BASE PROSPECTUS

TRAFIGURA FUNDING S.A.

(incorporated with limited liability in Luxembourg)

Guaranteed by

Trafigura Group Pte. Ltd.

(incorporated with limited liability in Singapore)

Trafigura Trading LLC

(incorporated with limited liability in Delaware)

and

Trafigura Pte Ltd

(incorporated with limited liability in Singapore)

EUR 3,000,000,000
Euro Medium Term Note Programme

This Base Prospectus has been approved by the Central Bank of Ireland (the "**Central Bank**"), as competent authority under Regulation (EU) 2017/1129 (as amended) (the "**Prospectus Regulation**"). The Central Bank only approves this Base Prospectus as meeting the standards of completeness, comprehensibility and consistency imposed by the Prospectus Regulation. Such approval should not be considered as an endorsement of the Issuer or the Guarantors or the quality of the securities that are subject to this Base Prospectus. Investors should make their own assessment as to the suitability of investment in the securities. Application has been made to the Irish Stock Exchange plc trading as Euronext Dublin ("**Euronext Dublin**") for notes (the "**Notes**") issued under this Euro Medium Term Note Programme (the "**Programme**") within 12 months of this Base Prospectus to be admitted to the Official List (the "**Official List**") and to trading on its regulated market. The regulated market of Euronext Dublin is a regulated market for the purposes of Directive 2014/65/EU (as amended, "**MiFID II**"). Such approval relates only to the Notes which are to be admitted to trading on the regulated market of the Euronext Dublin or other regulated markets for the purposes of MiFID II or which are to be offered to the public in any Member State of the European Economic Area (the "**EEA**").

The Programme also permits Notes to be issued on the basis that they will not be admitted to listing, trading and/or quotation by any competent authority, stock exchange and/or quotation system or that they will be admitted to listing, trading and/or quotation by such other or further competent authorities, stock exchanges and/or quotation systems as may be agreed with the Issuer.

This Base Prospectus is valid for 12 months from its date in relation to Notes which are to be admitted to trading on a regulated market in the EEA. The obligation to supplement this Base Prospectus in the event of a significant new factor, material mistake or material inaccuracy does not apply when this Base Prospectus is no longer valid.

The Notes are issued by Trafigura Funding S.A. (the "**Issuer**") and are unconditionally and irrevocably guaranteed on a joint and several basis by each of Trafigura Group Pte. Ltd., Trafigura Trading LLC and Trafigura Pte Ltd (each, a "**Guarantor**" and together, the "**Guarantors**").

The Notes constitute direct, unconditional, unsubordinated and unsecured obligations of the Issuer which will at all times rank *pari passu* among themselves and at least *pari passu* in right of payment with all other present and future unsecured and unsubordinated obligations of the Issuer, save for such obligations as may be preferred by mandatory provisions of law. The Notes are unconditionally and irrevocably guaranteed, jointly and severally, on a senior unsecured basis by each of the Guarantors. The guarantee of the Notes (the "**Guarantee**") will rank at least *pari passu* with all other present and future unsecured and unsubordinated obligations of the Guarantors, save for such obligations as may be preferred by mandatory provisions of law.

Investing in Notes issued under the Programme involves certain risks. The principal risk factors that may affect the abilities of the Issuer and the Guarantors to fulfil their respective obligations under the Notes and the Guarantee are discussed under "Risk Factors" below.

Arranger

ING

Dealers

Citigroup	**Credit Suisse**	**Deutsche Bank**
ING	**Société Générale Corporate & Investment Banking**	

10 May 2023

IMPORTANT NOTICES

Responsibility for this Base Prospectus

The Issuer and each Guarantor accepts responsibility for the information contained in this Base Prospectus and any Final Terms and declares that the information contained in this Base Prospectus is, to the best of its knowledge, in accordance with the facts and contains no omission likely to affect its import.

Final Terms/Drawdown Prospectus

Each Tranche (as defined herein) of Notes will be issued on the terms and subject to the conditions set out herein under "*Terms and Conditions of the Notes*" (the "**Conditions**") as completed by a document specific to such Tranche called final terms (the "**Final Terms**") or in a separate prospectus specific to such Tranche (the "**Drawdown Prospectus**") as described under "*Final Terms and Drawdown Prospectuses*" below.

Other relevant information

This Base Prospectus must be read and construed together with any supplements hereto and with any information incorporated by reference herein and, in relation to any Tranche of Notes which is the subject of Final Terms, must be read and construed together with the relevant Final Terms. In the case of a Tranche of Notes which is the subject of a Drawdown Prospectus, each reference in this Base Prospectus to information being specified or identified in the relevant Final Terms shall be read and construed as a reference to such information being specified or identified in the relevant Drawdown Prospectus unless the context requires otherwise.

The Issuer and the Guarantors have confirmed to the Dealers named under "*Subscription and Sale*" below that this Base Prospectus contains all information which is (in the context of the Programme, the issue, offering and sale of the Notes and the Guarantee of the Notes) material; that such information is true and accurate in all material respects and is not misleading in any material respect; that any opinions, predictions or intentions expressed herein are honestly held or made and are not misleading in any material respect; that this Base Prospectus does not omit to state any material fact necessary to make such information, opinions, predictions or intentions (in the context of the Programme, the issue, offering and sale of the Notes and the Guarantee of the Notes) not misleading in any material respect; and that all proper enquiries have been made to verify the foregoing.

Market data and certain industry forecasts used throughout this Base Prospectus 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 none of the Issuer, the Guarantors or the Dealers make any representation as to the accuracy of that information.

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

Unauthorised information

No person has been authorised to give any information or to make any representation not contained in or not consistent with this Base Prospectus or any other document entered into in relation to the Programme or any information supplied by the Issuer or the Guarantors or such other information as is in the public domain and, if given or made, such information or representation should not be relied upon as having been authorised by the Issuer, the Guarantors or any Dealer.

Neither the Dealers nor any of their respective affiliates have authorised the whole or any part of this Base Prospectus and none of them makes any representation or warranty or accepts any responsibility as to the accuracy or completeness of the information contained in this Base Prospectus or any responsibility for any acts or omissions of the Issuer, the Guarantors or any other person (other than the relevant Dealer) in connection with the issue and offering of the Notes. Neither the delivery of this Base Prospectus or any Final Terms nor the offering, sale or delivery of any Note shall, in any circumstances, create any implication that the information contained in this Base Prospectus is true subsequent to the date hereof or the date upon which this Base Prospectus has been most recently amended or supplemented or that there has been no adverse change, or any event reasonably likely to involve any adverse change, in the prospects or financial or trading position of the Issuer or the Guarantors since the date thereof or, if later, the date upon which this Base Prospectus has been most recently amended or supplemented or that any other information supplied in connection with the Programme is correct at any time subsequent to the date on which it is supplied or, if different, the date indicated in the document containing the same.

Restrictions on distribution

The distribution of this Base Prospectus and any Final Terms and the offering, sale and delivery of the Notes in certain jurisdictions may be restricted by law. Persons into whose possession this Base Prospectus or any Final Terms comes are required by the Issuer, the Guarantors and the Dealers to inform themselves about and to observe any such restrictions. For a description of certain restrictions on offers, sales and deliveries of Notes and on the distribution of this Base Prospectus or any Final Terms and other offering material relating to the Notes, see "*Subscription and Sale*". In particular, Notes have not been and will not be registered under the United States Securities Act of 1933 (as amended) (the "**Securities Act**") and may not be offered or sold in the United States other than pursuant to an exemption from the registration requirements of the Securities Act. Notes may also be subject to U.S. tax law requirements.

Neither this Base Prospectus nor any Final Terms constitutes an offer or an invitation to subscribe for or purchase any Notes and should not be considered as a recommendation by the Issuer, the Guarantors, the Dealers or any of them that any recipient of this Base Prospectus or any Final Terms should subscribe for or purchase any Notes. Each recipient of this Base Prospectus or any Final Terms shall be taken to have made its own investigation and appraisal of the condition (financial or otherwise) of the Issuer and the Guarantors.

MiFID II PRODUCT GOVERNANCE / TARGET MARKET: The Final Terms in respect of any Notes may include a legend entitled "MiFID II Product Governance" which will outline the target market assessment in respect of the Notes and which channels for distribution of the Notes are appropriate. Any person subsequently offering, selling or recommending the Notes (a "**distributor**") should take into consideration the target market assessment; however, a distributor subject to MiFID II is responsible for undertaking its own target market assessment in respect of the Notes (by either adopting or refining the target market assessment) and determining appropriate distribution channels. A determination will be made in relation to each issue of Notes about whether, for the purpose of the MiFID Product Governance rules under EU Delegated Directive 2017/593 (the "**MiFID Product Governance Rules**"), any Dealer subscribing for any Notes is a manufacturer in respect of such Notes, but otherwise neither the Arranger nor the Dealers nor any of their respective affiliates will be a manufacturer for the purpose of the MiFID Product Governance Rules.

UK MiFIR PRODUCT GOVERNANCE / TARGET MARKET: The Final Terms in respect of any Notes may include a legend entitled "UK MiFIR Product Governance" which will outline the target market assessment in respect of the Notes and which channels for distribution of the Notes are appropriate. Any distributor should take into consideration the target market assessment; however, a distributor subject to the FCA Handbook Product Intervention and Product Governance Sourcebook (the "**UK MiFIR Product Governance Rules**") is responsible for undertaking its own target market assessment in respect of the Notes (by either adopting or refining the target market assessment) and determining appropriate distribution channels. A determination will be made in relation to each issue of Notes about whether, for the purpose of the UK MiFIR Product Governance Rules, any Dealer subscribing for any Notes is a manufacturer in respect of such Notes, but otherwise neither the Arranger nor the Dealers nor any of their respective affiliates will be a manufacturer for the purpose of the UK MiFIR Product Governance Rules.

PROHIBITION OF SALES TO EEA RETAIL INVESTORS – The Notes 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. 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 MiFID II; or (ii) a customer within the meaning of Directive (EU) 2016/97 (as amended, the "**Insurance Distribution Directive**"), 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 Notes or otherwise making them available to retail investors in the European Economic Area has been prepared and therefore offering or selling the Notes or otherwise making them available to any retail investor in the European Economic Area may be unlawful under the PRIIPs Regulation.

PROHIBITION OF SALES TO UNITED KINGDOM RETAIL INVESTORS - The Notes 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 United Kingdom. For these purposes, a retail investor means a person who is one (or more) of (i) a retail client, as defined in point (8) of Article 2 of Regulation (EU) No 2017/565 as it forms part of domestic law by virtue of the European Union (Withdrawal) Act 2018 (the "**EUWA**"); or (ii) a customer within the meaning of the provisions of the Financial Services and Markets Act 2000, as amended (the "**FSMA**") and any rules or regulations made under the FSMA to implement Directive (EU) 2016/97, where that customer would not qualify as a professional client, as defined in point (8) of Article 2(1) of Regulation (EU) No 600/2014 as it forms part of domestic law by virtue of the EUWA. Consequently no key information document required by Regulation (EU) No 1286/2014 as it forms part of domestic law by virtue of the EUWA (the "**UK PRIIPs Regulation**") for offering or selling the Notes or otherwise making them available to retail investors in the United Kingdom has been prepared and therefore offering or selling the Notes or otherwise making them available to any retail investor in the United Kingdom may be unlawful under the UK PRIIPs Regulation.

Benchmarks Regulation

Interest and/or other amounts payable under the Notes may be calculated by reference to certain reference rates. Any such reference rate may constitute a benchmark for the purposes of Regulation (EU) 2016/1011 (the "**Benchmarks Regulation**"). If any such reference rate does constitute such a benchmark, the Final Terms will indicate whether or not the benchmark is provided by an administrator included in the register of administrators and benchmarks established and maintained by the European Securities and Markets Authority ("**ESMA**") pursuant to Article 36 (*Register of administrators and benchmarks*) of the Benchmarks Regulation. Transitional provisions in the Benchmarks Regulation may have the result that the administrator of a particular benchmark is not required to appear in the register of administrators and benchmarks at the date of the Final Terms. The registration status of any administrator under the Benchmarks Regulation is a matter of public record and, save where required by applicable law, the Issuer does not intend to update the Final Terms to reflect any change in the registration status of the administrator.

Product Classification pursuant to Section 309B of the Securities and Futures Act 2001

The Final Terms in respect of any Notes may include a legend entitled "Notification under Section 309B(1)(c) of the Securities and Futures Act 2001" (the "**SFA**"). The Issuer will make a determination in relation to each issue about the classification of the Notes being offered for purposes of section 309B(1)(a). Any such legend included on the relevant Final Terms will constitute notice to "relevant persons" for the purposes of section 309B(1)(c) of the SFA.

Unless otherwise stated in the Final Terms or the Drawdown Prospectus in respect of any Notes, all Notes issued or to be issued under the Programme shall be prescribed capital markets products (as defined in the Securities and Futures (Capital Markets Products) Regulations 2018).

Alternative Performance Measures

In addition to the financial performance measures established by International Financial Reporting Standards, as issued by the International Accounting Standards Board ("**IFRS**"), this Base Prospectus contains certain financial measures that are presented for the purpose of assisting securities analysts, investors and other interested parties in understanding the Group's financial performance. The relevant metrics are identified as Alternative Performance Measures ("**APMs**") for the purposes of the Guidelines on Alternative Performance Measures issued by the European Securities and Markets Authority and are accompanied by an explanation of each metric, see "*Key Performance Indicators*" on pages 195 to 199.

Such measures should not be considered as a substitute for those required by IFRS.

Notes may not be a suitable investment for all investors

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

- have sufficient knowledge and experience to make a meaningful evaluation of the Notes, the merits and risks of investing in the Notes and the information contained or incorporated by reference in this Base Prospectus or any applicable supplement;
- have access to, and knowledge of, appropriate analytical tools to evaluate, in the context of its particular financial situation, an investment in the Notes and the impact such investment will have on its overall investment portfolio;
- have sufficient financial resources and liquidity to bear all of the risks of an investment in the Notes, including where the currency for principal or interest payments is different from the potential investor's currency;
- understand thoroughly the terms of the Notes and be familiar with the behaviour of any relevant indices and financial markets; and
- 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.

Some Notes are complex financial instruments and such instruments may be purchased as a way to reduce risk or enhance yield with an understood, measured, appropriate addition of risk to their overall portfolios. A potential investor should not invest in the Notes, which are complex financial instruments, unless it has the expertise (either alone or with the help of a financial adviser) to evaluate how the Notes will perform under changing conditions, the resulting effects on the value of such Notes and the impact this investment will have on the potential investor's overall investment portfolio.

Programme limit

The maximum aggregate principal amount of Notes outstanding and guaranteed at any one time under the Programme will not exceed EUR 3,000,000,000 (and for this purpose, any Notes denominated in another currency shall be translated into euro at the date of the agreement to issue such Notes (calculated in accordance with the provisions of the Dealer Agreement as defined under "*Subscription and Sale*")). The maximum aggregate principal amount of Notes which may be outstanding and guaranteed at any one time under the Programme may be increased from time to time, subject to compliance with the relevant provisions of the Dealer Agreement.

Certain definitions

In this Base Prospectus, unless otherwise specified:

- references to a "**Member State**" are references to a Member State of the European Economic Area, references to "**EUR**" and "**euro**" are to the currency introduced at the start of the third stage of European economic and monetary union, and as defined in Article 2 of Council Regulation (EC) No 974/98 of 3 May 1998 on the introduction of the euro, as amended, references to "**U.S.$**", "**USD**", "**U.S. dollars**" and "**dollars**" are to United States dollars and references to "**sterling**", "**Pound Sterling**" and "**£**" are to the lawful currency of the United Kingdom;
- references herein to "**billions**" are to thousands of millions; and
- references herein to the "**Group**" or "**Trafigura**" are to Trafigura Group Pte. Ltd. and its consolidated subsidiaries.

Certain figures included in this Base Prospectus have been subject to rounding adjustments; accordingly, figures shown for the same category presented in different tables may vary slightly and figures shown as totals in certain tables may not be an arithmetic aggregation of the figures which precede them.

Stabilisation

In connection with the issue of any Tranche of Notes, the Dealer or Dealers (if any) named as the Stabilisation Manager(s) (or persons acting on behalf of any Stabilisation Manager(s)) in the applicable Final Terms may over allot Notes or effect transactions with a view to supporting the market price of the Notes at a level higher than that which might otherwise prevail. However, stabilisation may not necessarily occur. Any stabilisation action may begin on or after the date on which adequate public disclosure of the terms of the offer of the relevant Tranche of Notes is made and, if begun, may cease at any time, but it must end no later than the earlier of 30 days after the issue date of the relevant Tranche of Notes and 60 days after the date of the allotment of the relevant Tranche of Notes. Any stabilisation action or over-allotment must be conducted by the relevant Stabilisation Manager(s) (or person(s) acting on behalf of any Stabilisation Manager(s)) in accordance with all applicable laws and rules.

CONTENTS

Page

OVERVIEW OF THE PROGRAMME

The following overview is a general description of the Programme, must be read as an introduction to this Base Prospectus, and is qualified in its entirety by, the remainder of this Base Prospectus and in relation to the terms and conditions of any particular Tranche of Notes, the applicable Final Terms. Words and expressions defined elsewhere in this Base Prospectus shall have the same meaning in this overview unless otherwise defined herein.

Issuer:	Trafigura Funding S.A.
Guarantors:	Trafigura Group Pte. Ltd. ("**TGPL**" or the "**Company**"), Trafigura Trading LLC ("**TTL**") and Trafigura Pte Ltd ("**TPTE**").
Arranger:	ING Bank N.V.
Dealers:	Citigroup Global Markets Limited, Credit Suisse International, Deutsche Bank Aktiengesellschaft, ING Bank N.V., Société Générale and any other Dealer appointed from time to time by the Issuer and the Guarantors either generally in respect of the Programme or in relation to a particular Tranche of Notes.
Trustee:	Citicorp Trustee Company Limited, or any successor trustee appointed pursuant to the Trust Deed (as amended and/or supplemented and/or restated) from time to time.
Principal Paying Agent:	Citibank, N.A., London Branch, or any successor principal paying agent appointed pursuant to the Paying Agency Agreement (as amended and/or supplemented and/or restated) from time to time.
Irish Listing Agent:	Walkers Listing Services Limited.
Final Terms or Drawdown Prospectus:	Notes issued under the Programme may be issued either (1) pursuant to this Base Prospectus and associated Final Terms or (2) pursuant to a Drawdown Prospectus. The terms and conditions applicable to any particular Tranche of Notes will be the Conditions as completed by the relevant Final Terms or, as the case may be, as supplemented, amended and/or replaced by the relevant Drawdown Prospectus.
Listing and Trading:	Application has been made for Notes to be admitted during the period of twelve months after the date hereof to listing on the Official List and to trading on the regulated market of Euronext Dublin. The Programme also permits Notes to be issued on the basis that they will not be admitted to listing, trading and/or quotation by any competent authority, stock exchange and/or quotation system or to be admitted to listing, trading and/or quotation by such other or further competent authorities, stock exchanges and/or quotation systems as may be agreed with the Issuer.
Clearing Systems:	Euroclear Bank SA/NV ("**Euroclear**") and/or Clearstream Banking S.A. ("**Clearstream, Luxembourg**" and together with Euroclear, the "**ICSDs**") and/or, in relation to any Tranche of Notes, any other clearing system as may be specified in the relevant Final Terms.
Initial Programme Amount:	Up to EUR 3,000,000,000 (or its equivalent in other currencies) aggregate principal amount of Notes outstanding and guaranteed at any one time. The Issuer may increase the

amount of the Programme in accordance with the terms of the Dealer Agreement.

Issuance in Series: Notes will be issued in Series. Each Series may comprise one or more Tranches issued on different issue dates. The Notes of each Series will all be subject to identical terms, except that the issue date and the amount of the first payment of interest may be different in respect of different Tranches. The Notes of each Tranche will all be subject to identical terms in all respects save that a Tranche may comprise Notes of different denominations.

Use of Proceeds: The net proceeds of the issue of each Tranche of Notes will be applied by the Group for general corporate purposes.

Forms of Notes: Notes may only be issued in bearer form. Each Tranche of Notes will initially be in the form of either a Temporary Global Note or a Permanent Global Note, in each case as specified in the relevant Final Terms. Each Global Note will be deposited on or around the relevant issue date with a depositary or a common depositary for Euroclear and/or Clearstream, Luxembourg and/or any other relevant clearing system. Each Temporary Global Note will be exchangeable for a Permanent Global Note or, if so specified in the relevant Final Terms, for Definitive Notes. If the TEFRA D Rules are specified in the relevant Final Terms as applicable, certification as to non-U.S. beneficial ownership will be a condition precedent to any exchange of an interest in a Temporary Global Note or receipt of any payment of interest in respect of a Temporary Global Note. Each Permanent Global Note will be exchangeable for Definitive Notes in accordance with its terms. Definitive Notes will, if interest-bearing, have Coupons attached and, if appropriate, a Talon for further Coupons.

Currencies: Notes may be denominated in euro, U.S. dollars or in any other currency or currencies, subject to compliance with all applicable legal and/or regulatory and/or central bank requirements.

Status of the Notes: Notes will be issued on an unsubordinated basis.

Status of the Guarantee: Notes will be unconditionally and irrevocably guaranteed by each Guarantor, on an unsubordinated and joint and several basis.

Issue Price: Notes may be issued at any price. The price and amount of Notes to be issued under the Programme will be determined by the Issuer, the Guarantors and the relevant Dealer(s) at the time of issue in accordance with prevailing market conditions.

Maturities: Any maturity, subject, in relation to specific currencies, to compliance with all applicable legal and/or regulatory and/or central bank requirements.

Where Notes have a maturity of less than one year and either (a) the issue proceeds are received by the Issuer in the United Kingdom or (b) the activity of issuing the Notes is carried on from an establishment maintained by the Issuer in the United Kingdom, such Notes must: (i) have a minimum redemption value of £100,000 (or its equivalent in other currencies) and be issued only to persons whose ordinary activities involve them in acquiring, holding, managing or disposing of investments (as principal or agent) for the purposes of their businesses or who it is reasonable to expect will acquire, hold, manage or dispose of investments (as principal or agent) for the purposes of their businesses; or (ii) be issued in other circumstances which do not constitute a contravention of section 19 of the Financial Services and Markets Act (as amended, the "**FSMA**") by the Issuer.

Redemption:	Notes will be redeemable at par.
Optional Redemption:	Notes may be redeemed before their stated maturity at the option of the Issuer (either in whole or in part) and/or the Noteholders to the extent (if at all) specified in the relevant Final Terms.
Early Redemption:	Except as described in "*Optional Redemption*" above, early redemption will only be permitted for tax reasons, as described in Condition 9(b) (*Redemption and Purchase - Redemption for tax reasons)*, or if the aggregate principal amount of outstanding Notes of the relevant Series is less than 10 per cent. of the aggregate principal amount of such Series, as described in Condition 9(f) (*Redemption and Purchase – Redemption in the case of Minimal Outstanding Amount*).
Interest:	Notes may be interest-bearing or non-interest bearing. Interest (if any) may accrue at a fixed rate or a floating rate and the method of calculating interest may vary between the issue date and the maturity date of the relevant Series.
Denominations:	Notes issued under the Programme which are to be admitted to trading on the regulated market of Euronext Dublin and/or admitted to listing, trading and/or quotation by any other listing authority, stock exchange and/or quotation system which is a regulated market situated or operating in a Member State and/or offered to the public in any Member State, in each case in circumstances which require the publication of a prospectus under the Prospectus Regulation, may not have a minimum denomination of less than EUR 100,000 (or its equivalent in any other currency). Subject thereto, Notes will be issued in such denominations as may be specified in the relevant Final Terms, subject to compliance with all applicable legal and/or regulatory and/or central bank requirements.
Negative Pledge:	The Notes will have the benefit of a negative pledge as described in Condition 5 (*Negative Pledge)*.
Cross-Default:	The Notes will have the benefit of a cross-default as described in Condition 12 (*Events of Default)*.
Taxation:	All payments of principal and interest in respect of Notes by or on behalf of the Issuer or the Guarantors will be made free and clear of withholding taxes of Luxembourg and Singapore, as the case may be, unless the withholding is required by law. In that event, the Issuer or (as the case may be) the relevant Guarantor will (subject as provided in Condition 10 (*Payments*) and Condition 11 (*Taxation*)) pay

	such additional amounts as will result in the Noteholders receiving such amounts as they would have received in respect of such Notes had no such withholding been required.
Substitution:	The Trustee shall, in certain circumstances without the consent of the Noteholders, agree to the substitution of the Issuer or any Guarantor as described in Condition 16(c) (*Substitution*).
Governing Law:	English law.
Selling Restrictions:	For a description of certain restrictions on offers, sales and deliveries of Notes and on the distribution of offering material in the European Economic Area, the United Kingdom, Australia, Belgium, Denmark, France, Germany, Hong Kong, the Republic of Italy, Japan, Jersey, Korea, the Grand Duchy of Luxembourg, The Netherlands, Norway, the People's Republic of China, the Republic of China (Taiwan), Singapore, Spain, Switzerland, the United Arab Emirates (excluding the Dubai International Financial Centre) and Dubai International Financial Centre, see "*Subscription and Sale*".

