "**Initial Reset Date**"), the Initial Interest Rate (as defined in "*Terms and Conditions of the Securities – Interest* ") being 7.50 per cent. per annum; (ii) in respect of each Interest Period from, and including, the Initial Reset Date, unless previously redeemed, the aggregate of the Relevant Reset Interest Rate and the Step-Up Margin (each as defined in "*Terms and Conditions of the Securities – Interest*"). See "*Terms and Conditions of the Securities – Interest* ".

Interest Deferral and payment of Arrears of Interest:

The Issuer may, at its sole discretion, elect to defer (in whole but not in part) any interest which is otherwise due to be paid on an Interest Payment Date by providing holders of the Securities ("**Securityholders**") with not more than 30 nor less than five Business Days' (as defined in "*Terms and Conditions of the Securities* ") notice prior to the relevant Interest Payment Date, unless during the relevant Observation Period (as defined in "*Terms and Conditions of the Securities – Interest* ") a "*Compulsory Interest Payment Event* " has occurred. A Compulsory Interest Payment Event means the occurrence of any of the following events: (a) a dividend, distribution or other payment has been paid, made or declared by the Issuer on or in respect of any Pari Passu Obligations or Subordinated Obligations (each as defined in "*Terms and Conditions of the Securities – Status, Subordination and Winding-up* "); or (b) the Issuer or any Subsidiary has purchased, redeemed or otherwise acquired any Securities, Pari Passu Obligations or Subordinated Obligations; save, in each case, for certain exceptions as described in "*Terms and Conditions of the Securities – Interest* ".

Any interest so deferred shall remain outstanding in full and constitute "**Arrears of Interest**" and shall be subject to the restrictions and provisions as described in "*Terms and Conditions of the Securities – Interest* ".

Each amount of Arrears of Interest shall bear interest from and including the date on which (but for such deferral) it would have been due to be paid as if it constituted the principal of the Securities at the prevailing Interest Rate and the amount of such interest (the "**Additional Interest Amount**") with respect to Arrears of Interest shall be due and payable pursuant to "*Terms and Conditions of the Securities – Interest* " and shall be calculated by applying, in respect of each Interest Period, the applicable Interest Rate to the amount of the Arrears of Interest and otherwise mutatis mutandis. The Additional Interest Amount accrued up to any Interest Payment Date shall be added, for the purpose of calculating the Additional Interest Amount accruing thereafter, to the amount of Arrears of Interest remaining unpaid on such Interest Payment Date so that it will itself become and constitute Arrears of Interest. See "*Terms and Conditions of the Securities – Interest* ".

Redemption:

The Securities are perpetual securities in respect of which there is no fixed redemption date by which the Issuer would be under the obligation to redeem the Securities.

Early Redemption:

The Issuer may redeem all, but not some only, of the Securities at any time during the Relevant Period, meaning a period starting 90 calendar days before and ending on the Initial Reset Date by providing notice to the Holders specifying the date in the Relevant Period on which redemption shall occur, or on any Interest Payment Date falling after the Initial Reset Date, in each case, at the relevant Early Redemption Amount (as defined in "*Terms and Conditions of the Securities – Redemption and Purchase*") as further set out in "*Terms and Conditions of the Securities*". The Securities may also be redeemed in whole, but not in part, at the option of the Issuer upon the occurrence of a Withholding Tax Event, an Income Tax Deduction Event, an Accounting Redemption Event or a Sweep-up Redemption Event (each as defined in "*Terms and Conditions of the Securities – Redemption and Purchase*") in each case at the relevant Early Redemption Amount (as defined in "*Terms and Conditions of the Securities – Redemption and Purchase*") which shall include any Arrears of Interest, Additional Interest Amounts and interest accrued to the date fixed for redemption.

See "*Terms and Conditions of the Securities – Redemption and Purchase*".

Taxation:	Payments of interest in respect of the Securities may be subject to withholding or deduction for taxes in Singapore unless a waiver from such withholding or deduction in respect of the Securities is granted by the Singapore taxation authorities. If a such a waiver is not granted by the Singapore taxation authorities and the Issuer is required by law to withholdvd or deduct for such taxes with respect to a payment to Securityholders, then the Issuer shall, in accordance with Condition 6, pay such additional amounts as will result in receipt by the Securityholders after such withholding or deduction of such amounts as would have been received by them had no such withholding or deduction been required (see "*Terms and Conditions of the Securities – Taxation* "). If applicable, payments of interest in respect of the Securities may be subject to withholding taxes in the jurisdiction of any Substitute appointed pursuant to the "*Terms and Conditions of the Securities – Meetings of Securityholders, Modification, Waiver and Substitution*" subject to applicable law and customary exceptions, all as described in "*Terms and Conditions of the Securities – Taxation* ".
Substitution:	The Issuer shall be entitled, subject to certain conditions, to substitute itself as obligor under the Securities with another entity, see "*Terms and Conditions of the Securities – Meetings of Securityholders, Modification, Waiver and Substitution* ".
Governing Law:	English law, other than the status, subordination and winding up provisions in Condition 2(a) of the terms and conditions of the Securities (the "**Conditions**") which will be governed by the law of Singapore.
No Ratings:	The Securities have not been and are not intended to be rated.
Listing and Admission to Trading:	There is currently no public market for the Securities. Application has been made for the listing of the Securities on the Official List of the Singapore Exchange Securities Trading Limited ("**SGX-ST**"). Such permission will be granted when the Securities have been admitted to the Official List of the SGX-ST. The Securities will be traded on the SGX-ST in a minimum board lot size of the EUR equivalent of SGD 200,000 for so long as such Securities are listed on the SGX-ST. The SGX-ST assumes no responsibility for the correctness of any of the statements made or opinions expressed or reports contained herein. Admission to the Official List of the SGX-ST or quotation of any Securities on the SGX-ST is not to be taken as an indication of the merits of the Issuer, its Subsidiaries, or the Securities.
Selling Restrictions:	The United States, the United Kingdom, the European Economic Area and Singapore. See "*Subscription and Sale*".
Risk Factors:	There are certain factors that may affect the Issuer's ability to fulfil its obligations under the Securities. These include various risks relating to the Issuer's and the Group's business. In addition, there are certain factors which are material for the purpose of assessing the market risks associated with the Securities. These include the fact that the Securities may not be a suitable investment for all investors and certain market risks. See "*Risk Factors* ".

Use of Proceeds:	The Securities will be distributed by the Group pursuant to the Scheme in connection with the Nyrstar debt restructuring having an aggregate principal amount of EUR 262,500,000 for which no cash proceeds will be received by the Issuer. See "*Subscription and Sale*".
ISIN (Restricted Securities):	XS2034073606
Common Code (Restricted Securities):	203407360
ISIN (Unrestricted Securities):	XS2033327854
Common Code (Unrestricted Securities):	203332785
FISN:	TRAFIGURA GROUP/EUR NT PERP SUB RE
CFI Code:	DBFXPR
LEI Code:	549300HJ8VS88NIO3006

RISK FACTORS

Any investment in the Securities is subject to a number of risks. Prior to investing in the Securities, prospective investors should carefully consider risk factors associated with any investment in the Securities, the business of the Issuer and the industry or industries in which it operates together with all other information contained in this Offering Circular, including, in particular the risk factors described below. Words and expressions defined in the "Terms and Conditions of the Securities" below or elsewhere in this Offering Circular have the same meanings in this section.

Prospective investors should note that the risks relating to the Issuer, the industries in which it operates and the Securities summarised in the section of this Offering Circular headed "Overview of the Offering" are the risks that the Issuer believes to be the most essential to an assessment by a prospective investor of whether to consider an investment in the Securities. However, as the risks which the Issuer face relate to events and depend on circumstances that may or may not occur in the future, prospective investors should consider, among other things, the risks and uncertainties described below.

The following is not an exhaustive list or explanation of all risks which investors may face when making an investment in the Securities and should be used as guidance only. Additional risks and uncertainties relating to the Issuer that are not currently known to the Issuer, or that it currently deems immaterial, may individually or cumulatively also have a material adverse effect on the business, prospects, results of operations and/or financial position of the Issuer and, if any such risk should occur, the price of the Securities may decline and investors could lose all or part of their investment. Investors should consider carefully whether an investment in the Securities is suitable for them in light of the information in this Offering Circular and their personal circumstances. For background in respect of the risks relating to Nyrstar N.V., please see the section entitled "Recent Developments".

Risks relating to Trafigura

Trafigura is exposed to declines in the current and expected volumes of supply or demand for commodities, to commodity prices and to deterioration in economic and financial conditions.

The current and expected volumes of supply and demand for the commodities in which Trafigura is active vary over time based on changes in resource availability, government policies and regulation, costs of production, global, regional and national economic conditions, demand in end markets for products in which the commodities are used, technological developments, including commodity substitutions, fluctuations in global production capacity, global and regional weather conditions and natural disasters including, earthquake, tsunami, hurricanes, wildfire, drought, and flooding, all of which impact global markets and demand for commodities. Furthermore, changes in current and expected supply and demand conditions impact the current and expected future prices (and thus the price curve) of each commodity.

Declines in the volume of each commodity produced or traded by Trafigura, as well as declines in the price of commodities, could materially adversely impact Trafigura's business, results of operations and earnings. These declines could result in a reduction in the average trading unit margin achieved in respect of the volumes handled by Trafigura's trading activities, or a reduction in the volume and/or margin in respect of commodities produced by Trafigura's industrial assets.

Sustained increases in the price of commodities may require higher levels of working capital to be put in place in order to finance Trafigura's trading activities. Although Trafigura expects the continued support of financial institutions, there can be no assurance that additional credit or funding will be made available to Trafigura in the abovementioned circumstances or that the cost of such funding will not have a negative impact on the profitability of its trading activities. See "*Liquidity risk and a failure to obtain funds could limit Trafigura's ability to engage in desired activities and grow its business*."

In addition, a decline in economic and financial conditions globally or in a specific country, region or sector may have a material adverse effect on Trafigura's business, results of operations or earnings. For example, although most commodities' fixed pricing periods are relatively short, a significant rapid reduction or increase in commodity prices could result in customers or suppliers, as the case may be, being unwilling or unable to honour their contractual commitments to purchase or sell commodities on pre-agreed pricing terms. In addition, a tightening of available credit may make it more difficult for Trafigura to obtain, or may increase the cost of obtaining, financing for its trading activities and capital expenditures at its industrial assets.

Trafigura's financial performance is exposed to the level of treatment charges.

Following the completion of the acquisition of Nyrstar, Trafigura will be exposed to additional risks related to commodity prices. Nyrstar's profitability is highly sensitive to the market price of zinc and lead (which determines the amount of value available to be shared between the miner and the smelter) and treatment charges ("**TCs**") (which determine how that value is shared between the miner and the smelter). The market price of zinc and lead impacts both (i) the TC contribution and (ii) the contribution of refined metals produced and sold over and above the metal content paid for in concentrates purchased from the miner ("**free metal**"), in each case, impacting Nyrstar's revenues. TC levels and the amount of free metal available each has a significant impact on Nyrstar's financial performance given the bulk of Nyrstar's revenues are generated from smelting activities. In addition, Nyrstar's results are impacted by the prices of copper, silver, gold and other metals.

The prices of zinc, lead, copper, silver, gold and other metals have historically been subject to fluctuations in response to market forces. Factors largely beyond Nyrstar's control, such as the cyclicality of consumption, actual or perceived changes in levels of supply and demand, the availability and cost of substitute materials, inventory levels maintained by producers, trading on the metals market and exchange rates, all influence metal prices.

In addition, Nyrstar's results remain closely linked to the levels of TCs that it charges zinc miners to refine their zinc concentrates and lead miners to refine their lead concentrates. TCs are, in effect, paid by the miner to the smelter in the form of a concession (or deduction) on the price of the zinc or lead concentrates that the miner sells to the smelter. A decrease in TCs can be expected to have a material adverse effect on Nyrstar's business, results of operations and financial condition.

TCs are subject to fluctuations based on the supply and demand dynamics of the global zinc, lead or copper concentrate market. TCs are typically negotiated annually between individual miners and smelters in view of the anticipated supply and demand of concentrates and the likely metal price; a "benchmark" level of TCs is typically set in the first or the second quarter of each year. When supplies of concentrates (i.e., the mines' output) exceed available smelting capacity utilisation, there typically is a positive impact on the TCs realised by the smelters, and the smelters are able to obtain a larger portion of the value of the contained metal. Conversely, when supplies of concentrates are less than available smelting capacity utilisation, there usually is a negative impact on the TCs for smelters, and a greater share of the metal value is retained by miners. Depending on timing and overall circumstances, an increase in smelting capacity utilisation, particularly in regions like China where production costs are lower compared to operations in more mature regions, could therefore significantly and adversely affect TCs. The impact of TC levels is expected to further decrease in the future in line with the completion of the Port Pirie Redevelopment and in line with the increasing Nyrstar mining production.

Trafigura is exposed to geopolitical risk.

Trafigura operates and owns assets in a large number of geographic regions and countries and, as a result, is exposed to a wide range of political, regulatory and tax environments. These environments are subject to change in a manner that may be materially adverse for Trafigura, including changes to government policies and regulations governing industrial production, foreign investments, price controls, export controls, tariffs, income and other forms of taxation (including policies relating to the granting of advance rulings on taxation matters), nationalisation or expropriation of property, repatriation of income, royalties, the environment and health and safety.

Many of the commodities that Trafigura sources and markets are considered strategic resources for particular countries. Governments in these countries may decide not to recognise previous arrangements if they regard them as no longer being in the national interest. Governments may also implement export controls on commodities regarded by them as strategic (such as oil) or place restrictions on foreign ownership of industrial assets or other assets considered strategic resources. Renegotiation or nullification of existing agreements, leases, permits or tax rulings, changes in fiscal policies (including new or increased taxes or royalty rates or the implementation of a windfall tax) and currency restrictions imposed by the governments of countries in which Trafigura operates could have a material adverse effect on Trafigura.

Trafigura's operations may also be affected by political and economic instability in some of the countries in which it operates. Such instability could be caused by, among other things, terrorism, civil war, guerrilla activities, military repression, civil disorder, crime, workforce instability, change in government policy or the ruling party, economic or other sanctions imposed by other countries, extreme fluctuations in currency exchange rates or high inflation.

International trade disputes could result in tariffs and other protectionist measures that could adversely affect Trafigura's business. Tariffs could increase the cost of the commodities that Trafigura trades. Tariffs could also make commodities more expensive for customers, which could reduce demand from customers and consumers. In the United States, the current administration has publicly supported, and in some instances has already proposed or taken action with respect to, significant changes to certain trade policies, including import tariffs and quotas, modifications to international trade policy, the withdrawal from or renegotiation of certain trade agreements and other changes that may affect international trade relations, any of which may require Trafigura to significantly modify Trafigura's current business practices or may otherwise materially and adversely affect Trafigura's business. Such changes could also result in retaliatory actions by United States' trade partners. For example, in 2018, the United States imposed tariffs and proposed quotas on aluminum imports to the United States. These actions and the possibility of trade conflicts stemming from these actions could negatively impact global trade and economic conditions in many of the regions where Trafigura does business. Countries may also adopt other protectionist measures that could limit Trafigura's ability to trade or reduce the viability of Trafigura's mining operations, which could have a material adverse effect on Trafigura's business.

The geopolitical risks associated with operating in a large number of regions and countries, if realised, could affect Trafigura's ability to manage or retain interests in its industrial activities and could have a material adverse effect on the profitability, ability to finance or, in extreme cases, viability of one or more of its industrial assets.

Liquidity risk and a failure to obtain funds could limit Trafigura's ability to engage in desired activities and grow its business.

Liquidity, or ready access to funds, is essential to Trafigura's business. Liquidity risk is the risk that Trafigura is unable to meet its payment obligations when due, or that it is unable, on an ongoing basis, to borrow funds in the market on an unsecured or secured basis at an acceptable price to fund actual or proposed commitments. A lack of liquidity may mean that Trafigura will not have funds available to maintain or increase its trading activities, meet margin requirements, grow its industrial activities as planned or take advantage of other opportunities that may arise in its trading or industrial activities.

Trafigura's trading activities employ significant amounts of working capital to fund purchases of commodities for future delivery to Trafigura's end customers, to meet margin requirements under derivative contracts and to fund the acquisition and maintenance of certain transport and storage assets which complement its trading activities. Continued funding of and access to working capital is critical for Trafigura to maintain its historic levels of trading activity and increase such levels in the future. Trafigura's industrial activities are also capital intensive and the continued funding of such activities is critical for Trafigura to maintain its ownership interests in its industrial assets, to maintain production levels in periods when net operating cash flow is negative or insufficient to cover capital expenditures, to develop its activities or increase production levels in the future in accordance with its business plan and to grow its industrial activities through the acquisition of new assets. Prudent liquidity risk management requires Trafigura to maintain sufficient cash and cash equivalents through the accumulation of retained earnings and to have ready sources of committed funding available to meet anticipated and unanticipated funding needs. While Trafigura adjusts its minimum internal liquidity targets in response to changes in market conditions, its liquidity may be impaired due to circumstances it is unable to control, such as general market disruptions, increases in the prices of commodities or an operational problem that affects its suppliers or customers or Trafigura itself.

In addition to maintaining a cash position, Trafigura relies on two other principal sources of liquidity: borrowings under various short-term and long-term bank and asset-backed facilities and issuance of notes in the debt capital markets. An inability to raise money in the long-term and short-term debt markets could have a material adverse effect on Trafigura's liquidity. Trafigura's access to debt in amounts adequate to finance its activities could be impaired by factors that affect Trafigura in particular or the industries or geographies in which it operates. For example, lenders could develop a negative perception of Trafigura's short-term or long-term financial prospects if Trafigura incurred large losses, if the level of its trading activities were to materially decrease due to a market downturn in the demand for commodities, or if its business was otherwise materially adversely affected. Lenders could also develop a negative perception of the commodities trading industry if, for example, a competitor suffers from financial difficulties. Although Trafigura expects the continued support of financial institutions, there can be no assurance that additional credit or funding will be made available in the future.

Future debt financing, if accessible, may result in increased borrowing costs, increased financial leverage, decreased income available to fund further acquisitions and expansions and the imposition of restrictive covenants on Trafigura's businesses and operations. In addition, future debt financing may limit Trafigura's ability to withstand competitive pressures and render its businesses more vulnerable to economic downturns by exposing it to volatile interest rates, tighter credit markets and potentially reduced access to funding that may be needed to take advantage of future business opportunities.

Liquidity risk and a failure to obtain funds could affect the Group's ability to meet repayments to Securityholders.

Liquidity risk (as detailed in "*Liquidity risk and a failure to obtain funds could limit Trafigura's ability to engage in desired activities and grow its business*") could impact Trafigura's ability to make payments when due on the Securities. In the event that Trafigura does not have sufficient available liquidity or is unable to refinance the Securities in the long-term and short-term debt markets, the ability of Trafigura to make payments due on the Securities may be adversely impacted. As of 31 March 2019, Trafigura had USD 58.81 billion of credit facilities available to it, and USD 16.64 billion of these credit facilities had not been utilised and were available.

In addition, there can be no assurance that a material deterioration in Trafigura's operating results would not lead to violations of Trafigura's existing sources of liquidity, namely borrowings under various short-term and long-term bank and asset-backed facilities and the issuance of notes in the debt capital markets, which could have a material adverse effect on the financial position and prospects of Trafigura, and which could lead to Trafigura being unable to make the required payments to Securityholders pursuant to the Securities.

At the time of maturity of any other debt that Trafigura may incur, if Trafigura does not have sufficient cash flows from operations and other capital resources to pay its debt obligations, or to fund its other liquidity needs, it may be required to refinance its indebtedness. If Trafigura is unable to refinance its indebtedness or obtain such refinancing on terms acceptable to it, Trafigura may be forced to sell assets, or raise additional debt or equity financing in amounts which could be substantial. The type, timing and terms of any future financing will depend on Trafigura's cash needs and the prevailing conditions in the financial markets. Trafigura cannot guarantee that it would be able to accomplish any of these measures in a timely manner or on commercially reasonable terms, if at all and there can be no guarantee that the refinancing of such indebtedness, and the terms thereof, would not negatively impact Trafigura's ability to meet its obligations under the Securities.

Trafigura has significant outstanding indebtedness.

Trafigura has a significant amount of indebtedness, which could potentially impair its operating and financial flexibility and could adversely affect its business and financial position. A high level of indebtedness could potentially require Trafigura to use a substantial portion of cash flow from operations to service its debt, which could reduce the funds available for capital expenditure, acquisitions and other general corporate purposes. This could also potentially limit Trafigura's ability to borrow additional funds and increase its vulnerability to adverse economic conditions.

Trafigura may face uncertainties associated with its expansion plans.

Trafigura has undertaken certain expansion initiatives through the acquisition of various companies and the establishment of joint ventures, and as part of its strategy, Trafigura intends to continue pursuing a policy of measured expansion and development through asset acquisition.

Trafigura's expansion initiatives involve numerous risks, including but not limited to, the financial costs of investment in machinery and equipment, construction of new facilities and working capital requirements. Trafigura also regularly evaluates potential acquisitions of businesses that are complementary to Trafigura's businesses and client needs. As part of the process, Trafigura conducts business, legal and financial due diligence with the goal of identifying and evaluating material risks involved in any particular transaction. Despite Trafigura's efforts, Trafigura may be unsuccessful in ascertaining or evaluating all such risks. As a result, the intended advantages of any given acquisition may not be realised. If Trafigura fails to identify certain material risks from one or more acquisitions, its business, results of operations and financial position could be adversely affected.

Moreover mergers and acquisitions involve risks, including: unforeseen contingent risks or latent liabilities relating to these businesses that may only become apparent after the merger or acquisition is finalised, such as potential difficulties in the integration and management of the operations and systems; problems with the retention of select personnel; issues arising from the co-ordination of sales and marketing efforts; and diversion of Trafigura's management's attention from other ongoing business concerns.

These risks are magnified in the case of a sizeable transaction. This is particularly the case if the target company operates in an area ancillary to the Group's core business or substantially expands the Group's presence in a particular geographic or product market. While Trafigura believes it has the required expertise to manage the integration of such large new businesses or is able to identify, hire and retain the necessary additional expertise required, no assurance can be given that any significant acquisition will realise the positive results originally envisioned or that such an acquisition will be successfully integrated within the Group.

The success of Trafigura's acquisition and investment strategy depends on a number of factors, including: Trafigura's ability to identify suitable opportunities for investment or acquisition; whether Trafigura is able to complete an acquisition or investment agreement on terms that are satisfactory; the extent to which Trafigura is able to exercise control over the acquired company or business; the economic, business or other strategic objectives and goals of the acquired company or business compared to those of Trafigura; and Trafigura's ability to successfully integrate the acquired company or business with Trafigura's own business.

In addition, there is no assurance that the initiatives undertaken will result in increased revenues or cost cutting or other synergies commensurate with the investment costs. If Trafigura is unable to do so or cannot manage its costs, its business and profitability will be adversely affected as Trafigura will not able to recover the costs of its investment.

Risks relating to the integration of Nyrstar within Trafigura

Following the completion of the Nyrstar debt restructuring (the "**Nyrstar Debt Restructuring**"), the Group owns and controls substantially all of Nyrstar's operating business (the "**Nyrstar Operating Business**"). See the section entitled "*Recent Developments*".

The Group's increased control of the Nyrstar Operating Business involves risks that the acquired business will not trade in accordance with expectations and that business judgments concerning the value, strengths and weaknesses of the Nyrstar Operating Business acquired will prove to be incorrect. If the Group's increased interest in the Nyrstar Operating Business does not perform to expectations, the Group's results of operations and financial condition may be adversely affected. Furthermore, the Group may incur a number of significant unforeseen costs, including integration costs, in order to consolidate the Nyrstar Operating Business with its own business and operations. The successful integration of new businesses depends on the Group's ability to manage these new businesses, including cutting excess overheads and other costs. The successful integration of Nyrstar's operating business may also require substantial attention from the Group's senior management and the management of the Nyrstar Operating Business, which could disrupt the Group's operations by decreasing the time available that senior management has to attend to the management of the Group and to act on other acquisition opportunities.

There is no assurance that Trafigura will successfully or cost effectively integrate the Nyrstar Operating Business. If Trafigura is unable to successfully integrate the Nyrstar Operating Business or the acquisition otherwise does not perform to Trafigura's expectations, results of operations and financial condition may be adversely affected. It is also possible that the substantial management attention required by, and the indebtedness to be incurred in connection with, the transaction could cause Trafigura to forgo other acquisition opportunities, particularly if Trafigura encounters delays or unexpected costs or the acquisition otherwise does not perform to Trafigura's expectations.

Trafigura has paid, and expects to continue to pay, significant transaction costs in connection with the Nyrstar Debt Restructuring and other transactions related thereto. As a result of the Nyrstar Debt

Restructuring, Trafigura may also incur costs associated with integrating the Nyrstar Operating Business, and these costs may be significant and may have an adverse effect on Trafigura's future operating results if the anticipated returns from the Nyrstar Operating Business are not achieved. Although Trafigura expects that the elimination of duplicative costs and the realisation of other efficiencies related to the integration of the Nyrstar Operating Business should allow Trafigura to offset these incremental expenses over time, the net benefit may not be achieved in the near term, or at all. Furthermore, Trafigura may also be liable for the past acts, omissions or liabilities (including environmental liabilities) of Nyrstar, which may be unforeseen or greater than anticipated at the time of the completion of the Nyrstar Debt Restructuring.

Any change to Trafigura's ability to attract, retain and compensate key employees may impact its business.

Trafigura operates within a private company structure and as an employee-owned company. Any significant organisational or cultural change could result in certain key employees, whether skilled traders, or otherwise, leaving the Group. There are a number of other reasons why such personnel may leave, for example, an employee may leave Trafigura to go to a competitor, to start their own business, to retire or for other reasons.

Trafigura seeks to provide competitive compensation arrangements to retain and attract highly skilled personnel that are important to its business, including salaries and bonus and shareholding arrangements. While the Directors believe that Trafigura's current compensation arrangements are competitive and adequate to allow Trafigura to retain and attract the necessary calibre of employees, developments in the market or changes in internal culture may mean that these compensation payments may not be as effective as had been the case before and, as a result, Trafigura may need to change its compensation arrangements to make them more attractive to such employees which could be at an increased cost to Trafigura. The loss of any senior manager or other key personnel, as well as the inability to retain and/or attract new highly skilled personnel, could have a material adverse effect on Trafigura's business.

Trafigura is exposed to fluctuations in currency exchange and interest rates.

The significant majority of transactions undertaken by both Trafigura's trading and industrial activities are denominated in U.S. dollars. However, Trafigura is exposed to fluctuations in currency exchange rates:

- through its industrial activities, because a large proportion of the operating costs of these assets are denominated in the currency of the country in which each asset is located;
- through the costs of Trafigura's global office network, which are denominated largely in the currency of the country in which each office is located, the largest of such currency exposures being to the Swiss Franc, the Pound Sterling, the Singapore Dollar and the Euro; and
- through its trading activities, although only a small minority of purchase or sale transactions are denominated in currencies other than U.S. dollars.

The reporting currency and the functional currency of the majority of Trafigura's operations is the U.S. dollar, as this is assessed to be the principal currency of the economic environment in which Trafigura operates. The exchange rates between relevant local currencies and the U.S. dollar have historically fluctuated, and the translation effect of such fluctuations may have a material adverse effect on Trafigura's consolidated results of operations or financial condition.

Trafigura's exposure to changes in interest rates results from investing and borrowing activities undertaken to manage its liquidity and capital requirements. Substantially all of Trafigura's borrowings, other than its fixed-rate bonds, bear interest at floating rates. An increase in interest rates would therefore result in a relatively immediate increase in the cost of servicing Trafigura's indebtedness and could adversely affect Trafigura's financial results. Although borrowing costs are taken into account when setting transaction terms, there is no assurance that increased financing costs can be passed on to customers and/or suppliers. Trafigura may elect in the future to enter into interest rate swaps to convert some or all of its floating-rate debt to fixed-rate debt or enter into fixed-rate to floating-rate swaps. There can be no assurance that Trafigura will not be materially adversely affected by interest rate changes in the future.

The commodities industry is competitive and Trafigura may have difficulty effectively competing with other commodity trading and industrial companies.

Trafigura faces strong competition in each of its business segments. In addition, some of these competitors or existing producers may, in the future, use their resources to broaden into all of the markets in which Trafigura operates and therefore compete further against Trafigura. These competitors may also expand and diversify their commodity sourcing, processing or trading operations, or engage in pricing or other financial or operational practices that could increase competitive pressure on Trafigura across each of its business segments. Increased competition may result in losses of market share for Trafigura and could materially adversely affect Trafigura's business, results of operations and financial condition.

Risks relating to Trafigura's trading and industrial activities

The success of Trafigura's trading activities depends in part on its ability to identify and take advantage of arbitrage opportunities.

Many of the commodity markets in which Trafigura operates are fragmented and periodically volatile. As a result, discrepancies generally arise in respect of the prices at which the commodities can be bought or sold in different forms, geographic locations or time periods, taking into account the numerous relevant pricing factors, including freight and product quality. These pricing discrepancies can present Trafigura with arbitrage opportunities whereby Trafigura is able to generate profit by sourcing, transporting, blending, storing or processing the relevant commodities.

Trafigura's profitability is, in large part, dependent on its ability to identify and exploit such arbitrage opportunities. A lack of such opportunities, for example due to a prolonged period of pricing stability in a particular market, or an inability to take advantage of such opportunities when they present themselves, because of, for example, a shortage of liquidity or an inability to access required logistics assets or other operational constraints, could adversely impact Trafigura's business, results of operations and financial condition.

Trafigura's hedging strategy may not always be effective.

Trafigura's trading activities involve a significant number of purchase and sale transactions across multiple commodities. In order for Trafigura to mitigate the risks in its trading activities related to commodity price fluctuations and potential losses, Trafigura has a policy, at any given time, of hedging all index price exposure of its trading inventory not already contracted for sale at pre-determined prices through futures and swap commodity derivative contracts, either on commodities' exchanges or in the over the counter ("**OTC**") market. In the event of disruptions in the commodity exchanges or markets on which Trafigura engages in these hedging transactions, Trafigura's ability to manage commodity price risk may be adversely affected and this could in turn materially adversely affect its business, financial condition and results of operations.

Moreover, Nyrstar is exposed to the shape of the forward price curve for underlying metal prices. The volatility in the London Metal Exchange price creates differences between the average price Nyrstar pays for the contained metal and the price Nyrstar receives for it. Nyrstar engages in transactional hedging which means that it undertakes short-term hedging transactions to cover the timing risk between raw material purchases and sales of metal and to cover its exposure on fixed-price forward sales of metal to customers. In March 2019, Nyrstar closed out all of its metal at risk cash collateralised positions and is currently fully exposed to metal prices during the period covering the purchase and sale of metals.

Trafigura is exposed to counterparty risk in its trading activities.

Trafigura's trading and industrial activities are subject to non-performance risk by its suppliers, customers and hedging counterparties. For example:

- a significant rapid increase in commodity prices could result in suppliers being unwilling to honour their contractual commitments to sell commodities to Trafigura at pre-agreed prices;

- a significant rapid reduction in commodity prices could result in customers being unwilling or unable to honour their contractual commitments to purchase commodities from Trafigura at pre-agreed prices;

- customers may take delivery of commodities from Trafigura and then find themselves unable to honour their payment obligations due to financial distress or any other reasons; and

- hedging counterparties may find themselves unable to honour their contractual commitment due to financial distress or other reason.

Trafigura seeks to reduce the risk of customer non-performance by requiring credit support from creditworthy financial institutions, where appropriate, and by imposing limits on open accounts extended. In addition, mark-to-market exposures in relation to hedging contracts are regularly and substantially collateralised (primarily with cash) pursuant to margining arrangements in place with such hedge counterparts. However, no assurance can be given that Trafigura's attempts to reduce the risk of customer non-performance will be successful in every instance or that its financial results will not be adversely affected by the failure of a counterparty or counterparties to fulfil their contractual obligations in the future. Such failure could have an adverse impact on Trafigura's business, results of operations and financial condition, including by creating an unintended, unmatched commodity price exposure.

Trafigura's risk management policies and procedures may leave it exposed to unidentified or unanticipated risks.

Trafigura's trading and industrial activities are exposed to commodity price, foreign exchange, interest rate, counterparty (including credit), operational, regulatory and other risks. Trafigura has devoted significant resources to developing and implementing policies and procedures to manage these risks and expects to continue to do so in the future. Nonetheless, Trafigura's policies and procedures to identify, monitor and manage risks may not be fully effective.

Some of Trafigura's methods of monitoring and managing risk are based on historical market behaviour that may not be an accurate predictor of future market behaviour. Other risk management methods depend on evaluation of information relating to markets, suppliers, customers and other matters that are publicly available or otherwise accessible by Trafigura. This information may not in all cases be accurate, complete, up to date or properly evaluated. Management of operational, legal and regulatory risk requires, among other things, policies and procedures to properly record and verify a large number of transactions and events, and these policies and procedures may not be fully effective in doing so. Trafigura uses, among other techniques, value-at-risk ("**VaR**") as a key risk measurement technique for its trading activities. VaR does not purport to represent actual gains or losses in fair value on earnings to be incurred by Trafigura, nor does Trafigura expect that VaR results are indicative of future market movements or representative of any actual impact on its future results. Failure to mitigate all risks associated with Trafigura's business could have a material adverse effect on Trafigura's business, results of operations and financial condition.

Trafigura is reliant on third parties and non-controlled entities to source the majority of the commodities purchased by its trading operations.

Trafigura purchases a minority portion of the physical commodities sold by its trading operations from its controlled industrial operations and associates. The remainder of the commodities sourced by its trading operations are purchased from third party suppliers or entities in which Trafigura may have a minority stake. Trafigura is exposed to both price and supply risks with respect to commodities sourced from third parties and entities in which it holds a minority stake, including joint ventures and non-controlled associated entities. The supply agreements between Trafigura and such third parties or non-controlled entities range from short-term spot contracts to multiple years in duration and have historically been renewed by Trafigura and the suppliers on commercially acceptable terms. However, in general, these companies have no obligation to renew their supply agreements. Trafigura may not be able to compel the relevant company to enter into or renew a supply agreement with it in cases where Trafigura does not own 100 per cent.. of the company or where related party transaction minority shareholder approval requirements apply. Trafigura relies on these agreements to source some of its key commodities and any termination or failure to renew such agreements at the end of their terms could have an adverse effect on the Trafigura's business, results of operations and financial condition.

Any increases in Trafigura's purchase price relative to the price at which Trafigura trades a commodity could adversely affect Trafigura's margins. Trafigura's business, results of operations, financial condition and prospects could be materially adversely impacted if it is unable to continue to source required volumes of commodities from its suppliers on reasonable terms or at all.

Any disruptions in the supply of such products by factors such as weather and other natural disasters, insolvency or business failure of its third party suppliers, unexpected maintenance problems, damage to production sites, collapse of mines, labour disruptions and changes in laws and regulations could adversely affect Trafigura's margins. Trafigura's business, results of operations, financial condition and prospects could be materially adversely impacted if it is unable to continue to source the required volumes of commodities from its third party suppliers on reasonable terms, without interruption, or at all.

Trafigura's trading activities require access to significant amounts of freight, storage, infrastructure and logistics support and Trafigura is exposed to increases in the costs, and the availability, thereof.

Trafigura's trading activities entail shipments of commodities in large quantities, often by ocean-going transport. Trafigura often competes with other producers, purchasers or traders of commodities or other products for limited storage and berthing facilities at ports and freight terminals, which can result in delays in loading or unloading Trafigura's products and expose Trafigura to significant delivery interruptions. Limitations or interruptions in rail, shipping or port capacity could impede Trafigura's ability to deliver its products on time. In addition, increases in the costs of freight could adversely affect Trafigura's business, results of operations or financial condition.

Trafigura also requires significant storage capacity for its commodities, which it sources both through facilities in which Trafigura holds equity stakes and pursuant to rental agreements with, among others, oil terminals and tank farms and metal and other warehouses. Any decrease in Trafigura's ability to access its customary levels of capacity from these storage facilities or an increase in the price at which Trafigura can acquire storage capacity could have an adverse effect on Trafigura's business by forcing Trafigura to use storage facilities in less advantageous locations or at prices that make it less profitable for Trafigura to supply its customers.

Trafigura holds some of its industrial assets through non-controlling stakes or joint ventures and strategic partnership arrangements.

Trafigura does not fully control some of its industrial investments. Although Trafigura has sought to take steps to protect its industrial activities where it does not exercise control, the boards of these companies may:

- have economic or business interests or goals that are inconsistent with or are opposed to those of Trafigura;
- exercise veto rights or take shareholders' decisions so as to block actions that Trafigura believes to be in its best interests and/or in the best interests of all shareholders;
- take action contrary to Trafigura's policies or objectives with respect to its investments or commercial arrangements; or
- as a result of financial or other difficulties, be unable or unwilling to fulfil their obligations under any joint venture or other agreement, such as contributing capital to expansion or maintenance projects.

Where projects and operations are controlled and managed by Trafigura's co-investors or where control is shared on an equal basis, Trafigura may provide expertise and advice, but it has limited or restricted ability to mandate compliance with Trafigura's policies and/or objectives. Trafigura may conduct business with these entities in which it has an economic interest; however, such business is conducted on an arm's length basis and in accordance with Trafigura's own policies and objectives. Nevertheless, such joint ventures may undertake business operations or make investment decisions which conflict with Trafigura's own businesses to Trafigura's detriment. Moreover, improper management or ineffective policies, procedures or controls of a non-controlled entity could adversely affect the business, results of operations and financial condition of the relevant investment and, therefore, of Trafigura.

Trafigura's trading and industrial activities involve operating risks and hazards, many of which are outside Trafigura's control.

Trafigura's business is subject to numerous operating risks and hazards normally associated with the development and operation of natural resource or other industrial projects, many of which are beyond Trafigura's control. These operating risks and hazards include unanticipated variations in grade and other geological problems, seismic activity, climatic conditions such as flooding or drought, metallurgical and other processing problems, technical failures, unavailability of materials and equipment, industrial actions or disputes, industrial accidents, labour force disruptions, unanticipated transportation constraints, tribal action or political protests, environmental hazards, fire, explosions, vandalism and crime and other force majeure factors. These risks and hazards could result in damage to, or destruction of, properties, ships, storage facilities or production facilities, may cause production to be reduced or to cease at properties or production facilities, may result in personal injury or death, environmental damage, business interruption and legal liability, may result in actual production differing from estimates of production or may impede Trafigura's ability to deliver products on time to customers.

Smelters, an important part of Nyrstar's operations, are especially vulnerable to interruptions, particularly where events cause a stoppage which necessitates a shutdown in operations. Stoppages in smelting, even if lasting only a few hours, can cause the contents of furnaces to solidify, resulting in a plant closure for a significant period and necessitating expensive repairs, any of which could adversely affect Nyrstar's business, results of operations or financial condition.

The realisation of such operating risks and hazards and the costs associated with them could materially adversely affect Trafigura's business, results of operations and financial condition, including by requiring significant capital and operating expenditures to abate the risk or hazard, restore Trafigura or third party property, compensate third parties for any loss and/or pay fines or damages.

Trafigura's assets are subject to environmental hazards through their shipping, transportation and storage activities, and through their mining and smelting activities.

Where Trafigura holds or has interests in industrial activities, these assets are generally subject to environmental hazards as they involve the storage, disposal and transportation of hazardous materials. For example, Trafigura is the largest investor in Puma Energy Holdings Pte. Ltd. (together with its subsidiaries, the "**Puma Energy Group**", "**Puma**" and "**Puma Energy**"). Puma Energy's focus is in the oil storage and distribution business and, in particular, it is responsible for the storage, transport and retail distribution of large quantities of oil products which by their nature present such potential environmental risks. Through IWL Holding BV (Netherlands) (together with its subsidiaries, the "**Impala Terminals Group**"), Trafigura's bulk commodity terminals and warehousing business is responsible for extensive terminals, warehousing facilities and blending operations as well as the operation of a major deep water terminal, which similarly poses potential environmental hazards, as does DT Group, an indirect subsidiary of the Company, which has interests in shipping, trucking and recycling and among its other activities is involved in the transport of bitumen.

In addition, its mining activities are subject to environmental hazards through the processes and chemicals used in traditional extraction and production methods, environmental hazards may exist on Trafigura's owned or leased properties or at those of the industrial activities in which it holds an interest, or may be encountered while its products are in transit. Nyrstar faces additional environmental risks both through its mining operations as discussed below, but also in its smelting operations where the economics of such operations are reliant in part on the prices achievable for the marketable by-products of smelting. Nyrstar generates large quantities of by-products such as sulfur dioxide gas in its zinc and lead production process, as well as solid residues with zinc, lead, copper, silver, gold and other minor metal values. In order to maximise recovery of resource components, minimise emissions and comply with its environmental commitments, it processes these by-products into forms that facilitate further metals recovery or render them suitable for sale to external parties.

Damage to refineries, bulk storage depots, offshore mooring systems or vessels carrying oil or to a facility where it is stored could lead to a spill, causing environmental damage with significant clean-up or remediation costs and legal costs.

Trafigura, including through its acquisition of the Nyrstar Operating Business, also owns mining assets. The processes and chemicals used in traditional extraction and production methods in respect of such mining assets as well as the engineering design of its mining infrastructure (e.g. tailing dams) are subject to environmental hazards. In addition, the storage of tailings at Trafigura's industrial assets may present a risk to the environment, property and persons. There remains a risk of leakage from or failure of Trafigura's tailings dams, as well as theft and vandalism during the operating life of the assets or after closure. Trafigura may be liable for losses associated with environmental hazards, have its licences and permits withdrawn or suspended or may be forced to undertake extensive remedial clean-up action or to pay for government-ordered remedial clean-up actions, even in cases where such hazards have been caused by any previous or subsequent owners or operators of the property, by any past or present owners of adjacent properties, by independent third party contractors providing services to Trafigura or by acts of vandalism by trespassers. Any such losses, withdrawals, suspensions, actions or payments may have a material adverse effect on Trafigura's business, results of operations and financial condition.

Trafigura is exposed to the risk of delays in or failure to develop planned expansions or new projects.

Trafigura has some significant expansions planned for its existing operations and plans for certain new greenfield projects. Any future upward revisions in estimated project costs, delays in completing planned expansions, cost overruns, suspension of current projects or other operational difficulties after commissioning may have a material adverse effect on Trafigura's business, results of operations and financial condition, in turn requiring Trafigura to consider delaying discretionary expenditures, including capital expenditures, or suspending or altering the scope of one or more of its development projects.

In addition, there can be no assurance that Trafigura will be able to effectively manage the risks arising from expansion of its operations. Trafigura's current systems, procedures and controls may need to be expanded and strengthened to support Trafigura's future operations. Any failure of Trafigura to effectively manage its expansion plans or expanded operations could have a material adverse effect on Trafigura's business and results of operations.

Once complete, the results of these projects could differ materially from those anticipated by Trafigura and Trafigura's significant capital expenditures related to these projects may not be offset by cash flows or other benefits from these projects in the timeframe anticipated by Trafigura or at all.

From time to time, Trafigura considers the acquisition of complementary and synergistic businesses or assets. Business combinations entail a number of risks, including the ability of Trafigura to integrate effectively the businesses acquired with their existing operations (including the realisation of synergies, significant one-time write-offs or restructuring charges, difficulties in achieving optimal tax structures and unanticipated costs). All of these may be exacerbated by the diversion of the Directors' attention away from other ongoing business concerns. In addition, although Trafigura does not currently have significant shares of the total market for commodities which it trades, further acquisitions to be made by Trafigura may be subject to certain approvals (for example, competition approvals) which may or may not be obtained. Trafigura may also be liable for the past acts, omissions or liabilities of companies or businesses it has acquired, which may be unforeseen or greater than anticipated at the time of the relevant acquisition. In addition, various factors could impact Trafigura's estimated synergies for potential acquisitions and have a material adverse impact on Trafigura's business, results of operations and financial condition.

Additionally, Nyrstar's growth strategy relies in part on the ramp-up of the Port Pirie Redevelopment and the restart and ramp-up of the Myra Falls and the Middle Tennessee Mines respectively. Delay, technical issues or cost overruns in these projects could adversely impact the original business cases which justified these projects and impact Nyrstar's financial position. These risks are being carefully managed by a dedicated technical/project team in smelting (including external resources where needed) and mining segments. All investments leverage internal know-how, "off the shelf" technology or a different application of an existing technology.

Industrial activities are exposed to an increase in operating costs, including as a result of increased energy costs or shortages of equipment, spare parts and labour.

In relation to Trafigura's industrial activities, Trafigura's main production expenses include transportation costs, personnel expenses, maintenance and repairs, raw materials, energy and contractor expenses. Increased costs could arise from a number of factors which are beyond Trafigura's control, including: (i) increased fuel costs as well as the costs of other consumables, electricity, transport or site contractors; or (ii) increased processing or storage costs for such commodities.

In particular, electricity costs represent a very significant part of Nyrstar's production costs, especially in relation to the operation of smelters. Increases in energy, particularly electricity, prices would significantly increase Nyrstar's production costs and reduce its margins. Nyrstar attempts to limit its exposure to short term energy price fluctuations through forward purchases, long term contracts and participation in energy purchasing consortia. Further, Nyrstar is dependent on a limited number of suppliers for zinc and lead concentrates. Nyrstar is partially dependent on the supply of zinc and lead secondary feed materials. A disruption in supply could have a material adverse effect on Nyrstar's production levels and financial results. Unreliable energy supply at any of the mining and smelting operations requires appropriate emergency supply or will result in significant ramp up costs after a major power outage.

Further, shortages of certain equipment, spare parts or specialised labour may increase the costs of Trafigura's mining operations as a result of equipment, spare parts or labour becoming more expensive due to increased demand and tight supply. Such shortages may also cause delays to, and quality issues in respect of, Trafigura's operations either as a result of equipment used in Trafigura's operations being temporarily unavailable or not being available at all or there being insufficient resources to operate equipment or maintain production at the optimum capacity. Any resulting increase in costs or production delays could have a material adverse effect on Trafigura's business, results of operations and financial condition.

Estimates of ore reserves are based on certain assumptions, and changes in such assumptions could lead to reported ore reserves being restated at a lower level.

The value of Trafigura's mining activities is linked to its ore reserves. Trafigura's recoverable reserves decline as the commodities are extracted. These reserves represent the estimated quantities of minerals that the Group believes could be mined, processed, recovered and sold at prices sufficient to cover the estimated future total costs of production, remaining investment and anticipated additional capital expenditures. For as long as Trafigura continues to own its respective mining assets, its future profitability and operating margins depend partly upon its ability to access mineral reserves that have geological characteristics enabling mining at competitive costs either by conducting successful exploration and development activities or by acquiring properties containing economically recoverable reserves. Replacement reserves may not be available when required or, if available, may not be of a quality capable of being mined at costs comparable to existing mines. Trafigura's mining operations utilise the services of appropriately qualified experts to ascertain and verify the quantum of reserves and resources including ore grade and other geological characteristics under relevant global standards for measurement of mineral resources.

Resource and reserve information is based on engineering, economic and geological data assembled and analysed by third parties. Estimates as to both quantity and quality are periodically updated to reflect extraction of commodities and new drilling or other data received. There are numerous uncertainties inherent in estimating quantities and qualities of reserves and costs to mine, including many factors beyond Trafigura's and Nyrstar's control. Estimates of reserves necessarily depend upon a number of variable factors and assumptions, all of which may vary considerably from actual results.

Further, mineral resource estimates are based on concentrations or occurrences of minerals that are judged to have reasonable prospects for economic extraction, but for which the economics of extraction cannot be assessed, whether because of insufficiency of geological information or lack of feasibility analysis, or for which economic extraction cannot be justified at the time of reporting. Consequently, mineral resources are of a higher risk and are less likely to be accurately estimated or recovered than mineral reserves.

Assumptions that are valid at the time of estimation may change significantly when new information becomes available. This may, ultimately, result in the reserves or resources needing to be restated. Such changes in reserves or resources could also impact depreciation and amortisation rates, asset carrying values, deferred stripping calculations and provisions for close down, restoration and environmental clean-up costs. If the prices of the commodities produced by Trafigura and/or Nyrstar decrease, or if there are adverse changes in TCs, foreign exchange rates or other variables, certain of the Group's reserves which are currently classified as proved or probable may cease to be classified as recoverable as they become uneconomic to mine. In addition, changes in operating, capital or other costs may have the same effect by rendering certain mineral reserves or resources uneconomic to mine in the future. Should such reductions occur, further material write downs of its investment in mining properties or the discontinuation of development or production might be required, and there could be material delays in the development of new projects, increased net losses and reduced cash flow.

Other risks relating to Trafigura

Trafigura may be subject to the laws of various countries imposing sanctions for conducting business with certain persons.

Certain countries in which Trafigura currently does business, or may consider doing business in the future, are or may become subject to various trade sanctions including, but not limited to sanctions administered by the United States Treasury Department's Office of Foreign Assets Control, and European Union, United Kingdom and United Nations sanctions programmes. While Trafigura employs dedicated resources to ensure that it is in compliance, there can be no assurance that Trafigura will not in the future enter into transactions that breach these sanctions. In the event of any non-compliance with applicable sanctions, Trafigura may be subject to the imposition of significant fines, as well as negative publicity and reputational damage. Any of the foregoing could result in a material adverse effect on Trafigura's business, results of operations and/or financial condition.

Due to the nature of its business and operations, Trafigura is exposed to the risks of fraud and corruption.

As a diversified sourcing, trading and distribution company conducting complex transactions globally, Trafigura is exposed to the risks of fraud and corruption.

Trafigura's trading operations are large in scale, which may make fraudulent or accidental transactions difficult to detect. In addition, some of Trafigura's trading and industrial activities take place in countries where corruption is generally understood to exist.

Trafigura seeks to comply fully with all applicable legislation such as the U.S. Foreign Corrupt Practices Act, the U.K. Bribery Act and any applicable sanctions and has put in place internal control policies and external diligence and compliance policies. However, there can be no assurance that such procedures and established internal controls will adequately protect it against fraudulent and/or corrupt activity and such activity could have an adverse effect on Trafigura's business, reputation, results of operations, financial condition and/or prospects.

Accidents at Trafigura's trading and industrial activities, logistics and storage facilities could result in injuries and fatalities.

Any accidents or hazardous incidents causing personal injury, death or property or environmental damage at or to Trafigura's logistics and storage facilities, mines, concentrators, refineries or related facilities or surrounding areas may result in significant losses, interruptions in production, expensive litigation, imposition of penalties and sanctions or suspension or revocation of permits and licences. Risks associated with Trafigura's logistics and storage operations may include the risk of ruptures and spills from crude oil and other product carriers; spillage, leakage or seepage of solid materials or process water remaining after the extraction of metals and minerals from mined ore (tailings) or other hazardous substances found in storage or disposal facilities; and failure of tailings dams during the operating life of the mines or after closure.

Risks associated with Trafigura's mining operations include, but are not limited to, flooding, underground fires and explosions (including those caused by flammable gas), cave-ins or ground falls, discharges of gases or toxic chemicals, sinkhole formation and ground subsidence.

If accidents occur in the future, Trafigura's business and results of operations may be adversely impacted.

Trafigura is subject to risks relating to the processing, storage and transportation of its commodities.

Trafigura relies on a network of processing, transportation and storage facilities that are subject to numerous risks and hazards. If any of these risks materialise Trafigura's business, results of operations and financial condition could be materially adversely affected.

Trafigura's processing and storage facilities, which include oil terminals, refineries, tank farms and ore processing plants, are subject to risks and hazards, including accidental environmental damage, technical failure, vandalism and terrorism. In addition, Trafigura also depends upon seaborne freight, rail, trucking, pipeline, overland conveyor and other systems to deliver its commodities to market. Disruption of these transport services due to weather-related problems, key equipment or infrastructure failures, strikes, maritime disaster or other events could temporarily impair Trafigura's ability to supply its commodities to its customers and thus could adversely affect Trafigura's operations.

Transportation and storage of crude oil and oil products involves significant hazards that could result in fires, explosions, spills, maritime disaster and other unexpected or dangerous conditions. The occurrence of any of these events could result in a material adverse effect, either directly or indirectly, through resulting damages, claims and awards, remediation costs or negative publicity on Trafigura's business.

In addition, the vessels Trafigura uses to transport its products may be exposed to a variety of natural calamities during operations, including violent storms, tidal waves, rogue waves and tsunamis. Any of these natural calamities could result in Trafigura's vessels grounding, sinking, or colliding with other vessels or property, or the loss of life. If one of the vessels suffers damage, in addition to the potential loss of its cargo, it would need to be repaired, and the costs relating to such losses or repairs may not be covered (either in part or in full) by the insurance policies that are in place. The costs of such repairs are unpredictable and could be substantial. In addition, vessels will require general repair and maintenance from time to time. The loss of earnings while the vessels are being repaired and repositioned, the cost of arranging for alternative transport, as well as the actual cost of such repairs, could adversely affect Trafigura's business and results of operations. Furthermore, the vessels Trafigura uses to transport its products may be exposed to piracy, terrorist attacks and other events beyond its control. These events could result in adverse effects to Trafigura's business as a result of seizure of its cargoes and disruption to its customers' or suppliers' business. While Trafigura has procured insurance for its operations against these types of risks, no insurance can compensate for all potential losses and there can be no assurance that the insurance coverage Trafigura has will be adequate or that its insurers will pay a particular claim. As is the standard for policies of this type, Trafigura's insurance policies do not cover risks arising from damage caused by wear and tear to the vessels that it owns directly or through joint ventures. In the event of damage to, or the loss of, a vessel or vessels and/or their cargoes, lack of adequate insurance coverage may have a material adverse effect on Trafigura's business and results of operations.

Trafigura is subject to risks relating to product safety and dangerous goods regulations.

Products sold by Trafigura are in many cases covered by national and international product safety and dangerous goods regulations. In some instances, product safety regulations (for example, the European Union ("**EU**") chemicals legislation and EU regulation concerning the Registration, Evaluation, Authorisation & Restriction of Chemicals (REACH)) oblige manufacturers and importers to register their products and to regularly monitor and evaluate the risks and hazards of substances (chemicals, metals, etc.) to protect humans and the environment from harm during handling, storage and use. Any failure in complying with these obligations could result in a delay of Trafigura's product delivery, a loss of insurance coverage, business interruption on the customer side, administrative or criminal sanctions and, in the extreme, banning (temporarily) from a marketplace. Such events could have a material impact on the local or global demand, reducing Trafigura's trading opportunities for such a product, or at least increase the handling costs while shipping and placing the product in the market, all of which could have a material adverse effect on Trafigura's reputation, business, results of operations and financial condition.

Trafigura relies on its financial, accounting, trading and other data processing information systems to conduct its business.

Trafigura's software applications for areas such as traffic, accounting and finance are primarily based on integrated standard components. Trafigura's key business processes rely on in-house developed modules and are regularly adapted to suit its business needs. Trafigura has duplicated data centres on the outskirts of London, with further data centres providing local services in Asia and in North America. If any of these systems does not operate properly or is disabled, Trafigura could suffer, among other things, financial loss, a disruption of its business, liability to its counterparties, regulatory intervention or reputational damage.

Trafigura is subject to a significant number of laws and regulations including extensive health, safety and environmental regulations and legislation.

Trafigura's trading and industrial activities are subject to extensive laws and regulations governing various matters across multiple jurisdictions. These include laws and regulations relating to taxation, competition, environmental protection, management and use of hazardous substances and explosives, management of natural resources, licences over resources owned by various governments, exploration, development of projects, production and post-closure reclamation, the employment of expatriates, labour and occupational health and safety standards, and historic and cultural preservation. Additionally, in many of the developing countries where Trafigura operates, the legal systems may not be mature and legal practice may not be developed, such that, in certain cases, there may be significant uncertainty as to the correct legal position as well as the possibility of laws changing or new laws and regulations being enacted, which has the potential to increase risk and compliance costs.

These laws and regulations may allow governmental authorities and private parties to bring lawsuits based upon damages to property and injury to persons resulting from the environmental, health and safety and other impacts of Trafigura's past and current operations, and could lead to the imposition of substantial fines, penalties, other civil or criminal sanctions, the curtailment or cessation of operations, orders to pay compensation, orders to remedy the effects of violations and/or orders to take preventative steps against possible future violations. Moreover, the costs associated with compliance with these laws and regulations are substantial. More stringent enforcement or restrictive interpretation of current laws and regulations by governmental authorities or rulings or clearances obtained from such governmental authorities could cause additional expenditure (including capital expenditure) to be incurred or impose restrictions on or suspensions of Trafigura's operations and delays in the development of its properties.

Trafigura's subsidiaries and the companies in which Trafigura holds investments are generally required, under applicable laws and regulations, to seek governmental licences, permits, authorisations, concessions and other approvals in connection with their activities. Obtaining the necessary governmental permits can be a particularly complex and time-consuming process and may involve costly undertakings. The duration and success of permit applications are contingent on many factors, including those outside Trafigura's control. Failure to obtain or renew a necessary permit could mean that such companies would be unable to proceed with the development or continued operation of a storage facility, mine or project, which, in turn, may have a material adverse effect on Trafigura's business, results of operations, financial condition and prospects.

In addition, the enactment of new laws and regulations and changes to existing laws and regulations (including, but not restricted to, environmental laws, the imposition of higher licence fees, mining and hydrocarbon royalties or taxes, financial markets), compliance with which could be expensive or onerous, could also have a material adverse impact on Trafigura's ability to operate its business and/or the profitability of its industrial investments. For example, on 1 January 2020, the International Maritime Organisation ("IMO") will implement a new regulation under which ships will have to use marine fuels with a sulphur content of no more than 0.50 per cent. ("IMO 2020"). Compliance with IMO 2020, through sourcing new and alternative fuels for its ships, may increase the costs of Trafigura's trading operations and have a negative impact of Trafigura's results of operations.

The methods of transportation used by Trafigura's trading operations in order to deliver commodities to customers around the world depend heavily on fossil fuels. Increasing regulation of greenhouse gas emissions, including the progressive introduction of carbon emissions trading mechanisms and tighter emission reduction targets in numerous jurisdictions in which Trafigura operates is likely to raise energy costs and costs of production in the future. Regulation of greenhouse gas emissions in the jurisdictions of Trafigura's major customers and in relation to international shipping could also have a material adverse effect on the demand for Trafigura's products.

Moreover, numerous governmental permissions, approvals, licenses and leases are required for Trafigura's operations. These permissions, approvals, licenses and leases are subject, in certain circumstances or on the occurrence of certain events, to modification, renewal or revocation. Nyrstar is required to prepare and present to national, state or local authorities data pertaining to the anticipated effect or impact that any proposed exploration, mining or production activities may have upon the environment. Compliance with environmental, health and safety laws and regulations requires ongoing expenditure and considerable capital commitments. In addition, because many of Nyrstar's sites have been operating in their current capacity for relatively long periods of time, including during periods when environmental, health and safety laws and regulations were not as stringent as they are today, they may incur relatively high compliance costs. Furthermore, Nyrstar has operations in various jurisdictions, including the European Union and Australia, that may be subject to national, regional or local laws, regulations, taxes and policies aimed at limiting or reducing greenhouse gas emissions. The combined impact of direct and indirect greenhouse gas related costs across Nyrstar's business could have a material adverse effect on Nyrstar's business, results of operations or financial condition. Further, Nyrstar may be required to change operations, reduce production capacity or make additional investments or increase tax payments to adapt to new or amended environmental laws and regulations, which could also have a material adverse effect on Nyrstar's business, results of operations or financial condition.

Social, economic and other risks in the markets where Trafigura operates may cause disruptions to its business.

Through the geographic diversity of its operations, Trafigura is exposed to risks of political or other civil unrest, strikes, war and economic and other forms of instability, such as natural disasters, epidemics, widespread transmission or communicable or infectious diseases, terrorist attacks and other events beyond its control that may adversely affect local economies, infrastructure and livelihoods.

These events could result in disruption to Trafigura's, its customers' or suppliers' businesses and seizure of, or damage to, any of their cargoes or assets. Such events could also cause the destruction of key equipment and infrastructure (including infrastructure located at or serving Trafigura's industrial activities as well as the infrastructure that supports the freight and logistics required by Trafigura's trading operations). These events could also result in the partial or complete closure of particular ports or significant sea passages, such as the Suez or Panama canals or the Straits of Hormuz, potentially resulting in higher costs, congestions of ports or sea passages, vessel delays or cancellations on some trade routes. Any of these events could adversely impact Trafigura's business and results of operations.

Furthermore, the regulations to which Trafigura is subject differ from one jurisdiction to the other, as may the implementation or interpretation of seemingly similar regulations. Moreover, these regulations are often highly complex and are subject to changes in both substance and interpretation. In particular, areas such as taxes (and especially VAT), export and import duties and quotas and environmental compliance are characterised by a high degree of complexity. Changes in investment policies or shifts in the prevailing political climate in any of the countries in which Trafigura operates, buys from or sells to, including through Nyrstar, could result in the introduction of increased government regulations, including embargos with respect to, among other things:

- price controls;
- export, import and throughput controls, duties, tariffs and quotas;
- mining duties and royalties;
- income, withholding, VAT and other taxes;
- electricity and energy supply;
- environmental legislation;
- foreign ownership restrictions;
- foreign exchange and currency controls;
- financial, commercial or disclosure rules;
- labor and welfare benefit policies; and
- land and water use.

A number of countries, including Australia, Canada, Brazil, China, India, Mexico and Russia are considering or have recently introduced or increased the level of duties they impose on the mining industry. While the recent duties imposed in Canada and Mexico have not been material, it is possible that any future changes could have a material adverse impact on Nyrstar's, operations.

Trafigura's reputation, including in the communities in which it operates, could deteriorate.

If it is perceived that Trafigura is not respecting or advancing the economic and social progress and safety of the communities in which it operates, Trafigura's reputation and shareholder value could be damaged, which could have a negative impact on its "licences to operate", its ability to secure new resources and its financial performance.

Some of Trafigura's current and potential trading and industrial activities are located in or near communities that may regard such operations as having a detrimental effect on their safety or environmental, economic or social circumstances. The consequences of negative community reaction could also have a material adverse impact on the cost, profitability, ability to finance or even the viability of an operation. Such events could lead to disputes with national or local governments or with local communities or any other stakeholders and give rise to material reputational damage. If Trafigura's operations are delayed or shut down as a result of political and community instability, its earnings may be constrained and the long-term value of its business could be adversely impacted. Even in cases where no action adverse to Trafigura is actually taken, the uncertainty associated with such political or community instability could negatively impact the perceived value of Trafigura's assets and industrial investments and, consequently, have a material adverse effect on Trafigura's financial condition.

There is an increasing level of public concern relating to the effect of mining and smelting on adjacent surroundings and the environment. Certain non-governmental organisations are vocal critics of the industries in which Trafigura operates. In particular, Nyrstar has in the past been subject to adverse publicity relating to, among other things, environmental issues and incidents relating to operating equipment failures. While the Group seeks to operate in a socially responsible manner, adverse publicity, including that generated by non-governmental organisations, related to extractive industries generally or the Group's operations specifically, could have an adverse effect on the Group's reputation or results of operations or its relationships with the communities in which it operates.

The industries in which Trafigura operates are subject to a wide range of risks as described elsewhere in this section, not all of which can be covered, adequately or at all, by Trafigura's insurance programme.

Trafigura has a broad insurance programme in place which provides coverage for operations at a level believed by the Directors to be appropriate for the associated risks. Such insurance protection is maintained with leading international insurance providers and includes coverage for physical loss and damage to owned vessels and kidnap and ransom, as well as third party liability, including for pollution. However, although Trafigura's insurance is intended to cover the majority of the risks to which Trafigura is exposed, it cannot account for every potential risk associated with its operations. Adequate coverage at reasonable rates is not always commercially available to cover all potential risks and no assurance can be given that, where available, such coverage would be sufficient to cover all loss and liability to which Trafigura may be exposed. The occurrence of a significant adverse event not fully or partially covered by insurance could have a material adverse effect on Trafigura's business, results of operations and financial condition.

Trafigura is owned by its management and key senior employees.

Trafigura is exclusively owned by its management and key senior employees. As a private company with no equity listing Trafigura is not subject to the extensive laws and regulations relating to corporate governance and transparency applied to publicly owned companies or by companies with equity listings on major stock exchanges. While Trafigura applies a prudent corporate governance model and believes that it is transparent in its dealings with its investors and other stakeholders, such as its banking group, its obligations in this regard are potentially less transparent than those legal and regulatory regimes associated with public companies.

Trafigura's profitability may be affected by changes in tax regimes and certain special tax incentives.

Trafigura's operations in various countries are subject to different tax regimes. Changes in local tax regulations, or the interpretation thereof, might adversely affect Trafigura's business, results of operations and/or financial condition.

Trafigura is exposed to litigation risk.

Trafigura conducts its operations globally in a wide variety of jurisdictions and may potentially face litigation in any of them, including governmental or regulatory investigations or class actions. Damages or penalties claimed under any litigation are difficult to predict, and may be material. The legal infrastructure in certain of these jurisdictions may be less developed than in others and the legal process may be more uncertain or subject to extensive delay.

While Trafigura will assess the merits of each lawsuit and defend itself accordingly, it may be required to incur significant expenses or devote significant resources to defending itself against such litigation and the conduct of such defence may be a distraction for senior management from the running of the business. In addition, adverse publicity surrounding such claims may have a material adverse effect on Trafigura's business, prospects, financial condition and results of operations. The outcome of such litigation if adversely determined may materially impact Trafigura's business, results of operations or financial condition.

Risks related to the Securities

The Securities may not be a suitable investment for all investors.

Each of the risks highlighted in the section of this offering circular headed "Risk Factors" could adversely affect the trading price of the Securities or the rights of investors under the Securities and, as a result, investors could lose some or all of their investment. Each potential investor in the Securities must determine the suitability of that investment in light of its own circumstances. In particular, each potential investor should:

(a) have sufficient knowledge and experience to make a meaningful evaluation of the Securities, the merits and risks of investing in the Securities and the information contained;

(b) have access to, and knowledge of, appropriate analytical tools to evaluate, in the context of its particular financial situation, an investment in the Securities and the impact such investment will have on its overall investment portfolio;

(c) have sufficient financial resources and liquidity to bear all of the risks of an investment in the Securities, including where principal or interest is payable in one or more currencies, or where the currency for principal or interest payments is different from the potential investor's currency;

(d) understand thoroughly the terms of the Securities and be familiar with the behaviour of any relevant indices and financial markets; and

(e) be able to evaluate (either alone or with the help of a financial adviser) possible scenarios for economic, interest rate and other factors that may affect its investment and its ability to bear the applicable risks.

The Securities are perpetual and investors have no right to require redemption.

The Securities are perpetual and have no fixed maturity date. The Issuer is under no obligation to redeem the Securities and accordingly there is uncertainty as to when (if ever) an investor in the Securities will receive payment of the principal amount of the Securities. Although the interest rate on the Securities is reset on each Reset Date (which includes a step-up margin of 3.00 per cent. being added to the Relevant Reset Interest Rate) which may induce the Issuer to call the Securities, there is no assurance that the Issuer will call the Securities at such time or at any later time. Securityholders who wish to sell their Securities may be unable to do so at a price at or above the amount they have paid for them, or at all, if insufficient liquidity exists in the secondary market for the Securities.

The Securities may be redeemed at the Issuer's option (i) at any time during the Relevant Period by providing notice to the Holders specifying the date in the Relevant Period on which redemption shall occur or (ii) on any Interest Payment Date falling after the Initial Reset Date or (iii) upon the occurrence of certain other events.

The Conditions provide that the Securities are redeemable at the Issuer's option, in whole but not in part: (i) at any time during the Relevant Period (as defined in "*Terms and Conditions of the Securities – Redemption and Purchase*") by providing notice to the Holders specifying the date in the Relevant Period on which redemption shall occur; or (ii) on any Interest Payment Date falling after the Initial Reset Date (as defined in "*Terms and Conditions of the Securities – Redemption and Purchase*"). If the Issuer exercises its option to redeem the Securities in accordance with this provision, the Issuer will give not more than 60 days' nor less than 30 days' notice, to the Holders in accordance with Condition 13 and to the Trustee.

In the case of any such redemption, the Securities will be redeemed at their principal amount together with any Arrears of Interest, Additional Interest Amounts and interest accrued to the date fixed for redemption.

In addition, the Issuer has the right to redeem the Securities, in whole but not in part:

(a) if there are any amendments to the relevant accounting standards such that the Securities may not or may no longer be classified as "equity" pursuant to such relevant accounting standards;

(b) in the event that, as a result of a Change of Law (as referred to in "*Terms and Conditions of the Securities – Redemption and Purchase*"), the interest payments under the Securities are no longer tax-deductible by the Issuer for Singapore corporate income tax purposes or such deductibility is subject to additional conditions or requirements which render such tax deduction either impossible or materially more onerous to the Issuer;

(c) in the event that, as a result of any actual or proposed change in, or amendment to the laws or regulations of the jurisdiction of the Issuer, the Issuer would be required to pay additional amounts in respect of the Securities consequent upon any withholding or deduction for tax being required to be made on any payment under the Securities; and

(d) in the event that less than 20 per cent. of the aggregate principal amount of the Securities (including any further Securities issued pursuant to Condition 11) originally issued remain outstanding.

The redemption amount is par, in the case of (a), (c) and (d) above, or an amount equal to 101 per cent. of the principal amount of the Securities, in the case of (b) above, in each case together with any Arrears of Interest, Additional Interest Amounts and interest accrued to the date fixed for redemption.

The date on which the Issuer elects to redeem the Securities may not accord with the preference of individual Securityholders. This may be disadvantageous to Securityholders in light of market conditions or the individual circumstances of any Securityholder of Securities. In addition, an investor may not be able to reinvest the redemption proceeds in comparable securities at an effective distribution rate at the same level as that of the Securities.

An optional redemption feature is likely to limit the market value of the Securities. During any period when the Issuer may elect to redeem the Securities, the market value of the Securities generally will not rise substantially above the price at which they can be redeemed. This also may be true prior to any redemption period.

The accounting classification of the Securities may change

In June 2018, the International Accounting Standards Board (the "**IASB**") published the discussion paper DP/2018/1 on "Financial Instruments with Characteristics of Equity" (the "**DP/2018/1 Paper**"). If the proposals set out in the DP/2018/1 Paper are implemented, the current IFRS equity classification of financial instruments such as the Securities may change. In such an event, the Issuer may have the option to redeem, in whole but not in part, the Securities under the Terms and Conditions of the Securities (in accordance with Condition 4(d)) The implementation of any of the proposals set out in the DP/2018/1 Paper or any other similar such proposals that may be made in the future, including the extent and timing of any such implementation, if at all, is uncertain. Accordingly, no assurance can be given as to the future accounting classification of the Securities or whether any such change may result in the Issuer having the option to redeem the Securities pursuant to the Conditions.

The Issuer's obligations under the Securities are subordinated.

The Issuer's obligations under the Securities will constitute direct, unsecured and subordinated obligations. In the event of a Winding-up (as defined in the Conditions of the Securities) of the Issuer, the rights of the Securityholders to receive payments in respect of the Securities will rank pari passu among themselves and with the Securityholders of its Pari Passu Claims or Pari Passu Obligations but junior to all other Senior Claims or Senior Obligations.

In the event of a shortfall of funds on a Winding-up, there is a real risk that an investor in the Securities will lose all or most of its investment and will not receive any return of the principal amount or any unpaid interest, Arrears of Interest or Additional Interest Amounts. By virtue of such subordination, payments to a Securityholder will, in the events described in the relevant Conditions, only be made after all obligations of the Issuer resulting from higher ranking claims have been satisfied. A Securityholder may therefore recover less than the Securityholders of unsubordinated or other subordinated liabilities of the Issuer that are senior to the Securities. Furthermore, the Conditions do not limit the amount of the liabilities ranking senior to or pari passu with the Securities which may be incurred or assumed by the Issuer from time to time, whether before or after the issue date of the Securities. Subject to applicable law, no Securityholder may exercise or claim any right of set-off in respect of any amount owed to it by the Issuer arising under or in connection with the Securities and each Securityholder shall, by virtue of being a Securityholder, be deemed to have waived all such rights of set-off.

The Issuer may raise other funds which affect the price of the Securities.

The Issuer may raise additional funds through the issue of other securities or other means. There is no restriction under the Conditions, contractual or otherwise, on the amount of securities or other liabilities which the Issuer may issue or incur and which rank senior to, or pari passu with, the Securities. The issue of any such securities or the incurrence of any such other liabilities may reduce the amount (if any) recoverable by Securityholders on a Winding-up or may increase the likelihood of a deferral of interest under the Securities. The issue of any such securities or the incurrence of any such other liabilities might also have an adverse impact on the trading price of the Securities and/or the ability of Securityholders to sell their Securities.

No obligation of subsidiaries or associated companies to pay amounts under the Securities.

The Issuer's principal business is to act as the holding company of the Group, and virtually all of the Issuer's assets are shareholdings in its subsidiaries and associated companies. Investors will not have any direct claims on the cash flows or the assets of the other entities of the Group, and such entities have no obligation, contingent or otherwise, to pay amounts due under the Securities or to make funds available to the Issuer for these payments.

Securityholders may not receive interest payments if the Issuer elects to defer interest payments under the Conditions.

The Issuer may, at its sole discretion and subject to certain conditions, elect to defer any scheduled interest payment on the Securities for any period of time. The Issuer is not subject to any limits as to the number of times interest can be deferred pursuant to the Conditions subject to compliance with certain restrictions. Although, following a deferral, Arrears of Interest are cumulative, subject to the Conditions the Issuer may defer their payment for an indefinite period of time by delivering the relevant deferral notices to the Securityholders. Any such deferral of interest shall not constitute a default for any purpose unless payment is required in accordance with Condition 3(h)(i).

Any deferral of interest will likely have an adverse effect on the market price of the Securities. In addition, as a result of the interest deferral provision of the Securities, the market price of the Securities may be more volatile than the market prices of other debt securities on which original issue discount or interest accrues that are not subject to such deferrals and may be more sensitive generally to adverse changes in the financial condition of the Issuer.

The Securities have a market risk.

A Securityholder of fixed rate securities such as the Securities is particularly exposed to the risk that the price of such securities falls as a result of changes in the market interest rate. While the initial interest rate of the Securities is fixed until the Initial Reset Date (with a recalculation of the interest rate on every Reset Date as set out in Condition 3), market interest rates typically change on a daily basis. As the market interest rate changes, the price of the Securities also changes, but in the opposite direction. If the market interest rate increases, the price of the Securities would typically fall. If the market interest rate falls, the price of the Securities would typically increase. Securityholders should be aware that movements in these market interest rates can adversely affect the price of the Securities and can lead to losses for the Securityholders if they sell the Securities.

Exchange rate risks and exchange controls.

The Issuer will pay principal and interest on the Securities in Euros. This presents certain risks relating to currency conversions if an investor's financial activities are denominated principally in a currency or currency unit (the "**Investor's Currency**") other than Euros. These include the risk that exchange rates may significantly change (including changes due to devaluation of the Euro or revaluation of the Investor's Currency) and the risk that authorities with jurisdiction over the Investor's Currency may impose or modify exchange controls. An appreciation in the value of the Investor's Currency relative to the Euro would decrease (1) the Investor's Currency-equivalent yield on the Securities, (2) the Investor's Currency-equivalent value of the principal payable on the Securities and (3) the Investor's Currency-equivalent market value of the Securities. Government and monetary authorities may impose (as some have done in the past) exchange controls that could adversely affect an applicable exchange rate. As a result, investors may receive less interest or principal than expected, or no interest or principal.

Investors in the Securities must rely on clearing system procedures.

Because the Global Security is held by or on behalf of Euroclear and/or Clearstream, Luxembourg and/or any other clearing system, investors will have to rely on their procedures for transfer, payment and communication with the Issuer. The Securities will be represented by the Global Security except in certain limited circumstances described in the Global Security. The Global Security will be registered in the name of a nominee for, and deposited with, a common depositary for Euroclear and/or Clearstream, Luxembourg and/or any other clearing system. Except in certain limited circumstances described in the Global Security, investors will not be entitled to receive Definitive Securities. Euroclear and/or Clearstream, Luxembourg and/or any other clearing system will maintain records of the beneficial interests in the Global Security. While the Securities are represented by the Global Security, investors will be able to trade their beneficial interests only through Euroclear and/or Clearstream, Luxembourg and/or any other clearing system.

The Issuer will discharge its payment obligations under the Securities by making payments to or to the order of the common depositary for Euroclear and/or Clearstream, Luxembourg and/or any other clearing system for distribution to their account holders. A holder of a beneficial interest in the Global Security must rely on the procedures of Euroclear and/or Clearstream, Luxembourg and/or any other clearing system to receive payments under the Securities. The Issuer and has no responsibility or liability for the records relating to, or payments made in respect of, beneficial interests in the Global Security. Holders of beneficial interests in the Global Security will not have a direct right to vote in respect of the Securities. Instead, such holders will be permitted to act only to the extent that they are enabled by Euroclear and/or Clearstream, Luxembourg and/or any other clearing system to appoint appropriate proxies.

Interest rate reset may result in a decline of yield.

A Securityholder of securities with a fixed interest rate that will be reset during the term of the securities (as will be the case for the Securities on each Reset Date (as defined in Condition 3(i)) if not previously redeemed, is exposed to the risk of fluctuating interest rate levels and uncertain interest income.

No events of default allowing acceleration.

There are no events of default under the Securities allowing Securityholders to accelerate payments under the Securities.

There are limited remedies for non-payment under the Securities.

Any scheduled interest payment will not become due and payable if the Issuer elects to defer that interest payment pursuant to the Conditions. The only remedy against the Issuer available to the Trustee on behalf of Securityholders for recovery of amounts in respect of the Securities following the occurrence of a payment default after any sum becomes due in respect of the Securities will be instituting winding-up proceedings and/or proving and/or claiming in winding-up in respect of any of the Issuer's payment obligations arising from the Securities.

Neither the Issuer nor the Securities are rated.

Investors should not assume or infer that any rating ascribed to the Issuer or any of its indebtedness or credit would apply to the Securities. The Issuer does not currently benefit from, and has not applied to any ratings agency, for either a corporate rating or a rating of the Securities, and does not currently intend to apply for any such rating. If, however, a rating were obtained in respect of the Issuer's securities in the future, because the Securities are subordinated obligations, the rating ascribed to the Securities may be lower than that ascribed to the Issuer's senior unsecured debt or any of its other credit.

Modification, Waivers and Substitutions

The Conditions contain provisions for calling meetings of Securityholders to consider matters affecting their interests generally. These provisions permit defined majorities to bind all Securityholders including Securityholders who did not attend and vote at the relevant meeting and Securityholders who voted in a manner contrary to the majority.

In addition, the conditions of the Securities also provide that the Issuer may, without the consent of the Holders and without regard to the interests of particular Securityholders, be replaced and substituted by any Subsidiary or Affiliate of the Issuer as a new principal debtor under the Trust Deed and the Securities, in the circumstances described in Condition 10(c) (Substitution).

Risks relating to Minimum Denominations

In relation to any issue of Securities which have a denomination consisting of the minimum Authorised Denomination plus an integral multiple of another smaller amount in excess thereof, it is possible that the Securities may be traded in amounts in excess of the minimum Authorised Denomination that are not integral multiples of the minimum Authorised Denomination (or its equivalent). In such a case a Securityholder who, as a result of trading such amounts, holds a principal amount of less than the minimum Authorised Denomination in its account with the clearing system at the relevant time may not receive a Definitive Security in respect of such holding (should Definitive Securities be printed) and would need to purchase a principal amount of Securities such that its holding amounts to the minimum Authorised Denomination.

If Definitive Securities are issued, Securityholders should be aware that Definitive Securities which have a denomination that is not an integral multiple of the minimum Authorised Denomination may be illiquid and difficult to trade.

Change of law

The Conditions are based on English law and, with respect to the status of the Securities, Singapore law, in effect as at the date of this Offering Circular. No assurance can be given as to the impact of any possible judicial decision or change as the English law or, as the case may be, Singapore law, or administrative practice after the date of this Offering Circular.

The insolvency laws of Singapore may differ from comparable provisions of the laws of other jurisdictions with which Securityholders are familiar

Because the Issuer is incorporated under the laws of Singapore, an insolvency proceeding relating to the Issuer, would likely involve Singapore insolvency laws, the procedural and substantive provisions of which may differ from comparable provisions of the laws of other jurisdictions with which the Securityholders are familiar. The differences in insolvency laws across jurisdictions engender a multitude of issues, especially with respect to the recognition of the claims of foreign creditors and recognition and enforcement of foreign insolvency proceedings and judgments. These risks and related uncertainties should be analysed carefully before any decision to invest in the Securities.

An active trading market for the Securities may not develop.

Although application has been made to the SGX-ST for the listing and quotation of the Securities on the SGX-ST, no assurance can be given that the Issuer will obtain a listing of the Securities or be able to maintain a listing of the Securities on the Official List of the SGX-ST or that an active trading market for the Securities will develop or as to the liquidity or sustainability of any such market, the ability of Securityholders to sell their Securities or the price at which Securityholders will be able to sell their Securities.

Securityholders may be subject to Singapore taxation.

The Securityholders may be subject to Singapore tax (whether by way of withholding or otherwise) on payments made under the Securities, depending on the personal circumstances of the Securityholder in question. Please see the section entitled "Taxation – Singapore" for more information.

Tax treatment of the Securities is unclear.

An advance tax ruling will be requested from the Inland Revenue Authority of Singapore ("**IRAS**") to confirm whether the IRAS would regard the Securities as "debt securities" for the purposes of Section 43N(4) of the Income Tax Act, Chapter 134 of Singapore ("**ITA**"), and accordingly, that the interest (including Arrears of Interest and Additional Interest Amounts) arising from the Securities are regarded as debt interest in order to have clarity on the tax treatment of the Securities and the payments made under the Securities.

There is no guarantee as to how the IRAS will treat the Securities and the payments made under the Securities, and the IRAS' tax treatment of the Securities and the payments made under the Securities may give rise to additional tax liabilities for the Securityholders.

Accordingly, no assurance, warranty or guarantee is given on the tax treatment to Securityholders in respect of the interest (including Arrears of Interest and Additional Interest Amounts) payable to them. Securityholders should therefore consult their own accounting and tax advisers regarding the Singapore income tax consequences of their acquisition, holding and disposal of the Securities.

Although not free from doubt, the Issuer does not expect to be a "passive foreign investment company" ("PFIC") for U.S. federal income tax purposes for the current taxable year and at this time does not anticipate becoming a PFIC for future taxable years. However, PFIC status must be determined annually and therefore is subject to change, which may result in adverse U.S. federal income tax consequences to U.S. Holders (as defined in the section "Taxation—Certain U.S. Federal Income Tax Consequences").

A non-U.S. corporation will be considered a PFIC for any taxable year if (1) at least 75 per cent. of its gross income is "passive income" or (2) at least 50 per cent. of its gross assets during the taxable year (based on the average of the fair market values of the assets determined at the end of each quarterly period) are "passive assets," which generally means that they produce passive income or are held for the production of passive income. Although the matter is not free from doubt, the Issuer does not believe that it is a PFIC for the current taxable year and at this time does not anticipate becoming a PFIC for future taxable years. However, the Issuer's PFIC status must be determined annually and therefore is subject to change. Because this determination is made annually at the end of each taxable year and is dependent upon a number of factors, some of which are beyond the Issuer's control, including the amount and nature of the Issuer's income and our spending schedule for the Issuer's cash balances, there can be no assurance that the Issuer is or is not a PFIC or that the IRS will agree with the Issuer's conclusion regarding its PFIC status. If the Issuer is a PFIC for any taxable year during which a U.S. Holder holds the Securities, the U.S. Holder may be subject to adverse tax consequences including (1) the treatment of all or a portion of any gain on disposition of the Securities as ordinary income, (2) the application of an interest charge with respect to such gain and certain other payments and (3) compliance with certain reporting requirements. Each U.S. Holder is urged to consult its tax adviser regarding these issues and any available elections to mitigate such tax consequences. See the section "*Taxation—Certain U.S. Federal Income Tax Consequences*."

U.S. Holders (as defined in the section "Taxation—Certain U.S. Federal Income Tax Consequences") may be subject to tax with respect to Arrears of Interest prior to actual receipt of payment in respect thereof.

As described in the section "*Terms and Conditions of the Securities—Interest*," the Issuer may elect to defer any interest which is otherwise due to be paid on an Interest Payment Date, resulting in Arrears of Interest. Any such Arrears of Interest will be added to and treated as part of the total principal amount of the Securities held by a Securityholder. As described in the section "*Taxation—Certain U.S. Federal Income Tax Consequences—U.S. Tax Characterization of the Securities*," Trafigura expects that the Securities are treated as equity interests in us for U.S. federal income tax purposes. Assuming this treatment applies, then for U.S. federal income tax purposes, Arrears of Interest may be treated as a constructive distribution of additional Securities. See the section "*Taxation—Certain U.S. Federal Income Tax Consequences—Constructive Distributions*." U.S. Holders (as defined in the section "*Taxation—Certain U.S. Federal Income Tax Consequences*") generally may be required to include any such constructive distributions in income, even though no cash will have been actually received. The amount and character of income required to be recognised with respect to any such constructive distribution of Arrears of Interest will depend on multiple factors, including the earnings and profits of the Issuer and a U.S. Holder's tax basis in its Securities (each as determined for U.S. federal income tax purposes). See the section "*Taxation—Certain U.S. Federal Income Tax Consequences*." U.S. Holders of the Securities are urged to consult their tax advisers as to the potential for taxable constructive dividends with respect to the Securities, including in respect of deferred interest payments.

TERMS AND CONDITIONS OF THE SECURITIES

The following are the terms and conditions substantially in the form in which they will be endorsed on the Securities:

The issue of the EUR 262,500,000 in aggregate amount of perpetual resettable step-up subordinated securities (the "**Securities**", which expression includes any further Securities issued pursuant to Condition 11 and forming a single series therewith) of Trafigura Group Pte. Ltd. (the "**Issuer**") was authorised by the finance committee of the Issuer in resolutions adopted on 9 July 2019. The Securities are constituted by and are subject to and have the benefit of a Trust Deed dated 31 July 2019 (as it may be amended or supplemented from time to time, the "**Trust Deed**") between the Issuer and Citicorp Trustee Company Limited, as trustee (the "**Trustee**", which expression shall include any persons for the time being the trustee or trustees under the Trust Deed) and are the subject of an agency agreement dated 31 July 2019 (as it may be amended or supplemented from time to time, the "**Agency Agreement**") entered into in relation to the Securities between the Issuer, Citibank N.A., London Branch, as principal paying agent (the "**Principal Paying Agent**"), Citigroup Global Markets Europe AG, as registrar (the "**Registrar**", which expression shall include any successor registrar appointed from time to time in connection with the Securities), the transfer agents named therein (the "**Transfer Agent**", which expression shall include any successor transfer agent appointed from time to time in connection with the Securities), Citibank N.A., London Branch, as calculation agent (the "**Calculation Agent**", which expression shall include any successor calculation agent appointed from time to time in connection with the Securities) and the Trustee. The paying agents for the time being (including any successor agents appointed from time to time in connection with the Securities) are referred to below as the "**Paying Agents**" and, together with the Registrar, the Transfer Agent and the Calculation Agent, the "**Agents**". These terms and conditions (as amended from time to time) include summaries of and are subject to the detailed provisions of the Trust Deed (which includes the form of Securities) and the Agency Agreement. Copies of the Agency Agreement and the Trust Deed are available for inspection during normal business hours at the specified offices of the Paying Agents (specified below in accordance with Condition 5(e)) and the Trustee. The Securityholders (as defined below) are entitled to the benefit of and are deemed to have notice of, all the provisions of the Trust Deed and are deemed to have notice of all the provisions of the Agency Agreement, in each case applicable to them.

References below to "**Conditions**" are, unless the context requires otherwise, to the numbered paragraphs below.

1. **Form, Denomination, Title and Transfer**

(a) **Form and denomination:**

The Securities are serially numbered and in registered form without coupons in the denominations of EUR 100,000 and integral multiples of EUR 1,000 in excess thereof (each an "**Authorised Denomination**").

(b) **Register:**

The Registrar will maintain a register (the "**Register**") in respect of the Securities in accordance with the provisions of the Agency Agreement. In these Conditions, the "**Holder**" of a Security means the person in whose name such Security is for the time being registered in the Register (or, in the case of a joint holding, the first named thereof) and "**Securityholder**" shall be construed accordingly. A certificate (each, a "**Certificate**") will be issued to each Securityholder in respect of its registered holding of Securities. Each Certificate will be numbered serially with an identifying number which will be recorded on the relevant Certificate and in the Register.

(c) **Title:**

The Holder of any Security will (except as otherwise required by law) be treated as its absolute owner for all purposes (whether or not it is overdue and regardless of any notice of ownership, trust or any interest in it, any writing on it (other than the endorsed form of transfer), or its theft or loss) and no person will be liable for so treating the Holder. No person shall have any right to enforce any term or condition of the Securities or the Trust Deed under the Contracts (Rights of Third Parties) Act 1999.

(d) **Transfers:**

Subject to Condition 1(g) (*Closed periods*) and Condition 1(h) (*Regulations concerning transfers and registration*) below, a Security may be transferred upon surrender of the relevant Certificate, with the endorsed form of transfer duly completed, at the Specified Office of the Registrar or any Transfer Agent, together with such evidence as the Registrar or (as the case may be) such Transfer Agent may reasonably require to prove the title of the transferor and the authority of the individuals who have executed the form of transfer; *provided*, *however*, that a Security may not be transferred unless the principal amount of Securities transferred and (where not all of the Securities held by a Holder are being transferred) the principal amount of the balance of Securities not transferred are Authorised Denominations. Where not all the Securities represented by the surrendered Certificate are the subject of the transfer, a new Certificate in respect of the balance of the Securities will be issued to the transferor.

(e) **Registration and delivery of Certificates:**

Within five business days of the surrender of a Certificate in accordance with Condition 1(d) (*Transfers*) above, the Registrar will register the transfer in question and deliver a new Certificate of a like principal amount to the Securities transferred to each relevant Holder at its Specified Office or (as the case may be) the Specified Office of any Transfer Agent or (at the request and risk of any such relevant Holder) by uninsured first class mail (airmail if overseas) to the address specified for the purpose by such relevant Holder. In this paragraph, "**business day**" means a day on which commercial banks are open for general business (including dealings in foreign currencies) in the city where the Registrar or (as the case may be) the relevant Transfer Agent has its Specified Office.