RISK FACTORS

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

The following is not an exhaustive list or explanation of all risks which investors may face when making an investment in the Notes and should be used as guidance only. Additional risks and uncertainties relating to the Issuer and the Guarantors that are not currently known to the Issuer or the Guarantors, or that any of them currently deem 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/or the Guarantors and, if any such risk should occur, the price of the Notes may decline and investors could lose all or part of their investment. Investors should consider carefully whether an investment in the Notes is suitable for them in light of the information in this Base Prospectus and their personal circumstances.

The risk classifications below are for ease of reference only. Some risks (although listed under the heading of a certain risk classification) may in fact involve different categories. Investors should not rely on the headings to classify the relevant risks and should read each risk factor carefully.

CONTENTS OF THE RISK FACTORS

1. Financial Market and Economic Risks

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.

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.

For Trafigura, a significant liquidity risk stems from the possibility of margin calls related to hedging products, due to the high volatility of market prices. Depending on the fluctuation of the commodity price subject to the hedging arrangement, margin postings or margin returns may occur. In the event a margin call is made, the underlying physical contract for commodities will make a higher profit, and a higher level of margin would be required to be paid by Trafigura. An increase in commodity prices could result in a need for significant margin calls and a need for cash flow. Extreme volatility, in particular after the outbreak of war in Ukraine (see "*Trafigura is exposed to geopolitical risk*"), resulted in elevated margin calls and tighter position limits that made hedging activity more expensive and in some cases constrained access to commodities futures markets. The lack of debt available in the commodities futures markets looks set to continue to be a challenge for the industry, as reduced access to derivatives for all participants in turn puts pressure on the ability to move physical commodities and Trafigura anticipates that this will be affected by continued geo-political turbulence and a more challenging macro-economic outcome in many of Trafigura's key markets.

In addition to maintaining a cash position, Trafigura relies on two other principal sources of liquidity: (i) borrowings under various short-term and long-term bank and asset-backed facilities and (ii) 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.

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.

On 24 February 2022, the Russian military launched a full-scale invasion of Ukraine, and sustained disruption in the region continues to take place. As a result of the invasion, the United States, the European Union, Switzerland and the United Kingdom have imposed export-control measure packages and sanctions against the Russian government, various companies, and certain individuals. The uncertain nature, extent and duration of Russia’s war in Ukraine and actions taken by the United States, the European Union and other states and multinational organisations in response thereto, including, amongst other things, the potential effects of sanctions, export-control measures, travel bans and asset seizures, as well as any Russian retaliatory actions, including, amongst other things, restrictions on oil and gas exports and cyber-attacks, on the world economy and markets, have contributed and are expected to continue to contribute to increased market volatility and uncertainty. Uncertainty regarding global supply of commodities due to the Russia/Ukraine invasion has disrupted global trade flows, most notably in the energy markets, and placed significant upwards pressure on commodity prices and input costs as seen in 2022. Given the importance of Russian/Ukrainian supply to a number of key commodities, including oil, natural gas, coal, aluminium and nickel, price volatilities in all of these commodities spiked in 2022 as buyers struggled to find alternative sources of supply. Applicable sanctions are also significantly impacting traditional commodity trade flows. There remains a risk that global commodity trade flows will need to adapt to some or all of Russian/Ukrainian supply continuing to be unavailable, whether due to infrastructure damage, sanctions or ethical concerns. Such geopolitical risks may have a material adverse impact on macroeconomic factors which affect Trafigura’s business, results of operations, cash flows, financial condition and prospects.

Trafigura ceased all trading of crude oil with sanctioned Russian organisations in advance of the European Union and Swiss sanctions which took effect on 15 May 2022, and will continue to comply in full with all applicable subsequent sanctions packages. Trafigura also immediately froze its investments in Russia and on 12 July 2022 completed the disposal of its ten per. cent. non-operational, passive shareholding in Vostok Oil, including the associated non-recourse debt.

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 aluminium 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.

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

Due to the acquisition of Nyrstar and the subsequent integration of Nyrstar into the Group, Trafigura is exposed to additional risks related to commodity prices. Nyrstar's profitability, and consequently Trafigura’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 that Nyrstar's revenues are mainly 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 on Nyrstar’s revenues is expected to further decrease in the future in line with the completion of the Port Pirie Redevelopment.

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. The current high interest rate environment has resulted in an increase in interest rates which has resulted in an increase in the cost of servicing Trafigura's indebtedness, which may 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.

COVID-19 Pandemic and Possible Similar Future Outbreaks

The rapid, global spread of COVID-19 has adversely affected the global economy and has resulted in significant volatility in financial markets and the prices of and the demand for the commodities that the Group trades. Government measures taken in response to the COVID-19 pandemic as well as other indirect effects of the COVID-19 pandemic on global economic activity, resulted in some degree of global economic downturn and demand shocks for the Group's commodities. The pandemic has caused various emergency measures being applied by various countries around the world and brought along substantial volatility in financial markets globally. The response to the pandemic has varied by jurisdiction, with governments imposing different requirements.

The ongoing COVID-19 pandemic and any possible future outbreaks of viruses may have a significant adverse effect on the Group. Firstly, a spread of such diseases amongst the employees of the Group, as well any quarantines affecting the employees of the Group or the Group's facilities, may reduce the possibility of the Group's personnel to carry out their work and thereby affect the Group's operations. In addition, if personnel are required to work remotely during the pandemic, this increases the Group's exposure to cyber related risks.

Secondly, the current pandemic and any possible future outbreaks of viruses may have an adverse effect on the Group's suppliers or other counterparties, interfering with the ability of Trafigura's suppliers to manufacture the products it buys and the ability to transport commodities across borders. Thirdly, any quarantines or spread of viruses may affect the possibility of the customers of the Group to carry out their work, which may adversely affect the possibility to sell the Group's products to end-consumers. The Group has and continues to actively assess and respond, where possible, to the effects of the COVID-19 pandemic on employees, customers, suppliers and service providers, and evaluating governmental actions being taken to curtail its spread.

The impact of COVID-19 in emerging market countries where Trafigura operates may also be greater due to generally less established healthcare systems. Further, public health crises caused by the COVID-19 outbreak may exacerbate other pre-existing political, social and economic risks in certain countries or globally.

Further to the above, the Group may be adversely affected by the wider macroeconomic effect of the ongoing COVID-19 pandemic and any possible future outbreaks. While the final effects of the COVID-19 pandemic remain uncertain, it is likely that it will continue to have substantial negative effect on the economies where the Group operates. Any negative effect on such economies may decrease incomes of the end-customers of the Group and the demand for the Group's products. Such effects may also result in the insolvency of the Group's business partners, which could affect the operations of the Group, as well as its financial standing. While to date, the Group has successfully navigated any significant negative impact from the COVID-19 pandemic, depending on its duration and severity, the pandemic may also have the effect of heightening many of the other risks described in this document, such as risks relating to the successful completion of expansion projects, the Group's ability to maintain adequate internal controls in the event that employees are restricted from accessing offices for a significant period of time; restricted access to capital and increased borrowing costs; and complying with the covenants contained in the agreements that govern its existing indebtedness.

The impact of the COVID-19 pandemic on the Group's businesses going forward will depend on a range of factors which it is not able to accurately predict, including the duration and scope of the pandemic, the evolution and spread of variants, the geographies impacted, the impact of the pandemic on economic activity and the nature and severity of measures adopted by governments, the effectiveness and timing of vaccine programmes.

The Group may continue to experience material adverse impacts to its businesses as a result of the global economic impact of COVID-19, including related recessions, as well as lingering effects on demand for or oversupply of its products, suppliers, third-party service providers and/or customers. Further, the market disruption and volatility caused by the COVID-19 pandemic has increased the complexity of determining the value of the Group's assets. Lastly, the price of the Group's securities and the possibility of the Group to acquire further financing may be adversely affected. Any of the factors above could have an adverse effect on the Group's profits and financial position, and thereby affect the Group's ability to make the payments under the Notes.

2. Industry and Business Risks

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.

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.

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 not be fully effective.

Trafigura has devoted significant resources to developing and implementing policies and procedures to manage commodity price, foreign exchange, interest rate, counterparty (include credit), operational and regulatory 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.

Derivative markets and hedging instruments may not always be available to Trafigura.

Derivative markets are used by Trafigura to manage price risks from physical commodities and Trafigura hedges its price risk exposure against its positions in physical transactions to ensure exposure to movements in spot prices and forward prices is reduced. Access to derivative markets was affected by volatile market conditions in the first half of 2022, and accessing these markets became expensive as a result of exchanges and clearing brokers significantly increasing margins – or cash deposits - required for transactions resulting in a shortage of liquidity. Although Trafigura is well placed to withstand such market volatility, it is still affected by reduced market participation. Liquidity in derivatives markets remains reduced compared to pre-pandemic levels and therefore affects Trafigura’s ability to offset price risks associated with physical commodities. If Trafigura does not engage in effective hedging against declines in commodity prices, its business and results of operations could be impacted by volatility in commodity prices.

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. A lack of debt available in the commodities futures market looks set to continue to be a challenge for the industry, as reduced access to derivatives for all participants in turn puts pressure on the ability to move physical commodities and Trafigura anticipates that this will be affected by continued geo-political turbulence and a more challenging macro-economic outcome in many of Trafigura's key markets. 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.

In addition, Nyrstar continues to be 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.

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.

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'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's downstream distribution arm - Puma Energy Holdings Pte. Ltd. (together with its subsidiaries, the "**Puma Energy Group**", "**Puma**" and "**Puma Energy**") is a focused 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 Impala Holdings Limited (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. Trafigura's shipping group - Maritime Logistics Pte. Ltd. and bunker fuel supply and procurement joint venture - TFG Marine Pte. Ltd., provide shipping and freight services for the Group and for third-party clients, which may also result in environmental risks.

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 Nyrstar, 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.

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.

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.

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. Recent rises in energy prices are likely to 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.

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 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. 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.

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 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. As part of the acquisition 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.

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), problems with the retention of select personnel and issues arising from the co-ordination of sales and marketing efforts All of these may be exacerbated by the diversion of the Directors' attention away 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.

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.

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.

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.

3. Regulatory, Legal and Other Risks

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, unintentionally, 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, corruption, sanctions breaches and other unlawful activities.

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

In February 2023, Trafigura discovered a systematic fraud committed by a group of companies connected to and apparently controlled by Mr Prateek Gupta including TMT Metals and companies owned by UD Trading Group. Trafigura has commenced legal proceedings against Mr Gupta and the companies involved. The fraud involved containerised nickel in transit during 2022 and involved misrepresentation and presentation of a variety of false documentation. The fraud is believed to be isolated to one specific line of business. There is currently no evidence to suggest that anyone at Trafigura was involved or complicit in this illegal activity. The Group recorded a USD577 million charge in the first half of the financial year 2023 for Trafigura Group Pte Ltd., estimated to be the maximum loss exposure related to this fraud.

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. Trafigura could also be affected indirectly by the fraudulent actions of its competitors which affect the commodities industry as a whole, which may lead to reduced liquidity. See "*Liquidity risk and a failure to obtain funds could limit Trafigura's ability to engage in desired activities and grow its business*."

The Group is subject to emissions and climate change regulations.

The Group's global presence exposes it to a number of jurisdictions in which regulations or laws have been or are being considered to limit or reduce emissions. The likely effect of these changes will be to increase the cost for oil and oil-related products, impose levies for emissions in excess of certain permitted levels and increase administrative costs for monitoring and reporting. Third parties, including potential or actual investors or debt providers, may also introduce policies adverse to the Group due to its activities related to oil and oil products. Increasingly, major global investors are demanding transition plans from utility companies consistent with the goals of the Paris Agreement under the UN Framework Convention on Climate Change, including explicit timelines and commitments. Over time, it is reasonable to assume that it may become difficult to access capital for certain of the Group's businesses.

The transition to a low-carbon economy and its associated public policy and regulatory developments may lead to:

- the imposition of new regulations and climate change related policies adverse to the Group's interests in fossil fuels by actual or potential investors, customers and banks, potentially impacting the Group's reputation, access to capital and financial performance;
- import duties and carbon taxes in the Group's customers' markets which may potentially affect the Group's access to those markets as well as commodities delivery costs;
- increased costs for energy and for other resources which may impact the productivity of the Group's assets and associated costs;
- the imposition of levies related to greenhouse gas emissions;
- increased costs for monitoring and reporting related to the Group's carbon footprint;
- reduced demand for the Group's oil and oil-related products; or
- impacts on the development or maintenance of the Group's assets due to restrictions in operating permits, licenses or similar authorisations.

Increasing regulation of greenhouse gas ("**GHG**") emissions, including the progressive introduction of carbon emissions trading mechanisms and tighter emission reduction targets in numerous jurisdictions in which the Group operates, is likely to raise production, operating, shipping and other transportation and administrative costs and reduce demand growth. This includes countries where the Group has assets such as Australia, as well as customer markets such as China, South Korea, Japan, United States and Europe. Many developed countries are pledging to reduce reliance upon and/or to stop using certain fossil fuels. As a result of these factors, there is the risk that many fossil fuel assets, including those of the Group, could become no longer economically viable.

Trafigura owns and operates industrial assets such as mining and smelting operations, oil storage and retail facilities, metals and minerals warehousing and logistics operations. The Group also owns, operates and charters a fleet of tanker, bulk carrier, and gas carrier vessels. While Trafigura has set clear and ambitious GHG reduction targets for each of its industrial assets in order to decarbonize its operational footprint as well as reduce the GHG emissions of its upstream suppliers, the results of its efforts, while promising, are still developing and no assurance can be given that those targets will be achieved.

In addition, climate change may increase physical risks to the Group's assets and related infrastructure, largely driven from extreme weather events and water related risks such as flooding or water scarcity. There has been a significant increase in litigation (including class actions), in which climate change and its impacts are a contributing or key consideration, including administrative law cases, tortious cases and claims brought by investors. In particular, a number of lawsuits have been brought against companies with fossil fuel operations in various jurisdictions seeking damages related to climate change. Any such developments may have a material adverse effect on the Group's business, results of operations and financial condition.

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.

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 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.

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.

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;
- labour 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 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.

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.

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.

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'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 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.

The Issuer has requested a derogation letter in respect of the financial statements included in this Base Prospectus, so that the separate financial statements of TPTE and TTL are not included in this Base Prospectus

The Issuer has applied to the Central Bank of Ireland requesting the omission of each of TPTE and TTL's (as subsidiary Guarantors) individual financial statements from this Base Prospectus and the Central Bank of Ireland has granted such omission request. As all of the Group's operations are consolidated under TGPL, it is the Group's view that the inclusion of the consolidated Group Financial Statements provides substantial information about the Group's revenues and earnings by the Group's operating divisions and the geographic areas in which the Group operates, which reflects how the Group manages its business. The Group believes this is the information investors require to make an informed assessment of the assets and liabilities, financial position, profit and losses and prospects of the Issuer and the Guarantors, and that the inclusion of separate financial statements of each subsidiary Guarantor would not provide additional information which would materially affect such an assessment. Moreover, the inclusion of TPTE and TTL as guarantors primarily ensures that the Notes remain pari passu with the Group's bank facilities which also include these entities as guarantors.

The United Kingdom's Withdrawal from the European Union.

On 31 January 2020 the United Kingdom ceased to be a member state of the European Union. Investors should be aware that United Kingdom law may diverge from European Union law. As at the date of this Base Prospectus, it is not possible for Trafigura to predict (i) the extent or materiality of any such divergence; (ii) the precise impact of any such divergence on the regulatory environment in which the Group operates; (iii) the impact of any such divergence on the Terms and Conditions of the Notes; or (iv) the impact on the regulatory treatment of an investor holding any Notes. Investors are urged to make their own assessment, and seek independent advice, regarding the impact of the UK's exit from the European Union on their acquisition and/holding of any Notes.

Risks relating to the Notes

4. Risks related to the market generally.

Set out below is a brief description of certain market risks, including liquidity risk, exchange rate risk, interest rate risk and credit risk:

The secondary market generally

The Notes may have no established trading market when issued, and one may never develop. If a market does develop, it may not be liquid. Therefore, investors may not be able to sell their Notes easily or at prices that will provide them with a yield comparable to similar investments that have a developed secondary market. This is particularly the case for Notes that are especially sensitive to interest rate, currency or market risks, are designed for specific investment objectives or strategies or have been structured to meet the investment requirements of limited categories of investors. These types of Notes generally would have a more limited secondary market and more price volatility than conventional debt securities. In addition, liquidity may be limited if the Issuer makes large allocations to a limited number of investors. Illiquidity may have a severely adverse effect on the market value of Notes.

Exchange rate risks and exchange controls

The Issuer will pay principal and interest on the Notes in the Specified Currency. 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 the Specified Currency. These include the risk that exchange rates may significantly change (including changes due to devaluation of the Specified Currency 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 Specified Currency would decrease (1) the Investor's Currency-equivalent yield on the Notes, (2) the Investor's Currency-equivalent value of the principal payable on the Notes and (3) the Investor's Currency-equivalent market value of the Notes.

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.

Interest rate risks

The price of the Notes may be affected by any changes in the market interest rates. For example, should the market interest rates increase, the price of the Notes would typically fall and should the market interest rates decline, the price of the Notes would typically increase. Noteholders should be aware that any detrimental fluctuations in the applicable market interest rates could adversely affect the value of the Notes.

Legal investment considerations may restrict certain investments

The investment activities of certain investors are subject to legal investment laws and regulations, or review or regulation by certain authorities. Each potential investor should consult its legal advisers to determine whether and to what extent (1) Notes are legal investments for it, (2) Notes can be used as collateral for various types of borrowing and (3) other restrictions apply to its purchase or pledge of any Notes. Financial institutions should consult their legal advisers or the appropriate regulators to determine the appropriate treatment of Notes under any applicable risk-based capital or similar rules.

5. Risks related to the Notes and the Guarantee generally.

Set out below is a brief description of certain risks relating to the Notes and the Guarantee generally:

Notes may be redeemed prior to maturity

In the event that the Issuer or the Guarantors would be obliged to increase the amounts payable in respect of any Notes due to any withholding or deduction for or on account of, any present or future taxes, duties, assessments or governmental charges of whatever nature imposed, levied, collected, withheld or assessed by or on behalf of (in the case of the Issuer) Luxembourg, (in the case of TTL) the State of Delaware or (in the case of TGPL or TPTE) Singapore or any political subdivision thereof or any authority therein or thereof having power to tax, the Issuer may redeem all outstanding Notes in accordance with the Conditions.

Modification and Waivers

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

Change of law

The Conditions are based on English law in effect as at the date of issue of the relevant Notes. No assurance can be given as to the impact of any possible judicial decision or change to English law or administrative practice after the date of issue of the relevant Notes.

Neither the Issuer nor the Notes 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 Notes. No corporate public rating has been assigned to the Issuer or the Issuer's indebtedness and the Issuer does not currently intend to apply for any such rating.

Investors in the Notes must rely on clearing system procedures

Because the Global Notes are 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 and/or the Guarantors. The Notes will be represented by the Global Notes except in certain limited circumstances described in the Permanent Global Note. The Global Notes will be 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 Permanent Global Note, investors will not be entitled to receive definitive Notes. Euroclear and/or Clearstream, Luxembourg and/or any other clearing system will maintain records of the beneficial interests in the Global Notes. While the Notes are represented by the Global Notes, investors will be able to trade their beneficial interests only through Euroclear and/or Clearstream, Luxembourg and/or any other clearing system.

The Issuer and the Guarantors will discharge their payment obligations under the Notes 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 a Global Note must rely on the procedures of Euroclear and/or Clearstream, Luxembourg and/or any other clearing system to receive payments under the Notes. The Issuer and the Guarantors have no responsibility or liability for the records relating to, or payments made in respect of, beneficial interests in the Global Notes.

Holders of beneficial interests in the Global Notes will not have a direct right to vote in respect of the Notes. 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.

Denominations

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

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

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

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 principal or interest payments when due on the Notes. In the event that Trafigura does not have sufficient available liquidity or is unable to refinance the Notes in the long-term and short-term debt markets, the ability of Trafigura to make principal or interest payments due on the Notes may be adversely impacted. As of 30 September 2022, Trafigura (excluding Puma Energy) had USD 72.9 billion of credit facilities available to it, and USD 26.9 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 Noteholders pursuant to the Notes.

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 Notes.

6. Risks related to the structure of a particular issue of Notes.

A wide range of Notes may be issued under the Programme. A number of these Notes may have features which contain particular risks for potential investors. Set out below is a description of certain such features:

Notes subject to optional redemption by the Issuer

An optional redemption feature is likely to limit the market value of Notes. During any period when the Issuer may elect to redeem Notes, the market value of those Notes 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 Issuer may be expected to redeem Notes when its cost of borrowing is lower than the interest rate on the Notes. At those times, an investor generally would not be able to reinvest the redemption proceeds at an effective interest rate as high as the interest rate on the Notes being redeemed and may only be able to do so at a significantly lower rate. Potential investors should consider reinvestment risk in light of other investments available at that time.

Notes issued at a substantial discount or premium

The market values of securities issued at a substantial discount or premium to their nominal amount tend to fluctuate more in relation to general changes in interest rates than do prices for conventional interest-bearing securities. Generally, the longer the remaining term of the securities, the greater the price volatility as compared to conventional interest-bearing securities with comparable maturities.

Inverse Floating Rate Notes

Inverse Floating Rate Notes have an interest rate equal to a fixed rate minus a rate based upon a reference rate such as EURIBOR. The market values of such Notes are typically more volatile than the market values of other conventional floating rate debt securities based on the same reference rate (and with otherwise comparable terms). Inverse Floating Rate Notes are more volatile because an increase in the reference rate not only decreases the interest rate of the Notes but may also reflect an increase in prevailing interest rates, which further adversely affects the market value of these Notes.

The market continues to develop in relation to risk-free rates (including overnight rates) as reference rates for Floating Rate Notes.

The use of risk-free rates – including those such as the Sterling Overnight Index Average ("**SONIA**"), the Secured Overnight Financing Rate ("**SOFR**"), the Swiss Average Rate Overnight ("**SARON**") and the Euro Short Term Rate ("**€STR**"), as reference rates for Eurobonds continues to develop. This relates not only to the substance of the calculation and the development and adoption of market infrastructure for the issuance and trading of bonds referencing such rates, but also how widely such rates and methodologies might be adopted.

The market or a significant part thereof may adopt an application of risk-free rates that differs significantly from that set out in the Conditions and used in relation to Notes that reference risk-free rates issued under this Programme. The Issuer may in the future also issue Notes referencing SONIA, SOFR, SARON or €STR that differ materially in terms of interest determination when compared with any previous Notes issued by it under this Programme. The development of risk-free rates for the Eurobond markets could result in reduced liquidity or increased volatility, or could otherwise affect the market price of any Notes that reference a risk-free rate issued under this Programme from time to time.

In addition, the manner of adoption or application of risk-free rates in the Eurobond markets may differ materially compared with the application and adoption of risk-free rates in other markets, such as the derivatives and loan markets. Investors should carefully consider how any mismatch between the adoption of such reference rates in the bond, loan and derivatives markets may impact any hedging or other financial arrangements which they may put in place in connection with any acquisition, holding or disposal of Notes referencing such risk-free rates.

In particular, investors should be aware that several different methodologies have been used in risk-free rate notes issued to date. No assurance can be given that any particular methodology, including the compounding formula in the terms and conditions of the Notes, will gain widespread market acceptance. In addition, market participants and relevant working groups are still exploring alternative reference rates based on risk-free rates, including various ways to produce term versions of certain risk-free rates (which seek to measure the market's forward expectation of an average of these reference rates over a designated term, as they are overnight rates) or different measures of such risk-free rates. If the relevant risk-free rates do not prove to be widely used in securities like the Notes, the trading price of such Notes linked to such risk-free rates may be lower than those of Notes referencing indices that are more widely used.

Investors should consider these matters when making their investment decision with respect to any Notes which reference SONIA, SOFR, SARON, €STR or any related indices.

Risk-free rates may differ from LIBOR and other inter-bank offered rates in a number of material respects and have a limited history.

Risk-free rates may differ from The London Interbank Offered Rate ("**LIBOR**") and other inter-bank offered rates in a number of material respects. These include (without limitation) being backwards-looking, in most cases, calculated on a compounded or weighted average basis, risk-free, overnight rates and, in the case of SOFR, secured, whereas such interbank offered rates are generally expressed on the basis of a forward-looking term, are unsecured and include a risk-element based on interbank lending. As such, investors should be aware that risk-free rates may behave materially differently to interbank offered rates as interest reference rates for the Notes. Furthermore, SOFR is a secured rate that represents overnight secured funding transactions, and therefore will perform differently over time to an unsecured rate. For example, since publication of SOFR began on 3 April 2018, daily changes in SOFR have, on occasion, been more volatile than daily changes in comparable benchmarks or other market rates.

Risk-free rates offered as alternatives to interbank offered rates also have a limited history. For that reason, future performance of such rates may be difficult to predict based on their limited historical performance. The level of such rates during the term of the Notes may bear little or no relation to historical levels. Prior observed patterns, if any, in the behaviour of market variables and their relation to such rates such as correlations, may change in the future. Investors should not rely on historical performance data as an indicator of the future performance of such risk-free rates nor should they rely on any hypothetical data.

Furthermore, interest on Notes which reference a backwards-looking risk-free rate is only capable of being determined immediately prior to the relevant Interest Payment Date. It may be difficult for investors in Notes which reference such risk-free rates reliably to estimate the amount of interest which will be payable on such Notes, and some investors may be unable or unwilling to trade such Notes without changes to their IT systems, both of which could adversely impact the liquidity of such Notes. Further, in contrast to Notes linked to interbank offered rates, if Notes referencing backwards-looking rates become due and payable as a result of an Event of Default under Condition 12 (*Events of Default*), or are otherwise redeemed early on a date which is not an Interest Payment Date, the final Rate of Interest Rate payable in respect of such Notes shall be determined by reference to a shortened period ending immediately prior to the date on which the Notes become due and payable or are scheduled for redemption.

The administrator of SONIA, SOFR, SARON or €STR or any related indices may make changes that could change the value of SONIA, SOFR, SARON or €STR, or discontinue SONIA, SOFR or €STR.

The Bank of England, the Federal Reserve Bank of New York, SIX Group Ltd. or the European Central Bank (or their successors) as administrators of SONIA, SOFR, SARON, or €STR, respectively, may make methodological or other changes that could change the value of these risk-free rates and/or indices, including changes related to the method by which such risk-free rate is calculated, eligibility criteria applicable to the transactions used to calculate SONIA, SOFR, SARON or €STR, or timing related to the publication of SONIA, SOFR, SARON or €STR. In addition, the administrator may alter, discontinue or suspend calculation or dissemination of SONIA, SOFR, SARON or €STR (in which case a fallback method of determining the interest rate on the Notes will apply). The relevant administrator has no obligation to consider the interests of Noteholders when calculating, adjusting, converting, revising or discontinuing any such risk-free rate.

Risks related to Notes which are linked to "benchmarks"

The London Interbank Offered Rate ("**LIBOR**"), the Euro Interbank Offered Rate ("**EURIBOR**") and other interest rates or other types of rates and indices which are deemed to be "benchmarks" are the subject of ongoing national and international regulatory reform. Following the implementation of any such potential reforms, the manner of administration of benchmarks may change, with the result that they may perform differently than in the past, or benchmarks could be eliminated entirely, or there could be other consequences which cannot be predicted.

On 5 March 2021, the FCA published a statement on the future cessation and loss of representativeness of all LIBOR currencies and tenors. Permanent cessation of representative LIBOR rates has occurred for all Euro and Swiss Franc LIBOR tenors and Sterling, Japanese Yen and US Dollar LIBOR settings and will occur immediately after 30 June 2023 for certain other US Dollar LIBOR settings.

Furthermore, the UK has passed the Financial Services Act 2021. The new legislation provides a framework to enable the FCA to take action where it has determined that a critical benchmark is at risk of becoming unrepresentative, or has become unrepresentative, and that its representativeness cannot reasonably be maintained or restored (including for the benefit of the so-called 'tough legacy' contracts).

The Benchmarks Regulation applies, subject to certain transitional provisions, to the provision of benchmarks, the contribution of input data to a benchmark and the use of a benchmark within the EU. It, among other things, (i) requires benchmark administrators to be authorised or registered (or, if non-EU-based, to be subject to an equivalent regime or otherwise recognised or endorsed) and (ii) prevents certain uses by EU supervised entities of benchmarks of administrators that are not authorised or registered (or, if non-EU based, not deemed equivalent or recognised or endorsed). The Benchmarks Regulation could have a material impact on any Notes referencing a benchmark, in particular, if the methodology or other terms of the relevant benchmark are changed in order to comply with the requirements of the Benchmarks Regulation. Such changes could, among other things, have the effect of reducing or increasing the rate or level, or otherwise affecting, the volatility of the published rate or level of the relevant benchmark.

As of 1 January 2022, these LIBOR settings are no longer available on a representative basis. Although the one-, three- and six-month GBP and JPY LIBOR settings remain published on a synthetic, temporary and non-representative basis, primarily to facilitate the transaction of legacy contracts which have not been amended, these synthetic LIBORs are not available for reference in any new deals. The remaining USD LIBOR settings will permanently cease to be provided by any administrator or will no longer be representative immediately after 30 June 2023.

These reforms and changes may cause a benchmark to perform differently than it has done in the past or to be discontinued. At this time, it is not possible to predict the overall effect (including conduct, operational and financial impacts) of any such reforms and changes, any establishment of alternative reference rates or any other reforms to these reference rates that may be enacted.

Uncertainty as to the nature of such potential changes, alternative reference rates (including, without limitation, SONIA, €STR, SARON and SOFR or term versions of those rates) or other reforms may adversely affect a broad array of financial products, including any LIBOR-based securities, loans and derivatives that are included in the Group's financial assets and liabilities, that use these reference rates and may impact the availability and cost of hedging instruments and borrowings. During the transition to the new reference rates and/or when these reference rates are no longer available, the Group may incur additional expenses in effecting the transition from such reference rates, and may be subject to disputes, which could have an adverse effect on its results of operations.

Any such consequence could have a material adverse effect on the value of and return on any such Notes.

Future unavailability or discontinuance of certain benchmark rates (for example EURIBOR) may adversely affect the value of and return on the Notes which are linked to or which reference any such benchmark rate.

Investors should be aware that if EURIBOR, or any other benchmark, were discontinued or otherwise unavailable, the rate of interest on Floating Rate Notes which are linked to or which reference such benchmark will be determined for the relevant period by the fallback provisions applicable to such Notes. The Terms and Conditions of the Notes provide for certain fallback arrangements in the event that a published benchmark, such as EURIBOR, (including any page on which such benchmark may be published (or any successor service)) becomes unavailable. With respect to certain Notes issued under this Base Prospectus, these fallback arrangements may require or result in adjustments to the interest calculation provisions of the Terms and Conditions of the Notes. Even prior to the implementation of any changes to any benchmark, or to the interest calculation provisions based on such benchmark, uncertainty as to the nature of alternative reference rates and as to potential changes to such benchmark may adversely affect the operation of such benchmark during the term of the relevant Notes, as well as potentially adversely affecting both the return on any Notes which are linked to or which reference such benchmark and the trading market for such Notes.

With respect to certain Notes issued under this Base Prospectus, in certain situations, including the relevant benchmark ceasing to be administered, where Screen Rate Determination is specified in the applicable Final Terms as the manner in which the rate of interest is to be determined, the fallback arrangements referenced in the preceding paragraph will include the possibility that:

- the relevant rate of interest (or, as applicable, component thereof) could be set or, as the case may be, determined by reference to an alternative rate determined by the Issuer after consultation with an Independent Adviser or, if the Issuer is unable to appoint an Independent Adviser, the Issuer; and
- in the case of Floating Rate Notes, an adjustment spread may be applied to such alternative rate by the Issuer after consultation with an Independent Adviser or, if the Issuer is unable to appoint an Independent Adviser, the Issuer, if such an adjustment spread is required to reduce or eliminate, to the extent reasonably practicable in the circumstances, any economic prejudice or benefit (as applicable) to investors as a result of the replacement of the relevant benchmark, provided that if the Issuer after consultation with an Independent Adviser or, if the Issuer is unable to appoint an Independent Adviser, the Issuer is unable to determine such adjustment spread or decides that no such adjustment spread is required then such alternative rate will apply without adjustment for all future interest periods,

in each such case, with the Issuer and any Independent Adviser acting in good faith and in a commercially reasonable manner, and all as more fully described in the Terms and Conditions of the Notes.

No consent of the Noteholders shall be required in connection with effecting any alternative rate. In addition, no consent of the Noteholders shall be required in connection with any other related adjustments and/or amendments to the Terms and Conditions of the Notes (or any other document) which are made in order to effect any alternative rate.

Any such consequences could have a material adverse effect on the value of and return on any such Notes. Moreover, any of the above matters or any other significant change to the setting or existence of any relevant rate could affect the ability of the Issuer to meet its obligations under the Floating Rate Notes or could have a material adverse effect on the value or liquidity of, and the amount payable under, the Floating Rate Notes. Investors should note that the Independent Adviser or the Issuer (as applicable) will have discretion to adjust the relevant alternative rate in the circumstances described above. Any such adjustment could have unexpected commercial consequences and there can be no assurance that, due to the particular circumstances of each Noteholder, any such adjustment will be favourable to each Noteholder. In addition, if an amendment is made to the Notes to change the reference rate/benchmark from EURIBOR, or any other benchmark, to an alternative base rate, such amendment could have adverse tax consequence to certain holders.

Investors should consider all of these matters when making their investment decision with respect to the relevant Floating Rate Notes.

INFORMATION INCORPORATED BY REFERENCE

The following documents which have previously been published and have been filed with Euronext Dublin and the Central Bank shall be incorporated by reference in, and form part of, this Base Prospectus:

(a) the annual reports of Trafigura Group Pte. Ltd. for the years ended 30 September 2022 and 2021 (together, the "**Group Annual Reports**") which include the audited consolidated financial statements of the Group (including the notes thereto) for the financial years ended 30 September 2022 and 30 September 2021, respectively (together, the "**Group Financial Statements**") and the audit reports thereon; and

(b) the audited financial statements of the Issuer (including the notes thereto) for the financial years ended 30 September 2022 and 30 September 2021 (together, the "**Issuer Financial Statements**") and the audit reports thereon.

Such documents shall be deemed to be incorporated in, and form part of, this Base Prospectus, save that any statement contained in a document which is deemed to be incorporated by reference in this Base Prospectus shall be deemed to be modified or superseded for the purpose of this Base Prospectus to the extent that a statement contained herein modifies or supersedes such earlier statement (whether expressly, by implication or otherwise). Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Base Prospectus.

With respect to the Group Financial Statements, it should be noted that the statement of financial position as of 30 September 2021 included as comparative information in the consolidated financial statements of the Group as of and for the year ended 30 September 2022 has been restated as a result of amendments to the provisional assessment of the identifiable assets acquired in the acquisition of Puma Energy. As a result, the statement of financial position information presented in this Base Prospectus is disclosed on a restated basis. For further details, see notes 2.6 and 7.2 of the consolidated financial statements of the Group as of and for the year ended 30 September 2022. For the avoidance of doubt, the statement of financial position as of 30 September 2021 included in the consolidated financial statements of the Group as of and for the year ended 30 September 2021 has not been restated for this.

The Group Annual Reports, the Issuer Financial Statements and the audit reports thereon are available on the website of the Euronext Dublin.

Group Annual Reports

https://ise-prodnr-eu-west-1-data-integration.s3-eu-west-1.amazonaws.com/202212/dd18b850-1e66-4c30-819a-02340d97c84c.pdf

https://ise-prodnr-eu-west-1-data-integration.s3-eu-west-1.amazonaws.com/202112/f4d29050-2709-436f-a1e0-67d2abfaa989.pdf

Issuer Financial Statements

https://ise-prodnr-eu-west-1-data-integration.s3-eu-west-1.amazonaws.com/202305/c816aa59-3cdd-4427-b1c2-715c682c08dc.pdf

https://ise-prodnr-eu-west-1-data-integration.s3-eu-west-1.amazonaws.com/202305/a93c0d14-605d-473c-b2f2-3282a78557c4.pdf

Copies of the documents incorporated by reference may be inspected, free of charge, during normal business hours at the offices of Trafigura Group Pte. Ltd. at 10 Collyer Quay, #29-01/05 Ocean Financial Centre, Singapore 049315. To the extent that only part of a document is incorporated by reference in this Base Prospectus, the non-incorporated part of such document is either not relevant to investors or is covered elsewhere in this Base Prospectus.

No websites referred to herein, or any information contained therein (except as otherwise specified herein), form part of this Base Prospectus and the Group does not accept any responsibility for any information contained in such websites.

Supplements

Following the publication of this Base Prospectus a supplement may be prepared by the Issuer and the Guarantors and approved by the Central Bank of Ireland in accordance with Article 23 of the Prospectus Regulation. Statements contained in any such supplement (or contained in any document incorporated by reference therein) shall, to the extent applicable (whether expressly, by implication or otherwise), be deemed to supersede statements contained in this Base Prospectus (or any earlier supplement) or in a document which is incorporated by reference in this Base Prospectus.

The Issuer and the Guarantors will, in the event of any significant new factor, material mistake or material inaccuracy relating to information included in this Base Prospectus which is capable of affecting the assessment of any Notes, prepare a supplement to this Base Prospectus or publish a new Base Prospectus for use in connection with any subsequent issue of Notes.

FINAL TERMS AND DRAWDOWN PROSPECTUSES

In this section the expression "**necessary information**" means, in relation to any Tranche of Notes, the information necessary to enable investors to make an informed assessment of the assets and liabilities, financial position, profits and losses and prospects of the Issuer and the Guarantors and of the rights attaching to the Notes. In relation to the different types of Notes which may be issued under the Programme the Issuer and the Guarantors have included in this Base Prospectus all of the necessary information except for information relating to the Notes which is not known at the date of this Base Prospectus and which can only be determined at the time of an individual issue of a Tranche of Notes.

Any information relating to the Notes which is not included in this Base Prospectus and which is required in order to complete the necessary information in relation to a Tranche of Notes will be contained either in the relevant Final Terms or in a Drawdown Prospectus.

For a Tranche of Notes which is the subject of Final Terms, those Final Terms will, for the purposes of that Tranche only, supplement this Base Prospectus and must be read in conjunction with this Base Prospectus. The terms and conditions applicable to any particular Tranche of Notes which is the subject of Final Terms are the Conditions described in the relevant Final Terms as completed to the extent described in the relevant Final Terms.

The terms and conditions applicable to any particular Tranche of Notes which is the subject of a Drawdown Prospectus will be the Conditions as supplemented, amended and/or replaced to the extent described in the relevant Drawdown Prospectus. In the case of a Tranche of Notes which is the subject of a Drawdown Prospectus, each reference in this Base Prospectus to information being specified or identified in the relevant Final Terms shall be read and construed as a reference to such information being specified or identified in the relevant Drawdown Prospectus unless the context requires otherwise.

Each Drawdown Prospectus will be constituted either (1) by a single document containing the necessary information relating to the Issuer and the Guarantors and the relevant Notes or (2) by a registration document containing the necessary information relating to the Issuer and the Guarantors, a securities note containing the necessary information relating to the relevant Notes and, if necessary, a summary note.

FORMS OF THE NOTES

Each Tranche of Notes will initially be in the form of either a temporary global note (the "**Temporary Global Note**"), without interest coupons, or a permanent global note (the "**Permanent Global Note**"), without interest coupons, in each case as specified in the relevant Final Terms. Each Temporary Global Note or, as the case may be, Permanent Global Note (each a "**Global Note**"), will be deposited on or around the issue date of the relevant Tranche of the Notes with a depositary or a common depositary for Euroclear and/or Clearstream, Luxembourg and/or any other relevant clearing system.

The relevant Final Terms will also specify whether United States Treasury Regulation §1.163-5(c)(2)(i)(C) (the "**TEFRA C Rules**") or United States Treasury Regulation §1.163-5(c)(2)(i)(D) (the "**TEFRA D Rules**") are applicable in relation to the Notes or, if the Notes do not have a maturity of more than 365 days, that neither the TEFRA C Rules nor the TEFRA D Rules are applicable.

Temporary Global Note exchangeable for Permanent Global Notes

If the relevant Final Terms specifies the form of Notes as being "Temporary Global Note exchangeable for a Permanent Global Note", then the Notes will initially be in the form of a Temporary Global Note which will be exchangeable, in whole or in part, for interests in a Permanent Global Note, without interest coupons, not earlier than 40 days after the issue date of the relevant Tranche of the Notes. No payments will be made under the Temporary Global Note unless exchange for interests in the Permanent Global Note is improperly withheld or refused.

Whenever any interest in the Temporary Global Note is to be exchanged for an interest in a Permanent Global Note, the Issuer shall procure (in the case of first exchange) the delivery of a Permanent Global Note to the bearer of the Temporary Global Note or (in the case of any subsequent exchange) an increase in the principal amount of the Permanent Global Note in accordance with its terms against presentation and (in the case of final exchange) presentation and surrender of the Temporary Global Note to or to the order of the Principal Paying Agent.

The principal amount of Notes represented by the Permanent Global Note shall be equal to the aggregate of the principal amounts specified in the Temporary Global Note **provided**, **however**, **that** in no circumstances shall the principal amount of Notes represented by the Permanent Global Note exceed the initial principal amount of Notes represented by the Temporary Global Note.

The Permanent Global Note will become exchangeable, in whole but not in part only and at the request of the bearer of the Permanent Global Note, for Bearer Notes in definitive form ("**Definitive Notes**") if the Final Terms specifies "in the limited circumstances described in the Permanent Global Note" and either of the following events occurs:

(a) Euroclear or Clearstream, Luxembourg or any other relevant clearing system is closed for business for a continuous period of 14 days (other than by reason of legal holidays) or terminates without a successor or announces an intention permanently to cease business; or

(b) an Event of Default as defined in Condition 12 (*Events of Default*) occurs and the Notes become due and payable.

For the avoidance of doubt, Notes will only be issued with a minimum Specified Denomination and in integral multiples of another smaller amount in excess thereof if the relevant Final Terms specifies "in the limited circumstances described in the Permanent Global Note" in accordance with the paragraph above.

Whenever the Permanent Global Note is to be exchanged for Definitive Notes, the Issuer shall procure the prompt delivery (free of charge to the bearer) of such Definitive Notes, duly authenticated and with Coupons and Talons attached (if so specified in the relevant Final Terms), in an aggregate principal amount equal to the principal amount of Notes represented by the Permanent Global Note to the bearer of the Permanent Global Note against the surrender of the Permanent Global Note to or to the order of the Principal Paying Agent within 30 days of the bearer requesting such exchange.

Temporary Global Note exchangeable for Definitive Notes

If the relevant Final Terms specifies the form of Notes as being "Temporary Global Note exchangeable for Definitive Notes" and also specifies that the TEFRA C Rules are applicable or that neither the TEFRA C

Rules or the TEFRA D Rules are applicable, then the Notes will initially be in the form of a Temporary Global Note which will be exchangeable, in whole but not in part, for Definitive Notes on the expiry of such period of notice as is specified in the relevant Final Terms and not earlier than 40 days after the issue date of the relevant Tranche of the Notes.

If the relevant Final Terms specifies the form of Notes as being "Temporary Global Note exchangeable for Definitive Notes" and also specifies that the TEFRA D Rules are applicable, then the Notes will initially be in the form of a Temporary Global Note which will be exchangeable, in whole or in part, for Definitive Notes not earlier than 40 days after the issue date of the relevant Tranche of the Notes upon certification as to non-U.S. beneficial ownership. Interest payments in respect of the Notes cannot be collected without such certification of non-U.S. beneficial ownership.

Whenever the Temporary Global Note is to be exchanged for Definitive Notes, the Issuer shall procure the prompt delivery (free of charge to the bearer) of such Definitive Notes, duly authenticated and with Coupons and Talons attached (if so specified in the relevant Final Terms), in an aggregate principal amount equal to the principal amount of the Temporary Global Note to the bearer of the Temporary Global Note against the surrender of the Temporary Global Note to or to the order of the Principal Paying Agent within 30 days of the bearer requesting such exchange.

In the event that a Temporary Global Note is exchanged for Definitive Notes, such Definitive Notes shall be issued in Specified Denomination(s) only. A Noteholder who holds a principal amount of less than the minimum Specified Denomination will not receive a Definitive Note in respect of such holding and would need to purchase a principal amount of Notes such that it holds an amount equal to one or more Specified Denominations. Such Definitive Notes may only be issued to be held in clearing systems if in denominations equal to EUR 100,000 (or its equivalent in any other currency as at the Issue Date of the relevant Notes) and integral multiples thereof.

Permanent Global Note exchangeable for Definitive Notes

If the relevant Final Terms specifies the form of Notes as being "Permanent Global Note exchangeable for Definitive Notes", then the Notes will initially be in the form of a Permanent Global Note which will be exchangeable in whole, but not in part, for Definitive Notes if the relevant Final Terms specifies "in the limited circumstances described in the Permanent Global Note" and either of the following events occurs:

(a) Euroclear or Clearstream, Luxembourg or any other relevant clearing system is closed for business for a continuous period of 14 days (other than by reason of legal holidays) or terminates without a successor or announces an intention permanently to cease business; or

(b) any of the circumstances described in Condition 12 (*Events of Default*) occurs and the Notes become due and payable.

For the avoidance of doubt, Notes will only be issued with a minimum Specified Denomination and in integral multiples of another smaller amount in excess thereof if the relevant Final Terms specifies "in the limited circumstances described in the Permanent Global Note" in accordance with the paragraph above.

Whenever the Permanent Global Note is to be exchanged for Definitive Notes, the Issuer shall procure the prompt delivery (free of charge to the bearer) of such Definitive Notes, duly authenticated and with Coupons and Talons attached (if so specified in the relevant Final Terms), in an aggregate principal amount equal to the principal amount of Notes represented by the Permanent Global Note to the bearer of the Permanent Global Note against the surrender of the Permanent Global Note to or to the order of the Principal Paying Agent within 30 days of the bearer requesting such exchange.

Terms and conditions applicable to the Notes

The terms and conditions applicable to any Definitive Note will be endorsed on that Note and will consist of the Conditions and the provisions of the relevant Final Terms which complete those terms and conditions.

The terms and conditions applicable to any Note in global form will differ from those terms and conditions which would apply to the Note were it in definitive form to the extent described under "*Summary of Provisions Relating to the Notes while in Global Form*" below.

Legend concerning United States persons

In the case of any Tranche of Notes having a maturity of more than 365 days, any Global Notes as to which TEFRA D is applicable and any Definitive Notes (as defined herein) and any Coupons and Talons appertaining thereto will bear a legend to the following effect:

> "Any United States person who holds this obligation will be subject to limitations under the United States income tax laws, including the limitations provided in Sections 165(j) and 1287(a) of the Internal Revenue Code."

TERMS AND CONDITIONS OF THE NOTES

The following is the text of the terms and conditions, which, as completed by Part A of the relevant Final Terms, will apply to each Tranche of Notes issued pursuant to this Base Prospectus.