(f) **No charge:**

The transfer of a Security will be effected without charge by or on behalf of the Issuer, the Registrar or any Transfer Agent but against such indemnity as the Registrar or (as the case may be) such Transfer Agent may require in respect of any tax or other duty of whatsoever nature which may be levied or imposed in connection with such transfer.

(g) **Closed periods:**

Securityholders may not require transfers to be registered during the period of 15 days ending on the due date for any payment of principal or interest in respect of the Securities.

(h) **Regulations concerning transfers and registration:**

All transfers of Securities and entries on the Register are subject to the detailed regulations concerning the transfer of Securities scheduled to the Agency Agreement. The regulations may be changed by the Issuer with the prior written approval of the Trustee and the Registrar. A copy of the current regulations will be mailed (free of charge) by the Registrar to any Securityholder who requests in writing a copy of such regulations.

2. **Status, Subordination and Winding-up**

(a) **Status:**

The Securities, including any Arrears of Interest and any Additional Interest Amounts (each as defined below), constitute direct, unsecured and subordinated obligations of the Issuer (ranking *pari passu* without any preference among themselves), which in the event of a Winding-up (as defined below) will rank:

(i) junior to the claims of (x) all senior and unsubordinated creditors of the Issuer and (y) all other subordinated creditors of the Issuer except for the Pari Passu Claims or Pari Passu Obligations as defined in sub-paragraph (ii) below and the Subordinated Claims or Subordinated Obligations as defined in sub-paragraph (iii) below ("**Senior Claims**" or "**Senior Obligations**");

(ii) *pari passu* among themselves and with any claims of creditors of the Issuer in respect of loans, securities or other obligations of the Issuer which, in each case, rank or are expressed to rank *pari passu* with the Securities (including but not limited to, for the avoidance of doubt, the USD 600,000,000 Perpetual Resettable Step-up Subordinated Securities issued on 21 March 2017 and the USD 200,000,000 Perpetual Resettable Step-up Subordinated Securities issued on 21 November 2017) ("**Pari Passu Claims**" or "**Pari Passu Obligations**"); and

(iii) senior to (x) claims of shareholders of the Issuer in respect of the Issuer's ordinary and preferred share capital ("**Equity Securities**") and (y) claims of creditors of the Issuer in respect of subordinated loans, securities and other obligations of the Issuer which, in each case, rank or are expressed to rank junior to the Securities ("**Junior Claims**" or "**Junior Obligations**" and, together with Equity Securities, "**Subordinated Claims**" or "**Subordinated Obligations**"),

except as otherwise required by mandatory provisions of law.

"**Winding-up**" means:

(i) a meeting of the shareholders or directors of the Issuer is convened to consider a resolution to petition for the winding up of the Issuer and any such resolution is passed;

(ii) an application is made for the winding up of the Issuer; or

(iii) an order is made for the winding up of the Issuer.

(b) **No right of set-off:**

Subject to applicable law, no Holder may exercise or claim any right of set-off in respect of any amount owed to it by the Issuer arising under or in connection with the Securities and each Holder shall, by virtue of being the Holder, be deemed to have waived all such rights of set-off.

(c) **Winding-up:**

In the event of a Winding-up, the Securities will become immediately due and payable, in accordance with Condition 7, at their outstanding principal amount, together with accrued interest, including any Arrears of Interest and any Additional Interest Amount, up to (but excluding) the redemption date, provided that such amount shall only be paid to the Holders to the extent that all Senior Claims shall have been satisfied in full. In the event of incomplete payment of all Senior Claims upon a Winding-up, the payment obligations of the Issuer under the Securities will be terminated.

3. **Interest**

(a) **Interest Rates and Interest Payment Dates:**

Subject to this Condition 3, the Securities bear interest from and including, 31 July 2019 (the "**Issue Date**") at the applicable Interest Rate (as defined in Condition 3(c)) in accordance with this Condition 3. Interest shall be payable, subject to this Condition 3 and in particular Condition 3(h) below, semi-annually in arrear on and 31 January and 31 July in each year commencing on 31 January 2020 (each an "**Interest Payment Date**"). If any Interest Payment Date would otherwise fall on a date which is not a Business Day (as defined below), it shall be postponed to the next day which is a Business Day.

(b) **Interest Period:**

In these Conditions, the period beginning on, and including, the Issue Date and ending on but excluding the first Interest Payment Date and each successive period beginning on, and including, an Interest Payment Date and ending on, but excluding, the next succeeding Interest Payment Date is called an "**Interest Period**".

(c) **Rate of Interest:**

The rate of interest per annum ("**Interest Rate**") applicable to the Securities shall be:

(i) in respect of the period from, and including, the Issue Date to, but excluding, the Initial Reset Date (as defined in Condition 4(f) below), the Initial Interest Rate (as defined in Condition 3(i) below); and

(ii) in respect of the period from, and including, the Initial Reset Date the aggregate of the Relevant Reset Interest Rate and the Step-Up Margin (each as defined in Condition 3(i) below).

(d) **Calculation of Reset Interest Rate:**

The Calculation Agent will, at 11.00 a.m. (London time) on each Reset Interest Determination Date calculate the applicable Reset Interest Rate payable in respect of each Security for the Reset Interest Period commencing on the Reset Date immediately following such Reset Interest Determination Date in accordance with this Condition 3. The Calculation Agent will cause the applicable Reset Interest Rate determined by it to be notified to the Principal Paying Agent (if not itself the Calculation Agent), the Trustee and the Issuer as soon as practicable after the relevant Reset Interest Determination Date but, in any event, no later than two Business Days after the relevant Reset Interest Determination Date. Notice thereof shall also promptly be given by the Issuer to the Holders in accordance with Condition 13 and to the Trustee.

(e) **Calculation Amount and determination of Interest Rate and amount of interest payable per Calculation Amount:**

Interest in respect of any Security shall be calculated per EUR 1,000 in principal amount of the Securities (the "**Calculation Amount**"). The amount of interest payable per Calculation Amount for any Interest Period or any other period shall be equal to the product of the applicable Interest Rate, the Calculation Amount and the day count fraction (as set out in Condition 3(g) below) for the relevant Interest Period or other period, as applicable, rounding the resulting figure to the nearest cent (half a cent being rounded upwards). The Calculation Agent will, as soon as practicable after 11.00 a.m. (London time) on each Interest Determination Date, determine the Interest Rate and calculate the amount of interest payable per Calculation Amount for the relevant Interest Period.

(f) **Publication of Interest Rate and amount of interest payable per Calculation Amount:**

The Calculation Agent will cause the Interest Rate, the amount of interest payable per Calculation Amount for each Interest Period and the relevant Interest Payment Date to be notified to each of the Issuer, the Paying Agents and any stock exchange on which the Securities are for the time being listed or admitted to trading and the Issuer shall cause the Securityholders to be notified as soon as possible after their determination in accordance with Condition 13 but in any event no later than the second Business Day thereafter. The amount of interest payable per Calculation Amount and Interest Payment Date so published may subsequently be amended (or appropriate alternative arrangements made by way of adjustment) without notice in the event of an extension or shortening of the Interest Period. If the Securities become due and payable under Condition 7, the accrued interest per Calculation Amount and the Interest Rate payable in respect of the Securities shall nevertheless continue to be calculated as previously by the Calculation Agent in accordance with this Condition 3 but no publication of the Interest Rate or the amount of interest payable per Calculation Amount so calculated need be made. All notifications, opinions, determinations, certificates, calculations, quotations and decisions given, expressed, made or obtained for the purposes of this Condition 3 by the Calculation Agent will (in the absence of wilful default, gross negligence, fraud or manifest error) be binding on the Issuer, the Paying Agents, the Trustee, the Holders, and all other parties and (in the absence as aforesaid) no liability to any such person will attach to the Calculation Agent in connection with the exercise or non-exercise by it of its powers, duties and discretions for such purposes.

(g) **Interest Accrual:**

Unless otherwise provided in these Conditions, each Security will cease to bear interest from the due date for redemption pursuant to Condition 4 unless, upon due presentation, payment of principal is improperly withheld or refused. In such event it shall continue to bear interest at the then applicable Interest Rate (both before and after judgment) until whichever is the earlier of: (a) the day on which all sums due in respect of such Security up to that day are received by or on behalf of the relevant Holder; or (b) seven days after the Principal Paying Agent has notified Holders of receipt of all sums due in respect of all the Securities up to that seventh day (except to the extent that there is failure in the subsequent payment to the relevant Holders under these Conditions). Interest for any period (whether or not an Interest Period) will be determined on the basis of a 360-day year consisting of 12 months of 30 days each and, in the case of an incomplete month, the number of days elapsed.

(h) **Interest Deferral:**

(i) **Deferral Election:**

The Issuer may, at its sole discretion, elect to defer (in whole but not in part) any interest which is otherwise scheduled to be paid on an Interest Payment Date by giving notice (a "**Deferral Election Notice**") to the Holders (in accordance with Condition 13) and the Trustee and the Principal Paying Agent not more than 30 nor less than five Business Days prior to such scheduled Interest Payment Date unless, during the relevant Observation Period, a Compulsory Interest Payment Event (as defined below) has occurred or was expected to occur between the time of giving the Deferral Election Notice and the last day of such Observation Period (inclusive). For the avoidance of doubt, if any Deferral Election Notice is so published but a Compulsory Interest Payment Event occurs during the period commencing on the date such notice was given and ending on, and including, the last day of such Observation Period (inclusive), any such Deferral Notice shall be deemed not to have been given and will have no force or effect.

"**Observation Period**" means (a), in respect of each scheduled Interest Payment Date, the period comprising such scheduled Interest Payment Date and the prior two Interest Periods ending on such scheduled Interest Payment Date, or (b), in the case of the first scheduled Interest Payment Date, the period comprising the Interest Period ending on the first scheduled Interest Payment Date.

A "**Compulsory Interest Payment Event**" means the occurrence of any of the following events:

(x) a dividend, distribution or other payment has been paid, made or declared by the Issuer on or in respect of any Pari Passu Obligations or Subordinated Obligations;

(y) the Issuer or any Subsidiary (as defined below) of the Issuer has purchased, redeemed or otherwise acquired any Securities, Pari Passu Obligations or Subordinated Obligations,

save, in each case, for:

(A) (i) any dividend, distribution or other payment paid or made (subject as provided in (ii) below) solely and exclusively in the form of Equity Securities of the Issuer or any securities or rights entitling the holder to receive Equity

Securities of the Issuer; and (ii) any dividend, distribution or other payment in cash in lieu of the issue of (x) any fractional Equity Securities in connection with item (i) above, or (y) any portion of such securities or other rights referred to in item (i) above that would result in the holder receiving any fractional Equity Securities upon exercise of any such entitlement;

(B) any dividend, distribution, payment, declaration, repurchase, redemption or acquisition compulsorily required by the terms of any such Pari Passu Obligations or Subordinated Obligations;

(C) any purchase by the Issuer or any Subsidiary of any Securities, Pari Passu Obligations or Subordinated Obligations at a price less than the notional or par amount or value of such Securities, Pari Passu Obligations or Subordinated Obligations.

(ii) **No obligation to pay:**

The Issuer shall have no obligation to pay any interest (including any Arrears of Interest and any Additional Interest Amount) on any Interest Payment Date if it validly elects not to do so in accordance with Condition 3(h)(i).

(iii) **Cumulative Deferral:**

Any interest deferred pursuant to this Condition 3(h) shall constitute "**Arrears of Interest**". The Issuer may, at its sole discretion, elect (in the circumstances and subject always to the conditions set out in Condition 3(h)(i)) to defer further any payment of Arrears of Interest (and any Additional Interest Amount (as defined below)) by complying with the foregoing notice requirement in Condition 3(h)(i) applicable to any deferral of any accrued interest. For the avoidance of doubt, subject to Condition 3(h)(v)(y), the Issuer is not subject to any limit as to the number of times accrued interest, Arrears of Interest and any Additional Interest Amount can or shall be deferred pursuant to this Condition 3(h).

(iv) **Additional Interest Amount:**

Each amount of Arrears of Interest shall bear interest from and including the date on which (but for such deferral) it would have been due to be paid, as if it constituted the principal of the Securities at the prevailing Interest Rate and the amount of such interest (the "**Additional Interest Amount**") with respect to Arrears of Interest shall be due and payable pursuant to this Condition 3 and shall be calculated by applying, in respect of each Interest Period, the applicable Interest Rate to the amount of the Arrears of Interest and otherwise *mutatis mutandis* as provided in the foregoing provisions of this Condition 3. The Additional Interest Amount accrued up to any Interest Payment Date shall be added, for the purpose of calculating the Additional Interest Amount accruing thereafter, to the amount of Arrears of Interest remaining unpaid on such Interest Payment Date so that it will itself become and constitute Arrears of Interest.

(v) **Satisfaction of Arrears of Interest by payment:**

The Issuer:

(x) may satisfy any Arrears of Interest (in whole or in part) at any time by (1) paying all accrued interest due on the immediately following Interest Payment Date in respect of the Interest Period terminating on such Interest Payment Date, together with such Arrears of Interest and any related Additional Interest Amount; and (2) giving notice of such election to the Holders (in accordance with Condition 13), the Trustee and the Principal Paying Agent not more than thirty nor less than five Business Days prior to such Interest Payment Date, which shall be specified in such notice (which notice is irrevocable and shall oblige the Issuer to pay the relevant Arrears of Interest and any related Additional Interest Amount on the payment date specified in such notice); and

(y) in any event shall pay any outstanding Arrears of Interest and any Additional Interest Amount (in whole but not in part) on the earliest of:

(a) the date of redemption of the Securities in accordance with the redemption events set out in Condition 4;

(b) the first Interest Payment Date contemporaneous with or immediately following the occurrence of a Compulsory Interest Payment Event;

(c) the date any amounts become due under Condition 7; and

(d) the date on which any proceedings are instituted by a Holder pursuant to Condition 7.

Any partial payment of outstanding Arrears of Interest or any Additional Interest Amount by the Issuer shall be applied firstly to repaying any outstanding Additional Interest Amount and thereafter to any Arrears of Interest and shall be shared by the Holders of all outstanding Securities on a *pro-rata* basis.

(vi) **No default:**

Notwithstanding any other provision in these Conditions, the deferral of any interest payment (including Arrears of Interest and Additional Interest Amounts) in accordance with this Condition 3(h) shall not constitute a default for any purpose (including, without limitation, pursuant to Condition 7) on the part of the Issuer.

(i) **Definitions:**

For the purposes of these Conditions:

"**Adjustment Spread**" means either a spread (which may be positive or negative) or the formula or methodology for calculating a spread, in either case, which the Rate Determination Agent (acting in good faith and in a commercially reasonable manner) determines is required to be applied to a Replacement Rate in order to reduce or eliminate, to the extent reasonably practicable in the circumstances, any economic prejudice or benefit (as applicable) to Securityholders as a result of the replacement of the Original Swap Rate with the Replacement Rate and is (i) the spread, formula or methodology which is formally recommended in relation to replacement of the Original Swap Rate by any Relevant Nominating Body; or failing which, (ii) the spread, formula or methodology which the Rate Determination Agent determines (acting in good faith and in a commercially reasonable manner) is recognised or acknowledged as being the industry standard for over-the-counter derivative transactions or is in customary market usage in international debt capital markets transactions which reference the Original Swap Rate, where such rate has been replaced by such Replacement Rate; or if no such customary market usage is recognised or acknowledged, (iii) the Rate Determination Agent in its discretion determines (acting in good faith and in a commercially reasonable manner) to be appropriate.

"**Business Day**" means a day that is both a TARGET Settlement Day a day on which commercial banks and foreign exchange markets are open in London.;

"**Euro 5 year Swap Rate**" means:

(i) the mid-swap rate for euros for a term of five (5) years as displayed on Reuters screen "ICESWAP2/EURSFIXA" or, if such rate is not displayed on such screen as at the relevant time, the mid-swap rate as displayed on a successor page as determined by the Calculation Agent (in each case, the Screen Page) as at 11:00 a.m. (Central European time) on the relevant Reset Interest Determination Date (the "**Original Swap Rate**"),

(ii) in the event that the Euro 5 year Swap Rate does not appear on the Screen Page on a Reset Interest Determination Date, the Euro 5 year Swap Rate will be the Reset Reference Bank Rate on such Reset Interest Determination Date. "**Reset Reference Bank Rate**" means the percentage rate calculated by the Calculation Agent on the basis of the 5 year Swap Rate Quotations provided by five leading swap dealers in the interbank market (the "**Reset Reference Banks**") to the Issuer and the Calculation Agent at approximately 11:00 a.m. (Central European time) on the relevant Reset Interest Determination Date. If (a) at least three quotations are provided, the Reset Reference Bank Rate will be the arithmetic mean (or, if only three quotations are provided, the median) of the quotations provided, eliminating the highest quotation (or, in the event of equality, one of the highest) and the lowest quotation (or, in the event of equality, one of the lowest); (b) only two quotations are provided, the Reset Reference Bank Rate will be the arithmetic mean of the quotations provided; (c) only one quotation is provided, the Reset Reference Bank Rate will be the quotation provided; and (d) no quotations are provided, the Reset Reference Bank Rate for the relevant period will be: (i) in the case of each Reset Interest Period other than the Reset Interest Period commencing on the Initial Reset Date, the Euro 5 year Swap Rate in respect of the immediately preceding reset period, or (ii) in the case of the Reset Interest Period commencing on the Initial Reset Date, the Initial Spread.

(iii) notwithstanding paragraph (ii) above, if the Issuer or the Calculation Agent determines at any time that the Screen Page has been discontinued, the Issuer will as soon as reasonably practicable (and in any event prior to the next relevant Reset Interest Determination Date) appoint an independent agent (the "**Rate Determination Agent**"), which will determine in its sole discretion, acting in good faith and in a commercially reasonable manner, whether a substitute or successor rate (the "**Replacement Rate**") for purposes of determining the Euro 5 year Swap Rate on each Reset Interest Determination Date falling on such date or thereafter that is substantially comparable to the Euro 5 year Swap Rate is available, provided that if the Rate Determination Agent determines that there is an industry accepted successor rate, the Rate Determination Agent will use such successor rate to determine the Euro 5 year Swap Rate. If the Rate Determination Agent has determined such Replacement Rate in accordance with the foregoing, for purposes of determining the Euro 5 year Swap Rate on each Reset Interest Determination Date falling on or after such determination, (a) the Rate Determination Agent will also determine changes (if any) to the business day convention, the definition of Business Day, the interest determination date, the day count fraction, and any method for obtaining the Replacement Rate, including any adjustment factor needed to make such Replacement Rate comparable to the Euro 5 year Swap Rate which was displayed on the Screen Page, in each case in a manner that is consistent with industry-accepted practices for such Replacement Rate; (b) the Rate Determination Agent will also determine whether an Adjustment Spread is required to be applied to such Replacement Rate; (c) references to the Euro 5 year Swap Rate in these Conditions will be deemed to be references to the Replacement Rate, including any alternative method for determining such rate as described in (a) above; (d) the Rate Determination Agent will notify the Issuer and the Calculation Agent of the foregoing as soon as reasonably practicable, and (e) the Issuer will give notice as soon as reasonably practicable to the Securityholders (in accordance with Condition 13) and the Trustee specifying the Replacement Rate, as well as the details described in (a) above. The determination of the Replacement Rate and the other matters referred to above by the Rate Determination Agent will (in the absence of manifest error) be final and binding on the Issuer, the Trustee, the Calculation Agent and the Securityholders. If (i) the Issuer is unable, despite its best efforts, to appoint a Rate Determination Agent, or (ii) the Rate Determination Agent determines that the Screen Page has been discontinued but for any reason a Replacement Rate has not been determined, the provisions of paragraph (ii) above will continue to apply.

"**5 year Swap Rate Quotations**" " means the arithmetic mean of the bid and offered rates for the annual fixed leg (calculated on a 30/360 day count basis) of a fixed-for-floating euro interest rate swap which (i) has a term of five (5) years commencing on the relevant Reset Date, (ii) is in an amount that is representative of a single transaction in the relevant market at the relevant time with an acknowledged dealer of good credit in the swap market and (iii) has a floating leg based on the 6-month EURIBOR rate (calculated on the basis of the actual number of days elapsed and year of 360 days);

"**Initial Interest Rate**" means 7.50 per cent. per annum;

"**Initial Spread**" means 7.818 per cent.;

"**Interest Determination Date**" means the second Business Day prior to the start of each Interest Period;

"**Relevant Nominating Body**" means in respect of a benchmark or screen rate (as applicable):

(i) the central bank for the currency to which the benchmark or screen rate (as applicable) relates, or any central bank or other supervisory authority which is responsible for supervising the administrator of the benchmark or screen rate (as applicable); or

(ii) any working group or committee sponsored by, chaired or co-chaired by or constituted at the request of (a) the central bank for the currency to which the benchmark or screen rate (as applicable) relates, (b) any central bank or other supervisory authority which is responsible for supervising the administrator of the benchmark or screen rate (as applicable), (c) a group of the aforementioned central banks or other supervisory authorities or (d) the Financial Stability Board or any part thereof;

"**Relevant Reset Interest Rate**" means the Euro 5 year Swap Rate with respect to the relevant Reset Date plus the Initial Spread;

"**Reset Interest Rate**" means the Euro 5 year Swap Rate with respect to the applicable Reset Date;

"**Reset Date**" means the Initial Reset Date and thereafter each Interest Payment Date falling on, or nearest to, the date which is the fifth anniversary of the immediately preceding Reset Date;

"**Reset Interest Determination Date**" means the day falling two Business Days prior to each Reset Date;

"**Reset Interest Period**" means each period beginning on, and including, a Reset Date and ending on, but excluding, the next succeeding Reset Date;

"**Step-Up Margin**" means 300 basis points;

"**Subsidiary**" means as to any person (the "**first person**"): (i) any other person in which such first person or one or more of its Subsidiaries owns more than a 50 per cent. beneficial interest in the equity of such person, and (ii) any partnership or joint venture if more than a 50 per cent. interest in the profits or capital of such partnership or joint venture is owned by such first person or one or more of its Subsidiaries (unless such partnership or joint venture can and does ordinarily take major business actions without the prior approval of such first person or one or more of its Subsidiaries);

"**TARGET2**" means the Trans-European Automated Real-time Gross Settlement Express Transfer system which utilises a single shared platform and which was launched on November 19, 2007; and

"**TARGET Settlement Day**" means any day on which the TARGET2 system is open for settlement of payments in euro.

4. **Redemption and Purchase**

(a) **No fixed redemption date:**

The Securities are perpetual securities in respect of which there is no fixed redemption date and the Issuer shall only have the right to redeem or purchase them in accordance with the following provisions of this Condition 4.

(b) **Redemption for withholding taxation reasons:**

The Issuer may redeem the Securities in whole, but not in part, at any time on giving not less than 30 nor more than 60 days' notice to the Holders in accordance with Condition 13, the Principal Paying Agent and the Trustee (which notice shall be irrevocable), at the relevant Early Redemption Amount (as defined in Condition 4(g) below), if the Issuer has or will become obliged to pay additional amounts as provided or referred to in Condition 6 as a result of any actual or proposed change in, or amendment to, the laws or regulations of the jurisdiction of the Issuer or any Substitute appointed pursuant to Condition 10 (the "**Relevant Taxing Jurisdiction**") (including a decision or ruling of any court or tribunal) or any political subdivision or any authority thereof or therein having power to tax, or any actual or proposed change in the official application or official interpretation of such laws or regulations (including any interpretation or pronouncement by any relevant tax authority), which change or amendment becomes effective on or after the Issue Date, (a "**Withholding Tax Event**"), provided that (i) such Withholding Tax Event cannot be avoided by the Issuer taking reasonable measures available to it and (ii) no such notice of redemption shall be given earlier than 90 days prior to the earliest date on which the Issuer would be obliged to pay such additional amounts were a payment in respect of the Securities then due. For the purposes solely of this Condition 4(b), any interest scheduled to be payable on any date (whether or not an Interest Payment Date) shall be deemed to be so payable notwithstanding that on such date the Issuer is or may be entitled to defer any such interest payment on such date pursuant to the Conditions and irrespective whether the Issuer has served valid notice of any such interest deferral pursuant to the Conditions. Prior to the publication of any notice of redemption pursuant to this Condition 4(b), the Issuer shall deliver to the Trustee a certificate signed by two authorised signatories of the Issuer stating that the Issuer is entitled to effect such redemption and setting forth a statement of facts showing that the conditions precedent to the right of the Issuer so to redeem have occurred, and an opinion (addressed to the Trustee) of independent legal advisers of recognised standing (which may include legal advisers of the Issuer who have advised in connection with the original issue of the Securities) to the effect that the Issuer has or will become obliged to pay such additional amounts as a result of such change or amendment. The Trustee shall be entitled to accept such certificate and opinion as sufficient evidence of the circumstances set out in this Condition 4(b), in which event they shall be conclusive and binding on Holders.

(c) **Redemption for income taxation deduction reasons:**

The Issuer may redeem the Securities, in whole but not in part, at any time on giving not less than 30 nor more than 60 days' notice to the Holders, the Principal Paying Agent and the Trustee (which notice shall be irrevocable), at the relevant Early Redemption Amount if as a result of any Change of Law: (i) any interest payable under the Securities (including, for the avoidance of doubt, any Arrears of Interest or Additional Interest Amounts) are no longer tax-deductible by the Issuer for corporate income tax purposes in the Relevant Jurisdiction or (ii) the tax deductibility for corporate income tax purposes in the Relevant Jurisdiction of any interest payable under the Securities (including, for the avoidance of doubt, any Arrears of Interest or Additional Interest Amounts) becomes subject to any conditions or requirements which render such tax-deduction either impossible or materially more onerous to the Issuer (each such event referred to in (i) or (ii) an "**Income Tax Deduction Event**"), and such Income Tax Deduction Event cannot be avoided by the Issuer taking reasonable measures available to it. In the case of a Change of Law resulting from any actual change in, or amendment to, the laws or regulations of the Relevant Taxing Jurisdiction (including a decision or ruling of any court or tribunal) or any political sub-division or any authority thereof or therein having power to tax, any such notice of redemption shall be given within 90 days of any such Change of Law becoming effective (or, in the case of a decision or ruling of any court or tribunal, within 90 days of such becoming public). In the case of a Change of Law resulting from any actual change in the official application or official interpretation of such laws or regulations (including any interpretation or pronouncement by any relevant tax authority), any such notice of redemption shall be given within 90 days of any such Change of Law becoming public. For the purposes solely of this Condition 4(c), any interest scheduled to be payable on any date (whether or not an Interest Payment Date) shall be deemed to be so payable notwithstanding on such date the Issuer is or may be entitled to defer any such interest payment on such date pursuant to the Conditions and irrespective whether the Issuer has served valid notice of any such interest deferral pursuant to the Conditions. Prior to the publication of notice of redemption pursuant to this Condition 4(c), the Issuer shall deliver to the Trustee:

(A) a certificate signed by two authorised signatories of the Issuer to the effect of (i) or (ii) above, as the case may be, and setting forth a statement of facts showing that the conditions precedent to the right of the Issuer so to redeem have occurred; and

(B) an opinion (addressed to the Trustee) of independent legal advisers of recognised standing (which may include legal advisers of the Issuer who have advised in connection with the original issue of the Securities) to the effect that as a result of any of the events mentioned in this Condition 4(c) any interest payable under the Securities is no longer tax deductible for corporate income purposes in the Relevant Taxing Jurisdiction.

The Trustee shall be entitled to accept such certificate and opinion as sufficient evidence of the circumstances set out in (i) and (ii) above, in which event they shall be conclusive and binding on Holders.

For the purpose of this Condition, "**Change of Law**" means:

(A) any actual or proposed change in, or amendment to, the laws or regulations of the Relevant Taxing Jurisdiction (including a decision or ruling of any court or tribunal) or any political sub- division or any authority thereof or therein having power to tax; or

(B) any actual or proposed change in the official application or official interpretation of such laws or regulations (including any interpretation or pronouncement by any relevant tax authority),

which change or amendment becomes effective on or after the Issue Date.

(d) **Redemption for accounting reasons:**

The Issuer may redeem the Securities in whole, but not in part, at any time upon not more than 60 days' nor less than 30 days' notice to the Holders in accordance with Condition 13 and to the Principal Paying Agent and the Trustee, which notice shall be irrevocable, at the relevant Early Redemption Amount, if a recognised accountancy firm, acting upon instructions of the Issuer, has delivered a letter or report addressed to the Issuer, stating that as a result of a change in accounting principles (or the application thereof) since the Issue Date the funds raised by the Issuer in respect of the Securities may not or may no longer be recorded as "equity" in the consolidated financial statements of the Issuer pursuant to International Financial Reporting Standards ("IFRS") or any subsequent/alternative accounting standards which the Issuer may use for the purposes of preparing its annual consolidated financial statements (an "**Accounting Redemption Event**").

(e) **Redemption in the case of Minimal Outstanding Amount:**

The Issuer may, at any time on giving not more than 60 nor less than 30 days' irrevocable notice to the Holders in accordance with Condition 13 and to the Principal Paying Agent and the Trustee, redeem all but not some only of the Securities at the relevant Early Redemption Amount if, immediately before giving such notice, the aggregate principal amount of the Securities outstanding is less than 20 per cent. of the aggregate principal amount originally issued (which shall, for the avoidance of doubt, include any further Securities issued pursuant to Condition 11) (a "**Sweep-up Redemption Event**").

(f) **Redemption at the option of the Issuer:**

The Issuer may at its option, redeem all but not some only of the Securities:

(A) at any time during the Relevant Period by providing notice to the Holders specifying the date in the Relevant Period on which redemption shall occur; or

(B) on any Interest Payment Date falling after the Initial Reset Date, in each case, at the relevant Early Redemption Amount.

If the Issuer exercises its option to redeem the Securities in accordance with this Condition 4(f), the Issuer will give not more than 60 days' nor less than 30 days' notice, to the Holders in accordance with Condition 13 and to the Trustee.

"**Initial Reset Date**" means the Interest Payment Date falling on or nearest to 31 July 2024.

"**Relevant Period**" means a period starting 90 calendar days before and ending on the Initial Reset Date.

(g) **Early Redemption Amount:**

The early redemption amount payable by the Issuer in respect of each Security upon redemption of the Securities pursuant to this Condition 4 shall be:

(A) in the case of redemption of the Securities pursuant to Conditions 4(b), 4(d), 4(e) and 4(f), the principal amount of the Security, together with any interest accrued to the date fixed for redemption, all Arrears of Interest and all Additional Interest Amounts; or

(B) in the case of redemption of the Securities pursuant to Conditions 4(c), an amount equal to 101 per cent. of the principal amount of the Security, together with any interest accrued to the date fixed for redemption, all Arrears of Interest and all Additional Interest Amounts,

(each an "**Early Redemption Amount**").

(h) **Purchase:**

Each of the Issuer and its Subsidiaries may at any time purchase or acquire Securities in the open market or otherwise (including by means of any tender or exchange offer) at any price. The Securities so purchased or acquired, while held by or on behalf of the Issuer or any such Subsidiary, shall not entitle the holder to vote at any meetings of the Securityholders and shall not be deemed to be outstanding for the purposes of calculating quorums at meetings of the Securityholders or for the purposes of Condition 10(a).

(i) **Cancellation:**

All Securities, in excess of 10 per cent. of the original principal amount of the Securities (which shall, for the avoidance of doubt, include any further Securities issued pursuant to Condition 11), which are redeemed or purchased in accordance with Condition 4(h), other than any Securities purchased in the ordinary course of a business of dealing in Securities, will be cancelled and may not be re-issued or resold. The obligations of the Issuer in respect of any such Securities shall be discharged.

5. **Payments**

(a) **Method of Payment:**

Payments of principal and interest will be made by transfer to the registered account of the Holder or by Euro cheque drawn on a bank a that processes payments in Euro mailed to the registered address of the Holder if it does not have a registered account. Payments of principal and payments of interest due on redemption of the Securities will only be made against surrender of the relevant certificate at the specified office of any Paying Agent. Each payment on Securities will be paid to the Holder shown on the Register at the close of business on the date (the "**Record Date**") being the fifteenth day before the due date for such payment.

For the purposes of this Condition, a Holder's registered account means the Euro account maintained by or on behalf of it with a bank in a city in which banks have access to the

TARGET2 system, details of which are provided to the Principal Paying Agent at its specified office by the close of business on the relevant Record Date, and a Securityholder's registered address means its address appearing on the Register at that time.

(b) **Payments subject to fiscal laws:**

All payments are subject in all cases to any applicable fiscal or other laws and regulations in the place of payment, but without prejudice to the provisions of Condition 7.

No commissions or expenses shall be charged to the Securityholders in respect of such payments.

(c) **Payments on business days:**

Where payment is to be made by transfer to a Euro account, payment instructions (for value the due date, or, if the due date is not a business day, for value the next succeeding business day) will be initiated and, where payment is to be made by cheque, the cheque will be mailed (i) (in the case of payments of principal and interest payable on redemption) on the later of the due date for payment and the day on which the relevant Certificate is surrendered (or, in the case of part payment only, endorsed) at the specified office of a Paying Agent and (ii) (in the case of payments of interest payable other than on redemption) on the due date for payment. A Holder of a Security shall not be entitled to any interest or other payment in respect of any delay in payment resulting from (A) the due date for a payment not being a business day or (B) a cheque mailed in accordance with this Condition 5 arriving after the due date for payment or being lost in the mail. In this paragraph "**business day**" means:

(A) in the case of payment by transfer to a Euro account (as referred to above, any day which is a TARGET Settlement Day; and

(B) in the case of surrender (or, in the case of part payment only, endorsement) of a Certificate, any day on which banks are open for general business (including dealings in foreign currencies) in the place in which the Certificate is surrendered (or, as the case may be, endorsed).

(d) **Partial Payments:**

If the amount of principal or interest which is due on the Securities is not paid in full, the Registrar will annotate the Register and, in the case of presentation of the Certificate, endorse the Certificate with a record of the amount of principal or interest in fact paid and the date thereof.

(e) **Agents:**

The initial Paying Agents and Calculation Agent and their initial specified offices are listed in the Agency Agreement. The Issuer reserves the right at any time to vary or terminate the appointment of any Paying Agent or Calculation Agent and appoint additional or other Paying Agents or a replacement Calculation Agent, provided that it will maintain (i) a Paying Agent having specified offices in at least one major European city, (ii) for so long as the Securities are listed on the SGX-ST or on any other stock exchange and the rules of the SGX-ST or such other stock exchange so require, a paying agent in Singapore or any other city as shall be required by such rules, (iii) a Calculation Agent and (iv) a Registrar.

Notice of any change in the Paying Agents or Calculation Agent or their specified offices will promptly be given to the Holders in accordance with Condition 13 and the Trustee.

6. **Taxation**

All payments of principal and interest by or on behalf of the Issuer in respect of the Securities shall be made free and clear of, and without withholding or deduction for or on account of, any taxes present or future, duties, assessments or governmental charges of whatever nature imposed, levied, collected, withheld or assessed by or on behalf of or within the Relevant Taxing Jurisdiction or any political subdivision thereof or any authority therein or thereof having power to tax, unless such withholding or deduction is required by law. In that event, the Issuer shall pay such additional amounts as will result in receipt by the Holders after such withholding or deduction of such amounts as would have been received by them had no such withholding or deduction been required, except that no such additional amounts shall be payable in respect of any Security:

(a) Other connection: by or on behalf of a Holder who is liable to such taxes, duties, assessments or governmental charges in respect of such Security by reason of his having some connection with the Relevant Taxing Jurisdiction other than the mere holding of the Security;

(b) Presentation more than 30 days after the Relevant Date: where (in the case of a payment of principal or interest on redemption) the relevant Certificate is surrendered for payment more than 30 days after the Relevant Date except to the extent that the relevant Holder would have been entitled to such additional amounts if it had surrendered the relevant Certificate for payment on the last day of such period of 30 days;

(c) Avoidable deduction: by or on behalf of a Holder if such withholding or deduction would have been avoided by such Holder complying with any statutory requirement or making a declaration of residence or non-residence or other similar claim from exemption to the relevant tax authority and such Holder fails to do so.

"**Relevant Date**" means whichever is the later of (i) the date on which such payment first becomes due and (ii) if the full amount payable has not been received by the Principal Paying Agent on or prior to such due date, the date on which, the full amount having been so received, notice to that effect shall have been given to the Holders. Any reference in these Conditions to principal and/or interest shall be deemed to include any Early Redemption Amount, and, as the case may be, any additional amounts which may be payable under this Condition, any Arrears of Interest and Additional Interest Amounts.

7. **Enforcement**

(a) **Failure to Pay**

Subject to Condition 3(h), if a default is made by the Issuer for a period of 14 days or more in the payment of any principal or the payment of any interest, in each case in respect of the Securities and which is due, then the Issuer shall without notice from the Trustee be deemed to be in default under the Trust Deed and the Securities and the Trustee at its sole discretion may, notwithstanding the provisions of this Condition 7(a) but subject to Condition 7(c), institute proceedings for the winding-up of the Issuer and/or prove in the winding-up of the Issuer and/or claim in the liquidation of the Issuer for such payment.

(b) **Enforcement**

The Trustee may at its discretion (subject to Condition 7(c)) and without further notice institute such proceedings or take such steps or actions against the Issuer as it may think fit to enforce any term or condition binding on the Issuer under the Trust Deed or the Securities but in no event shall the Issuer, by virtue of the institution of any such proceedings, steps or actions, be obliged to pay any principal, premium or interest in respect of the Securities sooner than the same would otherwise have been payable by the Issuer.

(c) **Entitlement of Trustee**

The Trustee shall not be bound to take any of the actions referred to in Condition 7(a) or 7(b) above against the Issuer to enforce the terms of the Trust Deed or the Securities or any other action or step unless (i) it shall have been so requested by an Extraordinary Resolution of the Holders or in writing by the Holders of at least one-quarter in principal amount of the Securities then outstanding and (ii) it shall have been indemnified and/or secured and/or prefunded to its satisfaction.

(d) **Right of Holders**

No Holder shall be entitled to proceed directly against the Issuer or to institute proceedings for the winding-up or claim in the liquidation of the Issuer or to prove in such winding up unless the Trustee, having become so bound to proceed or being able to prove in such winding up or claim in such liquidation, fails to do so within a reasonable period and such failure shall be continuing, in which case the Holder shall have only such rights against the Issuer as those which the Trustee is entitled to exercise as set out in this Condition 7.

(e) **Extent of Holders' remedy**

No remedy against the Issuer, other than as referred to in this Condition 7, shall be available to the Trustee or the Holders, whether for the recovery of amounts owing in respect of the Securities or under the Trust Deed or in respect of any breach by the Issuer of any of its other obligations under or in respect of the Securities or under the Trust Deed.

8. **Prescription**

Claims in respect of principal and interest on redemption will become void unless the relevant Certificate is surrendered for payment within a period of 10 years of the appropriate Relevant Date.

9. **Replacement of Securities**

If any Certificate is lost, stolen, mutilated, defaced or destroyed it may be replaced at the specified office of the Registrar upon payment by the claimant of the expenses incurred in connection with the replacement and on such terms as to evidence and indemnity as the Issuer may reasonably require. Mutilated or defaced Certificates must be surrendered before replacements will be issued.

10. **Meetings of Securityholders, Modification, Waiver and Substitution**

(a) **Meetings of Securityholders:**

The Trust Deed contains provisions for convening meetings of Securityholders to consider matters affecting their interests, including the sanctioning by Extraordinary Resolution (as defined in the Trust Deed) of a modification of any of these Conditions. Such a meeting may be convened by Securityholders holding not less than 10 per cent in principal amount of the Securities for the time being outstanding. The quorum for any meeting convened to consider an Extraordinary Resolution will be two or more persons holding or representing a clear majority in principal amount of the Securities for the time being outstanding, or at any adjourned meeting two or more persons being or representing Securityholders whatever the principal amount of the Securities held or represented, unless the business of such meeting includes consideration of proposals, *inter alia*, (i) to modify the dates on which interest is payable in respect of the Securities, (ii) to reduce or cancel the principal amount of, or interest on, or to vary the method of calculating the rate of interest on, the Securities, (iii) to change the currency of payment of the Securities, or (iv) to modify the provisions concerning the quorum required at any meeting of Securityholders or the majority required to pass an Extraordinary Resolution and certain other provisions of the Trust Deed, as set out in the Trust Deed, in which case the necessary quorum will be two or more persons holding or representing not less than 75 per cent, or at any adjourned meeting not less than 25 per cent, in principal amount of the Securities for the time being outstanding. Any Extraordinary Resolution duly passed shall be binding on Securityholders (whether or not they were present at the meeting at which such resolution was passed).

The Trust Deed provides that a resolution in writing signed by or on behalf of the holders of not less than 90 per cent. in principal amount of the Securities outstanding shall for all purposes be as valid and effective as an Extraordinary Resolution passed at a meeting of Holders duly convened and held. Such a resolution in writing may be contained in one document or several documents in the same form, each signed by or on behalf of one or more Holders.

(b) **Modification:**

The Trustee may agree, without the consent of the Holders, to (i) any modification of these Conditions or of any other provisions of the Trust Deed or the Agency Agreement which is in each case, in the opinion of the Trustee, of a formal, minor or technical nature or is made to correct a manifest error, and (ii) any other modification to (except as mentioned in the Trust Deed), and any waiver or authorisation of any breach or proposed breach by the Issuer of any of these Conditions or of the provisions of the Trust Deed or the Agency Agreement which is, in the opinion of the Trustee, not materially prejudicial to the interests of the Holders.

(c) **Substitution:**

The Trust Deed contains provisions whereby the Trustee shall agree, without the consent of the Holders, to the substitution on a subordinated basis equivalent to that referred to in Condition 2 of any Subsidiary or Affiliate of the Issuer (any such entity, a "**Substitute**") in place of the Issuer (or any previous Substitute under this Condition) as a new principal debtor under the Trust Deed and the Securities, provided that: (1) the Issuer shall have provided to the Trustee a certificate from two directors of the Issuer, confirming that the proposed substitution will not be materially prejudicial to the interests of Holders, and (2) subject to the satisfaction of the Substitution Conditions (as defined below).

Such substitution may take place only if: (i) the Substitute shall, agree to indemnify and hold harmless each Holder and the Trustee against any tax, duty, assessment or governmental charge which is or may be imposed on, incurred by or levied on it by (or by any authority in or of) the jurisdiction of the country of the Substitute's residence for tax purposes and, if different, of its incorporation with respect to any Security and which would not have been so imposed had the substitution not been made, as well as against any tax, duty, assessment or governmental charge, and any liability, charge, cost or expense, in connection with the substitution; (ii) all action, conditions and things required to be taken, fulfilled and done (including the obtaining of any necessary consents or approvals) to ensure that the Trust Deed and the Securities represent valid, legally binding and enforceable obligations of the Substitute and have been taken, fulfilled and done and are in full force and effect; (iii) the Substitute shall have become party to the Agency Agreement and the Trust Deed, as if it had been an original party to it; (iv) the obligations of the Substitute under the Securities shall be unconditionally and irrevocably guaranteed by Trafigura Group Pte. Ltd.; (v) legal opinions, dated not more than 5 Business Days prior to the date of substitution, addressed to the Trustee shall have been delivered from independent legal advisers of recognised standing in each jurisdiction referred to in (i) above, the jurisdiction of the Issuer (if different) and in England as to the fulfilment of the preceding conditions of this Condition 10 and the other matters specified in the Trust Deed; and (vi) the Issuer shall have given at least 14 days' prior notice of such substitution to the Securityholders in accordance with Condition 13, stating that copies, and pending execution the agreed text, of all documents in relation to the substitution which are referred to above, or which might otherwise reasonably be regarded as material to Securityholders, will be available for inspection at the specified office of each of the Paying Agents. Conditions (i) to (vi) above shall together constitute the "**Substitution Conditions**").

For the purposes of this Condition, "**Affiliate**" means a person that directly, or indirectly through one or more intermediaries, controls or is controlled by, or is under common control with, the person specified.

The Issuer will notify the Trustee and Holders as soon as reasonably practicable following a substitution in accordance with Condition 13 and such substitution shall become effective upon the publication of such notice.

In connection with any proposed substitution as aforesaid and in connection with the exercise of its trusts, powers, authorities and discretions (including but not limited to those referred to in this Condition 10), the Trustee shall have regard to the general interests of the Holders as a class but shall not have regard to the consequences of such substitution or such exercise for individual Holders. In connection with any substitution or such exercise as aforesaid, no Holder shall be entitled to claim, whether from the Issuer, the Substitute or the Trustee or any other person, any indemnification or payment in respect of any tax consequence of any such substitution or any such exercise upon any individual Holders except to the extent already provided in Condition 10 and/or any undertaking given in addition thereto or in substitution therefor pursuant to the Trust Deed.

(d) **Subordination of obligations of Substitute:**

In respect of any substitution pursuant to this Condition in respect of the Securities, the amended Trust Deed shall provide for such further amendment of these Conditions as shall be necessary or desirable to ensure that the Securities constitute subordinated obligations of the Substitute, subordinated to no greater than the same extent as the Issuer's obligations prior to its substitution to make payments of principal in respect of the Securities under Condition 2.

(e) **Notification**

Any modification, waiver, authorisation or substitution shall be binding on all Holders and, unless the Trustee agrees otherwise, any such modification, waiver, authorisation or substitution shall be notified to the Holders by the Issuer in accordance with Condition 13 as soon as practicable thereafter.

11. **Further Issues**

The Issuer may from time to time without the consent of the Holders create and issue further Securities either having the same terms and conditions as the Securities in all respects, or in all respects except for the first payment of interest on them, and so that such further issue shall be consolidated and form a single series with the outstanding Securities. References in these Conditions to the Securities include (unless the context requires otherwise) any other Securities issued pursuant to this Condition and forming a single series with the Securities.

12. **Provision of Financial Information**

For so long as any Securities are outstanding the Issuer will deliver to the Trustee within 120 days of the end of each financial year of the Issuer, beginning with the financial year ending 30 September 2019, a copy in the English language of its consolidated financial statements consisting of an audited consolidated balance sheet of the Issuer as at the end of the most recent financial year and prior financial year and audited consolidated statements of income, comprehensive income, changes in equity and cash flow of the Issuer for the most recent financial year with a comparison against the prior-year period, together with complete notes to such financial statements and a report of the independent auditors of the Issuer on such financial statements; and procure that copies of the same are made available (A) on the website of the Singapore Stock Exchange and (B) for inspection by Holders in accordance with the Agency Agreement at the Specified Office of each of the Paying Agents as soon as practicable thereafter. The financial statements referred to in this paragraph shall be prepared in accordance with IFRS (or any subsequent/alternative accounting standard that the Issuer may use for the purpose of preparing its annual consolidated financial statements).

In addition, for so long as any Securities are outstanding, the Issuer will deliver to the Trustee within 90 days of the end of the first six months in each financial year of the Issuer, beginning with the six months ended 31 March 2020, a copy in the English language of half-yearly financial statements consisting of an unaudited consolidated balance sheet as at the end of such six months and the immediately preceding financial year-end and unaudited statements of income and cash flow for the six months ending on the date of the unaudited balance sheet, and the comparable prior year period for the Issuer, and procure that copies of the same are made available (A) on the website of the Singapore Stock Exchange and (B) for inspection by Holders in accordance with the Agency Agreement at the Specified Office of each of the Paying Agents as soon as practicable thereafter. The interim condensed financial statements referred to in this paragraph shall be prepared in accordance with IAS 34 (or any subsequent/alternative accounting standard that the Issuer may use for the purpose of preparing its semi-annual consolidated financial statements).

In the event that a substitution takes place in accordance with Condition 10(c), and the Substitute is thereafter the principal consolidating entity of the Group, the obligation to deliver financial statements pursuant to this Condition 12 shall apply to the Substitute and to the financial statements of such Substitute, rather than the Issuer.

For the purposes of this condition the "**Group**" shall mean the Issuer and its consolidated Subsidiaries immediately prior to the date of any proposed substitution in accordance with Condition 10(c).

13. **Notices**

All notices to the Securityholders will be mailed to them at their respective addresses in the register of Securityholders maintained by the Registrar. Any such notice shall be deemed to have been given on the fourth day after the date of mailing. Notices to Securityholders will also be valid if published in a daily newspaper of general circulation in Asia (which is expected to be the Wall Street Journal Asia, an online only publication) and in accordance with the requirements of any stock exchange upon which the Securities are for the time being listed. If any such publication is not practicable, notice shall be validly given if published in another leading daily English language newspaper with general circulation in Asia. Any such notice shall be deemed to have been given on the date of such publication or, if published more than once or on different dates, on the first date on which publication is made.

14. **Contracts (Rights of Third Parties) Act 1999**

No person shall have any right to enforce any term or condition of the Securities under the Contracts (Rights of Third Parties) Act 1999.

15. **Governing Law**

(a) **Governing Law:**

The Trust Deed and the Securities and any non-contractual obligations arising out of or in connection with them are governed by and shall be construed in accordance with English law, except that Condition 2(a) is governed by, and shall be construed in accordance with, Singapore law.

(b) **Agent for Service of Process:**

The Issuer irrevocably appoints Trafigura Limited of Portman House, 14 St. George Street, London W1S 1FE, United Kingdom as its agent in England to receive service of process in any Proceedings in England based on any of the Securities. If for any reason the Issuer does not have such an agent in England, it will promptly appoint a substitute process agent and immediately notify the Holders of such appointment in accordance with Condition 13. Nothing herein shall affect the right of any Holder to serve process in any other manner permitted by law.

SUMMARY OF PROVISIONS RELATING TO THE SECURITIES WHILE IN GLOBAL FORM

Clearing System Accountholders

Securities sold within the United States to accredited "institutional investors" (within the meaning of Rule 501(a)(1), (2), (3), (7) or (8) under the Securities Act) in reliance on Section 4(a)(2) under the Securities Act ("**Restricted Securities**") will initially be represented by a global security in registered form without interest coupons attached (the "**Restricted Global Security**"). Securities sold to persons outside the United States in reliance on Regulation S under the Securities Act ("**Unrestricted Securities**") will initially be represented by a global security in registered form without interest coupons attached (the "**Unrestricted Global Security**" and, together with the Restricted Global Security, the "**Global Securities**"). On the Issue Date, the Global Securities will be deposited with a common depositary and registered in the name of the nominee of the common depositary for the account of Euroclear and Clearstream, Luxembourg.

Ownership of interests in the Restricted Global Security (the "**Restricted Book-Entry Interests**") and ownership of interests in the Unrestricted Global Security (the "**Unrestricted Book-Entry Interests**" and, together with the Restricted Book Entry Interests, the "**Book-Entry Interests**") will be limited to persons that have accounts with Euroclear and/or Clearstream, Luxembourg or persons that hold interests through such participants. Euroclear and Clearstream, Luxembourg will hold interests in the Global Securities on behalf of their participants through customers' securities accounts in their respective names on the books of their respective depositories. Except under the limited circumstances described below, Book-Entry Interests will not be issued in definitive form.

Book-Entry Interests will be shown on, and transfers thereof will be effected only through, records maintained in Book-Entry form by Euroclear and Clearstream, Luxembourg and their participants. The Book-Entry interests will not be held in definitive form. Instead Euroclear and Clearstream, Luxembourg will credit on their Book-Entry transfer and registration systems a participants account with the interest beneficially owned by such participant. The laws of some jurisdictions, including certain states of the United States, may require that certain purchasers of securities take physical delivery of those securities in definitive form. The foregoing limitations may impair your ability to own, transfer or pledge Book-Entry Interests. In addition, while the Securities are in global form, holders of Book-Entry Interests will not be considered the owners or "holders" of Securities for any purpose.

So long as the Securities are held in global form, Euroclear and/or Clearstream, Luxembourg (or their respective nominees), as applicable, will be considered the sole holders of the Global Securities for all purposes under the Agency Agreement. In addition, participants must rely on the procedures of Euroclear and Clearstream, Luxembourg, and indirect participants must rely on the procedures of Euroclear and Clearstream, Luxembourg and the participants through which they own Book-Entry Interests, to transfer their interests or to exercise any rights of holders of Securities under the Trust Deed.

Neither the Issuer nor the Principal Paying Agent will have any responsibility, or be liable, for any aspect of the records relating to the Book-Entry Interests.

Conditions applicable to Global Security

Each Global Security will contain provisions which modify the Conditions as they apply to the Global Security. The following is a summary of certain of those provisions:

Payments: The Issuer will make payments of any amounts owing in respect of the Global Securities (including principal, premium, if any, interest and additional amounts, if any) to the custodian or its nominee for Euroclear and Clearstream, Luxembourg. The common depositary will distribute such payments to participants in accordance with their customary procedures. The Issuer expects that standing customer instructions and customary practices will govern payments by participants to owners of Book Entry Interests held through such participants. Under the terms of the Agency Agreement, the Issuer and the Principal Paying Agent will treat the registered holders of the Global Securities (e.g., Euroclear or Clearstream, Luxembourg (or their respective nominee)) as the owner thereof for the purpose of receiving payments and for all other purposes. Consequently, none of the Issuer, the Principal Paying Agent or any of their respective agents has or will have any responsibility or liability for:

- any aspect of the records of Euroclear, Clearstream, Luxembourg or any participant or indirect participant relating to, or payments made on account of, a Book-Entry Interest or for maintaining, supervising or reviewing the records of Euroclear or Clearstream, Luxembourg or any participant or indirect participant relating to, or payments made on account of, a Book-Entry Interest;

- any other matter relating to the actions and practices of Euroclear, Clearstream, Luxembourg or any participant or indirect participant or any participant or indirect participant; or

- the records of the common depositary.

Payments by participants to owners of Book-Entry interests held through participants are the responsibility of such participant.

Notices: Notwithstanding Condition 13 (*Notices*), while all the Securities are represented by a Global Security and the Global Security is registered in the name of a nominee for and deposited with a depositary or a common depositary for Euroclear and/or Clearstream, Luxembourg and/or any other relevant clearing system, notices to Securityholders may be given by delivery of the relevant notice to Euroclear and/or Clearstream, Luxembourg and/or any other relevant clearing system and, in any case, such notices shall be deemed to have been given to the Securityholders in accordance with Condition 13 (*Notices*) on the date of delivery to Euroclear and/or Clearstream, Luxembourg and/or any other relevant clearing system, except that, for so long as such Securities are admitted to trading on the SGX-ST, the SGX-ST notices will also be published in accordance with SGX-ST rules.

Transfers

Transfers between participants in Euroclear or Clearstream, Luxembourg will be effected in accordance with the rules of Euroclear and Clearstream, Luxembourg and will be settled in immediately available funds. If a holder of a Security requires physical delivery of Definitive Securities for any reason, including to sell Securities to persons in states that require physical delivery of such securities or to pledge such securities, such holder of Securities must transfer its interests in the Global Securities in accordance with the normal procedures of Euroclear and Clearstream, Luxembourg and in accordance with the procedures set forth in the Trust Deed.

The Global Securities will bear a legend to the effect set forth under "*Transfer restrictions*." Book-Entry Interests in the Global Securities will be subject to the restrictions on transfers and certification requirements discussed under "*Transfer restrictions*."

Transfers of Restricted Book-Entry Interests to persons wishing to take delivery of Restricted Book-Entry Interests will at all times be subject to such transfer restrictions.

Restricted Book-Entry Interests may be transferred to a person who takes delivery in the form of an Unrestricted Book-Entry Interest only upon delivery by the transferor of a written certification (in the form provided in the Trust Deed) to the effect that such transfer is being made in accordance with Regulation S under the Securities Act or any other exemption (if available under the Securities Act).

Unrestricted Book-Entry Interests may not be transferred to a person who takes delivery in the form of a Restricted Book-Entry Interest.

In connection with transfers involving an exchange of a Restricted Book-Entry Interest for an Unrestricted Book-Entry Interest, appropriate adjustments will be made to reflect a decrease in the principal amount of the Restricted Global Security and a corresponding increase in the principal amount of the Unrestricted Global Security.

USE OF PROCEEDS

The Securities will be distributed by the Group pursuant to the Scheme in connection with the Nyrstar debt restructuring having an aggregate principal amount of approximately EUR 262,500,000 for which no cash proceeds will be received by the Issuer. See "*Subscription and Sale*".

RECENT DEVELOPMENTS

The following information is provided to assist investors in evaluating an investment in the Group. The Group has extracted this information from public sources and makes no representation as to its accuracy or completeness other than its correct extraction from such public sources.

Through its indirect subsidiary, Urion Holdings (Malta) Limited, the Group is a significant shareholder of Nyrstar N.V. ("**Nyrstar**", and together with its subsidiaries, the "**Nyrstar Group**") initially acquiring its shareholding therein through several acquisitions between October 2014 and February 2016. The Group has had commercial arrangements with the Nyrstar Group since its inception in 2007 and longer term-structured arrangements since acquiring a substantial shareholding in the company in 2015. Immediately prior to the completion of the Restructuring and the Scheme, the Group held approximately 24.42 per cent. of the ordinary shares in Nyrstar.

The Nyrstar Group

The Nyrstar Group business is a global multi-metals business, with a strong market position in zinc and lead, and growing positions in other base and precious metals. It is one of the world's largest zinc smelting companies based on production levels. The Nyrstar Group business has mining, smelting and other operations located in Europe, the Americas and Australia and employs approximately 4,200 people. The ordinary shares of Nyrstar have been admitted to trading on Euronext Brussels since 29 October 2007.

The Nyrstar Group currently has two operating segments, Metals Processing and Mining.

Metals Processing

The Metals Processing segment comprises the following smelters: Auby (France), Balen (Belgium), Budel (The Netherlands), Clarksville (U.S.), Hobart (Australia) and Port Pirie (Australia), and a fumer at Hoyanger (Norway). Zinc smelting is the process of recovering and refining zinc metal out of zinc-containing feed material such as zinc containing concentrates or zinc oxides.

Nyrstar is one of the world's largest zinc smelting companies based on production volumes. Having produced approximately 1.1m tonnes of zinc metal in 2018, Nyrstar's share of the global zinc market in 2018 was 8.1 per cent (based on 2018 smelted zinc production figures of 13.2m tonnes) according to Wood Mackenzie in their Long Term Outlook fourth quarter of 2018, which made Nyrstar the second largest producer globally after Korean Zinc Co., Ltd. which benefits from a 9.2 per cent. market share in 2018.

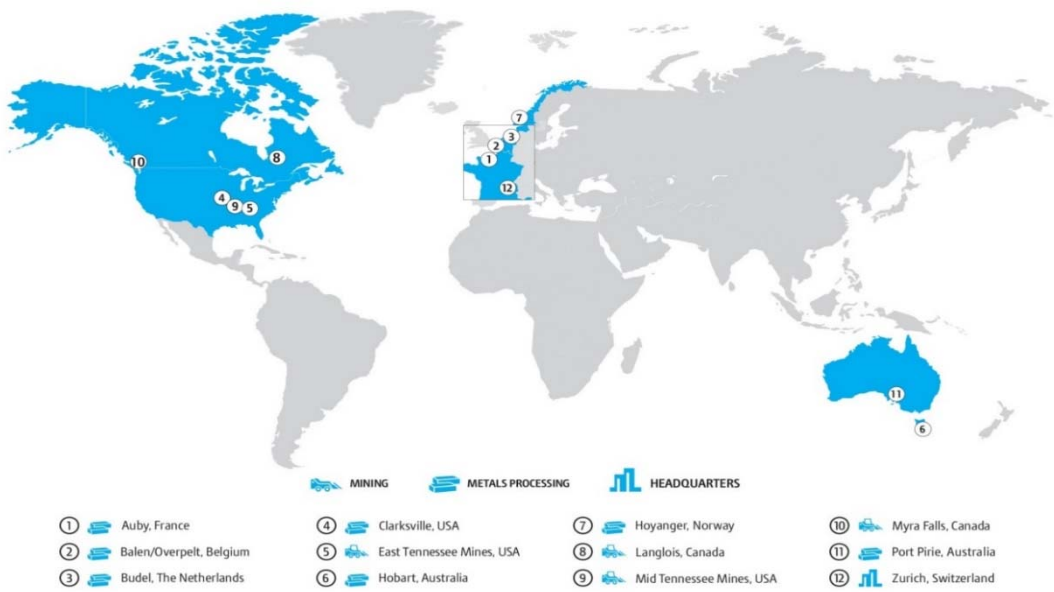
While Nyrstar's smelters are mostly primary zinc smelters, its smelter in Port Pirie in Australia is a primary lead smelter with multi-metal recovery capabilities. With its multi-metal capabilities, Port Pirie has the flexibility to process a wide range of lead-containing feedstocks to produce refined lead, zinc in fume, silver, copper and gold. Port Pirie has been redeveloped into an advanced metal recovery and refining facility, potentially enabling a fundamentally different operating and business model. Once fully ramped-up, the Port Pirie redevelopment is expected to allow Nyrstar to capture a greater proportion of the value contained within the feed material consumed by the metals processing part of the Nyrstar Group's network of smelters as well as third party residues.

Mining

The Mining segment currently consists of Nyrstar Tennessee Mines (U.S.), Myra Falls and Langlois (Canada). In the years ended 31 December 2018, 2017 and 2016, the Mining segment sales to the Metals Processing segment accounted for approximately 98 per cent of the Mining segment's revenue in each of those years. In 2018, the Nyrstar Group's zinc mining operations were the fifteenth largest in the world (based on 2018 production according to Wood Mackenzie). The Nyrstar Group's mines are currently at various stages of operation, as some are operating at full production capacity and others are in ramp-up. The Nyrstar Group is rolling out optimization plans for all four of its North American mining assets. The Nyrstar Group also has global operations, with smelters and mines close to key customers and major transport hubs to facilitate delivery of raw materials and distribution of finished products.

Global presence

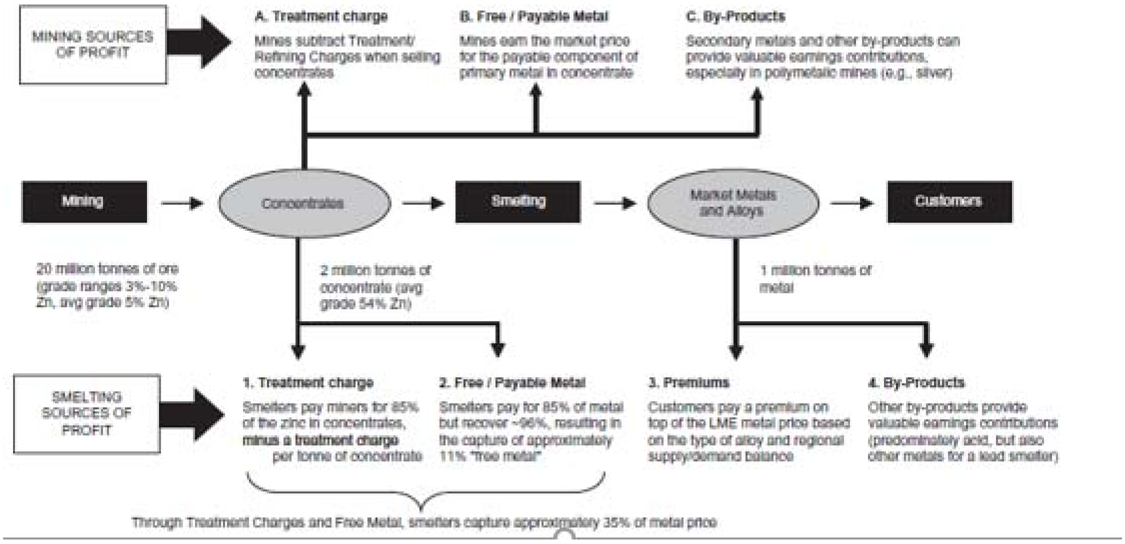
The Nyrstar Group also has global operations, with smelters and mines close to key customers and major transport hubs to facilitate delivery of raw materials and distribution of finished products. The map below illustrates Nyrstar's current operations:



Economic drivers for zinc mines and smelters

The zinc market consists of two sequential markets, the market for zinc concentrates between mines and smelters and the market for refined zinc between smelters and consumers. The price of metal in the refined market is set by trading on the London Metals Exchange ("**LME**") with smelter-specific premium adjustments according to conditions in markets. The amount of recoverable zinc in concentrate priced at the LME price plus smelter premiums determines concentrate zinc value. This value is apportioned between mines and smelters by way of the commercial concentrate sales contract such that miners receive a net income consisting of the paid contained zinc value less treatment charges (the "**TCs**") and smelters receive a net income consisting of the concentrate treatment charges, free metal, premiums and by-products (as defined in the following diagram).

Integrated mining and smelting business model: example of sources of profit



The market price of zinc is a key component in determining the value of the zinc contained in concentrate. The dynamics of how that value is shared between (i) the Nyrstar Group's Mining segment and other mining companies, as suppliers of zinc concentrates, and (ii) the Nyrstar Group's Metals Processing segment and other smelters are driven primarily by the relationship between the global supply of zinc concentrate from miners and the global demand for zinc concentrates by the smelters. In a market situation where the demand for zinc concentrates is greater than the supply, a relatively greater share of the zinc metal value and lead metal value will typically go to the miner. Conversely, when concentrates are relatively abundant, the opposite occurs and a greater share of such value is typically captured by the smelter. Negotiation of the applicable treatment charge is the key mechanism by which the value of the contained zinc in concentrate shifts between the miner and the smelter.

The Nyrstar Group's results therefore correlate to the levels of TCs that it charges zinc miners to refine zinc concentrates and lead miners to refine their lead concentrates. These TCs are cyclical in nature.

Operational and financial issues

The Nyrstar Group has been impacted by a number of operational/financial issues which have negatively affected its performance. The key issues affecting performance include:

- cost overruns and delays in the completion of the redevelopment of the Port Pirie smelting facility and subsequent ramp-up;
- delays to the recommencement of operations at the Myra Falls mine and weak operating performance at the "Middle Tennessee mines";
- historically low treatment charges for zinc and lead concentrate; and
- increased energy costs with respect to the smelting operations in Europe and Australia.

As a result, in October 2018 Nyrstar issued its third quarter interim management statement reporting that the Group had performed materially below the results achieved in the first half of its 2018 financial year. This performance had been affected particularly by a deterioration in commodity prices, historically low zinc treatment charges and increased energy costs in Europe. Over the course of the last quarter of 2018, commodity prices, exchange rates and treatment charges were at similar levels to those experienced in the third quarter of 2018. However, energy prices in Europe were higher and the Port Pirie site was affected by maintenance shut downs for the majority of December 2018. For the full year 2018, the Nyrstar Group's Underlying EBITDA was down 52 per cent. compared to 2017.

The Group believes that Nyrstar has been held back in recent times by its capital structure. Net debt for the Nyrstar Group at the end of 2018 at EUR 1,643 million, excluding the zinc metal prepay, was 49 per cent. higher compared to the end of 2017 (EUR 1,102 million at the end of 2017). This was predominantly due to higher commodity prices and the expiry of prepayment agreements, as well as certain credit constraints and accounting changes. Further information about the business, operations and financial performance of the Nyrstar Group is set out in the audited consolidated financial statements for the year ended 31 December 2018 which are available on the Nyrstar Group's website. The audited consolidated financial statements of the Nyrstar Group and the website of the Nyrstar Group do not form part of this Offering Circular and the Group accepts no responsibility nor liability with respect to the accuracy or completeness of the information contained in such financial statements or website.

Steps taken to address the Nyrstar Group's performance

In light of the deterioration in revenues and cash flow that were experienced in the fourth quarter of 2018 and the first half of 2019, the Nyrstar Group adopted a number of measures to address trading and short-term liquidity challenges, including a review of its capital structure (included in its 2018 interim management statement on 30 October 2018), the purpose of which was to explore the various options available to address the upcoming debt maturities in mid-late 2019. These measures were not sufficient to address the increased costs of the business. Absent the Restructuring (as defined below), it is likely that group-wide insolvencies would occur, as a result of which the recoveries for the Nyrstar Group's creditors (including the Group) would likely be significantly less than if the Restructuring were to be completed successfully.

The restructuring

In April 2019, Nyrstar entered into a lock-up agreement with a majority of its financial creditors for the purpose of recapitalising the Nyrstar Group. The Group is a party to this lock-up agreement and in conjunction with entering into the lock-up agreement, the Group provided USD 250 million to Nyrstar Sales & Marketing AG through a committed term loan facility to strengthen the Nyrstar Group's liquidity position and provide for its interim funding requirements prior to completion of the Restructuring.

The Nyrstar Group has now agreed in principle with the Group, in excess of 94 per cent. of its existing noteholders and all but one of its existing bank lenders to a proposed scheme of arrangement (the "**Scheme**") as part of the restructuring (the "**Restructuring**") of the financial indebtedness and capital structure of the Nyrstar Group and its Subsidiaries as set out in the Scheme and described in more detail in the Explanatory Statement (as defined below), the implementation of which is intended to ensure the continuing operations of the Nyrstar Group for the benefit of all stakeholders, with the key elements for a sustainable capital structure and a foundation from which the Nyrstar Group can deliver long-term value for all its stakeholders. The primary objectives of the Restructuring are to:

(a) obtain new capital in order to enable the Nyrstar Group to cover its operating expenses and recover its competitive position (through the provision of a new money facility by certain of the Nyrstar Group's existing lenders);

(b) reduce the total indebtedness of the Nyrstar Group to a sustainable level;

(c) ensure the Nyrstar Group can service its general corporate and working capital obligations; and

(d) implement a new capital structure so that the Nyrstar Group will possess a stronger balance sheet and a more serviceable level of debt going forward.

As a part of the Restructuring and in exchange for the discharge of the Nyrstar Group's obligations under its outstanding bonds and convertible notes, the Group has agreed to provide *pro-rata* to the Nyrstar Group's bondholders and convertible noteholders each with a pro rata share (calculated in respect of principal and accrued interest owing as at 15 March 2019) of each of the following instruments (i) perpetual resettable step-up subordinated securities issued by Trafigura Group Pte. Ltd.; (ii) guaranteed senior notes issued by Trafigura Funding S.A. under the EUR3 billion Euro Medium Term Note Programme; and (iii) zero coupon commodity linked instruments issued by a holding company of the Nyrstar Group and guaranteed by the Group. The Restructuring is expected to result in the Trafigura Group indirectly obtaining approximately 98 per cent. of the shares of the Nyrstar Group.

Details of the Scheme will be set out in the Explanatory Statement in relation to the Scheme provided pursuant to section 897 of the Companies Act 2006 (the "**Explanatory Statement**"), which is expected to be made available to Nyrstar bondholders.

DESCRIPTION OF THE GROUP

Until 30 September 2015, the Group's reference parent company (meaning the Group's consolidating entity but not the top holding company) was Trafigura Beheer B.V. ("**TBBV**"), a company incorporated under the laws of the Netherlands. On 30 September 2015, an entity called Trafigura Group Pte. Ltd. (the "**Company**" or "**TGPL**") incorporated in Singapore under the Companies Act, Chapter 50 of Singapore (with registration number 201017488D) assumed the role of reference parent company for the Group. The Company is a private limited liability company incorporated on 18 August 2010 and existing under the laws of Singapore. The registered office of the Company is at 10 Collyer Quay, Ocean Financial Centre, #29-00 Singapore 049315 and its telephone number is +65 6319 2960. The Company was incorporated for an indefinite duration and has no other commercial name.

Competitive Strengths

The Company believes that the Group's success is built upon the following combination of key competitive strengths:

Leading market position in the global commodity trading industry

The Group is one of the leading traders in the segments in which it operates.

The global competitive environment for physical commodities traders has evolved over the last few years. The Group operates today in a marketplace previously dominated by the major producers, whose operations in recent years have increasingly focused on upstream exploration and production and have reduced their involvement in distribution. There is also an increasing view that genuine global scale is required for commodity traders to be successful, apart from specific niche players. Indeed, the larger firms, with their greater access to liquidity and logistics assets, more significant IT infrastructure, and better access to proprietary information on commodity flows across geographies and commodities, can access and capture the strategic trading volumes and continue to be profitable; in particular, in times of lower volatility, when global commodity margins are under pressure. As a result, there has been consolidation in the industry, putting mid-tier companies under pressure, with global players such as the Group are becoming more prominent. These changes provide the Group with scope for growth in its core commodity activities.

Long term competitiveness in the industry is achieved through volume and market share dominance. The Group's scale presents a significant advantage over product focused niche traders that profit more from regional logistics than global arbitrage.

For the year ended 30 September 2018, the Group had a turnover (revenue) of USD 181 billion, with 69 per cent. generated by oil and petroleum products and 31 per cent. generated by the metals and minerals business division compared to a turnover of USD 136 billion with 69 per cent. and 31 per cent. generated by oil and petroleum products and by the metals and minerals business division, respectively, for the year ended 30 September 2017. For the half year ended 31 March 2019, the Group had a turnover of USD 86.3 billion, with 67 per cent. generated by oil and petroleum products and 33 per cent. generated by the metals and minerals business division compared to a turnover of USD 86.9 billion with 69 per cent. and 31 per cent. generated by oil and petroleum products and by the metals and minerals business division, respectively, for the half year ended 31 March 2018. Although there is no published market share information, based on market knowledge, the Group believes that it is the second largest independent trader of crude and refined products, with approximately 3-4 per cent. market share of the highly fragmented market, and approximately 7-8 per cent. of the "tradable market"[1]. Based on market knowledge, the Group also believes that it is the second largest independent trader in non-ferrous metals with estimated market shares in the tradable market ranging from 15 to 45 per cent. depending on the commodity. Based on its own market intelligence, the Group believes itself to be world largest independent traders of Liquified Natural Gas ("**LNG**").

Extensive global network

The Group's operations are geographically diversified with exposure to high growth supply and demand regions. The Group has an extensive global network and manages its activities via 66 offices in over 38

[1] Defined as volumes which are not distributed by producers directly to consumers.

countries organised across Europe, Asia, Australia, North America, Latin America and Africa (as at 30 September 2018), employing over 4,316 full-time employees on average over the financial year.

The Group believes that its scale and global footprint represent a key strength allowing it to improve its access to constantly evolving global commodity trade flows while helping to mitigate its exposure to regional risks. The Group's local presence, knowledge and relationships in different regions provide it with first hand market intelligence and information to enable it to identify and execute arbitrage opportunities. Furthermore, its local presence provides insight into macro drivers such as foreign exchange fluctuations, government policies, upstream commodity operations, and transport.

Highly diversified business model

The Group's business activities are focused on two main areas, namely trading, and industrial assets and investments that complement and enhance the trading activities. These activities are complementary to each other and help smooth income volatility resulting from the natural cycles of the commodities trading industry. Within its trading and industrial assets businesses, the Group's activities are diversified in terms of products traded and handled as well as geographical presence and types of supplier/customer base.

The Group is one of the most diverse global commodities firms in terms of products, geographies, suppliers and customers and one of few physical commodities firms with such breadth. It focuses on two asset classes: oil and petroleum products, and metals and minerals. It covers the main product categories within these fields, including some of the world's most actively traded commodities such as: crude oil, gasoline, distillates, alumina, non-ferrous concentrates, aluminium, copper, zinc and coal.

The Group has a diverse customer base with no single external customer representing more than four per cent. of turnover for oil and petroleum products (apart from the Group affiliated company, Puma Energy), and two per cent. for metals and minerals. In the oil and petroleum products business, the Group transacts with a diverse customer base located around the globe, including electricity utilities, oil refiners, major distributors, and state owned oil companies. In metals and minerals, the Group's broad customer base ranges from mining companies to smelters, and refined metals retailers. For the year ended 30 September 2018, the Group's top 10 customers (excluding Puma Energy) in either business constitute less than 30 per cent. of revenues for respective divisions.

The diversity of the Group's commodities offerings contributes to a reduced risk profile, both on the market side and in terms of spreading credit risk among a wider base of market counterparties.

Solid industrial asset base

The Group's business model is focused on balancing global supply and commodity trade flows and exploiting natural, low risk physical arbitrage opportunities.

The key to creating arbitrage opportunities is through increasing trading volumes by securing supply and off take contracts, as well as controlling logistical instruments (e.g. time charters, storage facilities, ports etc.). The Group's investments, whether in the oil or metals and minerals sector are focused on opportunities that provide complementary volume flow to the trading business, open up new markets and create recurrent, sustainable income sources.

The Group's trading activities are supported by a solid base of fixed midstream, downstream and mining assets. Through its selected asset investments, the Group has an established global presence throughout the value chain. The Group's industrial assets amounted to USD 6,636 million as of 30 September 2018 and USD 6,717 million as of 31 March 2019. These fixed assets correspond mainly to the Group's investment in Puma Energy Group, the Group's 49.3 per cent.-owned oil storage and distribution assets, Impala Terminals, the Group's metals and minerals warehousing division and logistics provider, the Group's 50 per cent. interest in Simba Holding S.à.r.l., the 49 per cent. interest in Tendril Ventures Pte Ltd (Nayara Energy Limited), the Group's oil storage and export terminals (such as the fully owned Petromining terminal in Argentina) and other assets held as part of its mining portfolio.

In addition to trading synergies, the cash flows generated by the Group's industrial assets portfolio have been growing significantly and now contribute substantially to the Group's profitability, resulting in an additional source of profitability and further diversification.

Conservative risk management and strong governance standards

The Group has put in place and adheres to comprehensive and clear compliance and risk management procedures which are monitored on a daily basis.

Prudent risk management is integral to the Group's business model and has been entrenched since its foundation. Risk management is a central focus for the Group's Board of Directors (the "**Board of Directors**") and the Group's Management Committee (the "**Management Committee**") and a crucial consideration in the Group's overall trading strategy. The Group operates a policy of hedging all its physical positions for price risk. All trading positions are monitored on a daily basis through various metrics, including a VaR soft limit target of less than one per cent. of equity. Operational risk is proactively managed through comprehensive vetting and due diligence procedures, which are continuously reviewed and updated to reflect the evolving nature of the regulatory environment. For further information on the Group's risk management policies and procedures please refer to "*Risk Management*".

The Group also has strict compliance policies in place, operating an overarching code of business conduct, which enforces a zero tolerance approach to bribery and corruption, promotes honest and ethical conduct and serves as a guide for all employees on how to comply with laws and regulations and exercise good business judgement. The Group also operates a strict know your counterparty ("**KYC**") process necessitating the successful completion of credit and compliance checks before transacting with a new counterparty. For further information on corporate governance and compliance policies and procedures please refer to "*Management Structure and Corporate Governance*".

The Group's risk management framework is supported by its proprietary IT systems which record transactions from the point of trade capture through to accounting entries and provide maximum transparency and control by ensuring different levels of access and automatic dissemination of key information to all concerned parties.

The Group believes that its sound risk management policies have contributed to its positive performance through the volatile market environment over the last few years and helped to mitigate earnings volatility.

Strong leadership and ownership by management and key employees

The Group management team has substantial experience in the commodity sector and a proven track record in the development of the business. The Company's Board of Directors has significant experience both in the commodities sector and within the Group with an average of approximately 22 years' experience in the commodities sector. Since the foundation of the Group in 1993, the management team has overseen the consolidation and expansion of its trading activities across various commodity products and geographies. The Group is exclusively owned by its management and employees. This shareholding structure aligns individual aspirations with the long term interests of the Group. By virtue of having its own capital at risk, senior management is motivated to take a long term view on the Group's overall performance and to protect its capital.

Track record of sustainable profitable growth and financial strength

As a result of its position in the global commodity trading industry, its business model and diversified activities, the Group has been profitable every year since inception in 1993 and has significantly grown shareholders' equity, demonstrating strong performance and business model resilience, with net worth increasing year-on-year. The resilience of the Group's business model has been demonstrated by its steady growth and strong performance through various commodity cycles and periods of price volatility as well as during periods of economic, financial, and sovereign debt crises. The Group's EBITDA (Earnings before interest, taxes, Depreciation and Amortisation) increased at a 6.9 per cent. compound annual growth rate ("**CAGR**") over 2014-2018.

The Group believes that its robust and highly diversified funding model and access to liquidity have contributed to the Group's strong financial performance and flexibility. The Group has a three-pillar funding model based on short term transactional facilities, securitisation, and corporate credit facilities. As of 30 September 2018, the Group sourced funds from about 135 banks in various markets including Europe, Asia Pacific and the United States, providing it with significant diversification both in terms of funding sources and geographies thereby allowing the Group to expand whilst managing its liquidity position. Since December 2012, the Group has increased its available facilities by 52 per cent., from USD 38.2 billion to approximately USD 59 billion as of 31 March 2019.

The significant expansion of the Group's sources of financing over the years has been achieved on the basis of maintaining an acceptable and sustainable credit standing in the absence of a corporate rating.

Group Strategy

The Group does not speculate on price direction. The Company profits from optimising the supply chain to its customers and from exploiting natural, low risk, physical arbitrage opportunities. All physical positions are systematically hedged for index price risk and no outright price risk is taken other than through limited speculative positions which are subject to defined risk limits. Profit is generated from the volatility of supply/demand and the value generated by control and management of the supply chain.

Unlike the derivatives markets, where transactions (and arbitrage opportunities) are closed within seconds, physical arbitrage of this kind requires actual delivery of the physical commodity. As a result, value can only be extracted by having access to physical commodities and adequate logistical assets. Therefore, in order to generate and maximise arbitrage opportunities the Group's strategy is to grow volumes and optimise logistics operations in its markets.

Key Industrial Assets Providing Arbitrage Opportunities and Income Diversification

The key to creating arbitrage opportunities is through increasing trading volume by securing as many supply and offtake contracts as possible, as well as having the control of logistics tools (e.g. time charter, storage facilities, ports, etc.). The Group's investments, whether in the oil or the metals and minerals sector, are focused on opportunities that provide complementary volume flow to the trading business, open up new markets and create recurrent, sustainable income sources. In addition to the trading benefits, the cash flows generated by these investments have been growing significantly and they now contribute to the Group's profitability, resulting in an additional source of profitability and further diversification.

As presented above, the Group's industrial assets have increased from USD 4,620 million as of 30 September 2012[2] to USD 6,636 million as of 30 September 2018 and to USD 6,717 million as of 31 March 2019. These industrial assets correspond mainly to the Group's investment in Puma Energy, the Group's 49.3 per cent.-owned oil storage and distribution business, Impala Terminals, the Group's metals and minerals warehousing division and logistics provider, the Group's 50 per cent. interest in Simba Holding S.à r.l., the 49 per cent. interest in Tendril Ventures Pte Ltd (Nayara Energy Limited), the Group's oil storage and export terminals (for example, the fully owned Petromining terminal in Argentina) and other assets held as part of its mining portfolio, notably 50 per cent. ownership in MATSA (as defined below).

The Group has demonstrated its ability to divest fixed assets and recycle capital, allowing the Group to realise gains from its divestments[3] amounting to more than USD 3.1 billion in aggregate over the period from the 2010 fiscal year to the 2018 fiscal year, and generate substantial cash flows and profits. It enables the Group to maintain discipline in capital expenditure, to share risk and to realise timely returns on its asset investments, while establishing a broader investment platform than would be possible on a stand-alone basis. Significant divestment included the full or partial sale of mining assets (Volcan, Anvil, Tiger and CMC); more than 50 per cent. of Puma Energy in 2013; the creation of an oil storage and export facility at Corpus Christi, Texas; the subsequent sale of a majority stake to Buckeye Partners L.P., with ongoing retention of commercial rights, in 2014, and the sale of the residual 20 per cent. stake in 2018; and the establishment of joint ventures with Mubadala to invest in the Porto Sudeste iron ore export facility in Brazil and the Minas Aguas Tenidas "**MATSA**" mine in Spain in 2015. In September 2018, the Group signed an agreement with IFM to create a 50:50 joint venture to operate Impala Terminal assets in Mexico, Spain, Peru, Paraguay, and the multimodal freight forwarding operation in Africa. A pre-tax profit contribution amounting to USD 191 million was realised from the sale of some of the infrastructure assets to a newly formed joint venture with IFM in fiscal year 2018.

---

[2] Equal to the total fixed assets of the Group disclosed in its FY2012 Annual Report.

[3] Total gain on divestment and re-measurement of retained interest after divestments caused by deconsolidaton and divestments in Trafigura's equity-accounted investees

Ownership Model and Experienced Management Team whose Interests are Aligned to Long Term Growth Performance

The Group is owned exclusively by approximately 700 senior employees. This ownership model ensures focus on the long term success of business, promoting management depth and stability and managing risk. By virtue of having capital at risk, senior management is motivated to take a long-term view of the Group's overall performance and to protect its capital.

The Group has an experienced management team which has developed the expertise required to manage a commodities trading business over a number of years.

Maintenance of Prudent Financial Profile

Prudent risk management is integral to the Group's business model and has been deeply rooted in the Company's business principles since its foundation. Guidelines are established at the senior management level and the credit and finance department retains a veto right on any transaction.

The Group maintains a diversified funding model, both in terms of the type of financing available and the geographic location of its banks. This broad funding base helps to increase the Group's access to liquidity and provides funding flexibility. The Group has demonstrated its ability through various market conditions to raise ample and appropriate types of financing to meet the business funding requirements and to tap various investor bases, maturities and geographies. The Group has successfully managed its liquidity positions throughout commodity, economic, financial and banking cycles and crises. The Group's strategy is to continue to focus on maintaining such a prudent financial policy and to sustain its liquidity buffer allowing it to be ready to capitalise on opportunities when they arise.

The Group manages its treasury and liquidity risks, maintaining a strong liquidity position through the following:

- Ensuring that a sufficient amount of immediately-available cash remains on hand in order to be prepared for a potential volatile period, and associated possible margin calls, or any urgent cash outflow. As of 30 September 2018 and as of 31 March 2019, the Group maintained USD 3.0 billion and USD 1.9 billion, respectively, of immediately available cash in liquidity funds;

- Maintaining bilateral lines which allow the Group to mark-to-market financings to the value of the underlying physical assets. Mark-to-market financing is performed weekly (or intra-weekly in the case of extreme volatility) and provides an additional source of liquidity which is not available to competitors which are financed purely from revolving credit facilities ("**RCF**");

- Committed unsecured credit facilities, with a focus on new sources of financing that lengthen the maturity profile of the Group's debt;

- Utilisation of bilateral trade finance lines for the fiscal year 2018 averaged about 69 per cent. Average utilisation of revolving credit facilities over the fiscal year 2018 was approximately 63 per cent.;

- Advanced funding sublimit incorporated in the European RCF (USD 1,750 million) and Asian RCF (USD 420 million), allowing same-day drawing of funds (otherwise T+3); and

- Balanced distribution of profit (significant retained earnings) and subordination of repurchased equity.

Recent Financial Results for the financial years ended 30 September 2018 and 30 September 2017[4]

Profit and Loss

Revenue for 2018 reached USD 181 billion, an increase of 32 per cent. from USD 136 billion recorded in 2017. This reflected the continuing strong expansion of the Group's traded volumes and a generally healthier commodity price environment. Total volume of commodities traded rose by 14 per cent. to 371.1 million tonnes in 2018 from 325.9 million tonnes in 2017, with oil and petroleum products volumes rising 8 per cent. to 275.2 million tonnes, and metals and minerals volumes increasing 37 per cent. to 95.9 million tonnes.

Gross profit in 2018 was USD 2,384 million, an increase of 6 per cent. from USD 2,239 million recorded in 2017; pressure on margins was especially intense in oil trading, reflecting intense competition and subdued price volatility. In divisional terms, the gross profit figure reflected a 10 per cent. decrease in gross profit in oil and petroleum products from USD 1,139 million in 2017 to USD 1,022 million in 2018, and a 24 per cent. increase in gross profit in metals and minerals from 2017 to 2018, with gross profit at USD 1,362 million in 2018 compared to USD 1,100 million in 2017. This was the second consecutive year in which the annual gross profit in metals and minerals exceeded USD 1 billion, showing an exceptionally strong performance by that division after several years in which the contribution from oil trading to gross profit was preponderant.

EBITDA was USD 1,712 million in 2018, an increase of 8 per cent. compared to USD 1,580 million in 2017 but still continuing a strong run of EBITDA performance in recent years. From an operating profit perspective, the Group believes that EBITDA is the most appropriate measure to assess its operating performance.

Results from operating activities were USD 1,492 million in 2018, an increase of 2 per cent. from USD 1,457 million recorded in 2017. General and administrative expenses, including staff costs, were at USD 937 million in 2018, almost flat compared to 2017 despite the volume increases, demonstrating the benefits the Group continues to derive from its IT investments and the centralisation of support functions in Mumbai, Shanghai and Montevideo.

The Group delivered a healthy financial performance in 2018, with a profit for the year of USD 873 million, a decrease of 2 per cent. from the figure of USD 887 million recorded in 2017. It should be noted though, that the net profit attributable to the owners of the Group was higher, at USD 849 million in 2018 compared with USD 848 million in 2017.

Assets and Liabilities

The Group's total assets as at 30 September 2018 stood at USD 53,801 million, up 10 per cent. from USD 48,770 million as at 30 September 2017. Non-current assets were 8 per cent. higher than at 30 September 2017, at USD 8,836 million. The increase reflects an increase in the "other non-current assets" line item, which represents non-financial hedged items relating to the Group's US oil and LNG businesses. In order to lock in the differential of different indices between the purchase formula at the pipeline and the sales index out of the pipeline, the Group entered into certain long-term financial derivatives. The liquidity effect of these derivatives was partially managed by entering into a structured OTC swap, with zero margining levels and an assignment of certain contract rights, with a large financial institution. Equity-accounted investees were USD3,361 million at 30 September 2018, 4 per cent. lower compared to 30 September 2017. This represents the net effect of acquisitions, disposals, and income and losses from various investments. Of these, the most important gain was the revaluation gain on recognition of the fair value of the retained interest in the Impala Terminals infrastructure assets referred to in the previous section. The impairment losses in 2018 predominantly relate to the impairment recorded on the Group's investment in Nyrstar of USD 72 million.

Current assets rose by 11 per cent. to USD 44,897 million at 30 September 2018 from USD 40,485 million at 30 September 2017. Inventories at 30 September 2018 were 6 per cent. higher at USD 14,733 million compared to USD 13,927 million at 30 September 2017. Of the total inventories as of 30

[4] References to "2017" or "2018" in this section entitled "Recent Financial Results for the financial years ended 30 September 2018 and 30 September 2017" are to the financial year ended 30 September 2018 or 30 September 2017, respectively.