In the case of any Tranche of Notes which are being (a) offered to the public in a Member State (other than pursuant to one or more of the exemptions set out in Article 1.4 of the Prospectus Regulation) or (b) admitted to trading on a regulated market in a Member State, the relevant Final Terms shall not amend or replace any information in this Base Prospectus. Subject to this, to the extent permitted by applicable law and/or regulation, the Final Terms in respect of any Tranche of Notes may supplement, amend or replace any information in this Base Prospectus. The terms and conditions applicable to any Note in global form will differ from those terms and conditions which would apply to the Note were it in definitive form to the extent described under "Summary of Provisions Relating to the Notes while in Global Form" below.

1. **Introduction**

(a) ***Programme***: Trafigura Funding S.A. (the "**Issuer**") and Trafigura Group Pte. Ltd., Trafigura Trading LLC and Trafigura Pte Ltd (each a "**Guarantor**" and together, the "**Guarantors**") are party to a Euro Medium Term Note Programme (the "**Programme**") for the issuance of up to EUR 3,000,000,000 in aggregate principal amount of notes (the "**Notes**") unconditionally and irrevocably guaranteed on a joint and several basis by the Guarantors.

(b) ***Final Terms***: Notes issued under the Programme are issued in series (each a "**Series**") and each Series may comprise one or more tranches (each a "**Tranche**") of Notes. Each Tranche is the subject of the applicable final terms (the "**Final Terms**") which supplements these terms and conditions (the "**Conditions**"). The terms and conditions applicable to any particular Tranche of Notes are these Conditions as supplemented, amended and/or replaced by the relevant Final Terms. In the event of any inconsistency between these Conditions and the relevant Final Terms, the relevant Final Terms shall prevail.

(c) ***Trust Deed***: The Notes are subject to and have the benefit of an amended and restated trust deed dated 10 May 2023 (as further amended and/or supplemented and/or restated from time to time, the "**Trust Deed**") made between the Issuer, each Guarantor and Citicorp Trustee Company Limited (the "**Trustee**", which expression shall include all persons for the time being the trustee or trustees appointed under the Trust Deed).

(d) ***Paying Agency Agreement:*** The Notes are the subject of an amended and restated issue and paying agency agreement dated 28 February 2018 (as further amended and/or supplemented and/or restated from time to time, the "**Paying Agency Agreement**") between the Issuer, each Guarantor, the Trustee and Citibank, N.A., London Branch (the "**Principal Paying Agent**", which expression includes any successor principal paying agent appointed from time to time in accordance with the Paying Agency Agreement in connection with the Notes) and the paying agents named therein (together with the Principal Paying Agent, the "**Paying Agents**", which expression includes any successor or additional paying agents appointed from time to time in accordance with the Paying Agency Agreement in connection with the Notes).

(e) ***The Notes***: All subsequent references in these Conditions to "**Notes**" are to the Notes which are the subject of the relevant Final Terms. Copies of the relevant Final Terms are available for inspection during normal business hours at the Specified Office of the Trustee and the Principal Paying Agent, the initial Specified Offices of which are set out below.

(f) ***Summaries***: Certain provisions of these Conditions are summaries of the Trust Deed, and the Paying Agency Agreement and are subject to their detailed provisions. The holders of the Notes (the "**Noteholders**") and the holders of the related interest coupons, if any, (the "**Couponholders**" and the "**Coupons**", respectively) are bound by, and are deemed to have notice of, all the provisions of the Trust Deed and the Paying Agency Agreement applicable to them. Copies of the Trust Deed and the Paying Agency Agreement are available for inspection by Noteholders during normal business hours at the Specified Offices of each of the Paying Agents, the initial Specified Offices of which are set out below.

2. **Interpretation**

(a) ***Definitions***: In these Conditions the following expressions have the following meanings:

"**2006 ISDA Definitions**" means the 2006 ISDA Definitions, as published by the International Swaps and Derivatives Association, Inc. ("**ISDA**"), as may be supplemented or amended from time to time, in their updated version applicable as at the date of issue of the first Tranche of the relevant Series of Notes, unless otherwise specified in the relevant Final Terms;

"**2021 ISDA Definitions**" means the 2021 ISDA Interest Rate Derivatives Definitions, as published by ISDA (including each Matrix (and each successor Matrix thereto), as defined in such 2021 ISDA Interest Rate Derivatives Definitions), as may be supplemented or amended from time to time, in their updated version applicable as at the date of issue of the first Tranche of the relevant Series of Notes, unless otherwise specified in the relevant Final Terms;

"**Accrual Yield**" has the meaning given in the relevant Final Terms;

"**Additional Business Centre(s)**" means the city or cities specified as such in the relevant Final Terms;

"**Additional Financial Centre(s)**" means the city or cities specified as such in the relevant Final Terms;

"**Authorised Signatory**" has the meaning given in the Trust Deed;

"**Business Day**" means:

(i) in relation to any sum payable in euro, a TARGET Settlement Day and a day on which commercial banks and foreign exchange markets settle payments generally in each (if any) Additional Business Centre;

(ii) in relation to any sum payable in a currency other than euro, a day on which commercial banks and foreign exchange markets settle payments generally in London, in the Principal Financial Centre of the relevant currency and in each (if any) Additional Business Centre; and

(iii) in respect of Notes for which the Reference Rate is specified as SOFR in the relevant Final Terms, any weekday that is a U.S. Government Securities Business Day and is not a legal holiday in New York and each (if any) Additional Business Centre(s) and is not a date on which banking institutions in those cities are authorised or required by law or regulation to be closed;

"**Business Day Convention**", in relation to any particular date, has the meaning given in the relevant Final Terms and, if so specified in the relevant Final Terms, may have different meanings in relation to different dates and, in this context, the following expressions shall have the following meanings:

(i) "**Following Business Day Convention**" means that the relevant date shall be postponed to the first following day that is a Business Day;

(ii) "**Modified Following Business Day Convention**" or "**Modified Business Day Convention**" means that the relevant date shall be postponed to the first following day that is a Business Day unless that day falls in the next calendar month in which case that date will be the first preceding day that is a Business Day;

(iii) "**Preceding Business Day Convention**" means that the relevant date shall be brought forward to the first preceding day that is a Business Day;

(iv) "**FRN Convention**", "**Floating Rate Convention**" or "**Eurodollar Convention**" means that each relevant date shall be the date which numerically corresponds to the preceding such date in the calendar month which is the number of months specified in the relevant

Final Terms as the Specified Period after the calendar month in which the preceding such date occurred **provided**, **however**, **that**:

(A) if there is no such numerically corresponding day in the calendar month in which any such date should occur, then such date will be the last day which is a Business Day in that calendar month;

(B) if any such date would otherwise fall on a day which is not a Business Day, then such date will be the first following day which is a Business Day unless that day falls in the next calendar month, in which case it will be the first preceding day which is a Business Day; and

(C) if the preceding such date occurred on the last day in a calendar month which was a Business Day, then all subsequent such dates will be the last day which is a Business Day in the calendar month which is the specified number of months after the calendar month in which the preceding such date occurred;

(v) "**No Adjustment**" means that the relevant date shall not be adjusted in accordance with any Business Day Convention;

"**Calculation Agent**" means the Principal Paying Agent or such other Person specified in the relevant Final Terms as the party responsible for calculating the Rate(s) of Interest and Interest Amount(s) and/or such other amount(s) as may be specified in the relevant Final Terms;

"**Calculation Amount**" has the meaning given in the relevant Final Terms;

"**Clearstream, Luxembourg**" means Clearstream Banking, S.A.;

"**Consolidated Net Earnings**" means, for a Measurement Period, the consolidated net income (or loss) of the Parent and the Subsidiaries for such period (taken as a cumulative whole), all determined in accordance with GAAP (without duplication) on a consolidated basis after deducting portions of income properly attributable to minority interests, if any, in the shares and surplus of Subsidiaries and excluding any net income (or loss) of SPE;

"**Consolidated Net Worth**" means, at any time:

(i) the total consolidated assets of the Parent which are shown as assets on a consolidated balance sheet of the Parent as of such time prepared in accordance with GAAP, after eliminating the assets of SPE,

Minus

(ii) the total consolidated liabilities of the Parent which are shown as liabilities on a consolidated balance sheet of the Parent as of such time prepared in accordance with GAAP, after excluding (i) the liabilities of SPE and (ii) for the avoidance of doubt, instruments classified as equity in accordance with GAAP in force prior to 1 January 2019;

"**Coupon Sheet**" means, in respect of a Note, a coupon sheet relating to the Note;

"**Day Count Fraction**" means, in respect of the calculation of an amount for any period of time (the "**Calculation Period**"), such day count fraction as may be specified in these Conditions or the relevant Final Terms and:

(A) if "**Actual/Actual (ICMA)**" is so specified, means:

(1) where the Calculation Period is equal to or shorter than the Regular Period during which it falls, the actual number of days in the Calculation Period divided by the product of (1) the actual number of days in such Regular Period and (2) the number of Regular Periods normally ending in any year; and

(2) where the Calculation Period is longer than one Regular Period, the sum of:

i. the actual number of days in such Calculation Period falling in the Regular Period in which it begins divided by the product of (1) the actual number of days in such Regular Period and (2) the number of Regular Periods in any year; and

ii. the actual number of days in such Calculation Period falling in the next Regular Period divided by the product of (1) the actual number of days in such Regular Period and (2) the number of Regular Periods normally ending in any year;

(B) if "**Actual/Actual**" or "**Actual/Actual (ISDA)**" is so specified, means the actual number of days in the Calculation Period divided by 365 (or, if any portion of the Calculation Period falls in a leap year, the sum of (A) the actual number of days in that portion of the Calculation Period falling in a leap year divided by 366 and (B) the actual number of days in that portion of the Calculation Period falling in a non-leap year divided by 365);

(C) if "**Actual/365 (Fixed)**" is so specified, means the actual number of days in the Calculation Period divided by 365;

(D) if "**Actual/360**" is so specified, means the actual number of days in the Calculation Period divided by 360;

(E) if "**30/360**" is so specified, means the number of days in the Calculation Period divided by 360 calculated on a formula basis as follows:

$$\text{Day Count Faction} = \frac{[360\ x\ (Y_2 - Y_1)] + [30\ x\ (M_2 - M_1)] + (D_2 - D_1)}{360}$$

where:

"$\mathbf{Y_1}$" is the year, expressed as a number, in which the first day of the Calculation Period falls;

"$\mathbf{Y_2}$" is the year, expressed as a number, in which the day immediately following the last day included in the Calculation Period falls;

"$\mathbf{M_1}$" is the calendar month, expressed as a number, in which the first day of the Calculation Period falls;

"$\mathbf{M_2}$" is the calendar month, expressed as a number, in which the day immediately following the last day included in the Calculation Period falls;

"$\mathbf{D_1}$" is the first calendar day, expressed as a number, of the Calculation Period, unless such number would be 31, in which case D_1 will be 30; and

"$\mathbf{D_2}$" is the calendar day, expressed as a number, immediately following the last day included in the Calculation Period, unless such number would be 31 and D_1 is greater than 29, in which case D_2 will be 30;

(F) if "**30E/360**" or "**Eurobond Basis**" is so specified, means the number of days in the Calculation Period divided by 360, calculated on a formula basis as follows:

$$\text{Day Count Faction} = \frac{[360\ x\ (Y_2 - Y_1)] + [30\ x\ (M_2 - M_1)] + (D_2 - D_1)}{360}$$

where:

"**Y_1**" is the year, expressed as a number, in which the first day of the Calculation Period falls;

"**Y_2**" is the year, expressed as a number, in which the day immediately following the last day included in the Calculation Period falls;

"**M_1**" is the calendar month, expressed as a number, in which the first day of the Calculation Period falls;

"**M_2**" is the calendar month, expressed as a number, in which the day immediately following the last day included in the Calculation Period falls;

"**D_1**" is the first calendar day, expressed as a number, of the Calculation Period, unless such number would be 31, in which case D_1 will be 30; and

"**D_2**" is the calendar day, expressed as a number, immediately following the last day included in the Calculation Period, unless such number would be 31, in which case D_2 will be 30;

(G) if "**30E/360 (ISDA)**" is so specified, means the number of days in the Calculation Period divided by 360, calculated on a formula basis as follows:

$$\text{Day Count Faction} = \frac{[360\ x\ (Y_2 - Y_1)] + [30\ x\ (M_2 - M_1)] + (D_2 - D_1)}{360}$$

where:

"**Y_1**" is the year, expressed as a number, in which the first day of the Calculation Period falls;

"**Y_2**" is the year, expressed as a number, in which the day immediately following the last day included in the Calculation Period falls;

"**M_1**" is the calendar month, expressed as a number, in which the first day of the Calculation Period falls;

"**M_2**" is the calendar month, expressed as a number, in which the day immediately following the last day included in the Calculation Period falls;

"**D_1**" is the first calendar day, expressed as a number, of the Calculation Period, unless (i) that day is the last day of February or (ii) such number would be 31, in which case D_1 will be 30; and

"**D_2**" is the calendar day, expressed as a number, immediately following the last day included in the Calculation Period, unless (i) that day is the last day of February but not the Maturity Date or (ii) such number would be 31, in which case D_2 will be 30;

provided, however, that in each such case the number of days in the Calculation Period is calculated from and including the first day of the Calculation Period to but excluding the last day of the Calculation Period;

"**Default**" means,

(i) an Event of Default; or

(ii) an event or circumstance which would be (with the expiry of a grace period, the giving of notice or the making of any relevant determination) an Event of Default;

"**Early Redemption Amount (Tax)**" means, in respect of any Note, its principal amount or such other amount as may be specified in, or determined in accordance with, the relevant Final Terms;

"**EURIBOR**" means, in respect of any specified currency and any specified period, the interest rate benchmark known as the Euro zone interbank offered rate which is calculated and published by a designated distributor (currently Thomson Reuters) in accordance with the requirements from time to time of the European Money Markets Institute (or any person which takes over administration of that rate);

"**Euroclear**" means Euroclear Bank SA/NV;

"**Extraordinary Resolution**" has the meaning given in the Trust Deed;

"**Final Redemption Amount**" means, in respect of any Note, its principal amount or such other amount as may be specified in, or determined in accordance with, the relevant Final Terms;

"**Financial Indebtedness**" means with respect to any person, at any time, without duplication:

(i) its liabilities for borrowed money and its redemption obligations in respect of any mandatorily redeemable class of shares (or similar equity interests) of such person that is preferred over any other class of shares (or similar equity interests) of such person as to the payment of dividends or payment of any amount upon liquidation or dissolution of such person;

(ii) its liabilities for the deferred purchase price of property acquired by such person (excluding accounts payable arising in the ordinary course of business but including all liabilities created or arising under any conditional sale or other title retention agreement with respect to any such property);

(iii) all liabilities appearing on its balance sheet in accordance with GAAP in respect of capital leases and all liabilities which would appear on its balance sheet in accordance with GAAP in respect of synthetic leases assuming such synthetic leases were accounted for as capital leases (other than any liability in respect of a lease or hire purchase contract which would, in accordance with GAAP in force prior to 1 January 2019, have been treated as an operating lease);

(iv) all liabilities for borrowed money secured by any Security Interest with respect to any property owned by such person (whether or not it has assumed or otherwise become liable for such liabilities);

(v) all its liabilities in respect of letters of credit or instruments serving a similar function issued or accepted for its account by banks and other financial institutions (whether or not representing obligations for borrowed money);

(vi) the aggregate swap termination value of all swap contracts of such person; and

(vii) any Guarantee of such person with respect to liabilities of a type described in any of paragraphs (i) to (v) hereof.

Financial Indebtedness of any person shall include all obligations of such person of the character described in paragraphs (i) through (vi) to the extent such person remains legally liable in respect thereof notwithstanding that any such obligation is deemed to be extinguished under GAAP;

"**Fixed Coupon Amount**" has the meaning given in the relevant Final Terms;

"**GAAP**" means generally accepted accounting principles in the jurisdiction of the Parent from time to time (including, at the Parent's option, IFRS);

"**Group**" means the Parent and its Subsidiaries;

"**Group Member**" means a member of the Group;

"**Guarantee**" means, with respect to any person, any obligation (except the endorsement in the ordinary course of business of negotiable instruments for deposit or collection) of such person guaranteeing or in effect guaranteeing any indebtedness, dividend or other obligation of any other person in any manner, whether directly or indirectly, including (without limitation) obligations incurred through an agreement, contingent or otherwise, by such person:

(i) to purchase such indebtedness or obligation or any property constituting security therefor;

(ii) to advance or supply funds:

    (A) for the purchase or payment of such indebtedness or obligation; or

    (B) to maintain any working capital or other balance sheet condition or any income statement condition of any other person or otherwise to advance or make available funds for the purchase or payment of such indebtedness or obligation;

(iii) to lease properties or to purchase properties or services primarily for the purpose of assuring the owner of such indebtedness or obligation of the ability of any other person to make payment of the indebtedness or obligation; or

(iv) otherwise to assure the owner of such indebtedness or obligation against loss in respect thereof.

In any computation of the indebtedness or other liabilities of the obligor under any Guarantee, the indebtedness or other obligations that are the subject of such Guarantee shall be assumed to be direct obligations of such obligor;

"**Guarantee of the Notes**" means the guarantee of the Notes given by the Guarantors in the Trust Deed;

"**Holding Company**" of any person, means a company in respect of which that other person is a Subsidiary;

"**IFRS**" means international financial reporting standards as issued by the International Accounting Standards Board to the extent applicable to the relevant financial statements;

"**Insignificant Subsidiary**" means, at any time, a Subsidiary of the Parent, of which either (or both):

(i) the net worth is less than two per cent. of Consolidated Net Worth at that time; or

(ii) the net income for the Measurement Period then most recently ended is less than three per cent. of Consolidated Net Earnings for that Measurement Period,

and, in either case, whose Financial Indebtedness in excess of the greater of US$50,000,000 and three per cent. of Consolidated Net Worth at that time is not guaranteed or supported in a similar manner by any other Group Member, unless that Group Member is also an Insignificant Subsidiary.

For the purposes of this definition, net worth for a Subsidiary will be calculated on the same basis as Consolidated Net Worth (but in this case calculated for an individual Subsidiary), with figures being taken from its latest available financial statements (whether year end or semi-annual, and whether audited or otherwise);

"**Interest Amount**" means, in relation to a Note and an Interest Period, the amount of interest payable in respect of that Note for that Interest Period;

"**Interest Commencement Date**" means the Issue Date of the Notes or such other date as may be specified as the Interest Commencement Date in the relevant Final Terms;

"**Interest Determination Date**" has the meaning given in the relevant Final Terms;

"**Interest Payment Date**" means the First Interest Payment Date and any date or dates specified as such in, or determined in accordance with the provisions of, the relevant Final Terms and, if a Business Day Convention is specified in the relevant Final Terms:

(i) as the same may be adjusted in accordance with the relevant Business Day Convention; or

(ii) if the Business Day Convention is the FRN Convention, Floating Rate Convention or Eurodollar Convention and an interval of a number of calendar months is specified in the relevant Final Terms as being the Specified Period, each of such dates as may occur in accordance with the FRN Convention, Floating Rate Convention or Eurodollar Convention at such Specified Period of calendar months following the Interest Commencement Date (in the case of the first Interest Payment Date) or the previous Interest Payment Date (in any other case);

"**Interest Period**" means each period beginning on (and including) the Interest Commencement Date or any Interest Payment Date and ending on (but excluding) the next Interest Payment Date (or, if the Notes are redeemed on any earlier date, the relevant redemption date);

"**Investment**" means any investment, made in cash or by delivery of property, by the Parent or any of its Subsidiaries:

(i) in any person, whether by acquisition of stock, Financial Indebtedness or other obligation or security, or by loan, Guarantee, advance, capital contribution or otherwise; or

(ii) in any property;

"**ISDA**" means the International Swaps and Derivatives Association, Inc. and its successors and assigns;

"**ISDA Definitions**" has the meaning given in the relevant Final Terms;

"**Islamic Financing Transaction**" means a sukuk (or Islamic bond) or similar Islamic debt capital markets instrument which complies with Shari'a where:

(i) an asset of the Parent or any of its Subsidiaries is transferred or otherwise disposed of to a special purpose company;

(ii) the Parent or a Subsidiary has an obligation to (and will) re-acquire that asset upon maturity of the relevant debt capital market instrument; and

(iii) the beneficiaries of the special purpose company:

   (A) have no entitlement or rights to the asset, by way of a Security Interest or otherwise; and

   (B) have no right to prevent the re-transfer of the asset back to the Parent or Subsidiary;

"**Issue Date**" has the meaning given in the relevant Final Terms;

"**Limited Group Member**" means a member of the Group other than an Insignificant Subsidiary;

"**Limited Recourse Trade Finance Indebtedness**" means Financial Indebtedness:

(i) incurred by the Parent or any Subsidiary in respect of a commercial transaction pursuant to which the risk of non-performance by a party to such commercial transaction (the "**Third Party**") other than the Parent or such Subsidiary (as the borrower of such Financial Indebtedness) or the lender financing such Financial Indebtedness, is apportioned (the amount of such Financial Indebtedness apportioned to the Parent or any Subsidiary herein, the "**Apportioned Amount**") between the Parent or such Subsidiary (as the borrower of such Financial Indebtedness) and the lender; and

(ii) in respect of which, upon the non-performance of the Third Party of its contractual obligations in respect of such commercial transaction, the Parent or such Subsidiary (as the borrower of such Financial Indebtedness), as the case may be, is liable to the lender solely for the monetary value of its Apportioned Amount;

"**Margin**" has the meaning given in the relevant Final Terms;

"**Material**" means material in relation to the business, operations, affairs, financial condition, assets, properties or prospects of the Group taken as a whole;

"**Maturity Date**" has the meaning given in the relevant Final Terms;

"**Maximum Redemption Amount**" has the meaning given in the relevant Final Terms;

"**Measurement Period**" means a period of 12 months ending on the last day of a financial half-year of Parent;

"**Meeting**" has the meaning given to it in the Trust Deed;

"**Member State**" means a Member State of the European Economic Area;

"**Minimum Redemption Amount**" has the meaning given in the relevant Final Terms;

"**Non-Recourse Group Member**" means any member of the Group other than (i) any Project Company or (ii) any Holding Company of a Project Company incorporated solely for the purpose of, and whose sole or principal activity consists of, the incurrence of Financial Indebtedness and making that Financial Indebtedness available to that Project Company;

"**Optional Redemption Amount (Call)**" means, in respect of any Note, its principal amount or such other amount as may be specified in, or determined in accordance with, the relevant Final Terms;

"**Optional Redemption Amount (Put)**" means, in respect of any Note, its principal amount or such other amount as may be specified in, or determined in accordance with, the relevant Final Terms;

"**Optional Redemption Date (Call)**" has the meaning given in the relevant Final Terms;

"**Optional Redemption Date (Put)**" has the meaning given in the relevant Final Terms;

"**Parent**" means Trafigura Group Pte. Ltd. or any entity which is substituted for Trafigura Group Pte. Ltd. (or for any previously Substituted Guarantor for Trafigura Group Pte. Ltd. in accordance with Condition 16(c) (*Substitution*));

"**Payment Business Day**" means:

(i) if the currency of payment is euro, any day which is:

(A) a day on which banks in the relevant place of presentation are open for presentation and payment of bearer debt securities and for dealings in foreign currencies; and

(B) in the case of payment by transfer to an account, a TARGET Settlement Day and a day on which dealings in foreign currencies may be carried on in each (if any) Additional Financial Centre; or

(ii) if the currency of payment is not euro, any day which is:

(A) a day on which banks in the relevant place of presentation are open for presentation and payment of bearer debt securities and for dealings in foreign currencies; and

(B) in the case of payment by transfer to an account, a day on which dealings in foreign currencies may be carried on in London, in the Principal Financial Centre of the currency of payment and in each (if any) Additional Financial Centre;

"**Permitted Indebtedness**" means any Financial Indebtedness:

(i) incurred to finance, hedge or execute commodity transactions (including, without limitation, working capital facilities, recourse discounting of receivables, prepayment or similar transactions, take or pay transactions, storage financing, sale and repurchase transactions and commodity inventory and trade receivable borrowing base financing) entered into in the ordinary course of the Parent's or one of its Subsidiary's business, consistent with past practices;

(ii) which is non-recourse or limited recourse trade finance Financial Indebtedness incurred in connection with structured transactions entered into in the ordinary course of the Parent's or one of its Subsidiary's trading business;