September 2018, USD 9,039 million were held in storage and USD 5,683 million were in transit. In line with the Group's risk management policies, all stock was either presold or hedged at all times throughout the year.

Group equity was USD 6,250 million as of 30 September 2018, compared to USD 6,385 million as at 30 September 2017, a reduction predominantly attributable to the repayment of a USD 500 million perpetual bond in 2018. Current liabilities were USD 38,576 million at 30 September 2018 up from USD 34,437 million at 30 September 2017.

Cash Flow

Operating cash flow before working capital changes was USD 1,655 million in 2018, comparable to the figure of USD 1,650 million in 2017. The Group's believes its financial performance is best assessed on the basis of operating cash flow before working capital changes as the level of working capital is primarily driven by prevailing commodity prices, and price variations are financed under the Group's self-liquidating finance lines.

Working capital needs reduced significantly year-on-year with a net working capital requirement of USD 702 million in 2018 as compared to USD 4,880 million in 2017. Cash flow from operating activities after working capital changes was a net inflow of USD 315 million in 2018 compared with a net outflow of USD 3,672 million in 2017.

Investing activities resulted in a net cash use of USD 95 million in 2018 compared to a net use of USD 412 million in 2017.

Net cash generated from financing activities was USD 148 million in 2018 compared to USD 5,930 million in 2017. The overall balance of cash and cash equivalents stood at USD 5,356 million as at 30 September 2018, compared to USD 4,989 million as at 30 September 2017.

Recent Financial Results for the half years ended 31 March 2019 and 31 March 2018[5]

Profit and Loss

Revenue for the first half of 2019 reached USD 86.3 billion, a decrease of 1 per cent. from USD 86.9 billion recorded in the first half of 2018, as volumes and average commodity prices remained stable year-on-year.

As in the first half of 2018, the global oil market remained in a state of backwardation during the period, meaning that spot prices were higher than forward prices. By having repositioned its oil trading book a year ago in response to the change of the term structure, the Group was able to benefit from increased price volatility resulting from geopolitical events during this period. Its performance was also enhanced by its market-leading position in strategic commodity flows, notably the increase in exports of crude oil and liquefied natural gas from the US.

Gross profit in the first half of 2019 was USD 1,472 million, a sharp increase of 50 per cent. from USD 979 million recorded in the first half of 2018, with margins on oil trading showing an especially strong recovery. Gross profit margin was 1.70 per cent., up from 1.13 per cent. in the first half of 2018.

Gross profit in Oil and Petroleum Products trading was USD 1,035 million, nearly three and a half times higher than in the first half of 2018. Whilst all of the division's books performed well during the period, the crude oil, gasoline, LNG and wet freight desks were the stand-out contributors. Gross profit in metals and minerals trading decreased by about a third to USD 437 million in the first half of 2019 compared to the first half of 2018, reflecting a slow start for the non-ferrous concentrates and refined metal books.

As a whole, these results once again demonstrate the benefits of the Group's diversified business model, focused on two commodity clusters whose market cycles are largely uncorrelated.

[5] References in this section "Recent Financial Results for the half years ended 31 March 2019 and 31 March 2018" to first half of 2019 or first half of 2018 are to the six months ended 30 March 2019 or six months ended 31 March 2018, respectively.

EBITDA was USD 1,112 million in the first half of 2019, an increase of 69 per cent. compared to USD 658 million in the first half of 2018, continuing a strong run of EBITDA performance in recent periods.

Results from operating activities were USD 894 million in the first half of 2019 compared to USD 575 million in the first half of 2018. General and administrative expenses were USD 510 million in the first half of 2019 compared to USD 447 million in the first half of 2018. Net financing costs increased to USD 316 million in the first half of 2019 from USD 247 million in the first half of 2018, reflecting increased use of credit facilities and a 68 per cent. increase of the 1-week USD Libor, the reference base rate for most of Trafigura's facilities. The increase in USD Libor is carefully monitored by Trafigura's Finance team. However, such an increase does not automatically affect Trafigura's profitability. In practice, before a trade is entered into, a forecasted trading profit and loss is established which captures all costs (cost of transport, storage, insurance, control, sampling, inspection and certification, cost of financing including Libor, taxes, etc.); this means that Trafigura can adjust the level of gross profit to the level of expected costs, subject to each market's competitive situation. Since Libor affects similarly all market participants, Trafigura's competitive position is generally not affected.

The income statement for the first half of 2019 also includes a loss of USD 64 million, which represents Trafigura's share of losses of equity-accounted investees. These include losses by Puma Energy, the Brazilian iron ore export terminal Porto Sudeste and Indian refining and distribution company Nayara Energy, partly offset by profits from the Group's share in the MATSA mining company in Spain, the Empresa Mineral del Caribe mining venture in Cuba and the deconsolidated Impala Terminals infrastructure assets now managed in a joint venture with IFM. In the first half of 2018, Trafigura's share of losses of equity-accounted investees was USD 26 million.

The Group delivered a healthy financial performance in the first half of 2019, with a profit for the period of USD 426 million, a substantial increase of 92 per cent. from the figure of USD 222 million recorded in the first half of 2018.

Assets and Liabilities

The Group's total assets as at 31 March 2019 stood at USD 56,106 million, up 4 per cent. from USD 53,801 million as at 30 September 2018. Non-current assets were 6 per cent. lower than at 30 September 2018, at USD 8,268 million, the decrease is related mainly to a decrease of other non-current assets. Acquisitions in the period, included in the "property, plant and equipment" line, amounted to USD 84 million in the first half of 2019, reflecting investments in a number of individually smaller projects.

Current assets rose by six per cent. to USD 47,772 million at 31 March 2019 from USD 44,897 million as at 30 September 2018. Inventories increased slightly to USD 14,899 million at 31 March 2019, but prepayments rose significantly, reflecting increasing demand for structured trade finance arrangements in which Trafigura advances credit to a counterparty and is repaid in commodity offtake over time, as follows: Current prepayments (with maturities of one year or less) rose to USD 4,295 million at 31 March 2019 from USD 3,064 million at 30 September 2018, while non-current (longer-term) prepayments rose to USD 753 million at 31 March 2019 from USD 596 million at 30 September 2018. Trafigura lays off a substantial portion of such credit risks through insurance and bank syndication arrangements. The increase in prepayments was driven mostly by new short-term transactions closed with Nayara and Nyrstar; these new transactions will be repaid, or converted to intercompany lending in the case of Nyrstar, in the coming months if the Restructuring is approved.

Group equity was USD 6,558 million as of 31 March 2019, up by 5 per cent. compared to USD 6,250 million as at 30 September 2018, despite the repayment of the capital security of SGD 200 million in February 2019. Current liabilities at 31 March 2019 were USD 40,577 million, up from USD 38,576 million at 30 September 2018.

Cash Flow

After adjusting profit before tax for non-cash items, the operating cash flow before working capital changes for the half year 2019 rose to USD 1,079 million from USD 681 million in the half year 2018. Trafigura believes its financial performance is best assessed on the basis of operating cash flow before working capital changes, as the level of working capital is primarily determined by prevailing commodity prices and price variations are financed through the Group's self-liquidating finance lines. Cash flow from working capital changes was negative due to an increase in prepayments. This section of the cash flow statement also includes a cash inflow of USD 1.3 billion due to recovery of margin calls paid under the hedging instruments relating to tolling, transportation and offtake agreements; the liquidity effect of these hedging instruments was also partially managed by entering into a structured OTC swap, with zero margining levels and an assignment of certain contract rights with a large financial institution.

Investing activities show a net outflow of USD 5 million as opposed to a net outflow of USD 62 million in the first half of 2018, including a cash inflow of USD 247.9 million in December 2018 on the receivable of the sale of 50 per cent. of Simba Holding S.à.r.l., the ultimate parent company of some of the Impala Terminals entities, that took place on 27 September 2018. Cash from financing activities amounted to a net inflow of USD 350 million, to be compared with a net inflow of USD 2,097 million in the first half of 2018. The overall balance of cash and cash equivalents stood at USD 4,566 million as of 31 March 2019.

Operating Free Cash Flow ("Operating FCF")

The Group's funding model is structurally designed to absorb significant working capital requirements, as demonstrated over time. Therefore, the Group's underlying financial performance and leverage position is better assessed on the basis of Operating FCF generation, which is defined as operating cash flow before working capital changes, minus net interest paid, tax and net cash used in investing activities.

To understand the Group's underlying cash flow generation, one should focus on the Operating Free Cash Flow ("**Operating FCF**") generation. Movements in underlying commodity prices, alongside changes in volume, can cause significant swings in cash flow generated by changes in working capital. These drivers have little impact on underlying performance, given price risk is systematically hedged. Short-term financing is used to finance outflows where required and these items therefore largely net off from a cash flow perspective.

Following a phase of strategic investment in industrial assets, peaking in 2013, the Group has generated USD 3,003 million of Operating FCF over the last three fiscal years. This reflects the Group's consistent cash flow generation in conjunction with an updated investment approach, i.e. reduction in annual capital expenditure spend, often including partners when directly making new investments and disposal of non-core assets. It is also worth noting that Operating FCF has also more than covered the Company's share buybacks for the fiscal years 2016, 2017 and 2018 which further demonstrates the Group's commitment to a conservative capital structure.

Adjusted Debt to Group Equity Ratio

As a physical trading group, the Group relies on a specific funding model. As a result, the financial analysis framework for other, more typical industrial companies, may not apply.

Banks and rating agencies have historically considered financial leverage after excluding some specific balance sheet items (e.g. inventories, securitisation), resulting in the use of adjusted debt as an overall leverage metric.

The following adjustments are made to calculate the adjusted debt metric:

- The receivables securitisation programme is taken out on the basis it is an entirely distinct legal entity from the Group with no recourse to the Group and is only consolidated into the financial statements in accordance with the Group's accounting rules;

- Cash and short-term deposits are deducted from debt;

- Pre-sold or hedged stock, including purchased and pre-paid inventories which are being released, is deducted from debt. This reflects the great liquidity of the stock and the ease at which this could be converted to cash. As previously described, the Group's policy is to have 100 per cent. of stock hedged or pre-sold at all times; and

- Non-recourse invoice discounting or portion of loans (for example non-recourse portions of bank financings used to extend prepayments to counterparties) are deducted from debt.

As at 30 September 2018, the Group's adjusted debt to Group equity ratio stood at 0.97x, compared with 1.24x at 30 September 2017[6]. This continued reduction reflects multiple initiatives to deleverage the balance sheet during 2018, including disposing of non-core assets and reducing capital expenditure:

- Net cash generation[7] of USD 1,016 million (after taxes and net finance costs, but before working capital changes);
- Combined capital expenditures and investments (net of divestments) was down to USD 95 million;
- An increase in the size and utilisation of the non-recourse Trade Receivables Securitisation Programme; and
- Decrease in Group equity mainly due to repayment of a USD 500 million perpetual bond originally launched in 2013.

In terms of operational leverage as at 31 March 2019, loans and borrowings barely changed from 30 September 2018. As at 31 March 2019, the Group's adjusted debt to equity ratio stood at 1.16x.

The nature of this ratio means it fluctuates over time, as it is highly correlated to commodities prices. However, the Group is committed to maintaining a disciplined approach to leverage and we are seeing the results of the Group's stated plan to reduce capital expenditure and, in turn, leverage. The Group will continue to manage its business so as to ensure that this ratio does not stay significantly above 1x for a sustained period.

Corporate Debt to EBITDA Ratio

There are some limitations to using the Adjusted Debt metric principally that it does not fully account for the Group's approach to working capital financing and therefore remains correlated to moves in commodity prices and traded volumes.

Over time, the Group has reviewed the adequacy of the adjusted debt concept and introduced a leverage ratio referred to as the corporate debt to EBITDA ratio in 2015. The Group believes this is a more relevant ratio for senior unsecured creditors than the adjusted debt to Group equity ratio.

In particular the adjusted debt to Group equity ratio does not take into account the excess of trade receivables over trade payables which would be available to senior creditors in the case of liquidation. Commodity receivables typically have a short duration (1 to 3 months) and very low default rate due to the strategic nature of the goods sold. By deducting the excess of trade receivables over trade payables, the corporate debt excludes any working-capital related indebtedness. Such indebtedness is not repaid by the organic cash flow generation of the Company but the completion of the trade flow cycle (i.e. through the payment of the invoice or the resale of the commodity). The corporate debt focuses on debt which is repaid by cash flow generation and EBITDA is a widely accepted proxy for operating cash flow.

The corporate debt to EBITDA ratio considers all debts, whether short-term or long-term, and removes:

- Cash and short-term deposits;
- Pre-sold or hedged stock (including purchased and pre-paid inventories being released);
- Trade receivables (including the MATSA sale receivable) in excess of trade payables and derivatives; and
- Any corporate debt for which lenders do not have recourse to the Group (e.g. non-recourse portion of bank financings used to extend prepayments to counterparties) which are not captured in the above adjustments.

---

[6] This is based on the full year 2018 calculation methodology.

[7] Calculated as operating cash flow before working capital changes, minus net finance costs, plus dividends received and minus tax paid.

The Trade Receivables Securitisation Programme does not need to be deducted separately since the excess trade receivables would capture it. Likewise, non-recourse debt relating to invoice discounting is not considered so as to avoid double counting (as receivables in excess of payables are already deducted).

The increase in corporate debt until 2016 end was related to the end of the intensive cycle of investment in industrial and logistical assets that the Company had started in 2012. Following the decision in 2017 to limit total annual capital expenditure (net of divestments) to USD 500 million for the years to come, and thanks to a strong Operating FCF generation in fiscal year 2016-17, the corporate debt level significantly decreased as at 30 September 2017 compared to 30 September 2016.

The increase of USD 1,182 million in corporate debt from 30 September 2017 to 30 September 2018 is mainly related to an increase in long term loans and borrowings.

The corporate debt to EBITDA ratio stood at 2.8x as at 30 September 2018 compared to 2.3x as at 30 September 2017, a level consistent with an investment grade rating.

The corporate debt to EBITDA ratio (with EBITDA over the last twelve months) stood at 2.3x as at 31 March 2019. The decrease from 2.8x as at 30 September 2018 related to a significant increase in the last twelve months EBITDA and that has more than compensated the small increase in corporate debt, driven by higher prepayments and repayment of the SGD 200 million perpetual bond.

Description of the Group

History of the Group

The Group was established in 1993 as a private group of companies owned by its core founding shareholders, and today remains exclusively owned by its management and key senior employees. It has transformed from a niche trader into a worldwide player, one of the few independent global trading houses. At its creation, the Group started by focusing on three markets in which it had extensive expertise: oil and minerals in South America, metals in Eastern Europe and oil in Africa. The Group rapidly expanded its activities geographically through internal growth, marginal acquisitions and strategic alliances to create a globally diversified company.

The Group has been profitable every year since inception in 1993. The Group has performed strongly throughout various commodity cycles and periods of high price volatility as well as during the economic, banking and financial crisis, with all key metrics improving.

Today, the Group operates in the market space previously dominated by the major producers which in recent years have increasingly focused on upstream exploration and production and reduced their involvement in distribution. As a consequence of these changes, only a handful of global players remain (including the Group), providing the Group with significant scope for growth in its core commodity activities. Since the Group is exclusively owned by its management and employees, it is therefore focused on the long term success of the business, promoting management depth and stability, and encouraging prudent risk management.

Business Model Principles

The Group sources, buys, stores, blends, transports and delivers products to each customer's specifications. The Group systematically hedges all index price exposure related to its physical business and consequently movements in the index price do not impact profitability. The Group is a commodity logistics company, which works with real commodities for real industrial clients and whose paper trading activities relate predominantly to the hedging of its physical business and not to speculative trading.

The Group profits from optimising the supply chain of its customers and exploiting natural, low risk, physical arbitrage opportunities in the marketplace. The Group's principal activity involves the "slow pace, high touch" distribution and logistics of physical commodities, purchasing commodities as principal and supplying them to customers at the right time, the right location and with the right specifications as well as managing all aspects related to the trade flows including logistics, price and counterparty risk management and financing. Profit is therefore generated from the volatility of supply and demand, and the value generated through the control and management of the supply chain.

The Group's business model is built on four pillars:

- Non speculative arbitrage based model whereby the embedded price risk in the physical flows is systematically hedged;
- Strong risk management philosophy which has been institutionalised since the Group's foundation.
- Diversification in terms of product range, geography and clients which balances revenues and absorbs volatility in cycles; and
- Private ownership structure which promotes management depth and stability and ensures business continuity as employee shareholders' long term interest is fully aligned with the sustained performance of the Group.

Physical Arbitrage Based Model

Unlike the derivatives markets where transactions (and arbitrage positions) are closed within seconds, capitalising on physical arbitrage opportunities requires delivery of the commodity over time and therefore value can only be extracted by those who have access to physical commodities and an extensive logistics network. While increased market volatility can generate a larger number of opportunities, the Group remains profitable during periods of lower volatility due to its global presence and diversification of geographical markets, customers and products.

Arbitrage opportunities exist in several forms and can be related to geography, product specs, timing and optionality of contract.

Geographical Arbitrage

The Group's global reach means it sources and sells products across the world. The combination of the expertise of its traders and knowledge of the global freight markets allows it to constantly optimise the geographical location of its supply and demand, so reducing logistical costs. This allows the Group to provide products to its customers quickly and at a competitive price, underlining the effectiveness of its business model.

Technical Arbitrage

Due to the Group's extensive logistical and storage networks, the Group is able to blend products in order to meet individual customer's specifications. This allows the Group the flexibility to offer tailor made products to its customers and obtain on specification products at the lowest possible cost. The Group is able to capitalise on such opportunities by virtue of its deep understanding of both market requirements for specific products, its technical comprehension and ability to blend products to required specifications.

Time Arbitrage

The Group's cost-efficient storage network also affords it the opportunity to take advantage of changes in market conditions over a period of time. In a "contango" market, where forward prices are higher than current spot prices, the Group is able to buy and place cargoes in storage whilst selling the equivalent forward contract. As long as the cost of storage and the transaction doesn't exceed the price differential between the forward and spot rates, the Group is able to lock in profit with very little risk.

Importantly, the Group can benefit from such arbitrages in a variety of ways by combining physical, product, and time arbitrages according to each specific market opportunity. The Group's strength lies in being able to resort to its extensive logistics and warehousing network, the Group's experience with blending material to customers' required specifications and the Group's strong local network that provides a key advantage in accessing first hand market intelligence.

Contractual Arbitrage

Contractual arbitrage is linked to pricing options provided in the contract between the Group and the buying or selling party in a transaction. For some customers, the Group can choose the pricing period for a given contract. This can include, for example, pricing based on an average price of month before or after the loading of a cargo. Such flexibility in pricing provides an extra level of optionality.

Company Structure

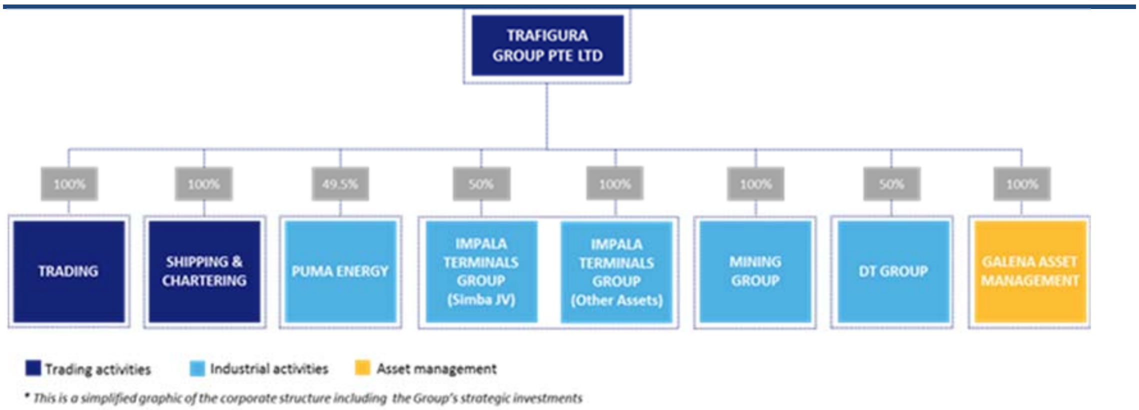
The Group's parent company, TGPL, is a company incorporated under the laws of Singapore.

The Group is composed of a number of trading companies and industrial asset based businesses related to its core trading activities. TPTE, incorporated in Singapore, is the entity through which the majority of the Group's physical trades are booked, with US trading booked through its US-domiciled entity TTL (as defined below), a company incorporated under the laws of Delaware. In addition, the Group directly or indirectly owns stakes in different assets (including oil storage, metals warehousing and mining assets) that allow the Group to improve logistics, increase volumes, reduce costs or add a new revenue generating activity to its trading portfolio.

At the end of the Group's fiscal year 2015 (30 September) the Group's incumbent reference parent entity, TBBV, was converted into a holding company and another existing Singaporean entity, TGPL, became the reference parent entity and the consolidating entity for the Group. The reorganisation was an important step in creating greater consistency across the Group's structure. The decision to make Singapore the domicile of the main trading entity was commercially driven and reflects the Group's commitment to the strategically important and rapidly growing Asian market.

A simplified summary chart of the Group structure is provided below:

THE GROUP'S CORPORATE STRUCTURE



Source: Company

The Group trades globally, so to consider the trading volumes and related financial statements of individual regionally focused subsidiaries is less important because these depend on the structure of the global market itself and as such, the Group believes it is best considered as a consolidated entity. For example, the financial statements of TTL will depend on the oil market demand and arbitrage opportunities available in the United States. As a result, the profitability and cash flow generation of individual subsidiaries can vary considerably year on year.

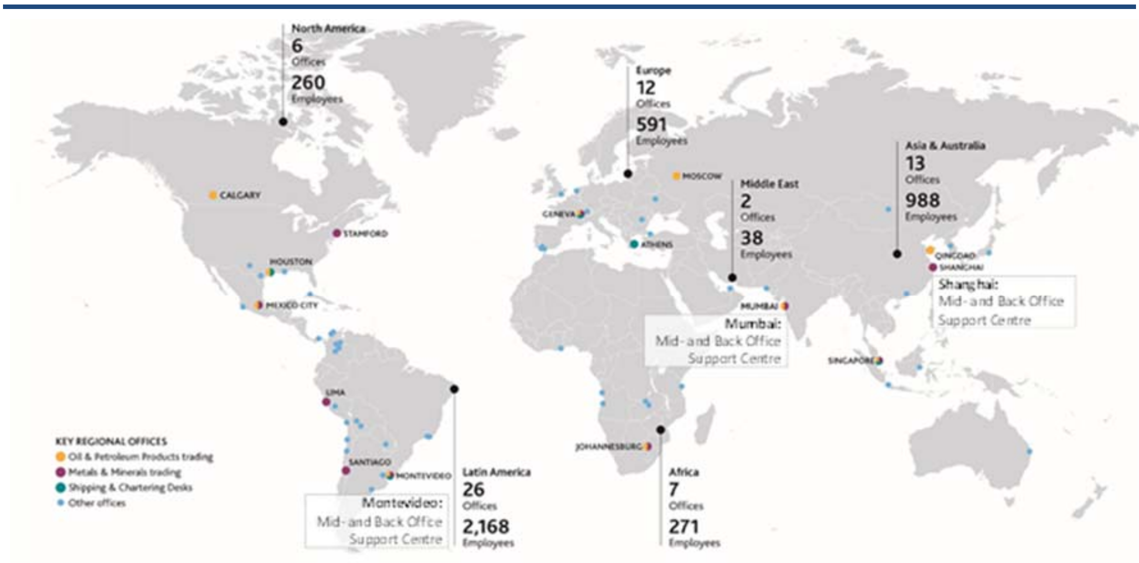
Within the consolidated Group, the principal entities are as follows:

TGPL	• Corporate head office • Reference parent company of the Group (effective from 30 September 2015)
Trafigura Funding S.A. ("TFSA" and the "Issuer")	• Wholly-owned indirect subsidiary of TGPL engaged in capital market transactions and private placements for the Group

Trafigura Pte. Ltd ("TPTE")	• Wholly owned indirect subsidiary of TGPL • Engaged in buying and selling commodities (TPTE is the Group's main trading company), operating through key offices in Singapore and Geneva (Switzerland). • Booking centre for all derivative transactions within the Group.
Trafigura Trading LLC ("TTL")	• Wholly-owned indirect subsidiary of TGPL • Engaged in buying and selling commodities • Responsible for conducting trading business in the U.S.
Trafigura Investment China Co Ltd. ("TIC")	• Wholly-owned indirect subsidiary of TGPL • Engaged in buying and selling commodities • Responsible for conducting trading business in China
IWL Holding BV (Netherlands) (together with its subsidiaries, "Impala Terminals")	• Wholly owned indirect subsidiary of TGPL • Consolidates the bulk commodity terminals, warehousing and logistics activities which do not fall under joint agreement with IFM
Urion Holdings (Malta) Limited (together with its subsidiaries, the "Mining Group")	• Wholly owned indirect subsidiary of TGPL • Managing the Group's mining related investments

The Group also owns 49.3 per cent. in Puma Energy Holdings Pte. Ltd., a leading midstream and downstream oil company, and 50 per cent. interest in Simba Holding S.à.R.L., the joint venture with IFM which own and operates Impala Terminals assets in Mexico, Spain, Peru and Paraguay, together with a global freight forwarding operation (described below).

KEY HUBS



Office Network

As at 30 September 2018, the Group's network of 66 offices, located in 38 countries, employs local marketing representatives who are the main day to day contacts with the customers in their given regions. This network provides the main traders with "hands on" market knowledge (trading conditions and characteristics) and valuable contacts in every jurisdiction. Relationships with suppliers and customers are also enhanced by this close proximity generating significant benefits for the Group's sourcing and distribution capabilities. These field offices and agencies liaise directly with the main offices and trade under the supervision of the main trading centres, although all contracts are executed centrally. They report regularly to the entire Group as well as on an *ad hoc* basis by telephone and videoconference. This organisation gives access to expertise and promotes flexibility so that the Group can benefit from market opportunities while efficiently controlling risk.

The finance, liquidity management, risk management and legal functions are centralised in Geneva with local representatives in the main trading offices. This centralisation enables the Group to maintain strict control over its financial position and its risk exposure.

Business Operations

Oil and Petroleum Products

The Group's petroleum related trading activities are conducted through its offices in Beijing, Calgary, Geneva, Houston, Montevideo, Moscow, Mumbai and Singapore and its network of branch offices and agencies.

The oil and petroleum products segment makes up the majority of Group turnover. The division reported revenue of over 124.6 billion (69 per cent. of total revenue) in fiscal year 2018, an increase of 32.5 per cent. over the previous year. The division reported revenue of 58 billion (67 per cent. of total revenue) in the first half of 2019, a decrease of 4 per cent. over first half of 2018. These activities cover the full products spectrum from crude oil and other refinery feedstocks to refined products, including fuel oil, gasoline, middle distillates, liquid petroleum gas, naphtha, bio diesel and more recently, natural gas, liquefied natural gas and aromatics.

The Group is primarily active in physical oil trading including transportation by vessel, pipeline or railcar and is correspondingly active in the futures, swaps, and options markets, predominantly for hedging purposes.

The Group trades crude and refined products with a diverse customer base including electric utilities, oil refiners, distributors and state monopolies. Clients include BP, Exxon Mobil, Royal Dutch Shell and Total, amongst others, while key suppliers include names such as Rosneft, SK Energy or Total amongst others.

About a third of the volumes traded are on one year contracts or more, with the rest on shorter term contracts or on a spot basis. In this market, however, it is important to note that due to control over the logistical chain and assets, spot purchases/sales are often recurring and can be viewed as stable long term positions. Hence whilst the contracts are short term and on a revolving basis, they can be understood as de facto recurring. This structure provides the Group with a flexible trading portfolio with a near term maturity bias, while simultaneously avoiding sole dependency on spot trades or risk associated with long-term maturities. Many of these trading relationships are further cemented by the giving and receiving of credit lines. These significant relationships all span in excess of a decade and represent a cross section of business activities ranging from spot and term business in different product lines.

In fiscal year 2018, the Group's top ten clients (excluding Puma Energy which is an affiliate company) in oil and petroleum made up 23 per cent. of the Group's overall annual oil and petroleum revenue (compared to 23 per cent. in 2017). No single external customer accounted for more than four per cent. of overall oil and petroleum products turnover.

The Group's oil volumes have increased significantly in recent years along with its corresponding market share. In fiscal year 2018, the Group traded on average approximately 5.8 million barrels of physical oil per day (**"mmbpd"**), an increase from the 5.3 mmbpd and 4.3 mmbpd in 2017 and 2016 respectively. The Group's oil book has more than doubled in size since 2014 (2.5 mmbpd were traded in 2014). The

Group estimates its current oil volumes amount to approximately 3-4 per cent. of the world oil market or around 7-8 per cent. of the "tradable market"[8].

After four years of rapid volume growth, Trafigura is in a phase of consolidation across its trading book. In the first six months of fiscal year 2019, total volumes traded in Oil and Petroleum Products reduced by 7 per cent. from the same period a year ago to an average 5.5 million barrels per day.

The Group estimates that it trades the second largest volume in oil and petroleum products for an independent trading company after Vitol Group of Companies ("**Vitol**"). The entire market remains very fragmented with no company representing more than 10 per cent. of total physical trading market volume.

In April 2018, the Group entered into a joint venture agreement to create a commodity petrochemical trading business, with a focus on bulk liquid chemicals. The joint venture has been created between the Group and senior executives from the petrochemical trading industry, including the current management team of Altis Group International LLC ("**Altis**"). It will include two new trading entities – the already existing Altis Group International LLC for the US, based in Houston and Altis International (Singapore) Pte, which will have a branch office in Geneva. Formed in October 2014, Altis Group International is a global trading and logistics company that focuses on the trade of bulk liquid chemicals. The market of petrochemicals is expected to grow significantly over the new few years, with Altis well placed to capture a share of this market by bringing an experienced team combined with the Group's global footprint, resources and infrastructure to connect buyers and sellers.

Metals and Minerals

Centralised in Geneva, Switzerland, the Group's metals activities comprise 10 main trading books consisting of copper, lead and zinc concentrate, alumina (an aluminium oxide commonly used in the production of aluminium), and refined metals including copper, lead, zinc and aluminium. The Group's mineral activities include the iron ore and coal trading books. The Group also trades silver as by-products. Similarly to the oil business, no price risk is taken on the physical business and the hedging of the physical trades occurs through TPTE which acts as an internal broker. Apart from Geneva, other key trading offices for the metals and minerals commodities business include Johannesburg, Lima, Mexico City, Montevideo, Mumbai, Shanghai, Singapore and Stamford.

Revenue generated by the metals and minerals trading division and related industrial activities represented 31 per cent. of trading turnover in 2018. The division reported revenue of USD 56.2 billion in fiscal year 2018, an increase of 32 per cent. over the previous year. The increase in metals and minerals revenue contribution is mainly due to the increase in traded volumes by 37 per cent. in fiscal year 2018. The profitability generated by the metals and minerals division has become increasingly significant over recent years as it has developed and expanded. The metals and minerals division reported gross profit of USD 1,362 million in fiscal year 2018, an increase of 24 per cent. from USD 1,100 million in 2017. Significantly, both divisions made a near-equal contribution to gross profit in fiscal year 2018, with an increase in gross profit in metals and minerals offsetting a fall in gross profit from oil and petroleum products. This underlines the strength of a diversified business model focused on two relatively uncorrelated segments of the global commodities market.

The revenue generated by the metals and minerals trading division represented 33 per cent. of trading turnover in the first six months of 2019. The division reported revenue of USD 28.3 billion, an increase of 6 per cent. over the first half of 2018. The metals and minerals division reported gross profit of USD 437 million in the first half of 2019, a decrease of 36 per cent. from USD 680 million in the first half of 2018. In the first six months of 2019, the recovered performance of the oil and petroleum products segment more than compensated for the weaker performance in metals and minerals.

Metals and minerals are traded with a diversified customer base ranging from mining and integrated mining companies to smelters and refined metals retailers. Major clients include Dongying Fangyuan Nonferrous Metals, China-Base Ningbo and Aurubis Group, amongst others.

The growth of Asian metals consumption, driven by significant smelting and refining capacity in China and India can be seen in the Group's bulk commodity revenue split. The growth of the Group's Asian

[8] Defined as volumes which are not distributed by producers directly to consumers.

revenue is simply a reflection of the global market rather than the build-up of a niche trading geography. In any case, the Group's bulk commodity revenue remains very diverse on a customer basis.

Approximately half of the Group's refined metals contracts are on a one year basis, with contracts typically agreed around October or November for the coming year. Other contracts are traded on a spot basis.

In the concentrates business around half of contracts are annual or multi-year including evergreen (i.e. indefinite) with negotiated pricing for up to three years ahead. Other contracts are traded on a spot basis.

For the fiscal year 2018, the Group's top 10 customers in the metals and minerals business comprised approximately 12 per cent. of the Group's overall turnover (compared to 14 per cent. for 2017). No single customer accounted for more than two per cent. of overall metals and minerals turnover.

On an annualised basis, the Group traded 96 million metric tons ("**MT**") of metal concentrates, associated refined metals, iron ore and coal during fiscal year 2018. As with the oil division, metals and minerals volumes have increased significantly in recent years. Total metals and minerals volumes for fiscal year 2017 amounted to 70 million MTs per annum. The increase in volumes from fiscal year 2017 to 2018 was a result of robust international growth (particularly in China), which generally increased demand across the board.

Regarding non-ferrous concentrates and refined metals, the commodities showing the sharpest moves were zinc and lead concentrates, nickel and cobalt concentrates and copper concentrates in 2018. In refined metals, current trade tension - most notably between the US and China, negatively impacted base metal prices. In terms of the Chinese government's environmental focus, the expectation is that solid waste and water treatment will now take centre stage and dominate the agenda for 2019 and 2020. On the bulks side, both coal and iron ore business continued to make significant progress in 2018. Iron ore traded volumes increased by 100 per cent. in fiscal year 2018 to 17 million tonnes from 8 million tonnes in 2017. The traded volume for coal grew by 30 per cent., to 61 million tonnes in fiscal year 2018, compared to 2017, led by growth from Indonesia, and with demand supported by surging electricity consumption across Asia.

During the first half of 2019, the Group traded 9.6 million tonnes of refined metals and 36.6 million tonnes of coal and iron ore, to be compared with 9.6 million tonnes and 36.4 million tonnes respectively in the first six months of 2018.

In the metals and minerals sector, similarly to the energy sector, market share statistics are not freely available. Based on market knowledge, the Group estimates that its share of the freely traded market for copper, lead and zinc metal roughly represents 20 to 25 per cent. and even more in the copper, zinc and lead concentrates market.

The Group considers that in the metals and minerals sector it ranks as the second largest independent trader behind Glencore, with Glencore largely acting as a marketer of its own captive production. The Group is active in all main producing areas such as South and Central America, the Far East and Eastern Europe and sells worldwide to industrial customers.

Asset Based Business

The principal driver behind the Group's investment strategy is its arbitrage based business model which relies on (amongst other things) the control of storage and logistics to generate or enhance arbitrage opportunities and create long term recurring income making the Group's business more sustainable. The Group seeks investment opportunities that can offer synergies with its core trading activities through the provision of recurrent supplies and outlets, whilst having their own industrial rationale. These assets bring optionality and flexibility to the trading books and are barriers to entry if they are not available to competitors. In this respect the Group has taken ownership or interests in companies or assets which have 'standalone' capacity but largely remain within the same commodities industry as its core trading business.

The Group has established four industrial groups: Puma Energy to manage the Group's oil storage and distribution assets, Impala Terminals to manage the Group's bulk commodity warehousing and infrastructure assets, the Mining Group to manage the Group's existing mining operations as well as mining exploration opportunities and DT Group, a 50/50 joint venture with Cochan Ltd., focusing on logistics and trading in sub-Saharan Africa, with a particular focus on Angola. The four industrial groups are structured as independent companies with their own fully dedicated management and resources, transacting with the Group on an arm's length basis, with service level agreements in place where appropriate.

The financials of three of the four industrial subsidiaries: Impala Terminals, the Mining Group and the DT Group are consolidated into TGPL's financial statements. The Group's fourth industrial asset, Puma Energy, is minority owned by TGPL, following a sale of the Group's stake to existing shareholders in the financial year ended 30 September 2013 and capital increase of Puma Energy in 2013 and 2015. Its results are therefore no longer consolidated into the Group's accounts, but rather are represented as an equity-accounted investee in the Group accounts.

The Group's industrial assets generate substantial profit in their own right, either through recurring income generation or profit on disposals, further diversifying the Group's sources of income. Total industrial assets amounted to USD 6,636 million as at 30 September 2018 (USD 7,189 million as at 30 September 2017) and USD 6,717 million as at 31 March 2019.

Puma Energy

Puma Energy is a leading integrated retail and distribution company active in Africa, Latin America, Europe, the Middle East, Australia and Asia. As of 31 December 2018, Puma Energy operated in over 48 countries worldwide, directly employing 8,278 people. As of 31 December 2018, Puma Energy owned and operated approximately 7.7 million cubic metres of storage capacity and operated a network of over 3,082 retail service stations in Latin America, Africa and Australia and is present at 84 airports. For the year ended 31 December 2018, Puma Energy sold 24.8 million cubic metres of refined oil products and its facilities handled 15.1 million cubic metres of oil products. Puma Energy is highly diversified in terms of business lines, geographies and customers, serving more than 20,500 business-to-business ("**B2B**") customers from various countries and industries.

Since the Group acquired the rights to the Puma brand in 1997, Puma Energy has expanded its activities worldwide achieving rapid growth, diversification and product line development to become one of the largest independent global downstream companies. In 2000, Puma Energy came under the direct ownership and management of the Group. In 2008, Puma Energy was reorganised as a separate and standalone division of the Group and consequently issues its own financial statements. In order to support the growth of Puma Energy's fixed asset infrastructure development and acquisition strategy, the Group opened up the capital of Puma Energy to selected investors in 2010.

In 2013, the Group further reduced its ownership in Puma Energy by selling a portion of its stake to existing minority shareholders, including the Angolan state-owned energy company Sonangol Holdings Lda ("**Sonangol**") and Cochan Holdings LLC ("**Cochan**"). Puma Energy also benefitted from a capital contribution of USD 500 million from Sonangol. As a result of the sale and the capital contribution, the Group's stake in Puma Energy reduced to 49.3 per cent., leading to the deconsolidation of Puma Energy from the Group Financial Statements. In 2015, Puma Energy's main shareholders subscribed pro rata to a further USD 350 million capital increase undertaken by Puma Energy. This enabled the company to maintain its growth momentum by capitalising on opportunities to expand its portfolio of mid- and downstream assets. Puma Energy remains an important part of the Group's business model; indeed, Puma Energy is the largest customer of the Group's Oil and Petroleum Products Trading Division, accounting for almost 7.3 per cent. of the division's turnover in 2018.

For the year ended 31 December 2018, Puma Energy generated sales of USD 17,921 million; whilst EBITDA recorded USD 554 million.

Puma Energy's core business activities can be categorised as follows:

Downstream activities

Downstream refers to the retail and wholesale distribution of refined products within national markets. In the downstream sector Puma Energy is active in all aspects of the business both as marketer of the petroleum products and owner/operator of the related infrastructure. By vertically integrating its midstream assets with its downstream business, Puma Energy seeks to capture the full value made available by its investments; internalising the strong distribution, wholesale and retail margins achievable within these emerging markets.

Downstream activities include the sale of refined oil products, including fuel oil, gasoline, diesel, jet, LPG and lubricants to a growing retail, B2B and aviation customer basis. Downstream is Puma Energy's core business and accounts for 88 per cent. of its gross profit and 83 per cent. of EBITDA for the twelve months ended 31 December 2018. It encompasses:

- Retail: Puma Energy provides quality fuels, non-fuel products and additional services to end customers through its extensive network of over 3,082 service stations, which includes 1,291 convenience stores (under the Super7, Shop Express, or 7th Street brands), 148 restaurants and 191 car washes.

- B2B: Puma Energy supplies clean and/or heavy petroleum products to over 20,500 customers, which are highly diversified across geographies and industries. The distribution of bitumen is also included under the B2B line of business.

- Aviation: Puma Energy operates in 84 airports in Europe, Americas, across Latin America, Africa and Middle East & Asia Pacific, providing high quality fuel products and services to airlines, aircraft operators and aircraft owners

- Others: includes the distribution of lubricants, LPG, wholesale, and bunkering activities.

Puma Energy's operations depend on a steady supply of refined oil products, and as a result, its supply activities are organised as separate business lines within downstream, retail and distribution operations. The supply business managed on both a regional and global level. Ultimately, the role of the supply function is to ensure that:

- requirements are managed at regional, rather than country level ensuring that economies of scale and to avoid unutilised space on vessels;

- developed expertise in inland logistics to optimise supply chain costs, truck and route scheduling;

- price exposure is controlled using hedging instruments with a maturity between three months and one year; and

- products are sourced at competitive price levels.

Midstream activities

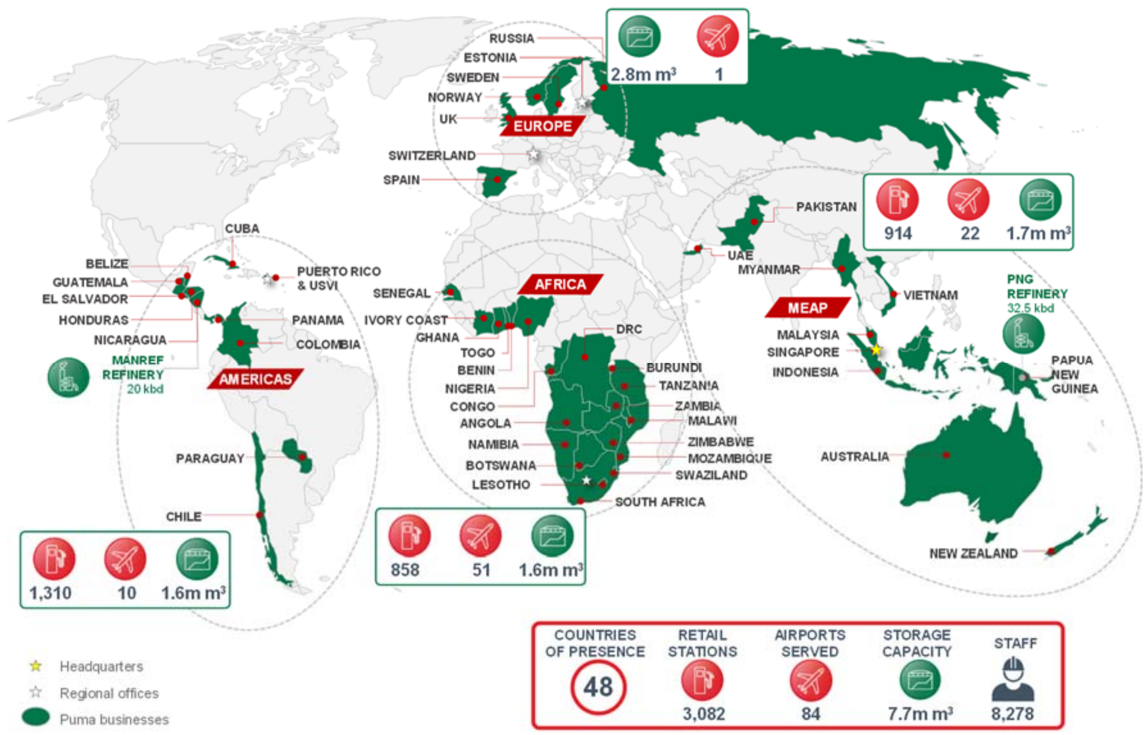
Midstream refers to the refining, storage and transportation of petroleum products. Given the accelerated closure of existing refineries and the resulting concentration towards 5-6 global refining hubs, there is an increasing need for physical transportation, as well as efficient and safe storage and handling of these products.

Puma Energy now owns and operates 106 terminals globally with a total storage capacity of 7.7 million cubic metres. These terminals handled 15.1 million cubic metres of products for external customers for the year ending December 2018, whilst focusing mainly on supporting Puma Energy's own downstream activities. Puma Energy's strategy is to grow the midstream activities in line with storage capacity needs for its retail and other downstream operations.

Global Presence

Puma Energy has assets worldwide, organised into five key regions. The below diagram illustrates how Puma Energy's assets work together to facilitate global supply routes:

PUMA ENERGY GLOBAL NETWORK



Organisational Structure

Puma Energy is coordinated from its global headquarters in Geneva, Switzerland, and as at 31 December 2018 directly employs over 8,278 people in over 48 countries. To support its activities, Puma Energy has regional offices in Johannesburg, South Africa (for Africa), San Juan, Puerto Rico (for Latin America), Tallinn, Estonia (for Europe), Brisbane (Australia), and Singapore (for Asia Pacific). Puma Energy is managed as an independent industrial group, with its own dedicated management, which transacts with its shareholders, the Group and Sonangol Group, on an arm's length basis.

Puma Energy operates a two-tier management structure comprising a Board of Directors and an Executive Committee. The Board of Directors manages the business and affairs of Puma Energy, providing oversight and management, but delegates the day to day management of the company to the Executive Committee. Following the deconsolidation of Puma Energy in September 2013, the Board of Directors underwent some changes and is now comprised of eight members: one non-Executive Chairman, three representatives of the Group, two representatives of Sonangol and one representative of Cochan as well as Puma Energy CEO, Emma FitzGerald. The Puma Energy executive committee comprises eight members of Puma Energy's senior management and is focused on the strategic issues facing Puma Energy and on the day-to-day management of the group. It also implements the strategy which is formulated at the level of the Board of Directors.

Management Changes

Puma Energy recently announced few changes/appointments at the senior positions. In January 2019, Emma FitzGerald replaced Pierre Eladari as Puma Energy CEO. In March 2019, Puma Energy announced the appointment of Andrew Kemp as Chief Financial Officer (the "**CFO**") who will replace Denis Chazarain in June 2019.

The Impala Terminals Group and Joint Venture created between Trafigura Group and IFM Investors ("IFM") to manage Bulk Commodity Terminals, Warehousing and Logistics Assets

Impala Terminals is a multimodal logistics provider and infrastructure development group focused mostly on export-driven emerging markets through the ownership and operation of ports, terminals, warehouses and transport assets which offer end-to-end logistics solutions for dry and liquid bulk cargoes, general cargo and containers.

In 2018, the decision was taken to bring in a strategic partner to support the expansion of Impala Terminals business into new markets and services, through handling increased volumes from the Group and third parties. In September 2018, the Group agreed to establish a long-term partnership with global fund manager IFM to invest in certain Impala Terminals assets. A 50:50 joint venture – Simba Holding S.à r.l. ("**Simba**"), incorporated in Luxembourg – was created to own and operate a network of concentrates terminal infrastructure in Mexico, Spain and Peru, which plays a key role in the movement of copper, lead and zinc in the global market. The joint venture also included fluvial operations in Paraguay and a Swiss based operation providing global freight forwarding, as well as multimodal transportation services in the African Copperbelt for Trafigura and third party clients.

The agreement, which closed in December 2018, creates the basis to bring together the Group trading know-how, the Impala Terminals operations expertise with the investment experience of IFM. The chosen partner, IFM, is an experienced and well-respected fund manager, backed by 27 Australian pension funds. IFM has a specialist focus on infrastructure investment and a 23-year track record, mainly in investments in Australia, North America and Europe. It contributes its own expertise to the joint venture as well as leveraging the accumulated skills and know-how in Impala. This is a partnership with two-high quality complementary parties with a shared focus on long-term success

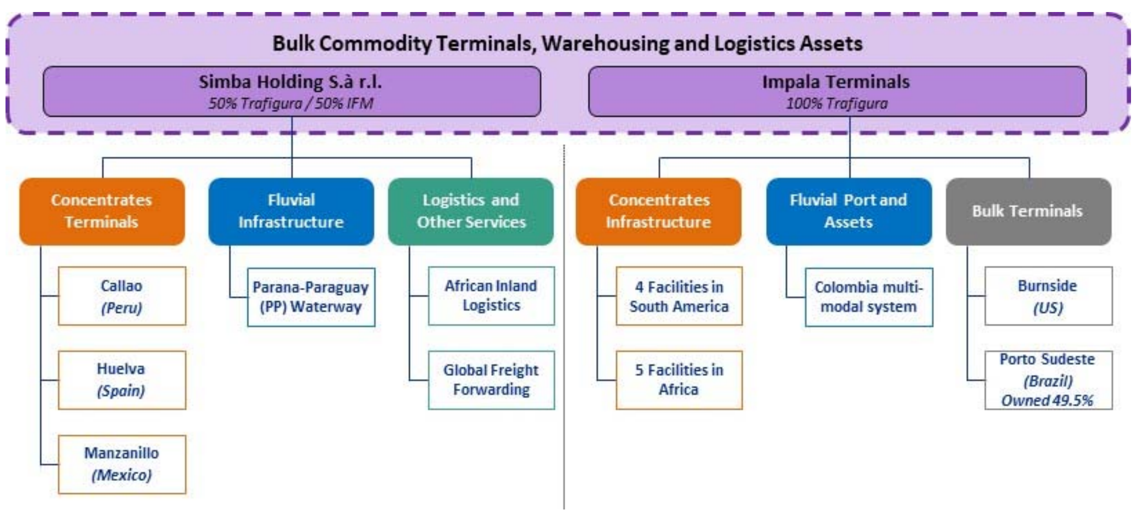
The transaction generated USD 191.2 million of exceptional profit for the Group, and the Group received a total consideration of USD 247.9 million, which was recorded as a receivable from related parties as of 30 September 2018. As of 30 September 2018, Simba was deconsolidated from the Group's balance sheet.

This transaction provides a tangible example of the value created at Impala over the years, enabling Trafigura to re-invest its funds into new projects to generate additional trade flows. It also creates a robust governance framework at Impala, which operates at arm's length with Trafigura Group under, an independent management team, specific corporate governance and clear board rules.

The joint-venture creates a new partnership for future investments in infrastructure related to commodities as well as a solid platform for future growth – both in existing Impala locations and markets, and in neighbouring countries.

The bulk commodity terminals, warehousing and logistics facilities and joint-venture are outlined below.

STRUCTURE FOR BULK COMMODITY TERMINALS, WAREHOUSING AND LOGISTICS ASSETS (FOLLOWING THE JV AGREEMENT)



Assets operated under the joint venture with IFM

The assets operated by Simba Holding S.à r.l. include three concentrates terminals strategically located in Mexico, Spain and Peru, countries well positioned on copper, zinc and lead concentrate export markets. These three terminals have a total throughput capacity of approximately 6.4 million tonnes.

The fluvial transportation network located on the Parana-Paraguay River, one of South America's most important waterways, connects Argentina, Uruguay, Paraguay, Brazil and Bolivia, which has become one of the most important economic development areas enabling domestic and international trade. The current fleet comprises 4 push boats and 27 double-hulled tanker barges (with approximately 530,000 cubic metres throughput capacity). The fleet is expected to grow over the next years, along with as the Group's and third party volumes.

The joint venture also provides end-to-end logistics solutions for stranded mineral resources and value-add central services of consulting and freight forwarding.

Simba provides logistics and multi-modal services in various region, of which Africa, comprising solution for warehousing, short and long hauls, via trucks and trains, as well as sea freight. It also provides end-to-end delivery solutions for imports and exports via a combination of road and rail networks combined with onward ocean container freight services. Simba also provides services to third parties and Trafigura for sea freight and container solutions. In 2018, the global container logistics and freight-forwarding desk, providing container logistics services to the Group and to third parties, handled 75,000 containers and in Africa the overland import and exports arranged by Impala exceeded 500,000MT.

Assets operated by Impala Terminals

Fluvial and Port infrastructure in Colombia

In Colombia, Impala has invested around USD 1.1 billion in an unprecedented project to transform the country's commodity transport network. This investment has allowed the company to develop best-in-class infrastructure and warehousing services, which are underpinned by a world-class multimodal logistics system. Together these elements connect Colombia's inland areas of production and consumption to international markets via the ocean ports of Barranquilla and Cartagena on the Caribbean coast. By having this oversight of the entire logistics chain, Impala provides its customers with safe, efficient and economic delivery of products. Moreover, by switching the dominant mode of transport from trucking to barging in the north of the country, Impala Colombia is creating a more environmentally responsible form of trade. Significantly safer than transporting products purely by truck, this fluvial system not only reduces freight costs but is also inherently much more efficient. The inland port has a storage capacity of over 780,000 barrels ("**bbls**") of crude oil and naphtha and disposes of over 150,000 TEU of container storage. Impala also owns and operates a fluvial fleet of 100 doubled-hull oil and dry barges and 18 pushers. The products handled are diverse combining LPG, Fuel Oil, and Dry Bulk Steel, showing the added value of Impala logistics in the Magdalena River.

In 2018, volume of hydrocarbons handled by the Group's logistical system remained flat at 8.5 million barrels. Regrettably a planned government project to dredge and dyke the river and thus enable a sharp increase in barge traffic was delayed by presidential elections and a change of administration. We anticipate that the river dredging and will be initiated in the coming year, and are well positioned commercially to derive the benefits as soon as the project begins.

Bulk Terminals in Brazil

In 2014, Impala entered into a joint venture with Abu Dhabi based investment fund Mubadala to complete the construction and control and operate Porto Sudeste do Brasil, a USD 2 billion iron ore export terminal which is located in Itaguaí, about 90km west of Rio de Janeiro, Brazil. Porto Sudeste do Brasil is owned at 49.5 per cent. by Trafigura Group and is deconsolidated from the Groups' balance sheet. The port commenced operations in August 2015 and has the capacity to handle 50 million tonnes of iron ore per year and scope to expand to 100 million tonnes. The port gives Brazil's independent miners a competitive alternative to existing export terminals and will offer them unprecedented access to global markets. During 2017, Porto Sudeste's debt package was restructured in order to better match the port's expected operational performance with anticipated cash flows and debt repayment profile. In addition, Porto

Sudeste signed new logistics contracts with Mineração Morro do Ipê S.A.'s ("**MMI**") in respect of the Ipe iron ore mine as well as a contract with Mineracao Usiminas separately. Total volumes handled remained at 9.5 million tonnes in 2018. Trafigura Mining Group is in the process of ramping up volumes from mines it operates in the region for export through Porto Sudeste, but there too progress is reliant on the speed of the permit process.

Bulk Terminals in the United States

In June 2011, Impala Terminals acquired the Burnside coal terminal in Louisiana, USA. Located on the east bank of the Mississippi River at Mile 169.9, the terminal consists of a site of about 1,100 acres, with a deep-water berth and ship loading/unloading equipment. Impala Terminals Group has refurbished and expanded the facility into a state-of-the-art major bulk terminal for coal, bauxite and alumina. The facility has a capacity of approximately 10 million MTs annually and is capable of loading cape-size class bulk vessels. Burnside has the potential to be the only coal terminal on the Mississippi with the capability to handle ocean vessels, barges and rail, thus allowing rail-to-vessel and barge-to-vessel capabilities. Phase 1 of the terminal was completed in June 2014 and the facility received its first million tonnes in March 2015. During 2018, business improved markedly, with volumes handled growing to 4.4 mmt of coal and coking coal and 1.1 mmt of bauxite and alumina, a combined increase of 2.1 million tonnes from the 3.4 million tonnes handled in 2017.

Mining Group

The Mining Group ("**TMG**") invests in mining assets that are closely related to and have strong synergies with the Group's core metals and minerals trading business. Encompassing operations in Latin America, North America, Europe and Africa, its investments include wholly-owned subsidiaries in addition to cornerstone shareholdings in both private and publicly traded entities. TMG directly or indirectly employed around more than 2,000 people (on a consolidated basis), including highly skilled personnel such as geologists and engineers.

TMG's focus continues to be on the participation in and development of mining projects globally. The flagship MATSA copper mine in Spain, a 50-50 joint venture with Mubadala, had a very good year with production steady and quality improving, following the completion of a four-year phase of development and expansion. For most of the other TMG's assets, stabilisation and improvement of operations and satisfactory performance were the themes of the year. Similar to the rest of the Group, TMG has demonstrated its ability to divest fixed assets and recycle capital over the years, completing the successful (partial) divestment of a number of investments, such as Anvil, the Compañia Minera Condestable SA ("**CMC**") and MATSA.

Iberian Minerals / MATSA

In 2013, the Group completed the purchase of Iberian Minerals Corp ("**Iberian**") following a squeeze out process, giving the Group 100 per cent. ownership in the mining group. Iberian's main asset was Minas Aguas Tenidas ("**MATSA**"), but it also held a mine in Peru at the time of the acquisition. MATSA owns and operates mines located on the Iberian pyrite belt in Southern Spain.

The Iberian pyrite belt is well-known amongst the international mining community, since it hosts one of the largest occurrences of volcanic massive sulphide deposits in the world. This belt extends from north of Seville, Spain to almost the west coast of Portugal spanning an area approximately 250 km long and 50 km wide.

MATSA started production in 2009 with the Aguas Tenidas mine and is now operating two additional mines, called Magdalena and Sotiel. Magdalena commenced production towards the end of 2016 following its discovery in 2014 which represented an industry record for the turnaround from discovery to production. Sotiel, an older mine, was reactivated in 2015.

Over the years, MATSA has accumulated advantageous exploration permits in Spain, mainly located around the Aguas Tenidas mine. The expertise and success acquired by MATSA's operational and metallurgical teams in mining and processing these sulphide ores created a bigger incentive for MATSA to become more aggressive in its exploration activities, leading to some important finds. The Magdalena mine is one important find, along with increased resources and reserves at Aguas Tenidas and further exploration of other ore bodies located nearby.

MATSA produces mainly copper and zinc concentrates, along with some small lead concentrate production and the Group completed a EUR 300 million expansion project including a new treatment plant which increased treatment capacity from 2.3 million tonnes per year in 2014 to 3.6 million tonnes per year in 2015 and 4.4 million tonnes per year in 2016 (flat year-on-year in 2017 and 2018).

In June 2015, Iberian signed a share purchase agreement with Mubadala. Under the agreement, MATSA was transferred to a joint venture held 50/50 by the Group and Mubadala, and by September 2015, MATSA had been deconsolidated from the Group's balance sheet.

The restructuring of ownership at MATSA, with the arrival of Mubadala, prompted a comprehensive review of the mine's governance in order to align its objectives and culture with both its shareholders. A new General Manager was appointed, who is an experienced mining professional with a strong track record at mining majors. Some other members of the management team were also changed, sharpening the focus on cost control and safety management. The fall in copper prices created additional need for cost efficiencies. Some other members of the management team were also changed, sharpening the focus on cost control and safety management. The cultural challenge came on top of an economic one, with the fall in copper prices during 2016 creating a fresh need for cost efficiencies.

MATSA is by now a world class mining and processing complex, using state of the art technology, including driverless loaders underground, remote control mine ventilation and water pumping, and a very high level of automation in the plant that has allowed metallurgical recovery to rise by 10 percentage points in the past two years, despite the metallurgical complexity of the ore. Also worth noting was a major improvement in safety performance, with a reduction of 40 per cent. in the lost time injury frequency rate over the last year.

Catalina Huanca Sociedad Minera S.A.C.

Catalina Huanca is a zinc and lead underground mine in Peru that is wholly owned by the Group. A concentration plant treats around 700,000 tonnes of ore per year and produces high quality zinc and lead concentrates. The mine was acquired in 2005. At that time, the operation was artisanal in nature and the Group has progressively modernised it and brought it to international standards, in terms of mechanisation, and also health, safety, environmental and community standards. Performance in fiscal year 2018 was affected by a strike; however, the mine was able to recoup some of the lost production and finished the year just five per cent. short of its production budget.

*Atalaya Mining Public Ltd. ("**Atalaya**")*

The Group owns a 22.4 per cent. stake in Atalaya Mining Plc, formerly known as "EMED". Atalaya originally restarted the Rio Tinto mine in Southern Spain (the mine is located approximately 40km away from MATSA operations).

The Group has the offtake over approximately 20 per cent. of the life of mine reserves. The mine restarted production during the third quarter of 2015 and reached commercial production in February 2016. In December 2017, Atalaya raised GBP 31 million via a share placement. As part of the placement, the Company, through its subsidiary Urion Holdings (Malta) Ltd, slightly increased its ownership to 22.4 per cent.. The proceeds will be used to increase the plant's capacity from 9.5 metric tonnes per annum ("**Mtpa**") to 15Mtpa at its Rio Tinto mine.

Nyrstar

For details on Trafigura's investment in Nyrstar N.V., please see the section entitled "*Recent Developments*" on page 54.

*Empresa Minera del Caribe S.A. ("**Emincar**")*

The Castellanos zinc and lead project in Cuba consists of an open-pit mine and a concentration plant, which was completed in October 2017. The project has been undertaken by the Group and the Cuban government and is the largest industrial investment on the island. It was delivered on time and within budget. The focus in 2018 was on ramping up production while addressing the inevitable initial operational and quality issues. By the end of the year, significant progress had been made and the plant was rising progressively towards its design capacity of 1 million tonnes per annum. For the full year ended 30 September 2018, 800,000 tonnes of ore were treated, and the mine already generated a profit.

Emincar employs approximately 700 people and has 21 million tonnes of reserves. This project is another illustration of TMG's ability to put its expertise and investment to work in challenging economic or political environments.

*Mineração Morro do Ipê S.A. ("**MMI**")*

In 2016, Mubadala and the Group acquired stakes in the Ipê and Tico-Tico mines and processing units located in the Serra Azul mining region of Minas Gerais, Brazil that were previously owned by MMX. To manage these assets a new company, Mineração Morro do Ipê S.A., has been established with Mubadala and the Group each holding 37 per cent. of shares and the remaining 26 per cent. owned by MMX's creditors, who approved the initiative following a judicial recovery plan.

The majority shareholders invested approximately BRL 190 million (approximately USD 52.6 million) in the Ipê and Tico-Tico mines and processing facilities. MMI employs approximately 200 people directly, and roughly the same amount of permanent contractors, and first ore was produced in March 2017. Up to 2021, operations are planned to focus on processing existing iron ore stocks. In parallel, MMI is working to conclude the permitting process to reopen the neighbouring Tico-Tico mine and build a new 5.5 Mtpa processing plant. Once the Tico-Tico plant is constructed in the course of 2021, it will process the mine's friable ore, a more competitive and better quality iron ore, enabling the production of high-quality pellet feed.

A new environmental licensing process is followed for the Tico-Tico mine, including the development of environmental impact studies that are appropriate for the scope of the new project. These include treating tailings from the processing of iron ore through a system of filtration, drying and stacking which is environmentally and socially responsible, removing the need for tailing dams.

Galena Private Equity Resources Fund (the "Resources Fund")

Galena Asset Management's teams operate wholly independently of the Group, but benefit from the Mining Group's expertise. The Resources Fund raised USD 400 million in 2015 to invest in equity and debt of metals and mining companies. To date it has invested in a number of mining assets in the Democratic Republic of the Congo, the US and Finland. Galena Asset Management is discussed in more detail below.

DT Group

DT Group is focused on managing, developing and growing a range of business lines predominantly focused on the Angolan market. DT Group is a 50:50 joint venture that leverages the market capabilities and financial strength of the Group, underpinned by the local knowledge and networks of partner Cochan Ltd.

Cochan Ltd. is a leading Angolan management and investment firm that facilitates investment activities by contributing specialist expertise and capital. The Group helps to develop new business lines in Angola and beyond by participating in projects related to infrastructure, logistics and economic diversification – with a focus on core trading and shipping activities.

Over the last few years, DT Group began a consolidation of its business in Angola, which meant that it withdrew from a number of lines of activity and refocused on core activities. In the coming year, DT intends to maintain this focus, based on a close commercial relationship with Sonangol and in partnership with the Angolan subsidiary of Puma Energy, Pumangol.

As part of this review of activities, DT Group's subsidiary Angola Exploration Mining Resources ("**AEMR**") (iron ore investments in Angola) was placed on standby in 2014. In early 2016, a presidential decree was issued resulting in the liquidation of AEMR and the Angolan Government acknowledged a debt of USD 409 million as compensation in respect of the investment made, with repayment in full due by end of 2020. Due to ongoing liquidity constraints within Angola for foreign currencies, the loan is in arrears and the amount payable to the DT Group as of September 2018, inclusive of discounting, amounted to approximately USD 300 million. The Group continues to expect all amounts will be collected within the timeframe defined in the agreed payment plan.

Further to the above, since 2017, assets with a book value of approximately USD 65 million from three DT subsidiaries, which include platforms, land and buildings, are being marketed and were transferred to assets held for sale. An independent valuation was performed, which exceeded current book value, and DT continues to maintain and secure those assets.

Galena Asset Management

Galena is the private investment arm of the Group, which has been providing investors with specialised alternative investment solutions in the energy, metals and minerals space through Private Equity Funds and Private Investments since 2003. The company has been regulated since 2003.

The Resources Fund raised USD 400 million in 2013 to invest in the equity and debt instruments of metals and mining companies, of which the Group has committed USD 100 million pari-passu to external investors. To date it has invested in a number of assets in the DRC, the United States and Finland. The fund become fully invested in 2017, and there are plans to raise a successor fund.

Notably in February 2017, Galena Private Equity Fund announced a 15.5 per cent. stake in Terrafame, a Finnish nickel and zinc miner, via a EUR 75 million investment and a EUR 75 million trade finance loan. The operation has a large mineral resource of almost 2 billion tons, and mine life based on reserves of approximately 20 years. As part of the transaction, Galena took two out of seven board seats for greater oversight and performance management, while the Group was granted the offtake of 100 per cent. of nickel precipitates and 80 per cent. of zinc precipitates produced over the next seven years. In November 2017, Galena increased its stake in Terrafame to 28.7 per cent. via a USD 100 million equity investment and additional funding package was announced to support the investment in a processing plant that will produce nickel and cobalt sulphate for use in electric batteries. This second investment is being channelled through a USD 225 million special purpose vehicle separate from the Private Equity Resources Fund, which had raised USD 140 million at its first close in August 2018. The ramp-up of production at Terrafame proceeded according to plan in 2018, and a feasibility study was concluded on the nickel sulphate plant. Also, the Group and Terrafame have extended the current offtake agreement concerning the zinc sulphide precipitates to 2027 and have negotiated new commercial arrangements for future nickel and cobalt sulphate products.

The strategy of Resources Fund is to identify mispriced assets that have a strong potential for growth in base metals and bulks. The team invest globally maintaining an agile investment approach across the development stages of underlying companies and invests in both listed and private companies. A particular focus is to secure high quality assets with the ability to rely on the Group's, technical, commercial and financial resources to extract maximum value whilst managing the downside risk.

Looking forward, Galena continues to prospect for suitable resource investments offering strong underlying asset value and the opportunity to apply management and financial capabilities from the wider Trafigura Group.

Galena Asset Management is regulated by the Swiss Financial Market Supervisory Authority (FINMA) and is carefully monitored by its own dedicated internal compliance department and supported by an external compliance consultant.

The Group's Capital Expenditure and Long-Term Equity Investment Programme

The Group's capital expenditures and long-term equity investment programme ("**Capex**") is mostly related to infrastructure projects within the Group's industrial asset divisions (i.e. Impala Terminals Group, Mining Group and DT Group), but more recently, increasingly also in the form of joint ventures and partnerships including some that are specifically related to the development of the trading business. The Group's Capex is largely of a discretionary nature and provides visibility on the Group's liquidity requirements.

The Group has invested significant resources to develop its physical assets portfolio over the years. The Group's strong performance and solid track record have helped open up new opportunities that might not be available to an entity to a smaller size or with a shorter track record. The assets often contribute on a standalone basis to the Group's earning power, but also offer significant synergies with the Group's trading activities, creating opportunities that would not otherwise be available to the Group and supporting business development. These divisions enable the Group to generate stable and recurring revenues irrespective of prevailing market conditions.

The Group's Capex is executed and monitored in accordance with four core principles:

- A favourable assessment of the standalone profitability of each investment, meeting internal return requirements on investment hurdles;
- Beyond a baseline maintenance capital expenditure, certain other elements of planned capital expenditure are flexible and could be deferred if necessary in order to smooth the Group's liquidity requirements. This is particularly true for investments made over several phases and expansionary capital expenditures which can be considered since it is discretionary and uncommitted;
- Over time, Capex has a positive impact on the EBITDA of the Group's industrial businesses resulting from productivity gains, increased volumes and synergies. The speed at which Capex is expected to turn into cash flows is also a key consideration; and
- Maintaining the Group's credit standing with unsecured lenders is achieved by building value in the long run and managing the Group's business and financial profile in a manner consistent with that of an investment grade company. There is management oversight over the Group's Capex plan, ensuring that the impact of such spending would not compromise the Group's compliance with its financial covenants.

Investments in fixed assets and equity investments can be monetised to generate liquidity for the Group. The Group has demonstrated over the years its ability to make divestments. For instance, this has included the sale of mining assets (Volcan, Anvil, Tiger and CMC and 50 per cent. of MATSA), the sale of equity investments (Corpus Christi Holdings, Chinalco Mining, Mexican Tuxpan pipeline), the sale of portions of its stake in Puma Energy in 2011 and 2013 to existing minority stakeholders and some of Impala Terminals' logistics assets to newly formed joint venture (Simba JV). These sales have generated substantial cash flows and profits for the Group and validate the Group's strategy of investing in industrial and logistical assets to support its trading business and generate new revenue streams. The transactions also demonstrate the Group's rigorous approach to managing its portfolio of asset investments, using capital in a disciplined manner and releasing value when the opportunity arises to recycle capital into new projects with a view to creating further profitable growth.

In the fiscal year 2016, the Group reached the end of an intensive cycle of investment in industrial and logistical assets and accordingly booked a reduced level of Capex. The Group's capital expenditure and investment (net of divestments) was just USD 95 million in fiscal year 2018, compared to USD 412 million in fiscal year 2017, well within the stated budget of USD 500 million. The Group expects Capex to continue at or around this level in coming years. The Group intends to invest in assets that offer opportunities, where appropriate, in the form of joint ventures and partnerships.

The Group seeks to expand its business and trading flows with a more partnership oriented growth model, as opposed to the full asset ownership model that has been pursued in the past.

The largest investment during fiscal year 2018 was the USD 80 million acquisition of the majority of the downstream business of Pampa Energia S.A. in Argentina, which was completed in May 2018. The acquired business included various legal entities, in which the Group acquired 100 per cent. of the shares, as well as certain assets. The business acquired predominantly included a refinery and service stations.

Property, plant and equipment ("**PPE**") expenditures were limited during fiscal year 2018, with the main ones relating to investments in a power plant in Ghana of USD 26 million, investments in a saltwater treatment project related to mining operations in Peru of USD 19 million, the construction of a splitter unit in Mexico of USD 15 million and the Colombian port project of USD 11 million.

Finally, the additions to equity accounted investees amounted to USD 101 million in fiscal year 2018. In November 2017, the Group participated for its share in an equity placement of Nyrstar resulting in an additional investment of USD 29 million. Other main additions relate to further investments in Porto Sudeste of USD 18 million, MMI iron ore mines in Brazil of USD 14 million, and investments in Tendril Ventures Pte Ltd (which relates to the Group's investment in Nayara Energy, ex-Essar Oil) of USD 14 million.

During the first half of 2019, the Group's capital expenditure and investment (net of divestments) was just USD 5 million compared to USD 62 million in the first half of 2018, including a cash inflow of USD 247.9 million in December 2018 on the receivable of the sale of 50 per cent. of Simba Holding S.à r.l., the ultimate parent company of some of the Impala Terminals entities, that took place on 27 September 2018.

Industry Overview

Oil Market

Market Structure – Supply Side

Crude oil is a major commodity traded on the international markets. There are numerous derivative products obtained from the processing of crude oil which are also useable and tradable, including gasoline, naphtha, fuel oil and bitumen. Gasoline and distillates are the most widely traded refined products, in terms of volumes traded.

Crude oil price, particularly in the long-term, is driven by supply and demand fundamentals, as are all commodities. However, given its role as one of the world's key economic drivers and that it is a tightly traded commodity, its short-term price can become especially volatile due to geopolitical events, financial positioning, macro-economic developments and regulatory changes.

Crude oil is extracted through exploration and production, and is carried out by either independent or integrated energy companies (e.g. BP, Shell, Exxon) or national energy companies such as PetroChina (CNPC) or Saudi Aramco. Producers are split between OPEC and non-OPEC producers. In 2017, OPEC countries held approximately 70 per cent. of the world's proven oil reserves, but they only accounted for around 42 per cent. of the world's oil production and possessed less than 15 per cent. of the refining capacity.

Although there is no consolidated data available regarding total volumes handled by traders, the Group's market experience indicates that between 50 to 60 mmbpd are "freely" traded, which equates to just under half of the total market volume. These are volumes on the "tradable market", i.e. volumes that are not handled by producers directly to consumers. The tradable market holds significant opportunities for companies engaged in the physical trading of oil, such as the Group, Vitol and Glencore. In 2018, the Group had approximately 7-8 per cent. of market share in the tradable market[9] with approximately 5.8 mmbpd of traded volumes calculated based on the Group's internal research of actual traded volumes.

In spite of the different varieties and grades of crude, buying and selling is done by reference to a limited number of benchmark crude oils. Examples include Brent crude oil ("**Brent**"), which is estimated to price two thirds of internationally traded crude oil supplies; Dubai crude, which is used as a benchmark to price sales from the Gulf into Asia, and West Texas Intermediate ("**WTI**"), which is the benchmark for sales into the US. OPEC produces its own benchmark price based on a basket of members' crudes as well as Mexico's Isthmus crude.

The vast majority of crude oil is refined into various fuel products, and a small fraction is used to produce chemicals, which are the basis for the petrochemical industry, which includes plastics, pharmaceuticals and cosmetics.

Market Structure – Demand Side

Global oil demand tends to closely follow global economic growth and for many years, global oil demand increased in line with the expansion in the global GDP growth. Demand fell in both 2008 and 2009 as the global economic recession led to a marked downturn in consumption of energy, yet recent years have witnessed signs of recovery including an increase in global oil consumption. However, oil demand in 2014 grew only modestly - by less than 1 per cent. to 92.8 mmbpd. The collapse of crude oil prices in late 2014 and 2015 led to a stronger rebound in demand; with a 1.9 per cent. world oil demand growth in 2015 to 94.6 mmbpd, which proved to be a boon to consumers, who began to increase demand as prices fell. Rapid gains in gasoline demand – from the US, China and India – fuelled the growth. Strong gains in European gasoil/diesel demand were also a contributed heavily after many of the region's economies grew out of recessionary conditions.

Global consumption growth was strong in 2017, recording a year-on-year increase of 1.7 mmbpd, taking total global liquids demand to 98.1 mmbpd. Going forward, demand growth is expected to edge closer towards its long-term trend, easing back to 1.2-1.3 mmbpd. We saw this reversion to trend in 2016, with demand slowing down as China and other emerging markets grew more slowly, offsetting stronger US

[9] Defined as volumes which are not distributed by producers directly to consumers.

and Indian demand growth. Although fundamental factors for demand growth look relatively strong since, higher interest rates, a stronger USD and higher oil prices could cause a slowdown in both economic and oil demand growth going forward.

Part of this strong demand growth recently has been due to the somewhat surprising rise in OECD demand in 2015-2017, which saw the reversal of nearly a decade of demand declines to see demand increase by an average of nearly 600 kbpd over those three years. This in turn was driven by lower oil prices, which saw US demand in particular record strong growth as consumers purchased more cars and drove them for more miles per year than previously. Just as important were the types of cars, with US consumers turning heavily to SUVs and light trucks, which are less fuel efficient than traditional sedans.

Looking ahead, despite some growth in the United States, overall OECD demand will continue to stagnate. Between 2005 and 2015, OECD oil consumption consistently declined, falling more than 8 per cent. from 50.1 to 45.9 mmbpd over the period. This trend should continue as overall OECD oil demand's trajectory is forecast to see flat-to-falling demand from 2019 onwards. In 2018, around 1.5 mmbpd demand growth is expected, 0.3 mmbpd of which will come from OECD countries and the rest from non-OECD countries.

By contrast, non-OECD oil consumption has steadily increased by more than 40 per cent. from 33.3 mmbpd to 51.2 mmbpd between 2004 and 2017, representing 52 per cent. of total oil demand. Chinese consumption has also increased by over 6.1 mmbpd compared to 2004, and is now over 12.8 mmbpd, although this is still far from the 19.9 mmbpd consumed each day in the US in 2017. China now accounts for approximately 13 per cent. of global oil demand in 2017, up from 8 per cent. in 2004.

As a result of these trends, the share of global consumption attributable to OECD countries fell from 60 per cent. in 2004 to less than 50 per cent. in 2013, and stand today at approximately 48 per cent., while the share of demand accounted for by non-OECD nations increased accordingly.

Over the last 10 years, the increase in global demand for oil has lagged behind the growth in global GDP, reflecting the increased use of alternate fuel types and improved efficiency. Oil consumption increased by 1.4 per cent. (compounded annually) since 2004, compared with a Purchasing Power Parities ("**PPP**") weighted increase in global GDP of 5.9 per cent.. Over recent years, a 1 per cent. increase in global GDP has resulted in oil consumption increase of approximately 200,000 bbls/day.

Market Fundamentals

The market for trading crude and refined products is driven by several factors and variables, primarily supply, demand and geopolitical scenarios as mentioned earlier. Another key factor is refining capacity, which becomes a bottleneck when crude supply is sufficient but demand outstrips production capacity which historically occurs when demand for refined product increases at a rate greater than additions in refining capacity growth. Conversely, when additions in refining capacity exceed the growth rate in demand for refined products, refining margins contract to incentivise capacity rationalisation, which is the expected dynamic for 2019.

Additional factors include environmental seasonality and the geographic locations of consumers and producers. For example, consumers located in cold weather regions push up demand for heating products, and producers and shipping routes located in regions susceptible to hurricanes can affect the stability of supply, pushing up prices and costs for players in the market. On a different scale, factors such as the United States Strategic Petroleum Reserve increasing or releasing stockpiles can influence the market within the North American region and beyond.

Although the market for producers and refiners is consolidated, the range of consumers is wide and fragmented. Consumers of products vary from car users to large petrochemical companies, which turn crude and refined products into sophisticated derivatives such as cosmetics. The oil market is also unique in that the versatility of uses for and characteristics of primary refined products means that industrial users can differentiate between their usage of crude and refined products mainly in terms of price and/or availability to produce further refined derivatives.

The Group benefits from this highly volatile environment by being able to make trading plays using its arbitrage expertise, geographical reach, storage blending capabilities and freight options. In addition, the use of financial derivatives provides the Group with the means to enhance opportunities in the market while hedging against outright price risk.

Recent Market Developments

While crude oil prices had been relatively stable for the first half of 2014, a notable decline ensued after June. Brent fell from USD 115/bbl in June to around USD 55/bbl in December. Offline production in Libya and Iran masked rapid production growth in North America and other regional gains for some time, but Libya's restarting of some exports in late 2014, further compounded by OPEC's decision in late November to not limit production in order to increase prices, contributed to a rapid sell-off.

Prices recovered some 25 per cent. from early February 2015 until May 2015, resulting in significant forward hedging by producers, who had been able to bring their costs down such that they were profitable at those levels. Producer hedging meant that production that was previously at threat of being turned off was able to keep going, adding supplies to the market which continued to put significant downward pressure on prices.

The price environment worsened following the removal of sanctions on Iran, which allowed more supply to flow into the market. It was during this period that there was the removal of the ban on US crude oil exports, which would play a major factor later.

In early 2016, the price of Brent Crude oil dropped to new lows (of USD 27.88/bbl in late January), levels last seen in November 2003. This price volatility and ensuing fall was detrimental to producers. However, traders such as the Group, can play a vital role in addressing temporary market imbalances by storing surplus commodities and producing a profit in the process.

Since the beginning of 2016, when oil prices fell to the upper USD 20/bbl range, Brent progressively increased upwards for two years. This was mainly the result of a deal announced between OPEC members and Non-OPEC producers in late 2016 to cut 1.7 mmbpd of production in 2017. The main drivers of this cut were Saudi Arabia, Kuwait, UAE, Iraq and Russia (non-OPEC). OPEC members Nigeria, Libya and Iran all increased their volumes during this time, offsetting the principal cutters. It was Venezuela, which deteriorated because of a failing socio-political environment, which had a particularly significant impact as its production fell over 1.5 million bpd in this two year span.

By mid-2018, when crude healthily recovered to USD 75/bbl, OPEC+ (OPEC plus Russia and others) countries decided to reverse course and increase production. This decision was driven in large part by expectations that U.S. sanctions would reduce Iranian oil exports by an amount that would significantly tighten global supplies if OPEC+ continued with their cut. At first, there was no significant market reaction, but strong rhetoric by the U.S. administration in the lead up to the return of Iranian sanctions spurred a crude oil rally to over USD 85/bbl. The timing of this rally coincided unfavorably with the U.S. midterm elections to occur in early November 2018 as gasoline prices rose to multi year highs. It was at this peak price that global refinery turnarounds and trade war fears weighed on crude oil demand. On the supply side, OPEC+ produced and exported crude oil quantities not seen since December 2016, while US reached record production of over 11 million bpd. Crude oil price fell 40 per cent. in two months (from October to December) to USD 50.8/bbl as crude oil stocks continuously built during this period and technical trading exacerbated the downward move. In 2018, the U.S. Permian Basine alone saw growth of 1.2 mmbpd in 2018, meaning that if it were a standalone country, it would be the world's eighth largest producer.

The extreme price sell-off forced OPEC+ to revisit their strategy in December 2018 and agreed once again to cut oil production by 1.2 million bpd. Since this agreement, and at the time of writing, crude oil trades at USD 58/bbl, up 15 per cent. from its lows.

Looking to 2019, price action on the supply side should continue to be most influenced by OPEC's commitment to price cuts, Iran's export enforcement, US production growth and Venezuela production woes. Wildcard events could include the Nigerian election in February and flare-ups in Libya. On the demand side, trade war rhetoric and interest rate hikes by the Fed will likely determine the path of the global economy, which trends in a direction of product demand growth softening. The Group welcomes 2019 as a year of anticipated opportunity as volatility continues to benefit the Group's business positioning.

Other structural changes continue to occur alongside the oil price fluctuations in recent years. For example, increased shale gas production has had an obvious effect on natural gas market development. In previous years, the natural gas market had been regionally isolated as global transportation of gas proved both difficult and expensive. However, the natural gas production boom from shale exploration has spurred recent infrastructure developments, quickly making the economics of global liquefied natural gas (LNG) trading increasingly attractive. The Group considers that it is well placed as the largest physical global LNG trader in the world to take advantage of these opportunities as the US and other producing nations use their large reserves of shale gas to produce more liquefied products for export purposes.

As one of the main structural changes over the past decade, increased natural gas production has garnered greater attention as an alternative fuel source to coal for supplementing world energy demands. The Group continues to believe coal is likely to remain essential to worldwide energy consumption for the next decade. This is especially driven by the fact that drilling costs and associated Capex expenditures for shale gas wells in China, the world's largest coal consumer, are too high to justify a quick move away from coal. These developments suggest energy based commodity markets will remain dynamic going in the near future.

Analysis of the Impact of Declining Oil Prices on the Group

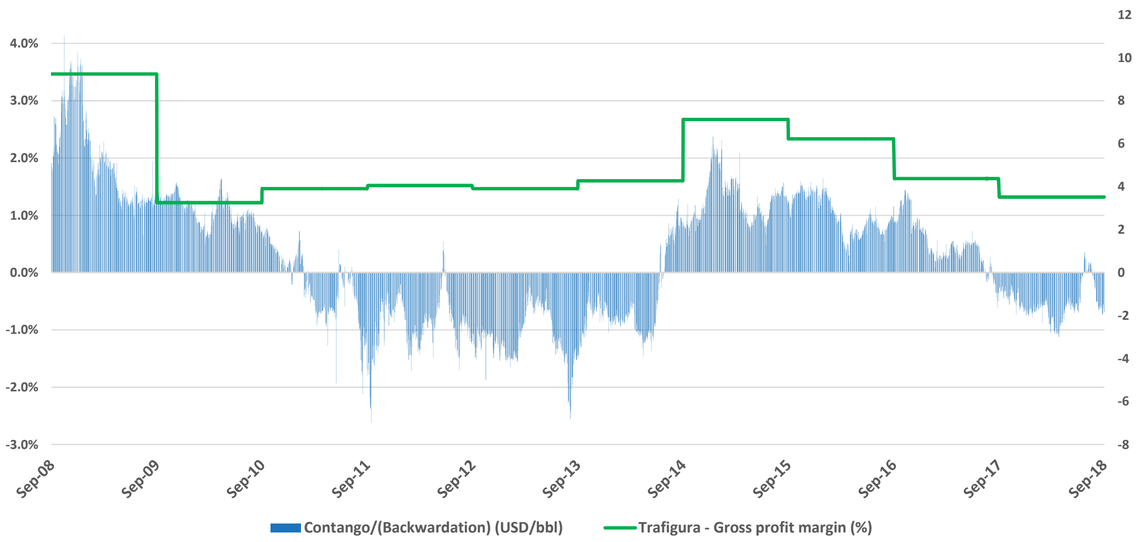
From September 2014 to September 2017 oil prices have declined by 40 per cent. and there were points in 2015 when the scale of the fall was even greater. When oil prices hit a trough, history has shown that the energy industry's response is a flurry of mergers and acquisitions. Price crashes in the early 1980s and late 1990s sparked a wave of deal-making that reshaped the industry. A decline in the mid-2000s led the majors to pick up smaller producing companies. Previous consolidations took place after a prolonged slump in crude prices and often during a period of weak energy-stock market valuations. The Group is not active in oil exploration and production.

Historically, declines in commodities prices have had almost no adverse effect on the way the Group conducts its day-to-day business. The Group hedges the risk embedded in its physical trade flows, so a decrease in commodities prices has no impact on the Group's profitability. In fact, the Group's business model benefits from volatility in commodities markets. The Group has grown its total oil and petroleum volumes by 25 per cent. for fiscal year 2017 and by 14 per cent. in fiscal year 2018, and generally delivered strong profit performances during volatile periods. This has been demonstrated during the two historic oil price crashes from 2008 to 2009 and 2014 to 2015.

The Impact of Contango and Backwardation

In a contango market, where forward prices are higher than current spot prices, The Group is able to buy and place cargoes in storage whilst selling the equivalent forward contract. As long as the cost of the transaction, which includes storage, insurance and financing, does not exceed the price differential between the forward and spot rates, the Group is able to lock in profit with very little risk. In the past year, primarily driven by falling inventories and increased producer hedging activity, we have seen the global oil market forced into backwardation, i.e. when futures prices fall below the current spot price. In the scenario when a switch from contango to backwardation occurs, commodity traders often experience an impact on profit margins, as it takes time to unwind storage positions that had been attractive when forward prices were higher than spot. The below chart demonstrates the impact that the move from contango to backwardation, and vice versa, has had on the Group's gross profit margins over the last ten years.

THE IMPACT OF CONTANGO AND BACKWARDATION



Source: Public Market Data, Trafigura Research. Contango / (Backwardation) graph is calculated by subtracting CO1 (Generic 1st 'CO' Brent Future) from CO6 (Generic 6th 'CO' Brent Future). Gross profit figures exclude Puma Energy gross profit for all years

Metals and Minerals Market

Market Structure – Supply Side

The main non-ferrous metals consist of aluminium, copper, lead, nickel and zinc. Concentrates of these metals are mined ores which have been processed to "concentrate" the metal content as well as alumina which is refined bauxite ore from which aluminium metal is produced. Concentrates are not traded on international exchanges but directly between counterparties.

Producers are essentially mining companies which operate or control mines. Consumers are usually smelters and refiners. Smelters process the concentrates to further separate the metal from other metals or impurities. The resulting blisters are then passed on to refineries for further processing.

The refined metals which are then produced are sold to fabricating companies to be used in the manufacturing process.

The main bulk commodities are iron ore and coal, the latter being divided into thermal coal (for use in electricity production) and coking coal (for use in steel production). In contrast to the metals and minerals markets, production of bulk commodities is generally much lower cost, but with much higher tonnages. Not surprisingly, transport costs are a significant factor in trading bulk commodities and as a result there is less of a global market than with metals and minerals, with some regional markets (internal US coal market for example) only loosely connected to the global market.

Market Structure – Demand Side

Refined metals and steel are used in a variety of end uses although the most important are construction (including infrastructure building), transportation and consumer products. As a result there is a close correlation between metal usage and the global industrial cycle. Further discussion of the global industrial cycle and demand is provided under "*Current Market Developments*".

Market Fundamentals

The non-ferrous concentrates, bulk commodity and metals market as a whole is composed of vertically integrated metal groups (BHP Billiton, Rio Tinto, etc.), industrial companies (Umicore, Arcelor, Korea

Zinc etc.) and, in the case of thermal, coal power utilities. As such, this market tends to be fairly conservative with counterparts that maintain stable long term relationships with their suppliers and customers. Most contracts tend to be over annual or multiple years including evergreen (i.e. indefinite) on the concentrate side and annual on the metals side. Such activity therefore offers longer term visibility with regard to the book composition and profitability when compared to oil trading.

As with the oil market, non-ferrous concentrate and metals markets and the bulk commodity markets are driven by global supply and demand and available refining capacity.

With respect to metal concentrates, even though concentrates are not exchange traded, the metal content is still hedgeable. The price of a ton of concentrate is determined by the metal content value less the treatment charge and refining charge ("**TC/RCs**") representing the fee paid to the smelters and refiners to first smelt and then refine the concentrate into metal. TC/RCs are effectively related to the level of utilisation of the smelters/refiners at any time in a geographical region, when compared with mine production and industrial user consumption.

Any combination of the two main drivers (overall supply/demand and smelting/refining capacity) can have an opposite impact for, on the one hand, concentrate value and, on the other, refined metal value. Indeed, it is possible to be in an environment of high demand for and/or low supply of metal linked to a lack of refining capacity driving prices high while concentrates are oversupplied compared to the same refining capacity, driving the value of concentrates lower (TC/RCs higher). It is therefore crucial to understand and follow closely the evolution of (i) mine production, (ii) available refining capacity, and (iii) global demand, in order to anticipate price movements and negotiate effectively long term contracts.

The Group's advantage in these markets arises from stable, long term relationships with producers, smelters and consumers complemented by its arbitrage (freight, geographical, etc.) and risk management expertise.