(iii) owed by the Parent to any Wholly-Owned Subsidiary or by any Subsidiary of the Parent to the Parent or any Wholly-Owned Subsidiary;

(iv) which is Project Finance Indebtedness incurred in connection with the purchase or refinancing of an Investment, **provided that** the Financial Indebtedness under this paragraph (iv) does not exceed 100 per cent. of the aggregate consideration payable to acquire such Investment;

(v) which is existing at, or entered into upon, the issue date of a Note (and any extensions, or renewals, replacements or refinancings on one or more occasions, including, for the avoidance of doubt, any subsequent refinancing of any such refinancing, and so on) of any such Financial Indebtedness or of such a facility; or

(vi) owed by a Subsidiary and which existed and was outstanding at the time such Subsidiary became a member of the Group and any extensions or renewals thereof;

"**Permitted Securitisation**" means the sale of inventory, receivables or other assets of the Group pursuant to which:

(i) a member of the Group disposes of such inventory, receivables or other assets in a true sale on a non-recourse basis to SPE; and

(ii) SPE incurs Financial Indebtedness to finance its acquisition of such inventory, receivables or assets;

"**Permitted Security Interest**" means:

(i) any Security Interest listed in a Schedule of a Principal Banking Facility setting forth existing Security and Indebtedness of the Group as such Schedule may be updated from time to time by reference to any equivalent Schedule contained in any subsequent agreement recording any Principal Banking Facility entered into after the date of the Trust Deed, except to the extent the principal amount secured by that Security Interest exceeds the amount stated in the then applicable Schedule;

(ii) Security Interests for taxes or assessments or other governmental charges or levies, either not yet due or payable to the extent that non-payment thereof is permitted;

(iii) any liens arising by operation of law and in the ordinary course of business, and any rights of set-off arising by operation of law and in the ordinary course of business in each case, which have not been foreclosed or otherwise enforced against the assets to which they apply;

(iv) Security Interests created by or resulting from any litigation or legal proceedings which are being contested in good faith by appropriate proceedings and with respect to which the relevant member of the Group has established adequate reserves on its books in accordance with applicable accounting principles;

(v) Security Interests incidental to the normal conduct of business of any member of the Group or the ownership of its property, which are not incurred in connection with the incurrence of Financial Indebtedness and which do not (taken as a whole) materially impair the use of such property in the operation of the business of the Group taken as a whole or the value of such property for the purposes of such business;

(vi) Security Interests on property or assets of the Parent or any of its Subsidiaries securing Financial Indebtedness owing to the Parent or a Wholly-Owned Subsidiary;

(vii) Security Interests to secure Permitted Indebtedness (other than Permitted Indebtedness pursuant to paragraph (v) of the definition of that term), **provided that** the aggregate fair market value of the assets that are subject to any such Security Interest does not exceed:

(A) other than in the case of Short-Term Trade Finance and Project Finance Indebtedness, 120 per cent. of the amount of such Permitted Indebtedness incurred by the relevant Subsidiary of the Parent and secured by such assets; or

(B) in the case of Project Finance Indebtedness, 200 per cent. of the amount of such Project Finance Indebtedness incurred by the relevant Subsidiary of the Parent and secured by such assets;

(viii) Security Interests granted by SPE over its assets to secure its Financial Indebtedness arising under a Permitted Securitisation;

(ix) the extension, renewal or replacement of any Security Interest permitted by subparagraph (i) above over the same property, **provided that** no Default would occur as a result;

(x) any Security Interest:

(A) over an asset or any proceeds or revenue derived from that asset to secure any Financial Indebtedness entered into in connection with the provision of all or a part of the purchase price or cost of the construction of such asset, **provided that** the Security Interest is created contemporaneously with, or within 120 days (or such longer period as it may take to perfect the Security Interest in the jurisdiction where such asset is located) after, such acquisition or the completion of such construction; or

(B) over an asset existing at the time of the acquisition of that asset by a member of the Group, whether or not the Financial Indebtedness secured thereby is assumed by that member of the Group; or

(C) existing over an asset of a company at the time such company is merged into or consolidated with a member of the Group, or at the time of a sale, lease or other disposal of the assets of a company or firm as a whole or substantially as a whole to a member of the Group,

provided in each case that the aggregate principal amount of the Financial Indebtedness secured by any such Security Interest does not exceed 100 per cent. of the fair market value of the relevant asset;

(xi) any asset transfer undertaken for the purpose of an Islamic Financing Transaction by the Parent or any of its Subsidiaries;

(xii) any Security Interest required by and as a result granted in favour of governmental authorities in any relevant jurisdiction;

(xiii) any Security Interest to secure Financial Indebtedness of joint ventures in which a member of the Group has an interest, to the extent such Security Interest is on property or assets of or equity interests in such joint ventures;

(xiv) Security Interests securing judgments (including judgment liens) not giving rise to an Event of Default, so long as any such Security Interest is adequately bonded and any appropriate legal proceedings which may have been duly initiated for the review of such judgment have not been finally terminated, or the period within which such proceedings may be initiated has not expired;

(xv) any liens, charges or rights of set-off arising in the ordinary course of business and required by any exchange or settlement system used by a member of the Group in connection with its cash management arrangements and limited to the cash provided by the member of the Group to effect the relevant exchange or settlement;

(xvi) any Security Interest comprising a netting or set-off arrangement entered into by a member of the Group in the ordinary course of its banking arrangements for the purpose of netting debit and credit balances;

(xvii) any Security Interest created pursuant to any order of attachment, distraint, garnishee order or injunction restraining disposal of assets or similar legal process arising in connection with court proceedings not giving rise to an Event of Default;

(xviii) any bonds constituting Security Interests over cash deposits or marketable investment securities to procure the release from judicial arrest of an asset belonging to a member of the Group and not giving rise to an Event of Default;

(xix) any Security Interest over any goods to secure liabilities incurred on concessional terms in connection with the supply of those goods, being terms provided by any governmental or other similar export credit agency or official export-import bank or official export-import credit insurer;

(xx) any Security Interest created in respect of borrowings from any governmental or other similar export credit agency or official export import bank or official export-import credit insurer incurred on concessional terms by any member of the Group made to refinance any amount receivable under any export sales contract where the Security Interest consists only of a pledge or similar Security Interest granted by the member of the Group's claims under the contract against the foreign buyer and of any Security Interests or guarantee of those claims;

(xxi) any Security Interest created in connection with any arrangement entered into between a member of the Group with any person providing for the leasing by any member of the Group of any property which property has been or is to be sold or transferred by a member of the Group to such person, where such arrangement involves (i) a lease for a term, including renewal rights, of not more than 36 months, (ii) a lease of property within 18 months from the acquisition or, in the case of the construction, alteration or improvement of property, the later of the completion of the construction, alteration or improvement of such property or the commencement of commercial operation of the property, or (iii) leases between or among the Parent and any of its Subsidiaries;

(xxii) any liens, charges or rights of set-off arising in the ordinary course of business and required by any exchange or settlement system used by a member of the Group in connection with its cash management arrangements and limited to the cash provided by the member of the Group to effect the relevant exchange or settlement; and

(xxiii) any Security Interest securing Financial Indebtedness, **provided that** the aggregate outstanding amount of Financial Indebtedness secured by Security Interests under this paragraph (xxiii) does not exceed 25 per cent. of Consolidated Net Worth, determined as of the last day of the most recently ended Measurement Period of the Parent for which financial statements have been published;

"**Permitted Transaction**" means:

(i) an intra-Group re-organisation of a Subsidiary of the Parent on a solvent basis **provided however that** any such re-organisation does not, subject to the provisions of Condition 16(c) (*Substitution*), extinguish, or result in a Guarantor being unable to perform or comply with, its obligations under the Guarantee; or

(ii) any other transaction approved by an Extraordinary Resolution of the Noteholders;

"**Person**" means any individual, company, corporation, firm, partnership, joint venture, association, organisation, state or agency of a state or other entity, whether or not having separate legal personality;

"**Principal Banking Facility**" means any senior unsecured funding facility provided to the Parent or any Guarantor of a size greater than USD 500,000,000;

"**Principal Financial Centre**" means, in relation to any currency, the principal financial centre for that currency **provided**, **however**, **that**:

(i) in relation to euro, it means the principal financial centre of such member state of the European Union as is selected (in the case of a payment) by the payee or (in the case of a calculation) by the Issuer; and

(ii) in relation to Australian dollars, it means Sydney and, in relation to New Zealand dollars, it means either Wellington or Auckland, as is selected (in the case of a payment) by the payee or (in the case of a calculation) by the Issuer;

"**Project Company**" means a Subsidiary of the Parent that is incorporated with limited liability and whose sole or principal activity consists in the acquisition, development, operation and/or maintenance of an asset or project;

"**Project Finance Indebtedness**" means Financial Indebtedness incurred in order to finance the acquisition, development, operation and/or maintenance of an asset or project, the creditors of which have no recourse to any Non-Recourse Group Member other than:

(i) an amount which does not exceed all or part of the revenues generated by the operation of the relevant asset or project;

(ii) amounts incurred in respect of the enforcement of security over the asset, assets of the project or all or part of the revenues generated by the operation of the relevant asset or project;

(iii) amounts equal to damages (including liquidated damages) incurred in connection with the breach of a contractual undertaking (other than the undertaking to pay a sum of money not being an amount corresponding to the revenues referred to in paragraph (a) above); or

(iv) under any guarantee by any Non-Recourse Group Member:

   (A) of Financial Indebtedness of a Project Company; and

   (B) under which third party lenders or other creditors of the Project Company (x) prior to completion of the relevant project, have recourse against Non-Recourse Group Member, provided the aggregate exposure of all Non-Recourse Group Members in respect of all guarantees under this sub-clause (x) outstanding at any one time shall not exceed 15 per cent. of Consolidated Net Worth and (y) following completion of the relevant project have no recourse against any Non-Recourse Group Member in its capacity as guarantor other than:

(1) security granted over the share capital, dividends and other rights relating to such share capital of, or any claim against the Project Company or a Holding Company of the Project Company;

(2) undertakings to subscribe for equity, quasi-equity investments or make subordinated debt contributions for the benefit of the Project Company or the Holding Company of the Project Company; and/or

(3) any guarantee the exercise of which relates solely to the operational condition of the asset or project or the operation or maintenance of such asset or project of the Project Company or the Holding Company of the Project Company;

"**Prospectus Regulation**" means Regulation (EU) 2017/1129 (as amended or superseded);

"**Put Option Notice**" means a notice which must be delivered to a Paying Agent by any Noteholder wanting to exercise a right to redeem a Note at the option of the Noteholder;

"**Put Option Receipt**" means a receipt issued by a Paying Agent to a depositing Noteholder upon deposit of a Note with such Paying Agent by any Noteholder wanting to exercise a right to redeem a Note at the option of the Noteholder;

"**Rate of Interest**" means the rate or rates (expressed as a percentage per annum) of interest payable in respect of the Notes specified in the relevant Final Terms or calculated or determined in accordance with the provisions of these Conditions and/or the relevant Final Terms;

"**Redemption Amount**" means, as appropriate, the Final Redemption Amount, the Early Redemption Amount (Tax), the Optional Redemption Amount (Call), the Optional Redemption Amount (Put) or such other amount in the nature of a redemption amount as may be specified in, or determined in accordance with the provisions of, the relevant Final Terms;

"**Reference Price**" has the meaning given in the relevant Final Terms;

"**Reference Rate**" means EURIBOR/SONIA/SOFR/€STR/SARON as specified in the relevant Final Terms in respect of the currency and period specified in the relevant Final Terms;

"**Regular Period**" means:

(i) in the case of Notes where interest is scheduled to be paid only by means of regular payments, each period from and including the Interest Commencement Date to but excluding the first Interest Payment Date and each successive period from and including one Interest Payment Date to but excluding the next Interest Payment Date;

(ii) in the case of Notes where, apart from the first Interest Period, interest is scheduled to be paid only by means of regular payments, each period from and including a Regular Date falling in any year to but excluding the next Regular Date, where "**Regular Date**" means the day and month (but not the year) on which any Interest Payment Date falls; and

(iii) in the case of Notes where, apart from one Interest Period other than the first Interest Period, interest is scheduled to be paid only by means of regular payments, each period from and including a Regular Date falling in any year to but excluding the next Regular Date, where "**Regular Date**" means the day and month (but not the year) on which any Interest Payment Date falls other than the Interest Payment Date falling at the end of the irregular Interest Period;

"**Relevant Date**" means, in relation to any payment, whichever is the later of (a) the date on which the payment in question first becomes due and (b) if the full amount payable has not been received by the Paying Agent on or prior to such due date, the date on which (the full amount having been so received) notice to that effect has been given to the Noteholders;

"**Relevant Financial Centre**" has the meaning given in the relevant Final Terms;

"**Relevant Screen Page**" means the page, section or other part of a particular information service (including, without limitation, Reuters) specified as the Relevant Screen Page in the relevant Final Terms, or such other page, section or other part as may replace it on that information service or such other information service, in each case, as may be nominated by the Person providing or sponsoring the information appearing there for the purpose of displaying rates or prices comparable to the Reference Rate;

"**Relevant Time**" has the meaning given in the relevant Final Terms;

"**Reserved Matter**" means any proposal:

(i) to change any date fixed for payment of principal or interest in respect of the Notes, to reduce the amount of principal or interest payable on any date in respect of the Notes or to alter the method of calculating the amount of any payment in respect of the Notes on redemption or maturity or the date for any such payment;

(ii) to effect the exchange or substitution of the Notes for, or the conversion of the Notes into, shares, bonds or other obligations or securities of the Issuer, any Guarantor or any other person or body corporate formed or to be formed (other than as permitted under Clause 8.3 of the Trust Deed);

(iii) to change the currency in which amounts due in respect of the Notes are payable;

(iv) to modify any provision of the guarantee of the Notes (other than as permitted under Clause 8.3 of the Trust Deed);

(v) to change the quorum required at any Meeting or the majority required to pass an Extraordinary Resolution; or

(vi) to amend this definition;

"**Sanctioned Person**" means, at any time:

(i) any person listed in any list (each such list as amended, supplemented or substituted from time to time) of specially designated nationals or designated persons or entities maintained by any Sanctions Authority;

(ii) any person who is 50 per cent. or more owned by or controlled by, any person or persons described in paragraph (i) of this definition; or

(iii) any person who is otherwise the subject of Sanctions;

"**Sanctions**" means economic, financial or trade sanctions or embargoes enacted or imposed by law or regulation or other restrictive measure and administered or enforced from time to time by (a) the US government, (b) the United Nations Security Council, (c) the European Union or any of its member states' governments, (d) the United Kingdom, (e) the Republic of Singapore or (f) the State Secretariat for Economic Affairs of Switzerland, acting through the respective governmental agencies of any of the foregoing (including through the Office of Foreign Assets Control of the U.S. Department of Treasury, the United States Department of State, the United States Department of Commerce and His Majesty's Treasury (each a "**Sanctions Authority**"));

"**Security Interest**" means any mortgage, pledge, lien, charge, assignment, hypothecation or security interest or any other agreement or arrangement having a similar effect;

"**Short-Term Trade Finance**" means Financial Indebtedness of a member of the Group having a maturity of 365 days or less and which is related to the purchase or sale (and any associated costs, including costs of any hedging arrangements) of commodities and in respect of which the borrower of such Financial Indebtedness has granted a Security Interest over such commodities or the receivables related thereto;

"**SPE**" means (a) Trafigura Securitisation Finance plc, an Irish public limited company, (b) Trafigura Commodities Funding Pte. Ltd., a Singapore private limited company, (c) Trafigura Global Commodities Funding Pte. Ltd., a Singapore private limited company, (d) Argonaut Receivables Company S.A., a Luxembourg public limited company, which, in each case, is neither a Subsidiary of the Parent nor under the control of the Parent, but which is consolidated in the financial statements of the Parent in accordance with GAAP, or (e) any similar vehicle which may or may not be a Subsidiary of the Parent or under its control or consolidated in its financial statements, in each case, established for the purposes of securitising receivables or inventory generated by the Parent or its Subsidiaries;

"**Specified Currency**" has the meaning given in the relevant Final Terms;

"**Specified Denomination(s)**" has the meaning given in the relevant Final Terms;

"**Specified Office**" has the meaning given in the Paying Agency Agreement or, in relation to the Trustee, has the meaning given to it in the Trust Deed;

"**Specified Period**" has the meaning given in the relevant Final Terms;

"**Subsidiary**" means as to any person, any other person in which such first person or one or more of its Subsidiaries owns more than 50 per cent. beneficial interest in the equity of such person and any partnership or joint venture if more than a 50 per cent. interest in the profits or capital thereof 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 person or one or more of its Subsidiaries). Unless the context otherwise requires, any reference to a "Subsidiary" is reference to a Subsidiary of the Parent;

"**Talon**" means a talon for further Coupons;

"**T2**" means the real time gross settlement system operated by the Eurosystem or any successor system;

"**TARGET Settlement Day**" means any day on which the T2 system is open for settlement of payments in euro;

"**Treaty**" means the Treaty establishing the European Communities, as subsequently amended;

"**Wholly-Owned Subsidiary**" means, at any time, any Subsidiary of which 90 per cent. or more of all of the equity interests (except directors' qualifying shares) and voting interests are owned, directly or indirectly, by the Parent; and

"**Zero Coupon Note**" means a Note specified as such in the relevant Final Terms.

(b) ***Interpretation***: In these Conditions:

(i) if the Notes are Zero Coupon Notes, references to Coupons and Couponholders are not applicable;

(ii) if Talons are specified in the relevant Final Terms as being attached to the Notes at the time of issue, references to Coupons shall be deemed to include references to Talons;

(iii) if Talons are not specified in the relevant Final Terms as being attached to the Notes at the time of issue, references to Talons are not applicable;

(iv) any reference to principal shall be deemed to include the Redemption Amount, any additional amounts in respect of principal which may be payable under Condition 11 (*Taxation*), any premium payable in respect of a Note and any other amount in the nature of principal payable pursuant to these Conditions or the Guarantee of the Notes;

(v) any reference to interest shall be deemed to include any additional amounts in respect of interest which may be payable under Condition 11 (*Taxation*) and any other amount in the nature of interest payable pursuant to these Conditions or the Guarantee of the Notes;

(vi) references to Notes being "**outstanding**" shall be construed in accordance with the Trust Deed;

(vii) if an expression is stated in Condition 2(a) to have the meaning given in the relevant Final Terms, but the relevant Final Terms gives no such meaning or specifies that such expression is "**not applicable**" then such expression is not applicable to the Notes;

(viii) any reference to the Paying Agency Agreement or the Trust Deed shall be construed as a reference to the Paying Agency Agreement or the Trust Deed, as the case may be, as amended and/or supplemented up to and including the Issue Date of the Notes; and

(ix) any reference in these Conditions to any legislation (whether primary legislation or regulations or other subsidiary legislation made pursuant to primary legislation) shall be construed as a reference to such legislation as the same may have been, or may from time to time be, amended or re-enacted.

3. Form, Denomination and Title

The Notes are in bearer form in the Specified Denomination(s) with Coupons and, if specified in the relevant Final Terms, Talons attached at the time of issue, **provided that** in the case of any Notes which are to be admitted to trading on a regulated market within the European Economic Area or offered to the public in a Member State in circumstances which require the publication of a prospectus under the Prospectus Regulation, the minimum Specified Denomination shall be EUR 100,000 (or its equivalent in any other currency as at the Issue Date of the relevant Notes). In the case of a Series of Notes with more than one Specified Denomination, Notes of one Specified Denomination will not be exchangeable for Notes of another Specified Denomination. Title to the Notes and the Coupons will pass by delivery. The holder of any Note or Coupon shall (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 other interest therein, any writing thereon or any notice of any previous loss or theft thereof) and no Person shall be liable for so treating such holder.

4. Status and Guarantees

(a) ***Status of the Notes***: The Notes constitute direct, general and unconditional obligations of the Issuer which will at all times rank *pari passu* among themselves and at least *pari passu* with all other present and future unsecured and unsubordinated obligations of the Issuer, save for such obligations as may be preferred by provisions of law that are both mandatory and of general application.

(b) ***Guarantees of the Notes***: The Guarantors have in the Trust Deed unconditionally and irrevocably guaranteed, on a joint and several basis, the due and punctual payment of all sums from time to time payable by the Issuer in respect of the Notes and the Trust Deed. The Guarantee of the Notes and amounts payable under the Trust Deed constitutes direct, general and unconditional obligations of each Guarantor which will at all times rank at least *pari passu* with all other present and future unsecured and unsubordinated obligations of such Guarantor, save for such obligations as may be preferred by provisions of law that are both mandatory and of general application.

5. Negative Pledge

So long as any Note remains outstanding (as defined in the Trust Deed), neither the Issuer nor the Guarantors shall, and the Issuer and Guarantors shall procure that no member of the Group (other than any Insignificant Subsidiary) will, create or allow to exist any Security Interest (other than a Permitted Security Interest) on any of its assets or undertaking without (a) at the same time or prior thereto securing the Notes equally and rateably therewith to the satisfaction of the Trustee or (b) providing such other security or other beneficial arrangement for the Notes as the Trustee may in its absolute discretion deem not to be materially less beneficial to the interests of the Noteholders or as may be approved by an Extraordinary Resolution of Noteholders.

6. Fixed Rate Note Provisions

(a) ***Application***: This Condition 6 is applicable to the Notes only if the Fixed Rate Note Provisions are specified in the relevant Final Terms as being applicable.

(b) ***Accrual of interest***: The Notes bear interest from, and including, the Interest Commencement Date at the Rate of Interest payable in arrear on each Interest Payment Date, subject as provided in Condition 10 (*Payments*). Each Note will cease to bear interest from the due date for final redemption unless, upon due presentation, payment of the Redemption Amount is improperly withheld or refused, in which case it will continue to bear interest in accordance with this Condition 6 (both before and after judgment) until whichever is the earlier of (i) the day on which all sums due in respect of such Note up to that day are received by or on behalf of the relevant Noteholder and (ii) the day which is seven days after the Principal Paying Agent or, as the case may be, the Trustee has notified the Noteholders that it has received all sums due in respect of the Notes up to such seventh day (except to the extent that there is any subsequent default in payment).

(c) ***Fixed Coupon Amount***: The amount of interest payable in respect of each Note for any Interest Period shall be the relevant Fixed Coupon Amount and, if the Notes are in more than one Specified Denomination, shall be the relevant Fixed Coupon Amount in respect of the relevant Specified Denomination.

(d) ***Calculation of Interest Amount***: The amount of interest payable per Calculation Amount in respect of each Note for any period for which a Fixed Coupon Amount (or formula for its calculation) is not specified shall be equal to the product of the Rate of Interest, the Calculation Amount and the relevant Day Count Fraction and rounding the resulting figure to the nearest sub-unit of the Specified Currency (half a sub-unit being rounded upwards). For this purpose a "**sub-unit**" means, in the case of any currency other than euro, the lowest amount of such currency that is available as legal tender in the country of such currency and, in the case of euro, means one cent.

(e) ***Net Interest Amount***: Subject to the terms at Condition 11 (*Taxation*) if any withholding or deduction for or on account of tax is required by law and is imposed by the jurisdiction of the Issuer or, as the case may be, any Guarantor on any payment of principal or interest in respect of the Notes, the Issuer or, as the case may be, the relevant Guarantor shall pay such additional amount as will result in receipt by the Noteholders and Couponholders of such amount as would have been received by them if no such withholding or deduction had been required.

7. **Floating Rate Note Provisions**

(a) ***Application***: This Condition 7 is applicable to the Notes only if the Floating Rate Note Provisions are specified in the relevant Final Terms as being applicable.

(b) ***Accrual of interest***: The Notes bear interest from, and including, the Interest Commencement Date at the Rate of Interest payable in arrear on each Interest Payment Date, subject as provided in Condition 10 (*Payments*). Each Note will cease to bear interest from the due date for final redemption unless, upon due presentation, payment of the Redemption Amount is improperly withheld or refused, in which case it will continue to bear interest in accordance with this Condition (both before and after judgment) until whichever is the earlier of (i) the day on which all sums due in respect of such Note up to that day are received by or on behalf of the relevant Noteholder and (ii) the day which is seven days after the Principal Paying Agent or, as the case may be, the Trustee has notified the Noteholders that it has received all sums due in respect of the Notes up to such seventh day (except to the extent that there is any subsequent default in payment).