Current Market Developments

Industrial metal prices have historically been volatile, reflecting the swings in the global economic cycle, often exacerbated by stocking and destocking cycles, supply-side changes and inflows and outflows of short-term and long-term speculative and investment flows. The key driver, however, remains the economic cycle and price movements which in recent years have reflected changes in both expectations and outturn growth.

Prices in the metals markets have seen similar levels of volatility to those seen in the oil markets, although metals have generally been slower than oil to react to weakness in China, the world's largest commodity market. From early 2015 until mid-2016, prices moved downward quite substantially before experiencing a surge similar to oil prices during 2017. As with oil, capacity has been increasing in recent years in the expectations of strong demand from China, only for that capacity to be achieved just as demand slowed.

However unlike in the oil market, metals producers have already reacted to the lower price environment by announcing supply cuts in key metals. This has helped keep a floor under prices. As with oil, demand growth will have to do its part to help rebalance the market.

Global economic growth in 2018 generally maintained its momentum from the previous year, underpinning a decent year in terms of commodity demand growth. Despite rising interest rates, emerging market turmoil, geopolitical issues, a stronger US dollar and higher commodity prices, growth was above historic averages and was broad based across geographies and product types alike.

Aluminium

LME 3 month forward aluminium prices fell rapidly towards the end of 2014, breaking through their average for the year of less than USD 1,900 per MT and continued to fall in 2015, reaching their lowest point in November below USD 1,450/MT, with the exception of brief a spike in May back up towards USD 2,000/MT. Prices stayed low in the early part of 2016, before beginning a sustained upward rally mid-year, along with the rest of the commodities complex.

Prices averaged just under USD 2,000/MT in 2017, but saw a sharp rally in early 2018 to over USD 2500/MT as the result of sanctions being placed on Rusal in April 2018, one of the largest producers of aluminium in the world. Prices have since steadily headed downward and were trading below USD 2000/MT by the end of the year.

The market reacted strongly to the revelations of fraudulent metals practices at the Qingdao port in June 2014, since China accounts for over 40 per cent. of primary aluminium consumption globally. The direct effect on the Group was not material, but market participants have added additional processes and safeguards in place for their aluminium trading within China.

In response to these issues across the aluminium market, including extended queues at some LME warehouses, the LME established new warehousing rules at the beginning of 2015. These rules have changed the market dynamics by subjecting warehouses with queues of over 50 days to strict load-in-load-out requirements, causing premiums to fall rapidly and sharply across the board.

New uses for aluminium, including in transportation and in high-voltage electricity grids, have meant that demand both inside and outside of China has been rising steadily, outperforming other base metals in 2015. Stronger vehicles sales in the US and Europe in particular have contributed to this rising demand as companies such as Ford move their most popular models to aluminium-based designs. Aluminium demand over the 2016 to 2021 time period is expected to see much stronger growth outside of China than inside, a reversal of the clear trend from 2011 to 2016.

China, however, has moved from being the world's largest importer to being a growing exporter, as low-cost capacity built during the boom years continues to come online and add to global supplies, reversing the dynamic of the last decade to some extent. The shift has left the market as a whole in surplus, which combined with significantly lower energy prices, has brought prices down to the lowest levels since the global financial crisis. China began reducing aluminium capacity in late 2017, both in response to over-capacity concerns and also to target the atmospheric emissions from the sectors. The result has been that the aluminium market has begun to tighten for the first time in many years, providing a floor for prices in 2018 and beyond.

The much anticipated environmental closures over the winter of 2017/2018 turned out to have very muted impact on overall production, resulting in a sell-off and a widening of the Chinese export arbitrage, as a solution was sought for winding down the large stock pile of metal built up in the country. Further disruption followed, with the US applying tariffs on the import of aluminium from March 2018, which sent the US premiums soaring, and later applying sanctions on the largest shareholder of Russian smelting giant Rusal, which potentially could have left a significant gap in global supply.

Volatility came from raw materials as well, with the world's largest alumina refinery in Brazil having to curtail output following an environmental incident. While this put upward pressure on alumina prices, the raw material cost increase did not fully pass through to smelters, leading to margin contraction. This has been felt in China in particular, where curtailed output is finally allowing stocks to draw back towards more normalised levels.

On the demand side, aluminium continues to see increased use in vehicle light-weighting and in transmission grid build-outs. Unusually, aluminium growth is beginning to be driven more by demand outside China rather than in it, providing a solid base for future growth.

Copper

In 2015, the copper price averaged approximately USD 5,500/MT, just less than 20 per cent. below its previous year average of approximately USD 6,830/MT. The 2016 year experienced two distinct phases: namely, prices remaining at approximately USD 4,700/MT for most of the year, before increasing to an average of USD 5,600/MT after the presidential election in the United States.

The steep upward change in the price initially occurred as a result of the announcement of the increased infrastructure stimulus from the current administration in the United States. However, against the backdrop that previous years had experienced oversupply due to increased production and the decline in Chinese demand growth rates, prices declined since the disappointment of the scale of the Trump administration stimulus.

The structural changes China is experiencing as it moves from an investment-led model to a more consumer-based economy have seen copper demand stagnate for most of 2015 in the world's biggest consumer of the metal. Electricity grid build-out in particular was much lower than expected in 2015, due in no small part to an ongoing corruption crackdown that appears to have stymied decision making. Furthermore, as the pace of China's urbanisation slowed down, real estate activity also decreased in parallel, leading to less demand for copper in housing. Over the medium term, the excess housing inventory in China should be absorbed, as workers continue to move from the countryside into cities. As inventories drop, construction activity should begin to pick up.

However, against this backdrop of structural slowing, the Chinese authorities put an unprecedented infusion of liquidity into the economy in 2016, amounting to over USD 3 trillion, with USD 1 trillion coming in the first quarter of 2016. Economic activity was thus given a sharp stimulus. Industrial production, real estate activity and infrastructure development all rebounded sharply after the slumps in late 2014 and across 2015. The government has kept liquidity conditions loose throughout 2016 and 2017, allowing economic activity to rebound across the board, boosting demand for copper and other industrial materials.

Suppliers responded to the low price environment by announcing supply cutbacks and project delays which they hope will see them through to a more balanced market. Glencore in particular has announced major cuts, totalling some 400,000 MTs, but others including Freeport McMoRan and First Quantum, have followed suit as well. These cuts, combined with a general rebound in commodity prices due to the proposed infrastructure plan from the Trump administration, meant copper prices rebounded to trade above USD 6,000/MT in 2017. Copper demand in 2017 was primarily boosted by the recovery in Chinese real estate and by an accelerated build-out of the Chinese electricity grid.

Copper started the fiscal year 2018 strongly, with prices rising to a high of USD 7,200/MT, a level not seen since 2014. The prices dipped below USD 6,000/MT for a short time before recovering to between USD 6,200/MT and USD 6,400/MT. In 2018, despite concerns about slowing macro economic trends demand remained healthy and import of cathode were strong. In June 2018, sentiment shifted as concern over the economic slowdown and the impact of deteriorating trade relations with the US led to broad sell-off in commodities. We are also seeing signs of increased liquidity in China filtering through into increased infrastructure and real estate, albeit at a pace that will not see the bulk of impact until sometime in 2019.

Mine supply appeared to be tightening for most of 2018, with spot treatment and refining charges dropping to five-year lows in April. However, unexpected smelter outages and generally stronger mine supply led to the market softening into the summer months. On the mining side, expected disruptions due to labour disputes failed to materialise, allowing the concentrates side to stay fairly well supplied and mitigating some of the upside price risk.

Lead

Lead finished 2014 at an average yearly low of approximately USD 1,860/MT after peaking at USD 2,301 /MT on 28 July. Prices in 2015 averaged just under USD 1,800/MT, before seeing a steady upward climb to average USD 1,900/MT in 2016. In 2017, the average price for lead was above USD 2,200/MT. The main driver for the price rises was a reduction of primary production in China due to a combination of tight concentrates and environmental pressures. Meanwhile, local demand has grown by 2 per cent., primarily from the battery replacement sector. However, moving into 2018 LME prices eased from USD 2,590/MT in January to USD 2,028/MT in September.

In lead concentrates, the market transitioned from a tighter supply scenario in 2014 to a more balanced condition throughout 2015. The transition came as a result of the closure of the La Oroya smelter in Peru, which reduced competition for concentrate demand. In 2015, the lead concentrates market was impacted by the Chinese economic slowdown. After two years of stagnation, Chinese demand decreased year-on-year. Since Chinese consumption accounts for up to 70 per cent. of global lead concentrates demand, this lead to a softer concentrate market. Similar market conditions to those experienced in 2015 were experienced in 2016, with Chinese demand under pressure given financial constraints on consumers and increasing focus on environment impacts. However, lead has rallied along with other key commodities such as zinc and iron ore, as the expectation for demand growth on the back of a brighter macroeconomic picture boosted price outlooks and that trend continued into 2017 as mine supply constraints tightened the market.

For 2018, lead mine supply showed no sign of recovery after significant decreases in recent years, and the concentrates market remained tight. To add to the pressure, recent environmental inspections in China have targeted secondary lead producers directly. The metal falls within two major categories that face scrutiny from the central government: solid waste and heavy metal. This has impacted smelters' ability to produce, while demand has remained strong, driven by replacement battery needs.

Zinc

The refined zinc market presented a difficult environment for trading in 2018, as supplies of both concentrates and refined metal remained tight for much of the year and refined price was backwardated, after showing strong performance in 2016 with prices averaging around USD 2,700/MT. As the market tightened, price surges to almost USD 3,600/MT in February 2018 but from then on supply was recovering. By the end of September 2018, prices dropped all the way back to USD 2,500/MT.

Concentrates supply had been constrained for two years as a result of the closure of the Century and Lisheen mines. However, as the year progressed this tightness started to ease as new zinc mine projects came on stream, while smelters within and outside China moved closer to producing at full capacity.

On the demand side, weakness in Chinese construction, which impacts steel and demand for the iron ore and zinc that go into galvanised steel, also helped to put downward pressure on zinc demand and prices. The decline in zinc took lead down with it.

Looking ahead, global zinc consumption is estimated by Wood Mackenzie to grow by 4 per cent. in the medium term. The market expects the increased demand to be met by increased Chinese supply as very few new viable pure zinc mines exist and new mining prospects have proven to be highly capital intensive. Smelting capacity is also limited, particularly in the short term, meaning that even though concentrates look to be well supplied, refined metals prices are likely to be strong.

Nickel

After falling by 50 per cent. in 2015, nickel prices proceeded to rally by over 40 per cent. after the Philippines announced limits on nickel mining activity. The ban has constrained the market supply, especially in China, of high quality nickel ore with no natural market substitute readily available. As such, LME nickel inventories decreased markedly and prices have endured significant bouts of volatility.

In 2018, nickel market saw its third consecutive year of significant deficit, with exchange stocks down by 350,000 tonnes from their peak in the fourth quarter of 2015. In 2015, nickel was the hardest hit amongst the non-ferrous metals group over the year. Nickel inventories rose substantially on the back of weak demand, substantial de-stocking of stainless steel and less supply disruption than had been anticipated due to the ban on ore exports from Indonesia, leading to a price correction of closer to 47 per cent.. The lowest point was reached in November 2015, with a price at USD 8,300 per tonne. At year end, the nickel was priced at USD 8,820/MT. Over 2016 and 2017, stainless steel production recovered thereby allowing stocks to draw and nickel has traded in the range of USD 9,000/MT to USD 13,000/MT. In 2018, nickel has traded in a range USD 10,750/MT to USD 15,750/MT with the peak price reported in June 2018, prices slipped all the way to USD 10,750/MT now.

Supply growth in China has been constrained by environmental policy-related restrictions, leaving Indonesia as the main source of new nickel units, almost exclusively in the form of nickel pig iron. Longer-term concerns over the availability of supply were tempered somewhat by the announcement of low-cost, Chinese-led, high pressure acid leach projects. The feasibility of these plans is uncertain.

On the demand side, stainless steel production was strong over the year, although worries about an economic slowdown in China hurt consumption and prices later in the year. Asian stainless steel markets felt the pressure of rising low-cost Indonesian exports more broadly and the further addition of Filipino and Indonesian stainless steel capacity remains a key risk factor.

Battery demand continued to grow at a healthy rate. Electric vehicle production and sales beat consensus expectations yet again, with China leading the increase in adoption rates.

Cobalt

After several years of relatively weak demand, Cobalt has been one of the best performing mined commodities over 2016 and 2017, with the LME cash price rising by almost 220 per cent. over the period. Traditionally, demand has been subdued due to the elevated price of the product – 50-60 per cent. of global reserves are owned by the DRC (Congo) where the industry is largely driven by small-scale artisanal miners, other than a few larger players. These small miners are typically price-sensitive and, in the past, we have seen them cut supply if prices drop below a certain level. Political instability in the country has also acted as a barrier to entry for global players, with limited investment in infrastructure meaning that margins come under pressure as soon as prices drop. Beyond the Congo market, supply has remained relatively limited as cobalt is typically obtained only as a by-product of nickel and copper-mining activities and cuts to base metals Capex in recent years, in the face of low copper and nickel prices, have had a knock-on impact on cobalt output from this source.

Cobalt prices were less volatile but nonetheless moved substantially, the first part of the Group's fiscal year 2018, before moving back down in the second half. Essentially, the market moved from concern over impending shortages to realising that short-term production can and had been ramped up, specifically in the Democratic Republic of the Congo. We witnessed a move in the price of cobalt from USD 60,000/MT to USD 95,000/MT between September 2017 and March 2018, and then a retracement from USD 95,000/MT to USD 60,000/MT between March 2018 and September 2018, as a result of higher supply and macroeconomic concerns. Prices are likely come under pressure in the short term as new supply continues to come online. However, in the longer-term, cobalt still looks to be undersupplied given the expected growth in electric vehicles and other uses. As such, prices expected to recover at some point.

Recent developments may continue to put pressure on cobalt supply, particularly from DRC. The government signed a mining code into law on 9 March 2018 that will increase taxes on mining firms and increase government royalties from the industry, despite opposition from foreign mining firms, who say that the legislation would deter future investment. Although the increased governmental revenues may ultimately lead to increased infrastructural investment in the country, worries remain over the political climate, with elections delayed repeatedly and the President in power 15 months after his term was supposed to end.

Battery demand is crucial in terms of the evolution of global cobalt demand, with cobalt an important element within lithium-ion batteries, traditionally used in mobile phones, laptops, digital cameras etc. Demand from industrial sources and Electric Vehicles ("**EVs**") has been an important catalyst for the recent rise in prices and will be a key driver of demand in the years to come. Batteries remain expensive, and reducing costs is a critical precondition to boost EV sales. Changing metal intensities has been a focus for this, with reducing reliance on the expensive cobalt a particular focus, and many manufacturers are shifting from batteries with a 1:1:1 nickel / manganese / cobalt mix to a mix of 6:2:2 or even 8:1:1. Clearly the mix of metal loadings will be a key factor in cobalt demand growth going forwards, with nickel, in particular, likely to be the key winner if the industry settles on the 8:1:1 weighting.

Iron ore

For the bulk commodities, where 40-50 per cent. of costs were energy-related at the peak, the collapse in oil prices has led to a strong decline in prices. For iron-ore, a slowdown in Chinese demand in 2014, along with a 180 million MT supply increase from global suppliers, sent the market on a downward trend. Prices in 2015 came down by over 55 per cent. from 2014 average levels of USD 97/MT, ending 2015 trading around USD 44/MT, which had decreased 68 per cent. against average 2013 levels.

Despite the depressed prices, major producers continued their ramp up stages in 2015 in an attempt to cut per tonne production costs and maintain revenue streams. Smaller producers and mines, however, which could not cut costs as easily, were forced to shut down. As a net effect, seaborne iron ore supply seemingly saw almost no growth in 2015. Yet, this masks a battle for market share between Australian and Brazilian suppliers that increased exports by 50 million tonnes in 2015, and a long tail of smaller producers that were displaced.

The year 2016 saw iron ore rally sharply, from under USD 40/MT to nearly USD 70/MT, as traders piled in on hopes that Chinese stimulus measures would boost demand. The election of Donald Trump as president of the United States in November resulted in further increases to over USD 80/MT on renewed optimism for the demand outlook in this market.

Better demand from both within China and externally has led to a sustained increase in volumes traded, although early in 2017 stockpiles began to build up in China as mills slowed activity due to Chinese New Year and also to pollution concerns which resulted in a reduction in capacity. During 2017, the price of iron ore fluctuated in the range of USD 90/MT and USD 50/MT, reaching a price of USD 70/MT at the end of September. Against the backdrop of reduced capacity, margins in China look to be robust ahead.

Iron ore saw its usual seasonal ups and downs over the winter of 2017-2018. Prices rose into February 2018 as mills restocked ahead of a spring production ramp-up. Then with restocking complete, prices sank and from there, benchmark prices saw a period of historically low volatility. China's iron ore imports ended up being weaker in 2018. Part of the shortfall was filled by running down stocks of ore that had built up at ports, but 2018 also saw a large increase in the use of scrap steel as a raw material in China. Scrap metal offset is likely to remain a long-term theme in iron ore and steel markets in China. However, with rising consolidation and structurally higher capacity use in the global blast furnace fleet, demand for productive iron ore looks set to remain strong.

Coal

Coal followed a trajectory very similar to iron ore, falling throughout 2014 and 2015, before rallying sharply in 2016 and through 2017 following Chinese supply reforms and global economic recovery. Prices of major seaborne indices for thermal coal currently range between USD90/MT and USD100/MT in 2017, after touching below USD50/MT in early 2016. In 2018, thermal coal traded in the range of USD 90/MT to USD 120/MT as the coal markets remained tight, a situation shaped by little incremental supply growth outside of Indonesia and the adverse effect of ongoing safety and environmental inspections on domestic Chinese production.

Prior to mine closures, the world was looking to be long on supply, hence the drop in prices. Most of this supply has been generated in Australia, where supply has been strong throughout the past two years as producers look to improve cost efficiency by maximising throughput. Australian supply has been supported by a weaker Australian dollar and improved cost efficiencies. Russian supply has also been strong, helped by a plunging rouble. Elsewhere, supply growth has been more muted. South Africa remains limited by infrastructure bottlenecks. Colombia has failed to grow substantially from 2013 levels and US exports have slowed as legacy hedge programmes have been exited. Indonesian supply also appears to have slowed down, hampered by a number of regulatory interventions and by market conditions.

Very strong Australian production has coincided with a fundamentally weak China, which has changed the recent flow of material around the world. Since the mid-2000s, coal flows have moved increasingly to the east, with up to one third of South African material flowing into Asia, as well as periods where both Colombian and the US tonnes have moved out of the Atlantic and into the Pacific market. There are almost no South African tonnes moving past India and there are more Australian tonnes having to flow west.

The weakness that has afflicted global coal markets for several years as a result of a structural surplus in supply, dramatically worsened in 2015. Demand for seaborne coal imports in China – previously the largest market by far – fell sharply as the weakness of the Renminbi rendered foreign coal uncompetitive with surplus domestic supplies. Prices dropped to levels last seen in 2007, increasing pressure on producers. On the other hand, currency weakness in many producing countries, coupled with lower fuel costs, enabled many mines that would otherwise have gone out of business, to carry on.

Although coal faces significant challenges in parts of the world due to climate change concerns, the Trump Administration appears as if it will try to boost coal consumption in the United States for the first time in the year. Some emerging energy consumers are also looking to coal as the lowest-cost alternative, although here too both pollution concerns and the falling cost of alternative energies may impact the longer term outlook.

In 2018, demand for coal grew further for the two largest emerging economies, China and India. This resulted in strong seasonal price movements, with sharp increases over the winter period and ahead of the summer season. In addition, with supply growth limited to low-to-mid calorific qualities, the premiums for higher-quality coal widened sharply. Furthermore, efforts on the part of the Chinese to limit the coal imports and continuing rail logistics issues in India added uncertainty and volatility to the market.

Competition

The Group's three main sources of competition are:

- Producers or integrated companies such as the oil majors or integrated giants;
- Global traders (the Group's peer group); and
- Small(er) independent traders focused on niche markets defined either geographically or by individual commodities. For example, in the oil sector some companies are more competitive in a particular region or commodity in which they are specialised.

The Group sees its two main competitors as Vitol Group of Companies and Glencore plc. Vitol is mainly focused on large and liquid oil markets whereas the Group's trading activities are spread more globally, resulting in more diversified profit generation. Glencore focuses primarily on metals and concentrates and energy. With the merger in 2012 between Glencore International and Xstrata plc, the commodities world has witnessed a major change in that Glencore is increasingly acting as a mining corporation, with the company marketing its own production.

Over the 25 years that the Group has been in operation, it has seen competition in the global commodities market alter as a result of a number of structural changes in the industry. These changes have created challenges, but have also opened opportunities for trading companies large enough to take advantage of them. They have included:

- The mergers of large integrated producers (e.g. Total, Exxon Mobil, ConocoPhillips), which has often resulted in reduced trading activity by the merged company, providing opportunities for commodities traders in balancing global demand and supply;
- A move away from vertically integrated business models by some of the majors, which has resulted in the disposal of some infrastructure and logistical assets and which has enabled some commodity traders to build up their capabilities in logistics;
- Regulatory changes in the banking sector, which have led to more stringent restrictions enforced on the lending activities of banks. This has also increased the cost of lending and has reduced the liquidity available to some smaller competitors who, unlike the Group, might not have strong bank group support. This has led to the disappearance or contraction of mid-sized companies, creating opportunities for larger traders such as the Group;
- Changes and developments in the geo-political environment, particularly in relation to sanctions regimes, have meant that incumbent market participants must be able to not only demonstrate their abidance to these rules, but also that they have strict controls in place to prevent any breaches from occurring to satisfy the requirements of banks and other stakeholders;
- Increased operating costs and the inability of smaller players to integrate the supply chain; and
- The erosion of physical traders' superior price information, as a result of increased transparency in pricing and the sophistication of commodity producers in the commercialisation of their products. This has opened opportunities for traders such as the Group, which has been steadily growing its industrial fixed asset base and reducing its reliance on pure trading activities as well as offering integrated logistical services yielding higher margins.

The Role of Commodity Traders in the Financial System

Allegations have been made that global physical commodity trading companies should be considered as systemically important to the world economy, claiming that they could pose a threat to global financial stability similar to that created by the 'shadow' banking system during the global financial crisis of 2007-2009.

In 2013, a study was commissioned by the Global Financial Markets Association ("**GFMA**"), an organisation representing the interests of the world′s leading financial institutions, to review the so-called 'shadow' banking system and financial institutions considered as systemically important. This study found that although global commodity trading companies do indeed compete with certain banks active in the physical commodities trading space, they do not pose a systemic threat to the system as a whole.

The report, which was never officially released, was aimed at the Financial Stability Board ("**FSB**"), a group of global regulators who had been discussing the imposition of stricter regulation and capital requirements on commodity trading companies. This could have been seen as a tactic by some banks active in the commodity trading space as a way of creating greater equality between market participants by seeking to usher in further restrictions on pure commodity trading companies.

The main argument was, and continues to be, that commodity traders engage in shadow banking, stemming from the fact that commodity trading companies (i) extend credit and working capital to their customers, as well as (ii) use securitisation programmes.

In response to the first point, trading firms do indeed provide funding to producers but this is in the form of prepayments and other similar arrangements. It is quite common that traders advance-fund volumes of commodities in exchange for receiving the agreed volumes when they are extracted. The commodities essentially form collateral for the advance-financing. The associated performance and credit risk of the producers are in most instances covered by insurance, limiting the exposure of the commodity firm extending the credit. Moreover, such financing typically relies on specialised commodity finance banks, which will carefully assess the terms of a prepayment transaction before putting their own capital at risk.

In response to the second point, the securitisation structures used by physical commodity traders such as the Group are very different to the financial structures that were the root cause of the global financial crisis of 2008.

To further elaborate on this, commodity traders′ securitisation platforms do not involve the kind of maturity mismatch that was the flaw of arbitrage securitisation vehicles such as SIVs or CDOs. Indeed, to the extent there is maturity transformation involved in the commodity securitisation platforms, it is the opposite of the type that proved problematic during the financial crisis. The underlying assets are extremely short dated (such as trade receivables) and/or very liquid (such as inventories of base metals in LME warehouses). The assets typically have shorter maturities than the liabilities issued to fund them. Traditional SIVs had to rollover their liabilities, whereas commodity trade securitisation programmes must replenish their assets. The former is far more problematic than the latter because the run risk is far greater.

Furthermore, default rates on securitised trade receivables are very low and in one respect, the development of securitisation programmes such as those operated by the Group, have helped free the capital demanded of commodity trade finance banks, since risk is transferred to the capital markets instead.

Given that the main focus of commodity traders is not in providing financial intermediation, but rather in providing logistical services and because their assets could be quickly re-deployed if necessary, it is difficult to envisage how more stringent regulations and capital requirements would be of benefit to the wider financial system.

Additionally, following the recent developments in the banking market over 2014, which caused banks to reduce lending in the commodity trading sector, large commodity traders, which have been able to maintain sound access to the banking market by virtue of their size and sound risk management practice, are increasingly seeing their ability to extend prepayment financing options to smaller counterparties as a key differentiator and a way of developing their access to new markets and increased volumes. Bearing this factor in mind, more stringent regulation on commodity trading companies would likely have the knock-on effect of disrupting the global trade that commodity traders facilitate.

In 2014, as a direct result of these debates, the Group took a pre-emptive decision to better inform all stakeholders about the business model, inherent risks and financing of the firms operating in the commodities trading industry. To do so, the company commissioned two white papers including *The Economics of Commodity Trading Firms and Foundations for Growth – Infrastructure Investment in Emerging Markets*. The papers were independently written by Craig Pirrong, Professor of Finance at the Bauer College of Business at the University of Houston and by Russell Jones and Camille Viros at Llewellyn Consulting to shed light on the differences between commodity trading firms and financial institutions. They have been presented to and referenced by regulators, politicians, and competitors alike;

and in early 2015, the Group published an additional white paper published by Professor Pirrong, *Not Too Big to Fail – Systemic Risk, Regulation and the Economics of Commodity Trading Firms*, which further explored the difference between physical commodity trading firms and financial institutions. This was discussed with senior European and North American regulators during that year.

In 2016, the Group also published and distributed to a wide public audience an educational guide to the purpose and practices of physical commodity trading firms entitled Commodities Demystified: A Guide to Trading and the Global Supply Chain. The second edition was published in 2018.

Operational Organisation and Procedure

The main commercial and operational responsibilities are split geographically between Athens, Calgary, Geneva, Houston, Johannesburg, Lima, Montevideo, Singapore, Shanghai and Stamford. Those offices have trading and operations departments and most have a finance function to support local trading activities. Trafigura Global Services Private Limited ("**TGS**") handles most middle office and back office functions, and is located in Montevideo and Mumbai. The Shanghai office manages all China related activities.

All of the Group operational responsibilities are subdivided into three main categories: the front, middle and back office. The front office consists of traders on the different trading desks. The middle office provides a broad range of necessary support functions to the front office (Deals desk, Chartering, Contracts administration, Traffic operations and Finance). The back office provides diversified services to the Group's operations as well as to the Group (Accounting, Compliance, Tax, Corporate Affairs, IT, Legal and HR).

The segregation of duties found between the front, middle and back offices, and in between the departments, is a key to the effective management of data collection and accuracy and therefore key to manage operational risk. Each department has its own clearly defined set of responsibilities and accountabilities.

Business Transformation Team

As the Group's commercial footprint continues to grow in scale and scope, there is an increasing need to optimise the efficiency of business processes, the capabilities of its employees and capacity to leverage technology. Consequently, the Business Transformation team was formed in 2017 to review all aspects of the Group's operations, covering the front, middle and back office. Its objective is to re-engineer internal processes to support the Group's next five years of growth in three broad aspects:

- Streamlining and standardising business processes to optimise efficiency and scalability, while retaining the flexibility to deal with a rapidly changing industry environment and with widely varying trade life cycles;
- Optimising technology and IT infrastructure as a competitive tool to secure maximum commercial benefits; and
- Enhancing human capital via bespoke talent development programmes to support the new business processes and IT improvements.

The Business Transformation team reports directly to the Chief Operating Officer (the "**COO**") and is supported by a senior team drawn from across the Group.

Operational Departments

Front Office

Traders

Traders initiate any sale or purchase transaction, either directly with a customer or through a commodity broker. In both cases, the contracts are negotiated directly with the contracting party. The Group trading operations are organised by product desk. The main desks are:

- Crude oil, fuel oil, biodiesel, condensate, bitumen, middle distillates, gasoline, naphtha, LPG, LNG and natural gas for the oil trading business; and
- Copper, lead, alumina and zinc as concentrates; copper, lead, zinc, aluminium and silver together with gold as a by-product of refined metals; and iron ore and coal desks for the metals and mineral business.

Trading positions are not established individually by each trader but managed on a book basis. Each book generates its profitability by exploiting natural/physical arbitrages in the market place.

For all trades (whether sales or purchases), the trader must verify the financial conditions, check the credit authorisations and request risk cover if needed. In the case of an existing customer, risk limits and acceptable credit terms are available on the Group's IT systems. Any transaction involving a new customer will trigger the Group's KYC procedure. The finance department has a final veto on any transaction.

There are established risk control procedures in place for the traders. For example, once a trader has entered into a transaction, he/she is required to enter a deal ticket into the system within 24 hours. Failure to do so will be discovered through:

- Receipt of supply contract with no corresponding deal ticket in the case of a physical purchase;
- Protest from the contractual counterparty for non-receipt of a contract for physical sale;
- Failure to issue a letter of credit on time; and
- Failure to nominate a vessel on time for the contracted cargo.

Middle Office

Deals Desks

The Group's deals desks (the "**Deals Desks**") ensure that trading profits and exposure are correctly reported. Deals Desks professionals verify that the results are accurate and reflect the true profit and loss of the trading activities. This data is also used to compile the Group's statutory accounts. The Deals Desk's organisational structure mirrors that of the trading book structure, with the Deals Desk staff physically sitting on each trading desk and assigned to specific product books. It is important to underline that the Deals Desk individuals are independent from the trading departments and that they report directly to the head of department who in turn reports to the Group's chief operating officer.

The Deals Desk is responsible for the following main areas:

- Preparation of provisional profit and loss ("**P&L**") statements, monitoring daily variance in trading P&L, volumetric as well as economic exposure to price quotes and production of a written commentary on variances;
- Ensure that all market price risks are captured and hedge actions are executed as well as the timely allocation of physical, swap and futures trades;
- Daily mark to market of P&L, initially based on cost estimates, and later adjusted for actual costs as they become available; and
- Monitoring of derivatives trading.

For all open positions, the Group has a very strict, two pronged risk policy that sets both a stop loss position and VaR limits. Furthermore, the Group has a Chief Risk Officer ("**CRO**") who is responsible for ensuring a full and accurate awareness of risk throughout the Group and that these risks are professionally analysed and managed. The CRO reports to the Group's COO and works closely with Deals Desk staff.

Traffic/Operations Department

The traffic/operations department role is to accurately follow each given transaction from inception to completion by focusing on the overall shipment procedure and the related upstream and downstream sub processes. Its organisational structure mirrors that of the book structure. This means that individuals from the traffic/operations department are located on each trading desk and have a portfolio of transactions within a specific product book. The traffic/operations department is also responsible for the safety of the operational transactions and the compliance with relevant regulations. Each representative is responsible for following a given transaction from inception to completion including involvement and co-operation with the related departments for the following:

- Invoicing;
- Reviewing the purchase/sale contract;
- Vessel vetting;
- Instructing the ship's Master;
- Lay time calculations;
- Appointment of inspection companies;
- Insurance declarations;
- Ensuring load, voyage and discharge occurs safely in line with relevant regulations;
- External liaison; and
- Timely IT system data entries and updates.

Chartering Department

Physical trading of commodities involves the port to port shipment of cargoes under charter parties. The chartering department's major objective is to find the best possible transportation solution for the underlying cargo by effectively using the market and timing circumstances to obtain the most competitive rates. The chartering department consists of specialised professionals based in the Group's main trading offices as well as Trafigura Maritime Logistics PTE. Ltd. (TMLP), a Singaporean company, which provides specialist advice on chartering issues. Chartering staff maintain a close liaison and good relations with traders, the traffic/operations department and tanker brokers as well as with ship owners.

Contracts Administration

The contracts administration department's main function is to draft all physical sales agreements and to review all physical purchase agreements to ensure that the Group is fully and legally protected. The contracts administration department works closely with the traffic and operations staff. Furthermore, they advise traders and other staff in the middle office about potential problems that may arise as a result of the contracts. The contracts administration staff seeks authorisation from the traffic and operations department and the insurance and trade finance teams in the finance department on each trade prior to completing the documentation. The Group ensures that the contracts for each trade are either sent or received (depending on whether the Group is acting as the buyer or the seller) within 48 hours after a deal ticket is entered into the system. Each standard template is adapted to reflect the terms of the individual trade.

Finance Department

The finance department supports the activities of the whole Group and is involved at the earliest stage of transactions and projects. The finance department is responsible for the financial risk assessment and has the capacity to veto any transaction. Its main functions are broken down into the following subdivisions:

- Corporate Finance;
- Structured Finance;
- Trade Finance;
- Credit;
- Insurance;
- Operational Treasury;
- Corporate Funding, and
- FX Risk Management department.

Operational Treasury, Corporate Funding and FX Risk Managements departments are part of the Group Treasury which is in charge of operational cash processing, liquidity management, capital allocation, securitisations and FX and interest rate risk management.

Corporate Finance Department

The corporate finance team is located in Geneva and acts as the Group's internal investment bank, focusing on medium and long term financing for the Group. The corporate finance team is mainly responsible for the origination and execution of corporate facilities (including Revolving Credit Facilities ("**RCFs**"), capital markets transactions and general corporate purpose facilities, securitisation, etc.), the financing of the Group's fixed assets as well as coordination of overall bank and investor relationships. The team is in charge of providing advice on balance sheet management and financial forecasting to the Management Committee. The team works closely with other teams in the finance department, including the structured finance and trade finance departments as well as the Investments/M&A team, the finance teams at Puma Energy, Impala Terminals and the Mining Group.

Structured Finance Department

The Structured Finance Department is centralised in Geneva with representatives in Johannesburg, Mumbai, Singapore, Shanghai, Montevideo and Houston. The structured finance department is responsible for structuring complex trade finance transactions supporting commercial operation. The structured finance professionals are regionally specialised and deal with a diverse range of funding requirements. The team has a varied role and plays a significant part in the transactions, from inception to conclusion. They have regular meetings with the trade finance and credit departments in which they review all trading activities. The structured finance department is also involved in the KYC procedure.

Trade Finance Department

The trade finance department is primarily based in Geneva, with representatives in Houston, Singapore, Montevideo and Shanghai, providing a wide range of trade finance services. The trade finance department is responsible for arranging all necessary financing for the Group's trading operations, as well as ensuring that credit decisions are properly implemented. The Group's trading operations can be financed by various instruments (i.e. open accounts, documentary collections, Letters of Credit ("**L/C**"), guarantees, Letters of Indemnity or advance payments). They ensure that all contracts are consistent with the recorded system entries to prevent P&L losses and to ensure that all documentary and financial instruments are issued correctly. The trade finance department works closely with different operational departments at an early stage in all transactions to identify and avoid any possible financing problems. Crucially, a vessel can only be instructed to load or discharge once approval from trade finance has been obtained.

Credit Department

The Group's credit department performs fundamental credit analysis with representation in 9 offices worldwide. The credit department's key role is to safeguard the receivables assets on the balance sheet. It assesses the credit risk associated with the Company's counterparts, sets appropriate internal limits, monitors exposures and ensures that relevant related documentation is completed and maintained. The credit department establishes credit limits for all counterparties and reviews them at least once a year.

Any exposure above the credit limits is covered on the insurance or financial markets. The credit department has the role of final approval as to whether an unsecured transaction can be entered into. The Credit Department is also involved with setting credit limits for new trading counterparties.

Insurance Department

The insurance department is responsible for arranging adequate cover for all types of operational risks and liabilities of the Group. The insurance department sets up and monitors various global insurance policies to provide coverage for a broad range of risks and liabilities, including but not limited to:

- Marine cargo in respect of the Group's physical cargo/stock cover for various risks, including, but not limited to: fire, contamination, loss, environmental damage, leakage, etc.;
- Third party insurance cover for liabilities associated with stocks, industrial assets, employees and pollution;
- Property insurance and directors and officers liability insurance; and
- Political and credit risks insurance cover, depending on specific characteristics of a single transaction in collaboration with the structured finance and/or the trade finance department.

Aside from arranging insurance cover, the insurance department is also responsible, in the event that an insured risk occurs, for handling the resulting claim. When a cargo accident occurs (e.g. contamination, damaged cargo, shortage etc.) or a legal claim is made against a Group company, the insurance department will handle the claim from the outset and will manage the recovery of proceeds under the appropriate insurance policy.

Back Office

Operational Treasury Department

The operational treasury department is split up across Geneva, Shanghai, Montevideo and Mumbai. The principal objective of the operational treasury department is to handle all cash management activities for the trading business and monitor its cash flows, in particular to report the cash flows and forecasts to corporate funding who consolidates the information on a Group basis. The operational treasury department also has the responsibility to maintain the integrity of payments. The treasury department monitors, on a daily basis, the use of the trading cash including the management of margin calls in relation to the Group's hedging requirements. It is also responsible for reconciling the cash flows to the P&L statements produced by the relevant Deals Desk staff and centralising the Deals Desk reports so that all cash is realised on each deal, as soon as possible.

Corporate Funding Department

The corporate funding department is located in Geneva and Mumbai and actively ensures the Group has access to maximum liquidity. Key activities of the department include:

- The monitoring of available cash balances in AAA rated money market funds and main trading accounts;
- Corporate facility utilisation (including, but not limited to, the Group's revolving credit facilities and securitisation programmes);
- Group liquidity forecast reporting and various inter-group loans relating to both trading and asset divisions, to ensure cash consumption is kept to a minimum, yet allowing each business to trade in an effective manner and anticipating the future liquidity requirements of the various business units on a global basis;
- The production of a monthly Group Capex forecast based on information collected from respective business divisions; and
- Operating and monitoring the securitisation programmes' platforms on a day-to-day basis.

FX Risk Management Department

The FX Risk Management Department is responsible for managing the foreign currency exposure arising from trading and investment business conducted in different divisions of the Group. The team is split up across Singapore, Mumbai, Geneva and Montevideo and provides global coverage. The FX risk management team liaise with Traders, Operators and Deals Desk to identify FX exposure in the physical trades. The team assists the traders to negotiate a precise FX conversion mechanism with counterparties. The team is also responsible for the execution of the FX hedges, managing the relevant cash flow and reporting the correct FX P&L to the Traders and Deals Desk. The goal of the FX team is to avoid any loss and maximise the gains within the risk parameters imposed by the risk owner.

Trafigura Global Services

Trafigura Global Services Private Limited is the Group's fully owned shared service centre ("**SSC**"), established in July 2011 with the mandate of centralising the Group's operations, yielding efficiency gains, driving process consistencies and providing support to front offices roles. TGS houses an array of teams carrying out middle and back office functions. Main support teams include accounting operations, deals desk, treasury, trade finance, compliance, insurance and operations settlement and provide critical support to other teams located in offices around the world. Furthermore, TGS supports Group functions, including IT (on application, infrastructure support) as well as HR.

TGS has offices in Mumbai and Montevideo to take advantage of time zones, to enable a 'follow-the-sun' approach to business operations, supporting main offices in Singapore, Geneva, the US and South America. TGS teams communicate with banks, brokers, vendors, counterparties, inspection companies etc. In addition, TGS maintains a culture and work environment that is on par with the other commercial functions of the Group, despite being a relatively new addition. This helps facilitate a culture of innovation, growth and ownership in the business.

Accounting Department

The accounting department is present in a number of offices, but mainly based in Geneva, Amsterdam, Montevideo and Mumbai. The department's main objectives are the maintenance of accounting ledgers, balance sheet management, legal entity management overhead reporting and the production of the resulting reports. Its responsibilities include producing annual statutory accounts, debtors, creditors and intercompany accounts as well as completing the normal day to day accounting tasks. In addition to these regular accounting functions, the department acts as an important second entity of control, after the middle office, mitigating the risk of inaccurate and incomplete deal capture. Structurally, the accounting department is subdivided into three areas of responsibilities; Group accounting, oil and energy accounting as well as metals and minerals accounting. Within the accounting department there is also a Group cost management ("**GCM**") team which is based in Mumbai and deals with central overheads such as office costs and expense claims.

Legal Department

The legal department has lawyers based in Geneva, Singapore, Shanghai, Johannesburg, Montevideo and Houston. It is staffed by experienced lawyers who are primarily lateral hires from law firms, investment banks and industry and secondees. The department relies on a limited number of leading law firms to provide additional resources and expertise.

The department provides and manages legal support across all of the Group's businesses and activities. It manages all contentious matters, any investigations or inquiries as well as the Group's commercial transactions – for instance, M&A, joint ventures, significant transactions, financings, competition and regulatory matters.

Compliance Department

The compliance department is staffed by a number of experienced Compliance Managers who are supported by a team of compliance advisors and KYC administrators. The Compliance Department is also assisted by a global network of compliance representatives embedded in business functions in local offices who are senior members of non-front office staff whose role is to provide a focal point for the escalation of local compliance issues.

The compliance officers act as advisors to employees on any compliance related matters including the application of, or compliance with, the code of conduct in specific circumstances, establishing proportionate procedures and controls in order to manage the risk to the business of potential failure to apply the appropriate standards of behaviour, and finally escalating issues, risks and breaches to senior management and the relevant Compliance Committee.

The Compliance Representatives act as a local, initial point of contact for any employee to raise any compliance-related issues. They may then escalate the issue and assist with implementing any necessary resolution action.

The compliance team is at the forefront of implementing key compliance polices designed to keep the Group in line with all applicable laws and regulations by ensuring that:

- The Business Conduct Code is signed by all members of staff. All staff receive mandatory training to ensure they understand its implications;
- The Trading Policy is signed by all staff and face to face training is provided by compliance to all those in the front office;
- Online mandatory training completed by all staff not only on the Business Conduct Code but also key compliance areas such as AML and Competition law;
- Guidance sent out regularly to the business as new laws and regulations are implemented and policies and procedures amended; and
- Compliance works together with the business and looks to foster relationships that lead to open and honest communication.

The compliance department is involved in the Group's KYC procedure and works closely with traders and the credit department. Besides its involvement in the KYC procedure, the compliance department acts as an internal advisor and provides training to all employees on any Business Conduct Code related matters.

Corporate Affairs Department

The corporate affairs department ("**Corporate Affairs**") has representatives in Johannesburg, Geneva, Montevideo and Houston. The responsibility of the team is two fold: to create and sustain frameworks for an increasingly responsible and effective company, and to protect and promote the business interests and reputation of the Group and its subsidiaries globally. In addition, the Group is instrumental in continuing to improve and implement the Group's HSEC business principles (as described in the section titled "*HSEC Steering Committee*" below).

IT Department

The IT department is distributed across the main offices around the world with Geneva being the main office. The department's over-arching responsibility centres on the development, support and maintenance of business supporting applications, and underpinning the IT infrastructure.

The Group's core IT functions globally comprise of Trading IT, Assets Division, Security and Infrastructure. Together, these functions provide a cohesive and well integrated organisation that supports the Group's Trading and Asset businesses. The Trading IT function is largely outsourced with the majority of the technology and support function based in India. Trading IT also has presence in Moscow and Montevideo.

In order to support the growing business, the Group continues to enhance its enterprise systems adding new modules and enhancing the existing functionality. Significant investment is also underway to upgrade the technical architecture and enable faster integration of future IT systems. Annually, the Group spends around 20-25 per cent. of its overhead budget on IT, which shows the importance of technology to the Group and the value of benefit we derive from it.

The core business is captured and managed by the Group's two key bespoke information systems "**Pluto**" for the oil business and "**Titan**" for concentrate products (which replaced the out-going system, "**Mercury**") and for the refined metals business. Each of these systems offers a fully integrated approach to the Group's needs. As such, every step in the lifecycle of each transaction is generated, executed, monitored and controlled through the related information system, from the time the trader enters the details of the trade, to the allocation of funds received from the customer.

Risk Management

Risk Management and Corporate Responsibility

Prudent risk management is an integral element of the Group's business and has been institutionalised since the Group's foundation. Guidelines are established at senior management level and the credit and finance teams retain an absolute veto right on any transaction.

The various risks are managed through a combination of internal procedures, such as strict control mechanisms and policies, as well as external third parties such as the derivative, insurance and bank markets.

Price Risk and Basis Risk

Fundamental principles

The Group's policy is to hedge all price exposure related to physical transactions on a deal by deal basis. The purpose of the Group's physical hedging activities is to protect the Group against the risk of physical transactions being adversely affected by changes in (commodity) prices. The Group systematically enters into hedging contracts to cover index price exposures in its physical trading activities. In particular, 100 per cent. of stock is at all times either pre sold or the commodity index price risk is hedged. Hedges are performed through either futures markets and/or a variety of traded derivatives instruments (e.g. swaps, options).

Beyond that, basis risk cannot be mitigated perfectly. Basis risk meaning, in this context, the risk that offsetting investments in a hedging strategy will not experience price changes in entirely opposite directions from each other. This imperfect correlation between the two investments creates the potential for excess gains or losses in a hedging strategy, thus adding risk to the position. The Group, therefore, carefully monitors all its hedging positions on a daily basis, thus avoiding excessive basis risk.

Concurrently, to the extent that basis movement cannot be eliminated completely, basis risk can be reduced through diversification. In particular, given that basis movements in different commodities are driven by different fundamentals, they are likely to exhibit little correlation. Hence, this provides a natural advantage to a large firm like the Group, which trades a diversified portfolio of commodities.

Price Risk Management

There are two formal committees responsible for different aspects of the Group's market risk management process. The risk committee reports to the Management Committee and is tasked with ensuring that the Group is technically and operationally prepared to deal with the risk issues it faces. The derivatives trading committee also reports to the Management Committee and is responsible for applying the Group's risk management capabilities to improving the overall performance of the group.

The Group's chief risk officer ("**CRO**") and the risk team work proactively with the trading teams to make the Group's risk management forward looking, by analysing new opportunities and changing market conditions. This team develops computationally intensive nonlinear risk simulations and advanced statistical models that incorporate the non normal market price dynamics that are an important feature of commodity markets. Particular attention is paid to modelling the mean-reverting nature of term structure and inter-commodity spread dynamics. The advanced statistical models developed by the risk team are continuously and automatically calibrated and back tested to ensure that their out of sample performance adheres to well defined targets. In addition, these models are regularly updated to ensure they reflect the current observed dynamics of the markets where the Group is active.

The risk team's models drive the Group's risk reporting system, which automatically distributes customised risk reports throughout the firm on a daily basis. These reports provide up to date information on each team's risk using industry standard measures such as 95 per cent. and 99 per cent.. VaR and performance indicators such as "Sharpe Ratios". The Group's risk reporting system automatically highlights exposures that are nearing their VaR limit and also when 10 per cent., 20 per cent. and 30 per cent. drawdowns occur. VaR limits are reduced when drawdowns occurs. All books have well defined VaR risk limits and management is automatically notified whenever a book nears its risk limit, as well as whenever a VaR overage occurs, resulting in automated emails to the relevant trader, desk managers and the Risk Committee. In addition, the Group's deals desk management team is automatically notified whenever statistically anomalous changes occur in the profit and loss of any deal.

For senior management, the daily reports provide a comprehensive view of the Group's risk, classified according to various risk factors. These reports emphasise the risk diversification created by the group's varied activities and highlight any excessive risk concentrations. Numerous indicators detail how the Group is performing relative to a wide range of benchmarks.

Energy

All futures markets are cash markets meaning that price differences are settled in cash on a daily basis ("**margin calls**") after the payment of an initial margin the day of the trade. Swaps or options are usually traded OTC.

Hedges are executed through a number of brokers. The Group works with ten main clearing brokers. The staff involved perform the equivalent functions as the operations department on the physical side: they receive or issue contracts, receive or issue invoices, control and order payment as well as following receipt of proceeds. The accounts department is also involved in swap administration as the department is responsible for the reconciliation of positions on a daily basis.

Hedges are performed through a Central Execution Desk by TPTE. Each hedge is individually monitored by the Deals Desk. Most oil contracts become fixed price around the shipment's loading date. Typically one or two days before such date, the Deals Desk liaises with the operations representative in charge in order to estimate the loading (i.e. price fixing) date and start hedging on time. The same applies for other instruments including as swaps and geographical spreads (for example Brent versus WTI).

As soon as a hedge has been put in place, a deal ticket is created and input into the system. The ticket is either attached to an existing physical deal or a new deal will be created if no such physical deal exists already. All positions are reconciled daily with the brokers' positions by the accounts department. Cash is settled daily by the treasury department.

The Collateral Management team is responsible for monitoring counterparty exposures across the OTC swaps and options portfolios. On a daily basis, the mark to market positions are cross referenced against pre agreed credit thresholds set by the Geneva credit team at a counterparty level. Excesses are covered by collateral called in the form of cash or standby letters of credit ("**SBLCs**"). The Collateral Management team works with the treasury trade finance teams to manage the collateral requirements, issued and received.

Another important aspect of the work undertaken by the credit team is their involvement in the negotiation of standard Master agreements such as International Swaps and Derivatives Association ("**ISDA**") and Master Netting Agreements. These documents provide a trading framework for the execution of OTC transactions and are negotiated with each counterparty with the assistance of the Group's Documentation Specialist and the Legal Department. Each ISDA includes a margin threshold within the Credit Support Annex. These are conservatively set on a case-by-case basis by the Group's Credit department and regularly reviewed. Recent regulatory changes have resulted in reduced OTC trading across the market as positions are increasingly cleared on recognised exchanges.

Metals

In Europe, the main futures market for metals, the London Metals Exchange, is not a cash market. The consequence is that brokers negotiate credit limits with their customers to cover initial and variation margins above which cash is required. In the same manner, customers run a credit exposure on their broker when positions are generating a positive balance.

Hedges are executed by the Metals desk in Geneva at the request of the operations staff when transactions are priced. Hedges are also followed on a transaction by transaction basis in the system. However, because pricing periods in metals are typically longer than in oil (one month), the quantity per contract to be hedged on a daily basis is small. This means that the derivative team hedges as a pool on the market, the system splitting such hedges back to each contract. Positions are reconciled by the Group Metals Derivatives desks with brokers on a daily basis.

This reconciliation shows daily credit exposures the Group has on its brokers as a result of its margin position. Contracts can be moved from one broker to another, if necessary, to reduce such risks.

Metal contracts often contain pricing options which allow the trader to decide on which month pricing will happen (i.e. when the "quotation period" is defined). Such options are sold by the physical department to TPTE at market price in order to provide more transparency in the management and results of such options.

Credit Risk

To manage its credit exposure the Group uses internal credit limits set up by the Credit department. Credit limits reflect the Group's own appetite for risk and are based on a credit analysis of the client as well as the respective size of the transaction when compared to the Group's balance sheet. Exposures in excess of a credit limit are covered through the insurance or bank markets. Typically this cover is arranged by the Trade Finance/Structured Trade Finance teams.

The Credit department consists of staff based in Geneva, Mumbai, Singapore, Shanghai, Houston, Stamford and Montevideo who work in complete independence from the trading business. Credit reviews follow a formal process as described in the Group's Credit Policy and Process document. As part of the annual credit review process, the Credit Department uses the S&P Capital IQ rating model to set internal credit ratings for all credit exposures to counterparties and banks. This model relies on fundamental credit analysis to determine credit ratings, which are expressed using a 26-point letter scale of AAA, AA+, AA, AA- and so forth. The proposed rating forms part of the approval of the credit review and must be supported or modified, with supporting justification, by the credit analyst.

Credit review is undertaken at least annually in local offices with smaller credit limits (up to a specified maximum) also being set locally. Larger credit limits are generally approved in Geneva, ultimately by a credit committee if required – the credit committee meets on an *ad hoc* basis and consists of a minimum of three senior finance managers, including the Group's global head of credit and a chief financial officer. An automated process is instituted where interim reviews of counterparties are conducted when risk triggers are breached, such as ratings agency downgrades, share price declines, adverse publicity etc. Credit limits are always set and monitored on an aggregate basis of the Group's worldwide exposure.

Performance and Country Risk

Performance risks are evaluated on a counterparty and country basis. As such, deals are considered on a case by case basis, and performance risks where the exposure is above the Group's appetite will be laid off to the bank and insurance markets. Typically, the Group will run an internal analysis to assess the country and political risk, and CEND (Confiscation, Expropriation, Nationalisation and Deprivation) insurance coverage will be contracted for assets that are deemed exposed to country risk above the limit. The Counterparty limit is set to reflect the rating of the counterparty, the extent risk to which mitigation insurance is contracted on the financial and insurance markets and/or collateral obtained to cover excess exposure.

Freight Risk

The hedging of freight costs is managed systematically by the chartering department. In a time charter scenario, the Group hedges its price risk using a combination of Forward Freight Agreements ("**FFAs**") and bunker swaps. When the chartering department chooses the vessel, the Group looks to sell FFAs and buy bunker swaps. This way, if spot charter rates for the vessels fall, the Group is covered as such a fluctuation in price is offset by the difference on the FFAs. Furthermore, the chartering department enters bunkers on the spot market. This is done with a view to safeguard the Group's price exposure under the following scenarios: spot charter rates remain at the same level, or they go up, but banker fuel prices rise simultaneously, hence leaving the Group's price assumptions uncertain, unless adequately hedged through bunker swaps.

The procedure between the oil and metals and minerals handling of vessel chartering and the respective risk management strategies are very similar. A combination of FFAs is used to hedge forward freight commitments. Bunker swaps cover forward freight commitments in addition to locking prices for bunkering levels which are required on re-delivery of the vessel at the end of the charter. When a vessel is fixed on the spot market with cargoes, the chartering department unwinds both legs of the hedge for the period that the boat is going to be occupied.

Operational Risk

The operations department has representatives in key locations around the world and is responsible for a number of tasks including contract issuance and booking of vessels. Operators are also responsible for ensuring that industry, environmental, safety and internal policies and procedures are complied with at all times. Detailed procedure manuals are implemented throughout the Group and all operators receive regular training on operational matters and additional training covering subjects such as contracts, charter parties and clauses, environmental policies and legislation, insurance declarations, reviewing due diligence reports, dealing with claims, and demurrage handling. This ensures that operators are kept up to date with procedural, legal, regulatory and industry changes.

The Group continues to move towards using a younger fleet of vessels, both in terms of time charters and voyage charters, and as such applies a strict vessel vetting procedure which complements insurers' requirements and focuses on the vessel age, classification, Protection and Indemnity club and pollution insurance cover. A similar procedure has also been introduced for both railcar and truck movements. The Group also has a storage procedure which involves full due diligence being undertaken of every proposed storage location including a site visit to the storage location, the tanks or warehouse and its financial position and management. Regular stock analysis is undertaken to avoid losses such as theft and contamination, and each approved location is checked annually to evaluate the ongoing situation.

Third Party Asset and Liability and Charterers Liability Risk

The Group maintains a level of inventories for supply efficiency purposes, and to benefit from cash and carry opportunities. The Group's total inventories were USD 14.73 billion as at 30 September 2018 (compared to USD 13.93 billion as at 30 September 2017), with 49 per cent. oil and petroleum products and 51 per cent. metals and minerals (compared to 53 per cent. oil and petroleum products and 47 per cent. metals and minerals at 30 September 2017), although it can vary substantially due to seasonal trading plays in energy as well as forward price structure (contango, backwardation and overall price levels) in both energy and metal Please note that inventories reported in the Group's financials can be higher as cargoes in transit for which title transfers at discharge port are also considered to be inventories for accounting purposes.

With regards to stock value, inspection reports are regularly received detailing the quality and the quantity stored.

Various global insurance policies provide coverage for both assets and third party liability risks. These are described below:

- Stock Throughput Policy (oil and metals);
- Charterers Legal Liability Policy; and
- General Liability and Terminal Operators Liability Policies.

The Stock Throughput Policy covers all declared Oil & Metal goods while subject to transport, shipment or storage. The limit is USD 100 million per event with excess layers providing total coverage of USD 500 million per event.

The Charterers Legal Liability policy covers legal and contractual liability for property damage and bodily injury (main risks covered: liability for damage to the vessel, bodily injury, damage to property of third parties, damage caused by the cargo, stevedoring, pollution of the environment, general average). Limit of USD 1 billion for any one accident or occurrence.

The General Liability Policy covers bodily injury and property damage incurred by third parties (the policy covers both legal and contractual liability and applies to general liability, employer's liability and product liability). The Limit is USD 500 million for any one occurrence with an annual aggregate of USD 500 million for product liability and pollution liability. For owned assets the Group also has USD 500 million of Terminal Operators Liability insurance covering the marine operations and potential third party exposures arising therefrom.

Risk Limits

On the physical side, each transaction has its own profit and loss record, which is established at the inception of the transaction and remains open over the entire life of the trade. Physical deals are continuously monitored by Deals Desk which acts entirely independently from the trading business. Each P&L is individually marked to market on a daily basis and updated with the actual transaction costs such as purchasing costs, hedging, insurance and financing as these costs become known. On any day, changes of +/- USD 25,000 (in either direction) are reported and explained to senior management, allowing the Group to closely monitor its basis risk.

In addition in the physical business:

- No specific limits are set outside any credit requirements; and
- The head trader on each desk speaks to the oil or metals management committee on a daily basis to highlight current issues and new business opportunities.

In addition to its physical trading business, the Group enters into managed speculative positions which involve spread risk when it identifies price or time differentials between markets and products related to its physical flows. Such speculative positions are continuously monitored and subject to VaR and stop loss limits per position. As a rule, the Group maintains conservative consolidated risk limits and ensures that its overall risk exposure remains well within these limits. Strategies are also given specific stop losses (e.g. USD 1 to 2/bbl), which are monitored by the Deals Desk and positions are marked to market on a daily basis (during volatile periods positions are marked to market multiple times during the day). If a stop loss is hit, senior management is notified immediately. A decision is then taken to liquidate or keep the position and set a new stop loss limit.

Market Risk Management Reporting

The Group's CRO is responsible for ensuring that there is a full and accurate awareness of risk throughout the Group and that these risks are professionally analysed and managed. The CRO works closely with the trading teams to make the Group's risk analysis forward looking, particularly by proactively analysing new opportunities and changing market conditions. The CRO ensures that the Group's Board of Directors are aware of these evolving risks and their financial implications. The CRO also sets the priorities of the risk systems development team so that the Group is able to systematically manage its risks through industry standard measures such as VaR, in conjunction with computationally intensive nonlinear risk simulations and advanced statistical analysis.

The Group's CRO reports to the Group's chief operating officer.

Mark to market

Mark to market reports are regularly produced for traders and management. The reports aim to show transaction profitability based on the aggregate mark to market of all outstanding transactions. Variations are carefully analysed.

Market Risk and Stress Testing

In the fiscal year 2018, the average 95 per cent. one day VaR for speculative positions was USD 7.8 million, representing a slight increase when compared to the fiscal year 2017 (USD 6.8 million). The Group's Board of Directors has set a target of maintaining VaR (one day 95 per cent.) below 1 per cent. of Group equity.

In the first half of 2019, the average 95 per cent. one day VaR for speculative positions was USD 8.9 million, representing a slight increase when compared to the previous fiscal year.

All trading books have well defined VaR risk limits and management is automatically notified whenever a book nears its risk limit, as well as whenever a VaR overage occurs. In addition, the Group's deals desk management team is automatically notified whenever statistically anomalous changes occur in the profit and loss of any deal.

The Group's policy is that basis risk should be kept to a minimum. If a trader wants to take on a specific position, he has to report in a speculative book where VaR and associated stop losses can more easily be monitored.

Internal Control Systems

The internal controls department implemented and maintains the internal controls system ("**ICS**") in the Group, covering the trading division globally.

The ICS is based on a framework that details the risks and controls for all material business processes of the trading division, and was designed using a widely accepted internal control model prescribed by COSO (business process and entity level controls) and COBIT (IT general controls).

The internal control process to create and maintain a framework involves phases of:

- Understanding a process and its objectives;
- Identification and assessment of risks;
- Defining mitigating controls;
- Test of key controls; and
- Remediate test failures.

Periodic measurement and reporting of the Trafigura ICS is based on these main steps since 2009:

- Management identifies and measures the inherent business risks (financial, operational, and compliance risks);
- Annually, management identifies and adapts the necessary controls to cover risk considering business changes;
- Quarterly, the key controls are tested to ensure operational effectiveness ;
- At the end of the year residual risk is assessed considering the results of the control tests and reported to management; and
- Continuously, possible opportunities for improvement identified during the previous steps and review visits are followed up to monitor progress.

The work developed in these phases is managed using BWise – the Group governance risk and compliance tool. This tool is not only a repository of the risks and controls but also serves as a means to schedule and review risk assessments and control assessments involving the whole organisation in the internal control framework. External auditors can make use of the framework to gain an understanding of the business processes they are evaluating, and make use of the internal control test results during interim visits to aid their work.

The Internal Controls department also assists local management in improving control over local risks, and to promote increased standardisation of procedures across the Group by performing targeted and focussed review of processes and/ or locations.

The Internal Controls department, thanks to its accumulated knowledge on the business processes, plays a crucial role in assisting management and maintaining an effective control environment whenever a process undergoes a major change such as a new system implementation.

Group Financing

Funding Model

A key reason for the Group's leading competitive position is its access to capital and liquidity. The Group sources funds from a number of markets including the syndicated bank loan market, securitisation markets, US private placements, corporate bond markets and through trade finance lines. The strength of the Group's liquidity and access to capital is derived from its unique financing model which is based on three main pillars:

- **Long term corporate credit facilities**: revolving credit, term loan facilities and capital market issuances that are used to meet liquidity requirements outside of day to day activities;

- **Shorter term transactional facilities**: uncommitted, secured bilateral trade finance lines are used to finance the day to day activities of the Group; and

- **Securitisation**: the Group operates one of the largest trade receivables securitisation programme in the world, which was established in 2004 (the "**Trade Receivables Securitisation Programme**"). The Trade Receivables Securitisation Programme allows the Group to fund its receivables once an invoice has been issued and all the Group's obligations under the contract have been performed. Following the success of the Trade Receivables Securitisation Programme, the company launched its first inventory backed securitisation programme in November 2017, leveraging inventories of crude oil and refined metals, and whose structure is similar to repurchase agreements (the "**Inventory Securitisation Programme**").

The main advantage of this financing model is that short term uncommitted transactional facilities (which finance the daily trading activities) and the securitisation programmes (which finances trade receivables and inventories on a non-recourse basis) are self-liquidating, i.e. they are repaid directly from the proceeds of the underlying transaction.

The Group sources funds from various markets including Europe, Asia Pacific as well as the US and continues to enjoy strong supports from a network of 135 financial institutions. As of 30 September 2018, the Group's top 10 banks provide approximately 48 per cent. of the Group's available bank funding. Due to increasing commodities prices and traded volumes in some divisions, the Group aims to continue increasing and diversifying its funding sources in order to ensure the unhindered growth of its trading divisions and industrial assets and maximisation of liquidity.

Bilateral trade finance lines, borrowing bases and revolving credit facilities make up the majority of the Group's funding.

The weighted average maturity of the Group's corporate (non-trade related) credit facilities as at 30 September 2018 was approximately 2.0 years. To mitigate refinancing risk the Group has diversified its long term funding base to reach different investor groups. Furthermore, under its revolving credit facilities the Group has extension options in place.

The Group maintains two main revolving credit facilities ("**RCFs**"), an Asian RCF and a European RCF. These are generally refinanced annually.

The Group had around USD 58 billion of available credit facilities as at 30 September 2018, and USD 59 billion as at 31 March 2019.

Long Term Financing

The Group's liquidity requirements outside of day to day trading activities are financed by committed corporate credit facilities including the Group's revolving credit, term loan facilities and capital market issuances. The corporate facilities, which amount to 24 per cent. of the Group's total credit facilities as at 30 September 2018, finance requirements such as initial margin deposits and margin call with hedge brokers and bridge financing of capital expenditure. The majority of the Group's corporate credit facilities are denominated in U.S. dollars because this is the functional currency of the Group's business. In the Asian RCF, the Group has included a CNH denominated tranche since 2013 to capture the growing offshore RMB liquidity. Similarly, the Group has been present in the Japanese domestic syndicated bank loan market since 2012 with a 3-year term facility denominated in JPY. In 2018 and 2019, the Group also raised renminbi-denominated bonds with a total principal amount of RMB 2,240 million in four tranches with a maturity of 3 years under its Panda Bond programme. In addition to Panda bonds, in May 2018, the company issued Swiss franc senior bonds with an aggregate principal amount of CHF 165 million, with an interest rate of 2.25 per cent. per annum and a maturity of 5 years.

Historically, the Group has been proactive in tapping new markets to diversify its funding sources and extend the terms of its debt profile. Some facilities which have been closed in recent years and which are outside of the Group's traditional corporate facilities are outlined below.

November 2017 – the Company launched a tap of its USD 600 million 6.875 per cent. perpetual subordinated bond issued in March 2017, and raised an additional USD 200 million in November 2017. The bond was consolidated and forms a single series with the initial perpetual securities. This was the Group's third perpetual bond, having issued its first one in April 2013 for USD 500 million and its second one in February 2014 for SGD 200 million. A key feature of these bonds is their equity-like treatment under IFRS accounting standards, improving the balance sheet ratios of the Group. They also extend the maturity of the Group's debt and have brought many entirely new investors to the Group, particularly in the Asian market. Those bonds are listed on the Singapore Stock Exchange.

March 2018 – The Group issued its inaugural US Dollar senior bond for USD 400 million with a 5-year maturity, priced at 5.25 per cent.. Despite a volatile market backdrop, the level of 5-year T + 254bps was the tightest credit spread ever achieved by the Company on any senior private or public bonds. The transaction was issued by Trafigura Funding S.A. under its EUR 3 billion European Medium Term Notes (EMTN) programme and is listed on Euronext Dublin. This new issuance was distributed globally with 44 per cent. placed in Asia and 56 per cent. in Europe.

April/May/September 2018/May 2019 –The Group successfully registered a 2.35 billion Renminbi-denominated programme (Panda Bond) approved by the National Association of Financial Market Institutional Investors (NAFMII) and has placed four tranches under such programme. In April 2018, the first RMB 500 million tranche was placed in the Interbank Market under a private placement format for a 3-year maturity. It was followed by a second tranche of RMB 500 million in May 2018 with similar terms. In September 2018, the Group issued the third tranche of RMB 700 million bond with a more competitive coupon compared with the previous two tranches. In May 2019, the Group raised RMB 540 million through the latest tranche of its Panda Bond Programme, with a final coupon which has significantly tightened since the first tranche issued in April 2018. With these pioneering transaction the Group became the first international commodity trading company and one of the first non-Chinese corporates to access the domestic renminbi-denominated bond market. This transaction enables the Group to access a deep and diversified pool of Chinese investors comprised of commercial banks, asset managers, insurance companies and securities firms.

May 2018 – The Group raised USD 140 million through US private placements of bonds (USPP) from 8 investors across 5, 7 and 10 year tenors to refinance USD 124 million of maturing USPP. Total amounts of USD 53 million were allocated in the 5-year notes, USD 67 million in the 7-year notes and USD 20 million in the 10-year notes, with a pricing of 5.50 per cent. (T+275bps), 5.72 per cent. (T+280bps) and 5.86 per cent. (T+290bps), respectively.

May 2018 – The Group issued its inaugural Swiss franc senior bond for CHF 165 million with a 5-year maturity. The bond, priced at 2.25 per cent., was issued under the Company's Euro Medium Term Notes programme and is listed on the SIX Swiss Exchange.

Revolving Credit Facilities

Over the last 12 years, the Group has maintained two revolving credit facilities, an Asian RCF and a European RCF.

In March 2019, the Group successfully signed a new 365-day multi-currency syndicated revolving credit facilities totalling USD 2.05 billion. The facility is arranged by the syndicate of 40 banks.

In October 2018, the Group refinanced its Asian RCF and term loan facilities for USD 1,945 million. The facility was oversubscribed and upsized from their initial launch amount of USD 1,500 million, with 28 banks participating in the transactions. The new Facilities comprise of a 365-day USD revolving credit facility (USD 1,075 million), a 1-year CNH term loan facility (USD 370 million) and a 3-year USD term loan facility (USD 500 million).

Other Corporate Facilities

In March 2018, the Group refinanced its 58.9 billion Japanese Yen ("**JPY**") denominated syndicated 3-year loan with domestic banks and increased the size of the facility to JPY 72.64 billion (USD 682 million). A JPY 2 billion accordion increase was put in place in June (the "**Samurai Loan**"). Nineteen Japanese financial institutions supported the Samurai Loan, including three new institutions. The facility was the fourth of its kind for the Issuer, following the first close in 2012 and refinancing's in 2014 and 2016. This transaction increased the diversification of the Group's funding base and strengthened its banking presence in Asia and in particular, the Group's track record in the Japanese lending market.

The Trade Receivables Securitisation Programme

The Group's trade securitisation programme was launched in November 2004 and enables the Group to fund its receivables once an invoice has been issued and all the Group's obligations under the contract have been performed. The program currently has ten bank sponsored conduits. Since currently most physical transactions are financed on a transactional basis with letters of credit or loans outstanding under existing lines, the securitisation of the Group's receivables accelerates the rotation of existing credit lines, as secured bilateral loans are repaid faster with the programme proceeds upon the sale of the receivables. This frees financial resources, enabling the Group to grow existing activities and develop new businesses.

The implementation of the securitisation programme achieved the following objectives:

- Diversify and increase borrowing sources;
- Maximise borrowing base and amount of net financing;
- Benefit from attractive funding costs;
- Create a scalable funding program that can grow in size as the Group's volume of receivables increases; and
- Extend borrowing maturity.

Over time, the external funding of TSF has increased significantly in size while incorporating a longer term committed funding element, principally through the issuance of Medium Term Notes (MTN), as well as retaining a significant proportion of variable funding purchased by bank-sponsored conduits, reaching USD 4,305 million of available external funding as at 30 September 2018.

As a result of the Group's stringent risk management philosophy, the programme has not suffered any write-offs since its inception in November 2004 and has become the largest AAA/Aaa publicly rated securitisation programme of trade receivables in the industry.

In September 2018, TSF issued a new series of public notes (TSF 2018-1) totalling USD 500 million in the US Rule 144A/Regulation S asset-backed securities (ABS) markets. This was the fifth MTN issuance under the programme.

The 3-year tenor USD 500 million of public notes were placed with US and European investors including: USD 185 million floating rate Class A1 notes (AAA/Aaa) at 1m LIBOR +73bps, USD 280 million fixed rate notes Class A2 (AAA/Aaa) Notes at mid-swap +73bps and USD 35 million fixed rate B notes (BBB/Baa2) at mid-swap + 130bps. The transaction was very well received, with distribution in Europe, the US and participation from a total of 32 institutional investors in the fixed and floating rate tranches.

The Inventory Securitisation Programme

Following the success of the trade receivables securitisation programme, the Group pioneered an inventory securitisation programme in November 2017. Trafigura Commodities Funding Pte. Ltd. ("**TCF**"), a standalone vehicle was established in Singapore to raise non-recourse funding backed by inventories of crude and refined metals.

TCF issued USD 470 million of senior variable notes which were placed on a private basis with six financial institutions. The proceeds of the notes enable TCF to purchase crude and refined metals inventories from the Group across twelve jurisdictions in Europe, Middle East and Asia-Pacific. The commodities are sold on a true sale basis under a purchase agreement, granting TCF the right to sell each commodity back to the Group at the expiry of the underlying contracts or earlier at the option of the Group.

The transaction architecture addresses risks related to the ownership of the commodities such as price, liquidity, basis risk, damage and theft of goods and storage control. TCF was designed to withstand the default of the Group via collateral and liquidation agency agreements.

This platform will enable the Group to become a systematic issuer of notes backed by commodities inventories and ultimately to seek committed term financing in the asset backed securitisation markets.

Transactional Financing

A large proportion of the Group's financing is derived from trade related transactional financing arrangements, which finance day to day activities. This involves the financing of individual physical commodity transactions with uncommitted secured bilateral bank lines. The debt created in these transactions is secured on the commodity that is being purchased and subsequent receivable.

In their most simple form, bilateral trade finance lines are a means of financing physical trading activity whereby a single trade finance bank initially opens up a letter of credit in favour of a commodity trader, followed by a loan to the commodity trader once the purchase invoice has been paid, to finance a specific single physical transaction. The loan is repaid by the commodity trader using cash received from the sale of the specific stock being financed. It is important to note that these transactions are self-liquidating in that the debt is repaid from the proceeds of the sale of the commodities (or by the sale of a related receivable).

A key feature of these financial arrangements is that financing is generally provided at 100 per cent. of the value of the underlying assets and adjusted on a weekly basis. In the event of rising prices, the Group marks to market the collateral held by the banks, who in turn provide additional liquidity to the Group on a weekly basis or more often if requested by the Group (or *vice versa* in case of declining prices). Given that the Group hedges its physical trading books, the cash flows on the hedging positions can be matched with the change in value of collateral which are marked to market under the corresponding loans. Without bilateral lines, such liquidity could only be realised at the time of the payment under the final sales contract by the client.

The main advantages of bilateral trade finance lines are as follows:

- *Self-liquidating nature*: Lenders initially retain security over the stock, then over the associated receivable. As cash from the receivable is received, the bilateral loan is repaid. As such, loans under bilateral lines are not repaid from cash flow, but rather from the transaction itself.
- *Flexibility*: Bilateral lines are also a very flexible form of financing and can be drawn for funding or the issue of credit instruments such as letters of credit and can be easily increased in case of high commodity prices.
- *Reliability*: Banks view bilateral financing favourably and are more generally more willing to lend under bilateral lines than other forms of financing. This ensures bilateral lines are a reliable form of financing even in distressed credit markets. Since September 2010, the Group has grown its bilateral lines by approximately USD 20 billion, with total lines now amounting to approximately USD 39 billion as of 30 September 2018.
- *Strong liquidity tool*: As transactions are generally 100 per cent. financed and the level of such financings is adjusted on a weekly basis margin calls can be recovered more quickly.
- *Mark to market*: Ability to make weekly drawdown in transactional secured loan to reflect a change in value of the underlying collateral; this provides liquidity to balance out margin call requirements on futures positions.

- *Scalability*: Ability to grow lines and to increase/decrease usage according to market conditions and price environment helps the Group react quickly to changing market conditions.

These financing arrangements on an individual transaction basis are only possible with the Group's highly developed and integrated IT systems. Various stages of these transactions need to be monitored and reported to the bilateral banks. The banks involved also need to be able to monitor the transactions and ensure proper management.

Today, the Group is unique among its principal peer group in the way it finances its business activities. It provides the Group with a competitive advantage and has proven to be resilient even during highly volatile market conditions.

The utilisation of the bilateral trade finance lines tracks the underlying oil price. Between September 2014 and September 2015, when oil prices fell below USD 43/barrel, utilisation of bilateral lines also tapered off. As oil prices have started to increase since early 2016, headroom under the Group's trade finance lines has contracted. In parallel, the increase in traded volumes has also resulted in rising utilisation of the Group's transactional facilities: since half-year 2015, traded volumes increased from 2.7 million barrels per day to 5.8 million barrels per day in fiscal year 2018. Despite the price fluctuations and traded volume increment, the Group has been able to maintain significant headroom in its bilateral lines (albeit with a slower pace of growth in overall size). The recent divergence between the short-term transactional lines and net utilisation is testament to the ability of the Group to not only diversify its sources of funding, but also to expand its banking group leading to increasing capacity in short-term transactional lines.

Transactional Finance compared to Unsecured Lenders

The Group's use of bilateral trade finance lines does not negatively impact the position of unsecured lenders. As financing is generally provided at 100 per cent. of the value of the underlying assets and adjusted on a weekly basis, there is no issue of over collateralisation. This means that no cash (flow), working capital, or equity is trapped under the bilateral facilities. In the event of an unforeseen problem with the Group, the bilateral lenders would simply liquidate the underlying transaction and as they are financing at 100 per cent. of the collateral value, the current asset and short term debt would simply cancel out.

The Group and the Banking Environment

As a privately owned company, the Group funds itself primarily from the banking and debt capital markets. Whilst the Group (in common with the rest of the commodity sector) has not been completely insulated from the turbulence in the banking environment, the consequences for the Group have been very limited due to its diversified sources of funding and a pro-active approach with its banks.

In 2010 and 2011 during the Eurozone crisis, there was scarce liquidity in the loan markets, particularly for borrowers looking to raise funds denominated in US Dollars. A combination of high commodity prices, with supply of and demand for liquidity polarised, meant borrowers saw pricing creep significantly higher. Between late 2012 and early 2015, steps to restore liquidity (e.g. quantitative easing etc.) and a generally improving banking environment meant loan volumes picked up, which enabled borrowers to (re)finance their facilities at lower pricing, with the increased liquidity resulting in significant oversubscription, allowing borrowers to increase facility sizes and even scale back commitments. Within the industrial and commodity financing spaces, this trend began to tail off in mid- to late- 2015 as the fall in commodity prices and slowing growth in some key markets such as China and Brazil have put pressure on commodity producers and integrated producer/marketers. This has understandably caused some nervousness to return amongst banks. Since the end of 2016, the stabilisation in oil prices has led to rise in available credit facilities.

The Group has, and expects to continue to benefit from being one of the top names in the commodity sector and has been able to maintain healthy levels of committed and uncommitted facilities throughout the various banking and commodity market cycles with strong and continued support from its banking partners.

In recognition of the market trends mentioned above, the Group has sought to manage its banking group in the following ways:

Track record of building strong relationships

For a number of years and throughout various commodity cycles and financial market environments, the Group has cemented strong relationships with its lending banks. Regular meetings are held between the Group's board members and/or management committee members and senior management of the Group's major banks. Top management at those banks have reiterated their commitment to the Group as they re-focus available capital to the leaders in each sector. Therefore, despite a client portfolio rationalisation being undertaken by such banks which has mainly affected non-core and small(er) clients in the commodities space, the Group has not suffered any material reduction of available lines and in a number of cases has actually seen available lines increase.

Diversification of Group funding sources

Diversification is a key pillar of the Group's funding strategy. For many years, the Group has actively sought to diversify its banking pool, which now consists of 135 banks across the world. The Group has developed strong banking relationships in regions which have been spared some of the consequences of the European sovereign debt crisis (e.g. North America, Japan, Australia and South East Asia). Historically, European banks have been prominent in commodity trade financing and are therefore an important part of the Group's bank group. In the unforeseen case that available credit lines from certain European banks were reduced, the Group would be in a position to mitigate the effects of such a reduction through corresponding increases of its banking lines in other regions.

Additionally, the Group has developed its Trade Receivables Securitisation Programme into the largest of the commodities trading industry. Since this programme is funded from the U.S. dollar capital markets (whether directly or indirectly via conduits) this significantly reduces the amount of U.S. dollar liquidity required from its banks in the form of traditional lending. Another milestone was achieved in November 2017 when the company successfully raised USD 515 million of non-recourse funding through its first ever inventory-backed securitisation programme, leveraging existing assets and diversifying the funding pool.

The Group has successfully tapped various markets for long term unsecured funding such as the Eurobond market (2010, 2013, 2014 and 2015), the US private placement markets (2006, 2011, 2013 and 2018), and the hybrid capital market (2013, 2014 and 2017). Since the beginning of the Group's fiscal year 2018, the Group has also been active in a number of different markets, tapping new sources of liquidity through senior USD bond, CHF bond and Panda bond (as presented above). Moreover, the Group also has a Japanese Yen denominated 3-year term loan which it has now refinanced three times (last in March 2018), upsizing the loan each time (see "*Other Corporate Facilities*").

Financial Discipline

Although unrated by an international rating agency, the Group aims to manage its business and financial profile in a manner consistent with an investment grade profile. The Group has a track record of raising financing from multiple sources on an unrated basis even in the most volatile and challenging market conditions.

Financial discipline is critical to the Group's business model due to its reliance on debt markets for capital and liquidity. The Group's significant expansion of its sources of financing over the years has been achieved on the basis that the Group can maintain an acceptable and sustainable credit standing consistent with an investment grade profile.

As a private company, the Group values long term relationships with all its financial stakeholders and provides access to all information necessary to reach an independent view on the Group's creditworthiness. The Group has always strives to disclose to its financial stakeholders information necessary to understand its business model and financial performance. The Group believes its stakeholders' scrutiny and continuous involvement provide a strong oversight and control on the Group's financial health and is consistent with the Group's strategy to build value in the long run, which is reinforced by its ownership model.

Such discipline is reinforced by the financial covenants that are granted to some of the Group's unsecured lenders.

Legal Proceedings

The Company and its subsidiaries are parties to a number of legal claims and proceedings arising out of their business operations. The Group believes that the ultimate resolution of these claims and proceedings will not, in the aggregate, have a material adverse effect on the Group's financial position, consolidated income or cash flows. Such legal claims and proceedings, however, are subject to inherent uncertainties and the outcome of individual matters is unpredictable. It is possible that the Group could be required to make expenditures, in excess of established provisions, in amounts that cannot reasonably be estimated.

As reported in the press, at certain warehouses in China, notably for the Company at Qingdao, Pinglai and Yingkou, there have been rumours that fraudulent warehouse certificates are in circulation. One of the Company's subsidiaries has issued warehouse certificates, and also has a limited number of collateral management agreements in place, regarding metal stored at these locations. The position remains that it has not been possible to independently verify the quantity and ownership of the metal stored at these locations and consequently legal proceedings have been commenced in England and China relating to ownership of the metal and potential liabilities regarding the storage arrangements. In view of the uncertainties surrounding (a) the volume of material in the warehouses; (b) its correct ownership; and (c) the approach the majority of the customers will ultimately take, it remains premature to speculate on the Group's likely net total exposure in relation to this matter. Having evaluated the risks involved in these legal proceedings, it is considered unlikely that potential liability arising therefrom would be material for the Group.

Ownership Structure

Group is owned by approximately 700 senior employees who are therefore focused on the long-term success of the business, promoting management depth and stability, and encouraging prudent risk management. The decision as to which employees may become shareholders is discretionary based upon management's evaluation of the individual's performance, seniority and future potential. This assessment is made on a yearly basis, with adjustments up or down, depending on the employee's overall (current and expected) contribution to the Group's results.

Shares are issued and redeemed by TBBV. Upon ceasing employment with the Group, any shares in TBBV held by an employee will be repurchased, under certain conditions. In case of shareholdings in excess of USD 1 million, an employee's shares are bought back in five separate instalments (the first one at the time of departure and then at the end of each of the following four years.

The Group operates a limited discretionary share redemption programme for non-departing employees in order to provide liquidity in the shares and ensure that employees hold shareholding positions commensurate with their overall contribution to the business. However, all share redemptions (for both departing and non-departing employees) are strictly discretionary and can be deferred indefinitely; noting that employees do not have the right to freely sell their shares. Redemptions are strictly subject to the Group maintaining its financial covenants.

Finally, as has been the case since inception, no dividend or profit distribution is paid to final shareholders of the Group other than through share redemptions at the level of TBBV (but dividends are paid from the Company to TBBV).

Management Structure and Corporate Governance

Board of Directors

As part of the corporate re-organisation described above, there was a change in the Group's governance arrangements. The reason for this is because Singapore law does not specifically provide for locally registered companies to have a two-tier Board structure. As a consequence, with effect from 30 September 2015, the Group established a single Board of Directors to exercise oversight of the Group. This encompasses the roles previously occupied by the Group's two-tier Board structure comprised of the Supervisory Board and the Board of Directors prior to the Group re-organisation. The Board is chaired by Jeremy Weir, Executive Chairman and CEO. Members of the current Board of Directors are listed below:

BOARD OF DIRECTORS				
Name	**Position**	**Other relevant activities outside the Group (Past or Present)**	**Years with the Group (as at 1 January 2019)**	**Years in Commodities**
Andrew Vickerman	Director	Former member of the Operating and Executive Committees of Rio Tinto; Former Global Head of Communication & External Relations of Rio Tinto	8	27
Jeremy Weir	Chief Executive Officer and CEO Mining	None	18	26
Jose Larocca	Co-Head of Oil Trading	None	25	27
Mark Irwin	Director	Former Financial and Corporate Controller	25	27
Mike Wainwright	Chief Operational Officer	None	23	23
Pierre Lorinet	Director	Former Group Chief Financial Officer Independent Director and Chairman of the Audit Committee for COFCO International Ltd.	17	18
Sipko Schat	Director	Former member of Executive Board of Rabobank Non-Executive Director of various companies including an independent member of the Supervisory Board and Chairman of the Risk Committee for Rothschild & Co (formerly Paris Orleans) Chairman of the	3	3

BOARD OF DIRECTORS				
Name	**Position**	**Other relevant activities outside the Group (Past or Present)**	**Years with the Group (as at 1 January 2019)**	**Years in Commodities**
		Supervisory Board of Vion N.V. Senior Independent Director of OCI N.V.		

The business address of each member of the Board of Directors is 10 Collyer Quay, Ocean Financial Centre, #29-00 Singapore 049315. As at the date of this Offering Circular, to the best of the Company's knowledge, no potential conflicts of interest exist between the duties to the Company of any director, and its private interests and/or other duties.

Management committee

The Management Committee was created in April 2018, subsuming the Trading Committee and Investment Committee. The Management Committee is responsible for the execution of the Group's business plan including management of the day-to-day trading, commercial and operational functions as well as the Group's investment portfolio. Creation of the Management Committee marks a further development of the Group governance and enlargement of the leadership of the Group. Members of the Management Committee are listed below:

Name	Position / Background	Years with the Group (as at 1 January 2019)	Years in Commodities
Amin Zahir	Co- Head of Minerals, Metals and Bulk Commodities division	18	21
Ben Luckock	Co-Head of Group Market Risk	11	21
Christophe Salmon	Group Chief Financial Officer	7	18
Jeremy Weir	Chief Executive Officer and CEO Mining	18	26
Jesus Fernandez	Head of M&A	14	14

Name	Position / Background	Years with the Group (as at 1 January 2019)	Years in Commodities
Jose Larocca	Co-Head of Oil Trading	25	27
Julien Rolland	Co- Head of Minerals, Metals and Bulk Commodities division	13	22
Mike Wainwright	Chief Operational Officer	23	23
Robert Gillon	Co-Head of Group Market Risk	13	15

Other committees

Below the Management Committee sit a number of more narrowly focused management committees which are focused on the day-to-day management of the Group, as opposed to the Group strategy. Each committees maintains regular contact with the Group's Management Committee and Board. They are comprised as follows:

- Oil Trading Committee: Head of Oil Trading, Group CEO and a group of senior oil traders;
- Metals and Minerals Trading Committee: Group CEO and senior metals and minerals traders;
- Finance Committee: Group CFO, Regional CFOs, Group Treasurer, Head of Structured & Trade Finance, Head of Credit Risk Management and Head of Trade Finance;
- Accounting Steering Committee: COO and Group Financial Controller;
- IT Steering Committee: Group COO, and other board-level representatives;
- Risk Committee: Group CEO, Group COO, Head of Oil Trading, Chief Risk Officer and Heads of Group Market Risk;
- Compliance Committee; and
- HSEC Committee.

Corporate Responsibility

The Group has set an important ambition: to become acknowledged as a sector leader in the way that it manages corporate responsibility. This commitment is endorsed by the Group's Management Committee, shareholders and by employees across the Group. It is also based on the following commercial logic:

1. The Group knows it has to earn and maintain a social licence to operate in the many countries and communities where the Group is active.

2. As a Group specialising in the logistics of moving large volumes of potentially dangerous or polluting materials around the world, it needs to operate a systematic and rigorous approach to the management of Health, Safety, Environment and Community ("**HSEC**") risks, both in operations under direct control and in selection of contracting partners.

3. The Group's partners rightly require assurance that the Group operate to the highest standards. Demonstrating leadership in responsibility will support the development of business and enhance access to capital and liquidity. In that sense, the Group see good performance in this area as a means of securing a competitive edge.

Different parts of the Group have distinct challenges and priorities across the HSEC and compliance agenda. All are required to implement, measure and report performance against the priorities and targets agreed at Group and operating levels.

The Group reports annually on its corporate responsibility performance.

Comprehensive Framework for Responsibility

The sustainability of any policy is contingent on how it is developed, embedded and monitored.

In 2016 Responsibility Report, the Company described the adoption of a new Corporate Responsibility Policy, together with updated Business Principles covering human rights, health and safety, environment and community engagement. Publication followed extensive consultation with employees, business partners and other stakeholders. These documents are all available here at www.trafigura.com .

At a strategic level, the Group′s Corporate Responsibility Policy articulates the leadership team′s priorities and commitments for social and environmental governance. Operationally, it outlines what is expected from everyone in the Group, its divisions and operating companies.

The Group policy and principles are cognisant of emerging best practice for multinational corporations and in particular with authoritative frameworks such as the UN Guiding Principles on Business and Human Rights (the UNGPs or 'Ruggie Principles'). They also reflect the evolving expectations of many of the stakeholders, from financing institutions to local communities.

The Group actively encourage business partners and other entities directly linked to its business operations, products and services to align with and implement comparable standards.

HSEC Steering Committee

The Group's HSEC Steering Committee is responsible for ensuring Group's Corporate Responsibility Policy and Business Principles are implemented consistently across organisation. It includes a Board member, the Heads of Corporate Affairs, HSE, and Corporate Responsibility as well as COOs and HSEC Heads from across the organisation.

The Group's HSEC Steering Committee is supported by cross-company HSEC Working Groups, focusing on particular challenges or work programmes.

The mandate of the Group's HSEC Steering Committee is to manage a robust, yet streamlined approach to HSEC issues across the Group with an emphasis on implementation and performance improvement at an operating company and local site level.

Transparency

The Group take the view that transparency is indispensable in its corporate responsibility journey. There are increasing demands for greater disclosure of payments to governments by commodity trading firms as well as mining companies and upstream oil producers. Disclosure can assist in improving governance in resource-rich countries.

As a major facilitator of global trade, the Group also believe that natural resource wealth should be an important engine for economic growth that contributes to sustainable development and poverty reduction. Being open about how the Group manage natural resources gives the populations in countries where it operate the tools to hold governments and business to account.

Since the Group's first bond issuance on the international debt capital markets in 2010, the Group has taken significant steps to provide greater transparency to stakeholders. The Group believe that driving greater transparency and accountability is in the best interests of those impacted by it activities, whether national governments and their citizens or sector leaders through to small businesses. Transparency is an important pillar of the company's core business and is increasingly viewed both internally and externally as a business enabler and a competitive differentiator.

Extractive Industries Transparency Initiative ("EITI")

In November 2014, the Group formally declared its support to the Extractive Industries Transparency Initiative (EITI) – the first privately held commodities trading company to do so. In a further step, the Group published a 'Payments to Governments Policy', which was drawn up in consultation with the EITI International Secretariat. The policy committed the company to disclosing any payments to National Oil Companies (NOCs) for crude oil and petroleum products, including gas, as well as associated corporate taxes and, where relevant, licence payments to Governments. As a leading commodities trading house, the Group has a role in making such disclosures, and believe that Governments have an important part to play in disclosing how they use these funds.

Health and Safety

Three health and safety objectives determine the Group's approach. First, aim for zero work-related fatalities; second, aim to reduce the number of serious incidents; and third, to share lessons from incidents and near misses, with a view to continually improving its performance.

The Group's robust, targeted approach is increasingly informed by solid data. The Group are asserting the primary importance of safe, healthy working conditions through strong governance supported by an active network of HSEC practitioners. The Group aim to eliminate or mitigate operational risks to as low as reasonably practicable, whether they relate to its employees or to others carrying out or overseeing duties on their behalf.

The Group approach has its foundations in its Corporate Responsibility Policy and Business Principles. The Group meeting these commitments through strong governance at the Group and operating levels. The Group is strengthening its assurance and formalising its processes. The Group focus on skills development and risk management, and share good practice across the organisation.

In 2018, The Group introduced new reporting protocol that improved its ability to review incidents and avert accidents by disseminating best practice and lessons learnt across the Group. The Group's strategy in 2019 built on these developments, improving how it report and what it learn from near misses and actual incidents. The Group's strategy is based on the key principle of the 'Bird Safety Model' that the ratio between minor and serious incidents is broadly constant. 2018 witnessed the 38 per cent. reduction in total lost time incidents and 34 per cent. reduction in overall Group-wide lost time incident rate and three fold increase in near miss reporting.

Environment

The Group is entrusted with the safe handling, storage, blending and transportation of significant volumes of commodities every day, including oil and petroleum products, ores, concentrates and refined metals. It is the Group's duty to prevent, minimise or remediate any unintended releases of these products to the natural environment.

The Group divisions and operating companies that manage industrial assets aim to eliminate or mitigate any adverse environmental impacts associated with their activities.

The Group seek to reduce emissions, explore ways in which it can create supply chain efficiencies in logistics, and adapt its operations to meet the reality of climate change. In 2018 the Group improved its data collection in order to be able to report CHG emission more accurately across the Group. It is also important to note that the number of oil spills incidents reduced from 13 to 10 with approximately 90 per cent. decrease in oil spills volume.

Conduct and Compliance

The Group focuses on promoting and sustaining a sound compliance culture where all staff recognise both a personal and a collective responsibility for meeting Group compliance objectives. The Group's Code of Business Conduct defines what is expected of its people.

The Group's business is conducted within national and international laws and regulations. Wherever the Group operates, it aims to ensure its conduct is in line with applicable and relevant internationally recognised standards.

The Group's Code of Business Conduct is a cornerstone of the Group's approach. It defines what is expected of the business and its employees. It promotes good business judgement and compliance with relevant laws and regulations.

Ethical business conduct is a pre-requisite for sustained success. The Group has adopted five key principles that define the way the Company conducts itself worldwide. The Company's Compliance Department has developed global systems and safeguards that ensure the Company adheres to these principles wherever the Group operates.

1. *Integrity* - honest and straightforward in business dealings.

2. *Care and diligence* - due skill, care and diligence in the management of its business.

3. *Best practice* - compliance procedures that meet best practice standards, not just minimum legal or regulatory requirements.

4. *Market conduct* - business dealings in accordance with high standards of market conduct.

5. *Management and control* - appropriate procedures in place to manage and control the business effectively and meet the requirements of its Code of Business Conduct.

The Group's Compliance Department oversees Group activities. It operates in partnership with front office functions to ensure the Group's controls are relevant and robust. The Group's Head of Compliance reports directly to the Group's COO who sits on the Group's Management Committee. The Group's Compliance Committee meets twice a year.

Know Your Counterparty Process

The Group is dedicated to forming strong, enduring and mutually beneficial relationships with its customers. Therefore, the Group takes great care in selecting its business partners, a commitment that is clearly articulated within the Company's 'Know Your Counterparty' programme. Before transactions can proceed, a prospective new counterparty must provide extensive information about its operations, directors and financial status. After these details have been analysed by the Group's internal compliance team, the data is verified by authoritative external agencies including Complinet and Dun & Bradstreet. Following this, the credit department verifies the credit status of the counterparty. Only after these checks are successfully undertaken can the Group enter into transactions with a new counterparty. These responsibilities are shared by a comprehensive compliance plan, monitoring programme and involvement of senior management through Compliance Committees.

Trafigura Foundation

The Trafigura Foundation was established in 2007 to coordinate and support the Company's philanthropy. What began as a handful of projects managed by staff has progressed into a systematic philanthropic organisation with global interests. Today, Trafigura Foundation provides financial and technical support to long-term development programmes that respond to specific local needs and delivers long lasting results. Over the past decades, it has engaged in projects involving around USD 58 million in nearly 100 programmes in 29 countries of operations.

In 2017, the Foundation reframed its strategic orientation to maximise its impact by forging stronger, more strategic relationships. It now focuses on programmes in two areas of activity: Fair and Sustainable Employment and Clean and Safe Supply Chains. Each of these furthers the Foundation's mission of improving the socio-economic conditions of vulnerable communities in countries where the Group has a presence, driving positive and lasting transformational change for those who need it the most. Beside these two focus areas, the Foundation's other mission remains to pool the charitable and community-oriented initiatives of the Group employees around the world.

The Foundation's governance structure ensures decisions are entirely independent and guided by genuine philanthropic motivations. The executive team selects, manages and monitors the programmes to which the foundation grants its support and is led by the Executive Director. The Foundation's Board of accomplished professionals' guides and supports the Foundation in its strategic decisions and investments.

Membership Organisations

In order to facilitate honest and open engagement with stakeholders on a range of social and environmental topics, The Group have joined a number of corporate responsibility initiatives worldwide. Current memberships include:

- UN Global Compact « (UNGC) » at an international level.
- World Economic Forum (WEF) - An international organisation for public-private cooperation engaging political, business and other leaders of society to shape global, regional and industry agendas. The Group is a member of the WEF's Global Battery Alliance.
- Global Maritime Forum: An international not-for-profit foundation dedicated to shaping the future of global seaborne trade to increase sustainable long-term economic development and human wellbeing.
- Global Business Initiative on Human Rights « (GBI) »: A not-for-profit organisation established to advance human rights in the business context by informing policy and promoting cross-industry peer learning, outreach and capacity building.
- Extractive Industries Transparency Initiative « (EITI) » (as mentioned above).
- Oil Spill Response Ltd.
- Other membership includes: International Swaps and Derivative Association, Futures Industry Association, Commodities Markets Council Europe and OECD Multi-Stakeholder Group.
- The Group's participation in these initiatives is enhancing the Company's ability to meet its obligation to respect human rights in practice.

Financial Year

The financial year of the Company ends on 30 September.

Auditors

For the financial years ended 30 September 2017 and 30 September 2018, the auditor of the Company was PricewaterhouseCoopers SA, avenue Giuseppe-Motta 50, 1211 Geneva, Switzerland. PricewaterhouseCoopers SA, Geneva branch, is registered in the commercial register of the Canton of Geneva under number CHE-390.062.005. PricewaterhouseCoopers SA is a member of EXPERTsuisse – Swiss Expert Association for Audit, Tax and Fiduciary.

TAXATION

The statements herein regarding taxation are based on the laws in force as at the date of this Offering Circular and are subject to any changes in law. The following summary does not purport to be a comprehensive description of all the tax considerations which may be relevant to a decision to purchase, own or dispose of, the Securities. Each prospective holder or beneficial owner of Securities should consult its tax adviser as to the tax consequences of any investment in, or ownership, disposition of and receiving payment of interest, principal and/or other amounts under the Securities.

Singapore

The statements below are general in nature and are based on certain aspects of current tax laws in Singapore, administrative guidelines and circulars issued by the relevant authorities in force as at the date of this Offering Circular and are subject to any changes in such laws, administrative guidelines or circulars, or the interpretation of those laws, guidelines or circulars, occurring after such date, which changes could be made on a retroactive basis. These laws, guidelines and circulars are also subject to various interpretations and the relevant tax authorities or the courts may later disagree with the explanations or conclusions set out below. Neither these statements nor any other statements in this Offering Circular are intended or are to be regarded as advice on the tax position of any Securityholder or of any person acquiring, selling or otherwise dealing with the Securities or on any tax implications arising from the acquisition, sale or other dealings in respect of the Securities. The statements made herein do not purport to be a comprehensive nor exhaustive description of all the tax considerations that may be relevant to a decision to subscribe for, purchase, own or dispose of the Securities and do not purport to deal with the tax consequences applicable to all categories of investors, some of which (such as dealers in securities or financial institutions in Singapore which have been granted the relevant Financial Sector Incentive(s)) may be subject to special rules or tax rates. Prospective holders of the Securities are advised to consult their own professional tax advisers as to the Singapore tax consequences of the acquisition, ownership or disposal of the Securities, including, in particular, the effect of any foreign, state or local tax laws to which they are subject. It is emphasised that none of the Issuer and any other persons involved in the issue and offer of the Securities accepts responsibility for any tax effects or liabilities resulting from the subscription for, purchase, holding or disposal of the Securities.

Classification of the Securities

An advance tax ruling will be requested from the IRAS to confirm whether the IRAS would regard the Securities as "debt securities" for the purposes of Section 43N(4) of the ITA, and accordingly, that the interest (including Arrears of Interest and Additional Interest Amounts) arising from the Securities are regarded as debt interest in order to have clarity on the tax treatment of the Securities and the payments made under the Securities. The disclosure below on "*Interest and Other Payments*" is on the assumption that this confirmation is obtained from the IRAS.

There is no guarantee as to how the IRAS will treat the Securities and the payments made under the Securities, and the IRAS' tax treatment of the Securities and the payments made under the Securities may give rise to additional tax liabilities for the Securityholders.

Accordingly, no assurance, warranty or guarantee is given on the tax treatment to Securityholders in respect of the interest (including Arrears of Interest and Additional Interest Amounts) payable to them. In addition, the Securities are not "qualifying debt securities" for the purposes of the ITA and Securityholders will not be eligible for the tax concessions and exemptions under the qualifying debt securities scheme. Securityholders should therefore consult their own accounting and tax advisers regarding the Singapore tax consequences of their purchase, holding and disposal of the Securities.

Interest and Other Payments

Subject to the following paragraphs, under Section 12(6) of the ITA, the following payments are deemed to be derived from Singapore:

(a) any interest, commission, fee or any other payment in connection with any loan or indebtedness or with any arrangement, management, guarantee, or service relating to any loan or indebtedness which is (i) borne, directly or indirectly, by a person tax resident in Singapore or a permanent establishment in Singapore (except in respect of any business carried on outside Singapore through a permanent establishment outside Singapore or any immovable property situated outside Singapore) or (ii) deductible against any income accruing in or derived from Singapore; or

(b) any income derived from loans where the funds provided by such loans are brought into or used in Singapore.

Such payments, where made to a person not known to the paying party to be a resident in Singapore for tax purposes, are generally subject to withholding tax in Singapore. Where the payment is derived by a person not tax resident in Singapore otherwise than from any trade, business, profession or vocation carried on or exercised by such person in Singapore and is not effectively connected with any permanent establishment in Singapore of that person, the payment is subject to a final withholding tax of 15 per cent. The rate of 15 per cent. may be reduced by applicable tax treaties. Where the payment is not so derived, the rate at which tax is to be withheld for the payment to non-tax resident persons (other than non-tax resident individuals) is 17 per cent. The applicable rate for non-tax resident individuals is 22 per cent.

Therefore, payments of interest and other income falling with Section 12(6) of the ITA made by the Issuer in respect of the Securities to Securityholders who are not resident in Singapore for tax purposes may be subject to withholding tax in Singapore. In this regard, if the Issuer obtains any waiver from withholding tax, the Issuer will update the Securityholders accordingly. Where withholding tax applies, the Issuer has agreed, subject to certain exceptions, to pay such additional amounts (pursuant to Condition 6) as will result in receipt by such Securityholders of such amounts as would have been received by them had no such withholding or deduction been required.

Interest, commission, fee or any other payment from the Securities derived by any company or a body of persons (as defined in the ITA) in Singapore from the Securities may be subject to Singapore income tax at the prevailing corporate tax rate of 17 per cent.

However, certain Singapore-sourced investment income derived by individuals from financial instruments is exempt from tax, including:

(a) interest from debt securities derived on or after 1 January 2004;

(b) discount income (not including discount income arising from secondary trading) from debt securities derived on or after 17 February 2006; and

(c) prepayment fee, redemption premium and break cost from debt securities derived on or after 15 February 2007,

except where such income is derived through a partnership in Singapore or is derived from the carrying on of a trade, business or profession.

In addition, payments under Section 12(6) of the ITA that are liable to be made on or after 21 February 2014 by a person to a branch in Singapore of a company incorporated outside Singapore and not known to such person to be tax resident in Singapore shall not be subject to withholding tax in Singapore. For the avoidance of doubt, the Singapore branches of the non-tax resident companies may, however, still be taxed on such payments and may be required to declare them in their annual income tax returns.

Gains on Disposal of Securities

Any gains considered to be in the nature of capital made from the sale of the Securities will not be taxable in Singapore. However, any gains derived by any person from the sale of the Securities which are gains from any trade, business, profession or vocation carried on by that person, if accruing in or derived from Singapore or received in Singapore, or deemed as such, may be taxable as such gains are considered revenue in nature.

In addition, Securityholders who apply or are required to apply Financial Reporting Standard 109 (Financial Instruments) ("**FRS 109**") or Singapore Financial Reporting Standard (International) 9 (Financial Instruments) ("**SFRS(I) 9**") for Singapore income tax purposes may be required to recognise gains or losses on the Securities, irrespective of disposal, in accordance with FRS 109 or SFRS(I) 9, even though no sale or disposal is made. Please see the section below on "*Adoption of FRS 109 or SFRS(I) 9 for Singapore Income Tax Purposes*".

Adoption of FRS 109 or SFRS(I) 9 for Singapore Income Tax Purposes

FRS 109 or SFRS(I) 9 (as the case may be) is mandatorily effective for annual periods beginning on or after 1 January 2018. Section 34AA of the ITA requires taxpayers who comply or who are required to comply with FRS 109 or SFRS(I) 9 for financial reporting purposes to calculate their profit, loss or expense for Singapore income tax purposes in respect of financial instruments in accordance with FRS 109 or SFRS(I) 9 (as the case may be), subject to certain exceptions. The IRAS has also issued a circular entitled "*Income Tax: Income Tax Treatment Arising from Adoption of FRS 109 – Financial Instruments*".

Securityholders who may be subject to the tax treatment under Section 34AA of the ITA should consult their own accounting and tax advisers regarding the Singapore income tax consequences of their acquisition, holding or disposal of the Securities.

Estate Duty

Singapore estate duty has been abolished with respect to all deaths occurring on or after 15 February 2008.

The proposed EU financial transactions tax ("FTT")

On 14 February 2013, the European Commission published a proposal (the "**Commission's proposal**") for a Directive for a common FTT in Belgium, Germany, Estonia, Greece, Spain, France, Italy, Austria, Portugal, Slovenia and Slovakia (each other than Estonia, the "**participating Member States**"). However, Estonia has ceased to participate.

The Commission's proposal has very broad scope and could, if introduced, apply to certain dealings in Securities (including secondary market transactions) in certain circumstances. The issuance and subscription of Securities should, however, be exempt.

Under the Commission's proposal, FTT could apply in certain circumstances to persons both within and outside of the participating Member States. Generally, it would apply to certain dealings in the Securities where at least one party is a financial institution, and at least one party is established in a participating Member State. A financial institution may be, or be deemed to be, "established" in a participating Member State in a broad range of circumstances, including (a) by transacting with a person established in a participating Member State or (b) where the financial instrument which is subject to the dealings is issued in a participating Member State.

However, the Commission's proposal remains subject to negotiation between participating Member States. It may therefore be altered prior to any implementation, the timing of which remains unclear. Additional EU Member States may decide to participate.

Prospective holders of the Securities are advised to seek their own professional advice in relation to the FTT.

Certain U.S. Federal Income Tax Consequences

The following is a summary of certain U.S. federal income tax consequences resulting from the purchase, ownership and disposition of the Securities, and does not purport to be a comprehensive discussion of all of the possible U.S. federal income tax consequences of the purchase, ownership or disposition of the Securities. This summary is based on the U.S. federal income tax laws, including the Internal Revenue Code of 1986, as amended (the "**Code**"), existing, temporary and proposed regulations ("**Treasury Regulations**") promulgated thereunder, rulings of the Internal Revenue Service ("**IRS**"), official pronouncements and judicial decisions, all as in effect on the date of this Offering Circular and all of which are subject to change or differing interpretation, possibly with retroactive effect. No assurance can be given that the IRS will agree with the views expressed in this summary, or that a court will not sustain any challenge by the IRS in the event of litigation. No advance tax ruling has been sought or obtained from the IRS regarding the tax consequences of the transactions described herein.

This summary deals only with Securities held as capital assets. Additionally, the discussion does not cover all aspects of U.S. federal income taxation that may be relevant to, or the actual tax effect that any of the matters described herein will have on, the acquisition, ownership or disposition of the Securities by particular investors, and does not address state, local, non-U.S. or other tax laws or any U.S. tax considerations (e.g., estate or gift tax) other than U.S. federal income tax considerations. This summary also does not discuss the alternative minimum tax, the effects of Section 451 of the Code conforming the timing of certain income accruals to financial statements, or all of the tax considerations that may be relevant to certain types of investors subject to special treatment under the U.S. federal income tax laws, such as financial institutions, brokers or dealers in securities or currencies, tax exempt organizations, insurance companies, traders in securities that elect to use a mark-to-market method of accounting, real estate investment trusts, regulated investment companies, individual retirement accounts, qualified pension plans, persons who hold Securities as part of a straddle, hedging, constructive sale, conversion, or other integrated transaction, partnerships and other pass-through entities and investors therein, investors owning 10% or more of our equity by vote or value or U.S. Holders whose functional currency is not the U.S. dollar.

Prospective purchasers of Securities should consult their own tax advisers concerning the consequences, in their particular circumstances, under the Code and the laws of any other taxing jurisdiction of the purchase, ownership and disposition of the Securities.

For purposes of the following discussion, a "**U.S. Holder**" is a beneficial owner of the Securities that is (a) an individual who is a citizen or resident of the United States for U.S. federal income tax purposes, (b) an entity that is classified for U.S. federal income tax purposes as a corporation and that is organized in or under the laws of the United States, any State, or the District of Columbia, (c) an estate the income of which is subject to U.S. federal income taxation regardless of source, or (d) a trust (i) whose administration is subject to the primary supervision of a court within the United States and which is subject to the control of one or more United States persons as described in Section 7701(a)(30) of the Code ("**United States persons**"), or (ii) that has a valid election in effect under applicable Treasury Regulations to be treated as a United States person.

If an entity or arrangement classified for U.S. federal income tax purposes as a partnership or other pass-through entity owns the Securities, the tax treatment of a partner in such partnership will depend on the status of the partner and the activities of the partnership. Any entity or arrangement that is classified for U.S. federal income tax purposes as a partnership and that owns the Securities, and any partners in a partnership, should consult their tax advisers regarding the U.S. federal income tax consequences of the purchase, ownership and disposition of the Securities.

A "**Non-U.S. Holder**" is a beneficial owner of the Securities that is neither a U.S. Holder nor a partnership for U.S. federal income tax purposes.

U.S. Tax Characterization of the Securities

Although not free from doubt, Trafigura expects that the Securities are treated as equity interests in it for U.S. federal income tax purposes. The remainder of this discussion assumes that the Securities are equity interests for U.S. federal income tax purposes.

PFIC Status

The Code provides special rules regarding certain distributions received by United States persons with respect to, and sales, exchanges and other dispositions, including pledges, of equity (including the Securities) in a passive foreign investment company (a "PFIC"). A non-U.S. corporation will be treated as a PFIC for any taxable year in which either: (1) at least 75 per cent. of its gross income is "passive income" or (2) at least 50 per cent. of its gross assets during the taxable year (based on the average of the fair market values of the assets determined at the end of each quarterly period) are "passive assets," which generally means that they produce passive income or are held for the production of passive income. In determining whether a foreign corporation is a PFIC, a pro rata portion of the income and assets of each corporation in which it owns, directly or indirectly, at least a 25% interest (by value) is taken into account. Although income from the sales of commodities is generally passive income, a special rule treats active business gains from the sales of certain commodities as non-passive income provided certain requirements are met. Commodities of a type that are properly includible in inventory generally are eligible for this special rule if they represent substantially all of the commodities held by the corporation. To the extent Trafigura derives income from the sale of commodities, which currently represents a significant percentage of Trafigura's income, Trafigura believes that it currently meets these requirements.

Accordingly, although the matter is not free from doubt, Trafigura does not expect to be a PFIC for U.S. federal income tax purposes for the current taxable year and at this time do not anticipate becoming a PFIC for future taxable years. However, our PFIC status must be determined annually and therefore is subject to change. Because this determination is made annually at the end of each taxable year and is dependent upon a number of factors, some of which are beyond our control, including the amount and nature of our income and our spending schedule for our cash balances, there can be no assurance that Trafigura is or is not a PFIC or that the IRS will agree with our conclusion regarding our PFIC status. If Trafigura is not a PFIC during any taxable year in which you hold the Securities, then the remainder of the discussion under "Material U.S. Federal Income Tax Considerations," outside of the section entitled "—PFIC Considerations" may be relevant to you. U.S. Holders who are purchasing the Securities pursuant to this offering should consult their tax advisers as to the applicability of the PFIC rules.

Constructive Distributions

As described in the section "*Terms and Conditions of the Securities—Interest*," Trafigura may elect to defer any interest which is otherwise due to be paid on an Interest Payment Date, resulting in Arrears of Interest. Any such Arrears of Interest will be added to and treated as part of the total principal amount of the Securities held by a Securityholder for subsequent interest accruals. For U.S. federal income tax purposes, accruals of Arrears of Interest may be treated as a constructive distribution of additional Securities. Any such constructive distributions may be treated for U.S. federal income tax purposes as having been actually received by a Securityholder, even though no cash will have been actually received. In such case, the tax treatment of any such constructive distributions in respect of Arrears of Interest generally should be the same as any actual distributions received on the Securities, as described below under "—Taxation of Distributions." U.S. Holders of the Securities are urged to consult their tax advisers as to the potential for taxable constructive dividends with respect to the Securities, including in respect of deferred interest payments.

Taxation of Distributions

U.S. Holders. Subject to the PFIC rules described below under "—PFIC Considerations," if you are a U.S. Holder, you must include in your gross income the gross amount of any distributions of cash or property with respect to the Securities (including (i) any payments of interest, (ii) any constructive distributions in respect of Arrears of Interest and (iii) any amounts withheld to pay non-U.S. taxes, but excluding distributions in redemption of the Securities treated as sales or exchanges under the Code) (such amount, a "**Distribution**"), to the extent the Distribution is paid out of our current or accumulated earnings and profits, as determined for U.S. federal income tax purposes (any such Distribution paid out of current or accumulated earnings and profits, a "**Dividend**"). A U.S. Holder must include the Dividend as ordinary income at the time of actual or constructive receipt. The amount of any Dividend income paid in euros will be the U.S. dollar amount calculated by reference to the exchange rate in effect on the date of receipt, regardless of whether the payment is in fact converted into U.S. dollars. If the Dividend is converted into U.S. dollars on the date of receipt, a U.S. Holder should not be required to recognize foreign currency gain or loss in respect of the Dividend income. A U.S. Holder may have foreign currency gain or loss if the Dividend is converted into U.S. dollars after the date of receipt.

If the amount of any Distribution exceeds our current and accumulated earnings and profits, as determined for U.S. federal income tax purposes, such excess will be treated first as a non-taxable return of capital to the extent of the U.S. Holder's basis in the Securities and thereafter as capital gain from the sale or exchange of such Securities. Notwithstanding the foregoing, Trafigura does not intend to maintain calculations of our earnings and profits under U.S. federal income tax principles and, unless and until such calculations are made, U.S. Holders should assume all distributions are made out of earnings and profits and constitute Dividend income. Any such Dividend will not be eligible for the dividends-received deduction generally allowed to U.S. corporations in respect of dividends received from other U.S. corporations.

Subject to the PFIC rules described below under "—PFIC Considerations," Dividends paid or deemed paid by a non-U.S. corporation generally will be taxed at the preferential tax rates applicable to long-term capital gain of non-corporate taxpayers if (a) such non-U.S. corporation is eligible for the benefits of certain U.S. treaties or the Dividend is paid by such non-U.S. corporation with respect to stock that is readily tradable on an established securities market in the United States, (b) the U.S. Holder receiving such Dividend is an individual, estate, or trust, (c) such Dividend is paid on shares that have been held by such U.S. Holder for at least 61 days during the 121-day period beginning 60 days before the "ex-dividend date," and (d) Trafigura is not a PFIC in the year of the Dividend or the immediately preceding year. If the requirements of the immediately preceding paragraph are not satisfied, a Dividend paid by a non-U.S. corporation to a U.S. Holder, including a U.S. Holder that is an individual, estate, or trust, generally will be taxed at ordinary income tax rates (and not at the preferential tax rates applicable to long-term capital gains). As discussed above under "—PFIC Status," although the matter is not free from doubt, Trafigura does not expect to be a PFIC for U.S. federal income tax purposes for the current taxable year or future taxable years. The Dividend rules are complex, and each U.S. Holder should consult its own tax adviser regarding the Dividend rules.

The amount of a Distribution with respect to the Securities will include any amounts withheld by the Issuer in respect of non-U.S. taxes. Subject to complex limitations, some of which vary depending upon the U.S. Holder's circumstances, non-U.S. income taxes withheld from Distributions on the Securities may be creditable against the U.S. Holder's U.S. federal income tax liability.

Distributions received generally will be income from non-U.S. sources, which may be relevant in calculating your U.S. foreign tax credit limitation. Such non-U.S. source income generally will be "passive category income," or in certain cases "general category income", which is treated separately from other types of income for purposes of computing the foreign tax credit allowable to you. The rules with respect to the foreign tax credit are complex and involve the application of rules that depend upon a U.S. Holder's particular circumstances. You should consult your own tax adviser to determine the foreign tax credit implications of owning the Securities. Instead of claiming a credit, a U.S. Holder may, subject to generally applicable limitations, elect to deduct such non-U.S. taxes, if any, in computing taxable income. An election to deduct foreign taxes instead of claiming foreign tax credits applies to all foreign taxes paid or accrued in the taxable year.

Non-U.S. Holders. If you are a Non-U.S. Holder, Distributions paid or deemed paid to you generally will not be subject to U.S. income tax unless the Distributions are "effectively connected" with your conduct of a trade or business within the United States, and the Distributions are attributable to a permanent establishment (or in the case of an individual, a fixed place of business) that you maintain in the United States if that is required by an applicable income tax treaty as a condition for subjecting you to U.S. taxation on a net income basis. In such cases you generally will be taxed in the same manner as a U.S. Holder (other than with respect to the Medicare Tax described below). If you are a corporate Non-U.S. Holder, "effectively connected" Distributions may, under certain circumstances, be subject to an additional "branch profits tax" at a 30% rate or a lower rate if you are eligible for the benefits of an income tax treaty that provides for a lower rate.

Taxation of Sale, Exchange or other Disposition of the Securities

U.S. Holders. Subject to the PFIC rules described below under "—PFIC Considerations," if you are a U.S. Holder and you sell, exchange or otherwise dispose of your Securities, you generally will recognize capital gain or loss for U.S. federal income tax purposes equal to the difference between the value of the amount realized and your tax basis in your Securities. The amount realized on a sale, exchange or other taxable disposition of the Securities generally will equal the sum of the cash and the fair market value of any other property received in exchange for the Securities. A U.S. Holder's tax basis generally will equal its initial investment in the Securities, reduced (but not below zero) by the amount of any distributions in excess of our current and accumulated earnings and profits received by such U.S. Holder.

Gain or loss recognized on such a sale, exchange or other taxable disposition of the Securities generally will be long-term capital gain if the U.S. Holder has held the Securities for more than one year. Long-term capital gains of U.S. Holders who are individuals (as well as certain trusts and estates) are generally taxed at preferential rates. The gain or loss will generally be income or loss from sources within the United States for foreign tax credit limitation purposes, unless it is attributable to an office or other fixed place of business outside the United States and certain other conditions are met. Your ability to deduct capital losses is subject to limitations.

Non-U.S. Holders. If you are a Non-U.S. Holder, you will not be subject to U.S. federal income tax on gain recognized on the sale, exchange or other taxable disposition of your Securities unless:

- the gain is "effectively connected" with your conduct of a trade or business in the United States, and the gain is attributable to a permanent establishment (or in the case of an individual, a fixed place of business) that you maintain in the United States if that is required by an applicable income tax treaty as a condition for subjecting you to U.S. taxation on a net income basis; or

- you are an individual, you are present in the United States for 183 or more days in the taxable year of such sale, exchange or other taxable disposition and certain other conditions are met.

If a Non-U.S. Holder is described in the first bullet point above, such Non-U.S. Holder generally will be taxed in the same manner as a U.S. Holder (other than with respect to the Medicare Tax described below). If you are a corporate Non-U.S. Holder, "effectively connected" gains that you recognize may also, under certain circumstances, be subject to an additional "branch profits tax" at a 30% rate or at a lower rate if you are eligible for the benefits of an income tax treaty that provides for a lower rate.

If a Non-U.S. Holder is described in the second bullet point above, such Non-U.S. Holder generally will be subject to U.S. federal income tax at a rate of 30% on the amount by which such Non-U.S. Holder's U.S.-source capital gains exceed such Non-U.S. Holder's non-U.S.-source capital losses.

Medicare Tax

Certain U.S. Holders who are individuals, estates or trusts are required to pay a 3.8% Medicare surtax on the lesser of (i) the U.S. Holder's "net investment income" for the relevant taxable year (or undistributed "net investment income" in the case of an estate or trust), and (ii) the excess of the U.S. Holder's modified adjusted gross income for the relevant taxable year (or adjusted gross income in the case of an estate or trust) over a certain threshold. A U.S. Holder's "net investment income" generally will include Dividends on, and capital gains from the sale or other taxable disposition of, the Securities, subject to certain limitations and exceptions. Prospective investors should consult their own tax advisers regarding the effect, if any, of this surtax on their ownership and disposition of the Securities.

Information with Respect to Foreign Financial Assets

Certain owners of "specified foreign financial assets" with an aggregate value in excess of certain threshold amounts may be required to file an information report with respect to such assets with their tax returns. "Specified foreign financial assets" include any financial accounts maintained by foreign financial institutions, as well as any of the following, but only if they are not held in accounts maintained by financial institutions: (i) stocks and securities issued by non-United States persons; (ii) financial instruments and contracts held for investment that have non-U.S. counterparties; and (iii) interests in foreign entities. Under these rules, the Securities (or accounts in which the Securities are held) may be treated as "specified foreign financial assets." U.S. Holders should consult their tax advisers regarding the application of this reporting requirement to their investment in the Securities.

Backup Withholding and Information Reporting

In general, information reporting requirements will apply to distributions made on the Securities within the United States to a non-corporate U.S. Holder and to the proceeds from the sale, exchange, redemption or other disposition of the Securities by a non-corporate U.S. Holder to or through a U.S. office of a broker. Payments made (and sales or other dispositions effected at an office) outside the U.S. will be subject to information reporting in limited circumstances.

In addition, backup withholding of U.S. federal income tax may apply to such amounts if the U.S. Holder fails to furnish its taxpayer identification number, fails to certify that such number is correct, fails to certify that such U.S. Holder is not subject to backup withholding, or otherwise fails to comply with the applicable requirements of the backup withholding rules.

Backup withholding is not an additional income tax. Any amounts withheld from a payment under the backup withholding rules generally will be allowed as credit against the U.S. Holder's U.S. federal income tax liability and may entitle such U.S. Holder to a refund provided the required information is furnished to the IRS in a timely manner.

A Non-U.S. Holder generally may eliminate the requirement for information reporting and backup withholding by providing certification of its foreign status to the payor, under penalties of perjury, on IRS Form W-8BEN or W-8BEN-E, as applicable.

Holders are urged to consult their own tax adviser regarding the application of backup withholding, the availability of an exemption from backup withholding, and the procedure for obtaining such exemption, if available.

PFIC Considerations

A U.S. Holder that holds the Securities during any taxable year in which Trafigura qualifies as a PFIC is subject to special tax rules with respect to (a) any gain realized on the sale, exchange or other disposition of the Securities and (b) any "excess distribution" by the corporation to the holder, unless the holder elects to treat the PFIC as a "qualified electing fund," or QEF, or makes a "mark-to-market" election, each as discussed below. An "excess distribution" is that portion of a payment treated as a distribution with respect to the Securities that exceeds 125% of the annual average of such distributions over the preceding three-year period or, if shorter, the U.S. Holder's holding period for its Securities. Excess distributions and gains on the sale, exchange or other disposition of the shares of a corporation which was a PFIC (including the Securities) at any time during the U.S. Holder's holding period are allocated ratably to each day of the U.S. Holder's holding period. Amounts allocated to the taxable year in which the disposition occurs and amounts allocated to any period in the shareholder's holding period before the first day of the first taxable year that the corporation was a PFIC will be taxed as ordinary income (rather than capital gain) earned in the taxable year of the disposition. Amounts allocated to each of the other taxable years in the U.S. Holder's holding period are not included in gross income for the year of the disposition, but are subject to the highest ordinary income tax rates in effect for individuals or corporations, as applicable, for each such year and the interest charge generally applicable to income tax deficiencies will be imposed on the resulting tax attributable to each year. The tax liability for amounts allocated to years before the year of disposition or "excess distribution" cannot be offset by any net operating losses for such years, and gains (but not losses) realized on the sale of the Securities cannot be treated as capital, even if a U.S. Holder held such Securities as capital assets.

If Trafigura is a PFIC for any taxable year during which a U.S. Holder holds the Securities, then Trafigura generally will continue to be treated as a PFIC with respect to the holder for all succeeding years during which such holder holds the Securities, even if Trafigura no longer satisfies either the passive income or passive asset tests described above, unless the U.S. Holder terminates this deemed PFIC status by making a "deemed sale" election. If such election is made, a U.S. Holder will be deemed to have sold the Securities at their fair market value on the last day of the last taxable year for which Trafigura was a PFIC, and any gain from such deemed sale would be subject to the excess distribution rules as described above. After the deemed sale election, the Securities with respect to which the deemed sale election was made will not be treated as shares in a PFIC unless Trafigura subsequently becomes a PFIC.

If Trafigura is or becomes a PFIC, the excess distribution rules may be avoided if a U.S. Holder makes a QEF election effective beginning with the first taxable year in the holder's holding period in which Trafigura is treated as a PFIC with respect to such holder. A U.S. Holder that makes a QEF election with respect to a PFIC is required to include in income its pro rata share of the PFIC's ordinary earnings and net capital gain as ordinary income and capital gain, respectively, subject to a separate election to defer payment of taxes, which deferral is subject to an interest charge. If a foreign corporation ceases to be a PFIC, the U.S. Holder's QEF election would no longer require an annual income inclusion. However, cessation of a foreign corporation's status as a PFIC will not terminate a QEF election and if the corporation becomes a PFIC again, an annual income inclusion may be required.

In general, a U.S. Holder makes a QEF election by attaching a completed IRS Form 8621 to a timely filed (taking into account any extensions) U.S. federal income tax return for the year beginning with which the QEF election is to be effective. In certain circumstances, a U.S. Holder may be able to make a retroactive QEF election. A QEF election can be revoked only with the consent of the IRS. However, in order for a U.S. Holder to make a valid QEF election, the corporation must annually provide or make available to the holder certain information. Trafigura does not currently intend to provide this information to holders.

As an alternative to making a QEF election, a U.S. holder may make a "mark-to-market" election with respect to its Securities if the Securities meet certain minimum trading requirements, as described below.

If a U.S. Holder makes a valid mark-to-market election for the first taxable year in which such holder holds (or is deemed to hold) shares in a corporation and for which such corporation is determined to be a PFIC (including the Securities), such holder generally will not be subject to the PFIC rules described above in respect of its Securities. Instead, a U.S. Holder that makes a mark-to-market election will be required to include in income each year an amount equal to the excess, if any, of the fair market value of the Securities that the holder owns as of the close of the taxable year over the holder's adjusted tax basis in the Securities. The U.S. Holder will be entitled to a deduction for the excess, if any, of the holder's adjusted tax basis in the Securities over the fair market value of the Securities as of the close of the taxable year; provided, however, that the deduction will be limited to the extent of any net mark-to-market gains with respect to the Securities included by the U.S. Holder under the election for prior taxable years. The U.S. Holder's basis in the Securities will be adjusted to reflect the amounts included or deducted pursuant to the election. Amounts included in income pursuant to a mark-to-market election, as well as gain on the sale, exchange or other disposition of the Securities, will be treated as ordinary income. The deductible portion of any mark-to-market loss, as well as loss on a sale, exchange or other disposition of the Securities to the extent that the amount of such loss does not exceed net mark-to-market gains previously included in income, will be treated as ordinary loss. If a U.S. Holder makes a valid mark-to-market election, any distributions made by us in a year in which Trafigura is a PFIC would generally be subject to the rules discussed below under "—Taxation of Distributions," except the lower rate applicable to qualified dividend income would not apply. If Trafigura is not a PFIC when a U.S. Holder has a mark-to-market election in effect, gain or loss realized by a U.S. Holder on the sale of our Securities will be a capital gain or loss and taxed in the manner described below under "—Taxation of Sale, Exchange or other Disposition of the Securities."

The mark-to-market election applies to the taxable year for which the election is made and all subsequent taxable years, unless the Securities cease to meet applicable trading requirements (described below) or the IRS consents to its revocation. The excess distribution rules generally do not apply to a U.S. Holder for taxable years for which a mark-to-market election is in effect. If Trafigura is a PFIC for any year in which the U.S. Holder owns the Securities but before a mark-to-market election is made, the interest charge rules described above will apply to any mark-to-market gain recognized in the year the election is made. Generally, if a foreign corporation ceases to be a PFIC, the U.S. Holder's mark-to-market election would no longer require the income inclusion described above. However, cessation of a foreign corporation's status as a PFIC will not terminate a mark-to-market election and if the corporation becomes a PFIC again, mark-to-market income inclusions may be required.

A mark-to-mark election is available only if the Securities are considered "marketable" for these purposes. The Securities will be marketable if they are regularly traded on a national securities exchange that is registered with the SEC (such as the Nasdaq Global Market) or on a non-U.S. exchange or market that the IRS determines has rules sufficient to ensure that the market price represents a legitimate and sound fair market value. For these purposes, the Securities will be considered regularly traded during any calendar year during which more than a de minimis quantity of the Securities is traded on at least 15 days during each calendar quarter. Any trades that have as their principal purpose meeting this requirement will be disregarded. Each U.S. Holder should ask its own tax adviser whether a mark-to-market election is available or desirable.

If Trafigura is a PFIC for any year in which a U.S. Holder holds the Securities, such U.S. Holder must generally file an IRS Form 8621 annually. A U.S. Holder must also provide such other information as may be required by the U.S. Treasury Department if the U.S. Holder (1) receives or is deemed to receive certain direct or indirect distributions from a PFIC, (2) recognizes gain on a direct or indirect disposition of the Securities, or (3) makes certain elections (including a QEF election or a mark-to-market election) reportable on IRS Form 8621.

Under attribution rules, if Trafigura is a PFIC, U.S. Holders of our Securities will be deemed to own their proportionate shares of our subsidiaries that are PFICs, if any. Like the determination of whether Trafigura is a PFIC, the determination of whether any of our subsidiaries is a PFIC is made annually at the end of each taxable year. Assuming a U.S. Holder does not receive from a PFIC subsidiary the information that the U.S. Holder needs to make a QEF election with respect to such a subsidiary, a U.S. Holder generally will be deemed to own a portion of the shares of such lower-tier PFIC and may incur liability for a deferred tax and interest charge if Trafigura receives a distribution from, or dispose of all or part of our interest in, or the U.S. Holder otherwise is deemed to have disposed of an interest in, the lower-tier PFIC, even though the U.S. Holder has not received the proceeds of those distributions or dispositions directly.

U.S. HOLDERS ARE URGED TO CONSULT THEIR TAX ADVISERS AS TO OUR STATUS AS A PFIC, AND, IF TRAFIGURA IS TREATED AS A PFIC, AS TO THE EFFECT ON THEM OF, AND THE REPORTING REQUIREMENTS WITH RESPECT TO, THE PFIC RULES AND THE DESIRABILITY OF MAKING, AND THE AVAILABILITY OF, EITHER A QEF ELECTION OR A MARK-TO-MARKET ELECTION WITH RESPECT TO OUR SECURITIES.

SUBSCRIPTION AND SALE

The Group intends to offer the Securities in exchange for certain Nyrstar debt instruments pursuant to the Nyrstar Debt Restructuring described below.

Nyrstar Debt Restructuring Scheme

The Group has agreed to the Restructuring with regards to the debt of Nyrstar N.V. and its subsidiaries, which will be implemented pursuant to the Scheme as approved on 22 July 2019 and sanctioned by the High Court of England and Wales on 26 July 2019. As part of the Restructuring, an aggregate principal amount of EUR 262,500,000 of Securities issued pursuant to this Offering Circular will be distributed to Nyrstar bondholders, pursuant to the Scheme. By receiving Securities pursuant to this Offering Circular, such Nyrstar bondholders confirm that they are eligible investors in the Scheme.

Selling Restrictions General

The Issuer has not made any representation that any action will be taken in any jurisdiction by the Issuer that would permit a public offering of the Securities, or possession or distribution of this Offering Circular (in preliminary, proof or final form) or any other offering or publicity material relating to the Securities (including roadshow materials and investor presentations), in any country or jurisdiction where action for that purpose is required.

United States

The Securities have not been and will not be registered under the Securities Act and may not be offered, sold or delivered within the United States or to, or for the account or benefit of, United States persons except in certain transactions exempt from the registration requirements of the Securities Act. Accordingly, the Securities are being offered and sold only: (a) to a person who confirms (i) that it is an "accredited investor" within the meaning of Rule 501(a)(1), (2), (3), (7) or (8) under the Securities Act, (ii) that it is purchasing the Securities for its own account or for one or more separate accounts maintained by such investor or for the account of one or more pension or trust funds and not with a view to the distribution thereof and (iii) that it understands and acknowledges the risks involved in purchasing the Securities, and has carried out a detailed independent due diligence exercise in connection with the Issuer and the Securities and (b) to non-US persons outside the United States in reliance upon Regulation S under the Securities Act.

United Kingdom

An invitation or inducement to engage in investment activity (within the meaning of Section 21 of the Financial Service and Markets Act 2000 ("**FSMA**")) received by it in connection with the issue or sale of the Securities has only been communicated or caused to be communicated and will only be communicated or caused to be communicated in circumstances in which Section 21(1) of the FSMA does not apply to the Issuer; and (b) anything done in relation to the Securities in, from, or otherwise involving the United Kingdom has been and may only be done in compliance with all applicable provisions of the FSMA.

European Economic Area

The Securities that are the subject of the offering contemplated by this Offering Circular have not been offered, sold or otherwise made available and will not be offered, sold or otherwise made available to any retail investor in the European Economic Area.

For the purposes of this provision:

the expression "retail investor' means a person who is one (or more) of the following:

(i) a retail client as defined in point (11) of Article 4(1) of MiFID II; or

(ii) a customer within the meaning of Directive 2016/97/EU (as amended or superseded) where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II.

Singapore

This Offering Circular has not been registered as a prospectus with the MAS. Accordingly, the Securities have not been offered or sold or caused to be made the subject of an invitation for subscription or purchase and will not be offered or sold or cause to be made the subject of an invitation for subscription or purchase, and this Offering Circular or any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the Securities, whether directly or indirectly, has not been circulated or distributed, nor will it be circulated or distributed to any person in Singapore other than: (i) to an institutional investor (as defined in Section 4A of the Securities and Futures Act, Chapter 289 of Singapore, as modified or amended from time to time (the "**SFA**")) pursuant to Section 274 of the SFA; (ii) to a relevant person (as defined in Section 275(2) of the SFA) pursuant to Section 275(1) of the SFA, or any person pursuant to Section 275(1A) of the SFA, and in accordance with the conditions specified in Section 275 of the SFA and (where applicable) Regulation 3 of the Securities and Futures (Classes of Investors) Regulations 2018; or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the Securities are subscribed or purchased under Section 275 of the SFA by a relevant person which is:

(a) a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or

(b) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor,

securities or securities-based derivatives contracts (each term as defined in Section 2(1) of the SFA) of that corporation or the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferred within six months after that corporation or that trust has acquired the Securities pursuant to an offer made under Section 275 of the SFA except:

(i) to an institutional investor, or to a relevant person, or to any person arising from an offer referred to in Section 275(1A) or Section 276(4)(i)(B) of the SFA;

(ii) where no consideration is or will be given for the transfer;

(iii) where the transfer is by operation of law;

(iv) as specified in Section 276(7) of the SFA; or

(v) as specified in Regulation 37A of the Securities and Futures (Offers of Investments) (Securities and Securities-based Derivatives Contracts) Regulations 2018.

Any reference to the SFA is a reference to the Securities and Futures Act, Chapter 289 of Singapore and a reference to any term as defined in the SFA or any provision in the SFA is a reference to that term as modified or amended from time to time including by such of its subsidiary legislation as may be applicable at the relevant time.

Australia

No prospectus or other disclosure document (as defined in the Corporations Act 2001 of the Commonwealth of Australia (the "Corporations Act")) in relation to the Securities has been, or will be, lodged with the Australian Securities and Investments Commission ("ASIC"). The Securities have not (directly or indirectly) been offered, and will not be offered for issue or sale, and applications for issue,or offers to purchase, the Securities in or to the Commonwealth of Australia (including an offer or invitation which is received by a person in the Commonwealth of Australia) have not been made or invited, and will not be made or invited. This Offering Circular or any other offering material or advertisement relating to any Securities in the Commonwealth of Australia has not been distributed or published, and will not be distributed or published unless:

(i) the aggregate consideration payable by each offeree or invitee is at least A$500,000 (or its equivalent in other currencies, in either case disregarding moneys lent by the offeror or its associates) or the offer or invitation otherwise does not require disclosure to investors in accordance with Part 6D.2 or Part 7.9 of the Corporations Act;

(ii) the offer or invitation is not made to a "retail client" as defined for the purposes of section 761G of the Corporations Act;

(iii) such action complies with all applicable laws, regulations and directives; and

(iv) such action does not require any document to be lodged with ASIC or any other regulatory authority.

Belgium

With regard to Securities having a maturity of less than 12 months (and which therefore fall outside the scope of the Prospectus Regulation), the Offering Circular has not been, and it is not expected that it will be, submitted for approval to the Belgian Financial Services and Markets Authority. Accordingly, no action that would be characterised as or result in a public offering of these Securities in Belgium in accordance with the Belgian Law of 11 July 2018 on public offerings of investment instruments and the admission of investment instruments to trading on regulated markets, as amended or replaced from time to time shall be taken.

The Securities are not intended to be sold to Consumers in Belgium, and the Securities have not been offered or sold and will not be offered or sold, directly or indirectly, to Consumers in Belgium, and the Offering Circular or any other offering material relating to such Securities to Consumers in Belgium has not been distributed or caused to be distributed and will not be distributed or cause to be distributed.

For these purposes, a "**Consumer**" has the meaning provided by the Belgian Code of Economic Law, as amended from time to time (Wetboek van 28 februari 2013 van economisch recht/Code du 28 février 2013 de droit économique), being any natural person acting for purposes which are outside his/her trade, business or profession

Denmark

The Securities have not been offered or sold and will not be offered, sold or delivered directly or indirectly in the Kingdom of Denmark by way of public offering, unless in compliance with the Danish Capital Markets Act (*Kapitalmarkedsloven*), as amended from time to time, and Executive Orders issued thereto.

France

Securities have not been offered or sold and will not be offered or sold, directly or indirectly, to the public in France and this Offering Circular, or any other offering material relating to the Securities has not been distributed or caused to be distributed and will not be distributed or caused to be distributed to the public in France, and such offers, sales and distributions have been and will be made in France only to qualified investors (investisseurs qualifiés), other than individuals all as defined in, and in accordance with, articles L.411-1, L.411-2 and D.411-1 of the French Code monétaire et financier. The offer of the Securities to the public in France will be made only in compliance with Regulation 2017/1129 (as amended) (the "Prospectus Regulation") and any applicable laws, regulations and procedures in France. This Offering Circular prepared in connection with the Securities has not been submitted to the clearance procedures of the French Autorité des marchés financiers (the "**AMF**").

Unless the approval of this Offering Circular by the Central Bank has been notified to the AMF in accordance with Article 25 of the Prospectus Regulation and all the other procedures and formalities required by French laws and regulations to permit the offering and sale of Securities in France have been carried out, an offer of Securities to the public in France has not been and will not be made.

Germany

The Securities may not be offered and sold to the public, except in accordance with the German Securities Prospectus Act (*Wertpapierprospektgesetz*) or any other laws applicable in Germany governing the issue, offering and sale of securities. This Offering Circular has not been and will not be submitted to, nor has it been nor will it be approved by, the German Federal Financial Supervisory Authority (*Bundesanstalt für*

Finanzdienstleistungsaufsicht). The Issuer has not obtained, and does not intend to obtain, a notification from the German Federal Financial Supervisory Authority or from another competent authority of a member state of the European Economic Area, with which a securities prospectus may have been filed, pursuant to Section 29(3) of the German Securities Prospectus Act. The Securities must not be distributed within Germany by way of a public offer, public advertisement or in any similar manner, and this Offering Circular and any other document relating to the Securities, as well as information contained therein, may not be supplied to the public in Germany or used in connection with any offer for subscription of Securities to the public in Germany. Consequently, in Germany, the Securities will only be available to, and this Offering Circular and any other offering material in relation to the Securities are directed only at, persons who are “qualified investors” (*qualifizierte Anleger*) within the meaning of Section 2 No. 3 of the German Securities Prospectus Act, Article 2(e) of Regulation (EU) 2017/1129 (the "**Prospectus Regulation**"). This Offering Circular and other offering materials relating to the offer of Securities are strictly confidential and may not be distributed to any person or entity other than the recipients hereof.

Hong Kong

The Securities have not been offered or sold and will not be offered or sold in Hong Kong, by means of any document, any Securities other than (a) to "professional investors" as defined in the Securities and Futures Ordinance (Cap. 571) of Hong Kong and any rules made under that Ordinance; or (b) in other circumstances which do not result in the document being a "prospectus" as defined in the Companies (Winding Up and Miscellaneous Provisions) Ordinance (Cap. 32) of Hong Kong or which do not constitute an offer to the public within the meaning of that Ordinance; and

No advertisement, invitation or document relating to the Securities, which is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted to do so under the securities laws of Hong Kong) has been issued and will not be issued whether in Hong Kong or elsewhere, other than with respect to Securities which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" as defined in the Securities and Futures Ordinance and any rules made under that Ordinance.

Republic of Italy

The offering of the Securities has not been registered pursuant to Italian securities legislation and, accordingly, no Securities may be offered, sold or delivered, nor may copies of the Offering Circular or of any other offering material relating to the Securities be distributed in the Republic of Italy, except:

(i) to qualified investors (*investitori qualificati*), as defined pursuant to Article 100 of the Legislative Decree No. 58 of 24 February 1998 (the "Consolidated Finance Act") and Article 34-*ter*, first paragraph, letter b) of CONSOB Regulation No. 11971 of 14 May 1999, as amended from time to time ("**Regulation No. 11971**"); or

(ii) in other circumstances which are exempted from the rules on public offerings pursuant to Article 100 of the Consolidated Finance Act, of Regulation No. 11971 or any other Italian laws applicable from time to time.

Any such offer, sale or delivery of the Securities or distribution of copies of the Offering Circular or any other document relating to the Securities in the Republic of Italy under paragraph (i) or (ii) must be:

(a) made by an investment firm, bank or financial intermediary permitted to conduct such activities in the Republic of Italy in accordance with the Consolidated Finance Act, the Legislative Decree No. 385 of 1 September 1993 (the "Consolidated Banking Act") and CONSOB Regulation No. 20307 of 15 February 2018 (all as amended from time to time);

(b) in compliance with Article 129 of the Consolidated Banking Act and the implementing regulations issued by the Bank of Italy, all as amended from time to time, pursuant to which the Bank of Italy may request information and impose certain reporting obligations on the issue or the offer of securities in the Republic of Italy; and

(c) in compliance with any other applicable laws and regulations or requirement imposed by CONSOB, the Bank of Italy and/or any other Italian authority.

Japan

The Securities have not been and will not be registered under the Financial Instruments and Exchange Act of Japan (Act No. 25 of 1948), as amended (the "FIEA"). Accordingly, the Securities have not been, directly or indirectly, offered or sold and will not be, directly or indirectly, offered or sold in Japan or to, or for the benefit of, a resident of Japan (which term as used herein means any person resident in Japan, including any corporation or other entity organised under the laws of Japan) or to others for re-offering or resale, directly or indirectly, in Japan or to, or for the benefit of, any resident in Japan, except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, FIEA and other relevant laws and regulations of Japan.

Jersey

No offer for subscription, sale or exchange of the Securities will be circulated in Jersey except in compliance with all applicable Jersey laws, orders and regulations, including, without limitation, the Control of Borrowing (Jersey) Order 1958.

Norway

The Securities have not been registered with the Norwegian Central Securities Depositary (the "**VPS**"). Accordingly, Securities have not been offered or sold, and will not be offered or sold, directly or indirectly, in any circumstance which would require the Securities to be registered with the VPS pursuant to Norwegian law and regulations. In addition, any offering of the Securities will comply with all laws, regulations and guidelines applicable to such offering of Securities within Norway or to or for the account or benefit of persons domiciled in or citizens of Norway.

Grand Duchy of Luxembourg

The Securities have not been offered or sold, and will not be offered or sold, directly or indirectly, to the public within the territory of the Grand-Duchy of Luxembourg ("**Luxembourg**") unless:

(a) a prospectus has been duly approved by the Commission de Surveillance du Secteur Financier (the "**CSSF**") pursuant to the Luxembourg law of 10 July 2005, on prospectuses for securities, as amended from time to time, which implements the Prospectus Directive (the "**Luxembourg Prospectus Law**") if Luxembourg is the home Member State as defined under the Luxembourg Prospectus Law;

(b) if Luxembourg is not the home Member State as defined under Luxembourg Prospectus Law, the CSSF and the European Securities and Markets Authority have been provided by the competent authority in the home Member State with a certificate of approval attesting that a prospectus in relation to the Securities has been duly approved in accordance with the Prospectus Directive and with a copy of that prospectus; or

(c) the offer of Securities benefits from an exemption from or constitutes a transaction not subject to, the requirement to publish a prospectus under the Luxembourg Prospectus Law, as amended from time to time.

Korea

The Securities have not been and will not be registered with the Financial Services Commission of Korea for public offering in Korea under the Financial Investment Services and Capital Markets Act of Korea and the decrees and regulations thereunder (collectively, the "**FSCMA**"). The Securities may not be offered, sold or delivered, directly or indirectly, or offered or sold for re-offering or resale, directly or indirectly, in Korea or to, or for the account of, any resident of Korea (as defined under the Foreign Exchange Transaction Act of Korea and the decrees and regulations thereunder (collectively, the "**Foreign Exchange Transaction Law**")), except as otherwise permitted by the applicable Korean laws and regulations, including the FSCMA and the Foreign Exchange Transaction Law.

People's Republic of China

(a) The Securities may not be offered or sold directly or indirectly within the People's Republic of China (for such purposes, not including Hong Kong and Macau Special Administrative Regions or Taiwan) ("**PRC**"). This Offering Circular, the offering material or any information contained or incorporated by reference herein does not constitute an offer to sell or the solicitation of an offer to buy any securities in the PRC. This Offering Circular, the offering material, any information contained herein or the Securities have not been, and will not be, submitted to, approved by, verified by or registered with any relevant governmental authorities in the PRC and thus may not be supplied to the public in the PRC or used in connection with any offer for the subscription or sale of the Securities in the PRC.

(b) The Securities may only be invested in by PRC investors that are authorised to engage in the investment in the Securities of the type being offered or sold. PRC investors themselves are responsible for informing themselves about and observing all legal and regulatory restrictions, obtaining all relevant governmental approvals, verifications, licences or registrations (if any) from all relevant PRC governmental authorities, including, but not limited to, the State Administration of Foreign Exchange, the People's Bank of China, the China Securities Regulatory Commission, the China Banking Regulatory Commission, the China Insurance Regulatory Commission and/or other relevant regulatory bodies, and complying with all relevant PRC regulations, including, but not limited to, any relevant PRC foreign exchange regulations and/or overseas investment regulations.

Republic of China (Taiwan)

The Securities have not been and will not be registered or filed with, or approved by, the Financial Supervisory Commission of Taiwan and/or other regulatory authority of Taiwan pursuant to relevant securities laws and regulations of Taiwan, and may not be issued, offered or sold within Taiwan through a public offering or in circumstances which constitute an offer within the meaning of the Securities and Exchange Act of Taiwan that requires a registration, filing or approval of the Financial Supervisory Commission of Taiwan and/or other regulatory authority of Taiwan. No person or entity in Taiwan has been authorised to offer or sell the Securities in Taiwan. The Securities may be made available outside Taiwan for purchase outside Taiwan by Taiwan resident investors, but may not be offered or sold in Taiwan.

Spain

The Securities may not be offered, sold or distributed in Spain to qualified investors (*inversores cualificados*) as this term is defined in Royal Decree 1310/2005 of 4 November (*Real Decreto 1310/2005, de 4 de noviembre*), and in compliance with the provisions of the Restated Text of the Spanish Securities Market Law approved by Legislative Royal Decree 4/2015 (*Real Decreto Legislativo 4/2015, de 23 de octubre, por el que se aprueba el texto refundido de la Ley del Mercado de Valores*), as amended, and further developing legislation. Neither the Securities nor this Offering Circular have been registered with the Spanish Securities Market Commission (*Comisión Nacional del Mercado de Valores*) and therefore this Offering Circular is not intended for any public offer of the Securities in Spain.

Switzerland

Securities have not been publicly offered, sold or advertised and will not be publicly offered, sold or advertised, directly or indirectly, in, into or from Switzerland and any offering or marketing material relating to the Securities does not constitute a prospectus as such term is understood pursuant to article 652a or article 1156 of the Swiss Code of Obligations or a listing prospectus within the meaning of the listing rules of the SIX Swiss Exchange or any other regulated trading facility in Switzerland, and any offering or marketing material relating to the Securities may not be publicly distributed or otherwise made publicly available in Switzerland.

United Arab Emirates (excluding the Dubai International Financial Centre)

The Securities have not been and will not be offered, sold or publicly promoted or advertised by it in the UAE other than in compliance with any laws applicable in the UAE governing the issue, offering and sale of securities.

Dubai International Financial Centre

The Securities have not been offered and will not be offered to any person in the Dubai International Financial Centre unless such offer is:

(a) an "**Exempt Offer**" in accordance with the Markets Rules (MKT) Module of the Dubai Financial Services Authority (the "**DFSA**"); and

(b) made only to persons who meet the "**Professional Client**" criteria set out in Rule 2.3.3 of the DFSA Conduct of Business Module.

GENERAL INFORMATION

Listing

1. Application has been made for the listing of the Securities on the Official List of the Singapore Exchange Securities Trading Limited ("**SGX-ST**"). The Securities will be traded on the SGX-ST in a minimum board lot size of the EUR equivalent of SGD 200,000 for so long as such Securities are listed on the SGX-ST. The SGX-ST assumes no responsibility for the correctness of any of the statements made or opinions expressed or reports contained herein. Admission to the Official List of the SGX-ST and quotation of any Securities on the SGXST is not to be taken as an indication of the merits of the Issuer, its Subsidiaries or the Securities.

2. For so long as the Securities are listed on the SGX-ST and the rules of the SGX-ST so require, the Issuer will appoint and maintain a paying agent in Singapore, where the Securities may be presented or surrendered for payment or redemption, in the event that a Global Security is exchanged for Definitive Securities. In addition, in the event that a Global Security is exchanged for Definitive Securities, an announcement of such exchange will be made by or on behalf of the Issuer through the SGX-ST and such announcement will include all material information with respect to the delivery of the Definitive Securities, including details of the paying agent in Singapore.

Authorisation

3. The creation and issue of the Securities has been authorised by the Finance Committee, as authorised by the board of directors of the Issuer, in resolutions adopted on 9 July 2019.

Legal and Arbitration Proceedings

4. There are no governmental, legal or arbitration proceedings, (including any such proceedings which are pending or threatened, of which the Issuer is aware), which may have, or have had during the 12 months prior to the date of this Offering Circular, a significant effect on the financial position or profitability of the Issuer or the Group.

Significant/Material Change

5. Since 30 September 2018 there has been no material adverse change in the prospects of the Issuer or the Group nor any significant change in the financial or trading position of the Issuer or the Group.

Auditors

6. The consolidated financial statements of the Issuer have been audited without qualification for the years ended 30 September 2018 and 30 September 2017 by PricewaterhouseCoopers, avenue Giuseppe-Motta 50, CH-1211 Geneva 2, Switzerland, independent auditors.

Documents on Display

7. Copies of the following documents may be inspected during normal business hours at the offices of Trafigura Group Pte. Ltd. at 10 Collyer Quay, #29-00 Ocean Financial Centre, Singapore 049315, Singapore for six months from the date of this Offering Circular:

   (a) the articles of association of the Issuer;

   (b) the Agency Agreement and the Trust Deed; and

   (c) this Offering Circular.

ISIN and Common Code

8. Unrestricted Securities: The ISIN is XS2033327854 and the common code is 203332785.

9. Restricted Securities: The ISIN is XS2034073606 and the common code is 203407360.

The Legal Entity Identifier

10. The Legal Entity Identifier (LEI) code of the Issuer is 549300HJ8VS88NIO3006.

FINANCIAL STATEMENTS AND AUDITORS' REPORTS

Contents

Trafigura Group Pte. Ltd.
Unaudited Condensed Consolidated Financial Statements
for the six month period ended
31 March 2019

INDEX

A. Interim condensed statement of income

For the six-month period ended 31 March

	Note	2019	2018
		USD'M	USD'M
Revenue	4	**86,296.5**	86,934.9
Cost of sales		**(84,824.9)**	(85,955.9)
Gross profit	4	**1,471.6**	979.0
Other income/(expenses)	7	**(67.9)**	43.6
General and administrative expenses		**(510.0)**	(447.4)
Results from operating activities		**893.7**	575.2
Finance income		**405.2**	315.2
Finance expense		**(721.4)**	(562.2)
Net financing costs		**(316.2)**	(247.0)
Share of profit/(loss) of equity-accounted investees	11	**(64.1)**	(26.0)
Profit before tax		**513.4**	302.2
Income tax expense	8	**(87.7)**	(80.4)
Profit for the period		**425.7**	221.8
Profit attributable to:			
Owners of the Company		**417.4**	207.4
Non-controlling interests		**8.3**	14.4
Profit for the period		**425.7**	221.8

See accompanying notes

B. Interim condensed statement of other comprehensive income

For the six-month period ended 31 March

	Note	2019	2018
		USD'M	USD'M
Profit for the period		**425.7**	221.8
Other comprehensive income			
Items that are or may be reclassified to profit or loss:			
Gain/(loss) on cash flow hedges	20	**(19.9)**	(18.4)
Tax on other comprehensive income	20	**0.4**	1.9
Exchange gain/(loss) on translation of foreign operations		**(3.3)**	3.6
Share of comprehensive income/(loss) from associates		**26.7**	(33.6)
Items that will not be reclassified to profit or loss:			
Net change in fair value through other comprehensive income		**(0.3)**	5.5
Other comprehensive income for the period net of tax		**3.6**	(41.0)
Total comprehensive income for the period		**429.3**	180.8
Total comprehensive income attributable to:			
Owners of the Company		**421.1**	166.4
Non-controlling interests		**8.2**	14.4
Total comprehensive income for the period		**429.3**	180.8

See accompanying notes

C. Interim condensed consolidated statement of financial position

	Note	31 March 2019 USD'M	30 September 2018 USD'M
Assets			
Property, plant and equipment	9	**1,985.9**	1,900.1
Intangible assets	10	**166.9**	173.4
Equity-accounted investees	11	**3,333.2**	3,361.2
Prepayments	12	**752.7**	595.9
Loans receivable	13	**432.9**	485.5
Other investments	14	**798.1**	715.9
Derivatives	24	**279.2**	338.6
Deferred tax assets	8	**172.8**	171.2
Other non-current assets	15	**346.1**	1,094.6
Total non-current assets		**8,267.8**	8,836.4
Inventories		**14,898.6**	14,732.9
Trade and other receivables	16	**22,381.9**	19,951.7
Derivatives	24	**685.0**	569.0
Prepayments	12	**4,294.9**	3,063.7
Income tax receivable	8	**58.0**	40.0
Other current assets	18	**518.1**	849.5
Deposits	19	**369.5**	334.4
Cash and cash equivalents	19	**4,566.3**	5,355.8
Total current assets		**47,772.3**	44,897.0
Non current assets classified as held for sale		**66.2**	67.6
Total assets		**56,106.3**	53,801.0
Equity			
Share capital	20	**1,503.7**	1,503.7
Capital securities	20	**807.3**	953.6
Reserves	20	**(761.4)**	(765.3)
Retained earnings	20	**4,674.1**	4,229.4
Equity attributable to the owners of the Company		**6,223.7**	5,921.4
Non-controlling interests		**334.2**	328.7
Total group equity		**6,557.9**	6,250.1
Liabilities			
Loans and borrowings	21	**8,451.5**	8,462.1
Derivatives	24	**221.2**	275.9
Provisions		**51.6**	63.8
Other non-current liabilities		**56.5**	–
Deferred tax liabilities	8	**190.3**	173.3
Total non-current liabilities		**8,971.1**	8,975.1
Current tax liabilities	8	**158.2**	176.3
Loans and borrowings	21	**24,275.2**	23,741.6
Trade and other payables	22	**15,355.0**	13,809.2
Other current liabilities		**42.2**	–
Derivatives	24	**746.7**	848.7
Total current liabilities		**40,577.3**	38,575.8
Total group equity and liabilities		**56,106.3**	53,801.0

See accompanying notes

D. Interim condensed consolidated statement of changes in equity

For the six-month period ended 31 March

USD'000	Note	Equity attributable to the owners of the Company: Share capital	Currency translation reserve	Revaluation reserve	Cash flow hedge reserve	Capital Securities	Retained earnings	Profit for the year	Total	Non-controlling interest	Total Group equity
Balance at 1 October 2018		1,503,722	(694,795)	(22,432)	(48,080)	953,556	3,380,171	849,217	5,921,359	328,699	6,250,058
Profit for the period		–	–	–	–	–	–	417,440	417,440	8,235	425,675
Other comprehensive income		–	(6,805)	(278)	10,707	–	–	–	3,624	(7)	3,617
Total comprehensive income for the period		–	(6,805)	(278)	10,707	–	–	417,440	421,064	8,228	429,292
Profit appropriation		–	–	–	–	–	849,217	(849,217)	–	–	–
Dividend		–	–	–	–	–	–	–	–	(5,400)	(5,400)
Transfer revaluation reserve to retained earnings FVOCI instruments		–	–	304	–	–	(304)	–	–	–	–
Share based payments	25	–	–	–	–	–	70,545	–	70,545	–	70,545
Capital securities issued	20	–	–	–	–	–	–	–	–	–	–
Repayment of capital securities		–	–	–	–	(147,995)	–	–	(147,995)	–	(147,995)
Capital securities (currency translation)		–	–	–	–	1,689	(1,689)	–	–	–	–
Capital securities dividend		–	–	–	–	–	(31,663)	–	(31,663)	–	(31,663)
Share of other changes in equity of associates		–	–	–	–	–	(9,617)	–	(9,617)	–	(9,617)
Other		–	–	–	–	–	(15)	–	(15)	2,718	2,703
Balance at 31 March 2019		**1,503,722**	**(701,600)**	**(22,406)**	**(37,373)**	**807,250**	**4,256,645**	**417,440**	**6,223,678**	**334,245**	**6,557,923**

See accompanying notes

USD'000	Note	Equity attributable to the owners of the Company: Share capital	Currency translation reserve	Revaluation reserve	Cash flow hedge reserve	Capital Securities	Retained earnings	Profit for the year	Total	Non-controlling interest	Total Group equity
Balance at 1 October 2017		1,503,722	(525,723)	(32,626)	(47,743)	1,247,318	3,052,784	847,710	6,045,442	339,367	6,384,809
Profit for the period		–	–	–	–	–	–	207,413	207,413	14,358	221,771
Other comprehensive income		–	(36,587)	5,458	(9,839)	–	–	–	(40,968)	7	(40,961)
Total comprehensive income for the period		–	(36,587)	5,458	(9,839)	–	–	207,413	166,445	14,365	180,810
Profit appropriation		–	–	–	–	–	847,710	(847,710)	–	–	–
Dividend		–	–	–	–	–	–	–	–	(25,000)	(25,000)
Acquisition of non-controlling interest in subsidiary		–	–	–	–	–	–	–	–	2,694	2,694
Share based payments	25	–	–	–	–	–	47,592	–	47,592	–	47,592
Capital securities issued	20	–	–	–	–	207,250	(1,423)	–	205,827	–	205,827
Capital securities (currency translation)		–	–	–	–	5,178	(5,178)	–	–	–	–
Capital securities dividend		–	–	–	–	–	(50,369)	–	(50,369)	–	(50,369)
Share of other changes in equity of associates		–	–	–	–	–	1,787	–	1,787	–	1,787
Balance at 31 March 2018		**1,503,722**	**(562,310)**	**(27,168)**	**(57,582)**	**1,459,746**	**3,892,903**	**207,413**	**6,416,724**	**331,426**	**6,748,150**

See accompanying notes

E. Interim condensed consolidated statement of cash flows

For the six-month period ended 31 March

	Note	2019 USD'M	2018 USD'M
Cash flows from operating activities			
Profit before tax		**513.4**	302.2
Adjustments for:			
Depreciation	9	**52.8**	67.3
Amortisation of intangible assets	10	**24.9**	28.5
Provisions		**(3.7)**	(10.4)
Gain/(loss) on fair value through profit and loss instruments	14	**(6.0)**	(25.5)
Impairments/(reversal) of impairments of financial assets	14	**(1.7)**	(0.4)
Impairment losses on non-financial fixed assets	7	**19.7**	–
Impairment losses on equity-accounted investees	11	**34.5**	0.2
Net finance costs		**316.2**	247.0
Share of (profit)/loss of equity-accounted investees	11	**64.1**	26.0
(Gain)/loss on sale of non-financial fixed assets	7	**(2.7)**	0.4
(Gain)/loss on sale of equity accounted investees	7	**(1.5)**	(0.3)
(Gain)/loss on sale of other investments	7	**(1.5)**	(0.1)
(Gain)/loss on divestments of subsidiaries	7	**–**	(2.9)
Revaluation gain on remeasurement of retained interest		**(0.3)**	–
Equity-settled share-based payment transactions	25	**70.5**	49.1
Operating cashflow before working capital changes		**1,078.7**	681.1
Changes in:			
Inventories		**(165.7)**	(700.8)
Trade and other receivables and derivatives		**(1,633.0)**	(3,421.6)
Prepayments		**(1,405.0)**	(512.0)
Trade and other payables and derivatives		**1,426.0**	1,829.5
Cash generated from/(used in) operating activities		**(699.0)**	(2,123.8)
Interest paid		**(731.9)**	(567.8)
Interest received		**403.3**	306.7
Dividends (paid)/received		**–**	20.7
Tax (paid)/received		**(107.0)**	(73.9)
Net cash from/(used in) operating activities		**(1,134.6)**	(2,438.1)
Cash flows from investing activities:			
Acquisition of property, plant and equipment	9	**(80.3)**	(90.9)
Proceeds from sale of property, plant and equipment	9	**3.0**	25.8
Acquisition of intangible assets	10	**(19.0)**	(16.7)
Acquisition of equity accounted investees	11	**(66.5)**	(73.5)
Disposal of equity accounted investees		**–**	9.6
Loans receivables and advances provided	12/13	**(4.4)**	(46.1)
Repayment of loans receivable and advances	12/13	**–**	140.6
Acquisition of other investments	14	**(85.7)**	(70.1)
Disposal of other investments	14	**8.4**	40.6
Acquisition of subsidiaries, net of cash acquired		**3.2**	–
Disposal of subsidiaries, net of cash disposed of	6	**236.3**	18.5
Net cash from/(used in) investing activities		**(5.0)**	(62.2)
Cash flows from financing activities:			
Proceeds from the issue of capital securities		**–**	205.8
Payment of capital securities dividend		**(33.1)**	(24.8)
Repayment of capital securities	20	(148.0)	–
Dividend non-controlling interest		(1.4)	–
Proceeds from capital contributions to subsidiaries by non-controlling interests		**2.7**	2.7
Net proceeds from long-term loans and borrowings	21	**(946.1)**	734.7
Payment of finance lease liabilities	21	**(5.9)**	(5.2)
Increase of short-term bank financing	21	**1,481.9**	1,183.8
Net cash from/(used in) financing activities		**350.1**	2,097.0
Net increase/(decrease) in cash and cash equivalents		**(789.5)**	(403.3)
Cash and cash equivalents at 1 October	19	**5,355.8**	4,988.7
Cash and cash equivalents at 31 March (note 19)		**4,566.3**	4,585.4

See accompanying notes

F. Notes to the interim condensed consolidated financial statements

1. Corporate information

The principal business activities of Trafigura Group Pte. Ltd. (the 'Company') and together with its subsidiaries (the 'Group') are trading in crude and petroleum products, non-ferrous concentrates, refined metals and bulk commodities such as coal and iron ore. The Group also invests in assets, including through investments in associates, which have strong synergies with its core trading activities. These include storage terminals, service stations, metal warehouses and mines.

The Company is incorporated in Singapore and its principal business office is at 10 Collyer Quay, Ocean Financial Centre, #29-00, Singapore, 049315.

The immediate and ultimate holding companies of the Company are Trafigura Beheer B.V. and Farringford N.V., respectively. Trafigura Beheer B.V. is incorporated in The Netherlands and Farringford N.V. is incorporated in Curaçao.

The interim condensed consolidated financial statements for the six months period ended 31 March 2019 were authorised for issue by the Board of Directors on 11 June 2019.

2. Statement of compliance

The interim condensed consolidated financial statements for the six-month period ended 31 March 2019 have been prepared in accordance with IAS 34 Interim Financial Reporting as issued by the International Accounting Standards Board (IASB).

The interim condensed consolidated financial statements do not include all the information and disclosures required in the annual financial statements and should be read in conjunction with the Group's annual consolidated financial statements as at 30 September 2018. The interim condensed consolidated financial statements have not been audited.

The interim condensed consolidated financial statements have been prepared under the historical cost convention except for inventories, derivatives and certain other financial instruments that have been measured at fair value. The interim condensed consolidated financial statements have been prepared on a going concern basis.

a. Functional and presentation currency

The Group's presentation currency is the US dollar (USD) and all values are rounded to the nearest tenth of a million (USD'M 0.1) except when otherwise indicated. The US dollar is the functional currency of most of the Group's principal operating subsidiaries. Most of the markets in which the Group is involved are USD denominated.

3. Basis of preparation

The accounting policies adopted in the preparation of the interim condensed consolidated financial statements are consistent with those followed in the preparation of the Group's annual consolidated financial statements for the year ended 30 September 2018.

4. Operating segments

The following tables present revenue and profit information about the Group's reportable segments for the six-month period ended 31 March 2019 and 2018 respectively:

2019	Oil and Petroleum USD'M	Metals and Minerals USD'M	All other segments USD'M	Total USD'M
Revenue from external customers	57,985.8	28,310.7	–	86,296.5
Gross profit	**1,035.0**	**436.6**	**–**	**1,471.6**
Profit for the period	**–**	**–**	**–**	**425.7**
Total segment assets	**–**	**–**	**–**	**56,106.3**
Total segment liabilities	**–**	**–**	**–**	**49,548.4**

2018	Oil and Petroleum USD'M	Metals and Minerals USD'M	All other segments USD'M	Total USD'M
Revenue from external customers	60,312.9	26,622.0	–	86,934.9
Gross profit	**298.9**	**680.1**	**–**	**979.0**
Profit for the period	**–**	**–**	**–**	**221.8**
Total segment assets	**–**	**–**	**–**	**52,760.6**
Total segment liabilities	**–**	**–**	**–**	**46,012.4**

The basis of segmentation of the Company has not changed compared to the annual consolidated financial statements.

5. Acquisitions of subsidiaries and non-controlling interests

Half year 2019

There were no significant acquisitions of subsidiaries and non-controlling interest during the six-month period ended 31 March 2019.

Financial year 2018

On 9 May 2018, the Group completed the acquisition of the majority of the downstream business of Pampa Energia S.A. The acquired business included various legal entities, in which the Group acquired 100 percent of the shares, as well as certain assets. The business acquired predominantly included a refinery and service stations.

The results of the acquired business are consolidated as from acquisition date, contributing an amount of over USD200 million to the consolidated revenue for the year.

6. Deconsolidation of subsidiaries

Half year 2019

There were no significant deconsolidations of subsidiaries and non-controlling interest during the six-month period ended 31 March 2019.

Financial year 2018

During the financial year 2018, the Group incorporated Simba Holding S.à.r.l. ('Simba') in Luxembourg. Following an internal restructuring, Simba became the ultimate parent company of some of the Impala entities (all the entities that were transferred to Simba were consolidated for 100 percent in the 2017 financial statements).

On 27 September 2018, following the investment from an external investor into Simba, the Group's shareholding was reduced to 50 percent. In exchange for the decrease in its shareholding, the Group received a total consideration of USD247.9 million, which has been recorded as a receivable from related parties as of 30 September 2018. These funds have been received in December 2018.

On 27 September 2018, the new governance structure of Simba became effective. The Group has no longer the power, directly or indirectly, to govern the financial and operational policies of Simba. As a consequence, the Group entities which are now included in the group headed by Simba have been deconsolidated from the Group's consolidated financial statements as per 30 September 2018. The Group's remaining stake in Simba has been remeasured at fair value and recorded as a joint venture as from 30 September 2018.

7. Other income and expense

	2019 USD'M	2018 USD'M
Release/(additions) to provisions	**3.7**	(0.2)
Gain/(loss) on disposal of tangible and intangible fixed assets	**2.7**	(0.4)
Gain/(loss) from disposal of other investments	**–**	0.1
Gain/(loss) on sale of equity-accounted investees	**1.5**	0.3
Gain on divestment of subsidiaries	**(0.2)**	2.9
Revaluation gain on remeasurement on retained interest	**0.3**	–
Gain/(loss) on fair value through profit and loss instrument	**6.0**	25.5
Impairments of financial assets	**1.8**	0.4
Impairments/reversal of impairement of non-financial assets	**(19.7)**	–
Impairments of equity-accounted investees	**(34.5)**	(0.2)
Dividend income	**–**	0.5
Gain/(loss) on foreign exchange	**(26.8)**	5.5
Other	**(2.8)**	9.2
Total	**(67.9)**	43.6

The impairment on non-financial assets includes an impairment of USD17.3 million on a prepayment related to Nyrstar NV. This is part of the financial restructuring and recapitalisation of Nyrstar NV. This financial restructuring and recapitalisation also led to the impairment of the carrying value of USD34.5 million of our equity accounted stake in Nyrstar NV. (see also note 27).

In 2018 other income and expenses were impacted by the gain on fair value instruments through profit and loss and includes a fair value movement of the debt securities related to the investment in Porto Sudeste de Brasil SA of USD25.9 million. Category 'Other' includes a gain of USD11.9 million related to the revaluation of an option on debt securities related to the investment in Porto Sudeste de Brasil SA.

8. Income tax

The major components of the income tax expense in the interim condensed consolidated statement of income for the six-month period ended 31 March 2019 and 2018 respectively are:

	2019 USD'M	2018 USD'M
Current income tax expense	**71.8**	81.6
Adjustments in relation to current income tax of previous period	**0.9**	(3.4)
Deferred tax expense/(income)	**16.1**	(1.6)
Withholding tax in the current period	**(1.1)**	3.8
Total	**87.7**	80.4

F. Notes to the interim condensed consolidated financial statements

9. Property, plant and equipment

USD'M	Land and buildings	Machinery and equipment	Barges and vessels	Other fixed assets	Total
Cost					
Balance at 1 October 2018	883.8	712.3	611.3	611.6	2,819.0
Additions	4.4	5.4	11.9	62.0	83.7
Reclassifications	21.9	1.2	36.5	(24.1)	35.5
Effect of movements in exchange rates, including hyperinflation adjustment	23.9	1.4	–	1.5	26.8
Disposals	(3.9)	(0.5)	–	(12.4)	(16.8)
Balance at 31 March 2019	**930.1**	**719.8**	**659.7**	**638.6**	**2,948.2**
Depreciation and impairment losses					
Balance at 1 October 2018	256.5	279.3	141.9	241.2	918.9
Depreciation for the period	15.2	12.6	16.2	8.8	52.8
Impairment losses	1.1	0.4	–	–	1.5
Reclassifications	1.4	(0.7)	(0.7)	–	–
Effect of movements in exchange rates, including hyperinflation adjustment	2.7	0.3	–	0.2	3.2
Disposals	(2.4)	(0.4)	–	(11.3)	(14.1)
Balance at 31 March 2019	**274.5**	**291.5**	**157.4**	**238.9**	**962.3**
Net book value at 31 March 2019	**655.6**	**428.3**	**502.3**	**399.7**	**1,985.9**

Acquisitions in the first half year of 2019 amounted to USD83.7 million, relating to investments in various individually smaller projects. Disposals amounted to USD2.7 million.

Included in the Other fixed assets category is assets under construction, which relates to assets not yet in use. Total balance at 31 March 2019 amounted to USD308.0 million (30 September 2018: USD265.9 million). Once the assets under construction come into operation they are reclassified to the appropriate asset category and from that point they are depreciated.

Depreciation expenses are included in general and administrative expenses. Impairment charges are included in other income and expense.

10. Intangible fixed assets

USD'M	Goodwill	Licences	Other intangible assets	Total
Cost				
Balance at 1 October 2018	8.1	32.0	407.3	447.4
Additions	–	–	18.9	18.9
Effect of movements in exchange rates, including hyperinflation adjustment	–	(1.3)	0.8	(0.5)
Disposals	–	(1.2)	(3.1)	(4.3)
Balance at 31 March 2019	**8.1**	**29.5**	**423.9**	**461.5**
Amortisation and impairment losses				
Balance at 1 October 2018	2.2	2.0	269.8	274.0
Amortization for the period	–	0.1	24.8	24.9
Disposals	–	(1.2)	(3.1)	(4.3)
Balance at 31 March 2019	**2.2**	**0.9**	**291.5**	**294.6**
Net book value at 31 March 2019	**5.9**	**28.6**	**132.4**	**166.9**

11. Equity accounted investees

	31 March 2019 USD'M	30 September 2018 USD'M
Opening Balance	**3,361.2**	3,487.9
Effect of movements in exchange rates	**(3.9)**	(98.6)
Additions	**71.6**	101.2
Fair value of retained interest in deconsolidated subsidiaries	**–**	261.1
Disposals	**0.4**	(272.3)
Impairments	**(34.5)**	(72.7)
Share of net income/(loss)	**(64.1)**	17.4
Dividends received	**(18.6)**	(50.4)
Other	**21.1**	(12.4)
Closing Balance	**3,333.2**	3,361.2

Half year 2019

During the first half year of 2019, the additions to equity accounted investees amounted to USD71.6 million. In October 2018 and January 2019, the Group participated for its share in an equity contribution in Tendril Ventures Pte. resulting in an additional investment of USD30.2 million. Other main additions relate to a new investment in a natural gas and power company focusing on the Italian market of USD11.4 million and various smaller investments in existing equity accounted investees. The share of net income from investments amounts to a loss of USD64.1 million. This is predominantly the result of losses in Puma, Porto Sudeste and Tendril Ventures (Nayara Energy Ltd.) of USD104.3 million, partly offset by profits from MATSA, Empresa Minera del Caribe and Simba of USD35.1 million.

In relation to the restructuring of Nyrstar N.V, the group impaired the carrying value of the equity investment in Nyrstar of USD 34.5 million.

Other predominately includes the positive movements on cash flow hedges of equity accounted investees.

Financial year 2018

The additions to equity accounted investees amounted to USD101.2 million. In November 2017, the Group participated for its share in an equity placement of Nyrstar resulting in an additional investment of USD28.8 million. Other main additions relate to further investments in Porto Sudeste of USD17.8 million, an iron ore mine in Brazil of USD14.2 million, and investments in Tendril Ventures Pte Ltd of USD13.9 million.

The fair value of retained interests in deconsolidated subsidiaries of USD261.1 million predominantly relates to the recognition of the fair value of the retained interest in Simba Holding S.a r.l. as disclosed in note 6.

The Group sold its 20 percent interest in Buckeye Texas Partners LLC to Buckeye Texas Partners Holdings LLC in April 2018. The book value of the investment at the moment of the sale amounted to USD263.9 million, which is included in the Disposals line.

The Group's share of results in its equity-accounted investees for the year amounted to a gain of USD17.4 million. This result includes the positive share in the income of MATSA and Puma Energy of USD84.4 million and losses in Porto Sudeste and Tendril Ventures of USD107.9 million.

The Group performs a periodic assessment of whether there is an indication of asset impairment or whether a previously recorded impairment may no longer be required. The Group decided that due to Nyrstar's exposure to adverse market conditions, most notably a decline in zinc prices compounded with historically low zinc treatment charges, coupled with concerns about financial liabilities maturing in 2019, an impairment of USD72 million was required to reduce Trafigura's equity investment in Nyrstar to USD35 million.

12. Prepayments

Under the prepayments category we account for the prepayments of commodity deliveries. Out of the total current prepayments balance of USD4.3 billion (30 September 2018: USD3.1 billion), an amount of USD0.7 billion (30 September 2018: USD0.9 billion) relates to prepayments which are made for specifically identified cargoes. The contractually outstanding prepayments amount decreases in size with each cargo that is delivered, until maturity. Once the contractually agreed total cargo has been fully delivered, the prepayment agreement falls away leaving no remaining contractual obligations on Trafigura or the supplier. The Company monitors the commodity prices in relation to the prepayment contracts and manages the credit risk together with its financial assets as described in note 24. The prepayments are split in non-current prepayments (due > 1 year) and current prepayments (due < 1 year). A portion of the long-term prepayments, as well as short-term prepayments, is on a limited recourse basis. Interest on the prepayments is added to the prepayment balance.

F. Notes to the interim condensed consolidated financial statements

13. Loans and other receivables

	31 March 2019 USD'M	30 September 2018 USD'M
Loans to associates and related parties	**304.5**	305.9
Other non-current loans receivable	**128.4**	179.6
Total	**432.9**	485.5

Loans to associates and related parties include a loan receivable from Empresa Minera del Caribe S.A. of USD289.6 million (30 September 2018: USD297.5 million). This loan relates to funding for the construction of a mine and related assets in Cuba, with repayments starting from April 2018.

Other non-current loans receivables include various loans which are granted to counterparties which the Group trades with. This line includes the long-term part of a debt agreement with the Angolan Ministry of Finance of USD70.8 million (30 September 2018: USD120.3 million), which relates to compensation for iron ore investments made by the Group following the liquidation of a consolidated Angolan subsidiary in 2016. During the year, USD49.5 million was reclassified to short term loans based on a payment plan established with the Angolan Ministry of Finance with repayment in full by end of 2020. Due to ongoing liquidity constraints within Angola for foreign currencies, the loan is in arrears. The Group continues to expect all amounts will be collected within the timeframe defined in the agreed payment plan.

The other non-current loans receivable also include a loan with a balance of USD38.6 million provided to PT Titan Infra Energy ('Titan'), the buyer of our 46.5 percent share in PT Servo Meda Sejahtera which was sold on 31 July 2017. This amount resulted from a debt refinancing by Titan during 2018, through which the prior year vendor loan receivable granted by the Group of USD70.1 million was repaid in full. As part of the refinancing the Group participated as lender within a consortium that provided a facility to Titan, resulting in the USD38.6 million loan receivable per 31 March 2019 (30 September 2018: USD39.9 million).

Based upon the individual analysis of these loans, the recorded expected losses on these loans amount to USD4.7 million (2018: USD4.6 million).

14. Other investments

Investments included in the balance sheets per 31 March 2019 and 30 September 2018 can be broken down as follows:

	31 March 2019 USD'M	30 September 2018 USD'M
Listed equity securities – Fair value through OCI	**26.3**	10.2
Listed equity securities – Fair value through profit and loss	**27.6**	44.6
Listed debt securities – Fair value through profit or loss	**490.1**	466.3
Unlisted equity investments – Fair value through profit and loss	**62.7**	31.6
Unlisted equity investments – Fair value through OCI	**191.4**	163.2
Total	**798.1**	715.9

The Group's long-term investments consist of listed equity securities, listed debt securities and unlisted equity securities. The listed equity securities have no fixed maturity or coupon rate. The fair values of listed equity investments are based on quoted market prices while the fair value of the unlisted equity securities is determined based on a Level 3 valuation as prepared by management.

The decrease of USD16 million in listed equity securities is mainly due to revaluation of Nostrum Oil & Gas shares of USD16 million. The listed debt securities increased by USD23.8 million due to the upward valuation of the debt instrument related to Porto Sudeste of USD23.8 million (2018: USD18.7 million). The increase in the unlisted equity investments of USD59.4 million mainly relates to investments in Galena Multi Strategy Fund, Galena Private Equity Fund and Tamarind Resources for a total of USD82.2 million.