(c) ***Screen Rate Determination***:

If Screen Rate Determination is specified in the relevant Final Terms as the manner in which the Rate(s) of Interest is/are to be determined, the Rate of Interest applicable to the Notes for each Interest Period will be (other than in respect of Notes for which SONIA, SOFR , €STR or SARON is specified as the Reference Rate in the relevant Final Terms) determined by the Calculation Agent on the following basis:

(i) if the Reference Rate is a composite quotation or customarily supplied by one entity, the Calculation Agent will determine the Reference Rate which appears on the Relevant Screen Page as of the Relevant Time on the relevant Interest Determination Date;

(ii) in any other case, the Calculation Agent will determine the arithmetic mean of the Reference Rates which appear on the Relevant Screen Page as of the Relevant Time on the relevant Interest Determination Date;

(iii) if, in the case of (i) above, such rate does not appear on that page or, in the case of (ii) above, fewer than two such rates appear on that page or if, in either case, the Relevant Screen Page is unavailable,

the Rate of Interest applicable to the Notes during such Interest Period will be the sum of the Margin and the rate or (as the case may be) the arithmetic mean last determined in relation to the Notes in respect of a preceding Interest Period.

If Linear Interpolation is specified as applicable in respect of an Interest Period in the applicable Final Terms, the Rate of Interest for such Interest Period shall be calculated by the Calculation Agent by straight-line linear interpolation by reference to two rates which appear on the Relevant Screen Page as of the Relevant Time on the relevant Interest Determination Date, where:

(A) one rate shall be determined as if the relevant Interest Period were the period of time for which rates are available next shorter than the length of the relevant Interest Period; and

(B) the other rate shall be determined as if the relevant Interest Period were the period of time for which rates are available next longer than the length of the relevant Interest Period; **provided, however, that** if no rate is available for a period of time next shorter or, as the case may be, next longer than the length of the relevant Interest Period, then the Calculation Agent shall calculate the Rate of Interest at such time and by reference to such sources as the Issuer, in consultation with an Independent Adviser appointed by the Issuer (and such Independent Adviser to act in good faith and in a commercially reasonable manner) determines appropriate and notifies to it.

(d) ***ISDA Determination***:

If ISDA Determination is specified in the relevant Final Terms as the manner in which the Rate(s) of Interest is/are to be determined, the Rate of Interest applicable to the Notes for each Interest Period will be the sum of the Margin and the relevant ISDA Rate where "**ISDA Rate**" in relation to any Interest Period means a rate equal to the Floating Rate (as defined in the ISDA Definitions) that would be determined by the Calculation Agent, provided that in any circumstances where under the ISDA Definitions the Calculation Agent would be required to exercise any discretion, including the selection of any reference banks and seeking quotations from reference banks, when calculating the relevant ISDA Rate, the relevant determination(s) which require the Calculation Agent to exercise its discretion shall instead be made by the Issuer or its designee, under an interest rate swap transaction under the terms of an agreement incorporating the ISDA Definitions and under which:

(1) if the relevant Final Terms specify either "2006 ISDA Definitions" or "2021 ISDA Definitions" as the applicable ISDA Definitions:

(i) the Floating Rate Option (as defined in the ISDA Definitions) is as specified in the relevant Final Terms;

(ii) the Designated Maturity (as defined in the ISDA Definitions), if applicable, is a period specified in the relevant Final Terms;

(iii) the relevant Reset Date (as defined in the ISDA Definitions), unless otherwise specified in the relevant Final Terms, has the meaning given to it in the ISDA Definitions;

(iv) if Linear Interpolation is specified as applicable in respect of an Interest Period in the applicable Final Terms, the Rate of Interest for such Interest Period shall be calculated by the Calculation Agent by straight-line linear interpolation by reference to two rates based on the relevant Floating Rate Option, where:

(A) one rate shall be determined as if the Designated Maturity were the period of time for which rates are available next shorter than the length of the relevant Interest Period; and

(B) the other rate shall be determined as if the Designated Maturity were the period of time for which rates are available next longer than the length of the relevant Interest Period,

provided, however, that if there is no rate available for a period of time next shorter than the length of the relevant Interest Period or, as the case may be, next longer than the length of the relevant Interest Period, then the Calculation Agent shall calculate the Rate of Interest at such time and by reference to such sources as the Issuer, in consultation with an Independent Adviser appointed by the Issuer (and such Independent Adviser to act in good faith and in a commercially reasonable manner) determines appropriate; and

(v) if the Floating Rate Option specified in the relevant Final Terms is an Overnight Floating Rate Option, Compounding is specified as applicable in the relevant Final Terms and:

(A) if Compounding with Lookback is specified as the Compounding Method in the relevant Final Terms then (a) Compounding with Lookback is the Overnight Rate Compounding Method and (b) Lookback is the number of Applicable Business Days specified in the relevant Final Terms;

(B) if Compounding with Observation Period Shift is specified as the Compounding Method in the relevant Final Terms then (a) Compounding with Observation Period Shift is the Overnight Rate Compounding Method, (b) Observation Period Shift Additional Business Days, if applicable, are the days specified in the relevant Final Terms, and (c) Observation Period Shift is the number of Observation Period Shift Business Days specified in the relevant Final Terms; or

(C) if Compounding with Lockout is specified as the Compounding Method in the relevant Final Terms then (a) Compounding with Lockout is the Overnight Rate Compounding Method, (b) Lockout Period Business Days, if applicable, are the days specified in the relevant Final Terms and (c) Lockout is the number of Lockout Period Business Days specified in the relevant Final Terms; and

(vi) if the Floating Rate Option specified in the relevant Final Terms is an Overnight Floating Rate Option, Averaging is specified to be applicable in the relevant Final Terms and:

(A) if Averaging with Lookback is specified as the Averaging Method in the relevant Final Terms then (a) Averaging with Lookback is the Overnight Rate Averaging Method and (b) Lookback is the number of Applicable Business Days as specified in relevant Final Terms;

(B) if Averaging with Observation Period Shift is specified as the Averaging Method in the relevant Final Terms then (a) Averaging with Lookback is the Overnight Rate Averaging Method, (b) Observation Period Shift is the number of Observation Period Shift Business Days specified in the relevant Final Terms, and (c) Observation Period Shift Additional Business Days, if applicable, are the days specified in the relevant Final Terms; or

(C) if Averaging with Lockout is specified as the Averaging Method in the relevant Final Terms then (a) Averaging with Lookback is the Overnight Rate Averaging Method, (b) Lockout is the number of Lockout Period Business Days specified in the relevant Final Terms, and (c) Lockout Period Business Days, if applicable, are the days specified in the relevant Final Terms;

(2) references in the ISDA Definitions to:

(a) "**Confirmation**" shall be references to the relevant Final Terms;

(b) "**Calculation Period**" shall be references to the relevant Interest Period;

(c) "**Termination Date**" shall be references to the Maturity Date and

(d) "**Effective Date**" shall be references to the Interest Commencement Date.

(3) if the Final Terms specify "2021 ISDA Definitions" as being applicable:

(a) "**Administrator/Benchmark Event**" shall be disapplied; and

(b) if the Temporary Non-Publication Fallback in respect of any specified Floating Rate Option is specified to be "Temporary Non-Publication Fallback – Alternative Rate" in the Floating Rate Matrix of the 2021 ISDA Definitions the reference to "Calculation Agent Alternative Rate Determination" in the definition of "Temporary Non-Publication Fallback – Alternative Rate" shall be replaced by "Temporary Non-Publication Fallback – Previous Day's Rate".

(4) Unless otherwise defined capitalised terms used in this Condition 7(d) shall have the meaning ascribed to them in the ISDA Definitions.

(e) ***Screen Rate Determination – Floating Rate Notes Referencing SONIA***

(1) This Condition 7(e) is applicable to the Notes only if the Floating Rate Note Provisions are specified in the relevant Final Terms as being applicable, Screen Rate Determination is specified in the relevant Final Terms as the manner in which the Rate(s) of Interest is/are to be determined, and the "Reference Rate" is specified in the relevant Final Terms as being "SONIA";

(2) Where "SONIA" is specified as the Reference Rate in the Final Terms, the Rate of Interest for each Interest Period will, subject as provided below, be Compounded Daily SONIA plus or minus (as specified in the relevant Final Terms) the Margin, all as determined by the Calculation Agent;

(3) For the purposes of this Condition 7(e):

"**Compounded Daily SONIA**", with respect to an Interest Period, will be calculated by the Calculation Agent on each Interest Determination Date in accordance with the following formula, and the resulting percentage will be rounded, if necessary, to the fourth decimal place, with 0.00005 being rounded upwards:

$$\left[\prod_{i=1}^{d_0}\left(1+\frac{SONIA_{i-pLBD}\times n_i}{365}\right)-1\right]\times\frac{365}{d}$$

"**d**" means the number of calendar days in:

(i) where "Lag" is specified as the Observation Method in the relevant Final Terms, the relevant Interest Period; or

(ii) where "Observation Shift" is specified as the Observation Method in the relevant Final Terms, the relevant Observation Period;

"**d_o**" means the number of London Banking Days in:

(i) where "Lag" is specified as the Observation Method in the relevant Final Terms, the relevant Interest Period; or

(ii) where "Observation Shift" is specified as the Observation Method in the relevant Final Terms, the relevant Observation Period;

"**i**" means a series of whole numbers from one to d_o, each representing the relevant London Banking Day in chronological order from, and including, the first London Banking Day in:

(i) where "Lag" is specified as the Observation Method in the relevant Final Terms, the relevant Interest Period; or

(ii) where "Observation Shift" is specified as the Observation Method in the relevant Final Terms, the relevant Observation Period;

to, and including, the last London Banking Day in such period;

"**Interest Determination Date**" means, in respect of any Interest Period, the date falling "p" London Banking Days prior to the Interest Payment Date for such Interest Period (or the date falling "p" London Banking Days prior to such earlier date, if any, on which the Notes are due and payable).

"**London Banking Day**" or "**LBD**" means any day on which commercial banks are open for general business (including dealing in foreign exchange and foreign currency deposits) in London;

"$\mathbf{n_i}$" for any London Banking Day "i", in the relevant Interest Period or Observation Period (as applicable) is the number of calendar days from, and including, such London Banking Day "i" up to, but excluding, the following London Banking Day;

"**Observation Period**" means, in respect of an Interest Period, the period from, and including, the date falling "p" London Banking Days prior to the first day of such Interest Period (and the first Interest Period shall begin on and include the Interest Commencement Date) and ending on, but excluding, the date which is "p" London Banking Days prior to the Interest Payment Date for such Interest Period (or the date falling p London Banking Days prior to such earlier date, if any, on which the Notes become due and payable);

"**p**" for any Interest Period or Observation Period (as applicable), means the number of London Banking Days specified as the "Lag Period" or the "Observation Shift Period" (as applicable) in the relevant Final Terms or if no such period is specified, five London Banking Days;

"**SONIA Reference Rate**" means, in respect of any London Banking Day, a reference rate equal to the daily Sterling Overnight Index Average ("**SONIA**") rate for such London Banking Day as provided by the administrator of SONIA to authorised distributors and as then published on the Relevant Screen Page (or if the Relevant Screen Page is unavailable, as otherwise is published by such authorised distributors) on the London Banking Day immediately following such London Banking Day; and

"$\mathbf{SONIA_i}$" means the SONIA Reference Rate for:

(i) where "Lag" is specified as the Observation Method in the relevant Final Terms, the London Banking Day falling "p" London Banking Days prior to the relevant London Banking Day "i"; or

(ii) where "Observation Shift" is specified as the Observation Method in the relevant Final Terms; the relevant London Banking Day "i";

For the avoidance of doubt, the formula for the calculation of Compounded Daily SONIA only compounds the SONIA Reference Rate in respect of any London Banking Day. The SONIA Reference Rate applied to a day that is a non-London Banking Day will be taken by applying the SONIA Reference Rate for the previous London Banking Day but without compounding.

(4) If, in respect of any London Banking Day in the relevant Interest Period or Observation Period (as applicable), the Calculation Agent determines that the SONIA Reference Rate is not available on the Relevant Screen Page or has not otherwise been published by the relevant authorised distributors, such SONIA Reference Rate shall, subject to Condition 7(o) (*Benchmark Discontinuation*), be:

(i) the Bank of England's Bank Rate (the "**Bank Rate**") prevailing at close of business on the relevant London Banking Day; plus the mean of the spread of the SONIA Reference Rate to the Bank Rate over the previous five London Banking Days on which a SONIA Reference Rate has been published, excluding the highest spread (or, if there is more than one highest spread, one only of those highest spreads) and lowest spread (or, if there is more than one lowest spread, one only of those lowest spreads) to the Bank Rate; or

(ii) if the Bank Rate is not published by the Bank of England at close of business on the relevant London Banking Day, the SONIA Reference Rate published on the Relevant Screen Page (or otherwise published by the relevant authorised distributors) for the first preceding London Banking Day on which the SONIA Reference Rate was published on the Relevant Screen Page (or otherwise published by the relevant authorised distributors or if this is more recent, the latest determined rate under (i)).

(5) Subject to Condition 7(o) (*Benchmark Discontinuation*) if the Rate of Interest cannot be determined in accordance with the foregoing provisions of this Condition 7(e), the Rate of Interest shall be (i) that determined as at the last preceding Interest Determination Date (though substituting, where a different Margin is to be applied to the relevant Interest Period from that which applied to the last preceding Interest Period, the Margin relating to the relevant Interest Period, in place of the Margin relating to that last preceding Interest Period) or (ii) if there is no such preceding Interest Determination Date, the initial Rate of Interest which would have been applicable to the Notes for the first Interest Period had the Notes been in issue for a period equal in duration to the scheduled first Interest Period but ending on (and excluding) the Interest Commencement Date (but applying the Margin applicable to the first Interest Period).

(f) ***Screen Rate Determination – Floating Rate Notes referencing SOFR***

(1) This Condition 7(f) is applicable to the Notes only if the Floating Rate Note Provisions are specified in the relevant Final Terms as being applicable, Screen Rate Determination is specified in the relevant Final Terms as the manner in which the Rate(s) of Interest is/are to be determined, and the "Reference Rate" is specified in the relevant Final Terms as being "SOFR".

(2) Where "SOFR" is specified as the Reference Rate in the Final Terms, the Rate of Interest for each Interest Period will, subject as provided below, be the Benchmark plus or minus (as specified in the relevant Final Terms) the Margin, all as determined by the Calculation Agent on each Interest Determination Date.

(3) For the purposes of this Condition 7(f):

"**Benchmark**" means Compounded SOFR, which is a compounded average of daily SOFR, as determined for each Interest Period in accordance with the specific formula and other provisions set out in this Condition 7(f).

Daily SOFR rates will not be published in respect of any day that is not a U.S. Government Securities Business Day, such as a Saturday, Sunday or holiday. For this reason, in determining Compounded SOFR in accordance with the specific formula and other provisions set forth herein, the daily SOFR rate for any U.S. Government Securities Business Day that immediately precedes one or more days that are not U.S. Government Securities Business Days will be multiplied by the number of calendar days from and including such U.S. Government Securities Business Day to, but excluding, the following U.S. Government Securities Business Day.

If the Issuer determines that a Benchmark Transition Event and its related Benchmark Replacement Date have occurred in respect of Compounded SOFR (or the daily SOFR used in the calculation hereof) prior to the relevant SOFR Determination Time, then the provisions under Condition 7(f)(4) below will apply.

"**Compounded SOFR**" with respect to any Interest Period, means the rate of return of a daily compound interest investment computed in accordance with the following formula (and the resulting percentage will be rounded, if necessary, to the nearest one hundred-thousandth of a percentage point, with 0.000005 being rounded upwards to 0.00001):

$$\left[\prod_{i=1}^{d_0}\left(1+\frac{SOFR_i \times n_i}{360}\right)\right] \times \frac{360}{d}$$

"**d**" means the number of calendar days in:

(i) where "Lag" is specified as the Observation Method in the relevant Final Terms, the relevant Interest Period; or

(ii) where "Observation Shift" is specified as the Observation Method in the relevant Final Terms, the relevant Observation Period;

"$\mathbf{d_o}$" means the number of U.S. Government Securities Business Days in:

(i) where "Lag" is specified as the Observation Method in the relevant Final Terms, the relevant Interest Period; or

(ii) where "Observation Shift" is specified as the Observation Method in the relevant Final Terms, the relevant Observation Period;

"**i**" is a series of whole numbers from one to do, each representing the relevant U.S. Government Securities Business Day in chronological order from, and including, the first U.S. Government Securities Business Day in:

(i) where "Lag" is specified as the Observation Method in the relevant Final Terms, the relevant Interest Period; or

(ii) where "Observation Shift" is specified as the Observation Method in the relevant Final Terms, the relevant Observation Period;

to, and including, the last U.S. Government Securities Business Day in such period;

"**Interest Determination Date**" means, in respect of any Interest Period, the date falling "p" U.S. Government Securities Business Days prior to the Interest Payment Date for such Interest Period (or the date falling "p" U.S. Government Securities Business Days prior to such earlier date, if any, on which the Notes are due and payable);

"$\mathbf{n_i}$" for any U.S. Government Securities Business Day "i", in the relevant Interest Period or Observation Period (as applicable) is the number of calendar days from, and including, such U.S. Government Securities Business Day "i" up to, but excluding, the following U.S. Government Securities Business Day ("i+1");

"**Observation Period**" in respect of an Interest Period means the period from, and including, the date falling "p" U.S. Government Securities Business Days preceding the first day in such Interest Period (and the first Interest Period shall begin on and include the Interest Commencement Date) to, but excluding, the date falling "p" U.S. Government Securities Business Days preceding the Interest Payment Date for such Interest Period (or the date falling "p" U.S. Government Securities Business Days prior to such earlier date, if any, on which the Notes become due and payable);

"**p**" for any Interest Period or Observation Period (as applicable), means the number of U.S. Government Securities Business Days specified as the "Lag Period" or the "Observation Shift Period" (as applicable) in the relevant Final Terms or if no such period is specified, five U.S. Government Securities Business Days;

"**SOFR**" with respect to any U.S. Government Securities Business Day, means:

(i) the Secured Overnight Financing Rate published for such U.S. Government Securities Business Day as such rate appears on the SOFR Administrator's Website at 3:00 p.m. (New York time) on the immediately following U.S. Government Securities Business Day (the "**SOFR Determination Time**"); or

(ii) Subject to Condition 7(f)(4) below, if the rate specified in (i) above does not so appear, the Secured Overnight Financing Rate as published in respect of the first preceding U.S. Government Securities Business Day for which the Secured Overnight Financing Rate was published on the SOFR Administrator's Website;

"**SOFR Administrator**" means the Federal Reserve Bank of New York (or a successor administrator of the Secured Overnight Financing Rate);

"**SOFR Administrator's Website**" means the website of the Federal Reserve Bank of New York, or any successor source;

"**$SOFR_i$**" means the SOFR for:

(i) where "Lag" is specified as the Observation Method in the applicable Final Terms, the U.S. Government Securities Business Day falling "p" U.S. Government Securities Business Days prior to the relevant U.S. Government Securities Business Day "i"; or

(ii) where "Observation Shift" is specified as the Observation Method in the relevant Final Terms, the relevant U.S. Government Securities Business Day "i"; and

"**U.S. Government Securities Business Day**" means any day except for a Saturday, a Sunday or a day on which the Securities Industry and Financial Markets Association recommends that the fixed income departments of its members be closed for the entire day for purposes of trading in U.S. government securities.

(4) If the Issuer determines on or prior to the relevant Reference Time that a Benchmark Transition Event and its related Benchmark Replacement Date have occurred with respect to the then-current Benchmark, the Benchmark Replacement will replace the then-current Benchmark for all purposes relating to the Notes in respect of all determinations on such date and for all determinations on all subsequent dates. In connection with the implementation of a Benchmark Replacement, the Issuer will have the right to make Benchmark Replacement Conforming Changes from time to time, without any requirement for the consent or approval of the Trustee or the Noteholders.

Any determination, decision or election that may be made by the Issuer pursuant to this section, including any determination with respect to a tenor, rate or adjustment or of the occurrence or non-occurrence of an event, circumstance or date and any decision to take or refrain from taking any action or any selection:

(i) will be conclusive and binding absent manifest error;

(ii) will be made in the sole discretion of the Issuer; and

(iii) notwithstanding anything to the contrary in the documentation relating to the Notes, shall become effective without consent from the holders of the Notes or any other party.

"**Benchmark**" means, initially, Compounded SOFR, as such term is defined above; provided that if the Issuer determines on or prior to the Reference Time that a Benchmark Transition Event and its related Benchmark Replacement Date have occurred with respect to Compounded SOFR (or the published daily SOFR used in the calculation thereof) or the then-current Benchmark, then "Benchmark" shall mean the applicable Benchmark Replacement.

"**Benchmark Replacement**" means the first alternative set forth in the order below that can be determined by the Issuer as of the Benchmark Replacement Date:

(i) the sum of: (A) the alternate rate of interest that has been selected or recommended by the Relevant Governmental Body as the replacement for the then-current Benchmark and (B) the Benchmark Replacement Adjustment;

(ii) the sum of: (A) the ISDA Fallback Rate and (B) the Benchmark Replacement Adjustment; or

(iii) the sum of: (A) the alternate rate of interest that has been selected by the Issuer as the replacement for the then-current Benchmark giving due consideration to any industry-accepted rate of interest as a replacement for the then-current Benchmark for U.S. dollar-denominated floating rate notes at such time and (B) the Benchmark Replacement Adjustment;

"**Benchmark Replacement Adjustment**" means the first alternative set forth in the order below that can be determined by the Issuer as of the Benchmark Replacement Date:

(i) the spread adjustment, or method for calculating or determining such spread adjustment, (which may be a positive or negative value or zero) that has been selected or recommended by the Relevant Governmental Body for the applicable Unadjusted Benchmark Replacement;

(ii) if the applicable Unadjusted Benchmark Replacement is equivalent to the ISDA Fallback Rate, the ISDA Fallback Adjustment; or

(iii) the spread adjustment (which may be a positive or negative value or zero) that has been selected by the Issuer giving due consideration to any industry-accepted spread adjustment, or method for calculating or determining such spread adjustment, for the replacement of the then-current Benchmark with the applicable Unadjusted Benchmark Replacement for U.S. dollar-denominated floating rate notes at such time;

"**Benchmark Replacement Conforming Changes**" means, with respect to any Benchmark Replacement, any technical, administrative or operational changes (including changes to the timing and frequency of determining rates and making payments of interest, rounding of amounts or tenors, and other administrative matters) that the Issuer decides may be appropriate to reflect the adoption of such Benchmark Replacement in a manner substantially consistent with market practice (or, if the Issuer decides that adoption of any portion of such market practice is not administratively feasible or if the Issuer determines that no market practice for use of the Benchmark Replacement exists, in such other manner as the Issuer determines is reasonably necessary);

"**Benchmark Replacement Date**" means the earliest to occur of the following events with respect to the then-current Benchmark (including the daily published component used in the calculation thereof):

(i) in the case of clause (i) or (ii) of the definition of "Benchmark Transition Event", the later of (a) the date of the public statement or publication of information referenced therein and (b) the date on which the administrator of the Benchmark permanently or indefinitely ceases to provide the Benchmark (or such component); or

(ii) in the case of clause (iii) of the definition of "Benchmark Transition Event", the date of the public statement or publication of information referenced therein.