15. Other non-current assets

As at 31 March 2019, the other non-current assets amounted to USD346.1 million (2018: USD1,094.6 million). The majority of this balance, amounting to USD327.8 million (2018: USD1,073.9 million), relates to the non-current part of the non-financial hedged items which are disclosed in note 24h.

16. Trade and other receivables

	31 March 2019	30 September 2018
	USD'M	USD'M
Trade debtors	**9,067.5**	8,722.8
Provision for bad and doubtful debts	**(43.9)**	(56.1)
Accrued turnover	**9,030.1**	7,472.3
Broker balances	**945.5**	789.9
Other debtors	**352.1**	388.8
Loans to third parties	**565.3**	447.3
Loans to related parties	**33.9**	6.3
Other taxes	**628.7**	570.8
Related parties	**1,802.7**	1,609.6
Total	**22,381.9**	19,951.7

All financial instruments included in trade and other receivables are held to collect the contractual cash flows except for those subject to certain dedicated financing facilities which would be held for collection of contractual cash flows and for selling the financial asset. Furthermore, the cash flows that the Group receives on these instruments are solely payments of principal and interest.

Trafigura entered into a number of dedicated financing facilities, which finance a portion of its receivables. Part of these facilities meet the criteria of derecognition of the receivables according to IFRS. As per 31 March 2019 an amount of USD1,986.5 million (30 September 2018 USD3,263.3 million) of trade debtors has been discounted. Of this amount, USD1,683.9 million (30 September 2018 USD2,903.3 million) has been derecognised, as Trafigura has transferred substantially all the risks and rewards of ownership of the financial asset with non-recourse. The remaining part of discounted receivables which does not meet the criteria for derecognition amounting to USD302.5 million (30 September 2018: USD360.0 million), remains in the balance of trade debtors. For the received amount of cash of these items the company has recognised a liability under current loans and borrowings.

Of the USD9,067.5 million trade debtors, USD3,620.3 million had been sold on a non-recourse basis under the securitisation programme (30 September 2018: USD3,693.8 million). Of the USD1,802.7 million receivables on related parties, USD762.3 million had been sold on a non-recourse basis under the securitisation programme (30 September 2018: USD719.6 million). Refer to note 17.

As at 31 March 2019, 14.0 percent (2018: 10.6%) of receivables were between 1-60 days overdue, and 7.0 percent (2018: 9.2%) were greater than 60 days overdue. Trafigura applied the simplified method in assessing expected credit losses. The accounts receivables have been divided in aging buckets and based on a historical analysis on defaults and recovery rates, a percentage for expected credit losses has been determined. Trafigura manages to limit credit losses by renegotiating contracts in the case of a default. From the above analysis, an expected credit loss as at 31 March 2019 amounted to USD3.0 million (30 September 2018 USD4.9 million) has been taken into account. The loss allowance provision at 31 March 2019 amounts to USD43.9 million (2018: USD56.1 million). The provision mostly relates to demurrage claims and commercial disputes with our clients. Accrued turnover represents receivable balances for sales which have not yet been invoiced. They have similar risks and characteristics as trade debtors. Trade debtors and accrued turnover have similar cashflow characteristics and are therefore considered to be a homogeneous group of financial assets.

17. Securitisation Programmes

The Group operates various securitisation programmes: Trafigura Securitisation Finance plc. (TSF) enables the Group to sell eligible receivables and Trafigura Commodities Funding Pte. Ltd. (TCF) enables Trafigura to sell and repurchase eligible inventories. Those securitisation vehicles are consolidated and consequently the securitised receivables and inventories are included within the consolidated trade debtor and inventory balances. Over time the external funding of TSF has increased significantly in size while incorporating a longer term committed funding element, principally through the issuance of Medium Term Notes (MTN) and Variable Funding Notes (VFN) purchased by bank sponsored conduits. The available external funding of the securitisation programme consists of:

Receivables securitisation

	Interest rate	Maturity	31 March 2019	30 September 2018
			USD'M	USD'M
TSF AAA MTN	Libor + 0.85%	2020 – June	**235.0**	235.0
TSF AAA MTN	2.47%	2020 – June	**230.0**	230.0
TSF BBB MTN	Libor + 1.70%	2020 – June	**35.0**	35.0
TSF AAA MTN	Libor +0.73%	2021 – September	**185.0**	185.0
TSF AAA MTN	3.73%	2021 – September	**280.0**	280.0
TSF BBB MTN	4.33%	2021 – September	**35.0**	35.0
TSF AAA VFN	See note	Various throughout the year	**2,818.2**	2,973.1
TSF BBB VFN	See note	Various throughout the year	**211.9**	223.6
TSF senior subordinated debt	Libor + 4.25%	2020 – March	**111.0**	108.3
Total			**4,141.1**	4,305.0

As at 31 March 2019, the maximum available amount of external funding was USD4,141.1 million (2018: USD4,305.0 million) for the receivable securitisation programme. The utilised external funding of the programme as at 31 March 2019 was USD4,134.8 million (2018: USD4,294.0 million).

a. Interest rate

The rate of interest applied to the AAA Variable Funding Notes is defined in the securitisation facility documentation and is principally determined by the demand for commercial paper issued by eight bank-sponsored conduits. The Group benchmarks the rate provided against 1-week Libor. In the case of the rate of interest applicable to the BBB Variable Funding Notes, the rate of interest is principally determined by the liquidity of the interbank market. The rate of interest applied to the VFN and MLF under the inventories securitisation is defined in the facility documentation.

b. Maturity

The maturity of the AAA and BBB Variable Funding Notes has been staggered to diversify the maturity profile of the notes. This aims to mitigate the 'liquidity wall' risk associated with a single maturity date for a significant funding amount.

Inventory securitisation

	Interest rate	Maturity	31 March 2019 USD'M	30 September 2018 USD'M
TCF VFN	See note	2018 – November	–	470.0
TCF MLF	See note	2018 – November	–	45.0
TCF VFN	See note	2019 – November	**410.0**	–
TCF MLF	See note	2019 – November	**40.0**	–
Total			**450.0**	515.0

As at 31 March 2019, the maximum available amount of external funding was USD450.0 million (2018: USD515.0 million) for the inventory securitisation programme. The utilised external funding of the programme as at 31 March 2019 was USD158.5 million (2018: USD239.1 million).

18. Other current assets

	31 March 2019 USD'M	30 September 2018 USD'M
Non-financial hedged items	**354.3**	675.6
Prepaid expenses	**163.8**	173.9
Total	**518.1**	849.5

The non-financial hedged items balance of USD354.3 million (2018: USD675.6 million) fully relates to the current part of the non-financial hedged items, refer to note 24h for further information. Prepaid expenses relate to prepayments other than those made for physical commodities.

19. Cash and cash equivalents

Cash at bank earns interest at floating rates based on daily bank deposit rates. Short-term deposits are made for varying periods between one day and three months depending on the immediate cash requirements of the Group and earn interest at the respective short-term deposit rates. The fair value of cash and cash equivalents approximates the carrying value. An amount of USD213.1 million (2018: USD81.0 million) of cash at bank is restricted including restrictions that require the funds to be used for a specified purpose and restrictions that limit the purpose for which the funds can be used, unless fixed asset construction invoices are presented to the banks.

	2019 USD'M	2018 USD'M
Cash at bank and in hand	**3,859.0**	4,924.5
Short-term deposits	**707.3**	431.3
Total	**4,566.3**	5,355.8

As at 31 March 2019, the Group had USD9.2 billion (2018: USD9.5 billion) of committed unsecured syndicated loans of which USD1.7 billion (2018: USD2.7 billion) remained unutilised. The Group had USD1.9 billion (2018: USD3.0 billion) of immediately (same day) available cash in liquidity funds. The Group had immediate access to available liquidity balances from liquidity funds and corporate facilities in excess of USD3.6 billion (2018: USD5.7 billion). Short-term deposits made for periods longer than three months are separately shown in the statement of financial position and earn interest at the respective short-term deposit rates.

Short term deposits made for periods longer than three months are separately shown in the statement of financial position and earn interest at the respective short-term deposit rates

20. Capital and reserves

a. Share capital

As at 31 March 2019 the company has 25,000,000 ordinary shares outstanding and a capital of USD1,504 million. During the six-month period ended 31 March 2019 no changes took place in the outstanding share capital.

The holders of ordinary shares are entitled to receive dividends as and when declared by the Company. All ordinary shares carry one vote per share without restriction. The ordinary shares have no par value.

b. Capital securities

As part of the financing of the Company and its subsidiaries, the Company has a capital security instrument as at 31 March 2019 with a carrying value of USD807.3 million.

This capital security is perpetual in respect of which there is no fixed redemption date. The distribution on the capital security is payable semi-annually in arrears every six months from the date of issue. The company may elect to defer (in whole but not in part) any distribution in respect of this capital security by providing no more than 30 nor less than five business days' notice, unless a compulsory interest payment event has occurred, including occurrence of a dividend payment in respect of subordinated obligations of the Company. Any interest deferred shall constitute arrears of interest and shall bear interest.

In the event of a winding-up, the rights and claims of the holders in respect of the capital security shall rank ahead of claims in respect of the Company's shareholders, but shall be subordinated in right of payment to the claims of all present and future senior obligations, except for obligations of the Company that are expressed to rank pari passu with, or junior to, its obligations under the capital security.

This capital security has a par value of USD800 million. The carrying value as per 30 September 2018 amounted to USD953.6 million and comprised two instruments with a par value of SGD200 million, USD800 million respectively. The capital security of SGD200 million has been repaid in February 2019.

The USD600 million capital security was originally issued on 14 March 2017, with an additional tap of USD200 million in November 2017 increasing the carrying value to USD800 million as per 31 March 2019. The distribution on the capital security is 6.875 percent per annum until March 2022. The capital security may be redeemed at the Company's option in whole, but not in part, in the period starting 90 calendar days before, and ending on, the distribution payment date in March 2022 or any distribution date thereafter upon giving not less than 30 nor more than 60 days' notice to the holders. The early redemption amount payable by the Company shall be the principal amount of the capital security, together with any interest accrued to the date fixed for redemption, all arrears of interest and all additional interest amounts.

c. Currency translation reserve

The currency translation reserve comprises all foreign currency differences arising from the translation of the financial statements of foreign operations, as well as from the translation of liabilities that hedge the Company's net investment in a foreign operation.

d. Revaluation reserve

The revaluation reserve comprises the fair value measurements movements of the equity investments which are accounted for at fair value through other comprehensive income. On realisation of these gains or losses, for example the sale of an equity instrument, the cumulative amounts of this reserve are transferred to retained earnings. Included in the revaluation reserve is a loss of USD22.4 million (30 September 2018: USD22.4 million loss) related to the mark-to-market valuation of equity investments.

e. Cash flow hedge reserve

Included in the cash flow hedge reserve is a loss of USD37.4 million (30 September 2018: USD48.1 million loss) related to the effective portion of the changes in fair value of cash flow hedges, net of tax. These cash flow hedges relate to hedging of interest and currency exposure on corporate loans and hedging of price exposure on future sales of zinc production from Mining Group companies.

21. Loans and borrowings

This note provides information about the contractual terms of the Group's interest-bearing loans and borrowings, which are measured at amortised cost. For more information about the Group's exposure to interest rate, foreign currency and liquidity risk, refer to note 24.

Carrying value of loans and borrowings	31 March 2019 USD'M	30 September 2018 USD'M
Carrying value of loans and borrowings		
Committed unsecured syndicated loans	**5,155.2**	4,893.9
Private placements	**956.2**	826.6
Listed bonds	**1,161.4**	1,207.0
Securitisation Programmes	**1,000.0**	1,000.0
Other loans	**168.2**	520.9
Finance leases	**10.5**	13.7
Total non-current	**8,451.5**	8,462.1
Current		
Committed unsecured syndicated loans	**2,140.2**	1,743.8
Private placements	**57.4**	–
Listed bonds	**–**	704.0
Other loans	**343.6**	371.5
Finance leases	**11.2**	10.4
Short-term bank borrowings	**21,722.8**	20,912.0
Total current	**24,275.2**	23,741.6
Total	**32,726.7**	32,203.7

F. Notes to the interim condensed consolidated financial statements

Terms and conditions of outstanding loans as at 31 March 2019 were as follows:

	Principal	Interest rate	Maturity	Floating/fixed rate debt	< 1 year USD'M	1-5 years USD'M	> 5 years USD'M	Total USD'M
Committed unsecured syndicated loans								
USD	1,100.0	Libor + 0.65%	2019 – October	Floating	325.0	–	–	**325.0**
USD	290.0	Libor + 1.10%	2019 – October	Floating	290.0	–	–	**290.0**
USD	2,180.0	Libor + 0.55%	2020 – March	Floating	1,100.0	–	–	**1,100.0**
USD	435.0	Libor + 1.10%	2020 – October	Floating	–	435.0	–	**435.0**
USD	300.0	Libor + 0.80%	2021 – March	Floating	–	300.0	–	**300.0**
USD	520.0	Libor + 1.10%	2021 – October	Floating	–	520.0	–	**520.0**
USD	3,250.0	Libor + 0.80%	2022 – March	Floating	–	3,245.0	–	**3,245.0**
JPY	72,640.0	Libor + 0.95%	2021 – March	Floating	–	655.2	–	**655.2**
CNH	2,865.0	Hibor + 1.00%	2019 – October	Floating	425.2	–	–	**425.2**
					2,140.2	5,155.2	–	**7,295.4**
Private placement								
USD	51.5	4.89%	2020 – March	Fixed	51.5	–	–	**51.5**
USD	98.0	7.11%	2021 – April	Fixed	–	98.0	–	**98.0**
USD	57.5	5.53%	2023 – March	Fixed	–	57.5	–	**57.5**
USD	53.0	5.55%	2023 – May	Fixed	–	53.0	–	**53.0**
USD	67.0	5.72%	2025 – May	Fixed	–	–	67.0	**67.0**
USD	20.0	5.86%	2028 – May	Fixed	–	–	20.0	**20.0**
USD	200.0	6.33%	2036 – July	Fixed	5.9	27.7	155.5	**189.1**
CNY	500.0	6.50%	2021 – April	Fixed	–	75.6	–	**75.6**
CNY	500.0	6.50%	2021 – May	Fixed	–	75.6	–	**75.6**
CNY	700.0	6.20%	2021 – September	Fixed	–	101.9	–	**101.9**
EUR	200.0	5.50%	2020 – July	Fixed	–	224.4	–	**224.4**
					57.4	713.7	242.5	**1,013.6**
Listed bonds								
EUR	550.0	5.00%	2020 – April	Fixed	–	617.3	–	**617.3**
CHF	165.0	2.25%	2023 – May	Fixed	–	165.8	–	**165.8**
USD	386.3	5.25%	2023 – March	Fixed	–	378.3	–	**378.3**
					–	1,161.4	–	**1,161.4**
Securitisation Programmes								
USD	235.0	Libor + 0.85%	2020 – June	Floating	–	235.0	–	**235.0**
USD	230.0	2.47%	2020 – June	Fixed	–	230.0	–	**230.0**
USD	35.0	Libor + 1.70%	2020 – June	Floating	–	35.0	–	**35.0**
USD	185.0	Libor + 0.73%	2021 – September	Floating	–	185.0	–	**185.0**
USD	280.0	3.73%	2021 – September	Fixed	–	280.0	–	**280.0**
USD	35.0	4.33%	2021 – September	Fixed	–	35.0	–	**35.0**
						1,000.0	–	**1,000.0**
Other Loans								
USD	25.0	Libor + 1.00%	2019 – April	Floating	25.0	–	–	**25.0**
USD	25.0	Libor + 1.40%	2019 – April	Floating	25.0	–	–	**25.0**
USD	23.0	3.21%	2019 – May	Fixed	23.0	–	–	**23.0**
USD	39.6	Libor + 2.95%	2019 – October	Floating	15.0	–	–	**15.0**
USD	111.0	Libor + 4.25%	2020 – March	Floating	111.0	–	–	**111.0**
USD	30.0	Libor + 0.65%	2020 – March	Floating	30.0	–	–	**30.0**
USD	129.4	Libor + 2.65%	2020 – September	Floating	37.6	19.7	–	**57.2**
USD	120.0	Libor + 4.00%	2021 – November	Floating	20.0	35.0	–	**55.0**
USD	30.0	Libor + 2.43%	2022 – March	Floating	3.0	22.5	–	**25.5**
USD	172.5	Libor + 3.15%	2022 – March	Floating	29.7	91.0	–	**120.6**
Various loans with balances outstanding <USD'M15					24.4	–	–	**24.4**
					343.6	168.2	–	**511.8**
Finance leases					11.2	10.5	–	**21.7**
Total					**2,552.4**	**8,209.0**	**242.5**	**11,003.9**

During the six-month period ended 31 March 2019, a number of important transactions for the Group were completed.

In October 2018 the Group closed a new Syndicated Revolving Credit Facility and Term Loan Facilities (the "Facilities") totalling USD1,945 million-equivalent. The new facilities comprise a 365-day USD-denominated revolving credit facility (USD1,075 million), a three year USD term loan facility (USD500 million), as well as a Renminbi (CNH) denominated one year tranche (USD370 million). These new facilities will refinance the maturing three year tranche from 2015 and the maturing one year RCF and one year CNH tranches from 2017.

In October 2018 the Group raised a third tranche of RMB700 million, with a three-year maturity, issued in China's mainland debt market as part of a RMB2,350 million Panda Bond Programme for which Trafigura obtained National Association of Financial Market Institutional Investors' registration approval.

In March 2019, the Group refinanced the 365-day tranche of its European multicurrency syndicated revolving credit facility (the "ERCF") at USD2.05 billion. In addition, the Group decided to exercise the first extension option available on the USD3.55 billion three-year tranche of its 2018 ERCF, thereby extending the facility by 365 days and resetting the facility maturity to three years.

The Group was in compliance with all its corporate and financial covenants as at 31 March 2019.

22. Trade and other payables

The Group's exposure to currency and liquidity risk related to trade and other payables is disclosed in note 24.

	31 March 2019	30 September 2018
	USD'M	USD'M
Trade creditors	**3,459.5**	3,248.8
Accrued costs of sales and expenses	**11,671.9**	10,410.9
Broker balances	**–**	29.7
Related parties	**223.6**	119.8
Total	**15,355.0**	13,809.2

23. Commitments and contingencies

The Company and its subsidiaries are party to a number of legal claims and proceedings arising out of their business operations. The Company believes that the ultimate resolution of these claims and proceedings will not, in the aggregate, have a material adverse effect on The Company's financial position, consolidated income or cash flows. Such legal claims and proceedings, however, are subject to inherent uncertainties and the outcome of individual matters is unpredictable. It is possible that the Company could be required to make expenditures, in excess of established provisions, in amounts that cannot reasonably be estimated.

The following contingent liabilities exist in respect of trade financing:

	31 March 2019	30 September 2018
	USD'M	USD'M
Letters of credit	**8,664.2**	8,700.7
Letters of indemnity	**–**	1.0
Guarantees	**352.3**	330.6
Total	**9,016.5**	9,032.3

The Company had outstanding commitments at the end of 31 March 2019, and 30 September 2018 as follows:

	31 March 2019	30 September 2018
	USD'M	USD'M
Storage rental	**2,748.7**	2,020.3
Time charters	**4,189.0**	4,126.6
Office rent	**91.8**	99.5
Total	**7,029.5**	6,246.3
Assets under construction	**26.1**	2.8
Total	**7,055.6**	6,249.1

In 2017 and 2018 Trafigura entered into lease transactions with an Asian financial counterparty for new build crude oil and product tankers. As at 31 March 2019, 45 leases have been entered into (2018: 35 leases). Non-cancellable operating lease rentals are payable as follows:

	31 March 2019	30 September 2018
	USD'M	USD'M
Less than one year	**1,621.1**	1,290.5
Later than one year and less than five years	**4,061.9**	3,552.5
Later than five years	**1,346.5**	1,403.3
Total	**7,029.5**	6,246.3

24. Financial instruments

a. Financial risk management

The Group is exposed to a number of different financial risks arising from normal business exposures as well as its use of financial instruments including: market risks relating to commodity prices, foreign currency exchange rates and interest rates; credit risk; and liquidity risk.

Prudently managing these risks is an integral element of Trafigura's business and has been institutionalised since the Group's foundation. Risk management guidelines are established at senior management level. The various risks the Group is exposed to are managed through a combination of internal procedures, such as strict control mechanisms and policies, as well as external third parties such as the derivative, insurance and bank markets. As a rule, Trafigura actively manages and lays off where possible a large majority of the risks inherent to its activity. Trafigura's conservative risk management process is designed to:

- Provide a full and accurate awareness of risks throughout the Group;
- Professionally evaluate and monitor these risks through a range of risk metrics;
- Limit risks via a dynamic limit setting framework;
- Manage risks using a wide range of hedging instruments and strategies;
- Ensure a constant dialogue between trading desks, risk managers and senior management.

The three main, reinforcing, components of Trafigura's risk management process are the Chief Risk Officer (CRO), the Risk Committee, and the trading teams.

The Chief Risk Officer is independent of the revenue-producing units and reports to the Chief Operating Officer and the Management Board. The CRO has primary responsibility for assessing and monitoring Trafigura's market risks. The CRO's team liaises directly with the trading teams to analyse new opportunities and ensure that risk assessments adapt to changing market conditions. The CRO's team also ensures Trafigura's risk management capabilities incorporate ongoing advances in technology and risk management modelling capabilities.

The Risk Committee, which is comprised of members of the Management Board and the Chief Risk Officer, is responsible for applying Trafigura's risk management capabilities towards improving the overall performance of the Group. The Risk Committee meets weekly to discuss and set risk and concentration limits, review changing market conditions, and analyse new market risks and opportunities.

Trafigura's trading teams provide deep expertise in hedging and risk management in the specific markets each team operates in. While the trading teams have front line responsibility for managing the risks arising from their activities, our process ensures a strong culture of escalation and accountability, with well-defined limits, automatic notifications of limit overages and regular dialogue with the CRO and Risk Committee.

b. Market risk

Market risk is the risk of loss in the value of Trafigura's positions due to changes in market prices. Trafigura holds positions primarily to ensure our ability to meet physical supply commitments to our customers, to hedge exposures arising from these commitments, and to support our investment activities. Our positions change due to changing customer requirements and investment opportunities. The value of our positions is accounted for at fair value and therefore fluctuates on a daily basis due to changes in market prices. Categories of market risk we are exposed to include:

- Commodity price risk results from exposures to changes in spot prices, forward prices and volatilities of commodities, such as crude oil, petroleum products, natural gas, base metals, coal and iron ore.
- Currency rate risk results from exposures to changes in spot prices, forward prices and volatilities of currency rates.
- Interest rate risk results from exposures to changes in the level, slope and curvature of yield curves, the volatilities of interest rates, and credit spreads.
- Equity price risk results from exposures to changes in prices and volatilities of individual equities and equity indices.

Trafigura hedges a large majority of price risks arising from its activities. When there is a difference in the characteristics of available hedging instruments and the corresponding commodity price exposures, Trafigura remains exposed to a residual price risk referred to as basis risk. Dynamically managing the basis risk that arises from Trafigura's activities requires specialist skills and is a core focus of our trading and risk management teams.

Value at Risk

As of 31 March 2019, Trafigura's one day market risk value at risk (VAR) was USD9.6 million (30 September 2018: USD8.0 million). VaR is a statistical estimate of the potential loss in value of our positions and unsold in-transit material due to adverse market movements. Trafigura calculates VaR over a one-day time horizon with a 95 percent confidence level. We use an integrated VaR model which captures risks including commodity prices, interest rates, equity prices and currency rates. Trafigura's integrated VaR model facilitates comparison of VaR across portfolios comprised of a range of different risk exposures.

Average market risk VaR (1 day 95 percent) during the first six-months of this fiscal year was USD8.9 million compared to USD7.8 million in the previous fiscal year. Trafigura's Management Board has set a target of maintaining VaR (1 day 95 percent) below 1 percent of Group equity.

Trafigura is aware of the inherent limitations to VaR and therefore uses a variety of risk measures and risk management techniques to create a robust risk management process. Limitations of VaR include:

- VaR does not estimate potential losses over longer time horizons where the aggregate moves may be extreme;
- VaR does not take account of the liquidity of different risk positions and therefore does not estimate the losses that might arise if Trafigura liquidated large positions over a short period of time;
- VaR is based on statistical analysis of historical market data. If this historical data is not reflective of futures market prices movements, VaR may not provide accurate predictions of future possible losses;
- Trafigura's VaR calculation covers its trading businesses in the crude oil, refined oil products, petrochemical, natural gas, metals, concentrates, coal, iron ore, and freight markets and assesses the open-priced positions which are those subject to price risk, including inventories of these commodities. Trafigura's VaR model is based on historical simulations, with full valuation of more than 5,000 market risk factors.

VaR is calculated based on simultaneously shocking these risk factors. More recent historical price data is more heavily weighted in these simulations, which enables the VaR model to adapt to more recent market conditions and improves the accuracy of our estimates of potential losses.

Trafigura's VaR model utilises advanced statistical techniques that incorporate the non-normal price dynamics that are an important feature of commodity markets. Our VaR model is continuously and automatically calibrated and back-tested to ensure that its out-of-sample performance adheres to well defined targets. In addition, our VaR model is regularly updated to ensure it reflects the current observed dynamics of the markets Trafigura is active in.

Trafigura has made a significant, ongoing investment in risk management systems, including a reporting system which automatically distributes customised risk reports throughout the Group on a daily basis. These reports provide up-to-date information on each team's risk using industry standard measures such as 95 percent and 99 percent VaR and performance indicators such as Sharpe ratios.

All trading books have well defined VaR risk limits and management and the trading teams are automatically notified whenever a book nears its risk limit, as well as whenever a VaR overage occurs. In addition, Trafigura's deals desk management team is automatically notified whenever statistically anomalous changes occur in the profit and loss of any deal.

For senior management, the daily reports provide a comprehensive view of Trafigura's risk, classified according to various risk factors. These reports emphasise the risk diversification created by the Group's varied activities and highlight any excessive risk concentrations.

c. Credit risk

Credit risk is the risk of financial loss to the Group if a customer or counterparty to a financial instrument or physical contract fails to meet its contractual obligations, and arises principally from the Group's receivables from customers and investment securities.

The Company has a formalised credit process with credit officers in the key locations around the world. Strict credit limits are set up for each counterparty on the basis of detailed financial and business analysis. These limits are constantly monitored and revised in light of counterparty or market developments and the amount of exposure relative to the size of the Group's balance sheet. The Company makes extensive use of the banking and insurance markets to cover any counterparty or country risks that are in excess of its credit limits.

The risk management monitoring and decision-making functions are centralised and make extensive use of the Company's integrated bespoke IT system. The Company conducts transactions with the following major types of counterparties:

- Physical commodity counterparties spread across the vertical chains for both oil and bulk, e.g. producers, refiners/smelters and end-users. Sales to investment grade and non-investment grade counterparties are made on open terms up to internally approved credit limits. Exposures above such limits are subject to payment guarantees.
- Payment guarantee counterparties, i.e. prime financial institutions from which the Company obtains payment guarantees.
- Hedge counterparties comprising a number of prime financial institutions and physical participants in the relevant markets. There is no significant concentration of risk with any single counterparty or group of counterparties. Collateral is obtained from counterparties when the Company's exposure to them exceeds approved credit limits. It is the Company's policy to have ISDA Master Agreements or ISDA-based Long-Form Confirmation Agreements in place with all hedging counterparties.

The Company trades in all major geographic regions. Where appropriate, guarantees, insurance and letters of credit are used to reduce payment or performance risk. The Company has gross credit exposure in locations across the world with a concentration in emerging markets. Most of this exposure is laid off with third parties while the Company retains between 10 percent to 20 percent on average of the individual exposures.

The Company's maximum exposure to credit risk, without considering netting agreements or without taking into account any collateral held or other credit enhancements, is equal to the carrying amount of Trafigura's financial assets as indicated in the balance sheet, plus the guarantees to third parties and associates. The Company's objective is to seek continued revenue growth while minimising losses incurred due to increased credit risk exposure.

The Group has amounts and guarantees outstanding related to countries that are impacted by sanctions currently imposed by the US and EU. The Group analysed the sanctions and exposures and concluded that these do not materially impact the Group's positions.

(i) Concentration of credit risk

Concentrations of credit risk exist when changes in economic, industry or geographical factors similarly affect the Company's counterparties whose aggregate credit exposure is significant in relation to the Company's total credit exposure. The carrying amount of financial assets represents the maximum credit exposure. The Company determines concentrations of credit risk by monitoring the country profile of its third party trade receivables on an on-going basis.

(ii) Financial assets that are neither past due nor impaired

Trade and other receivables that are neither past due nor impaired are considered creditworthy debtors. Cash and cash equivalents and derivatives that are neither past due nor impaired are placed with or entered into with reputable financial institutions or companies with high credit ratings and no history of default. The credit quality of trade and other receivables is assessed based on a strict credit policy. The Group monitors customer credit risk, by grouping trade and other receivables based on their characteristics.

Based on the Group's monitoring of customer credit risk, the Group believes that, except as indicated above, no impairment allowance is necessary in respect of trade receivables not past due.

(iii) Financial assets that are either past due or impaired

Information regarding financial assets that are either past due or impaired is disclosed in note 16 (Trade and other receivables).

(iv) Guarantees

The Group's policy is to provide financial guarantees only to wholly-owned subsidiaries and trading partners in the normal course of business. As part of the Group's ordinary physical commodity trading activities, Trafigura Group Pte. Ltd. may act as guarantor by way of issuing guarantees accepting responsibility for subsidiaries' contractual obligations.

d. Liquidity risk

Liquidity risk is the risk that the Company is unable to meet its payment obligations when due, or that it is unable, on an on-going basis, to borrow funds in the market on an unsecured or secured basis at an acceptable price to fund actual or proposed commitments.

The Group's approach to managing liquidity is to ensure, as far as possible, that it will always have sufficient cash and cash equivalents and ready sources of committed funding available to meet anticipated and unanticipated funding needs. Sound financial management with a focus on liquidity has been instrumental to the Group's success. The Company has demonstrated the ability to raise the appropriate types of financing to match the needs of the business and to tap various investor bases (e.g. syndicated loan markets, trade finance markets, bond markets, private placement markets, securitisation etc.), maturities and geographies.

The Company manages its treasury and liquidity risks maintaining a strong liquidity position through the following:

- Targeting immediately-available cash on hand of minimum USD500 million under normal conditions (higher in the case of extreme volatility);
- Maintaining transactional lines which allow the Group to mark-to-market financings to the value of the underlying physical assets. Mark to market financing is performed weekly (or intra-weekly in the case of extreme volatility) and provides an additional source of liquidity which is not available to competitors which are financed purely from revolving credit facilities;
- Committed unsecured credit facilities;
- Maintaining headroom under transactional trade finance lines and committed revolving credit facilities; and
- Reasonable distribution of profit (retained earnings) and subordination of repurchased equity.

The maturity analysis of the Groups financial liabilities based on the contractual terms is as follows:

	Total USD'M	0-1 years USD'M	1-5 years USD'M	> 5 years USD'M
31 March 2019				
Financial liabilities				
Current and non-current loans and borrowings	**32,726.7**	24,275.2	8,209.0	242.5
Trade and other payables	**15,355.0**	15,355.0	–	–
Derivative financial liabilities	**968.0**	746.7	218.0	3.3
Total financial liabilities	49,049.7	**40,376.9**	**8,427.0**	**245.8**

	Total USD'M	0-1 years USD'M	1-5 years USD'M	> 5 years USD'M
30 September 2018				
Financial liabilities				
Current and non-current loans and borrowings	**32,203.7**	23,741.6	8,219.6	242.5
Trade and other payables	**13,809.2**	13,809.2	–	–
Derivative financial liabilities	**1,124.6**	848.7	273.9	2.0
Total financial liabilities	47,137.5	**38,399.5**	**8,493.5**	**244.5**

e. Interest rate risk

Trafigura is not exposed to significant interest rate risk since the maturity of its short term funding ranges from a few weeks to a few months and each transaction considers current interest rate levels. Interest rate risk of the Group is mainly applicable on the long-term funding of the Group, although a majority of debt, whether long-term or short-term, is floating rate.

From time to time the Group enters into interest rate derivatives transactions to lock-in current interest rate levels, for instance, interest rate swaps provide a method of reducing the Group's exposure to floating interest rates arising from its corporate funding programmes. To realise the desired matching of derivative results with the hedged interest rate payments, cash flow hedge accounting is applied and the derivatives are designated as hedging instruments. The derivatives are carried on balance and their effectiveness is tested on a quarterly basis.

f. Currency risk

Trafigura has few exposures to foreign currency risk on its trading activities and those that do exist are hedged out. The Group does not use financial instruments to hedge the translation risk related to equity and earnings of foreign subsidiaries and non-consolidated companies.

The Group uses cross-currency swaps to hedge currency risk on the principal and related payments of foreign currency denominated loans and bonds for which cash-flow hedge accounting is applied. The hedge relationship is expected to be highly effective due to the matching of critical terms between the underlying hedged item and the associated hedge instrument.

The periods when the cash flows are expected to occur are similar to the periods when the cash flows on the foreign currency denominated loans and bonds occur as indicated in note 21 and 24d. Ineffectiveness may arise (i) if the underlying interest reference rate is divergent to the underlying reference rate in the Company's debt agreements, to the extent that the hedging instrument is already in the money or out of the money at the point of designation (compared to the hypothetical derivative that must be created on market), (ii) when the timing of the hedging instrument goes beyond the hedged item and it is not considered highly probable that the hedged item will be refinanced beyond its current maturity date or (iii) if the hedging instrument is for an amount greater than the hedged item.

g. Cash flow hedge accounting

During the six-month period ended 31 March 2019, the Group continued to apply cash flow hedge accounting to hedge certain non-financial hedged items. These are the future purchases and sales of mining products and LNG.

The designated hedge derivatives are accounted for at fair value, with the fair value movements being deferred through other comprehensive income where they are deemed to be entered in an effective hedge relationship with cash flows that are yet to be reflected in the statement of income. Any fair value movements that are not considered to be an effective hedge are recognised directly through the statement of income. Ineffectiveness will occur due to differences in maturity of the hedged item and the hedging instrument as well as due to the non-price elements of the cash flows arising from the hedged item. The effectiveness of the economic relationship between the hedging instruments and the hedged item has been assessed at the inception of the hedge accounting designation and is reassessed prospectively and retrospectively at least quarterly. The hedge ratio is determined by the ratio which provides a strong relationship between movements in the fair value of the hedged item and hedging instruments at the inception of the hedge accounting relationship. The overview of the cash flow hedges is:

	Maturity	Equivalent	Notionals 31 March 2019	Notionals 30 September 2018	Fair values 31 March 2019	Fair values 30 September 2018
Cross-currency swap		USD	**1,194.2**	1,915.0	**6.1**	(50.0)
Cross-currency interest rate swap		USD	**681.8**	681.8	**(35.2)**	(41.7)
Future purchases and sales of LNG	< 1 year	Various	**1,239.9**	1,121.4	**(94.2)**	(86.8)
Future purchases and sales of LNG	1-4-years	Various	**45.6**	381.1	**(6.8)**	(38.5)
Future sales mining production	< 1 year	DMT	**–**	69,050.0	**–**	28.2
Total					**(130.1)**	**(188.8)**

	Ineffectiveness recognised through statement of income	Hedge result deferred through other comprehensive income
Cross-currency swap	(.3)	(11.0)
Cross currency interest rate swap	(2.2)	(9.1)
Future purchases and sales of LNG	–	(73.2)
Future sales mining production	–	(.7)

Other comprehensive movements in the equity movement schedule include a USD19.4 million (negative) movement of cash flow hedge reserves due to hedge accounting applied by the Group and USD30.2 million (positive) movement due to cash flow hedge accounting applied by equity accounted investees of the Group.

h. Fair value hedge accounting

In some instances, the Group elects to apply fair value hedge accounting to certain physical forward contracts described in the table below (the hedged items) and the corresponding paper hedge positions (the hedging instruments). Under the strict rules of hedge accounting, the Group is required to match each paper hedge position with the corresponding physical contract position. The intention is that a movement in fair value of a physical contract is booked against the corresponding (and opposite) movement in fair value of the related paper hedges: both movements (increase and decrease) are booked in the profit and loss statement (specifically to the line cost of sales), leading to a neutral result. It is important to note that the fair value of the physical contracts does not include any trading margin, premium or any form of potential profit of the physical contracts; the fair value of the physical contracts consider only the risk components being hedged.

	Tolling agreements	Transportation agreements	Offtake agreements
Nature of forward contract (=hedged item)	Convert crude to refined products	Transport crude from Permian Basin to Gulf Coast	Offtake LNG in the US
Main counterparties of forward contracts	Buckeye Texas Processing LLC and Magellan Processing LP	Cactus II PipelineLLC	Cheniere Marketing LLC and Freeport LNG Marketing LLC
Maturity of forward contracts	Ranging from 2020 to 2023	Ranging from 2019 to 2024	Ranging from 2019 to 2033
Trading strategy	Process crude into refined products	Transport crude from Permian Basin to Gulf Coast	Purchase LNG in the US, transport, transform back into natural gas, and sell natural gas in Europe
Nature of paper hedge (=hedging instrument)	Hedging spread exposure (crude vs refined products) with futures and swaps	Hedging spread exposure (Permian Basin crude vs Gulf Coast crude) with futures and swaps	Hedging spread exposure (LNG in the US vs natural gas in Europe) with futures and swaps

The Group elects to apply fair value hedge accounting to non-financial hedged items or certain risk components of non-financial hedged items. These non-financial hedged items relate to firm commitments with respect to tolling agreements, a transportation agreement, and offtake agreements described above.

Hedged items

(i) The Group's tolling agreements represent a non-financial hedged item which Trafigura has entered into for fractionation services to convert crude feedstock into various crude refined products.

The derivative hedging instruments (hedges consisting of futures and swaps) are entered into, to hedge the spread exposures, referred as the hedged risk, between the purchase of crude feedstock and the sale of crude refined products.

(ii) The Group's transportation agreement represent a non-financial hedged item which Trafigura has entered into for transportation services to move crude oil from the Permian Basin of Texas to the Gulf Coast. The derivative hedging instruments (hedges consisting of futures and swaps) are entered into, to hedge the spread exposures, referred as the hedged risk, between the purchase of inland crude oil barrels and the sale of those barrels on the Gulf Coast.

(iii) The Group's offtake agreements represent a non-financial hedged item which Trafigura has entered into for the purchase of liquefied natural gas (LNG) from the US with a number of counterparties. The derivative hedging instruments (hedges consisting of futures and swaps) are entered into, to hedge the spread exposures, referred as the hedged risk, between purchasing LNG from the US and selling LNG to its expected destination markets. Where the hedging on the tolling and transportation agreements is done on the above described risk components, offtake agreements are designated as hedged item in its entirety.

Hedging instruments

When applicable, the Group designates derivative hedging instruments as fair value hedges in relationship to the associated hedged items:

(i) The maturity profile of the hedging instruments used for hedging the designated risk components associated with the tolling agreements varies from one to five years;

(ii) The maturity profile of the hedging instruments used for hedging the designated risk components associated with the transportation agreement varies from one to three years;

(iii) The maturity profile of the hedging instruments used for the hedging of the offtake agreement varies from one to six years.

The designated hedge derivatives are accounted for at fair value through profit and loss and reflected on the balance sheet as a financial asset or liability. The identified hedged items are accounted for at fair value and recognized through profit and loss (specifically to line cost of sales), the fair value is reflected on the balance sheet as either a recognised asset or liability, see notes 15 and 18. The fair value is determined using benchmarks best representing the designated hedged item.

Specifically in the case of LNG, the fair value of the hedged item also considers unobservable inputs.

Economic relationship

IFRS 9 requires the existence of an economic relationship between the hedged item (the physical forward contract) and the hedging instrument (the paper hedge). At designation and at the start of each reporting period critical terms (volumes) of both hedged items and hedge instruments in a hedge relationship are reviewed to ascertain the expectation that the value of the hedging instrument and the value of the hedged item would move into opposite directions as a result of the common underlying or hedged risk and therefore meeting the risk management objective of the hedge relationship.

Hedge effectiveness assessment

At each reporting date or on significant changes in circumstances a quantitative hedge effectiveness assessment test is performed. The fair values of both hedged items and hedging instruments are measured and the net difference of the changes corresponds to the hedge ineffectiveness amount. The hedge ineffectiveness amount is analysed by its various sources (i.e. basis differences, location differences, timing differences, quantity or notional amount differences, currency basis and forward points, credit risk or other risks) where applicable. Specific factors that may impact ineffectiveness are the mismatch in the designated hedge period and the maturity period of the hedging instrument and a differential of the various benchmarks for the pricing of the hedging instruments and the hedged items. In the case of LNG, the hedged item is valued in its entirety, however, the FX hedges could not be designated into the hedge relationship giving rise to additional, unintentional ineffectiveness. The fair value of the FX hedges, that have not been designated, can be seen in the table below. As at 31 March 2019, the ineffectiveness year-to-date amounted to USD3.5 million. The ineffectiveness over the life of the transactions amounted to USD250.9 million.

The fair value adjustment on the non-financial hedged items are presented in the balance sheet under the following categories:

	31 March 2019		30 September 2018	
	Other non-current assets (note 15)	**Other current assets (note 18)**	Other non-current assets (note 15)	Other current assets (note 18)
Non-financial hedged items – tolling agreements	**198.5**	**80.4**	283.2	85.6
Non-financial hedged items – transportation agreement	**–**	**273.9**	269.2	465.1
Non-financial hedged items – LNG contracts	**129.4**	**–**	521.5	124.9
Closing balance of the hedged item	**327.8**	**354.3**	1,073.9	675.6

	31 March 2019		30 September 2018	
	Other non-current liabilities	**Other current liabilities**	Other non-current liabilities	Other current liabilities
Non-financial hedged items – tolling agreements	**–**	**–**	–	–
Non-financial hedged items – transportation agreement	**(42.9)**	**–**	–	–
Non-financial hedged items – LNG contracts	**(13.6)**	**(42.2)**	–	–
Closing balance of the hedged item	**(56.5)**	**(42.2)**	–	–

The following table summarises the movements in the non financial hedged items and the related derivatives recognised in the statement of income.

Fair value hedge accounting	31 March 2019 USD'M	30 September 2018 USD'M
Opening balances of the derivatives marked as hedges	**(1,888.6)**	(179.4)
FV movement included in the hedge relationship	**1,024.2**	(1,881.4)
Hedges for which hedge relationship matured	**158.0**	64.6
Hedges not designated in hedge relationship	**50.8**	107.6
Closing balance of the derivatives marked as hedges	**(655.6)**	(1,888.6)
Opening balance of the hedged item	**1,749.5**	162.6
FV movement included in the hedge relationship	**(1,020.7)**	1,627.0
Hedging (gain)/loss released to profit or loss	**(145.4)**	(40.1)
Closing balance of the hedged item	**583.4**	1,749.5
Lifetime to date net gain/(loss)	**(72.1)**	(139.1)
Year to date net gain/(loss)	**67.0**	(122.2)

i. Capital management

The Board's policy is to maintain a strong capital base so as to maintain investor, creditor and market confidence and to sustain future development of the business.

The Company's immediate parent, Trafigura Beheer B.V., is exclusively owned by its employees. This shareholding arrangement leads to an alignment of the long term interests of the Company and its management team. By virtue of having its own capital at risk, senior management is incentivised to take a long-term view of the Company's overall performance and to protect its capital.

The Company's capital management aims to ensure that it meets financial covenants attached to the interest-bearing loans and borrowings that define capital structure requirements. Breaches in meeting the financial covenants would permit the bank to immediately call loans and borrowings. There have been no breaches in the financial covenants of any interest-bearing loans and borrowing in the current period.

The Company monitors capital using an adjusted debt to equity ratio, which is adjusted total debt divided by the Company's equity. For this purpose, the adjusted debt metric represents the Company's total long and short-term debt less cash, deposits, readily marketable inventories, debt related to the Company's securitisation programme and the non-recourse portion of loans to third-parties.

The Company's long term average target adjusted debt to equity ratio is 1.0x. The Company's adjusted net debt to equity ratio at the end of the reporting period was as follows:

	31 March 2019 USD'M	30 September 2018 USD'M
Non-current loans and borrowings	**8,451.5**	8,462.1
Current loans and borrowings	**24,275.2**	23,741.6
Total debt	**32,726.7**	32,203.7
Adjustments		
Cash and cash equivalents	**4,566.3**	5,355.8
Deposits	**369.5**	334.4
Inventories (including purchased and pre-paid inventories)	**15,585.8**	15,620.5
Securitisation debt	**4,134.8**	4,294.1
Non-recourse debt	**484.9**	562.2
Adjusted total debt	**7,585.4**	6,036.7
Group equity	**6,557.9**	6,250.1
Adjusted debt to Group equity ratio at the end of the period	**1.16**	0.97

F. Notes to the interim condensed consolidated financial statements

j. Fair value

(i) Fair values versus carrying amounts

The fair values of inventories, financial assets and liabilities, together with the carrying amounts shown in the statement of financial position, are as follows:

31 March 2019	Carrying value USD'M	Fair value USD'M
Assets		
Listed equity securities – Fair value through OCI	26.3	26.3
Listed equity securities – Fair value through profit and loss	27.6	27.6
Listed debt securities – Fair value through profit or loss	490.1	490.1
Unlisted equity investments – Fair value through profit or loss	62.7	62.7
Unlisted equity investments – Fair value through OCI	191.5	191.5
Loans receivable (*)	432.9	432.9
Inventories	14,898.6	14,898.6
Trade and other receivables (*)	22,381.9	22,381.9
Non-financial hedged items	682.1	682.1
Derivatives	964.2	964.2
Deposits (*)	369.5	369.5
Cash and cash equivalents (*)	4,566.3	4,566.3
Total financial assets and inventories	**45,093.8**	**45,093.8**
Liabilities		
Loans and borrowings		
Floating rate borrowings (*)	29,962.0	29,962.0
Fixed rate borrowings	2,743.0	2,751.4
Finance lease and purchase contract (*)	21.7	21.7
Trade and other payables (*)	15,355.0	15,355.0
Non-financial hedged items	98.7	98.7
Derivatives	968.0	968.0
Total financial liabilities	**49,148.2**	**49,156.7**

30 September 2018	Carrying value USD'M	Fair value USD'M
Assets		
Listed equity securities – Fair value through OCI	10.2	10.2
Listed equity securities – Fair value through profit and loss	44.6	44.6
Listed debt securities – Fair value through profit or loss	466.3	466.3
Unlisted equity investments – Fair value through profit or loss	31.6	31.6
Unlisted equity investments – Fair value through OCI	163.2	163.2
Loans receivable (*)	485.5	485.5
Inventories	14,732.9	14,732.9
Trade and other receivables (*)	19,951.7	19,951.7
Non-financial hedged items	1,749.5	1,749.5
Derivatives	907.6	907.6
Deposits (*)	334.4	334.4
Cash and cash equivalents (*)	5,355.8	5,355.8
Total financial assets and inventories	**44,233.3**	**44,233.3**
Liabilities		
Loans and borrowings		
Floating rate borrowings (*)	28,708.0	28,708.0
Fixed rate borrowings	3,471.6	3,481.2
Finance lease and purchase contracts (*)	24.1	24.1
Trade and other payables (*)	13,809.2	13,809.2
Derivatives	1,124.6	1,124.6
Total financial liabilities	**47,137.4**	**47,147.1**

(*) Management has determined that the carrying amounts of trade and other receivables, cash and cash equivalents, deposits and trade and other payables reasonably approximate their fair values because these are mostly short-term in nature and are re-priced regularly.

Offsetting of financial assets and liabilities

In accordance with IAS 32 the Group reports financial assets and liabilities on a net basis in the consolidated statement of financial position only if there is a legally enforceable right to set off the recognised amounts and there is intention to settle on a net basis, or to realise the asset and settle the liability simultaneously. The financial assets and liabilities subject to offsetting, enforceable master netting and similar agreements as at 31 March 2019 and 30 September 2018 were as follows:

	Amounts eligible for set off under netting agreements				
31 March 2019	Gross amount USD'M	Amounts offset USD'M	Net amount USD'M	Amounts not subject to netting agreements USD'M	Net amounts presented in the statement of financial position USD'M
Related parties	1,893.4	(90.7)	1,802.7	–	1,802.7
Derivative assets	1,283.4	(842.3)	441.2	523.1	964.2
Related parties	(314.3)	90.7	(223.6)	–	(223.6)
Derivative liabilities	(1,272.2)	842.3	(429.9)	(538.0)	(968.0)

	Amounts eligible for set off under netting agreements				
30 September 2018	Gross amount USD'M	Amounts offset USD'M	Net amount USD'M	Amounts not subject to netting agreements USD'M	Net amounts presented in the statement of financial position USD'M
Related parties	1,696.7	(87.1)	1,609.6	–	1,609.6
Derivative assets	1,238.8	(805.5)	433.3	474.3	907.6
Related parties	(206.9)	87.1	(119.8)	–	(119.8)
Derivative liabilities	(1,387.5)	805.5	(581.9)	(542.7)	(1,124.6)

For the financial assets and liabilities subject to enforceable master netting or similar arrangements above, each agreement between the Group and the counterparty allows for net settlement of the relevant financial assets and liabilities when both elect to settle on a net basis. In the absence of such an election, financial assets and liabilities may be settled on a gross basis, however, each party to the master netting or similar agreement will have the option to settle all such amounts on a net basis in the event of default of the other party.

(ii) Fair value hierarchy

The table below analyses financial instruments carried at fair value, by valuation method. The different levels have been defined as follows:

- Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities.
- Level 2: inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices).
- Level 3: inputs for the asset or liability that are not based on observable market data (unobservable inputs).

Level 1 classifications primarily include futures with a maturity of less than one year. Level 2 classifications primarily include swaps and physical forward transactions which derive their fair value primarily from exchange quotes and readily observable broker quotes. Level 3 classifications primarily include physical forward transactions which derive their fair value predominately from calculations that use broker quotes and applicable market based estimates surrounding location, quality and credit differentials. In circumstances where Trafigura cannot verify fair value with observable market inputs (Level 3 fair values), it is possible that a different valuation model could produce a materially different estimate of fair value. It is Trafigura's policy to hedge significant market risk, therefore sensitivity to fair value movements is limited. Trafigura manages its market risk using the Value at Risk (VaR) as disclosed in note 24b.

Other financial assets and inventories	Level 1 USD'M	Level 2 USD'M	Level 3 USD'M	Total USD'M
31 March 2019				
Listed equity securities – Fair value through OCI	26.3	–	–	**26.3**
Listed equity securities – Fair value through profit and loss	27.6	–	–	**27.6**
Listed debt securities – Fair value through profit or loss	–	–	490.1	**490.1**
Unlisted equity investments – Fair value through profit or loss	–	–	62.7	**62.7**
Unlisted equity investments – Fair value through OCI	–	–	191.5	**191.5**
Futures	28.0	–	–	**28.0**
OTC derivatives	–	103.1	44.7	**147.8**
Physical forwards	–	–	230.2	**230.2**
Cross-currency swaps	–	32.9	–	**32.9**
Interest rate swaps	–	54.7	–	**54.7**
Non-financial hedged items	–	552.7	129.4	**682.1**
Other financial derivatives	–	470.7	–	**470.7**
Inventories	–	14,898.6	–	**14,898.6**
Total	**81.9**	**16,112.7**	**1,148.6**	**17,343.2**

Other financial liabilities	Level 1 USD'M	Level 2 USD'M	Level 3 USD'M	Total USD'M
31 March 2019				
Futures	23.4	–	–	**23.4**
OTC derivatives	–	249.6	–	**249.6**
Physical forwards	–	–	298.7	**298.7**
Cross-currency swaps	–	64.0	–	**64.0**
Interest rate swaps	–	2.5	–	**2.5**
Non-financial hedged items	–	42.9	55.7	**98.7**
Other financial derivatives	–	329.7	–	**329.7**
Fixed rate borrowings	–	2,751.4	–	**2,751.4**
Total	**23.4**	**3,440.2**	**354.4**	**3,818.0**

Other financial assets and inventories	Level 1 USD'M	Level 2 USD'M	Level 3 USD'M	Total USD'M
30 September 2018				
Listed equity securities – Fair value through OCI	10.2	–	–	**10.2**
Listed equity securities – Fair value through profit and loss	44.6	–	–	**44.6**
Listed debt securities – Fair value through profit or loss	–	–	466.3	**466.3**
Unlisted equity investments – Fair value through profit or loss	–	–	31.6	**31.6**
Unlisted equity investments – Fair value through OCI	–	–	163.2	**163.2**
Futures	7.8	–	–	**7.8**
OTC derivatives	–	93.1	44.7	**137.8**
Physical forwards	–	1.4	329.0	**330.4**
Cross-currency swaps	–	63.4	–	**63.4**
Interest rate swaps	–	21.6	–	**21.6**
Non-financial hedged items	–	1,103.0	646.5	**1,749.5**
Other financial derivatives	–	346.5	–	**346.5**
Inventories	–	14,732.9	–	**14,732.9**
Total	**62.6**	**16,362.0**	**1,681.3**	**18,105.8**

Other financial liabilities	Level 1 USD'M	Level 2 USD'M	Level 3 USD'M	Total USD'M
30 September 2018				
Futures	5.3	–	–	**5.3**
OTC derivatives	–	356.1	–	**356.1**
Physical forwards	–	0.7	307.9	**308.6**
Cross-currency swaps	–	155.1	–	**155.1**
Interest rate swaps	–	1.4	–	**1.4**
Other financial derivatives	–	298.1	–	**298.1**
Fixed rate borrowings	–	3,479.6	–	**3,479.6**
Total	**5.3**	**4,291.0**	**307.9**	**4,604.2**

F. Notes to the interim condensed consolidated financial statements

The overview of the fair value hierarchy and applied valuation methods can be specified as follows:

Listed equity securities – Fair value through OCI		31 March 2019 USD'M	30 September 2018 USD'M
– Level 1	Assets	26.3	10.2
	Liabilities	–	–
Valuation techniques and key inputs:	Quoted prices in an active market.		
Significant unobservable inputs:	None.		

Listed equity securities – Fair value through profit and loss		31 March 2019 USD'M	30 September 2018 USD'M
– Level 1	Assets	27.6	44.6
	Liabilities	–	–
Valuation techniques and key inputs:	Quoted prices in an active market.		
Significant unobservable inputs:	None.		

Futures		31 March 2019 USD'M	30 September 2018 USD'M
– Level 1	Assets	28.0	7.8
	Liabilities	23.4	5.3
Valuation techniques and key inputs:	Quoted prices in an active market.		
Significant unobservable inputs:	None.		

OTC derivatives		31 March 2019 USD'M	30 September 2018 USD'M
– Level 2	Assets	103.1	93.1
	Liabilities	249.6	356.1
Valuation techniques and key inputs:	Reference prices.		
Significant unobservable inputs:	Inputs include observable quoted prices sourced from traded reference prices or recent traded prices indices in an active market for identical assets or liabilities.		

Physical forwards		31 March 2019 USD'M	30 September 2018 USD'M
– Level 2	Assets	–	1.4
	Liabilities	–	0.7
Valuation techniques and key inputs:	Reference prices.		
Significant unobservable inputs:	Inputs include observable quoted prices sourced from traded reference prices or recent traded prices indices in an active market for identical assets or liabilities.		

Cross-currency swaps		31 March 2019 USD'M	30 September 2018 USD'M
– Level 2	Assets	32.9	63.4
	Liabilities	64.0	155.1
Valuation techniques and key inputs:	Discounted cash flow model.		
Significant unobservable inputs:	Inputs include observable quoted prices sourced from exchanges or traded references indices in an active market for identical assets or liabilities. Prices are adjusted by a discount rate which captures the time value of money and counterparty credit considerations.		

Interest rate swaps		31 March 2019 USD'M	30 September 2018 USD'M
– Level 2	Assets	54.7	21.6
	Liabilities	2.5	1.4
Valuation techniques and key inputs:	Discounted cash flow model.		
Significant unobservable inputs:	Inputs include observable quoted prices sourced from exchanges or traded prices indices in an active market for identical assets or liabilities. Prices are adjusted by a discount rate which captures the time value of money and counterparty credit considerations.		

Non-financial hedged items		31 March 2019 USD'M	30 September 2018 USD'M
– Level 2	Assets	552.7	1,103.0
	Liabilities	42.9	–
Valuation techniques and key inputs:	Reference prices.		
Significant unobservable inputs:	Inputs include observable quoted prices sourced from traded reference prices or recent traded prices indices in an active market for identical assets or liabilities.		

Non-financial hedged items		31 March 2019 USD'M	30 September 2018 USD'M
– Level 3	Assets	129.4	646.5
	Liabilities	55.7	–
Valuation techniques and key inputs:	LNG valuation model.		
Significant unobservable inputs:	Inputs include observable quoted prices sourced from traded reference prices or recent traded prices indices in an active market for identical assets or liabilities.		

Other financial derivatives		31 March 2019 USD'M	30 September 2018 USD'M
– Level 2	Assets	470.7	346.5
	Liabilities	329.7	298.1
Valuation techniques and key inputs:	Discounted cash flow model.		
Significant unobservable inputs:	Inputs include observable quoted prices sourced from exchanges or traded reference indices in an active market for identical assets or liabilities. Prices are adjusted by a discount rate which captures the time value of money and counterparty credit considerations.		

Inventories		31 March 2019 USD'M	30 September 2018 USD'M
– Level 2	Assets	14,898.6	14,732.9
	Liabilities	–	–
Valuation techniques and key inputs:	Quoted prices in an active market.		
Significant unobservable inputs:	Premium discount on quality and location.		

Fixed rate borrowings		31 March 2019 USD'M	30 September 2018 USD'M
– Level 2	Assets	–	–
	Liabilities	2,751.4	3,481.2
Valuation techniques and key inputs:	Discounted cash flow model.		
Significant unobservable inputs:	Cash flows discounted at current borrowing rates for similar instruments.		

Listed debt securities – Fair value through profit or loss			31 March 2019 USD'M	30 September 2018 USD'M
	– Level 3	Assets	**490.1**	466.3
		Liabilities	**–**	–
Valuation techniques and key inputs:	Discounted cash flow model.			
Significant unobservable inputs:	– Forecast throughput – Discount rates using weighted average cost of capital – Market illiquidity – Operating cost and capital expenditures The resultant asset is a discounted cash flow of the underlying throughput. Increase/decrease of the forecasted throughput will result in an increase/decrease of the value of the asset.			

Unlisted equity investments – Fair value through profit and loss			31 March 2019 USD'M	30 September 2018 USD'M
	– Level 3	Assets	**62.7**	31.6
		Liabilities	**–**	–
Valuation techniques and key inputs:	Quoted prices obtained from the asset managers of the funds.			
Significant observable inputs:	– Market illiquidity – Price of commodities			

Unlisted equity investments – Fair value through OCI			31 March 2019 USD'M	30 September 2018 USD'M
	– Level 3	Assets	**191.5**	163.2
		Liabilities	**–**	–
Valuation techniques and key inputs:	Quoted prices obtained from the asset managers of the funds.			
Significant observable inputs:	– Market illiquidity – Price of commodities			

OTC derivatives			31 March 2019 USD'M	30 September 2018 USD'M
	– Level 3	Assets	**44.7**	44.7
		Liabilities	**–**	–
Valuation techniques and key inputs:	Discounted valuation of cashflows generated by mean-reverting price simulations.			
Significant observable inputs:	– Mean reversion – Volatility			

Physical forwards			31 March 2019 USD'M	30 September 2018 USD'M
	– Level 3	Assets	**230.2**	329.0
		Liabilities	**298.7**	307.9
Valuation techniques and key inputs:	Discounted cash flow model.			
Significant observable inputs:	Prices are adjusted by differentials including: – Quality – Location			

The movements in the Level 3 hierarchy can be summarised as follows:

USD'M	Physical forwards/ Derivatives	Equity/Debt securities	Non-financial hedged items	Total
1 October 2018	65.9	661.1	646.5	1,373.4
Total gain/(loss) recognised in statement of income	(53.9)	19.8	(585.6)	(619.7)
Total gain/(loss) recognised in OCI	–	1.3	–	1.3
Invested	–	66.7	–	66.7
Disposals	–	(4.5)	–	(4.5)
Total realised	(35.8)	–	12.7	(23.1)
31 March 2019	**(23.8)**	**744.3**	**73.6**	**794.1**

USD'M	Physical forwards/ Derivatives	Equity/Debt securities	Non-financial hedged items	Total
1 October 2017	(53.8)	615.7	–	561.9
Total gain/(loss) recognised in statement of income	67.3	20.0	646.5	733.7
Total gain/(loss) recognised in OCI	–	9.9	–	9.9
Invested	–	61.1	–	61.1
Disposals	–	(45.6)	–	(45.6)
Total realised	52.4	–	–	52.4
30 September 2018	**65.9**	**661.1**	**646.5**	**1,373.4**

There have been no transfers between fair value hierarchy Levels in the six-month period ended 31 March 2019. Materially all Level 3 physical forwards are settled in the next year. See note 14 for equity/debt securities.

25. Equity participation plan

The immediate parent of the Company, Trafigura Beheer B.V., has an equity participation plan (EPP) which is open to employees of the Group. Shares issued to employees are preference shares of Trafigura Beheer B.V. which give rights to economic benefits with limited voting rights. The founders and controlling shareholders of the Group, represented by the Board of Directors of Trafigura Control Holdings Pte. Ltd., a parent company of Trafigura Beheer B.V., in consultation with the Board of Directors of the Company, decide on the share awards to be issued to employees. Annual remuneration (which includes the equity participation awards) is subject to review by the remuneration committee of the Group.

The value of the shares is based on the net asset value of an ordinary share as set out in the Articles of Association of Trafigura Beheer B.V., which management believe is a fair approximation of the fair value. Shares awarded under the EPP may vest immediately or over a period of several years.

Employees do not have the right to freely sell shares that have vested unless Trafigura Control Holdings Pte. Ltd. has granted approval and has refrained from its right to nominate a prospective purchaser and make a purchase offer. Upon termination of employment, employees must transfer all of their shares at the direction of Trafigura Control Holdings Pte. Ltd. or hold the shares subject to further directions of Trafigura Control Holdings Pte. Ltd.

Neither Trafigura Beheer B.V. nor the Group have a legal or constructive obligation to settle the shares held by employees in cash. If employment is ceased prior to the end of the vesting period the shares will be forfeited unless otherwise determined by Trafigura Control Holdings Pte. Ltd.

The Group's EPP is classified as an equity-settled plan in the Group's financial statements; the fair value of the shares granted, determined at the grant date, is recorded in the statement of income rateably over the vesting period of the shares.

Compensation in respect of share based payments recognised in staff costs for the six-month period ended 31 March 2019 amounted to USD70.5 million (HY 2018: USD50.7 million).

Unrecognised staff costs in respect of rateably vesting shares expected to be recognised from 2019 to 2024 amount to USD193.1 million at 31 March 2019 (31 March 2018 USD126.4 million).

26. Related parties transactions

In the normal course of business, the Company enters into various transactions with related parties including fixed price commitments to sell and to purchase commodities, forward sale and purchase contracts, agency agreements and management service agreements. Outstanding balances at period end are unsecured and settlement occurs in cash. There have been no guarantees provided or received for any related-party receivables or payables.

All transactions between the Company and its subsidiaries are eliminated on consolidation along with any unrealised profits and losses between its subsidiaries, associates and joint ventures.

Related-party receivables/(payables)	31 March 2019 USD'M	30 September 2018 USD'M
Trafigura Beheer B.V.	**(19.5)**	(17.7)
Trafigura Control Holdings Pte. Ltd.	**0.7**	–
Puma Energy	**1,224.6**	1,173.2
Farringford N.V.	**148.7**	83.1
Beheer Malta Ltd.	**229.2**	(9.0)
Ecore B.V.	**1.1**	1.3
Emincar	**285.5**	295.1
Jinchuan Group Co. Ltd.	**30.4**	58.5
Minas de Aguas Teñidas, S.A.U ("MATSA")	**5.0**	(7.2)
Simba Holding S.à r.l.	**(1.4)**	242.9
Nayara Energy Limited	**398.2**	132.7
Nyrstar Sales & Marketing AG	**592.5**	118.7
Other	**32.5**	(4.5)
Total	**2,927.4**	2,067.3

	31 March 2019 USD'M	31 March 2018 USD'M
Sales (mainly Puma Energy)	**4,936.0**	4,592.0
Purchases	**1,929.2**	1,783.1
Terminalling & dockage fees	**–**	86.2
Interest income	**35.8**	15.0
Interest expenses	**–**	8.3
Cost recharges	**20.3**	28.8

Below table summarises the nature of relationship and nature of transactions entered with the related party:

Party	Nature of relationship	Nature of transaction
Beheer Malta Ltd.	Parent company	Buy back of preference shares
Trafigura Control holding S.a.r.l.	Parent company	Buy back of preference shares
Trafigura Control Holdings Pte. Ltd.	Parent company	Buy back of preference shares
Buckeye Partners LLC	Equity-accounted investee	Lease agreements
Ecore B.V.	Cousin group	Cost recharges, trading and hedging
Empresa Minera del Caribe SA	Equity-accounted investee	Financing and trading agreement
Nayara Energy Limited	Equity-accounted investee	Financing and trading agreement
Farringford N.V.	Ultimate parent	Loans and cost recharges
Jinchuan Group Co. Ltd.	Equity-accounted investee	Trading agreement
Minas de Aguas Teñidas, S.A.U ("MATSA")	Equity-accounted investee	Financing and trading agreement
Porto Sudeste do Brasil S.A.	Equity-accounted investee	Loans and cost recharges
Nyrstar Sales & Marketing AG	Equity-accounted investee	Financing and trading agreement
Simba Holding S.à.r.l.	Equity-accounted investee	Multimodal logistic services
Puma Energy Holdings	Equity-accounted investee	Financing and trading agreement
Trafigura Beheer B.V.	Parent company	Loans and cost recharges

27. Subsequent events

In May 2019 the Group raised its latest tranche of RMB540 million, with a three-year maturity, issued in China's mainland debt market as part of a RMB2,350 million Panda Bond Programme for which Trafigura obtained National Association of Financial Market Institutional Investors' registration approval.

In March 2019, Nyrstar entered into a Lock-Up Agreement with a majority of its financial creditors for the purpose of recapitalising the Group. It has received the requisite support from the financial creditor groups and will now proceed to implement the scheme of arrangement which is expected to complete by financial year-end. The restructuring arrangement will result in Trafigura indirectly obtaining approximately 98 percent of the shares of the Nyrstar Operating Group and will lead to Trafigura consolidating the assets and remaining liabilities of the company within its balance sheet before the end of this financial year. For a more detailed disclosure of Nyrstar's restructuring see page 3 of this interim report.

Trafigura Group Pte. Ltd.
Consolidated Financial Statements
for the year ended
30 September 2018

INDEX

Report of the auditor on the consolidated financial statements of Trafigura Group Pte. Ltd.

To the Shareholders and the Board of Directors

Opinion

We have audited the consolidated financial statements of Trafigura Group Pte. Ltd. and its subsidiaries (collectively, the "Group"), which comprise the consolidated statement of financial position as at 30 September 2018 and the consolidated statement of income, consolidated statement of comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements on pages F-39 to F-80 give a true and fair view of the consolidated financial position of the Group as at 30 September 2018 and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with the International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (ISAs). Our responsibilities under those provisions and standards are further described in the "Auditor's responsibilities for the audit of the consolidated financial s tatements" s ection of our report.

We are independent of the Group in accordance with the provisions of the IESBA Code of Ethics for Professional Accountants, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Our audit approach

Trafigura Group Pte. Ltd. is one of the world's largest independent commodity trading and logistics companies. The Group trades operationally across different geographical locations around the world within two primary segments, Oil and Petroleum Products and Metals and Minerals, both of which are supported by the related shipping and chartering activities. The Metals and Minerals segment also encompasses the mining and logistics businesses. The Group also invests in terminals, storage warehouses, mines and other commodity-related assets, either directly or through equity stakes in joint ventures and associate companies over which they may have significant influence.

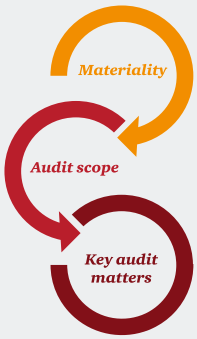
The Group's business is focused on commodity trade flows, including the transporting, storing and blending of a diverse portfolio of commodities to exploit natural arbitrage opportunities. To ensure the accurate capture of all the transactions for financial reporting, the Group relies on complex front-office trade and risk management systems with varying levels of integration, supported by manual reconciliations. The high volume of transactions and complexity of the systems heightens the risk of inaccurate or incomplete recording of transactions within the system. Minor errors, which repeat, could, have a material impact on the consolidated financial statements.

As a part of designing our audit, we determined materiality and assessed the risks of material misstatement in the consolidated financial statements. In particular, we considered where management made subjective judgements, especially in respect of significant accounting estimates that involved making assumptions and considering the impact of future events that are inherently uncertain. In Note 3(y) Use of estimates and judgements of the financial statements, the Group describes the areas of key judgements made in applying accounting policies and the key sources of estimation uncertainty. Given the significant estimation uncertainty and the higher inherent risks of material misstatement, many of these areas were also considered by us to be key audit matters and are described in more detail in the section 'Key audit matters' of this report. We also addressed risk of management override of controls, including among other matters, consideration of whether there was evidence of bias that represented a risk of material misstatement due to fraud. Furthermore, we evaluated and tested the design and operating effectiveness of the Group's controls over the accounting and financial reporting aspects within its trading operations, including the use of data analytics to assist in the testing of revenue (trade to cash) to identify non-standard and more risky transactions.

***PricewaterhouseCoopers SA**, avenue Giuseppe-Motta 50, postcode, CH-1211 Geneva 2, Switzerland*
Telephone: +41 58 792 91 00, Telefax: +41 58 792 91 10, www.pwc.ch

The outline of our audit approach as follows:

Overview



Overall Group materiality: USD48,000,000

We performed full scope audit work at six components, audited specific balances at 29 components and performed specified procedures at 1 component. Additionally, specified procedures were performed by a non-PwC audit firm over the valuation and financial performance of Puma Energy Holdings Pte. Ltd. Our audit scope addressed approximately 82 percent of the Group's revenue and 75 percent of the Group's total assets.

As key audit matters the following areas of focus have been identified:

- Fair value of physical commodity contracts and commodity hedges
- Impairment testing of non-current assets in Colombia and Brazil
- Evaluation of uncertain tax positions and valuation of deferred tax assets
- Determination of control of subsidiaries and joint arrangements

Audit scope

We tailored the scope of our audit in order to perform sufficient work to enable us to provide an opinion on the consolidated financial statements as a whole, taking into account the structure of the Group, the accounting processes and controls, and the industry in which the Group operates.

The Group financial statements are a consolidation of 358 legal entities that are accounted for in 595 financial ledgers, which we have defined as "components" for audit scoping purposes.

We identified six components that, in our view, required an audit of their financial information due to their size or risk characteristics. For these six components, the audit work was performed either centrally by the Group audit team in Switzerland or the Netherlands or by another PwC audit firm at one of the Group's global service centres located in Mumbai, India or Montevideo, Uruguay under the direct guidance of the Group audit team. Additionally, we identified 31 components, that in our view, required either an audit of specific balances or specified procedures to be performed due to the significant or higher risk areas and to achieve appropriate coverage over material amounts.

Of the 31 components, there were only 4 components where the work was not performed directly by ourselves or through our direct supervision at the Group's global services centres. We determined the level of our involvement in the audit work performed by the component auditors for these four other components to be able to conclude whether sufficient appropriate audit evidence had been obtained as a basis for our opinion on the consolidated financial statements as a whole.

We ensured that the audit teams both at Group and at the component levels included the appropriate skills and competencies necessary for the audit of the Group's consolidated financial statements, including specialists in the areas of information technology, valuation and taxes. The Group audit team was in continuous communication during the year with the local teams to discuss the audit approach, progress of the audit and observations or findings, if any. To facilitate our direct review, local PwC teams in India and Uruguay documented their audit work directly in the Group audit team's files. The Group audit team also performed further audit procedures over Group functions (including those relating to taxation, equity-based remuneration, valuation of certain non-current assets, litigation, consolidation and financial reporting disclosures).

By performing the procedures described above at the components, combined with the additional procedures at a Group level, we have obtained sufficient and appropriate audit evidence regarding the financial information of the Group as a whole to provide a basis for our opinion on the consolidated financial statements.

Materiality

The scope of our audit was influenced by our application of materiality. Our audit opinion aims to provide reasonable assurance that the consolidated financial statements are free from material misstatement. Misstatements may arise due to fraud or error. They are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken based on the consolidated financial statements.

Based on our professional judgement, we determined certain quantitative thresholds for materiality, including the overall Group materiality for the consolidated financial statements as a whole as set out in the table below. These, together with qualitative considerations, helped us to determine the scope of our audit and the nature, timing and extent of our audit procedures and to evaluate the effect of misstatements, both individually and in aggregate, on the consolidated financial statements as a whole.

Overall Group materiality	USD48,000,000
How we determined it	5% of the three-year average profit before tax, adjusted for impairment losses and reversals
Rationale for the materiality benchmark applied	We chose profit before tax as the measure because, in our view, it is the measure against which the performance of the Group is most commonly assessed and is a generally accepted benchmark. We used a three-year average to allow for the volatility in earnings normally encountered in the commodity trading markets. Profit before tax is adjusted for the impact of impairment losses and reversals to normalise it for non-recurring elements outside the normal course of business.

We agreed with the Management that we would report to them misstatements above USD2,400,000 identified during our audit as well as any misstatements below that amount which, in our view, warranted reporting for qualitative reasons.

Key audit matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Fair value of physical commodity contracts and commodity hedges

Refer to "Use of estimates and judgements" in Note 3(y) and Note 29

Key audit matter	How our audit addressed the key audit matter
The Group discloses USD329 million and USD308 million of "Level 3" financial assets and liabilities, respectively, for its physical commodity contracts which are the most judgemental category in the IFRS fair valuation hierarchy. Changes in these estimates may significantly impact the Group's future results. The majority of the physical purchase or sale commodity contracts entered by the Group are, however, short-term in nature. The significance in both size and volume of these short-term contracts, including an IT-supported, yet manual process to assess anomalies, presents inherent valuation risks. These shorter-term contracts do involve less judgement in determining the fair value for financial reporting; however, the Group does hold a portfolio of long-dated physical commodity contracts that require more assumptions. The Group has also entered into a number of derivatives to hedge a splitter refinery tolling arrangement, a pipeline transportation contract and long-term LNG off-take agreements. The fair value gain of these agreements was USD1,750million at 30 September 2018, hedged with derivative instruments with a fair value loss totalling USD1,898 million. In addition to these fair value hedges, the Group applied cash flow hedge accounting for forecasted transactions as detailed in Note 29(g). The fair valuation of these physical contracts and commodity hedges involves significant estimates, especially when the Group is required to use unobservable inputs, adopt market-based assumptions or make comparisons to similar instruments. These judgements become more significant in less liquid markets or for longer dated contracts. These fair valuations are calculated and managed manually.	We included financial instrument and treasury specialists directly in our team to evaluate management's approach to estimating the fair values and performed the following: • Evaluated the Group's process and controls for capturing and reviewing the inputs into the fair value estimates, including the relevant IT systems; • Substantively tested the forward curve calculations for a sample of physical and paper contracts across all commodities traded by the Group, including the verification of the relevant inputs, such as observable benchmark prices for similar products or adjustments for quality and location; • Evaluated the reasonableness of the methodology and any assumptions adopted by management in their forward curve pricing and hedging models, especially those which involved greater judgement around unobservable inputs. This was performed by benchmarking management's approach to our understanding of industry practices, agreeing or comparing the model support to observable market pricing inputs, and evaluating the reasonableness of using differing alternatives to calculating fair value. • For the LNG hedging of the various off-take agreements, we assessed the reasonableness of management's assumption that there is no readily available LNG market to determine the instruments classification under IFRS. We also verified the consistent application across the hedged population; and • Where manual calculations were involved, we tested the mathematical accuracy of the models and verified the input curves to external sources. We were able to conclude that the significant judgements were reasonable and free from bias as well as the appropriateness of the valuation models used and their consistent application.

Impairment testing of non-current assets in Colombia and Brazil

Refer to Notes 11, 13, and 16

Key audit matter	How our audit addressed the key audit matter
The Group invests in ports and terminals to support its trading activities. With the input of local management, the Group assesses market conditions and country specific risks to determine if there are any triggering events that may be indicators of an impairment of the asset carrying amounts. This resulted in two significant investments being reviewed by management: *Impala Terminals Colombia inland port* The Group has constructed a river port to transport wet and dry bulk cargoes along the Magdalena River, one of Colombia's main waterways. The carrying amount of the total multimodal project as one cash-generating unit was USD1,025 million at 30 September 2018. The port's potential profitability is hindered by the Colombian government's delays of its planned dredging of the Magdalena River. The depth of the Magdalena River determines the ease of navigability and how much each barge convoy can load. The dredging project continues to be delayed until a new contractor is mandated to complete the project; management expects the valuation to be negatively impacted if the dredging project commences after 2020. These delays impact the volume and timing of future cash flows. Management also used other significant assumptions in its valuation model, including discount rate, tariffs, mix and level of volumes and costs and expenses. Management's assessment was that there was no impairment required to the carrying value of the project. *Investment in Porto Sudeste do Brazil S.A. and its direct impact on the fair value of the related debt securities* The Group holds a 49.5 percent interest in a joint venture that owns and operates an iron ore port facility in Brazil. Linked to this investment, the Group also holds listed debt securities totalling USD466 million which are accounted for at fair value through profit and loss. The performance of these debt instruments is dependent on the future throughput results of the port. As there is limited liquidity of these debt securities, the fair value is based on a Level 3 valuation using the key assumptions of the port's business plan that underlie the impairment test. A 10 percent discount is also applied due to lack of marketability. Management engaged an independent valuation expert to assist them in their valuation of these instruments. In 2016, the Group recorded a USD250 million impairment on its investment in associate primarily due to the depressed iron ore prices and low volumes. The Group's residual exposure at 30 September 2018 was USD42 million. Management re-assessed the impairment risk in 2018 due to continued challenges to increase volumes and improve pricing and determined no further impairment was required. The estimates and judgements used in determining the fair value of the debt securities and related impairment assessments are significant, open to bias and are considered a key audit matter.	Similar to prior year, we obtained the valuation models and met with management to gain an overview of the triggering events, market and operational factors and key assumptions supporting the Group's impairment assessment. With the assistance of our internal valuation specialists, we performed the following procedures for the impairment risks in Colombia and Brazil: • Gained an understanding of the controls and process for collecting the inputs into the valuation models to evaluate the design of the Group's controls over its impairment assessment and challenged the appropriateness of the inputs and significant assumptions, including the cash flow projections, discount rate, volumes, tariffs, costs and expenses as well as the impact of the expected finalisation of the river improvement project specific to Colombia. • Re-performed the valuation calculations; benchmarked the valuation model with generally accepted valuation techniques; compared historical estimates used by management to actual results. • Re-performed the calculations supporting the sensitivity analysis prepared by management for the forecasted assumptions over volumes, discount rates, commodity prices, foreign exchange and operating costs; we performed our own independent calculations where applicable, especially when only a lower headroom was available. The risk of management bias was considered in our work. • Assessed the appropriateness of disclosures included in the financial statements, including key assumptions used and inherent sensitivities of the financial results to these assumptions. Specifically for the listed debt securities, we have also assessed the objectivity and competence of the valuation expert used by management to determine the fair value of the listed debt securities. The procedures performed over the port impairment model were used to determine the appropriateness of the fair value calculation of these instruments. We were able to conclude that the significant judgements were reasonable and free from bias as well as the appropriateness of the valuation models used and their consistent application.

Evaluation of uncertain tax positions and valuation of deferred tax assets

Refer to "Use of estimates and judgements" in Note 3(y) and Note 10

Key audit matter	How our audit addressed the key audit matter
The Group has significant intercompany transactions among companies in the numerous jurisdictions where it operates, with certain jurisdictions having varying levels of maturity in regards to acceptance by the local tax authorities of global transfer pricing practices that are specific to the Group in each territory. Changes in the tax legislation, interpretations or the underlying business model, as well as one-off transactions, may create or crystallize tax exposures in a particular country. The Group's assessment on whether it should provide for an uncertain tax position involves significant judgements over the applicable tax legislation in the jurisdiction of the underlying transactions and interpretation of complex transfer pricing rules. At 30 September 2018, the Group's deferred tax asset resulting from net operating losses was USD147 million. Certain of these losses will not be recoverable before an extended period, which increases the judgement to determine their eventual recovery. The assessment of the valuation of deferred tax assets resulting from net operating losses and temporary differences involves judgement around the feasibility of the long-term future profitability and development of the activities.	To assess the recognition and valuation of the Group's deferred tax assets resulting from net operating losses as well as the provision for uncertain tax positions made by the Group, we performed the following with the assistance of our tax specialists: • Agreed net operating losses to prior year returns to determine their existence and assessed if the associated deferred tax asset were properly netted against any deferred tax liabilities; • Reviewed management's assessment of the recoverability of the deferred tax assets by testing the assumptions supporting projected forecasts. The assumptions supporting this analysis were consistent with the impairment assessment described above, including the review of differences between historical estimates and actual results; • Evaluated the probability of future cash outflows of specific, uncertain tax risks identified by the Group; • Assessed the Group's application of its transfer pricing policies that are specific to the Group in each jurisdiction, paying particular attention to changes in the applicable local fiscal regulations. Further, we tested a sample of intercompany transactions to their applicable transfer pricing policies. • Analysed the tax positions by benchmarking the assumptions and methodologies adopted by the Group to our understanding of local tax practices. We also assessed the adequacy of the Group's disclosures on deferred tax assets and uncertain tax positions using our understanding. We did not identify any material differences between our independent assessment and the amounts of the deferred tax assets and provisions recorded by management; we found the judgements made by management to be reasonable.

Determination of control of subsidiaries and joint arrangements

Refer to "Use of estimates and judgements" in Note 3(y) and Note 13 and 28

Key audit matter	How our audit addressed the key audit matter
Under the financial reporting framework, the Group is required to determine whether it controls an entity, and consequently, whether it needs to consolidate that entity into the consolidated financial statements. Specifically, the Group assesses whether it has the power over the relevant activities of the entity, exposure to its variable returns and the ability to use this power to impact returns of the entity. This is considered a key audit matter because of the judgements often required to assess the impact of complex contractual terms and underlying business rationale. The Group has certain investments in companies, which are not consolidated and whose results are accounted for in the Group's consolidated financial statements based on their equity share ownership. The most significant of the Group's investments is a 49.3 percent investment in Puma Energy Holdings Pte. Ltd., which was deconsolidated as of 30 September 2013 following the sale of the majority interest. Furthermore as of 30 September 2018, the Group deconsolidated Simba Holding Sàrl, a new structure created in 2018 to group selected logistics activities into a joint venture with an external investor. Total gain recognised from this transaction was USD191 million. The impact of the decision regarding the existence of control significantly impacts the accuracy, completeness and presentation of the financial statements and potentially, the debt covenant ratios which are included in the covenants to the Group's debt financing arrangements.	We obtained an understanding of the investments and entities, their structure and relationships to the Group (funding, supply agreements, governance structures) as well as their business rationale. We sought to capture any changes in the relationship that would impact the original assumptions adopted for investments existing in prior years. We inquired of various members of management to corroborate the representations being received and reviewed contracts, supply agreements, amendments, minutes and other supporting documentation providing further clarity into the question over control. In particular for the deconsolidation of the Simba Holding structure, we reviewed the investor shareholding and commercial agreements, potential hurdles to regulatory approval and related critical judgments supporting Management's determination that Simba is under joint control and the resulting accounting treatment. We involved our financial reporting specialists to assist in our assessment of management's conclusions against the IFRS guidance and to ensure we had considered all possibly factors in this assessment. As a result of our procedures, we determined that the judgements adopted by management were reasonable.

Other information in the annual report

The Board of Directors is responsible for the other information in the annual report. The other information comprises all information included in the annual report, but does not include the consolidated financial statements of Trafigura Group Pte. Ltd. and our auditor's reports thereon.

Our opinion on the consolidated financial statements does not cover the other information in the annual report and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information in the annual report and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of the Board of Directors for the consolidated financial statements

The Board of Directors is responsible for the preparation of the consolidated financial statements that give a true and fair view in accordance with IFRS as issued by the IASB, and for such internal control as the Board of Directors determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the Board of Directors is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Auditor's responsibilities for the audit of the consolidated financial statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken based on these consolidated financial statements.

As part of an audit in accordance with ISAs, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made.
- Conclude on the appropriateness of the Board of Directors use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the Group audit. We remain solely responsible for our audit opinion.

We communicate with the Board of Directors or its relevant committee regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the Board of Directors or its relevant committee with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with the Board of Directors or its relevant committee, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

PricewaterhouseCoopers SA

/s/ TRAVIS RANDOLPH	/s/ EWA ANSELM-JEDLINSKA
Travis Randolph	Ewa Anselm-Jedlinska

Geneva, Switzerland
7 December 2018

A. Consolidated statement of income

	Note	2018 USD'M	2017 USD'M
Revenue	7	**180,744.1**	136,420.7
Cost of sales		**(178,360.0)**	(134,181.7)
Gross profit	4	**2,384.1**	2,239.0
Other income/(expenses)	8	**44.9**	163.2
General and administrative expenses	9	**(937.3)**	(945.0)
Results from operating activities		**1,491.7**	1,457.2
Finance income		**647.4**	557.1
Finance expense		**(1,189.6)**	(813.4)
Net financing costs		**(542.2)**	(256.3)
Share of profit/(loss) of equity-accounted investees	13	**17.4**	(232.2)
Profit before tax		**966.9**	968.7
Income tax expense	10	**(94.1)**	(81.4)
Profit for the year		**872.8**	887.3
Profit attributable to			
Owners of the Company		**849.2**	847.7
Non-controlling interests	24	**23.6**	39.6
Profit for the year		**872.8**	887.3

See accompanying notes

B. Consolidated statement of other comprehensive income

	Note	2018 USD'M	2017 USD'M
Profit for the year		**872.8**	887.3
Other comprehensive income			
Items that are or may be reclassified to profit or loss:			
Gain/(loss) on cash flow hedges	23	**9.8**	(17.4)
Effect from hyperinflation adjustment	32	**79.3**	–
Tax on other comprehensive income	10	**(18.3)**	(1.0)
Exchange gain/(loss) on translation of foreign operations		**(131.7)**	18.6
Share of other comprehensive income/(loss) from associates		**(108.5)**	(38.2)
Items that will not be reclassified to profit or loss:			
Net change in fair value through other comprehensive income	16	**11.9**	8.6
Defined benefit plan actuarial gains/(losses), net of tax		**0.8**	0.7
Other comprehensive income for the year net of tax		**(156.7)**	(28.7)
Total comprehensive income for the year		**716.1**	858.6
Total comprehensive income attributable to:			
Owners of the Company		**692.5**	819.0
Non-controlling interests		**23.6**	39.6
Total comprehensive income for the year		**716.1**	858.6

See accompanying notes

C. Consolidated statement of financial position

	Note	30 September 2018 USD'M	30 September 2017 USD'M
Assets			
Property, plant and equipment	11	**1,900.1**	2,190.8
Intangible assets	12	**173.4**	203.7
Equity-accounted investees	13	**3,361.2**	3,487.9
Prepayments	14	**595.9**	608.8
Loans receivable	15	**485.5**	670.7
Other investments	16	**715.9**	635.0
Derivatives	29	**338.6**	147.5
Deferred tax assets	10	**171.2**	153.2
Other non-current assets	17	**1,094.6**	119.1
Total non-current assets		**8,836.4**	8,216.7
Inventories	18	**14,732.9**	13,926.7
Trade and other receivables	19	**19,951.7**	17,367.1
Derivatives	29	**569.0**	462.9
Prepayments	14	**3,063.7**	3,130.4
Income tax receivable	10	**40.0**	88.4
Other current assets	21	**849.5**	182.6
Deposits	22	**334.4**	338.3
Cash and cash equivalents	22	**5,355.8**	4,988.7
Total current assets		**44,897.0**	40,485.1
Non current assets classified as held for sale	11	**67.6**	68.3
Total assets		**53,801.0**	48,770.1
Equity			
Share capital	23	**1,503.7**	1,503.7
Capital securities	23	**953.6**	1,247.3
Reserves	23	**(765.3)**	(606.1)
Retained earnings	23	**4,229.4**	3,900.5
Equity attributable to the owners of the Company		**5,921.4**	6,045.4
Non-controlling interests	24	**328.7**	339.4
Total group equity		**6,250.1**	6,384.8
Liabilities			
Loans and borrowings	25	**8,462.1**	7,401.1
Derivatives	29	**275.9**	267.8
Provisions	26	**63.8**	90.9
Deferred tax liabilities	10	**173.3**	188.6
Total non-current liabilities		**8,975.1**	7,948.4
Current tax liabilities	10	**176.3**	207.6
Loans and borrowings	25	**23,741.6**	23,853.5
Trade and other payables	27	**13,809.2**	9,940.9
Derivatives	29	**848.7**	434.9
Total current liabilities		**38,575.8**	34,436.9
Total group equity and liabilities		**53,801.0**	48,770.1

See accompanying notes

D. Consolidated statement of changes in equity

USD'000	Note	Equity attributable to the owners of the Company								Non-controlling interest	Total Group equity
		Share capital	Currency translation reserve	Revaluation reserve	Cash flow hedge reserve	Capital Securities	Retained earnings	Profit for the year	Total		
Balance at 1 October 2017		1,503,722	(525,723)	(32,626)	(47,743)	1,247,318	3,052,784	847,710	6,045,442	339,367	6,384,809
Profit for the year		–	–	–	–	–	–	849,217	849,217	23,576	872,793
Other comprehensive income		–	(169,071)	11,876	(337)	–	801	–	(156,731)	(1)	(156,732)
Total comprehensive income for the year		–	(169,071)	11,876	(337)	–	801	849,217	692,486	23,575	716,061
Profit appropriation		–	–	–	–	–	847,710	(847,710)	–	–	–
Dividend	23	–	–	–	–	–	(527,826)	–	(527,826)	(28,600)	(556,426)
Transfer revaluation reserve to retained earnings FVOCI instruments	16	–	–	(1,682)	–	–	1,682	–	–	–	–
Acquisition of non-controlling interest in subsidiary		–	–	–	–	–	–	–	–	226	226
Share based payments	30	–	–	–	–	–	84,489	–	84,489	–	84,489
Capital securities issued	23	–	–	–	–	207,250	(1,487)	–	205,763	–	205,763
Repayment of capital securities		–	–	–	–	(500,000)	–	–	(500,000)	–	(500,000)
Capital securities (currency translation)		–	–	–	–	(1,013)	1,013	–	–	–	–
Capital securities dividend		–	–	–	–	–	(85,380)	–	(85,380)	–	(85,380)
Divestment and deconsolidation of subsidiary	6	–	–	–	–	–	–	–	–	(5,165)	(5,165)
Share of other changes in equity of associates		–	–	–	–	–	6,345	–	6,345	–	6,345
Other		–	–	–	–	–	39	–	39	(705)	(666)
Balance at 30 September 2018		**1,503,722**	**(694,794)**	**(22,432)**	**(48,080)**	**953,555**	**3,380,170**	**849,217**	**5,921,358**	**328,698**	**6,250,056**

See accompanying notes

USD'000	Note	Equity attributable to the owners of the Company								Non-controlling interest	Total Group equity
		Share capital	Currency translation reserve	Revaluation reserve	Cash flow hedge reserve	Capital Securities	Retained earnings	Profit for the year	Total		
Balance at 1 October 2016		1,503,727	(549,763)	(23,023)	14,057	646,724	3,205,489	750,817	5,548,028	299,079	5,847,107
Profit for the year		–	–	–	–	–	–	847,710	847,710	39,583	887,293
Other comprehensive income		–	23,865	8,583	(61,800)	–	661	–	(28,691)	(21)	(28,712)
Total comprehensive income for the year		–	23,865	8,583	(61,800)	–	661	847,710	819,019	39,562	858,581
Profit appropriation		–	–	–	–	–	750,817	(750,817)	–	–	–
Dividend	23	–	–	–	–	–	(933,877)	–	(933,877)	–	(933,877)
Transfer revaluation reserve to retained earnings FVOCI instruments	16	–	–	(18,186)	–	–	18,186	–	–	–	–
Acquisition of non-controlling interest in subsidiary		–	–	–	–	–	–	–	–	735	735
Share-based payments	30	–	–	–	–	–	82,151	–	82,151	–	82,151
Capital securities issued	23	–	–	–	–	600,000	(5,519)	–	594,481	–	594,481
Capital securities (currency translation)		–	–	–	–	594	(594)	–	–	–	–
Capital securities dividend		–	–	–	–	–	(70,656)	–	(70,656)	–	(70,656)
Dilution gain from capital contribution in equity-accounted investees		–	–	–	–	–	4,377	–	4,377	–	4,377
Reclassification		–	175	–	–	–	(175)	–	–	–	–
Share of other changes in equity of associates		–	–	–	–	–	1,916	–	1,916	–	1,916
Other		(5)	–	–	–	–	8	–	3	(9)	(6)
Balance at 30 September 2017		**1,503,722**	**(525,723)**	**(32,626)**	**(47,743)**	**1,247,318**	**3,052,784**	**847,710**	**6,045,442**	**339,367**	**6,384,809**

See accompanying notes

E. Consolidated statement of cash flows

	Note	2018 USD'M	2017 USD'M
Cash flows from operating activities			
Profit before tax		**966.9**	968.7
Adjustments for:			
Depreciation	11	**135.5**	135.8
Amortisation of intangible assets	12	**56.1**	63.2
Provisions	26	**(31.0)**	18.8
Gain/(loss) on fair value through profit and loss instruments	16	**(4.2)**	(118.7)
Impairment losses on financial fixed assets	16	**(13.4)**	23.8
Impairment losses on non-financial fixed assets	8	**1.2**	17.4
Impairment losses on equity-accounted investees	13	**72.7**	4.2
Net finance costs		**542.2**	256.3
Share of (profit)/loss of equity-accounted investees	13	**(17.4)**	232.2
(Gain)/loss on sale of non-financial fixed assets	8	**(1.0)**	0.4
(Gain)/loss on sale of equity accounted investees	8	**56.6**	(3.0)
(Gain)/loss on sale of other investments	8	**(0.1)**	(0.6)
(Gain)/loss on divestments of subsidiaries	8	**(92.9)**	(30.8)
Revaluation gain on remeasurement of retained interest	6	**(103.9)**	–
Equity-settled share-based payment transactions	30	**87.6**	82.2
Operating cashflow before working capital changes		**1,654.9**	1,649.8
Changes in:			
Inventories		**(732.2)**	(2,387.8)
Trade and other receivables and derivatives		**(4,516.7)**	(2,343.0)
Prepayments		**80.5**	(534.5)
Trade and other payables and derivatives		**4,466.7**	385.0
Cash generated from/(used in) operating activities		**953.2**	(3,230.5)
Interest paid		**(1,193.8)**	(819.8)
Interest received		**620.4**	523.8
Dividends (paid)/received		**50.4**	35.8
Tax (paid)/received		**(115.6)**	(180.8)
Net cash from/(used in) operating activities		**314.6**	(3,671.5)
Cash flows from investing activities:			
Acquisition of property, plant and equipment	11	**(167.5)**	(318.7)
Proceeds from sale of property, plant and equipment	11	**28.6**	159.6
Disposal of assets/liabilities held for sale		**(0.2)**	(0.3)
Acquisition of intangible assets	12	**(35.6)**	(51.6)
Proceeds from sale of intangible assets		**0.0**	0.1
Acquisition of equity accounted investees	13	**(101.2)**	(374.9)
Disposal of equity accounted investees		**216.6**	26.5
Proceeds from loans receivable and advances	14/15	**(86.9)**	(119.6)
Repayment of loans receivable and advances	14/15	**227.4**	168.2
Acquisition of other investments	16	**(56.1)**	(72.8)
Disposal of other investments	16	**53.7**	107.6
Acquisition of subsidiaries, net of cash acquired	5	**(190.1)**	(0.8)
Disposal of subsidiaries, net of cash disposed of	6	**16.0**	64.7
Net cash from/(used in) investing activities		**(95.3)**	(412.1)
Cash flows from financing activities:			
Proceeds from the issue of capital securities	23	**205.8**	594.5
Payment of capital securities dividend	23	**(92.5)**	(69.6)
Dividend and payment in relation to the share redemption by the direct parent company	23	**(527.8)**	(568.9)
Repayment of capital securities	23	**(500.0)**	–
Proceeds from capital contributions to subsidiaries by non-controlling interests	24	**2.4**	0.7
Dividend non-controlling interest		**(7.3)**	–
Net proceeds from long-term loans and borrowings	25	**1,719.8**	586.3
Payment of finance lease liabilities	25	**(9.1)**	(5.2)
Increase of short-term bank financing	25	**(643.5)**	5,392.6
Net cash from/(used in) financing activities		**147.8**	5,930.4
Net increase/(decrease) in cash and cash equivalents		**367.1**	1,846.8
Cash and cash equivalents at 1 October	22	**4.988.7**	3,141.9
Cash and cash equivalents at 30 September (note 22)		**5.355.8**	4,988.7

See accompanying notes

F. Notes to consolidated financial statements

1. Corporate information

The principal business activities of Trafigura Group Pte. Ltd. ('the Company') and together with its subsidiaries ('the Group') are trading in crude and petroleum products, non-ferrous concentrates, refined metals and bulk commodities such as coal and iron ore. The Group also invests in assets, including investments in associates, which have strong synergies with its core trading activities. These include storage terminals, service stations, metal warehouses and mines.

The Company is incorporated in Singapore and its principal business office is at 10 Collyer Quay, Ocean Financial Centre, #29-00, Singapore, 049315.

The immediate and ultimate holding companies of the Company are Trafigura Beheer B.V. and Farringford N.V., respectively. Trafigura Beheer B.V. is incorporated in The Netherlands and Farringford N.V. is incorporated in Curacao.

The consolidated financial statements for the year ended 30 September 2018 were authorised for issue by the Board of Directors on 7 December 2018.

2. Basis of preparation

The Company's consolidated financial statements have been prepared in accordance with International Financial Reporting Standards ('IFRS') as issued by the International Accounting Standards Board ('IASB').

The consolidated financial statements have been prepared under the historical cost convention except for inventories, derivatives and certain other financial instruments that have been measured at fair value. The consolidated financial statements have been prepared on a going concern basis.

Functional and presentation currency

The Group's presentation currency is the US dollar (USD) and all values are rounded to the nearest tenth of a million (USD'M 0.1) except when otherwise indicated. The US dollar is the functional currency of most of the Group's principal operating subsidiaries. Most of the markets in which the Group is involved are USD denominated.

3. Significant accounting policies

The consolidated financial statements have been prepared in compliance with IFRS. The company has consistently applied the accounting policies used in the preparation of its opening IFRS statement of financial position and throughout all periods presented, as if these policies had always been in effect.

a. Reclassifications made in the comparative figures

As a result of the increased value of the non-financial hedged items during 2018, management decided to report these items under two newly introduced line items: Other non-current assets and other current assets. In the 2017 financial statements the fair value of the non-financial hedged items, amounting to USD162.6 million, were recorded in the line item Trade and other payables. This prior year balance related to non-financial hedged items was reclassified to align with current year presentation.

With the introduction of the new line item Other current assets, management also decided to present Prepaid expenses, which in 2017 was included within Trade and other receivables (2017: USD139.2 million), within Other current assets going forward. This was done to better differentiate between items which are considered to be financial instruments (all remaining items under Trade and other receivables) and items which are not considered to be financial instruments (all items presented under Other current assets).

For further information on the composition of the new balances, see note 17 Other non-current assets and note 21 Other current assets.

b. Basis of consolidation

The consolidated financial statements include the assets, liabilities and results of operations of all subsidiaries and branch offices, which the Company, either directly or indirectly, controls. Control is achieved when the Group is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. When the Group has less than a majority of the voting or similar rights of an investee, the Group considers all relevant facts and circumstances in assessing whether it has power over an investee.

Subsidiaries are consolidated from the date on which control is obtained by the Company and cease to be consolidated from the date on which control is transferred to a person or entity outside of the control of the Company. All intra-group assets and liabilities, equity, income, expenses and cash flows relating to transactions between members of the Group are eliminated in full on consolidation.

Changes in the Company's interests in subsidiaries that do not result in a loss of control are accounted for as equity transactions with any difference between the amount by which the non-controlling interests are adjusted and the fair value of the consideration paid or received being recognised directly in equity and attributed to equity holders of the Company.

If the Group loses control, the Group derecognises the assets and liabilities of the subsidiary, any non-controlling interests and the other components of equity related to the subsidiary. The parent's share of components previously recognised in other comprehensive income (OCI) is reclassified to profit and loss or retained earnings, as would be required if the Group had directly disposed of the related assets or liabilities. Any surplus or deficit arising on the loss of control is recognised in the statement of income. If the Group retains any interest in the previous subsidiary, then such interest is measured at fair value at the date that control is lost. Subsequently it is accounted for as an equity-accounted investee or as an equity investment depending on the level of influence retained.

Non-controlling interests in subsidiaries are identified separately from the Company's equity and are initially measured either at fair value or at the non-controlling interests' proportionate share of the fair value of the acquiree's identifiable net assets. Subsequent to acquisition, the carrying amount of non-controlling interests is the amount of those interests at initial recognition plus the non-controlling interests' share of subsequent changes in equity. Total comprehensive income is attributed to non-controlling interests even if this results in the non-controlling interests having a deficit balance.

c. Investments in equity-accounted investees

Associates and joint ventures (together 'Associates') in which the Group exercises significant influence or joint control are accounted for using the equity method. Significant influence is the power to participate in the financial and operating policy decisions of the investee but not control those policies. Joint control is established by contractual agreement and requires unanimous consent for strategic financial and operating decisions. The considerations made in determining significant influence or joint control are similar to those necessary to determine control over subsidiaries.

Under the equity method the investment in an Associate is initially recognised at cost. The carrying amount of the investment is adjusted to recognise changes in the Group's share in the net assets of the Associate or joint venture since acquisition date. Goodwill relating to the associate or joint venture is included in the carrying amount of the investment and is neither amortised nor individually tested for impairment. The statement of income reflects the Group's share of the results of operations of the associate. Any change in OCI of those investees is presented as part of the Group's OCI. In addition, when there has been a change recognised directly in the equity of the associate or joint venture, the Group recognises its share of any changes, when applicable, in the statement of changes in equity.

Unrealised gains and losses resulting from transactions between the Group and the Associate are eliminated to the extent of the interest in the Associate, unless the sale or contribution of assets constitute a business in which case the gains and losses are recognised in full.

The aggregate of the Group's share of profit or loss of equity-accounted investees is shown on the face of the statement of income and represents profit or loss after tax and non-controlling interests in the subsidiaries of the associate or joint venture.

The Group determines at each reporting date whether there is any objective evidence that the investment in the Associate is impaired.

The financial statements of the Associates are prepared for the same reporting period as the Group, unless otherwise indicated.

Changes in the Group's interest in Associates are accounted for as a gain or loss on disposal with any differences between the amount by which the carrying value of the Associate is adjusted and the fair value of the consideration received being recognised directly in the statement of income.

d. Business combinations

The Company accounts for its business combinations under the acquisition method at the acquisition date, which is the date on which control is transferred to the Group. The cost of an acquisition is measured as the aggregate of the consideration transferred, which is measured at acquisition date fair value, and the amount of any non-controlling interests in the acquiree. Transaction costs, other than those associated with the issue of debt or equity securities, that the Group incurs in connection with a business combination are expensed as incurred.

If a business combination is achieved in stages, any previously held equity interest is remeasured at its acquisition date fair value and any resulting gain or loss is recognised in the statement of income except when measured at fair value through OCI. The remeasured stake is then considered in the determination of goodwill.

If the consideration transferred for a business combination exceeds the fair values attributable to the Group's share of the identifiable net assets, the difference is treated as goodwill, which is not amortised but is reviewed annually for impairment or when there is an indication of impairment. If a business combination results in a negative goodwill, the Group reassesses whether it has correctly identified and measured all assets acquired and all liabilities assumed. If the negative goodwill remains after the reassessment, it is recognised as a gain in the statement of income.

Any contingent consideration payable is measured at fair value at the acquisition date. If the contingent consideration is classified as equity, then it is not remeasured and settlement is accounted for within equity. Otherwise, subsequent changes in the fair value of the contingent consideration are recognised in the statement of income.

e. Fair value measurement

The Group measures financial instruments, such as derivatives, and certain non-derivative financial assets, at fair value at each balance sheet date. Also, fair values of financial instruments measured at amortised cost are disclosed in note 29j.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value measurement is based on the presumption that the transaction to sell the asset or transfer the liability takes place either:

- In the principal market for the asset or liability, or
- In the absence of a principal market, in the most advantageous market for the asset or liability

The principal or the most advantageous market must be accessible by the Group.

The fair value of an asset or a liability is measured using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their economic best interest.

A fair value measurement of a non-financial asset takes into account a market participant's ability to generate economic benefits by using the asset in its highest and best use or by selling it to another market participant that would use the asset in its highest and best use.

The Group uses valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, maximising the use of relevant observable inputs and minimising the use of unobservable inputs.

All assets and liabilities for which fair value is measured or disclosed in the financial statements are categorised within the fair value hierarchy, described as follows, based on the lowest level input that is significant to the fair value measurement as a whole:

Level 1 — Quoted (unadjusted) market prices in active markets for identical assets or liabilities

Level 2 — Valuation techniques for which the lowest level input that is significant to the fair value measurement is directly or indirectly observable

Level 3 — Valuation techniques for which the lowest level input that is significant to the fair value measurement is unobservable.

For assets and liabilities that are recognised in the financial statements on a recurring basis, the Group determines whether transfers have occurred between Levels in the hierarchy by re-assessing categorisation (based on the lowest level input that is significant to the fair value measurement as a whole) at the end of each reporting period.

For the purpose of fair value disclosures, the Group has determined classes of assets and liabilities on the basis of the nature, characteristics and risks of the asset or liability and the level of the fair value hierarchy as explained above.

f. Foreign currency

(i) Foreign currency transactions

Subsidiaries, joint ventures and equity accounted investees record transactions in the functional currency of the economic environment in which they operate. Transactions in currencies other than the functional currency of the subsidiary, joint ventures and equity investees are recorded at the rates of exchange prevailing at the date of the transaction.

Monetary assets and liabilities in currencies other than the functional currency are translated at the rates of exchange prevailing at the balance sheet date and gains and losses are reported in the statement of income.

(ii) Foreign operations

The assets and liabilities of foreign operations, including goodwill and fair value adjustments arising on acquisition, are translated to USD at exchange rates at the reporting date. The income and expenses of foreign operations, excluding foreign operations in hyperinflationary economies, are translated to USD at the average rate for the year which is considered as the best estimate of transaction dates. The resulting exchange differences are recorded in equity through other comprehensive income and are included in the statement of income upon sale or liquidation of the underlying foreign operation.

Group entities, with a functional currency being the currency of a hyperinflationary economy, first restate their financial statements in accordance with IAS 29, Financial Reporting in Hyperinflationary Economies (see 'Reporting in hyperinflationary economies' below). The related income, costs and balance sheet amounts are translated at the foreign exchange rate ruling at the balance sheet date.

(iii) Reporting in hyperinflationary economies

When the economy of a country in which the Group operates is deemed hyperinflationary and the functional currency of a Group entity is the currency of that hyperinflationary economy, the financial statements of such Group entities are adjusted so that they are stated in terms of the measuring unit current at the end of the reporting period. This involves restatement of income and expenses to reflect changes in the general price index from the start of the reporting period and restatement of non-monetary items in the balance sheet to reflect current purchasing power as at the period end using a general price index from the date when they were first recognised. Comparative amounts are not adjusted. Any differences arising were recorded in other comprehensive income on adoption.

The only hyperinflationary economy applicable to the Group is Argentina. The financial statements of the major subsidiaries in this country are first adjusted for the effect of inflation with any gain or loss on the net monetary position recorded in the related functional lines in the consolidated income statement and then translated into US Dollars. See note 32.

g. Financial instruments

The financial assets are classified in the following measurement categories:

- Those to be measured subsequently at fair value (either through other comprehensive income, or through the statement of income), and
- Those to be measured at amortised cost.

The classification depends on the Group's business model for managing the financial assets and the contractual terms of the cash flows.

For assets measured at fair value, gains and losses will either be recorded in the statement of income or other comprehensive income. For investments in debt instruments, this will depend on the business model in which the investment is held. For investments in equity instruments, this will depend on whether the Group has made an irrevocable election at the time of initial recognition to account for the equity investment at fair value through other comprehensive income.

The Group reclassifies debt investments when and only when its business model for managing those assets changes. Reclassification takes place at the first day of the financial year following the financial year in which the business model changes.

At initial recognition, the group measures a financial asset at its fair value plus, in the case of a financial asset not at fair value through profit or loss, transaction costs that are directly attributable to the acquisition of the financial asset. Transaction costs of financial assets carried at fair value through profit or loss are expensed in profit or loss as incurred.

Purchases or sales of financial assets that require delivery of assets within a time frame established by regulation or convention in the market place (regular way trades) are recognised on the trade date i.e., the date that the Group commits to purchase or sell the asset.

Subsequent measurement of debt instruments depends on the Groups business model for managing the asset and the cash flow characteristics of the asset. There are three measurement categories into which the Group classifies its equity and debt instruments:

(i) Amortised cost

The Group classifies its financial assets as at amortised cost only if both of the following criteria are met:

- The asset is held within a business model with the objective of collecting the contractual cash flows; and
- The contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal outstanding.

Financial assets at amortised cost include loans receivable, trade and other receivables, and other financial assets that are held with the objective of collecting contractual cash flows. After initial measurement at fair value, the financial assets are measured at amortised cost using the effective interest rate (EIR) method, less impairment.

Amortised cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortisation is included in finance income in the statement of profit or loss. The losses arising from impairment are recognised in the statement of profit or loss in other income.

(ii) Fair value through other comprehensive income

Financial assets that are held for collection of contractual cash flows and for selling the financial assets, where the assets' cash flows represent solely payments of principal and interest, are measured at fair value through other comprehensive income. Movements in the carrying amount are taken through other comprehensive income, except for the recognition of impairment losses, interest revenue and foreign exchange gains and losses which are recognised in profit or loss. When the financial asset is derecognised, the cumulative gain or loss previously recognised in other comprehensive income is reclassified from equity to profit or loss and recognised in other gains/ (losses). Interest income from these financial assets is included in finance income using the effective interest rate method.

Where Group management has elected to present fair value gains and losses on equity investments in other comprehensive income, there is no subsequent reclassification of fair value gains and losses to the statement of income. Dividends from such investments continue to be recognised in the statement of income as other income when the Group's right to receive payments is established. There are no impairment requirements for equity investments measured at fair value through other comprehensive income.

(iii) Financial assets at fair value through profit or loss

The Group classifies the following financial assets at fair value through profit or loss:

- Debt investments that do not qualify for measurement at amortised cost;
- Debt investments that do not qualify for measurement at fair value through other comprehensive income; and
- Debt investments that have been designated at fair value through profit or loss.

Financial assets at fair value through profit or loss include financial assets held for trading, debt securities and financial assets designated upon initial recognition at fair value through profit or loss. Financial assets at fair value through profit or loss are carried in the statement of financial position at fair value with net changes in fair value presented as other income/ (expenses) in the statement of income. Interests, dividends and gain/loss on foreign exchange on financial assets at fair value through profit or loss are included separately in finance income or other income respectively.

The Group enters into prepayment agreements where purchases of commodities are prepaid. When the prepayment agreement can be settled in cash or another financial asset, it is classified at amortised cost in line with IFRS 9. When settlement of the prepayment agreement solely occurs by having the commodities physically delivered, these agreements are not classified as financial instruments as they do not meet the definition of a financial asset. For the clauses in the contracts which might result in cash settlement instead of physical delivery, the objective of the contract and the economic reality of such clauses, determine the classification. Interest received on prepayment agreements is presented in finance income in the statement of income.

The Group invested in listed equity securities and unlisted equity investments. The Group subsequently measures all equity investments at fair value. The Group classifies the following financial assets at fair value through profit or loss:

- Equity investments that are held for trading; and
- Equity investments for which the entity has not elected to recognise fair value gains and losses through other comprehensive income

The Group derecognises a financial asset when the contractual rights to the cash flows from the asset expire, or it transfers the rights to receive the contractual cash flows in a transaction in which substantially all the risks and rewards of ownership of the financial asset are transferred. Any interest in such transferred financial assets that is created or retained by the Group is recognised as a separate asset or liability.

Financial assets and liabilities are offset and the net amount presented in the statement of financial position if, and only if, the Group has a legal right to offset the amounts and intends either to settle on a net basis or to realise the asset and settle the liability simultaneously.

Non-derivative financial liabilities

The Group measures non-derivative financial liabilities at amortised cost. The non-derivative financial liabilities are recognised initially at fair value less any directly attributable transaction costs. Subsequent to initial recognition, the financial liabilities are measured at amortised cost using the effective interest method.

The Group derecognises a financial liability when its contractual obligations are discharged, cancelled or expire.

Derivative financial instruments, including hedge accounting

Derivative instruments, which include physical contracts to sell or purchase commodities that do not meet the own use exemption, are initially recognised at fair value when the Group becomes a party to the contractual provisions of the instrument and are subsequently remeasured to fair value at the end of each reporting period. Any attributable transaction costs are recognised in the statement of income as incurred.

The Group utilises derivative financial instruments (shown separately in the statement of financial position) to hedge its primary market risk exposures, primarily risks related to commodity price movements, and to a lesser extent, exposure to foreign currency exchange rates and interest rate movements. Commodity derivative contracts may be utilised to hedge against commodity price risk for fixed priced physical purchase and sales contracts, including inventory. Commodity swaps, options and futures are used to manage price and timing risks in conformity with the Group's risk management policies.

Generally, the Group does not apply hedge accounting, but in some instances it may elect to apply hedge accounting. The Group elects to apply fair value hedge accounting to hedge certain risk components of non-financial hedged items. When applicable, the Group designates derivative hedging instruments as fair value hedges in relationship to the hedged item. The hedged item may be individual risk components which are separately identifiable and reliably measurable. The designated hedge derivatives are accounted for at fair value through profit and loss and reflected on the balance sheet as either a recognized asset or liability or an unrecognised firm commitment. Each of the identified risk components of the hedged item will be revalued at each period with its corresponding benchmark accounted for at fair value and recognized through profit and loss and reflected on the balance sheet as either a recognized asset or liability or an unrecognised firm commitment. The Group documents at the inception of the hedging transaction the economic relationship between hedging instruments and hedged items including whether the hedging instrument is expected to offset changes in cash flows of hedged items.

Those derivatives qualifying and designated as hedges are either (i) a fair value hedge of the change in fair value of a recognised asset or liability or an unrecognised firm commitment, or (ii) a cash flow hedge of the change in cash flows to be received or paid relating to a recognised asset or liability or a highly probable transaction.

A change in the fair value of derivatives designated as a fair value hedge is reflected together with the change in the fair value of the hedged item in the statement of income. A change in the fair value of derivatives designated as a cash flow hedge is initially recognised as a cash flow hedge reserve in OCI. The deferred amount is then released to the statement of income in the same periods during which the hedged transaction affects the statement of income.

When a hedging instrument expires, or is sold or terminated, or when a hedge no longer meets the criteria for hedge accounting, any cumulative deferred gain or loss and deferred costs of hedging in equity at that time remains in equity and are reclassified to the statement of income when the forecast transaction affects in profit or loss.

If the hedge ratio for risk management purposes is no longer optimal but the risk management objective remains unchanged and the hedge continues to qualify for hedge accounting, the hedge relationship will be rebalanced by adjusting either the volume of the hedging instrument or the volume of the hedged item so that the hedge ratio aligns with the ratio used for risk management purposes. Any hedge ineffectiveness is calculated and accounted for at the time of the hedge relationship rebalancing.

Current versus non-current classification

Derivative instruments that are not designated as effective hedging instruments are classified as current or non-current, or separated into current and non-current portions based on an assessment of the facts and circumstances (i.e. the underlying contractual cash flows).

Where the Group will hold a derivative as an economic hedge (and does not apply hedge accounting) for a period beyond 12 months after the reporting date, the derivative is classified as non-current (or separated into current and non-current portions).

h. Cash and cash equivalents

Cash and cash equivalents include all cash on hand and short-term highly liquid investments such as deposits with original maturities of three months or less.

For the purpose of the consolidated statement of cash flows, cash and cash equivalent consist of cash and short term deposits as defined above.

i. Property, plant and equipment

(i) Recognition and measurement

Property, plant and equipment are measured at cost less accumulated depreciation and accumulated impairment losses. The initial cost of an asset comprises its purchase price or construction cost, any costs directly attributable to bringing the asset into operation, the initial estimate of any decommissioning obligation, if any, and, for qualifying assets, borrowing costs. The purchase price or construction cost is the aggregate amount paid and the fair value of any other consideration given to acquire the asset.

When parts of an item of property, plant and equipment have different useful lives, they are accounted for as separate items (major components). The Group provisions certain survey expenses, repairs and eventually dry docking costs for leases vessels when there is a contractual commitment to pay such costs at the end expiration of the contract.

Gains or losses on disposal of an item of property, plant and equipment are recorded in the statement of income under 'Other income/ (expense)'.

The carrying value of property and equipment is reviewed for impairment whenever events or changes in circumstances indicate the carrying value may not be recoverable.

Assets in the course of construction are capitalised as a separate component of property, plant and equipment. Upon completion, the cost of construction is transferred to the appropriate category.

(ii) Subsequent costs

Subsequent expenditure is capitalised only when it is probable that the future economic benefits associated with the expenditure will flow to the Group. Ongoing repairs and maintenance are expensed as incurred.

(iii) Depreciation

Items of property, plant and equipment are depreciated on a straight-line basis over the estimated useful lives of each component. Land is not depreciated.

Items of property, plant and equipment are depreciated from the date that they are installed and are ready for use. Assets under construction are not depreciated.

Depreciation of assets held under finance leases is calculated over the shorter of the lease term or the estimated useful life of the asset.

The estimated useful lives for the current and comparative years of significant items of property, plant and equipment are as follows:

- Buildings 20-33 years
- Machinery and equipment 3-28 years
- Barges and vessels 10-20 years
- Other fixed assets 1-5 years

Depreciation methods, useful lives and residual values are reviewed at each reporting date and adjusted if appropriate.

(iv) Borrowing costs

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, i.e. assets that necessarily take a substantial period of time to get ready for their intended use or sale, are calculated using the effective interest rate method and are capitalised as part of the cost of those assets. The capitalisation of such borrowing costs ceases when the assets are substantially ready for their intended use or sale. Investment income earned on the temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs capitalised.

All other borrowing costs are expensed in the period in which they are incurred. Borrowing costs consist of interest and other costs that an entity incurs directly in connection with the borrowing of funds.

j. Intangible assets and goodwill

(i) Goodwill

Goodwill that arises on the acquisition of subsidiaries is presented with intangible assets. For the measurement of goodwill at initial recognition see note c.

Goodwill is measured at cost less accumulated impairment losses. For the purpose of impairment testing, goodwill acquired in a business combination is, from the acquisition date, allocated to each of the Group's cash-generating units or group of cash generating units that are expected to benefit from the combination, irrespective of whether other assets or liabilities of the acquire are assigned to those units.

Where goodwill has been allocated to a cash-generating unit and part of the operation within that unit is disposed of, the goodwill associated with the disposed operation is included in the carrying amount of the operation when determining the gain and loss on disposal. Goodwill disposed in these circumstances is measured based on the relative values of the disposed operation and the portion of the cash-generating unit retained.

In respect of equity-accounted investees, the carrying amount of goodwill is included in the carrying amount of the investment, and any impairment loss is allocated to the carrying amount of the equity-accounted investee as a whole.

(ii) Licences and Other intangible assets

Licences and other intangible assets, which include software development costs, and are stated at cost, less accumulated amortisation and accumulated impairment losses. Licences are amortised over the term of the licence, generally not exceeding 10 years.

An intangible asset acquired as part of a business combination is measured at fair value at the date of acquisition and is recognised separately from goodwill if the asset is separable or arises from contractual or other legal rights.

Intangible assets with finite lives are amortised over their useful economic life and assessed for impairment whenever there is an indication that the intangible asset may be impaired. The amortisation period and the amortisation method for an intangible asset with a finite useful life are reviewed at least at each reporting date. Changes in the expected useful life or the expected pattern of consumption of future economic benefits embodied in the asset are accounted for by changing the amortisation period or method, as appropriate, and treated as changes in the accounting estimates.

Gains or losses on disposal of intangible assets are recorded in the statement of income under 'Other income/ (expense)'.

k. Leases

The Group is the lessee of equipment, buildings, vessels and terminals under various operating and finance leases. The Group classifies its leases as operating or finance leases based upon whether the lease agreement transfers substantially all the risks and rewards of ownership.

For leases determined to be finance leases, an asset and liability are recognised at an amount equal to the lower of the fair value of the leased asset or the present value of the minimum lease payments during the lease term. Such assets are amortised on a straight-line basis over the shorter of the lease term or the estimated useful life of the asset taking into account the residual value, with depreciation included in depreciation expense.

Leases that do not qualify as finance leases are classified as operating leases, and the related rental payments are expensed on a straight-line basis over the lease term.

If a sale and leaseback transaction can be classified as an operational lease, which implies that substantially all the risks and rewards of ownership of the lease agreement have been transferred, the difference between the carrying value and the consideration of the sold assets will be accounted for in the statement of income under 'Other income/ (expense)'.

l. Inventories

Trading-related inventories are measured at fair value less costs to sell. Fair value movements are included in cost of sales.

Inventories of non-trading related products are measured at the lower of cost or net realisable value. Costs comprise all costs of purchases and other costs incurred.

m. Impairment of financial instruments

Non-derivative financial assets

The Group assesses the expected credit losses associated with its debt instruments and trade receivables carried at amortised cost and fair value through other comprehensive income. The impairment provisions for financial assets disclosed in Notes 15 and 16 are based on assumptions about risk of default and expected loss rates. The Group uses judgement in making these assumptions and selecting the inputs to the impairment calculation. This judgement is based on the Group's past history, existing market conditions as well as forward looking estimates at the end of each reporting period.

Trade receivables

The Group applies the simplified approach to providing for expected credit losses, which permits the use of the lifetime expected loss provision for all trade receivables. In calculating the expected credit loss rates for trade receivables, the Group considers historical loss rates for each category of counterparties, and adjusts for forward looking macroeconomic data. Refer to Note 19 for the loss provision on trade receivables.

Loans receivable

Over the term of the loans, the Group manages its credit risk by appropriately providing for expected credit losses on a timely basis. In calculating the expected credit loss rates, the Group considers historical loss rates for each category of counterparties, and adjusts for forward looking macroeconomic data. The Group classifies its loans receivable in four categories that reflect their credit risk as follows:

Category	Group definition of category	Basis for recognition of expected credit loss provision
Performing	Customers have a low risk of default and a strong capacity to meet contractual cash flows.	12 month expected losses. Where the expected lifetime of an asset is less than 12 months, expected losses are measured at its expected lifetime.
Underperforming	A significant increase in credit risk is noted (see definition below).	Lifetime expected losses
Non-performing	The loan meets the definition of default (see definition below)	Lifetime expected losses
Write-off	Based on observable data the interest and/or principal will not be collected.	Asset is written off through profit or loss to extent of expected loss.

A significant increase in credit risk is presumed if interest and/ or principal repayments are 30 days past due or if there are other indicators of a significant increase in the probability of default.

A default is defined when one or both of the following events have taken place:

- A counterparty structurally fails to perform under a financial contract with a Trafigura group company and such failure is not expected to be cured shortly;
- A Trafigura group company declares a default due to the failure of the counterparty to comply with the conditions of an obligation or agreement.

Trafigura decided to assess the Expected Credit Loss ('ECL') of these loans individually based on the discounted product of probability of default ('PD'), exposure at default ('EAD') and loss given default ('LGD') as defined below:

- PD represents the likelihood of a borrower defaulting on its financial obligation, either over the next 12 months or over the remaining lifetime of the obligation.
- EAD is based on the amounts the Group expects to be owed at the time of default. For most cases, this represents the carrying value of the financial asset.
- LGD represents the Group's expectation of the extent of loss on a defaulted exposure. LGD varies by type of counterparty, seniority of claim and available collateral or other credit support. LGD is expressed as a percentage loss per unit of exposure at the time of default.

The ECL is determined by projecting PD, LGD, EAD for each future month and for each exposure. These three components are multiplied together and discounted at the original effective interest rate of the loan. The PD and LGD are developed by utilising historical default studies and publicly available data.

Refer to note 15 for the loss provision on loans receivable.

Write-off

The Group also assesses at each reporting date whether there is any objective evidence that a financial asset or a group of financial assets is impaired. A financial asset or a group of financial assets is deemed to be impaired if, and only if, there is objective evidence of impairment as a result of one or more events that has occurred after the initial recognition of the asset (an incurred 'loss event') and that the loss event has an impact on the estimated future cash flows of the financial asset or the group of financial assets that can be reliably estimated.

Objective evidence that financial assets are impaired may include indications that the debtors or a group of debtors are experiencing significant financial difficulty, default or delinquency in interest or principal payments, the probability that they will enter into bankruptcy or other financial reorganisation, and where observable data indicate that there is a measurable decrease in the estimated future cash flows, such as changes in arrears or economic conditions that correlate with defaults.

If the decrease in impairment relates to an objective event occurring after the impairment was recognised, a previously recognised impairment loss is reversed to a maximum of the amount required to carry the asset at amortised cost at the time of the reversal if no impairment had taken place, while taking into consideration the expected credit losses associated to the instrument. The Group recognises in the statement of income, as an impairment gain, the amount of expected credit losses reversal that is required to adjust the loss allowance at the reporting date to the amount that is required to be recognised under the expected credit loss model.

n. Accrued turnover

Accrued turnover relates to sales made before the end of the year that have not been invoiced at the balance sheet date. Reasons for such delays include the need to determine final pricing, quantity and quality analysis. All are typical of the industry in which the Group operates.

o. Employee benefits

(i) Post-employment benefits

Pensions and other post-employment benefits, wages, salaries, bonuses, social security contributions, paid annual leave and sick leave are accrued in the period in which the associated services are rendered by employees of the Group. The cost of providing benefits under the defined benefit plans is determined separately for each plan using the projected unit credit method. Unvested past service costs are recognised as an expense on a straight-line basis over the average period until the benefits become vested. Past service costs are recognised immediately if the benefits have already vested immediately following the introduction of, or changes to, a pension plan.

When a settlement (eliminating all obligations for benefits already accrued) or a curtailment (reducing future obligations as a result of a material reduction in the scheme membership or a reduction in future entitlement) occurs, the obligation and related plan assets are remeasured using current actuarial assumptions and the resultant gain or loss is recognised in profit or loss during the period in which the settlement or curtailment occurs.

The interest element of the defined benefit cost represents the change in present value of scheme obligations resulting from the passage of time, and is determined by applying the discount rate to the opening present value of the benefit obligation, taking into account material changes in the obligation during the year. The expected return on plan assets is based on an assessment made at the beginning of the year of long-term market returns on plan assets, adjusted for the effect on the fair value of plan assets of contributions received and benefits paid during the year. Actuarial gains and losses are recognised in full within other comprehensive income in the year in which they occur.

The defined benefit pension plan surplus or deficit in the consolidated statement of financial position comprises the total for each plan at the present value of the defined benefit obligation (using a discount rate based on high-quality corporate bonds), less the fair value of plan assets out of which the obligations are to be settled directly. Fair value is based on market price information and, in the case of quoted securities, is the published bid price. Contributions to defined contribution schemes are recognised in profit or loss in the period in which they become payable.

(ii) Employee share incentive plan and employee share trust

Employees of the Group receive remuneration in the form of shares of the immediate holding company Trafigura Beheer B.V. as consideration for services rendered. This is considered an equity-settled share scheme as the Company neither has a present legal nor constructive obligation to settle in cash, nor has a past practice or stated policy of settling in cash.

The cost of the equity-settled transactions is measured at fair value at the grant date taking into account the terms and conditions upon which the shares were granted. This fair value is expensed over the vesting period with a corresponding credit to equity. For shares that immediately vest, the fair value is expensed in the accounting period corresponding to the date of grant.

p. Provisions

The Group recognises provisions for liabilities and onerous contracts that have been incurred as of the balance sheet date and can be reliably estimated. A provision is recognised when (i) the Group has a present obligation (legal or constructive) as a result of a particular event; (ii) it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation; and (iii) an estimate can be made of the amount of the obligation.

Provisions for claims, disputes and legal proceedings are recorded if it is probable that the Group will be liable in a proceeding, for the estimated amount at which the liability can be settled. If the amount for which the liability can be settled cannot be reliably estimated, the claim, dispute or legal proceeding is disclosed, if it is expected to be significant.

(i) Restoration, rehabilitation and decommissioning

Restoration, rehabilitation and decommissioning costs arising from the installation of plant and other site preparation work, discounted to their net present value, are provided for and capitalised at the time such an obligation arises. The costs are charged to the statement of income over the life of the operation through depreciation of the asset and the unwinding of the discount on the provision.

(ii) Onerous contracts

A provision for onerous contracts is recognised when the expected benefits to be derived by the Group from a contract are lower than the unavoidable cost of meeting its obligations under the contract. The provision is measured at the present value of the lower of the expected cost of terminating the contract and the expected net cost of continuing with the contract. Before a provision is established, the Group recognises any impairment loss on the assets associated with that contract.

q. Accrued costs of sales and expenses

The accrued cost of sales and expenses relate to purchases and expenses made before the year end that have not been invoiced at the balance sheet date. Reasons for such delays include the need to determine final pricing, quantity and quality analysis. All are typical of the industry in which the Group operates.

r. Revenue recognition

Revenue is measured at the fair value of the consideration received or receivable, taking into account contractually defined terms of payment and excluding taxes or duty.

Revenue is recognised to the extent that it is probable that the economic benefits will flow to the Group and the revenue can be reliably measured, regardless of when the payment is being made.

The following specific recognition criteria must also be met before revenue is recognised:

- Revenue from the sale of goods which are transported in discrete cargoes is recognised when the significant risk and rewards of the goods have passed to the buyer, which is usually the date of the bill of lading. Revenue from the sale of goods which are transported in continuous systems is recognised when the goods have been delivered.
- Revenue from the sale of goods which are consigned to counterparties on a sale-and-return basis is recognised when the goods are sold to the customers on a non-recourse basis. At these points the quantity and the quality of the goods has been determined with reasonable accuracy, the price is fixed or determinable, and collectability is reasonably assured.
- Revenue from rendering of services is recognised in the statement of income in proportion to the stage of the rendered performance as at the balance sheet date.

For certain commodities, the sales price determined on a provisional basis at the date of sale as the final selling price is subject to movements in market prices up to the date of final pricing, normally ranging from 30 to 90 days after initial booking. Revenue on provisionally priced sales is recognised based on the estimate fair value of the total consideration receivable. The revenue adjustment mechanism embedded within provisionally priced sales arrangements has the character of a commodity derivative. Accordingly, the fair value of the final sales price adjustments is re-estimated continuously and changes in fair value are recognised as an adjustment to revenue. In all cases, fair value is estimated by reference to forward market prices.

s. Cost of sales

Cost of sales includes the purchase price of the products sold, as well as the costs of purchasing, storing, and transporting the products. It also includes the changes in mark to market valuation of inventories, all derivatives and forward contracts.

t. Selling, general and administrative expenses

Selling, general and administrative expenses include the Group's corporate offices, rent and facility costs, staff cost, depreciation and certain other general and administrative expenses. As the Group chooses to present the gross profit as the result on the trades these costs are not attributed to cost of sales.

u. Finance income and finance expense

Interest income and interest expense are recognized on a time-proportion basis using the effective interest method.

v. Corporate taxes

Income tax expense comprises current and deferred tax. Current tax and deferred tax are recognised in the statement of income except to the extent that it relates to a business combination, or items recognised directly in equity or in other comprehensive income.

(i) Current income tax

Current income tax is the expected tax payable or receivable on the taxable income or loss for the year, using tax rates enacted or substantively enacted at the reporting date, and any adjustment to tax payable in respect of previous years. The charge for taxation includes Singaporean and foreign corporate income taxation. Due to the different statutory rates applicable and non-deductible expenses, the Group effective tax charge differs from the statutory tax rate applicable in Singapore.

(ii) Deferred tax

Deferred tax is recognised in respect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes, and the amounts used for taxation purposes.

The measurement of deferred tax reflects the tax consequences that would follow the manner in which the Group expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

Deferred tax is measured at the tax rates that are expected to be applied to temporary differences when they reverse, using tax rates enacted or substantively enacted at the reporting date.

Deferred tax assets and liabilities are offset if there is a legally enforceable right to offset current tax liabilities and assets, and they relate to taxes levied by the same tax authority on the same taxable entity, or on different tax entities, but they intend to settle current tax liabilities and assets on a net basis, or their tax assets and liabilities will be realised simultaneously.

A deferred tax asset is recognised for unused tax losses, tax credits and deductible temporary differences to the extent that it is probable that future taxable profits will be available against which they can be utilised. Deferred tax assets are reviewed at each reporting date and are reduced to the extent that it is no longer probable that the related tax benefit will be realised.

(iii) Tax exposure

In determining the amount of current and deferred tax the Group takes into account the impact of uncertain tax positions and whether additional taxes and interest may be due. The Group believes that its accruals for tax liabilities are adequate for all open tax years based on its assessment of many factors, including interpretations of tax law and prior experience. This assessment relies on estimates and assumptions and may involve a series of judgements about future events. New information may become available that causes the Group to change its judgement regarding the adequacy of existing tax liabilities; such changes to tax liabilities will impact the tax expense in the period that such a determination is made.

w. Assets held for sale

Non-current assets and disposal groups are classified as held for sale if their carrying amounts will be recovered principally through a sales transaction rather than through continuing use. For this to be the case, the asset or disposal group must be available for immediate sale in its present condition subject only to terms that are usual and customary for the sale of such assets or disposal groups and its sale must be highly probable. All assets and liabilities of a subsidiary classified as a disposal group are reclassified as held for sale regardless of whether the Group retains a non-controlling interest in its former subsidiary after the sale.

Non-current assets and disposal groups (other than financial assets) classified as held for sale are measured at the lower of their carrying amounts and fair values less costs to sell. Property, plant and equipment and intangible assets classified as held for sale are not depreciated or amortised.

x. Segments

The Group’s operating segments are established on the basis of those components of the Group that are evaluated regularly by the chief operating decision maker (CODM) in deciding how to allocate resources and in assessing performance.

y. Use of estimates and judgements

The preparation of the Group's financial statements in compliance with IFRS requires management to make judgements, estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period.

The estimates and associated assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances, and are used to judge the carrying values of assets and liabilities that are not readily apparent from other sources. Actual outcomes could differ from those estimates. Existing circumstances and assumptions about future developments, however, may change due to market changes or circumstances arising beyond the control of the Group. Such changes are reflected in the assumptions when they occur.

The Group has identified the following areas as being critical to understanding the Company’s financial position as they require management to make complex and/or subjective judgments and estimates about matters that are inherently uncertain.

(i) Valuation of derivative instruments

Derivative instruments are carried at fair value and the Group evaluates the quality and reliability of the assumptions and data used to measure fair value in the three hierarchy levels, Level 1, 2 and 3, as prescribed by IFRS 13. Fair values are determined in the following ways: externally verified via comparison to quoted market prices in active markets (Level 1); by using models with externally verifiable inputs (Level 2); or by using alternative procedures such as comparison to comparable instruments and/or using models with unobservable market inputs requiring the Group to make market based assumptions (Level 3). For more details refer to note 29. For assets and liabilities that are recognised in the financial statements on a recurring basis, the Group determines whether transfers have occurred between Levels in the hierarchy by re-assessing categorisation (based on the lowest level input that is significant to the fair value measurement as a whole) at the end of each reporting period.

(ii) Impairments

Investments in associates and other investments, loans receivables and property, plant and equipment and intangible assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying value may not be fully recoverable or at least annually for goodwill and other indefinite life intangible assets. If an asset’s recoverable amount is less than the asset’s carrying amount, an impairment loss is recognised. Future cash flow estimates which are used to calculate the asset’s fair value are based on expectations about future operations primarily comprising estimates about production and sales volumes, commodity prices, operating, rehabilitation and restoration costs and capital expenditures. For loans receivables, impairments are measured using expected credit losses. The measurement of the loss provision requires significant assumptions including likelihood of default, collectability and timing of expected recovery of future cash flows for the loans. Changes in such estimates could impact recoverable values or loss provisions of these assets. Changes in such estimates could impact recoverable values of these assets. Estimates are reviewed regularly by management. Refer to note 11, note 12, note 13 and note 15.

(iii) Provisions

The amount recognised as a provision, including tax, legal, restoration and rehabilitation, contractual and other exposures or obligations, is the best estimate of the consideration required to settle the related liability, including any related interest charges, taking into account the risks and uncertainties surrounding the obligation. The Group assesses its liabilities and contingencies based upon the best information available, relevant tax laws and other appropriate requirements. Refer to notes 26 and 28.

(iv) Restoration, rehabilitation and decommissioning costs

A provision for future restoration, rehabilitation and decommissioning costs requires estimates and assumptions to be made around the relevant regulatory framework, the magnitude of the possible disturbance and the timing, extent and costs of the required closure and rehabilitation activities. To the extent that the actual future costs differ from these estimates, adjustments will be recorded and the statement of income could be impacted. The provisions including the estimates and assumptions contained therein are reviewed regularly by management. Refer to note 26.

(v) Taxation

Deferred tax assets are recognised only to the extent it is considered probable that those assets will be recoverable. This involves an assessment of when those deferred tax assets are likely to reverse, and a judgement as to whether or not there will be sufficient taxable profits available to offset the tax assets when they do reverse. These judgements are subject to risk and uncertainty and hence, to the extent assumptions regarding future profitability change, there can be an increase or decrease in the amounts recognised in the statement of income in the period in which the change occurs. The recoverability of deferred tax assets, including the estimates and assumptions contained therein, are reviewed regularly by management. Refer to note 10.

(vi) Determination of control of subsidiaries and joint arrangements

Judgement is required to determine whether the Group controls an entity, and consequently, whether it needs to consolidate that entity into the consolidated financial statements. Specifically, the Group assesses whether it has the power over the relevant activities of the entity, exposure to its variable returns or the ability to use power to impact returns of the entity.

The Group has certain investments in companies, which are not consolidated and whose results are accounted for in the Group's consolidated financial statements based on their equity share ownership. The most significant of the Group's investments are the 49.3 percent investment in Puma Energy Holdings Pte Ltd ('Puma') and the 50 percent investment in Simba Holding S.à r.l. ('Simba'). Puma Energy was deconsolidated as of 30 September 2013 and Simba was deconsolidated as of 30 September 2018 (refer note 6).

Judgement is also required in determining the classification of a joint arrangement between a joint venture or a joint operation through an evaluation of the rights and obligations arising from the arrangement.

The impact of the decision regarding the existence of control, and classification of joint arrangements, significantly impacts the accuracy, completeness and presentation of the financial statements and, potentially, the debt covenant ratios which are included in the Group's debt financing agreements.

4. Operating segments

The Group's operating businesses are organised and managed separately according to the nature of the products, with each segment representing a strategic unit that offers different products and serves different markets.

Segment results that are reported to the Group's Chief Executive Officer (CEO), being the chief operating decision maker, include items directly attributable to a segment as well as those that can be allocated on a reasonable basis.

- The Oil and Petroleum Products segment is engaged in the sourcing, provision and storage of oil, at all stages from crude to finished products such as naphtha and gasoline. This includes the blending required to make gasoline in the various grades suitable for the different specifications relevant in different countries.
- The Metals and Minerals segment trades copper, lead, zinc, aluminium, iron ore and coal in all forms including ores, concentrates, and refined metals. There is involvement in all the various stages from mining through smelting to the finished metal. This segment also includes the Mining group and the Impala activities (as from 30 September 2018 only those that were not included in the deconsolidated group as disclosed in note 6), and includes the blending of metal concentrates, iron ore, coal and alumina, as well as warehousing and transportation.
- All other segments include holding companies, and some smaller operating companies.

Information regarding the results of each reportable segment is included below. Performance is measured based on segment gross profit, as included in the internal management reports that are reviewed by the Group's CEO. Segment gross profit is used to measure performance as management believes that such information is the most relevant in evaluating the results of certain segments relative to other entities that operate within these industries.

The accounting policies of the operating segments are the same as those described in the summary of significant accounting policies. Trafigura accounts for inter-segment sales and transfers where applicable as if the sales or transfers were to third parties.

Reconciliations of reportable segment revenues, results, assets and liabilities, and other material items are as follows:

2018	Oil and Petroleum USD'M	Metals and Minerals USD'M	All other segments USD'M	Total USD'M
Revenue from external customers	124,563.0	56,181.1	–	180,744.1
Gross profit	**1,022.4**	**1,361.7**		**2,384.1**
Other income/(expenses)	–	–	–	44.9
General and administrative expenses	–	–	–	(937.3)
Finance income	–	–	–	647.4
Finance expense	–	–	–	(1,189.6)
Share of profit/(loss) of equity-accounted investees	–	–	–	17.4
Income tax expense	–	–	–	(94.1)
Profit for the year				**872.8**

2018	Oil and Petroleum USD'M	Metals and Minerals USD'M	All other segments USD'M	Total USD'M
Segment assets and liabilities				
Equity-accounted investees	2,254.6	1,078.9	27.7	3,361.2
Other non-current assets	2,343.5	2,169.6	962.1	5,475.2
Non current assets classified as held for sale	65.5	2.1	–	67.6
Total assets	26,389.2	19,880.7	7,531.1	53,801.0
Total liabilities	19,879.4	14,837.6	12,833.9	47,550.9
Other segment information				
Capital expenditure	181.8	77.2	48.4	307.4
Depreciation and amortisation	14.4	100.2	77.1	191.7
Impairment of non-financial assets	0.9	0.3	–	1.2
Impairment of financial assets	–	(13.4)	–	(13.4)
Impairment of equity-accounted investees	0.3	72.4	–	72.7

2017	Oil and Petroleum USD'M	Metals and Minerals USD'M	All other segments USD'M	Total USD'M
Revenue from external customers	94,016.8	42,403.9	–	136,420.7
Gross profit	**1,139.3**	**1,099.7**		**2,239.0**
Other income/(expenses)	–	–	–	163.2
General and administrative expenses	–	–	–	(945.0)
Finance income	–	–	–	557.1
Finance expense	–	–	–	(813.4)
Share of profit/(loss) of equity-accounted investees	–	–	–	(232.2)
Income tax expense	–	–	–	(81.4)
Profit for the year				**887.3**

2017	Oil and Petroleum USD'M	Metals and Minerals USD'M	All other segments USD'M	Total USD'M
Segment assets and liabilities				
Equity-accounted investees	2,664.7	810.2	13.0	3,487.9
Other non-current assets	1,253.8	2,708.3	766.7	4,728.8
Non current assets classified as held for sale	66.3	2.0	–	68.3
Total assets	23,983.3	18,523.1	6,263.7	48,770.1
Total liabilities	14,918.8	15,289.7	12,176.8	42,385.3
Other segment information				
Capital expenditure	218.8	126.9	45.3	391.0
Depreciation and amortisation	22.3	93.1	83.6	199.0
Impairment of non-financial assets	7.9	8.8	0.6	17.4
Impairment of financial assets	–	23.8	–	23.8
Impairment of equity-accounted investees	2.4	1.8	–	4.2

Geographical information

The following table sets out information about the geographical location of the Group's revenue from external customers:

2018	Oil & Petroleum USD'M	Metals and Minerals USD'M	Total USD'M
Revenue from external customers			
Europe	32,572.5	8,915.5	41,488.0
Asia	37,891.6	31,624.0	69,515.6
North America	31,195.3	9,438.0	40,633.3
Latin America	11,501.7	1,434.0	12,935.7
Africa	5,893.5	580.3	6,473.7
Australia	754.1	117.4	871.5
Middle East	4,754.2	4,072.0	8,826.2
Total revenue from external customers	**124,563.0**	**56,181.1**	**180,744.1**

2017	Oil & Petroleum USD'M	Metals and Minerals USD'M	Total USD'M
Revenue from external customers			
Europe	20,876.2	5,763.9	26,640.1
Asia	34,760.8	24,013.2	58,774.0
North America	20,500.3	9,218.9	29,719.2
Latin America	9,357.9	992.3	10,350.2
Africa	3,974.5	381.8	4,356.3
Australia	339.6	30.2	369.8
Middle East	4,207.5	2,003.6	6,211.1
Total revenue from external customers	**94,016.8**	**42,403.9**	**136,420.7**

5. Business combinations and acquisition of non-controlling interests

On 9 May 2018, the Group completed the acquisition of the majority of the downstream business of Pampa Energia S.A. The acquired business included various legal entities, in which the Group acquired 100 percent of the shares, as well as certain assets. The business acquired predominantly included a refinery and service stations.

The Group completed an overview of the assets acquired and liabilities assumed. The fair values of the identifiable assets and liabilities of the acquired business as at the acquisition date were:

	Fair value recognised on acquisition USD'M
Intangible assets	5.5
Property, plant and equipment	79.5
Inventories	73.8
VAT receivables	44.0
Other receivables	0.1
Cash and cash equivalents	1.8
Total assets	**204.7**
Provision for decommissioning costs	12.8
Other liabilities	3.2
Total liabilities	**188.7**
Goodwill arising on acquisition	–
Total consideration	**188.7**

The identified intangible assets predominantly relate to customer relationships which will be amortised over the useful life of 5 years.

The analysis of cash flows on acquisition date is included below:

	USD'M
Total consideration	188.7
Of which to be received from sellers based on final price	3.2
Total cash paid to previous owners	**191.9**
Cash acquired with the business	1.8
Acquisition related cash flow, net of cash acquired	**190.1**

The results of the acquired business are consolidated as from acquisition date, contributing an amount of over USD200 million to the consolidated revenue for the year. As volatility of commodity prices have significant impact on revenue, and historical information is not readily available, the full year revenue of the acquired business cannot be reliably estimated and is therefore not disclosed. As a result of the integration in the Group, resulting in various positive synergy effects, it is impracticable to disclose the individual full year net result of the acquired business.

No significant transactions occurred during financial year 2017.

6. Deconsolidation of subsidiaries

Financial year 2018

During the financial year 2018, the Group incorporated Simba Holding S.à.r.l. ('Simba') in Luxemburg. Following an internal restructuring, Simba became the ultimate parent company of some of the Impala entities (all the entities that were transferred to Simba were consolidated for 100 percent in the 2017 financial statements).

On 27 September 2018, following the investment from an external investor into Simba, the Group's shareholding was reduced to 50 percent. In exchange for the decrease in its shareholding, the Group received a total consideration of USD247.9 million, which has been recorded as a receivable from related parties as of 30 September 2018.

On 27 September 2018, the new governance structure of Simba became effective. The Group has no longer the power, directly or indirectly, to govern the financial and operational policies of Simba. As a consequence, the Group entities which are now included in the group headed by Simba have been deconsolidated from the Group's consolidated financial statements as per 30 September 2018. The USD87.3 million gain resulting from this divestment is recorded in Other income (see note 8). The Group's remaining stake in Simba has been remeasured at fair value and recorded as a joint venture as from 30 September 2018. This remeasurement resulted in a gain of USD103.9 million (see note 8).

The impact of Simba on the Group's consolidated statements of income and cash flows, both before intercompany eliminations, is as follows:

	2018 USD'M	2017 USD'M
Revenue (including intercompany)	291.2	249.1
Gross profit	**137.6**	**122.6**
EBITDA	**96.3**	**77.5**
Profit for the year	**49.0**	**7.5**

	2018 USD'M	2017 USD'M
Net cash from/(used in) operating activities	34.6	25.9
Net cash from/(used in) investing activities	(12.3)	(21.4)
Net cash from/(used in) financing activities	(17.6)	1.8
Net cash flows for the year	**4.7**	**6.3**

The effect of the divestment and deconsolidation of Simba on the Group's consolidated statement of financial position is as follows:

	2018 USD'M
Non-current assets	321.9
Current assets	75.6
Non-current liabilities	48.8
Current liabilities	55.5
Minority interest	5.2
Net assets and liabilities at 100%	**288.0**
Total consideration for 50% equity sale	**247.9**
Retained investment in Simba at carrying value	144.0
Retained investment in Simba measured at fair value	247.9
Gain on remeasurement of retained interest at fair value	**103.9**
Net gain on divestment of 50% equity stake	87.3
Total gain on divestment and remeasurement of retained interest	**191.2**

Financial year 2017

On 14 October 2016, the Group has entered into a Stock Purchase Agreement with Tajin Transporte S.a.r.l for the sale of 100 percent of its share in Trafigura Mexico Holding BV and PPM Energy S.A.P.I. de C.V, including the owned Rights of Way necessary for the Transportation Service Agreement tender for the Tuxpan – Tula natural gas pipeline and real estate properties in Mexico. The total consideration of the sale was USD68.1 million of which USD65.3 million was received in cash before 30 September 2017. On 31 May 2017, being the closing date of the transaction, the Group has recognised a gain of USD50.2 million which has been recognised under disposal of subsidiaries as reported in note 8, Other income/(expense).

7. Revenue

	2018 USD'M	2017 USD'M
Sales of goods	**179,977.2**	136,315.1
Rendering of services	**766.9**	105.6
Total	**180,744.1**	136,420.7

8. Other income/(expense)

	2018 USD'M	2017 USD'M
Release/(additions) to provisions	**19.1**	(1.1)
Gain/(loss) on disposal of tangible and intangible fixed assets	**1.0**	(0.4)
Gain/(loss) from disposal of other investments	**0.1**	0.6
Gain/(loss) on sale of equity-accounted investees	**(56.6)**	3.0
Gain on divestment of subsidiaries	**92.9**	30.8
Revaluation gain on remeasurement of retained interest	**103.9**	–
Gain/(loss) on fair value through profit and loss instruments	**4.2**	118.7
Impairments of financial assets	**(1.5)**	(23.8)
Reversal of impairments of financial assets	**14.8**	–
Impairments of non-financial assets	**(1.2)**	(17.4)
Impairments of equity-accounted investees	**(72.7)**	(4.2)
Dividend income	**2.0**	0.7
Gain/(loss) on foreign exchange	**(47.7)**	31.3
Other	**(13.6)**	25.0
Total	**44.9**	163.2

Financial year 2018

In April 2018, the Group sold its 20 percent stake in Buckeye Texas Partners LLC for an agreed price of USD210 million. The result on this transaction amounted to a pre-tax loss of USD56.9 million, which is reported under Gain/(loss) on sale of equity accounted investees.

The revaluation gain of USD103.9 million, and the majority of the gain on divestment of subsidiaries of USD92.9 million, relate to the total gain on the divestment and remeasurement of the retained interest in Simba Holding S.à r.l. of USD191.2 million (see note 6). The Group recorded an impairment on the carrying amount of the equity-accounted investee Nyrstar N.V. for an amount of USD72.4 million, see note 13.

Financial year 2017

The gain on divestments of subsidiaries reported in 2017 comprises of the gain of USD50.2 million on the sale of Trafigura Mexico Holding BV and PPM Energy S.A.P.I. de C.V. This gain is offset by the effect of the deconsolidation of the Group's railway operations in Colombia in Impala. These operations have been sold to a third party resulting in a loss on disposal of USD19.4 million. This loss is mainly comprised of recycling of foreign currency translation losses recognised in equity until the disposal date.

The gain on fair value instruments through profit and loss includes a fair value movement of the debt securities related to the investment in Porto Sudeste de Brasil SA of USD135.7 million offset by a USD20.1 million impairment to nil value in relation to the investment in Indian refinery NOCL which filed for bankruptcy in July 2017. During the regular assessment to determine asset impairments, the Group decided to record impairments of USD23.8 million on financial assets mainly related to the Cedars Energy LLC of USD20.1 million.

9. General and administrative expenses

	2018 USD'M	2017 USD'M
Depreciation and amortisation	**191.7**	199.0
Staff costs	**497.2**	527.9
General and other	**248.4**	218.1
Total	**937.3**	945.0

Refer to note 30 for a breakdown of the staff costs. The category 'General and other' mainly comprise office, IT, and travelling costs.

10. Tax

a. Tax expense

Income tax expense recognised in the statement of income consists of the following:

	2018 USD'M	2017 USD'M
Current income tax expense	**139.6**	135.0
Adjustments in relation to current income tax of previous year	**(16.3)**	(8.7)
Deferred tax expense/(income)	**(38.8)**	(48.6)
Withholding tax in the current year	**9.6**	3.7
Total	**94.1**	81.4

b. Tax recognised in other comprehensive income

The tax credit/(charge) relating to components of other comprehensive income is as follows:

	2018 USD'M	2017 USD'M
Tax (expense)/income on cash flow hedges	**(0.6)**	(1.1)
Tax (expense)/income on hyperinflation adjustment	**(17.7)**	–
Total	**(18.3)**	(1.1)

c. Reconciliation of effective tax rate

Trafigura's operations are subject to income taxes in various foreign jurisdictions. The statutory income tax rate vary between 10 percent and 35 percent, which results in a difference between the weighted average statutory income tax rate and Singapore's statutory tax rate of 17 percent (2017: 17%).

The weighted average statutory income tax rate did not change in 2018 compared to 2017 notwithstanding the change in the mix of profits and losses generated in the various countries in which Trafigura operates.

The reconciliation between tax expense and the result of accounting profit multiplied by the Company's statutory income tax rate for the years ended 30 September 2018 and 2017 is as follows:

	2018		2017	
	USD'M	%	USD'M	%
Profit before tax	**966.9**	**–**	968.7	–
Income tax expense at statutory blended tax rate	**226.2**	**23.4%**	227.0	23.4%
Tax effect of adjustments to arrive at the effective income tax rate:				
Effect of unused tax losses, not recognised as deferred tax assets	**20.7**	**–**	20.3	–
Non-taxable income or subject to specific tax holidays	**(240.5)**	**–**	(232.8)	–
Non-deductible expenses	**46.3**	**–**	53.6	–
Foreign exchange	**8.5**	**–**	18.3	–
Adjustments in relation to income tax of previous year	**(16.3)**	**–**	(8.7)	–
Tax rate changes	**39.6**	**–**	18.3	–
Withholding tax	**9.6**	**–**	3.7	–
Effective tax rate	**94.1**	**9.7%**	81.4	8.4%

On 22 December 2017 new U.S. tax legislation was enacted. The new law includes the reduction of the statutory federal income tax rate from 35 percent to 21 percent effective 1 January 2018, which affected Trafigura's U.S. deferred tax position at the end of 2017. The "tax rate changes" shows the impact of recalculating the deferred tax positions of Trafigura U.S. entities applying the reduced U.S. corporate income tax rate. The effects of tax reforms have been included in the reported tax balances based on the information per reporting date. The Company keeps following any development and further clarifications of changes in tax laws and will make adjustments to the tax balances accordingly.

d. Deferred tax assets and liabilities

The breakdown of deferred tax assets and liabilities in significant components as well as the movement between 1 October 2017 and 30 September 2018 of these components is as follows:

USD'M	Opening balance	Recognised income statement	Other comprehensive income	FX and other	Closing balance	Deferred tax assets	Deferred tax (liabilities)
Property, plant and equipment	(3.2)	5.2	(17.7)	3.4	(12.3)	13.3	(25.6)
Investment in subsidiaries & associates	(36.0)	30.5	–	–	(5.5)	–	(5.5)
Other temporary differences	(17.3)	18.3	–	14.5	15.5	38.7	(23.2)
Provisions	(158.1)	19.3	0.1	3.8	(134.9)	13.4	(148.3)
Derivatives	10.0	(9.0)	(0.7)	(12.2)	(11.9)	5.4	(17.3)
Tax losses carried forward and tax attributes	169.1	(25.5)	–	3.4	147.0	147.0	–
Total deferred tax position	**(35.4)**	**38.8**	**(18.3)**	**12.9**	**(2.1)**	**217.8**	**(219.9)**
Set-off deferred tax positions						(46.6)	46.6
Net deferred tax position						**171.2**	**(173.3)**

Deferred tax assets are recognised for temporary differences and unused tax losses to the extent that realisation is probable as sufficient taxable profit is expected in the countries where the deferred tax assets are originated. The majority of the reported deferred taxes will be settled after 12 months from the balance sheet date.

No significant deferred tax liability has been recognised in respect of undistributed earnings of subsidiaries. This is because Trafigura is able to control the timing of the reversal of the temporary differences and it is probable that such differences will not reverse in the foreseeable future.

Included in the table above are tax losses available in one of Trafigura's Colombian group companies which were incurred up to and including 31 December 2016. These losses do not expire and can therefore be carried forward unlimited. A deferred tax asset is recognised for these tax losses for an amount of USD24 million as it is probable that this group company will generate sufficient taxable profits in the future to off-set the amount of unused tax losses. For underlying assumptions see note 11.

Based on the forecast, the expectation is that the tax losses will be fully utilised by the end of financial year 2034.

Unrecognised tax losses carry forward and tax attributes	2018 USD'M
Losses expiring in 2019	**–**
Losses expiring in 2020	**0.4**
Losses expiring in 2021	**4.2**
Losses expiring in 2022	**0.1**
Losses expiring in 2023	**53.7**
Losses expiring in 2024	**0.5**
Losses expiring in 2025	**5.6**
Losses expiring after 2025	**82.4**
Losses which do not expire	**5.0**
Total	**151.9**

In the prior year, the gross unrecognised tax losses carry forward and tax attributes expiring within five years amounted to USD0.5 million and those expiring after five years amounted to USD253.9 million.

The unrecognised deferred tax assets for losses and tax attributes relate to entities for which it is not probable that taxable profit will be available to offset against these losses and attributes.

F. Notes to consolidated financial statements

e. Tax uncertainties

Trafigura operates in numerous jurisdictions worldwide resulting in cross border intercompany transactions whereby the transfer pricing rules applied in one country have an impact on the results in another country. In order to reduce transfer pricing uncertainties, transfer pricing studies are performed and reports are prepared to fulfil local transfer pricing requirements. Due to complexity of tax rules, interpretation by local taxing authorities can differ from Trafigura's interpretation based on opinions provided by local tax counsel. Trafigura believes that it has sufficiently provided for financial consequences (if any).

In countries where Trafigura starts new operations or alters business models, the issue of permanent establishment and profit allocation thereto may arise. The risk is that taxing authorities in multiple jurisdictions claim taxation rights over the same profit.

11. Property, plant and equipment

USD'M	Land and buildings	Machinery and equipment	Barges and vessels	Other fixed assets	Total
Cost					
Balance at 1 October 2017	1,077.4	785.8	724.9	513.1	3,101.2
Additions	18.2	23.6	2.6	142.8	187.2
Acquired through business combination	40.3	28.7	–	10.5	79.5
Reclassifications	9.1	7.8	–	(14.2)	2.7
Effect of movements in exchange rates, including hyperinflation adjustment	6.0	(3.6)	–	(14.2)	(11.8)
Disposals	(0.2)	(32.7)	(23.4)	(13.1)	(69.4)
Divestment of subsidiaries	(267.0)	(97.3)	(92.8)	(13.3)	(470.4)
Balance at 30 September 2018	**883.8**	**712.3**	**611.3**	**611.6**	**2,819.0**
Depreciation and impairment losses					
Balance at 1 October 2017	261.6	295.2	121.5	232.0	910.3
Depreciation for the period	44.8	36.2	35.5	19.0	135.5
Impairment losses	–	0.3	–	–	0.3
Reclassifications	(1.0)	–	–	4.5	3.5
Effect of movements in exchange rates, including hyperinflation adjustment	0.6	(0.7)	–	(0.7)	(0.8)
Disposals	–	(8.9)	–	(12.3)	(21.2)
Divestment of subsidiaries	49.5	(42.8)	(15.1)	(1.3)	(108.7)
Balance at 30 September 2018	**256.5**	**279.3**	**141.9**	**241.2**	**918.9**
Net book value at 30 September 2018	**627.3**	**433.0**	**469.4**	**370.4**	**1,900.1**

USD'M	Land and buildings	Machinery and equipment	Barges and vessels	Other fixed assets	Total
Cost					
Balance at 1 October 2016	968.9	587.0	654.4	944.4	3,154.7
Additions	15.5	8.1	48.5	266.8	338.9
Reclassifications	150.5	197.8	166.0	(578.0)	(63.7)
Effect of movements in exchange rates	(21.0)	(0.8)	(0.3)	(3.4)	(25.5)
Disposals	(30.4)	(2.7)	(134.1)	(96.5)	(263.7)
Divestment of subsidiaries	(6.1)	(3.6)	(9.6)	(20.2)	(39.5)
Balance at 30 September 2017	**1,077.4**	**785.8**	**724.9**	**513.1**	**3,101.2**
Depreciation and impairment losses					
Balance at 1 October 2016	218.0	270.9	82.9	237.9	809.7
Depreciation for the period	46.4	31.4	36.2	21.8	135.8
Impairment losses	9.2	–	6.5	0.8	16.5
Reclassifications	6.0	2.5	–	(3.8)	4.7
Effect of movements in exchange rates	(9.5)	(0.7)	(0.1)	(2.0)	(12.3)
Disposals	(4.7)	(0.8)	–	(3.5)	(9.0)
Divestment of subsidiaries	(3.8)	(8.1)	(4.0)	(19.2)	(35.1)
Balance at 30 September 2017	**261.6**	**295.2**	**121.5**	**232.0**	**910.3**
Net book value at 30 September 2017	**815.8**	**490.6**	**603.4**	**281.1**	**2,190.8**

Financial year 2018

The total additions for the year amounted to USD187.2 million. The main investments during 2018 relate to investments in a power plant in Ghana of USD25.9 million, investments in a saltwater treatment project related to mining operations in Peru of USD18.6 million, the construction of a splitter unit in Mexico of USD14.7 million and the Colombian port project of USD11.4 million. The remaining investments relate to various smaller projects.

The acquisitions through business combinations totalling USD79.5 million relate to the acquired downstream business in Argentina, as disclosed in note 5.

The Colombian port project relates to the development of multimodal transport activities in Colombia, which includes an inland port at Barrancabermeja and fluvial equipment providing multimodal logistics services linking the industrial heartland to the Caribbean ports Cartagena and Barranquilla via the Magdalena River. The total book value of the assets as per 30 September 2018 is USD1,025 million (consisting of assets within all asset categories). During the ramp-up of the project, the Colombian market environment for oil products has been challenging and combined with insufficient draft on the Magdalena River resulted in a trigger to perform an impairment test. To assess a potential impairment, the Colombia project was combined into one Cash Generating Unit ('CGU') as the specific assets do not have independent associated cash flows. The value in use is calculated based upon the discounted cash flows associated with the assets. This calculation incorporates all aspects of the Colombia multimodal project including the expected award of a dyking and dredging contract by the local authorities following a tender in 2019, a gradual ramp-up of the work from mid-2020, expected revenues and relevant costs. Based on the projections until 2044, which correspond to the current end of the port concession and does not include the expected extension, and using a pre-tax discount rate of 8.89 percent (2017: 9.77%), the recoverable amount exceeded the tested carrying amount of the assets by USD240 million and therefore no impairment was required. The sensitivity analyses on the valuations show that an increase/decrease in the discount rate of +/-0.5% points has an impact on the recoverable amount of minus USD67 million/plus USD71 million. A change in the EBITDA of 10 percent causes a change of USD128 million to the recoverable amount.

The disposals for the year amounted to USD48.2 million and mainly relate to the sale of a vessel and the sale of a storage terminal in Argentina. The impact recorded on the Divestment of subsidiaries lines predominantly relate to the deconsolidation of Simba Holding S.à r.l. as disclosed in note 6.

The category 'Other fixed assets' includes assets under construction, which relates to assets not yet in use. Total balance at 30 September 2018 amounted to USD265.9 million (2017: USD194.2 million). Once the assets under construction come into operation they are reclassified to the appropriate asset category and it is from that point that they are depreciated. The increase is mainly driven by investments in various longer term construction projects, such as the power plant in Ghana and the splitter unit in Mexico. The total book value of these projects reported as assets under construction as per 30 September 2018 amount to USD97.3 million (power plant) and USD86.7 million (splitter unit) respectively. Further the category 'Other fixed assets' mainly includes small equipment, computer hardware, office equipment and refurbishments.

The net book value of property, plant and equipment acquired under finance leases at 30 September 2018 was USD23.2 million (2017: USD20.6 million).

Certain items of property, plant and equipment are pledged as collateral for an amount of USD421.3 million (2017: USD496.2 million).

Depreciation expenses are included in general and administrative expenses. Impairment charges are included in other income and expense.

During the financial year ended 30 September 2018, the Company has capitalised borrowing cost of a total amount of USD7.8 million under other fixed assets (2017: USD12.3 million).

Financial year 2017

In 2017 the Group finalised the sale and leaseback transactions of 17 vessels entered in 2016 by delivering the last three vessels. The vessels have been leased back from periods ranging between 8 and 10 years. The sale and leaseback transaction generated a total consideration in 2017 of USD134.2 million and a net nil result. The sale and leaseback transaction can be classified as an operational lease. The lease agreements are in line with market rent for longer term charters. The future charter commitments of these leases are included in the outstanding commitments under note 28.

Main investments during 2017 relate to the Colombian port project USD71.7 million, vessels USD103.4 million and the construction of a splitter unit in Mexico USD54.4 million.

During 2017, assets with a value of USD66.3 million (mainly land and buildings) from three DT subsidiaries were transferred to assets held for sale.

F. Notes to consolidated financial statements

12. Intangible assets

USD'M	Goodwill	Licences	Other intangible assets	Total
Cost				
Balance at 1 October 2017	8.1	38.5	393.4	440.0
Additions	–	0.4	35.2	35.6
Acquired through business combination	–	–	5.5	5.5
Reclassifications	–	(1.5)	0.7	(0.8)
Effect of movements in exchange rates, including hyperinflation adjustment	–	(0.3)	(2.9)	(3.2)
Disposals	–	–	–	–
Divestment of subsidiaries	–	(5.1)	(24.6)	(29.7)
Balance at 30 September 2018	**8.1**	**32.0**	**407.3**	**447.4**
Amortisation and impairment losses				
Balance at 1 October 2017	2.2	2.3	231.8	236.3
Amortisation for the period	–	0.2	55.9	56.1
Impairment	–	–	–	–
Effect of movements in exchange rates, including hyperinflation adjustment	–	–	(0.3)	(0.3)
Reclassifications	–	0.1	(0.8)	(0.7)
Disposals	–	–	–	–
Divestment of subsidiaries	–	(0.6)	(16.8)	(17.4)
Balance at 30 September 2018	**2.2**	**2.0**	**269.8**	**274.0**
Net book value at 30 September 2018	**5.9**	**30.0**	**137.5**	**173.4**

USD'M	Goodwill	Licences	Other intangible assets	Total
Cost				
Balance at 1 October 2016	8.1	36.4	343.2	387.7
Additions	–	2.0	50.2	52.2
Reclassifications	–	0.7	15.5	16.2
Effect of movements in exchange rates	–	(0.4)	0.4	–
Disposals	–	–	(1.3)	(1.3)
Divestment of subsidiaries	–	(0.2)	(14.6)	(14.8)
Balance at 30 September 2017	**8.1**	**38.5**	**393.4**	**440.0**
Amortisation and impairment losses				
Balance at 1 October 2016	2.2	2.1	152.9	157.2
Amortisation for the period	–	0.3	63.0	63.3
Impairment	–	–	0.2	0.2
Effect of movements in exchange rates	–	–	–	–
Reclassifications	–	(0.1)	16.5	16.4
Disposals	–	–	(0.5)	(0.5)
Divestment of subsidiaries	–	–	(0.3)	(0.3)
Balance at 30 September 2017	**2.2**	**2.3**	**231.8**	**236.3**
Net book value at 30 September 2017	**5.9**	**36.2**	**161.6**	**203.7**

Goodwill is the only intangible asset with an indefinite life. All other intangible assets are amortised as follows:

- Licence fees paid are amortised evenly over their respective periods, for which the licences have been granted, generally not exceeding 10 years;
- Other intangible assets are amortised evenly over their estimated useful economic life. Other intangibles mainly consist of software of USD122.5 million (2017: USD146.8 million) which is amortised over 5 years, and payments made under exclusivity contracts with clients for petroleum fuels and lubricants which are amortised over the contractual period.

Amortisation expenses are included in general and administrative expenses. Impairment charges are included in other income and expense. Intangible assets with finite lives are tested for impairment when impairment indicators exist. For the purpose of impairment testing, goodwill is allocated to the CGUs, or groups of CGUs.

13. Equity-accounted investees

	2018 USD'M	2017 USD'M
Opening Balance – 1 October	**3,487.9**	3,464.4
Effect of movements in exchange rates	**(98.6)**	5.9
Additions	**101.2**	375.1
Fair value of retained interest in deconsolidated subsidiaries	**261.1**	–
Disposals	**(272.3)**	(60.4)
Impairments	**(72.7)**	(4.2)
Share of net income/(loss)	**17.4**	(232.2)
Dividends received	**(50.4)**	(35.8)
Other	**(12.4)**	(24.9)
Closing Balance – 30 September	**3,361.2**	3,487.9

Financial year 2018

The additions to equity accounted investees amounted to USD101.2 million. In November 2017, the Group participated for its share in an equity placement of Nyrstar resulting in an additional investment of USD28.8 million. Other main additions relate to further investments in Porto Sudeste of USD17.8 million, an iron ore mine in Brazil of USD14.2 million, and investments in Tendril Ventures Pte Ltd of USD13.9 million.

The fair value of retained interests in deconsolidated subsidiaries of USD261.1 million predominantly relates to the recognition of the fair value of the retained interest in Simba Holding S.à r.l. as disclosed in note 6.

As disclosed in note 8, the Group sold its 20 percent interest in Buckeye Texas Partners LLC to Buckeye Texas Partners Holdings LLC in April 2018. The book value of the investment at the moment of the sale amounted to USD263.9 million, which is included in the Disposals line.

The Group's share of results in its equity-accounted investees for the year amounted to a gain of USD17.4 million. This result includes the positive share in the income of MATSA and Puma Energy of USD84.4 million and losses in Porto Sudeste and Tendril Ventures of USD107.9 million.

The Group performs a periodic assessment of whether there is an indication of asset impairment or whether a previously recorded impairment may no longer be required. The Group decided that due to Nyrstar's exposure to adverse market conditions, most notably a decline in zinc prices compounded with historically low zinc treatment charges, coupled with concerns about financial liabilities maturing in 2019, an impairment of USD72 million was required to reduce Trafigura's equity investment in Nyrstar to USD35 million.

In recognition of the volatile market price quotations of Nyrstar, the recoverable amount of USD35 million was determined based on its value-in-use using a discounted cash flow model and incorporated a discount rate of 12 percent. The value-in-use calculation inherently includes elements of judgment and estimations in relation to projected future production volumes, commodity prices and treatment charges.

In 2018, the Group received dividends of USD50.4 million from its investments in equity-accounted investees (2017: USD35.8 million).

Financial year 2017

The Group's share of results in its equity-accounted investees for the year amounted to a loss of USD232.2 million. The positive share of income in our investments of Puma Energy and MATSA of USD81.6 million was offset against losses in Porto Sudeste and Nyrstar of USD317.6 million.

On 31 July 2017 the Group sold its 46.5 percent stake in PT Servo Meda Sejahtera (Servo), an Indonesia based business with strategic logistical assets which enable efficient transportation of unprocessed Coal from local mines to the river port. The total consideration was USD226 million and included a USD158 million repayment of outstanding loans to Servo. The result on this transaction amounted to USD3.0 million, which is offset by the share of net loss during the year until the date of the transaction.

On 18 August 2017, an investment consortium comprised of Trafigura, private investment group United Capital Partners (UCP) and Oil Holdings completed the acquisition of a 49 percent stake in Mumbai-based Essar Oil Limited (renamed in 2018 to Nayara Energy Limited) for a total consideration of USD3,880 million including acquisition costs. The acquiring entity, Kesani Enterprises Company Limited (Kesani), has financed the acquisition through a non-recourse loan facility and capital contributions by the consortium. The acquisition includes the Vadinar oil refinery and storage and import/export facilities, as well as a domestic retail network business consisting of over 3,500 retail service stations. The 20Mtpa super refinery, with a Nelson complexity index of 11.8, is located on strategic shipping routes to demand centres in the Far East and close to Middle East sources of production. India is one of the world's most important sources of growth in energy demand and the deregulation of pricing of the Indian retail market is expected to bring potential growth opportunities for EOL's retail network. Tendril Ventures Pte Ltd qualifies as an associate. Furthermore during 2017 Trafigura made additional investments of USD56.1 million in Porto Sudeste, USD9.0≈million in Buckeye Texas Partners LLC and a new investment in an Iron ore mine in Brazil of USD11.0 million.

Name	Place of incorporation/ registration	Activities	Percentage of equity attributable to the Group 2018	Percentage of equity attributable to the Group 2017
Atalaya Mining PLC (previously known as EMED Mining Public Limited)	Cyprus	Mining	**22.4%**	22.0%
Buckeye Texas Partners LLC	United States	Terminalling	**–**	20.0%
Empresa Minera del Caribe S.A. (Joint venture)	Caribbean	Mining	**49.0%**	49.0%
Guangxi Jinchuan Non-ferrous Metals Co., Ltd	China	Smelter	**30.0%**	30.0%
Mineração Morro do Ipê S.A.	Brazil	Mining	**36.2%**	25.5%
Napoil Limited	Bermuda	Oil trading	**49.0%**	49.0%
Nyrstar N.V.	Belgium	Mining, Metal processing	**24.4%**	24.6%
Porto Sudeste do Brasil S.A. (Joint venture)	Brazil	Port services	**49.5%**	49.2%
Puma Energy Holdings Pte. Ltd.	Singapore	Mid- and downstream oil activities	**49.3%**	49.6%
Tendril Ventures Pte Ltd	Singapore	Oil refinery, terminal and retailing of fuel	**49.0%**	49.0%
TM Mining Ventures, S.L. (Joint venture)	Spain	Mining	**50.0%**	50.0%
Transportadora Callao S.A.	Peru	Transportation	**30.0%**	30.0%
Simba Holding S.à r.l. (Joint venture)	Luxembourg	Multimodal logistics and warehousing	**50.0%**	–

Name	Segment	2018 USD'M	2017 USD'M
Oil and Petroleum:			
Puma Energy Holdings Pte. Ltd.	Oil and Petroleum	**1,953.0**	2,113.5
Tendril Ventures Pte Ltd (Nayara Energy Limited)	Oil and Petroleum	**291.8**	270.3
Buckeye Texas Partners LLC	Oil and Petroleum	**–**	270.9
Napoil Limited	Oil and Petroleum	**8.7**	8.7
Others	Oil and Petroleum	**1.1**	1.2
	Total	**2,254.6**	2,664.6
Metals and Minerals:			
TM Mining Ventures, S.L. (MATSA)	Metals and Minerals	**454.2**	395.6
Porto Sudeste do Brasil S.A.	Metals and Minerals	**41.9**	65.4
Nyrstar N.V.*	Metals and Minerals	**35.0**	96.7
Guangxi Jinchuan Non-ferrous Metals Co., Ltd	Metals and Minerals	**151.8**	141.7
ATALAYA MINING PLC (previously known as EMED MINING PUBLIC LIMITED)*	Metals and Minerals	**81.9**	63.7
Simba Holding S.à r.l.	Metals and Minerals	**247.9**	–
Empresa Minera del Caribe S.A.	Metals and Minerals	**25.5**	16.8
Transportadora Callao S.A.	Metals and Minerals	**8.9**	8.4
Mineração Morro do Ipê S.A.	Metals and Minerals	**15.5**	9.2
Ryker Base Pvt Ltd	Metals and Minerals	**4.0**	–
Others	Metals and Minerals	**12.3**	12.8
	Total	**1,078.9**	810.3
All other segments:			
Others	Corporate and Others	**27.7**	13.0
Total		**3,361.2**	3,487.9

* Listed investments. Fair value as of 30 September 2018 (and 2017) based on quoted stock prices:

	2018	2017
Nyrstar N.V.	64.2	182.9
ATALAYA MINING PLC (previously known as EMED MINING PUBLIC LIMITED)	104.2	53.9

Only the individually significant associates Puma Energy Holdings Pte. Ltd., TM Mining Ventures S.L (MATSA) and the joint venture Simba Holding S.à r.l. are shown separate from the other associates.

	Puma Energy Holdings Pte. Ltd.		TM Mining Ventures, S.L.		Simba Holding S.à.r.l.	
	2018 USD'M	2017 USD'M	2018 USD'M	2017 USD'M	2018 USD'M	2017 USD'M
Non current assets	**4,918.9**	5,192.8	**1,520.9**	1,514.1	**321.9**	–
Current assets	**2,982.4**	2,415.0	**174.8**	297.7	**75.9**	–
Non current liabilities	**2,977.2**	2,764.0	**572.7**	579.5	**48.8**	–
Current liabilities	**3,188.6**	2,797.0	**214.7**	441.2	**55.4**	–
Revenue	**17,697.6**	14,178.3	**646.9**	593.5	**–**	–
Profit/(loss) for the year	**61.2**	127.5	**104.9**	49.8	**–**	–
Dividends paid	**7.3**	29.9	**24.8**	–	**–**	–
Other Comprehensive income	**(565.4)**	30.9	**61.9**	(73.3)	**–**	–
Total comprehensive income	**(504.2)**	158.4	**166.8**	(23.5)	**–**	–
Net assets	**1,735.6**	2,047.4	**908.4**	791.2	**293.5**	–
Trafigura's ownership interest	**49.3%**	49.6%	**50.0%**	50.0%	**50.0%**	–
Fair value adjustment as a result of partial sale and other adjustments	**1,097.4**	1,100.3	**–**	–	**101.1**	–
Carrying value	**1,953.0**	2,113.5	**454.2**	395.6	**247.9**	–

Other associates	2018 USD'M	2017 USD'M
Assets	**5,445.8**	5,700.8
Liabilities	**4,878.6**	4,718.8
Revenue	**2,273.0**	2,009.9
Profit/(loss) for the year	**61.0**	(300.6)

The amount of corporate guarantees in favour of associates and joint ventures as at 30 September 2018 was USD121.7 million (2017: USD101 million).

14. Prepayments

Under the prepayments category we account for the prepayments of commodity deliveries. Out of the total current prepayments balance of USD3.1 billion (2017: USD3.1 billion), an amount of USD0.9 billion (2017: USD0.7 billion) relates to prepayments which are made for specifically identified cargos. The contractually outstanding prepayments amount decreases in size with each cargo that is delivered, until maturity. Once the contractually agreed total cargo has been fully delivered, the prepayment agreement falls away leaving no remaining contractual obligations on Trafigura or the supplier. The Company monitors the commodity prices in relation to the prepayment contracts and manages the credit risk together with its financial assets as described in note 29. The prepayments are split in non-current prepayments (due > 1 year) and current prepayments (due < 1 year). A portion of the long-term prepayments, as well as short-term prepayments, is insured. Unpaid interest on the prepayments is added to the prepayment balance.

15. Loans receivable

	2018 USD'M	2017 USD'M
Loans to associates and related parties	**305.9**	326.4
Other non-current loans receivable	**179.6**	344.3
Total	**485.5**	670.7

The loans to associated and related parties decreased by USD20.5 million during the year. This decrease mainly results from the full repayment of the shareholder loan receivable from the equity-accounted investee Minas de Aguas Teñidas (MATSA) of USD82.6 million. This decrease was partly offset by the increase in the loan receivable to Empresa Minera del Caribe S.A. ('Emincar'), which increased by USD67.5 million to a balance of USD297.5 million as at 30 September 2018 (30 September 2017: USD230.0 million). The increase of USD67.5 million predominantly relates to the capitalisation of interest and receivables previously reported under related party receivables, offset by USD12.2 million repayments during financial year 2018.