For the avoidance of doubt, if the event that gives rise to the Benchmark Replacement Date occurs on the same day as, but earlier than, the Reference Time in respect of any determination, the Benchmark Replacement Date will be deemed to have occurred prior to the Reference Time for such determination;

"**Benchmark Transition Event**" means the occurrence of one or more of the following events with respect to the then-current Benchmark (including the daily published component used in the calculation thereof):

(i) a public statement or publication of information by or on behalf of the administrator of the Benchmark (or such component) announcing that such administrator has ceased or will cease to provide the Benchmark (or such component), permanently or indefinitely, provided that, at the time of such statement or publication, there is no successor administrator that will continue to provide the Benchmark (or such component); or

(ii) a public statement or publication of information by the regulatory supervisor for the administrator of the Benchmark (or such component), the central bank for the currency of the Benchmark (or such component), an insolvency official with jurisdiction over the administrator for the Benchmark (or such component), a resolution authority with jurisdiction over the administrator for the Benchmark (or such component) or a court or an entity with similar insolvency or resolution authority over the administrator for the Benchmark, which states that the administrator of the Benchmark (or such component) has ceased or will cease to provide the Benchmark (or such component) permanently or indefinitely, provided that, at the time of such statement or publication, there is no successor administrator that will continue to provide the Benchmark (or such component); or

(iii) a public statement or publication of information by the regulatory supervisor for the administrator of the Benchmark announcing that the Benchmark is no longer representative;

"**ISDA Fallback Adjustment**" means the spread adjustment (which may be a positive or negative value or zero) that would apply for derivatives transactions referencing the 2006 ISDA Definitions to be determined upon the occurrence of an index cessation event with respect to the Benchmark;

"**ISDA Fallback Rate**" means the rate that would apply for derivatives transactions referencing the 2006 ISDA Definitions to be effective upon the occurrence of an index cessation date with respect to the Benchmark for the applicable tenor excluding the applicable ISDA Fallback Adjustment;

"**Reference Time**" with respect to any determination of the Benchmark means (i) if the Benchmark is Compounded SOFR, the SOFR Determination Time, and (ii) if the Benchmark is not Compounded SOFR, the time determined by the Issuer after giving effect to the Benchmark Replacement Conforming Changes;

"**Relevant Governmental Body**" means the Federal Reserve Board and/or the Federal Reserve Bank of New York, or a committee officially endorsed or convened by the Federal Reserve Board and/or the Federal Reserve Bank of New York or any successor thereto; and

"**Unadjusted Benchmark Replacement**" means the Benchmark Replacement excluding the Benchmark Replacement Adjustment.

(5) Any Benchmark Replacement, Benchmark Replacement Adjustment and the specific terms of any Benchmark Replacement Conforming Changes, determined under Condition 7(f)(4) above will be notified promptly by the Issuer to the Trustee, the Calculation Agent, the Paying Agents and, in accordance with Condition 20 (*Notices*), the Noteholders. Such notice shall be irrevocable and shall specify the effective date on which such changes take effect.

No later than notifying the Trustee of the same, the Issuer shall deliver to the Trustee a certificate signed by two authorised signatories of the Issuer:

(i) confirming (x) that a Benchmark Transition Event has occurred, (y) the relevant Benchmark Replacement and, (z) where applicable, any Benchmark Replacement Adjustment and/or the specific terms of any relevant Benchmark Replacement Conforming Changes, in each case as determined in accordance with the provisions of this Condition 7(f); and

(ii) certifying that the relevant Benchmark Replacement Conforming Changes are necessary to ensure the proper operation of such Benchmark Replacement and/or Benchmark Replacement Adjustment.

(6) If the Rate of Interest cannot be determined in accordance with the foregoing provisions of this Condition 7(f), the Rate of Interest shall be (x) that determined as at the last preceding Interest Determination Date (though substituting, where a different Margin is to be applied to the relevant Interest Period from that which applied to the last preceding Interest Period, the Margin relating to the relevant Interest Period, in place of the Margin relating to that last preceding Interest Period) or (y) if there is no such preceding Interest Determination Date, the initial Rate of Interest which would have been applicable to the Notes for the first Interest Period had the Notes been in issue for a period equal in duration to the scheduled first Interest Period but ending on (and excluding) the Interest Commencement Date (but applying the Margin applicable to the first Interest Period).

(g) ***Screen Rate Determination – Floating Rate Notes referencing €STR***

(1) This Condition 7(g) is applicable to the Notes only if the Floating Rate Note Provisions are specified in the relevant Final Terms as being applicable, Screen Rate Determination is specified in the relevant Final Terms as the manner in which the Rate(s) of Interest is/are to be determined, and the "Reference Rate" is specified in the relevant Final Terms as being "€STR".

(2) Where "€STR" is specified as the Reference Rate in the Final Terms, the Rate of Interest for each Interest Period will, subject as provided below, be Compounded Daily €STR plus or minus (as specified in the relevant Final Terms) the Margin, all as determined by the Calculation Agent on each Interest Determination Date.

(3) For the purposes of this Condition 7(g):

"**Compounded Daily €STR**" means, with respect to any Interest Period, the rate of return of a daily compound interest investment (with the daily euro short-term rate as reference rate for the calculation of interest) as calculated by the Calculation Agent as at the relevant Interest Determination Date in accordance with the following formula (and the resulting percentage will be rounded if necessary to the nearest fifth decimal place, with 0.000005 being rounded upwards):

$$\left[\prod_{i=1}^{d_0}\left(1+\frac{€STR_i \times n_i}{D}\right)\right] \times \frac{D}{d}$$

where:

"**d**" means the number of calendar days in:

(i) where "Lag" is specified as the Observation Method in the relevant Final Terms, the relevant Interest Period; or

(ii) where "Observation Shift" is specified as the Observation Method in the relevant Final Terms, the relevant Observation Period;

"**D**" means the number specified as such in the relevant Final Terms (or, if no such number is specified, 360);

"**d_o**" means the number of TARGET Settlement Days in:

(i) where "Lag" is specified as the Observation Method in the relevant Final Terms, the relevant Interest Period; or

(ii) where "Observation Shift" is specified as the Observation Method in the relevant Final Terms, the relevant Observation Period;

the "**€STR reference rate**", in respect of any TARGET Settlement Day, is a reference rate equal to the daily euro short-term rate ("**€STR**") for such TARGET Settlement Day as provided by the European Central Bank as the administrator of €STR (or any successor administrator of such rate) on the website of the European Central Bank (or, if no longer published on its website, as otherwise published by it or provided by it to authorised distributors and as then published on the Relevant Screen Page or, if the Relevant Screen Page is unavailable, as otherwise published by such authorised distributors) on the TARGET Settlement Day immediately following such TARGET Settlement Day (in each case, at the time specified by, or determined in accordance with, the applicable methodology, policies or guidelines, of the European Central Bank or the successor administrator of such rate);

"**$€STR_i$**" means the €STR reference rate for:

(i) where "Lag" is specified as the Observation Method in the relevant Final Terms, the TARGET Settlement Day falling "p" TARGET Settlement Days prior to the relevant TARGET Settlement Day "i"; or

(ii) where "Observation Shift" is specified as the Observation Method in the relevant Final Terms, the relevant TARGET Settlement Day "i".

"**i**" is a series of whole numbers from one to "d_o", each representing the relevant TARGET Settlement Day in chronological order from, and including, the first TARGET Settlement Day in:

(i) where "Lag" is specified as the Observation Method in the relevant Final Terms, the relevant Interest Period; or

(ii) where "Observation Shift" is specified as the Observation Method in the relevant Final Terms, the relevant Observation Period;

to, and including, the last TARGET Settlement Day in such period;

"**Interest Determination Date**" means, in respect of any Interest Period, the date falling "p" TARGET Settlement Days prior to the Interest Payment Date for such Interest Period (or the date falling "p" TARGET Settlement Days prior to such earlier date, if any, on which the Notes are due and payable);

"**n_i**" for any TARGET Settlement Day "i" in the relevant Interest Period or Observation Period (as applicable), means the number of calendar days from (and including) such TARGET Settlement Day "i" up to (but excluding) the following TARGET Settlement Day;

"**Observation Period**" means, in respect of any Interest Period, the period from (and including) the date falling "p" TARGET Settlement Days prior to the first day of the relevant Interest Period (and the first Interest Period shall begin on and include the Interest Commencement Date) to (but excluding) the date falling "p" TARGET Settlement Days prior to (A) (in the case of an Interest Period) the Interest Payment Date for such Interest Period or (B) such earlier date, if any, on which the Notes become due and payable; and

"**p**" for any latest Interest Period or Observation Period (as applicable), means the number of TARGET Settlement Days specified as the "Lag Period" or the "Observation Shift Period" (as applicable) in the relevant Final Terms or, if no such period is specified, five TARGET Settlement Days.

(4) Subject to Condition 7(o) (*Benchmark Discontinuation*), if, where any Rate of Interest is to be calculated pursuant to Condition 7(g)(2) above, in respect of any TARGET Settlement Day in respect of which an applicable €STR reference rate is required to be determined, such €STR reference rate is not made available on the Relevant Screen Page and has not otherwise been published by the relevant authorised distributors, then the €STR reference rate in respect of such TARGET Settlement Day shall be the €STR reference rate for the first preceding TARGET Settlement Day in respect of which €STR reference rate was published by the European Central Bank on its website, as determined by the Calculation Agent.

(5) Subject to Condition 7(o) (*Benchmark Discontinuation*), if the Rate of Interest cannot be determined in accordance with the foregoing provisions of this Condition 7(g), the Rate of Interest shall be (A) that determined as at the last preceding Interest Determination Date (though substituting, where a different Margin is to be applied to the relevant Interest Period from that which applied to the last preceding Interest Period, the Margin relating to the relevant Interest Period, in place of the Margin relating to that last preceding Interest Period) or (B) if there is no such preceding Interest Determination Date, the initial Rate of Interest which would have been applicable to the Notes for the first Interest Period had the Notes been in issue for a period equal in duration to the scheduled first Interest Period but ending on (and excluding) the Interest Commencement Date (but applying the Margin applicable to the first Interest Period).

(h) ***Screen Rate Determination – Floating Rate Notes referencing SARON***

(1) This Condition 7(h) is applicable to the Notes only if the Floating Rate Note Provisions are specified in the relevant Final Terms as being applicable and the "Reference Rate" is specified in the relevant Final Terms as being "SARON", Screen Rate Determination is specified in the relevant Final Terms as the manner in which the Rate(s) of Interest is/are to be determined.

(2) Where "SARON" is specified as the Reference Rate in the Final Terms, the Rate of Interest for each Interest Period will be determined by the Calculation Agent on each Interest Determination Date, subject as provided below, on the basis of SARON Compounded plus or minus (as specified in the relevant Final Terms) the Margin.

(3) For the purposes of this Condition 7(h):

"**SARON Compounded**" means, in respect of an Interest Period, the rate of return of a daily compound interest investment (with the daily overnight interest rate of the secured funding market for Swiss franc) as calculated by the Calculation Agent on the relevant Interest Determination Date in accordance with the following formula (and the resulting percentage will be rounded, if necessary, to the nearest fifth decimal place, with 0.000005 being rounded upwards):

$$\left[\prod_{\mathrm{i}=1}^{db}\left(1+\frac{SARON_{\mathrm{i}}\times \mathrm{n_i}}{360}\right)\right]\times\frac{360}{\mathrm{dc}}$$

where:

"$\boldsymbol{db}$" means the number of Zurich Banking Days in:

(i) where "Lag" is specified as the Observation Method in the relevant Final Terms, the relevant Interest Period; or

(ii) where "Observation Shift" is specified as the Observation Method in the relevant Final Terms, the relevant Observation Period;

"dc" means the number of calendar days in

(i) where "Lag" is specified as the Observation Method in the relevant Final Terms, the relevant Interest Period; or

(ii) where "Observation Shift" is specified as the Observation Method in the relevant Final Terms, the relevant Observation Period;

"i" is a series of whole numbers from one to "db", each representing the relevant Zurich Banking Day in chronological order from, and including, the first Zurich Banking Day in:

(i) where "Lag" is specified as the Observation Method in the relevant Final Terms, the relevant Interest Period; or

(ii) where "Observation Shift" is specified as the Observation Method in the relevant Final Terms, the relevant Observation Period,

to, and including, the last Zurich Banking Day in such period;

"n_i" means, in respect of any Zurich Banking Day "i", the number of calendar days from, and including, the Zurich Banking Day "i" up to but excluding, the first following Zurich Banking Day;

"**Observation Period**" means, in respect of an Interest Period, the period from, and including, the date falling "p" Zurich Banking Days prior to the first day of such Interest Period (and the first day of such Interest Period shall begin on and include the Interest Commencement Date) and ending on, but excluding, the date falling "p" Zurich Banking Days prior to the Interest Payment Date for such Interest Period (or the date falling "p" Zurich Banking Days prior to such earlier date, if any, on which the Notes become due and payable);

"**Observation Shift Period**" is as specified in the applicable Final Terms;

"**p**" for any Interest Period or Observation Period (as applicable), means the number of Zurich Banking Days specified as the "Lag Period" or the "Observation Shift Period" (as applicable) in the relevant Final Terms or, if no such period is specified, five Zurich Banking Days;

"$\mathbf{SARON}_i$" means, in respect of any Zurich Banking Day "i", SARON for such Zurich Banking Day "i";

"**SARON**" means, in respect of any Zurich Banking Day, the Swiss Average Rate Overnight for such Zurich Banking Day published by the SARON Administrator on the SARON Administrator Website at the Relevant Time on the Zurich Banking Day immediately following such Zurich Banking Day; or

(i) if SARON does not so appear on the SARON Administrator Website or is not so published by the Relevant Time on such Zurich Banking Day and a SARON Index Cessation Event and a SARON Index Cessation Effective Date have not both occurred on or prior to such Zurich Banking Day, the Swiss Average Rate Overnight published by the SARON Administrator on the SARON Administrator Website for the first preceding Zurich Banking Day on which the Swiss Average Rate Overnight was published by the SARON Administrator on the SARON Administrator Website; or

(ii) if such rate does not so appear on the SARON Administrator Website or is not so published by the Relevant Time on such Zurich Banking Day and a SARON Index Cessation Event and a SARON Index Cessation Effective Date have both occurred on or prior to such Zurich Banking Day, then SARON shall be determined to be the SARON Replacement determined in accordance with Condition 7(h)(4).

If the relevant Notes become due and payable in accordance with Condition 12 (*Events of Default*), the final Interest Determination Date shall, notwithstanding any Interest Determination Date specified in the applicable Final Terms, be deemed to be the date on which such Notes become due and payable, and the Rate of Interest on such Notes shall, for so long as such Notes remain outstanding, be that determined on such date and as if (solely for the purpose of such interest determination) the relevant Interest Period had been shortened accordingly.

(4) If the Issuer determines on or prior to the Relevant Time on a relevant Zurich Banking Day that a SARON Index Cessation Event and its related SARON Index Cessation Effective Date have occurred with respect to SARON-referenced Floating Rate Notes, then the Trustee shall be obliged, without the consent or sanction of the Noteholders to concur with the Issuer in making any modification (other than in respect of a Reserved Matter, provided that neither replacing SARON with the SARON Replacement nor any SARON Replacement Conforming Changes (each as defined below) shall constitute a Reserved Matter) of these Conditions solely with respect to any SARON-referenced Floating Rate Notes that the Issuer decides may be appropriate to give effect to the provisions set forth under this Condition 7(h)(4) in relation only to all determinations of the rate of interest payable on any SARON-referenced Floating Rate Notes, provided that:

(i) *Benchmark Replacement*. If the Issuer determines that a SARON Index Cessation Event and its related SARON Index Cessation Effective Date have occurred prior to the Relevant Time in respect of any determination of SARON on any date applicable to any SARON-referenced Floating Rate Notes, the SARON Replacement will replace SARON for all purposes relating to any SARON-referenced Floating Rate Notes in respect of such determination on such date and all determinations on all subsequent dates (subject to the further operation, if any, of Condition 7(o) (*Benchmark Discontinuation*));

(ii) *SARON Replacement Conforming Changes*. In connection with the implementation of a SARON Replacement with respect to any SARON-referenced Floating Rate Notes, the Issuer will have the right, subject to satisfaction of Condition 7(o) (*Benchmark Discontinuation*), to make SARON Replacement Conforming Changes with respect to any SARON-referenced Floating Rate Notes from time to time;

(iii) *Decisions and Determinations*. Any determination, decision or election that may be made by the Issuer pursuant to this Condition 7(h)(4), including any determination with respect to tenor, rate or adjustment of or the occurrence or non-occurrence of an event, circumstance or date and any decision to take or refrain from taking any action or any selection, in each case, solely with respect to any SARON-referenced Floating Rate Notes:

(A) will be conclusive and binding absent manifest error;

(B) will be made in the Issuer's sole discretion; and

(C) notwithstanding anything to the contrary in the documentation relating to the Notes, shall become effective without consent from the Noteholders or any other party.

In no event shall the Calculation Agent, Trustee or Paying Agent be responsible for determining any substitute for SARON, or for making any adjustments to any alternative benchmark or spread thereon, the business day convention, interest determination dates or any other relevant methodology for calculating any such substitute or successor benchmark. In connection with the foregoing, the Calculation Agent will be entitled to conclusively rely on any determinations made by the Issuer and will have no liability for such actions taken at the direction of the Issuer.

None of the Trustee, Paying Agent or the Calculation Agent will have any liability for any determination made by or on behalf of the Issuer in connection with a SARON Index Cessation Event or a SARON Replacement;

(iv) The Issuer shall certify in writing to the Trustee, the Paying Agent and the Calculation Agent in writing (such certificate, a "**SARON Base Rate Modification Certificate**") that (A) a SARON Cessation Event and its related SARON Index Cessation Effective Date have occurred specifying the SARON Replacement; and (B) that the SARON Replacement Conforming Changes have been made in accordance with this Condition 7(h)(4); and

(v) No consents are required to be obtained in relation to the SARON Replacement, provided, for the avoidance of doubt, that the Trustee, the Calculation Agent and the Paying Agent shall not be obliged to agree to any SARON Replacement Conforming Changes, which, in the sole opinion of such Trustee, Calculation Agent or Paying Agent, as the case may be, would impose more onerous obligations upon it or expose it to any additional duties, responsibilities or liabilities or reduce or amend the protective provisions afforded to any such person in the Trust Deed or Agency Agreement.

(5) The following definitions shall apply with respect to this Condition 7(h):

"**Recommended Replacement Rate**" means the rate that has been recommended as the replacement for the Swiss Average Rate Overnight by any working group or committee in Switzerland organized in the same or a similar manner as the National Working Group on Swiss Franc Reference Rates that was founded in 2013 for purposes of, among other things, considering proposals to reform reference interest rates in Switzerland (any such working group or committee, the "**Recommending Body**");

"**Recommended Adjustment Spread**" means, with respect to any Recommended Replacement Rate or Alternative Replacement Rate, as the case may be, the spread (which may be positive, negative or zero), or formula or methodology for calculating such a spread:

(i) that the Recommending Body has recommended be applied to such Recommended Replacement Rate or Alternative Replacement Rate, as the case may be, in the case of fixed income securities with respect to which such Recommended Replacement Rate or Alternative Replacement Rate, as the case may be, has replaced SARON as the reference rate for purposes of determining the applicable rate of interest thereon; or

(ii) if the Recommending Body has not recommended such a spread, formula or methodology as described in subclause (i) above, to be applied to such Recommended Replacement Rate or Alternative Replacement Rate, as the case may be, in order to reduce or eliminate, to the extent reasonably practicable under the circumstances, any economic prejudice or benefit (as applicable) to Noteholders as a result of the replacement of SARON with such Recommended Replacement Rate or Alternative Replacement Rate, as the case may be, for purposes of determining SARON, which spread will be determined by the Issuer, acting in good faith and a commercially reasonable manner, and be consistent with industry-accepted practices for fixed income securities with respect to which such Recommended Replacement Rate Rate or Alternative Replacement Rate, as the case may be, has replaced SARON as the reference rate for purposes of determining the applicable rate of interest thereon;

"**Relevant Time**" means, in respect of any Zurich Banking Day, close of trading on SIX Swiss Exchange on such Zurich Banking Day, which is expected to be on or around 6 p.m. (Zurich time);

"**SARON Administrator**" means SIX Swiss Exchange or any successor administrator of SARON;

"**SARON Administrator Website**" means the website of the SARON Administrator, or any successor website or other source on which SARON is published;

"**SARON Index Cessation Effective Date**" means, in respect of a SARON Index Cessation Event, the earliest of:

(i) (in the case of a SARON Index Cessation Event described in clause (i) of the definition thereof) the date on which the SARON Administrator of the Swiss Average Rate Overnight ceases to provide the Swiss Average Rate Overnight;

(ii) (in the case of a SARON Index Cessation Event described in clause (ii)(x) of the definition thereof) the latest of:

(A) the date of such statement or publication;

(B) the date, if any, specified in such statement or publication as the date on which the Swiss Average Rate Overnight will no longer be representative; and

(C) if a SARON Index Cessation Event described in clause (ii)(y) of the definition of SARON Index Cessation Event has occurred on or prior to either or both dates specified in subclauses (A) and (B) of this clause (ii), the date as of which the Swiss Average Rate Overnight may no longer be used; and

(iii) (in the case of a SARON Index Cessation Event described in clause (ii)(y) of the definition thereof) the date as of which the Swiss Average Rate Overnight may no longer be used;

"**SARON Index Cessation Event**" means the occurrence of one or more of the following events:

(i) a public statement or publication of information by or on behalf of the SARON Administrator, or by any competent authority, announcing or confirming that the SARON Administrator has ceased or will cease to provide the Swiss Average Rate Overnight permanently or indefinitely, provided that, at the time of such statement or publication, there is no successor administrator that will continue to provide the Swiss Average Rate Overnight; or

(ii) a public statement or publication of information by the SARON Administrator, or by any competent authority, announcing that (x) the Swiss Average Rate Overnight is no longer representative or will as of a certain date no longer be representative, or (y) the Swiss Average Rate Overnight may no longer be used after a certain date, which statement, in the case of subclause (y), is applicable to (but not necessarily limited to) fixed income securities and derivatives;

"**SARON Replacement**" means (i) the Recommended Replacement Rate, giving effect to the Recommended Adjustment Spread, if any or (ii) if there is no Recommeneded Replacement Rate within one Zurich Banking Day of the SARON Index Cessation Effective Date, the policy rate of the Swiss National Bank (the "**SNB Policy Rate**") for such Zurich Banking Day, giving effect to the SNB Adjustment Spread, if any, or (iii) if no SNB Policy Rate is available for such Zurich Banking Day, the sum of: (A) the alternate rate that has been determined by the Issuer to be the most comparable rate to SARON provided that if the Issuer determines that there is an appropriate industry-accepted successor rate to such rate, it shall use such industry-accepted successor rate (the "**Alternative Replacement Rate**") and (B) the Recommended Adjustment Spread, if any;

"**SARON Replacement Conforming Changes**" means, with respect to any SARON Replacement, any technical, administrative or operational changes (including without limitation changes to the definition of "Interest Period", determination dates, timing and frequency of determining rates and making payments, rounding of amounts, or tenors, and other administrative matters) that the Issuer decides may be appropriate to reflect the adoption of such SARON Replacement in a manner substantially consistent with market practice (or, if the Issuer decides that adoption of any portion of such market practice is not administratively feasible or if the Issuer determines that no market practice for use of the SARON Replacement exists, in such other manner as the Issuer determines is reasonably necessary);

"**SIX Swiss Exchange**" means SIX Swiss Exchange AG and any successor thereto;

"**SNB Adjustment Spread**" means, with respect to the SNB Policy Rate (which may be positive, negative or zero), the spread to be applied to the SNB Policy Rate in order to reduce or eliminate, to the extent reasonably practicable under the circumstances, any economic prejudice or benefit (as applicable) to Noteholders as a result of the replacement of SARON with the SNB Policy Rate for purposes of determining SARON, which spread will be determined by the Issuer, acting in good faith and a commercially reasonable manner, taking into account the historical median between SARON and the SNB Policy Rate during the two year period ending on the date on which the SARON Index Cessation Event occurred (or, if more than one SARON Index Cessation Event has occurred, the date on which the first of such events occurred); and

"**Zurich Banking Day**" means a day on which banks are open in the City of Zurich for the settlement of payments and of foreign exchange transactions.

(i) ***Maximum or Minimum Rate of Interest***: If any Maximum Rate of Interest or Minimum Rate of Interest is specified in the relevant Final Terms, then the Rate of Interest shall in no event be greater than the maximum or be less than the minimum so specified.

(j) ***Calculation of Interest Amount***: The Calculation Agent will, as soon as practicable after the time at which the Rate of Interest is to be determined in relation to each Interest Period, calculate the Interest Amount payable in respect of the Calculation Amount for such Interest Period. The Interest Amount will be equal to the product of the Rate of Interest for such Interest Period, the Calculation Amount and the relevant Day Count Fraction, rounding the resulting figure to the nearest sub-unit of the Specified Currency (half a sub-unit being rounded upwards). For this purpose a "**sub-unit**" means, in the case of any currency other than euro, the lowest amount of such currency that is available as legal tender in the country of such currency and, in the case of euro, means one cent.