In determining the impairment provision on loans granted to associates, where repayment is neither planned nor likely, these loans form part of the net investment in the associate and the impairment test has been based upon the total consideration on these associates. Based on these assessments no impairment needs to be recorded at 30 September 2018.

Other non-current loans receivables include various loans which are granted to counterparties which the Group trades with. The decrease for the year of USD164.7 million relates to received repayments on prior year receivables totalling USD132.5 million and reclassifications to short-term loans, partly offset by new loans. The main movements are described below.

This other non-current loans receivable includes the long-term part of a debt agreement with the Angolan Ministry of Finance of USD122.9 million (30 September 2017: USD214.8 million), which relates to compensation for iron-ore investments made by the Group following the liquidation of a consolidated Angolan subsidiary in 2016. During the year, USD91.9 million was reclassified to short term loans based on a payment plan established with the Angolan Ministry of Finance with repayment in full by end of 2020. Due to ongoing liquidity constraints within Angola for foreign currencies, the loan is in arrears. The Group continues to expect all amounts will be collected within the timeframe defined in the agreed payment plan.

The other non-current loans receivable also include a loan with a balance of USD39.9 million provided to PT Titan Infra Energy ('Titan'), the buyer of our 46.5 percent share in PT Servo Meda Sejahtera which was sold on 31 July 2017. This amount resulted from a debt refinancing by Titan during 2018, through which the prior year vendor loan receivable granted by the Group of USD70.1 million was repaid in full. As part of the refinancing the Group participated as lender within a consortium that provided a facility to Titan, resulting in the USD39.9 million loan receivable per 30 September 2018.

Based upon the individual analysis of these loans, the recorded expected losses on these loans amount to USD4.6 million (2017: USD3.3 million). The following tables explain the movements of the ECL between the beginning and the end of the year and the gross carrying amounts of the loan receivables by credit risk category.

	2018			2017
	Performing	**Under performing**	**Total**	Performing
	12-months ECL	**Life time ECL**		12-months ECL
Loan Receivables	**USD'M**	**USD'M**	**USD'M**	USD'M
ECL Provision				
Opening Balance – 1 October	**3.3**	**–**	**3.3**	2.5
Transfer to under performing	**(1.4)**	**1.4**	**0.0**	–
New loans originated during the period	**2.0**	**–**	**2.0**	1.8
Loans derecognised during the period	**(1.9)**	**–**	**(1.9)**	(1.0)
Changes in PD/LGD/EAD	**–**	**1.2**	**1.2**	–
Closing Balance 30 September	**2.0**	**2.6**	**4.6**	3.3
Gross carrying amount 30 September				
Current (note19)	**276.5**	**177.1**	**453.6**	295.2
Non Current	**362.6**	**122.9**	**485.5**	670.7
Total	**639.1**	**300.0**	**939.1**	965.9

16. Other investments

	2018 USD'M	2017 USD'M
Listed equity securities – Fair value through OCI	**10.2**	19.3
Listed equity securities – Fair value through profit or loss	**44.6**	–
Listed debt securities – Fair value through profit or loss	**466.3**	447.6
Unlisted equity investments – Fair value through profit and loss	**31.6**	45.5
Unlisted equity investments – Fair value through OCI	**163.2**	122.6
Total	**715.9**	635.0

The Group's long-term investments consist of listed equity securities, listed debt securities and unlisted equity securities. The listed equity securities have no fixed maturity or coupon rate. The fair values of listed equity investments are based on quoted market prices while the fair value of the unlisted equity securities is determined based on a Level 3 valuation prepared by management.

The increase of USD35.5 million in listed equity securities is mainly due to investments in Nostrum Oil & Gas shares of USD25.9 million as a result of the Group's security pledge on a loan and an investment in SBM Securities Ltd of USD16.7 million offset by the sale of Highland shares of USD7.4 million. The listed debt securities increased by USD18.7 million due to the upward valuation of the debt instrument related to Porto Sudeste of USD18.7 million (2017: USD135.7 million). The increase of the equity investments of USD26.7 million mainly relates to investments in Royal London Asset Management and Wolverine Fuels for a total of USD20.4 million.

The listed debt securities consist of a financial instrument related to the investment in Porto Sudeste do Brasil SA, which is accounted for under equity accounted investees in note 13. These instruments are held to collect cash flows. Since the payments on these debt instruments are dependent on the port's throughput, they are classified as fair value through profit or loss. Since the free float of these listed debt instruments is extremely thin and in the absence of normal market activity, it has been concluded that no active market exists and therefore the fair value is determined using a level 3 valuation. The holders of the instrument are entitled to a fixed royalty payment per metric tonne processed by the port and therefore have direct exposure to the business risks of Porto Sudeste. As a result, the fair value of this instrument is based on a discounted cash flow model of the port in which the business plan of Porto Sudeste is reflected. Revenue is calculated over a period ending in 2064 and throughput volumes are held constant from 2025 onwards. In this calculation, management used a discount rate of 12.5 percent (2017: 12.5%). Due to the limited liquidity of the port asset, a discount factor of 10 percent is applied (2017: 10%). The level 3 valuation of the debt securities increased as a result of movements in both foreign exchange and inflation rates leading to a value of the debt securities of USD466.3 million (2017: USD447.6 million). The sensitivity analysis on this valuation shows that an increase/decrease of the throughput of the port of five percent has an impact on the value of USD23 million (2017: USD22 million), an increase/decrease of the discount rate by 0.5% has an impact on the valuation of USD28 million (2017: USD27 million). A change in the discount rate due to lack of marketability by 0.5% has an effect of USD26 million (2017: USD25 million) on the valuation.

Throughout the financial year, no dividend has been recognised related to the equity securities held at 30 September 2018 (2017: nil). The net change in fair value in equity securities measured at fair value through other comprehensive income ('OCI') was positive USD11.9 million (2017: positive USD8.6 million). A cumulative gain of USD1.7 million (2017: USD18.2 million gain) was transferred within equity from OCI to retained earnings due to disposals of items valued at fair value through OCI.

17. Other non-current assets

As at 30 September 2018, the other non-current assets amounted to USD1,094.6 million (2017: USD119.1 million). This majority of this balance, amounting to USD1,073.9 million (2017: USD119.1 million), relates to the non-current part of the non-financial hedged items which are disclosed in note 29h.

18. Inventories

Carrying amount	2018 USD'M	2017 USD'M
Storage inventories	**9,038.9**	8,508.1
Floating inventories	**5,683.0**	5,403.7
Supplies	**11.0**	14.9
Total	**14,732.9**	13,926.7

As at 30 September 2018 (and 30 September 2017) the entire inventory has either been pre-sold or hedged.

The Group is committed to financing its day-to-day trading activity through self-liquidating transactional lines, whereby the financing banks retain security on the goods purchased. The percentage of total inventories financed through these lines is carefully monitored.

19. Trade and other receivables

	2018 USD'M	2017 USD'M
Trade debtors	**8,722.8**	7,148.3
Provision for bad and doubtful debts	**(56.1)**	(55.1)
Accrued turnover	**7,472.3**	7,406.1
Broker balances	**789.9**	1,011.0
Other debtors	**388.8**	340.9
Loans to third parties	**447.3**	293.3
Loans to related parties	**6.3**	1.9
Other taxes	**570.8**	407.6
Related parties	**1,609.6**	813.1
Total	**19,951.7**	17,367.1

All financial instruments included in trade and other receivables are held to collect the contractual cash flows except for those subject to certain dedicated financing facilities which would be held for collection of contractual cash flows and for selling the financial asset. Furthermore, the cash flows that the Group receives on these instruments are solely payments of principal and interest.

In 2018 Trafigura entered into a number of dedicated financing facilities, which finance a portion of its receivables. Part of these facilities meet the criteria of derecognition of the receivables according to IFRS. As per 30 September 2018 an amount of USD3,263.3 million of trade debtors has been discounted. Of this amount, USD2,903.3 million has been derecognised, as Trafigura has transferred substantially all the risks and rewards of ownership of the financial asset with non-recourse. The remaining part of discounted receivables which does not meet the criteria for derecognition, amounting to USD360.0 million at 30 September 2018, remains in the balance of trade debtors. For the received amount of cash of these items the company has recognised a liability under current loans and borrowings.

Of the USD8,722.8 million trade debtors, USD3,693.8 million (2017: USD2,142.7 million) had been sold on a non-recourse basis under the securitisation programme. Of the USD1,609.6 million receivables to related parties, USD719.6 million (2017: USD124.2 million) had been sold on a non-recourse basis under the securitisation programme, see note 20.

As at 30 September 2018, 10.6 percent (2017: 14.6%) of receivables were between 1-60 days overdue, and 9.2 percent (2017: 12.6%) were greater than 60 days overdue. Trafigura applied the simplified method in assessing expected credit losses. The accounts receivables have been divided in aging buckets and based on a historical analysis on defaults and recovery rates, a percentage for expected credit losses has been determined. Trafigura manages to limit credit losses by renegotiating contracts in the case of a default. From the above analysis, an expected credit loss as at 30 September 2018 of USD4.9 million has been taken into account (2017: USD4.7 million). The loss allowance provision at 30 September 2018 amounts to USD56.1 million (2017: USD55.1 million). The provision mostly relate to demurrage claims and commercial disputes with our clients.

Accrued turnover represents receivable balances for sales which have not yet been invoiced. They have similar risks and characteristic as trade debtors. Trade debtors and accrued turnover have similar cashflow characteristics and are therefore considered to be a homogeneous group of financial assets.

20. Securitisation programme

The Group operates various securitisation programmes: Trafigura Securitisation Finance plc. (TSF) enables the Group to sell eligible receivables and Trafigura Commodities Funding Pte. Ltd. (TCF) enables Trafigura to sell and repurchase eligible inventories. Those securitisation vehicles are consolidated and consequently the securitised receivables and inventories are included within the consolidated trade debtor and inventory balances.

Over time the external funding of TSF has increased significantly in size while incorporating a longer term committed funding element, principally through the issuance of Medium Term Notes (MTN) and Variable Funding Notes (VFN) purchased by bank sponsored conduits.

The available external funding of the securitisation programme consists of:

Receivable securitisation

	Interest rate	Maturity	2018 USD'M	2017 USD'M
TSF AAA MTN	Libor + 0.95%	2017 – October	–	279.0
TSF BBB MTN	Libor + 2.25%	2017 – October	–	21.0
TSF AAA MTN	Libor + 0.85%	2020 – June	**235.0**	235.0
TSF AAA MTN	2.47%	2020 – June	**230.0**	230.0
TSF BBB MTN	Libor + 1.70%	2020 – June	**35.0**	35.0
TSF AAA MTN	Libor + 0.73%	2021 – September	**185.0**	–
TSF AAA MTN	3.73%	2021 – September	**280.0**	–
TSF BBB MTN	4.33%	2021 – September	**35.0**	–
TSF AAA VFN	See note	Various throughout the year	**2,973.1**	1,525.4
TSF BBB VFN	See note	Various throughout the year	**223.6**	114.7
TSF Senior subordinated debt	Libor +4.25%	2020 – March	**108.3**	95.8
Total			**4,305.0**	2,535.9

As at 30 September 2018, the maximum available amount of external funding was USD4,305.0 million (2017: USD2,535.9 million) for the receivable securitisation programme. The utilised external funding of the programme as at 30 September 2018 was USD4,294.0 million (2017: USD2,517.4 million).

Inventory securitisation

	Interest rate	Maturity	2018 USD'M	2017 USD'M
TCF VFN	See note	2018 – November	**470.0**	–
TCF MLF	See note	2018 – November	**45.0**	–
Total			**515.0**	–

As at 30 September 2018, the maximum available amount of external funding was USD515.0 million (2017: Nil) for the inventory securitisation programme. The utilised external funding of the programme as at 30 September 2018 was USD239.1 million (2017: Nil).

a. Interest rate

The rate of interest applied to the AAA Variable Funding Notes is defined in the securitisation facility documentation and is principally determined by the demand for commercial paper issued by eight bank-sponsored conduits. The Group benchmarks the rate provided against 1-week Libor. In the case of the rate of interest applicable to the BBB Variable Funding Notes, the rate of interest is principally determined by the liquidity of the interbank market.

The rate of interest applied to the VFN and MLF under the inventories securitisation is defined in the facility documentation.

b. Maturity

The maturity of the AAA and BBB Variable Funding Notes has been staggered to diversify the maturity profile of the notes. This aims to mitigate the 'liquidity wall' risk associated with a single maturity date for a significant funding amount.

21. Other current assets

	2018 USD'M	2017 USD'M
Non-financial hedged items	**675.6**	43.5
Prepaid expenses	**173.9**	139.2
Total	**849.5**	182.6

The non-financial hedged items balance of USD675.6 million (2017: USD43.4 million) fully relates to the current part of the non-financial hedged items, refer to note 29h for further information. Prepaid expenses relate to prepayments other than those made for physical commodities.

22. Cash and cash equivalents

Cash at bank earns interest at floating rates based on daily bank deposit rates. Short-term deposits are made for varying periods between one day and three months depending on the immediate cash requirements of the Group and earn interest at the respective short-term deposit rates. The fair value of cash and cash equivalents approximates the carrying value. An amount of USD81.0 million (2017: USD103.6 million) of cash at bank is restricted including restrictions that require the funds to be used for a specified purpose and restrictions that limit the purpose for which the funds can be used, unless fixed asset construction invoices are presented to the banks.

	2018 USD'M	2017 USD'M
Cash at bank and in hand	**4,924.5**	4,753.2
Short-term deposits	**431.3**	235.5
Total	**5,355.8**	4,988.7

As at 30 September 2018, the Group had USD9.5 billion (2017: USD8.7 billion) of committed unsecured syndicated loans of which USD2.7 billion (2017: USD2.2 billion) remained unutilised. The Group had USD3.0 billion (2017: USD2.8 billion) of immediately (same day) available cash in liquidity funds. The Group had immediate access to available liquidity balances from liquidity funds and corporate facilities in excess of USD5.7 billion (2017: USD5.0 billion). Short-term deposits made for periods longer than three months are separately shown in the statement of financial position and earn interest at the respective short-term deposit rates.

23. Capital and reserves

a. Share capital

As at 30 September 2018 the company has 25,000,000 ordinary shares outstanding and a capital of USD1,504 million. During 2018 no changes took place in the outstanding share capital.

The holders of ordinary shares are entitled to receive dividends as and when declared by the Company. All ordinary shares carry one vote per share without restriction. The ordinary shares have no par value.

b. Capital securities

As part of the financing of the Company and its subsidiaries, the Company has two capital securities instruments at 30 September 2018 with a carrying value of USD953.6 million.

These two capital securities are perpetual in respect of which there is no fixed redemption date. The distribution on the capital securities is payable semi-annually in arrears every six months from the date of issue. The company may elect to defer (in whole but not in part) any distribution in respect of these capital securities by providing no more than 30 nor less than five business days' notice, unless a compulsory interest payment event has occurred, including amongst other the occurrence of a dividend payment in respect of subordinated obligations of the Company. Any interest deferred shall constitute arrears of interest and shall bear interest.

In the event of a winding-up, the rights and claims of the holders in respect of the capital securities shall rank ahead of claims in respect of the Company's shareholders, but shall be subordinated in right of payment to the claims of all present and future senior obligations, except for obligations of the Company that are expressed to rank pari passu with, or junior to, its obligations under the capital securities.

These two capital securities have a par value of SGD200 million and USD800 million respectively. The carrying value as per 30 September 2017 amounted to USD1,247.3 million and comprised three instruments with a par value of SGD200 million, USD600 million and USD500 million respectively. The capital security of USD500 million has been repaid in April 2018.

The SGD200 million capital security was originally issued in February 2014 and is listed on the Singapore Stock Exchange. The distribution on the security is 7.5 percent per annum until February 2019. The capital security may be redeemed at the Company's option in whole, but not in part, on the distribution payment date in February 2019 or any distribution date thereafter at its principal amount together with any arrears of interest, additional interest amounts and accrued interests to the date fixed for redemption upon giving not less than 30 nor more than 60 days' notice to the holders.

The USD600 million capital security was originally issued on 14 March 2017, with an additional tap of USD200 million in November 2017 increasing the carrying value to USD800 million as per 30 September 2018. The distribution on the capital security is 6.875 percent per annum until March 2022. The capital security may be redeemed at the Company's option in whole, but not in part, in the period starting 90 calendar days before, and ending on, the distribution payment date in March 2022 or any distribution date thereafter upon giving not less than 30 nor more than 60 days' notice to the holders. The early redemption amount payable by the Company shall be the principal amount of the capital security, together with any interest accrued to the date fixed for redemption, all arrears of interest and all additional interest amounts.

c. Currency translation reserve

The currency translation reserve comprises all foreign currency differences arising from the translation of the financial statements of foreign operations, as well as from the translation of liabilities that hedge the Company's net investment in a foreign operation. For the impact of hyperinflation accounting, see note 32.

d. Revaluation reserve

The revaluation reserve comprises the fair value measurements movements of the equity investments which are accounted for at fair value through other comprehensive income. On realisation of these gains or losses, for example the sale of an equity instrument, the cumulative amounts of this reserve are transferred to retained earnings. The revaluation reserve relates to a loss of USD22.4 million (30 September 2017: USD32.6 million loss) related to the mark-to-market valuation of equity investments.

e. Cash flow hedge reserve

Trafigura has elected to not apply the cost of hedging option. Included in the cash flow hedge reserve is a loss of USD48.1 million (30 September 2017: USD47.7 million loss) related to the effective portion of the changes in fair value of cash flow hedges, net of tax. These cash flow hedges relate to hedging of interest and currency exposure on corporate loans and hedging of price exposure on future purchases and sales of physical commodities.

f. Dividends

The value of the dividends declared on the ordinary shares amount to USD527.8 million (2017: USD933.9 million), representing USD21.1 per share (2017: USD37.4).

24. Material partly owned subsidiaries

Financial information of subsidiaries that have material non-controlling interest is provided below. The information is based on amounts before intercompany eliminations.

The Company has control over DTS Holdings Singapore Pte. Ltd. with a 50 percent equity interest (2017: 50%). DTS Holdings Singapore Pte. Ltd. is a business venture between the Group and Cochan Singapore Pte. Ltd. and is the main holding company of the DT Group. The DT Group's activities span trading, shipping, infrastructure, asset management and logistics.

The summarised statement of income is as follows:

	2018 USD'M	2017 USD'M
Revenue	**768.3**	1,188.4
Cost of sales	**(737.1)**	(1,116.4)
General and administrative expenses	**(9.0)**	(12.1)
Other income/(expense)	**(1.7)**	(5.2)
Net financing income	**26.0**	24.2
Profit before tax	**46.5**	78.9
Income tax expense	**(0.2)**	(2.7)
Profit for the period	**46.3**	76.2
Attributable to non-controlling interest	**23.2**	38.3

During 2018, DTS Holdings Singapore Pte. Ltd. declared a dividend of USD28.6 million (2017: nil).

The summarised statement of financial position as at 30 September is as follows:

	2018 USD'M	2017 USD'M
Total non-current assets	**240.6**	336.4
Total current assets	**756.0**	1,276.8
Total non-current liabilities	**(0.0)**	(1.8)
Total current liabilities	**(346.1)**	(950.0)
Total equity	**650.5**	661.4
Attributable to		
Non-controlling interests	**325.1**	330.6
Owners of the Company	**325.4**	330.8

25. Loans and borrowings

This note provides information about the contractual terms of the Group's interest-bearing loans and borrowings, which are measured at amortised cost. For more information about the Group's exposure to interest rate, foreign currency and liquidity risk, see note 29.

Carrying value of loans and borrowings	2018 USD'M	2017 USD'M
Non-current		
Committed unsecured syndicated loans	**4,893.9**	3,905.0
Private placements	**826.6**	207.0
Listed bonds	**1,207.0**	1,368.3
Other loans	**1,520.9**	1,907.4
Finance leases	**13.7**	13.4
Total non-current	**8,462.1**	7,401.1
Current		
Committed unsecured syndicated loans	**1,743.8**	1,915.0
Private placements	**–**	124.0
Listed bonds	**704.0**	–
Other loans	**371.5**	637.1
Finance leases	**10.4**	7.2
Short-term bank borrowings	**20,912.0**	21,170.2
Total current	**23,741.6**	23,853.5
Total	**32,203.7**	31,254.6

Net debt reconciliation	Non-current debt	Current debt	Cash and cash equivalent	Net Debt
At 1 October 2017	**(7,401.1)**	**(23,853.5)**	**4,988.7**	**(26,265.9)**
Cashflow movements	(2,673.3)	1,606.1	367.1	(700.1)
Finance lease additions	(8.8)	–	–	(8.8)
Currency translation gains/(losses)	39.7	30.7	–	70.4
Reclassifications from long term to short term	1,581.4	(1,581.4)	–	–
Other movements	–	56.5	–	56.5
As of September 2018	**(8,462.1)**	**(23,741.6)**	**5,355.8**	**(26,847.9)**
As of October 2016	**(7,234.2)**	**(18,033.0)**	**3,141.9**	**(22,125.3)**
Cashflow movements	(1,096.1)	(4,877.6)	1,846.8	(4,126.9)
Finance lease additions	(1.2)	–	–	(1.2)
Currency translation gains/(losses)	(27.5)	–	–	(27.4)
Reclassifications from long term to short term	957.8	(957.8)	–	–
Other movements	–	14.9	–	14.9
As of September 2017	**(7,401.1)**	**(23,853.5)**	**4,988.7**	**(26,265.9)**

The total of the presented cashflow movements for non-current and current debt amount to USD1,067.2 million (2017: USD5,973.7 million). These movement are reflected in the cashflow statement lines Net proceeds from long-term loans and borrowings, Increase of short-term bank financing, and Payment of finance lease liabilities.

F. Notes to consolidated financial statements

a. Terms and debt repayment schedule

The terms and conditions of the outstanding debt (excluding short-term bank borrowings) per 30 September 2018 were as follows:

	Principal	Interest rate	Maturity	Floating/fixed rate debt	< 1 year USD'M	1-5 years USD'M	> 5 years USD'M	Total USD'M
Committed unsecured syndicated loans								
USD	2,250.0	Libor + 0.60%	2019 – March	Floating	510.0	–	–	**510.0**
USD	3,350.0	Libor + 0.80%	2021 – March	Floating	–	3,530.0	–	**3,530.0**
USD	1,175.0	Libor + 0.65%	2018 – October	Floating	155.0	–	–	**155.0**
CNH	2,502.6	Libor + 1.00%	2018 – October	Floating	363.8	–	–	**363.8**
USD	435.0	Libor + 1.10%	2020 – October	Floating	–	435.0	–	**435.0**
USD	625.0	Libor + 1.10%	2018 – October	Floating	625.0	–	–	**625.0**
USD	290.0	Libor + 1.10%	2019 – October	Floating	–	290.0	–	**290.0**
USD	90.0	Libor + 2.35%	2018 – October	Floating	90.0	–	–	**90.0**
JPY	72,640.0	Libor + 0.95%	2021 – March	Floating	–	638.9	–	**638.9**
					1,743.8	4,893.9	–	**6,637.7**
Private placements								
USD	98.0	7.11%	2021 – April	Fixed	–	98.0	–	**98.0**
USD	51.5	4.89%	2020 – March	Fixed	–	51.5	–	**51.5**
USD	57.5	5.53%	2023 – March	Fixed	–	57.5	–	**57.5**
USD	53.0	5.55%	2023 – May	Fixed	–	53.0	–	**53.0**
USD	67.0	5.72%	2025 – May	Fixed	–	–	67.0	**67.0**
USD	20.0	5.86%	2028 – May	Fixed	–	–	20.0	**20.0**
CNY	500.0	6.50%	2021 – April	Fixed	–	72.8	–	**72.8**
CNY	500.0	6.50%	2021 – May	Fixed	–	72.8	–	**72.8**
CNY	700.0	6.20%	2021 – September	Fixed	–	101.9	–	**101.9**
EUR	200.0	5.50%	2020 – July	Fixed	–	232.1	–	**232.1**
					–	739.6	87.0	**826.6**
Eurobonds								
EUR	606.7	5.25%	2018 – November	Fixed	704.0	–	–	**704.0**
EUR	550.0	5.00%	2020 – April	Fixed	–	638.9	–	**638.9**
CHF	165.0	2.25%	2023 – April	Fixed	–	168.1	–	**168.1**
USD	400.0	5.25%	2023- March	Fixed	–	400.0	–	**400.0**
					704.0	1,207.0	–	**1,911.0**
Other loans								
USD	235.0	Libor + 0.85%	2020 – June	Floating	–	235.0	–	**235.0**
USD	230.0	2.47%	2020 – June	Fixed	–	230.0	–	**230.0**
USD	35.0	Libor +1.70%	2020 – June	Floating	–	35.0	–	**35.0**
USD	185.0	Libor + 0.73%	2021 – September	Floating	–	185.0	–	**185.0**
USD	280.0	3.73%	2021 – September	Fixed	–	280.0	–	**280.0**
USD	35.0	4.33%	2021 – September	Fixed	–	35.0	–	**35.0**
USD	129.4	Libor + 2.65%	2020 – September	Floating	36.2	38.6	–	**74.8**
USD	172.5	Libor + 3.15%	2022 – March	Floating	28.5	106.0	–	**134.5**
USD	108.8	Libor + 4.25%	2020 – March	Floating	–	108.3	–	**108.3**
USD	200.0	6.33%	2036 – July	Fixed	5.9	27.7	155.5	**189.1**
EUR	165.0	Euribor + 0.95%	2019 – July	Floating	90.9	–	–	**90.9**
USD	30.0	Libor + 0.65%,	2019 – March	Floating	30.0	–	–	**30.0**
USD	25.0	Libor + 1.00%,	2018 – October	Floating	25.0	–	–	**25.0**
USD	25.0	Libor + 1.40%,	2018 – December	Floating	25.0	–	–	**25.0**
USD	80.0	Libor + 1.75%,	2018 – December	Floating	800	–	–	**80.0**
USD	120.0	Libor + 4.00%,	2021 – August	Floating	20.0	45.0	–	**65.0**
USD	30.0	Libor + 2.43%	2022 – March	Floating	3.0	24.8	–	**27.8**
USD	39.6	Libor + 2.95%	2019 – October	Floating	3.5	14.3	–	**17.8**
Various loans with balances outstanding <USD'M15					23.5	0.7	–	**24.2**
					371.5	1,365.4	155.5	**1,892.4**
Finance leases					10.4	13.7	–	**24.1**
Total					**2,829.7**	**8,219.6**	**242.5**	**11,291.8**

For long term assets pledged under loans and borrowings agreements, refer to note 11 (Property, plant and equipment).

Finance lease commitments are principally for machinery and equipment. Original terms range from two years to five years, some containing renewal options.

At the time of entering into finance lease agreements, the commitments are recorded at their present value using the interest rate then applicable for long-term funding. At 30 September 2018, existing finance lease commitments are recorded at the remaining present value using the interest rate applied at commencement of the lease.

26. Provisions

The movement in the provisions balance during year was as follows:

	2018 USD'M	2017 USD'M
Opening balance 1 October	**90.9**	69.3
Additions	**11.5**	20.0
Reversals	**(43.3)**	–
Additions through business combinations	**12.8**	–
Amounts charged against provisions	**(1.3)**	(0.6)
Unwind of discount	**0.6**	0.3
Remeasurements and other movements	**(6.3)**	5.8
Divestments of subsidiaries	**(1.1)**	(3.9)
Closing balance 30 September	**63.8**	90.9
Non-current portion	**21.1**	21.1
Current portion	**42.6**	69.8
Closing balance 30 September	**63.8**	90.9

Provisions consist of decommissioning, rehabilitation and restoration provisions totalling USD22.8 million (2017: USD13.2 million), a provision for litigation and disputes of USD25.4 million (2017: USD44.9 million), a provision for pension liabilities of USD4.3 million (2017: USD16.9 million), and other provisions totalling USD11.3 million (2017: USD14.9 million).

Provisions for decommissioning, rehabilitation and restoration costs are recognised due to the environmental commitment the Group has made with local authorities and for its obligations to undertake site reclamation and remediation in connection with its mining and downstream activities. Provisions for litigation and disputes at 30 September 2018 relate to two situations connected with the Company's trading and storage activities in China. Further information is presented in note 28. Under the Onerous contracts the wind up of some long-term lease contracts are accounted for as well as onerous capital expenditure commitments.

27. Trade and other payables

	2018 USD'M	2017 USD'M
Trade creditors	**3,248.8**	2,463.7
Accrued costs of sales and expenses	**10,410.9**	7,395.6
Broker balances	**29.7**	15.6
Related parties	**119.8**	66.0
Total	**13,809.2**	9,940.9

The Group's exposure to currency and liquidity risk related to trade and other payables is disclosed in note 29.

28. Contingencies and commitments

The total contingent liabilities related to trade finance instruments, such as letters of credit and guarantees, as at 30 September 2018 amount to USD9,032.3 million (2017: USD6,707.0 million). In addition to the trade finance liabilities, the Group has various other outstanding commitments. As per 30 September 2018, and 30 September 2017, these are as follows:

	2018 USD'M	2017 USD'M
Storage rental	**2,020.3**	2,572.2
Time charters	**4,126.5**	2,735.9
Office rent	**99.5**	111.8
	6,246.3	5,419.9
Assets under construction	**2.8**	41.0
Total	**6,249.1**	5,460.9

In 2017 and 2018 Trafigura entered into lease transactions with an Asian financial counterparty for new build crude oil and product tankers. As at 30 September 2018, 35 leases have been entered into (2017: 30 leases). The vessels will be delivered from the end of calendar year 2018, with the majority of the vessels being delivered in the first quarter of calendar year 2019.

Non-cancellable operating lease rentals are payable as follows:

	2018 USD'M	2017 USD'M
Less than one year	**1,290.5**	1,199.4
Less than one year and less than five years	**3,552.5**	2,880.2
Later than five years	**1,403.3**	1,340.3
Total	**6,246.3**	5,419.9

The Company and its subsidiaries are parties to a number of legal claims and proceedings arising out of their business operations. The Group believes that the ultimate resolution of these claims and proceedings will not, in the aggregate, have a material adverse effect on the Group's financial position, consolidated income or cash flows. Such legal claims and proceedings, however, are subject to inherent uncertainties and the outcome of individual matters is unpredictable. It is possible that the Group could be required to make expenditures, in excess of established provisions, in amounts that cannot reasonably be estimated.

As reported in the press, at certain warehouses in China, notably for the Company at Qingdao, Pinglai and Yingkou, there have been rumours that fraudulent warehouse certificates are in circulation. One of the Company's subsidiaries has issued warehouse certificates, and also has a limited number of collateral management agreements in place, regarding metal stored at these locations. The position remains that it has not been possible to independently verify the quantity and ownership of the metal stored at these locations and consequently legal proceedings have been commenced in England and China relating to ownership of the metal and potential liabilities regarding the storage arrangements. In view of the uncertainties surrounding (a) the volume of material in the warehouses; (b) its correct ownership; and (c) the approach the majority of the customers will ultimately take, it remains premature to speculate on the Group's likely net total exposure in relation to this matter. Looking at hypothetical yet realistic scenarios, it is considered unlikely that a potential liability would be material for the Group.

The Group has a potential financial exposure resulting from certain oil trading and risk management activities of its counterparty's representative. These activities are the subject of on-going actions, claims and disputes against the Group. The underlying circumstances regarding these actions, claims and disputes are complex and opaque and consequently how these disputes and actions will be resolved is uncertain and the provisions taken for them are reviewed annually (and adjusted appropriately) based on the most current information and advice.

Guarantees include guarantees to trading partners in the normal course of business.

29. Financial instruments

a. Financial risk management

The Group is exposed to a number of different financial risks arising from normal business exposures as well as its use of financial instruments including: market risks relating to commodity prices, foreign currency exchange rates and interest rates; credit risk; and liquidity risk.

Prudently managing these risks is an integral element of Trafigura's business and has been institutionalised since the Group's foundation. Risk management guidelines are established at senior management level. The various risks the Group is exposed to are managed through a combination of internal procedures, such as strict control mechanisms and policies, as well as external third parties such as the derivative, insurance and bank markets. As a rule, Trafigura actively manages and lays off where possible a large majority of the risks inherent to its activity. Trafigura's conservative risk management process is designed to:

- Provide a full and accurate awareness of risks throughout the Group
- Professionally evaluate and monitor these risks through a range of risk metrics
- Limit risks via a dynamic limit setting framework
- Manage risks using a wide range of hedging instruments and strategies
- Ensure a constant dialogue between trading desks, risk managers and senior management

The three main, reinforcing, components of Trafigura's risk management process are the Chief Risk Officer (CRO), the Derivatives Trading Committee, and the trading teams.

The Chief Risk Officer is independent of the revenue-producing units and reports to the Chief Operating Officer and the Management Committee. The CRO has primary responsibility for assessing and monitoring Trafigura's market risks. The CRO's team liaise directly with the trading teams to analyse new opportunities and ensure that risk assessments adapt to changing market conditions. The CRO's team also ensures Trafigura's risk management capabilities incorporate ongoing advances in technology and risk management modelling capabilities.

The Derivatives Trading Committee, which is comprised of members of the Management Committee and the Chief Risk Officer, is responsible for applying Trafigura's risk management capabilities towards improving the overall performance of the Group. In 2018, the Derivatives Trading Committee met weekly to discuss and set risk and concentration limits, review changing market conditions, and analyse new market risks and opportunities.

Trafigura's trading teams provide deep expertise in hedging and risk management in the specific markets each team operates in. While the trading teams have front line responsibility for managing the risks arising from their activities, our process ensures a strong culture of escalation and accountability, with well-defined limits, automatic notifications of limit overages and regular dialogue with the CRO and Derivatives Trading Committee.

b. Market risk

Market risk is the risk of loss in the value of Trafigura's positions due to changes in market prices. Trafigura holds positions primarily to ensure our ability to meet physical supply commitments to our customers, to hedge exposures arising from these commitments, and to support our investment activities. Our positions change due to changing customer requirements and investment opportunities. The value of our positions is accounted for at fair value and therefore fluctuates on a daily basis due to changes in market prices. Categories of market risk we are exposed to include:

- Commodity price risk results from exposures to changes in spot prices, forward prices and volatilities of commodities, such as crude oil, petroleum products, natural gas, base metals, coal and iron ore.
- Currency rate risk results from exposures to changes in spot prices, forward prices and volatilities of currency rates.
- Interest rate risk results from exposures to changes in the level, slope and curvature of yield curves, the volatilities of interest rates, and credit spreads.
- Equity price risk results from exposures to changes in prices and volatilities of individual equities and equity indices.

Trafigura hedges a large majority of price risks arising from its activities. When there is a difference in the characteristics of available hedging instruments and the corresponding commodity price exposures, Trafigura remains exposed to a residual price risk referred to as basis risk. Dynamically managing the basis risk that arises from Trafigura's activities requires specialist skills and is a core focus of our trading and risk management teams.

Value at Risk

Value at Risk (VaR) is a statistical estimate of the potential loss in value of our positions and unsold in-transit material due to adverse market movements. Trafigura calculates VaR over a one-day time horizon with a 95 percent confidence level. We use an integrated VaR model which captures risks including commodity prices, interest rates, equity prices and currency rates. Trafigura's integrated VaR model facilitates comparison of VaR across portfolios comprised of a range of different risk exposures.

As of 30 September 2018, Trafigura's one day market risk VaR was USD8.0 million (2017: USD6.1 million). Average market risk VaR (1 day 95%) during the fiscal year was USD7.8 million compared to USD6.8 million in the previous fiscal year. Trafigura's Management Committee has set a target of maintaining VaR (1 day 95%) below one percent of Group equity.

Trafigura is aware of the inherent limitations to VaR and therefore uses a variety of risk measures and risk management techniques to create a robust risk management process. Limitations of VaR include:

- VaR does not estimate potential losses over longer time horizons where the aggregate moves may be extreme.
- VaR does not take account of the liquidity of different risk positions and therefore does not estimate the losses that might arise if Trafigura liquidated large positions over a short period of time.
- VaR is based on statistical analysis of historical market data. If this historical data is not reflective of futures market prices movements, VaR may not provide accurate predictions of future possible losses.

Trafigura's VaR calculation covers its trading businesses in the crude oil, refined oil products, petrochemical, natural gas, metals, concentrates, coal, iron ore, and freight markets and assesses the open-priced positions which are those subject to price risk, including inventories of these commodities. Trafigura's VaR model is based on historical simulations, with full valuation of more than 5,000 market risk factors.

VaR is calculated based on simultaneously shocking these risk factors. More recent historical price data is more heavily weighted in these simulations, which enables the VaR model to adapt to more recent market conditions and improves the accuracy of our estimates of potential losses.

Trafigura's VaR model utilises advanced statistical techniques that incorporate the non-normal price dynamics that are an important feature of commodity markets. Our VaR model is continuously and automatically calibrated and back-tested to ensure that its out-of-sample performance adheres to well defined targets. In addition, our VaR model is regularly updated to ensure it reflects the current observed dynamics of the markets Trafigura is active in.

Trafigura has made a significant, ongoing investment in risk management systems, including a reporting system which automatically distributes customised risk reports throughout the Group on a daily basis. These reports provide up-to-date information on each team's risk using industry standard measures such as 95 percent and 99 percent Value at Risk and performance indicators such as Sharpe ratios.

All trading books have well defined VaR risk limits and management and the trading teams are automatically notified whenever a book nears its risk limit, as well as whenever a VaR overage occurs. In addition, Trafigura's deals desk management team is automatically notified whenever statistically anomalous changes occur in the profit and loss of any deal.

For senior management, the daily reports provide a comprehensive view of Trafigura's risk, classified according to various risk factors. These reports emphasise the risk diversification created by the Group's varied activities and highlight any excessive risk concentrations.

c. Credit risk

Credit risk is the risk of financial loss to the Group if a customer or counterparty to a financial instrument or physical contract fails to meet its contractual obligations, and arises principally from the Group's receivables from customers and investment securities.

The Company has a formalised credit process with credit officers in the key locations around the world. Strict credit limits are set up for each counterparty on the basis of detailed financial and business analysis. These limits are constantly monitored and revised in light of counterparty or market developments and the amount of exposure relative to the size of the Group's balance sheet. The Company makes extensive use of the banking and insurance markets to cover any counterparty or country risks that are in excess of its credit limits.

The risk management monitoring and decision-making functions are centralised and make extensive use of the Company's integrated bespoke IT system. The Company conducts transactions with the following major types of counterparties:

- Physical commodity counterparties spread across the vertical chains of crude and petroleum products, non-ferrous concentrates, refined metals and bulk commodities industries, e.g. producers, refiners/smelters and end-users. Sales to investment grade and non-investment grade counterparties are made on open terms up to internally approved credit limits. Exposures above such limits are subject to payment guarantees.
- Payment guarantee counterparties, i.e. prime financial institutions from which the Company obtains payment guarantees.
- Hedge counterparties comprising a number of prime financial institutions and physical participants in the relevant markets. There is no significant concentration of risk with any single counterparty or group of counterparties. Collateral is obtained from counterparties when the Company's exposure to them exceeds approved credit limits. It is the Company's policy to have ISDA Master Agreements or ISDA-based Long-Form Confirmation Agreements in place with all hedging counterparties.

The Company trades in all major geographic regions. Where appropriate, guarantees, insurance and letters of credit are used to reduce payment or performance risk. The Company has gross credit exposure in locations across the world with a concentration in emerging markets. Most of this exposure is transferred to third parties while the Company retains between 10 percent to 20 percent on average of the individual exposures.

The Company's maximum exposure to credit risk, without considering netting agreements or without taking into account any collateral held or other credit enhancements, is equal to the carrying amount of Trafigura's financial assets as indicated in the balance sheet plus the guarantees to third parties and associates. The Company's objective is to seek continued revenue growth while minimising losses incurred due to increased credit risk exposure.

The Group has amounts and guarantees outstanding related to countries that are impacted by sanctions currently imposed by the US and EU. The Group analysed the sanctions and exposures and concluded that these do not materially impact the Group's positions.

(i) Concentration of credit risk

Concentrations of credit risk exist when changes in economic, industry or geographical factors similarly affect the Company's counterparties whose aggregate credit exposure is significant in relation to the Company's total credit exposure. The carrying amount of financial assets represents the maximum credit exposure. The Company determines concentrations of credit risk by monitoring the country profile of its third party trade receivables on an on-going basis.

Trafigura has a diverse customer base, with no customer representing more than 5.1 percent of its revenues over the year ended 30 September 2018 (2017: 4.6%).

Refer to note 19 for the aging of trade and other receivables at the reporting date that were not impaired.

(ii) Financial assets that are neither past due nor impaired

Trade and other receivables that are neither past due nor impaired are considered creditworthy debtors. Cash and cash equivalents and derivatives that are neither past due nor impaired are placed with or entered into with reputable financial institutions or companies with high credit ratings and no history of default. The credit quality of trade and other receivables is assessed based on a strict credit policy. The Group monitors customer credit risk, by grouping trade and other receivables based on their characteristics.

Based on the Group's monitoring of customer credit risk, the Group believes that, except as indicated above, no impairment allowance is necessary in respect of trade receivables not past due.

(iii) Financial assets that are either past due or impaired

Information regarding financial assets that are either past due or impaired is disclosed in note 19 (Trade and other receivables).

(iv) Guarantees

The Group's policy is to provide financial guarantees only to wholly-owned subsidiaries and trading partners in the normal course of business. As part of the Group's ordinary physical commodity trading activities, Trafigura Group Pte. Ltd. may act as guarantor by way of issuing guarantees accepting responsibility for subsidiaries' contractual obligations.

d. Liquidity risk

Liquidity risk is the risk that the Company is unable to meet its payment obligations when due, or that it is unable, on an on-going basis, to borrow funds in the market on an unsecured or secured basis at an acceptable price to fund actual or proposed commitments.

The Group's approach to managing liquidity is to ensure, as far as possible, that it will always have sufficient cash and cash equivalents and ready sources of committed funding available to meet anticipated and unanticipated funding needs. Sound financial management with a focus on liquidity has been instrumental to the Group's success. The Company has demonstrated the ability to raise the appropriate types of financing to match the needs of the business and to tap various investor bases (e.g. syndicated loan markets, trade finance markets, bond markets, private placement markets, securitisation etc.), maturities and geographies.

The Company manages its treasury and liquidity risks maintaining a strong liquidity position through the following:

- Targeting immediately-available cash on hand of minimum USD500 million under normal conditions (higher in the case of extreme volatility);
- Maintaining transactional lines which allow the Group to mark-to-market financings to the value of the underlying physical assets. Mark to market financing is performed weekly (or intra-weekly in the case of extreme volatility) and provides an additional source of liquidity which is not available to competitors which are financed purely from revolving credit facilities;
- Committed unsecured credit facilities;
- Maintaining headroom under transactional trade finance lines and committed revolving credit facilities; and
- Reasonable distribution of profit (significant retained earnings) and subordination of repurchased equity.

The amount of corporate guarantees in favour of associates and joint ventures as at 30 September 2018 was USD121.7 million (2017: USD101.0 million). The maturity analysis of the Group's financial liabilities based on the contractual terms is as follows:

	Total USD'M	0-1 years USD'M	1-5 years USD'M	> 5 years USD'M
30 September 2018				
Financial liabilities				
Current and non-current loans and borrowings	**32,203.7**	23,741.6	8,219.6	242.5
Trade and other payables	**13,809.2**	13,809.2	–	–
Expected future interest payments on committed lines	**923.7**	309.3	448.1	166.3
Derivative financial liabilities	**1,124.6**	848.7	273.9	2.0
Total financial liabilities	**48,061.2**	**38,708.8**	**8,941.6**	**410.8**

	Total USD'M	0-1 years USD'M	1-5 years USD'M	> 5 years USD'M
30 September 2017				
Financial liabilities				
Current and non-current loans and borrowings	**31,254.6**	23,853.5	7,173.9	227.2
Trade and other payables	**9,940.9**	9,940.9	–	–
Expected future interest payments on committed lines	**683.2**	224.4	279.2	179.6
Derivative financial liabilities	**702.6**	434.9	266.8	0.9
Total financial liabilities	**42,581.3**	**34,453.7**	**7,719.9**	**407.7**

e. Interest rate risk

Trafigura is not exposed to significant interest rate risk. Interest rate risk of the Group is mainly applicable on the long-term funding of the Group, although a majority of debt, whether long-term or short-term, is floating rate.

At 30 September 2018, assuming the amount of floating rate liabilities (excluding working capital financing) were outstanding for the whole year, interest rates were 50 basis points higher/lower and all other variables held constant, the Group's profit, other comprehensive income and group equity for the year ended 30 September 2018 would decrease/increase by USD27.5 million (2017: USD24.2 million).

From time to time the Group enters into interest rate derivatives transactions to lock-in current interest rate levels, for instance, interest rate swaps provide a method of reducing the Group's exposure to floating interest rates arising from its corporate funding programmes. To realise the desired matching of derivative results with the hedged interest rate payments, cash flow hedge accounting is applied and the derivatives are designated as hedging instruments. The derivatives are carried on balance and their effectiveness is tested on a quarterly basis.

f. Currency risk

Trafigura has few exposures to foreign currency risk on its trading activities and those that do exist are hedged out. The Group does not use financial instruments to hedge the translation risk related to equity and earnings of foreign subsidiaries and non-consolidated companies.

The Group uses cross-currency swaps to hedge currency risk on the principal and related payments of foreign currency denominated loans and bonds for which cash-flow hedge accounting is applied. The hedge relationship is expected to be highly effective due to the matching of critical terms between the underlying hedged item and the associated hedge instrument.

The periods when the cash flows are expected to occur are similar to the periods when the cash flows on the foreign currency denominated loans and bonds occur as indicated in note 25 and 29d. Ineffectiveness may arise if the underlying interest reference rate is divergent to the underlying reference rate in the Company's debt agreements, to the extent that the hedging instrument is already in the money or out of the money at the point of designation (compared to the hypothetical derivative that must be created on market), when the timing of the hedging instrument goes beyond the hedged item and it is not considered highly probable that the hedged item will be refinanced beyond its current maturity date or if the hedging instrument is for an amount greater than the hedged item.

g. Cash flow hedge accounting

During the year, the Group elected to apply cash flow hedge accounting to hedge certain non-financial hedged items. These are the future purchases and sales of mining products and LNG.

The designated hedge derivatives are accounted for at fair value, with the fair value movements being deferred through other comprehensive income where they are deemed to be entered in an effective hedge relationship with cash flows that are yet to be reflected in the statement of income. Any fair value movements that are not considered to be an effective hedge are recognised directly through the statement of income.

Ineffectiveness will occur due to time spread between the hedged item and the hedging instrument as well as due to the basis risk. The effectiveness of the economic relationship between the hedging instruments and the hedged item has been assessed at the inception of the hedge accounting designation and is reassessed prospectively when new hedging products are introduced and at least annually at the beginning of the reporting period. The hedge ratio is determined by the ratio which provides a strong relationship between movements in the fair value of the hedged item and hedging instruments at the inception of the hedge accounting relationship.

The overview of the cash flow hedges is as follows:

	Maturity	Equivalent	**2018** Notionals	2017 Notionals	**2018** Fair values	2017 Fair values
Cross-currency swap		USD	**1,915.0**	1,670.2	**(50.0)**	(21.6)
Cross-currency interest rate swap		USD	**681.8**	581.3	**(41.7)**	(60.7)
Future purchases and sales of LNG	< 1 year	various	**1,121.4**	–	**(86.8)**	–
Future purchases and sales of LNG	1–4 years	various	**381.1**	–	**(38.5)**	–
Future sales mining production	< 1 year	DMT	**69,050.0**	79,425.0	**28.2**	(31.9)
Total					**(188.8)**	**(114.2)**

	Ineffectiveness recognised through statement of income	Hedge result deferred through other comprehensive income
Cross-currency swap	0.1	3.4
Cross-currency interest rate swap	2.9	2.6
Future purchases and sales of LNG	(28.4)	(90.7)
Future sales mining production	20.9	80.3

Other comprehensive movements in the equity movement schedule include USD40 million movement of cash flow hedge reserves from equity-accounted investees (2017: USD45 million).

h. Fair value hedge accounting

In some instances, the Group elects to apply fair value hedge accounting to non-financial hedged items or certain risk components of non-financial hedged items. These non-financial hedged items relate to firm commitments with respect to tolling agreements, a transportation agreement, and offtake agreements.

Hedged items

The Group's tolling agreements represent a non-financial hedged item which Trafigura has entered into for fractionation services to convert crude feedstock into various crude refined products. The derivative hedging instruments (hedges consisting of futures and swaps) are entered into, to hedge the spread exposures, referred as the hedged risk, between the purchase of crude feedstock and the sale of crude refined products.

The Group's transportation agreement represent a non-financial hedged item which Trafigura has entered into for transportation services to move crude oil from the Permian Basin of Texas to the Gulf Coast. The derivative hedging instruments (hedges consisting of futures and swaps) are entered into, to hedge the spread exposures, referred as the hedged risk, between the purchase of inland crude oil barrels and the sale of those barrels on the Gulf Coast.

The Group's offtake agreements represent a non-financial hedged item which Trafigura has entered into for the purchase of liquefied natural gas (LNG) from the US with a number of counterparties. The derivative hedging instruments (hedges consisting of futures and swaps) are entered into, to hedge the spread exposures, referred as the hedged risk, between purchasing LNG from the US and selling LNG to its expected destination markets. Where the hedging on the tolling and transportation agreements is done on the above described risk components, offtake agreements are designated as hedged item in its entirety.

Hedging instruments

When applicable, the Group designates derivative hedging instruments as fair value hedges in relationship to the associated hedged items:

- The maturity profile of the hedging instruments used for hedging the designated risk components associated with the tolling agreements varies from one to five years.
- The maturity profile of the hedging instruments used for hedging the designated risk components associated with the transportation agreement varies from one to three years.
- The maturity profile of the hedging instruments used for the hedging of the offtake agreement varies from one to six years.

The designated hedge derivatives are accounted for at fair value through profit and loss and reflected on the balance sheet as a financial asset or liability. The identified hedged items are accounted for at fair value and recognized through profit and loss, the fair value is reflected on the balance sheet as either a recognised asset or liability, see notes 17 and 21. The fair value is determined using benchmarks best representing the designated hedged item. Specifically in the case of LNG, the fair value of the hedged item also considers unobservable inputs.

Economic relationship

IFRS 9 requires the existence of an economic relationship between the hedged item and the hedging instrument. At designation and at the start of each reporting period critical terms (volumes) of both hedged items and hedge instruments in a hedge relationship are reviewed to ascertain the expectation that the value of the hedging instrument and the value of the hedged item would move into opposite directions as a result of the common underlying or hedged risk and therefore meeting the risk management objective of the hedge relationship.

Hedge effectiveness assessment

At each reporting date or on significant changes in circumstances a quantitative hedge effectiveness assessment is performed. The fair values of both hedged items and hedging instruments are measured and the net difference of the changes is the hedge ineffectiveness amount. The hedge ineffectiveness amount is analysed by its various sources (basis differences, location differences, timing differences, quantity or notional amount differences, currency basis and forward points, credit risk or other risks) where applicable. Specific factors that may impact ineffectiveness are the mismatch in the designated hedge period and the maturity period of the hedging instrument and a differential of the various benchmarks for the pricing of the hedging instruments and the hedged items. In the case of LNG, the hedged item is valued in entirety, however, the FX hedges have not been designated into a hedge relationship giving rise to ineffectiveness on account of FX exposures embedded in the hedged item. The fair value of the FX hedges, that have not been designated, can be seen in the table below.

The fair value adjustment on the non-financial hedged items is presented in the balance sheet under the following categories:

	30 September 2018		30 September 2017	
	Other non-current assets (note 17)	**Other current assets (note 21)**	Other non-current assets (note 17)	Other current assets (note 21)
Non-financial hedged items – tolling agreements	**283.2**	**85.6**	119.1	43.5
Non-financial hedged items – transportation agreements	**269.2**	**465.1**	–	–
Non-financial hedged items – LNG contracts	**521.5**	**124.9**	–	–
Total	**1,073.9**	**675.6**	119.1	43.5

The following table summarises the movements in the non-financial hedged items and the related derivatives, as well as the hedge ineffectiveness recognised in the statement of income.

Fair value hedge accounting	**30 September 2018 USD'M**	30 September 2017 USD'M
Opening balances of the derivatives designated as hedges	**(179.4)**	127.1
Fair value movement included in the hedge relationship	**(1,881.4)**	(226.3)
Hedges for which hedge relationship matured	**64.6**	(99.4)
Hedges not designated in hedge relationship	**98.3**	19.2
Closing balance of the derivatives designated as hedges	**(1,897.9)**	(179.4)
Opening balance of the hedged item	**162.6**	(151.8)
Fair value movement included in the hedge relationship	**1,627.0**	218.1
Hedging gain/(loss) released to profit or loss	**(40.1)**	96.3
Closing balance of the hedged item	**1,749.5**	162.6
Lifetime to date net gain/(loss)	**(148.4)**	(16.9)
Year to date net gain/(loss)	**(131.5)**	7.9
Year to date hedge ineffectiveness	**(254.4)**	(8.3)

i. Capital management

The Board's policy is to maintain a strong capital base so as to maintain investor, creditor and market confidence and to sustain future development of the business.

The Company's immediate parent, Trafigura Beheer B.V., is exclusively owned by its employees. This shareholding arrangement leads to an alignment of the long term interests of the Company and its management team. By virtue of having its own capital at risk, senior management is incentivised to take a long-term view of the Company's overall performance and to protect its capital.

The Company's capital management aims to ensure that it meets financial covenants attached to the interest-bearing loans and borrowings that define capital structure requirements. Breaches in meeting the financial covenants would permit the bank to immediately call loans and borrowings. There have been no breaches in the financial covenants of any interest-bearing loans and borrowing in the current period.

The Company monitors capital using an adjusted debt to equity ratio, which is adjusted total debt divided by the Company's equity. For this purpose, the adjusted debt metric represents the Company's total long and short-term debt less cash, deposits, readily marketable inventories (including purchased and pre-paid inventories which are being released), debt related to the Company's receivable securitisation programme and the non-recourse portion of loans from third-parties.

j. Fair value

(i) Fair values versus carrying amounts

The fair values of inventories, financial assets and liabilities, together with the carrying amounts shown in the statement of financial position, are as follows:

30 September 2018	Carrying value USD'M	Fair value USD'M
Assets		
Listed equity securities – Fair value through OCI	10.2	10.2
Listed equity securities - Fair value through profit and loss	44.6	44.6
Listed debt securities – Fair value through profit or loss	466.3	466.3
Unlisted equity investments – Fair value through profit or loss	31.6	31.6
Unlisted equity investments – Fair value through OCI	163.2	163.2
Loans receivable (*)	485.5	485.5
Inventories	14,732.9	14,732.9
Trade and other receivables (*)	19,951.7	19,951.7
Non-financial hedged items	1,749.5	1,749.5
Derivatives	907.6	907.6
Deposits (*)	334.4	334.4
Cash and cash equivalents (*)	5,355.8	5,355.8
Total financial assets and inventories	**44,233.3**	**44,233.3**
Liabilities		
Loans and borrowings		
Floating rate borrowings (*)	28,708.0	28,708.0
Fixed rate borrowings	3,471.6	3,481.2
Finance lease and purchase contract (*)	24.1	24.1
Trade and other payables (*)	13,809.2	13,809.2
Derivatives	1,124.6	1,124.6
Total financial liabilities	**47,137.4**	**47,147.1**

30 September 2017	Carrying value USD'M	Fair value USD'M
Assets		
Listed equity securities – Fair value through OCI	19.3	19.3
Listed debt securities – Fair value through profit or loss	447.6	447.6
Unlisted equity investments – Fair value through profit or loss	45.5	45.5
Unlisted equity investments – Fair value through OCI	122.6	122.6
Loans receivable (*)	670.7	670.7
Inventories	13,926.7	13,926.7
Trade and other receivables (*)	17,367.1	17,367.1
Non-financial hedged items	162.6	162.6
Derivatives	610.4	610.4
Deposits (*)	338.3	338.3
Cash and cash equivalents (*)	4,988.7	4,988.7
Total financial assets and inventories	**38,699.5**	**38,699.5**
Liabilities		
Loans and borrowings		
Floating rate borrowings (*)	28,873.7	28,873.7
Fixed rate borrowings	2,360.3	2,453.2
Finance lease and purchase contract (*)	20.6	20.6
Trade and other payables (*)	9,940.9	9,940.9
Derivatives	702.6	702.6
Total financial liabilities	**41,898.1**	**41,991.0**

(*)Management has determined that the carrying amounts of loans receivable, trade and other receivables, cash and cash equivalents, deposits, floating rate borrowings, finance lease and purchases contracts, and trade and other payables reasonably approximate their fair values because these are mostly short-term in nature and are re-priced regularly.

Offsetting of financial assets and liabilities

In accordance with IAS 32 the Group reports financial assets and liabilities on a net basis in the consolidated statement of financial position only if there is a legally enforceable right to set off the recognised amounts and there is intention to settle on a net basis, or to realise the asset and settle the liability simultaneously. The financial assets and liabilities subject to offsetting, enforceable master netting and similar agreements as at 30 September 2018 and 2017 were as follows:

	Amounts eligible for set off under netting agreements				
	Gross Amount	Amounts offset	Net amount	Amounts not subject to netting agreements	Net amounts presented in the statement of financial position
2018	USD'M	USD'M	USD'M	USD'M	USD'M
Related parties	1,696.7	(87.1)	1,609.6	–	1,609.6
Derivative assets	1,238.8	(805.5)	433.3	474.3	907.6
				–	
Related parties	(206.9)	87.1	(119.8)	–	(119.8)
Derivative liabilities	(1,387.5)	805.5	(581.9)	(542.7)	(1,124.6)

	Amounts eligible for set off under netting agreements				
	Gross Amount	Amounts offset	Net amount	Amounts not subject to netting agreements	Net amounts presented in the statement of financial position
2017	USD'M	USD'M	USD'M	USD'M	USD'M
Related parties	822.2	(9.1)	813.1	–	813.1
Derivative assets	674.2	(458.0)	216.2	394.2	610.4
Related parties	(75.1)	9.1	(66.0)	–	(66.0)
Derivative liabilities	(735.6)	458.0	(277.6)	(425.0)	(702.6)

For the financial assets and liabilities subject to enforceable master netting or similar arrangements above, each agreement between the Group and the counterparty allows for net settlement of the relevant financial assets and liabilities when both elect to settle on a net basis. In the absence of such an election, financial assets and liabilities may be settled on a gross basis, however, each party to the master netting or similar agreement will have the option to settle all such amounts on a net basis in the event of default of the other party.

(ii) Fair value hierarchy

The table below analyses financial instruments carried at fair value, by valuation method. The different levels have been defined as follows:

- Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities.
- Level 2: inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices).
- Level 3: inputs for the asset or liability that are not based on observable market data (unobservable inputs).

Level 1 classifications primarily include futures with a maturity of less than one year. Level 2 classifications primarily include swaps and physical forward transactions which derive their fair value primarily from exchange quotes and readily observable broker quotes. Level 3 classifications primarily include physical forward transactions which derive their fair value predominately from calculations that use broker quotes and applicable market based estimates surrounding location, quality and credit differentials. In circumstances where Trafigura cannot verify fair value with observable market inputs (Level 3 fair values), it is possible that a different valuation model could produce a materially different estimate of fair value. It is Trafigura's policy to hedge significant market risk, therefore sensitivity to fair value movements is limited. Trafigura manages its market risk using the Value at Risk (VaR) as disclosed in note 29b.

Other financial assets and inventories	Level 1 USD'M	Level 2 USD'M	Level 3 USD'M	Total USD'M
30 September 2018				
Listed equity securities – Fair value through OCI	10.2	–	–	**10.2**
Listed equity securities – Fair value through profit or loss	44.6	–	–	**44.6**
Listed debt securities – Fair value through profit or loss	–	–	466.3	**466.3**
Unlisted equity investments – Fair value through profit and loss	–	–	31.6	**31.6**
Unlisted equity investments – Fair value through OCI	–	–	163.2	**163.2**
Futures	7.8	–	–	**7.8**
OTC derivatives	–	93.1	44.7	**137.8**
Physical forwards	–	1.4	329.0	**330.4**
Cross-currency swaps	–	63.4	–	**63.4**
Interest rate swaps	–	21.6	–	**21.6**
Non-financial hedged items	–	1,103.0	646.5	**1,749.5**
Other financial derivatives	–	346.5	–	**346.5**
Inventories	–	14,732.9	–	**14,732.9**
Total	**62.6**	**16,362.0**	**1,681.3**	**18,105.8**

Other financial liabilities	Level 1 USD'M	Level 2 USD'M	Level 3 USD'M	Total USD'M
30 September 2018				
Futures	5.3	–	–	**5.3**
OTC derivatives	–	356.1	–	**356.1**
Physical forwards	–	0.7	307.9	**308.6**
Cross-currency swaps	–	155.1	–	**155.1**
Interest rate swaps	–	1.4	–	**1.4**
Other financial derivatives	–	298.1	–	**298.1**
Fixed rate borrowings	–	3,479.6	–	**3,479.6**
Total	**5.3**	**4,291.0**	**307.9**	**4,604.2**

Other financial assets and inventories	Level 1 USD'M	Level 2 USD'M	Level 3 USD'M	Total USD'M
30 September 2017				
Listed equity securities – Fair value through OCI	19.3	–	–	**19.3**
Listed debt securities – Fair value through profit or loss	–	–	447.6	**447.6**
Unlisted equity investments – Fair value through profit and loss	–	–	45.5	**45.5**
Unlisted equity investments – Fair value through OCI	–	–	122.6	**122.6**
Futures	24.4	–	–	**24.4**
OTC derivatives	–	64.7	41.9	**106.6**
Physical forwards	–	1.8	231.4	**233.2**
Cross-currency swaps	–	68.8	–	**68.8**
Interest rate swaps	–	5.7	–	**5.7**
Non-financial hedged items	–	162.5	–	**162.6**
Other financial derivatives	–	171.7	–	**171.7**
Inventories	–	13,926.7	–	**13,926.7**
Total	**43.7**	**14,402.0**	**889.0**	**15,334.7**

Other financial liabilities	Level 1 USD'M	Level 2 USD'M	Level 3 USD'M	Total USD'M
30 September 2017				
Futures	21.8	–	–	**21.8**
OTC derivatives	–	27.8	0.2	**28.0**
Physical forwards	–	3.8	326.9	**330.7**
Cross-currency swaps	–	151.0	–	**151.0**
Interest rate swaps	–	2.5	–	**2.5**
Other financial derivatives	–	168.6	–	**168.6**
Fixed rate borrowings	–	2,453.2	–	**2,453.2**
Total	**21.8**	**2,806.9**	**327.1**	**3,155.8**

The overview of the fair value hierarchy and applied valuation methods can be specified as follows:

Listed equity securities – Fair value through OCI			2018 USD'M	2017 USD'M
	– level 1	Assets	**10.2**	19.3
		Liabilities	**–**	–
Valuation techniques and key inputs:	Quoted prices in an active market			
Significant unobservable inputs:	None			

Listed equity securities – Fair value through profit or loss			2018 USD'M	2017 USD'M
	– level 1	Assets	**44.6**	–
		Liabilities	**–**	–
Valuation techniques and key inputs:	Quoted prices in an active market			
Significant unobservable inputs:	None			

Futures			2018 USD'M	2017 USD'M
	– level 1	Assets	**7.8**	24.4
		Liabilities	**5.3**	21.8
Valuation techniques and key inputs:	Quoted prices in an active market			
Significant unobservable inputs:	None			

OTC derivatives			2018 USD'M	2017 USD'M
	– level 2	Assets	**93.1**	64.7
		Liabilities	**356.1**	27.8
Valuation techniques and key inputs:	Reference prices			
Significant observable inputs:	Inputs include observable quoted prices sourced from traded reference prices or recent traded prices indices in an active market for identical assets or liabilities.			

Physical forwards			2018 USD'M	2017 USD'M
	– level 2	Assets	**1.4**	1.8
		Liabilities	**0.7**	3.8
Valuation techniques and key inputs:	Reference prices			
Significant observable inputs:	Inputs include observable quoted prices sourced from traded reference prices or recent traded prices indices in an active market for identical assets or liabilities.			

Cross-currency swaps			2018 USD'M	2017 USD'M
	– level 2	Assets	**63.4**	68.8
		Liabilities	**155.1**	151.0
Valuation techniques and key inputs:	Discounted cash flow model			
Significant observable inputs:	Inputs include observable quoted prices sourced from exchanges or traded reference indices in an active market for identical assets or liabilities. Prices are adjusted by a discount rate which captures the time value of money and counterparty credit considerations.			

Interest rate swaps			2018 USD'M	2017 USD'M
	– level 2	Assets	**21.6**	5.7
		Liabilities	**1.4**	2.5
Valuation techniques and key inputs:	Discounted cash flow model			
Significant observable inputs:	Inputs include observable quoted prices sourced from exchanges or traded reference indices in an active market for identical assets or liabilities. Prices are adjusted by a discount rate which captures the time value of money and counterparty credit considerations.			

Non-financial hedged items			2018 USD'M	2017 USD'M
	– level 2	Assets	**1,103.0**	162.5
		Liabilities	**–**	–
Valuation techniques and key inputs:	Reference prices			
Significant observable inputs:	Inputs include observable quoted prices sourced from traded reference prices ore recent traded prices indices in an active market for identical assets or liabilities.			

Non-financial hedged items			2018 USD'M	2017 USD'M
	– level 3	Assets	**646.5**	–
		Liabilities	**–**	–
Valuation techniques and key inputs:	LNG valuation model			
Significant observable inputs:	Inputs include observable quoted prices sourced from traded reference prices ore recent traded prices indices in an active market for identical assets or liabilities.			

Other financial derivatives			2018 USD'M	2017 USD'M
	– level 2	Assets	**346.5**	171.7
		Liabilities	**298.1**	168.6
Valuation techniques and key inputs:	Discounted cash flow model			
Significant observable inputs:	Inputs include observable quoted prices sourced from exchanges or traded reference indices in an active market for identical assets or liabilities. Prices are adjusted by a discount rate which captures the time value of money and counterparty credit considerations.			

Inventories			2018 USD'M	2017 USD'M
	– level 2	Assets	**14,732.9**	13,926.7
		Liabilities	**–**	–
Valuation techniques and key inputs:	Quoted prices in an active market			
Significant unobservable inputs:	Premium discount on quality and location			

Fixed rate borrowings			2018 USD'M	2017 USD'M
	– level 2	Assets	**–**	–
		Liabilities	**3,479.6**	2,453.2
Valuation techniques and key inputs:	Discounted cash flow model			
Significant observable inputs:	Cash flow discounted at current borrowing rates for similar instruments			

Listed debt securities – Fair value through profit or loss			2018 USD'M	2017 USD'M
	– level 3	Assets	**466.3**	447.6
		Liabilities	**–**	–
Valuation techniques and key inputs:	Discounted cash flow model			
Significant unobservable inputs:	– forecast throughput – discount rates using weighted average cost of capital – market illiquidity – operating cost and capital expenditures The resultant asset is a discounted cash flow of the underlying throughput. Increase/decrease of the forecasted throughput will result in an increase/decrease of the value of the asset.			

Unlisted equity investments – Fair value through profit and loss			2018 USD'M	2017 USD'M
	– level 3	Assets	**31.6**	45.5
		Liabilities	**–**	–
Valuation techniques and key inputs:	Quoted prices obtained from the asset managers of the funds			
Significant observable inputs:	– market illiquidity – price of commodities			

Unlisted equity investments – Fair value through OCI			2018 USD'M	2017 USD'M
	– level 3	Assets	**163.2**	122.6
		Liabilities	**–**	–
Valuation techniques and key inputs:	Quoted prices obtained from the asset managers of the funds			
Significant observable inputs:	– market illiquidity – price of commodities			

OTC derivatives			2018 USD'M	2017 USD'M
	– level 3	Assets	**44.7**	41.9
		Liabilities	**–**	0.2
Valuation techniques and key inputs:	Discounted valuation of cashflows generated by mean-reverting price simulations			
Significant observable inputs:	– mean reversion – volatility			

Physical forwards			2018 USD'M	2017 USD'M
	– level 3	Assets	**329.0**	231.4
		Liabilities	**307.9**	326.9
Valuation techniques and key inputs:	Discounted cash flow model			
Significant observable inputs:	Prices are adjusted by differentials including: – quality – location			

The movements in the Level 3 hierarchy can be summarised as follows:

USD'M	Physical forwards/ Derivatives	Equity/Debt securities	Non-financial hedged items	Total
1 October 2017	(53.8)	615.7	–	561.9
Total gain/(loss) recognised in income statement	67.3	20.0	646.5	733.7
Total gain/(loss) recognised in OCI	–	9.9	–	9.9
Invested	–	61.1	–	61.1
Disposals	–	(45.6)	–	(45.6)
Total realised	52.4	–	–	52.4
30 September 2018	**65.9**	**661.1**	**646.5**	**1,373.4**

USD'M	Physical forwards/ Derivatives	Equity/Debt securities	Non-financial hedged items	Total
1 October 2016	(30.5)	427.5	–	397.0
Total gain/(loss) recognised in income statement	(51.3)	117.6	–	66.3
Total gain/(loss) recognised in OCI	–	6.9	–	6.9
Invested	–	74.4	–	74.4
Disposals	–	(10.7)	–	(10.7)
Total realised	28.0	–	–	28.0
30 September 2017	**(53.8)**	**615.7**	**–**	**561.9**

There have been no transfers between fair value hierarchy levels in 2018. Materially all level 3 physical forwards are settled in the next year. See note 16 for equity/debt securities.

K. Other

The Group replaced a series of exchange traded futures contracts by entering into an over-the-counter financial swap transaction with a bank. The pricing of the swap transaction was done taking into account the historical value of the exchange traded futures contracts. The transaction price included a structuring fee and funding fee. As part of the swap transaction, the Group received both initial and variation margin cash postings back from its clearing brokers and classified the resulting OTC swap transaction as a derivative liability for an amount of USD247 million at 30 September 2018. The fair value of the swap transaction changes in response to both the underlying commodity price and funding fee, with the impact of these changes being recorded in cost of goods sold. The structuring fee has been recognised immediately through the statement of income as a transactional cost associated with entering into the swap transaction.

30. Employee benefits

a. Equity participation plan

The immediate parent of the Company, Trafigura Beheer B.V., has an equity participation plan (EPP) which is open to employees of the Group. Shares issued to employees, are preference shares of Trafigura Beheer B.V. which give rights to economic benefits with limited voting rights. The founders and controlling shareholders of the Group, represented by the Board of Directors of Trafigura Control Holdings Pte. Ltd., a parent company of Trafigura Beheer B.V., in consultation with the Board of Directors of the Company, decide on the share awards to be issued to employees. Annual remuneration (which includes the equity participation awards) is subject to review by the remuneration committee of the Group.

The value of the shares is based on the net asset value of an ordinary share as set out in the Articles of Association of Trafigura Beheer B.V., which management believe is a fair approximation of the fair value. Shares awarded under the EPP may vest immediately or over a period of several years.

Employees do not have the right to freely sell shares that have vested unless Trafigura Control Holdings Pte. Ltd. has granted approval and has refrained from its right to nominate a prospective purchaser and make a purchase offer. Upon termination of employment, employees must transfer all of their shares at the direction of Trafigura Control Holdings Pte. Ltd. or hold the shares subject to further directions of Trafigura Control Holdings Pte. Ltd.

Neither Trafigura Beheer B.V. nor the Group have a legal or constructive obligation to settle the shares held by employees in cash. If employment is ceased prior to the end of the vesting period the shares will be forfeited unless otherwise determined by Trafigura Control Holdings Pte. Ltd.

The Group's EPP is classified as an equity-settled plan in the Group's financial statements; the fair value of the shares granted, determined at the grant date, is recorded in the statement of income rateably over the vesting period of the shares.

During 2018, 6,344 immediately vesting shares were granted to employees representing a value of USD11.6 million (2017: 12,135 shares representing a value of USD15.5 million) and 35,488 shares were granted with a vesting period of one to five years representing a value of USD64.9 million (2017: 46,555 shares representing a value of USD59.5 million).

Compensation in respect of share based payments recognised in staff costs amounted to USD87.6 million (2017: USD82.2 million).

Unrecognised staff costs in respect of rateably vesting shares expected to be recognised from 2019 to 2021 amount to USD82.3 million at 30 September 2018 (2017: USD97.9 million for the period from 2018 to 2021).

b. Personnel expenses

	2018 USD'M	2017 USD'M
Salaries and bonuses	**379.4**	387.9
Social security costs	**26.7**	24.7
Pension costs	**3.5**	33.1
Share-based payments	**87.6**	82.2
Total	**497.2**	527.9

The average number of employees split geographically is depicted below:

2018	Oil & Petroleum FTE	Non-Ferrous & Bulk FTE	Corporate and other FTE	**Total FTE**
North, Central and South America	503	1,713	212	**2,428**
Europe and Africa	190	407	265	**862**
Asia, Middle East and Australia	279	335	412	**1,026**
Total	**972**	**2,455**	**889**	**4,316**

2017	Oil & Petroleum FTE	Non-Ferrous & Bulk FTE	Corporate and other FTE	**Total FTE**
North, Central and South America	249	1,705	169	**2,123**
Europe and Africa	185	406	278	**869**
Asia, Middle East and Australia	257	291	395	**943**
Total	**691**	**2,402**	**842**	**3,935**

31. Related parties

In the normal course of business, the Company enters into various transactions with related parties including commitments to sell and to purchase commodities, forward sale and purchase contracts, agency agreements and management service agreements. Outstanding balances at period end are unsecured and settlement occurs in cash.

All transactions between the Company and its subsidiaries are eliminated on consolidation along with any unrealised profits and losses between its subsidiaries, associates and joint ventures.

a. Transactions with key management personnel

(i) Key management personnel compensation

In addition to their salaries, the Group also provides non-cash benefits to directors and executive officers. Executive officers also participate in the Group's share participation programme (see note 30). Compensation of key management personnel, including all members of the Board of Directors and the Management Committee, comprised of the following:

	2018 USD'M	2017 USD'M
Short-term employee benefits	**7.0**	12.8
Post-employment benefits	**0.5**	0.5
Share-based payments	**32.3**	29.5
Total	**39.8**	42.8

(ii) Key management personnel and director transactions

As at 30 September 2018, loans receivable from the members of the Board of Directors and Management Board total USD7.6 million (2017: USD10.6 million). Interest is charged on the loans at approximately LIBOR + 1.5 percent and the loans are repayable within the 1-3 year bracket.

b. Other related-party transactions

Related-party receivables/(payables)	2018 USD'M	2017 USD'M
Trafigura Beheer B.V.	**(17.7)**	(47.4)
Puma Energy	**1,173.2**	642.1
Farringford N.V.	**83.1**	29.6
Beheer Malta Ltd.	**(9.0)**	(8.1)
Ecore B.V.	**1.3**	4.3
Emincar	**295.1**	263.3
Jinchuan Group Co. Ltd.	**58.5**	16.5
Minas de Aguas Teñidas, S.A.U ("MATSA")	**(7.2)**	72.6
Simba Holding S.à r.l.	**242.9**	–
Nayara Energy Limited	**132.7**	374.4
Nyrstar Sales & Marketing Ag	**118.7**	40.2
Other	**(4.5)**	62.8
Total	**2,067.2**	1,450.5

	2018 USD'M	2017 USD'M
Sales (mainly Puma Energy)	**11,865.1**	7,627.1
Purchases	**3,826.3**	1,986.5
Terminalling & dockage fees	**127.5**	167.6
Interest income	**29.8**	58.2
Interest expenses	**3.7**	–
Cost recharges	**57.7**	73.1

Transactions between related parties are made on commercial terms.

Below table summarises the nature of relationship and nature of transactions entered with the related party:

Party	Nature of relationship	Nature of transaction
Beheer Malta Ltd	Parent company	Buy back of treasury shares
Buckeye Partners LLC	Equity-accounted investee	Lease agreements
Ecore B.V.	Cousin group	Cost recharges, trading and hedging
Empresa Minera del Caribe SA	Equity-accounted investee	Financing and trading agreement
Nayara Energy Limited	Equity-accounted investee	Financing and trading agreement
Farringford N.V.	Ultimate parent	Loans and cost recharges
Jinchuan Group Co. Ltd.	Equity-accounted investee	Trading agreement
Minas de Aguas Teñidas, S.A.U ("MATSA")	Equity-accounted investee	Financing and trading agreement
Porto Sudeste do Brasil S.A.	Equity-accounted investee	Loans and cost recharges
Nyrstar	Equity-accounted investee	Financing and trading agreement
Simba Holding S.à.r.l.	Equity-accounted investee	Multimodal logistics services
Puma Energy Holdings Pte. Ltd.	Equity-accounted investee	Financing and trading agreement
Trafigura Beheer B.V.	Parent company	Loans and cost recharges

A list of consolidated subsidiaries and associates is included in note 35.

32. Hyperinflationary economies

With the effect from 1 July 2018, the Argentine economy is considered to be hyperinflationary in accordance with the criteria in IAS 29, 'Financial reporting in hyperinflationary economies'. Accordingly, the financial statements include restatements for changes in the general purchasing power of the Argentine Peso. These restatements are made for all Group entities that have the Argentine Peso as functional currency.

On the application of IAS 29 the Group used a conversion coefficient derived from official wholesale price and consumer price indices published by the National Institute of Statistics and Censuses (INDEC, in its Spanish acronym). The index rates and corresponding conversion coefficients applied are as follows:

Year	Index, % (December 2010=100)	Conversion coefficient
30 September 2014	182.0	268.6
30 September 2015	205.6	237.7
30 September 2016	288.6	169.4
30 September 2017	347.8	140.5
30 September 2018	488.7	100.0

Monetary assets and liabilities are not restated because they are already expressed in terms of the monetary unit current as at 30 September 2018. Non-monetary assets and liabilities (items which are not already expressed in terms of the monetary unit as at 30 September 2018) are restated by applying the above index.

The impact of the initial application has been recorded in Other comprehensive income. The effect of inflation after initial application of USD19.1 million (pre-tax gain) is included in the Finance Income.

33. New and amended standards or interpretations

a. New and amended standards or interpretations adopted by the Group

There were no new standards or interpretations effective for the first time for periods beginning on or after 1 January 2017 that had a significant effect on the Group's financial statements. In 2015 the Group early adopted IFRS 9 – Financial instruments.

b. New and amended standards or interpretations not yet adopted

Certain new accounting standards and interpretations have been published that are not mandatory for reporting periods started on 1 October 2017 and have not been early adopted by the group. The group's assessment of the impact of these new standards and interpretations is set out below.

IFRS 15 – Revenue from Contracts with Customers

IFRS 15 'Revenue from Contracts with Customers' applies to revenue from contracts with customers and replaces all of the revenue standards and interpretations in IFRS. The standard outlines the principles an entity must apply to measure and recognise revenue and the related cash flows.

The Group has undertaken a preliminary comprehensive analysis of the impact of the new standard based on a review of the contractual terms of its principal revenue streams with the primary focus being to understand whether the timing and amount of revenue recognised could differ under IFRS 15. During the preliminary analyses, the following points were noted:

- The Group sells part of its products on Cost and Freight (CFR) or Cost, Insurance & Freight (CIF) Incoterms. This means that the Group is responsible for providing shipping services in addition to the delivery of physical commodities. Under IAS 18, the Group recognises such shipping and other freight revenue and accrues the associated costs in full on loading. The Group is currently reassessing the control transfer moment on these trading contracts based on the guidance set forth in IFRS 15.
- The nature of the products sold by the Group is such that adjustments may be made to prices in the situation where the specification of the commodities delivered deviate from the terms agreed in the contract with the customer. The Group has considered whether revenue arising from the sales of such products should be constrained under the IFRS 15 rules on variable consideration. Based on the initial assessment, the Group concluded that the impact of the potential constraint is immaterial.
- Final consideration to which the Group is entitled may change as a result of quantity differences. The Group has considered whether revenue arising from the sales of such products should be constrained under the IFRS 15 rules on variable consideration. Based on the initial assessment, the Group concluded that the impact of the potential constraint is immaterial.
- Certain of the commodities delivered to customers are provisionally priced at the date revenue is recognised. The prices are generally finalised within 3 months. Such adjustments to revenue are dealt with under IFRS 9, "Financial Instruments" rather than IFRS 15 and therefore the IFRS 15 rules on variable consideration do not apply. The Group is assessing the potential impact on the disclosure notes.

IFRS 15 must be applied for annual periods beginning on or after 1 January 2018. The Group will hence apply the new standard as from 1 October 2018. The Group envisages adopting the modified retrospective approach, where any transitional adjustment (if any) will be recognised in retained earnings at 1 October 2018 without adjustment of comparatives. The new standard will only be applied to contracts that remain in force at that date.

IFRS 16 – Leases

IFRS 16 'Leases' will result in almost all leases being recognised on the balance sheet, as the distinction between operating and finance leases is removed. Under the new standard, an asset (the right to use the leased item) and a financial liability to pay rentals are recognised. The Group anticipates electing the short-term lease and low-value lease exemptions.

During 2018, the Group initiated a project team which has focused on the identification and understanding of:

a. The provisions of the standard which will most impact the Group;
b. Establishing the population of lease contracts which will extend beyond 1 October 2019 based on the current lease portfolio;
c. Preliminary impact analysis; and
d. A preliminary review of system and process requirements.

During 2018 and 2019, the Group will continue to work on the process with a preliminary focus on the further analysis of the contract portfolio, the selection of an IT solution, and enhancing internal processes where required.

IFRS 16 is expected to have a significant impact on the primary statements and on systems and processes. As the impact on implementation date will depend on factors such as the lease portfolio at that date and the discount rate to be applied, the impact cannot be determined from the disclosure of the minimum lease payments in accordance with IAS 17 in Note 26.

IFRS 16 must be applied for annual periods beginning on or after 1 January 2019. The Group will hence apply the new standard as from 1 October 2019. The Group envisages adopting the modified retrospective approach, through which the cumulative effect of the initial application is recognised 1 October 2019 without any restatement of comparative information.

Other

There are no other standards that are not yet effective and that would be expected to have a material impact on the entity in the current or future reporting periods and on foreseeable future transactions.

34. Subsequent events

There are no significant subsequent events which require disclosure.

35. Consolidated subsidiaries and associates

For entities where legal shareholding is less than 50 percent, the Group has consolidated based on the definition of control under IFRS. Certain entities with a percentage of effective economic interest below 50 percent are held through intermediate holding companies controlled by the Group.

Principal consolidated operating subsidiaries	Location	% Owned 2018	% Owned 2017
AngoRecycling Industry, Lda.	Angola	25.0%	25.0%
Boyaca Navigation Inc.	Panama	100.0%	100.0%
C.I. Trafigura Petroleum Colombia S.A.S	Colombia	100.0%	100.0%
Catalina Huanca Sociedad Minera S.A.C.	Peru	100.0%	100.0%
DT Trading Ltd.	Bahamas	50.0%	50.0%
DTS Commercial Pte. Ltd.	Singapore	50.0%	50.0%
DTS Refining Pte. Ltd.	Singapore	50.0%	50.0%
DTS Shipping Ventures Pte. Ltd	Singapore	50.0%	50.0%
Edenfield Procurement DMCC	United Arab Emirates	100.0%	100.0%
Empresa de Recolha de Residuos de Angola, Lda. (Errangol)	Angola	25.0%	25.0%
Fangchenggang Guo Tong Import and Export Co. Ltd.	China	100.0%	100.0%
Galena Asset Management B.V.	Netherlands	100.0%	100.0%
Galena Asset Management Limited	United Kingdom	100.0%	100.0%
Galena Asset Management SA	Switzerland	100.0%	100.0%
Galena Investments 2 Limited	Malta	100.0%	100.0%
Genghis Holding Company Limited	Malta	100.0%	100.0%
Iberian Minerals Corp.	Switzerland	100.0%	100.0%
Impala Holdings Limited	Malta	100.0%	100.0%
Impala Middle East General Warehousing L.L.C.	United Arab Emirates	100.0%	100.0%
Impala Terminals Barrancabermeja S.A.	Colombia	100.0%	100.0%
Impala Terminals Burnside LLC	United States	100.0%	100.0%
Impala Terminals Colombia SAS	Colombia	100.0%	100.0%
Impala Terminals DRC SARL	Congo, The Democratic Republic of the	100.0%	100.0%
Impala Terminals Middle East FZE	United Arab Emirates	100.0%	100.0%
Impala Terminals UK Limited	United Kingdom	100.0%	100.0%
Impala Warehousing and Logistics (Shanghai) Co., Ltd	China	100.0%	100.0%
IWL (Luxembourg) S.à r.l.	Luxembourg	100.0%	100.0%
IWL Capital LLC	Marshall Islands	100.0%	100.0%
IWL Holding B.V.	Netherlands	100.0%	100.0%
IWL Holdings (Luxembourg) S.à r.l.	Luxembourg	100.0%	100.0%
IWL River Inc.	Panama	100.0%	100.0%
Lykos India Private Limited	India	100.0%	100.0%
Manatee Holding Company Limited	Malta	100.0%	100.0%
NGL Equipments, S.A. de C.V.	Mexico	100.0%	100.0%
Ningbo Trans-Coal Trading Co., Ltd.	China	100.0%	100.0%
Petromining S.A.	Argentina	100.0%	100.0%
Seal Sands Gas Transportation Limited	United Kingdom	100.0%	100.0%
Shanghai Trafigura Energy and Resource Trading Co., Ltd.	China	100.0%	100.0%
TAG ECO Recycling (UK) Limited	United Kingdom	100.0%	100.0%
TCPU Inc.	United States	100.0%	100.0%
Teesside Gasport Limited	United Kingdom	100.0%	100.0%
Trafigura Argentina S.A.	Argentina	100.0%	100.0%
Trafigura B.V.	Netherlands	100.0%	100.0%
Trafigura Canada General Partnership	Canada	100.0%	100.0%
Trafigura Chile Limitada	Chile	100.0%	100.0%
Trafigura Coal Colombia S.A.S.	Colombia	100.0%	100.0%
Trafigura Corpus Christi Holdings LLC	United States	100.0%	100.0%
Trafigura Derivatives Limited	United Kingdom	100.0%	100.0%
Trafigura DMCC	United Arab Emirates	100.0%	100.0%
Trafigura Energy Colombia S.A.S.	Colombia	100.0%	100.0%
Trafigura Eurasia LLC	Russian Federation	100.0%	100.0%
Trafigura Funding S.A.	Luxembourg	100.0%	100.0%
Trafigura Holding GmbH	Switzerland	100.0%	100.0%
Trafigura Holdings Limited	Malta	100.0%	100.0%

Principal consolidated operating subsidiaries	Location	% Owned 2018	% Owned 2017
Trafigura Holdings Pte. Ltd.	Singapore	100.0%	100.0%
Trafigura India Private Limited	India	100.0%	100.0%
Trafigura Investment (China) Co., Ltd.	China	100.0%	100.0%
Trafigura Limited	United Kingdom	100.0%	100.0%
Trafigura Maritime Logistics Pte. Ltd.	Singapore	100.0%	100.0%
Trafigura Maritime Ventures Limited	Malta	100.0%	100.0%
Trafigura Marketing Inc.	United States	100.0%	100.0%
Trafigura Marketing Ltd.	Canada	100.0%	100.0%
Trafigura Metales Basicos S.A.C.	Peru	100.0%	100.0%
Trafigura Mexico, S.A. de C.V.	Mexico	100.0%	100.0%
Trafigura Mongolia LLC	Mongolia	100.0%	100.0%
Trafigura Nat Gas Limited	Malta	100.0%	100.0%
Trafigura Overseas Projects Pte. Ltd.	Singapore	100.0%	100.0%
Trafigura PE Holding Limited (Formerly Puma Energy Holdings Malta Limited)	Malta	100.0%	100.0%
Trafigura Peru S.A.C.	Peru	100.0%	100.0%
Trafigura Pte. Ltd.	Singapore	100.0%	100.0%
Trafigura Services Pte. Ltd.	Singapore	100.0%	100.0%
Trafigura Services South Africa (Pty) Ltd.	South Africa	100.0%	100.0%
Trafigura Trade Holdings B.V.	Netherlands	100.0%	100.0%
Trafigura Trade Investments B.V.	Netherlands	100.0%	100.0%
Trafigura Trading (Europe) Sàrl	Switzerland	100.0%	100.0%
Trafigura Trading LLC	United States	100.0%	100.0%
Trafigura Trading Yangshan Co., Ltd.	China	100.0%	100.0%
Trafigura Ukraine LLC	Ukraine	100.0%	99.5%
Trafigura US Inc.	United States	100.0%	99.5%
Trafigura Ventures IX B.V.	Netherlands	100.0%	0.0%
Trafigura Ventures Trading Ltd.	Mauritius	100.0%	100.0%
Trafigura Ventures V B.V.	Netherlands	100.0%	100.0%
Trafigura Ventures VIII B.V.	Netherlands	100.0%	0.0%
Urion Holdings (Malta) Limited	Malta	100.0%	100.0%
Urion Mining International B.V.	Netherlands	100.0%	100.0%

36. Board of Directors

The Board of Directors	
Mark Irwin	José Larocca
Pierre Lorinet	Sipko Schat
Andrew Vickerman	Mike Wainwright
Jeremy Weir	

Singapore, 7 December 2018.

REGISTERED OFFICE OF THE ISSUER

Trafigura Group Pte. Ltd
10 Collyer Quay
#29-00 Ocean Financial Centre
Singapore 049315
Singapore

PRINCIPAL PAYING AGENT
Citibank N.A., London Branch
Citigroup Centre
Canada Square
Canary Wharf
London E14 5LB

TRUSTEE
Citicorp Trustee Company Limited
Citigroup Centre
Canada Square
Canary Wharf
London E14 5LB

REGISTRAR
Citigroup Global Markets Europe AG
Reuterweg 16
Frankfurt, 60323
Germany

LEGAL ADVISERS

To the Issuer as to English law:
Jones Day
21 Tudor Street
London EC4Y 0DJ
United Kingdom

To the Issuer as to the laws of Singapore:
Allen & Gledhill LLP
One Marina Boulevard #28-00
Singapore 018989

To the Trustee as to English law:
Clifford Chance LLP
10 Upper Bank Street
London E14 5JJ
United Kingdom

AUDITORS TO THE ISSUER
PricewaterhouseCoopers SA
avenue Giuseppe-Motta 50
CH-1211 Geneva 2
Switzerland