(k) ***Publication***: The Calculation Agent will cause each Rate of Interest and Interest Amount determined by it, together with the relevant Interest Payment Date, Interest Period and any other amount(s) required to be determined by it together with any relevant payment date(s) to be notified to the Issuer, each Guarantor, the Trustee and the Paying Agents, Euronext Dublin and each stock exchange (if any) on which the Notes are then listed and /or admitted to trading as soon as practicable after such determination but (in the case of each Rate of Interest, Interest Amount and Interest Payment Date) in any event not later than the first day of the relevant Interest Period. Notice thereof shall also promptly be given to the Noteholders. The Calculation Agent will be entitled to recalculate any Interest Amount (on the basis of the foregoing provisions) without notice in the event of an extension or shortening of the relevant Interest Period. If the Calculation Amount is less than the minimum Specified Denomination the Calculation Agent shall not be obliged to publish each Interest Amount but instead may publish only the Calculation Amount and the Interest Amount in respect of a Note having the minimum Specified Denomination.

(l) ***Notifications etc***: All notifications, opinions, determinations, certificates, calculations, quotations and decisions given, expressed, made or obtained for the purposes of this Condition by the Calculation Agent will (in the absence of manifest error) be binding on the Issuer, the Guarantors, the Trustee, the Paying Agents, the Noteholders and the Couponholders and (subject as aforesaid) no liability to any such Person will attach to the Calculation Agent or the Trustee in connection with the exercise or non- exercise by it of its powers, duties and discretions for such purposes.

(m) ***Net Interest Amount***: If any withholding or deduction is imposed under Condition 11 (*Taxation*), the Issuer shall increase the payment of principal or interest to such amount as will result in receipt by the Noteholders and Couponholders of such amount as would have been received by them if no such withholding or deduction had been required (except as provided in Condition 11 (*Taxation*)).

(n) ***Calculation Agent***: Notwithstanding any other provision of this Condition 7, if in the Calculation Agent's opinion there is any uncertainty between two or more alternative courses of action in making any determination or calculation under this Condition 7, the Calculation Agent shall promptly notify the Issuer and the Independent Adviser thereof and the Issuer and the Independent Adviser shall direct the Calculation Agent in writing as to which alternative course of action to adopt. If the Calculation Agent is not promptly provided with such direction, or if otherwise unable to make such calculation or determination for any reason, it shall notify the Issuer and the Independent Adviser thereof and the Calculation Agent shall be under no obligation to make such calculation or determination and shall not incur any liability for not doing so.

(o) ***Benchmark Discontinuation***

(i) If the Issuer has determined that a Benchmark Event has occurred in relation to any Reference Rate when any Rate of Interest (or any component part thereof) remains to be determined by reference to such Reference Rate, then the Issuer shall notify the Calculation Agent and shall use its reasonable endeavours to select and appoint and consult with an Independent Adviser, as soon as reasonably practicable, with a view to the Issuer determining a Successor Rate, failing which an Alternative Rate (in accordance with Condition 7(o)(ii)(2)) and, in either case, an Adjustment Spread, if any (in accordance with Condition 7(iii)) and/or any Benchmark Amendments (in accordance with Condition 7(iv)).

An Independent Adviser appointed pursuant to this Condition 7(o) shall act in good faith and (in the absence of fraud) shall have no liability whatsoever to the Issuer, the Trustee, the Paying Agents or the Noteholders for any determination made by it or for any advice given to the Issuer in connection with any determination made by the Issuer, pursuant to this Condition 7(o).

(ii) If the Issuer, following consultation with the Independent Adviser and acting in good faith and in a commercially reasonable manner, determines and notifies the Calculation Agent prior to the date which is five business days prior to the next Interest Determination Date that:

(1) there is a Successor Rate, then such Successor Rate shall (subject to adjustment as provided in Condition 7(o)(iii)) subsequently be used in place of the Reference Rate to determine the Rate of Interest (or the relevant component part thereof) for all future payments of interest on the Instruments (subject to the operation of this Condition 7(o)); or

(2) there is no Successor Rate but that there is an Alternative Rate, then such Alternative Rate shall (subject to adjustment as provided in Condition 7(o)(iii)) subsequently be used in place of the Reference Rate to determine the Rate of Interest (or the relevant component part thereof) for all future payments of interest on the Notes (subject to the operation of this Condition 7(o)).

(iii) If the Issuer, following consultation with the Independent Adviser and acting in good faith and in a commercially reasonable manner, determines and notifies the Calculation Agent prior to the date which is five business days prior to the next Interest Determination Date (A) that an Adjustment Spread is required to be applied to the Successor Rate or the Alternative Rate (as the case may be) in order to reduce or eliminate, to the extent reasonably practicable in the circumstances, any economic prejudice or benefit (as applicable) to Noteholders or Couponholders as a result of the replacement of the Reference Rate and (B) the quantum of, or a formula or methodology for determining, such Adjustment Spread, then such Adjustment Spread shall be applied to the Successor Rate or the Alternative Rate (as the case may be) for each subsequent determination of a relevant Rate of Interest (or a component part thereof) by reference to such Successor Rate or Alternative Rate (as applicable).

(iv) If any Successor Rate, Alternative Rate or Adjustment Spread is determined in accordance with this Condition 7(o) and the Issuer, following consultation with the Independent Adviser and acting in good faith and in a commercially reasonable manner, determines (i) that amendments to these Conditions, the Trust Deed and/or the Agency Agreement are necessary to ensure the proper operation of such Successor Rate, Alternative Rate and/or Adjustment Spread (such amendments, the "**Benchmark Amendments**") and (ii) the terms of the Benchmark Amendments, then the Issuer shall, subject to giving notice thereof in accordance with Condition 7(o)(v), but without any requirement for the consent or approval of Noteholders, vary these Conditions and/or the Trust Deed and/or the Agency Agreement to give effect to such Benchmark Amendments with effect from the date specified in such notice (in accordance with Condition 7(o)(vi) below). In connection with any such variation in accordance with this Condition 7(o)(iv), the Issuer shall comply with the rules of any stock exchange on which the Instruments are for the time being listed or admitted to trading.

(v) If the Issuer is unable to appoint an Independent Adviser in accordance with this Condition 7(o), the Issuer, acting in good faith and in a commercially reasonable manner, may still determine (x) a Successor Rate or Alternative Rate and (y) in either case, an Adjustment Spread and/or any Benchmark Amendments in accordance with this Condition 7(o) (with the relevant provisions in this Condition 7(o) applying *mutatis mutandis* to allow such determinations to be made by the Issuer without consultation with an Independent Adviser).

Where this Condition 7(o)(v) applies, without prejudice to the definitions thereof, for the purposes of determining any Successor Rate, Alternative Rate, Adjustment Spread and/or Benchmark Amendments (as the case may be), the Issuer will take into account any relevant and applicable market precedents and customary market usage as well as any published guidance from relevant associations involved in the establishment of market standards and/or protocols in the international debt capital markets.

(vi) Any Successor Rate, Alternative Rate, Adjustment Spread and the specific terms of any Benchmark Amendments, determined under this Condition 7(o) will be notified promptly by the Issuer to the Trustee and, the Agents and, in accordance with Condition 20, the Noteholders. Such notice shall be irrevocable and shall specify the effective date, which shall not be less than five Business Days prior to the next Interest Determination Date of the Benchmark Amendments, if any.

No later than notifying the Trustee and the Agents of the same, the Issuer shall deliver to the Trustee and the Agent a certificate signed by two duly authorised signatories of the Issuer:

(1) confirming (x) that a Benchmark Event has occurred, (y) the Successor Rate or, as the case may be, the Alternative Rate and, (z) where applicable, any Adjustment Spread and/or the specific terms of any Benchmark Amendments, in each case as determined in accordance with the provisions of this Condition 7(o); and

(2) certifying that the Benchmark Amendments (if applicable) (x) are necessary to ensure the proper operation of such Successor Rate, Alternative Rate and/or Adjustment Spread and (y) in each case have been drafted solely to such effect.

The Trustee shall be entitled to rely on such certificate (without further enquiry and without liability to any person) as sufficient evidence thereof.

For the avoidance of doubt, the Trustee and the Agents shall, at the request and expense of the Issuer, without any consent or sanction of the Noteholders, concur with the Issuer in making any modification to these Conditions, the Agency Agreement or the Trust Deed with respect to the Successor Rate or Alternative Rate and the Adjustment Spread (if any) and/or the Benchmark Amendments (if any) (which, for the avoidance of doubt, shall not be treated as being within the scope of the Reserved Matters (as defined in the Trust Deed)) specified in such certificate, and such modifications will (in the absence of manifest error) be binding on the Issuer, the Trustee, the Paying Agents and the Noteholders.

Notwithstanding any other provision of this Condition 7(o), neither the Trustee nor the Agents shall be obliged to agree to any modifications, amendments and/or adjustments pursuant to this Condition 7(o) which, in the sole opinion of the Trustee and/or the Agents would have the effect of (x) exposing it to any liability against which it has not been indemnified and/or secured and/or prefunded to its satisfaction or (y) increasing the obligations or duties, or decreasing the rights or protections, of it in the Trust Deed, the Agency Agreement and/or these Conditions. For the avoidance of doubt, none of the Trustee, the Paying Agents or the Calculation Agent will be responsible for determining whether or not a Benchmark Event has occurred.

(vii) Without prejudice to the obligations of the Issuer under Condition 7(o), the Reference Rate and the fallback provisions provided for in Condition 7(c) will continue to apply unless and until either a Successor Rate or an Alternative Rate (and any associated Adjustment Spread and/or Benchmark Amendments) is determined pursuant to this Condition 7(o).

In such circumstances, the Issuer will be entitled (but not obliged), at any time thereafter, to elect to re-apply the provisions of Condition 7(o), *mutatis mutandis*, on one or more occasions until a Successor Rate or Alternative Rate (and, if applicable, any associated Adjustment Spread and/or Benchmark Amendments) has been determined and notified (and, until such determination and notification (if any), the fallback provisions provided for in Condition 7(c) will continue to apply).

(viii) As used in this Condition 7(o):

"**Adjustment Spread**" means either (a) a spread (which may be positive, negative or zero) or (b) a formula or methodology for calculating a spread, in each case to be applied to the Successor Rate or the relevant Alternative Rate (as the case may be) and is the spread, formula or methodology which:

(1) in the case of a Successor Rate, is formally recommended in relation to the replacement of the Reference Rate with the Successor Rate by any Relevant Nominating Body; or

(2) (if no such recommendation has been made, or in the case of an Alternative Rate), the Issuer determines, following consultation with the Independent Adviser and acting in good faith and in a commercially reasonable manner, is customarily applied to the relevant Successor Rate or the Alternative Rate (as the case may be) in international debt capital markets transactions to produce an industry-accepted replacement rate for the Reference Rate; or

(3) (if no such determination has been made) the Issuer determines, following consultation with the Independent Adviser and 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 which reference the Reference Rate, where such rate has been replaced by the Successor Rate or the Alternative Rate (as the case may be); or

(4) (if the Issuer determines that no such industry standard is recognised or acknowledged), the Issuer, following consultation with the Independent Adviser and acting in good faith and in a commercially reasonable manner, determines to be appropriate to reduce or eliminate, to the extent reasonably practicable in the circumstances, any economic prejudice or benefit (as the case may be) to Noteholders as a result of the replacement of the Reference Rate with the Successor Rate or the Alternative Rate (as the case may be).

"**Alternative Rate**" means an alternative benchmark or screen rate which the Issuer determines in accordance with Condition 7(o)(ii)(2) has replaced the Reference Rate in customary market usage in the international debt capital markets for the purposes of determining rates of interest (or the relevant component part thereof) for the same interest period and in the same Specified Currency as the Notes.

"**Benchmark Amendments**" has the meaning given to it in Condition 7(o)(iv).

"**Benchmark Event**" means:

(1) the Reference Rate ceasing to exist or be published; or

(2) the making of a public statement by the administrator of the Reference Rate that (in circumstances where no successor administrator has been appointed that will continue publication of the Reference Rate) it has ceased publishing such Reference Rate permanently or indefinitely or that it will, by a specified date, cease publishing the Reference Rate permanently or indefinitely; or

(3) the making of a public statement by the supervisor of the administrator of the Reference Rate that the Reference Rate has been or will, by a specified future date, be permanently or indefinitely discontinued; or

(4) the making of a public statement by the supervisor of the administrator of the Reference Rate that means the Reference Rate will, by a specified date, be prohibited from being used or that its use will be subject to restrictions; or

(5) the making of a public statement by the supervisor of the administrator of the Reference Rate that the Reference Rate, in the opinion of the supervisor, is, or will by a specified date be, no longer representative of an underlying market or that its method of calculation has significantly changed; or

(6) it has or will by a specified date within the following six months, become unlawful for the Issuer, the party responsible for determining the Rate of Interest (being the Calculation Agent or such other party specified in the applicable Final Terms, as applicable), or any Paying Agent to calculate any payments due to be made to any Noteholder using the Reference Rate (including, without limitation, under the Benchmarks Regulation, if applicable); or

(7) that a decision to withdraw the authorisation or registration pursuant to Article 35 of the Benchmarks Regulation of any benchmark administrator previously authorised to publish such Reference Rate has been adopted.

Notwithstanding the sub-paragraphs above, where the relevant Benchmark Event is a public statement within sub-paragraphs (2), (3), (4) or (5) above and the relevant specified date in the public statement is more than six months after the date of that public statement, the Benchmark Event shall not be deemed to occur until the date falling six months prior to such specified date.

"**Independent Adviser**" means an independent financial institution of international repute or an independent financial adviser with appropriate expertise appointed by the Issuer under Condition 7(o)(i).

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

(1) 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

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

"Successor Rate" means a successor to or replacement of the Reference Rate which is formally recommended by any Relevant Nominating Body.

8. **Zero Coupon Note Provisions**

(a) ***Application***: This Condition 8 is applicable to the Notes only if the Zero Coupon Note Provisions are specified in the relevant Final Terms as being applicable.

(b) ***Late payment on Zero Coupon Notes***: If the Redemption Amount payable in respect of any Zero Coupon Note is improperly withheld or refused, the Redemption Amount shall thereafter be an amount equal to the sum of:

(i) the Reference Price; and

(ii) the product of the Accrual Yield (compounded annually) being applied to the Reference Price on the basis of the relevant Day Count Fraction from (and including) the Issue Date to (but excluding) whichever is the earlier of (i) the day on which all sums due in respect of such Note up to that day are received by or on behalf of the relevant Noteholder and (ii) the day which is seven days after the Principal Paying Agent or as the case may be the Trustee has notified the Noteholders that it has received all sums due in respect of the Notes up to such seventh day (except to the extent that there is any subsequent default in payment).

9. **Redemption and Purchase**

(a) ***Scheduled redemption***: Unless previously redeemed, or purchased and cancelled, the Notes will be redeemed at their Final Redemption Amount on the Maturity Date, subject as provided in Condition 10 (*Payments*).

(b) ***Redemption for tax reasons***: The Notes may be redeemed at the option of the Issuer in whole, but not in part:

(i) at any time (if the Floating Rate Note Provisions are not specified in the relevant Final Terms as being applicable); or

(ii) on any Interest Payment Date (if the Floating Rate Note Provisions are specified in the relevant Final Terms as being applicable),

on giving not less than 30 nor more than 60 days' notice to the Noteholders (in accordance with Condition 20 (*Notices*)) and the Trustee (which notice shall be irrevocable), at their Early Redemption Amount (Tax), together with interest accrued (if any) to the date fixed for redemption, if immediately before giving such notice, the Issuer satisfies the Trustee that:

(A) (1) the Issuer has or will become obliged to pay additional amounts as provided or referred to in Condition 11 (*Taxation*) as a result of any change in, or amendment to, the laws or regulations of its jurisdiction of incorporation or any political subdivision or any authority thereof or therein having power to tax, or any change in the application or official interpretation of such laws or regulations (including a holding by a court of competent jurisdiction), which change or amendment becomes effective on or after the Issue Date of the first Tranche of the Notes and (2) such obligation cannot be avoided by the Issuer taking reasonable measures available to it; or

(B) (1) any Guarantor has or (if a demand were made under the Guarantee of the Notes) would become obliged to pay additional amounts as provided or referred to in Condition 11 (*Taxation*) or the Guarantee of the Notes, as the case may be, or any Guarantor has or will become obliged to make any such withholding or deduction as is referred to in Condition 11 (*Taxation*) or in the Guarantee of the Notes, as the case may be, from any amount paid by it to the Issuer in order to enable the Issuer to make a payment of principal or interest in respect of the Notes, in either case as a result of any change in, or amendment to, the laws or regulations of such Guarantor's jurisdiction of incorporation or any political subdivision or any authority thereof or therein having power to tax, or any change in the application or official interpretation of such laws or regulations (including a holding by a court of competent jurisdiction), which change or amendment becomes effective on or after the Issue Date of the first Tranche of the Notes, and (2) such obligation cannot be avoided by such Guarantor taking reasonable measures available to it,

provided, **however**, **that** no such notice of redemption shall be given earlier than:

(i) where the Notes may be redeemed at any time, 90 days prior to the earliest date on which the Issuer or a Guarantor would be obliged to pay such additional amounts or the relevant Guarantor would be obliged to make such withholding or deduction if a payment in respect of the Notes were then due or (as the case may be) a demand under the Guarantees of the Notes were then made; or

(ii) where the Notes may be redeemed only on an Interest Payment Date, 60 days prior to the Interest Payment Date occurring immediately before the earliest date on which the Issuer or a Guarantor would be obliged to pay such additional amounts or the relevant Guarantor would be obliged to make such withholding or deduction if a payment in respect of the Notes were then due or (as the case may be) a demand under the Guarantee of the Notes were then made.

Prior to the publication of any notice of redemption pursuant to this paragraph, the Issuer shall deliver or procure that there is delivered to the Trustee (x) a certificate signed by an authorised signatory of the Issuer stating that the circumstances referred to in (A)(1) and (A)(2) prevail and setting out the details of such circumstances or (as the case may be) a certificate signed by an authorised signatory of the relevant Guarantor stating that the circumstances referred to in (B)(1) and (B)(2) prevail and setting out the details of such circumstances and (y) an opinion satisfactory to the Trustee of independent tax advisers of recognised standing to the effect that the Issuer or (as the case may be) the relevant Guarantor has or will become obliged to pay such additional amounts or (as the case may be) the Guarantor has or will become obliged to make such withholding or deduction 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 (A)(1) and (A)(2) above or (as the case may be) (B)(1) and (B)(2) above, in which event they shall be conclusive and binding on the Noteholders. Upon the expiry of any such notice as is referred to in this Condition 9(b), the Issuer shall be bound to redeem the Notes in accordance with this Condition 9(b).

(c) ***Redemption at the option of the Issuer***: If the Call Option is specified in the relevant Final Terms as being applicable, the Notes may be redeemed at the option of the Issuer in whole or, if so specified in the relevant Final Terms, in part on any Optional Redemption Date (Call) at the relevant Optional Redemption Amount (Call) on the Issuer's giving not less than 30 nor more than 60 days' notice to the Noteholders (in accordance with Condition 20 (*Notices*)) and having notified the Trustee prior to the provision of such notice (which notice shall be irrevocable and shall oblige the Issuer to redeem the Notes or, as the case may be, the Notes specified in such notice on the relevant Optional Redemption Date (Call) at the Optional Redemption Amount (Call) plus accrued interest (if any) to such date).

(d) ***Partial redemption***: If the Notes are to be redeemed in part only on any date in accordance with Condition 9(c) (*Redemption at the option of the Issuer*), the Notes to be redeemed shall be selected by the drawing of lots in such place as the Trustee approves and in such manner as the Trustee considers appropriate, subject in each case to compliance with applicable law and the rules of any stock exchange on which the Notes are then listed and/or admitted to trading, and the notice to Noteholders referred to in Condition 9(c) (*Redemption at the option of the Issuer*) shall specify the serial numbers of the Notes so to be redeemed. If any Maximum Redemption Amount or Minimum Redemption Amount is specified in the relevant Final Terms, then the Optional Redemption Amount (Call) shall in no event be greater than the maximum or be less than the minimum so specified.

(e) ***Redemption at the option of Noteholders***: If the Put Option is specified in the relevant Final Terms as being applicable, the Issuer shall, at the option of the holder of any Note, redeem such Note on the Optional Redemption Date (Put) specified in the relevant Put Option Notice at the relevant Optional Redemption Amount (Put) together with interest (if any) accrued to such date. In order to exercise the option contained in this Condition 9(e), the holder of a Note must, not less than 30 nor more than 60 days before the relevant Optional Redemption Date (Put), deposit with any

Paying Agent such Note together with all unmatured Coupons relating thereto and a duly completed Put Option Notice in the form obtainable from any Paying Agent. The Paying Agent with which a Note is so deposited shall deliver a duly completed Put Option Receipt to the depositing Noteholder. No Note, once deposited with a duly completed Put Option Notice in accordance with this Condition 9(e), may be withdrawn; **provided**, **however**, **that** if, prior to the relevant Optional Redemption Date (Put), any such Note becomes immediately due and payable or, upon due presentation of any such Note on the relevant Optional Redemption Date (Put), payment of the redemption moneys is improperly withheld or refused, the relevant Paying Agent shall mail notification thereof to the depositing Noteholder at such address as may have been given by such Noteholder in the relevant Put Option Notice and shall hold such Note at its Specified Office for collection by the depositing Noteholder against surrender of the relevant Put Option Receipt. For so long as any outstanding Note is held by a Paying Agent in accordance with this Condition 9(e), the depositor of such Note and not such Paying Agent shall be deemed to be the holder of such Note for all purposes.

(f) ***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' notice to the Noteholders and the Trustee in accordance with Condition 20 (*Notices*) (which notice shall be irrevocable) redeem all but not some only of the Notes of the relevant series at their principal amount, together with interest accrued to the date fixed for redemption if, immediately before giving such notice, the aggregate principal amount of the Notes of such series outstanding is less than 25 per cent. of the aggregate principal amount of such series originally issued (which shall, for the avoidance of doubt, include any further Notes issued pursuant to Condition 19 (*Further Issues*)).

(g) ***Redemption at the option of the Noteholders in the event of a Change of Control*:** A Change of Control Event will be deemed to occur if a Change of Control occurs (a "**Change of Control Event**"). If a Change of Control Event occurs, each Noteholder will have the option (the "**Change of Control Put Option**") (unless, prior to the giving of the relevant Change of Control Put Option Notice (as defined below), the Issuer has given notice to redeem the Notes in accordance with Condition 9(b) (*Redemption for tax reasons*), (c) (*Redemption at the option of the Issuer*) or (f) (*Redemption in the case of Minimal Outstanding Amount*)) to require the Issuer to redeem or, at the Issuer's option, purchase (or procure the purchase of) the Notes held by it on the Change of Control Put Date at their principal amount together with (or, where purchased, together with an amount equal to) interest (if any) accrued to but excluding the Change of Control Put Date.

Promptly upon a Change of Control Event having occurred, the Issuer shall give notice (a "**Change of Control Event Notice**") to the Noteholders in accordance with Condition 20 (*Notices*) specifying the nature of the Change of Control Event and the circumstances giving rise to it, the procedure for exercising the Change of Control Put Option and the Change of Control Put Date.

In order to exercise the Change of Control Put Option, the holder of the Note must deposit such Note with the Principal Paying Agent at its specified office at any time during normal business hours of the Principal Paying Agent, accompanied by a duly signed and completed Put Option Notice in the form (for the time being current) available from the specified office of the Principal Paying Agent (a "**Change of Control Put Option Notice**") within the period (the "**Change of Control Put Period**") of 45 days after a Change of Control Event Notice is given. No Note so deposited and option so exercised may be revoked or withdrawn.

The Notes should be delivered together with all Coupons, if any, relating to them maturing after the Change of Control Put Date, failing which the amount of any such missing unmatured Coupon will be deducted from the sum due for payment in the manner provided in Condition 10(e) (*Deduction for unmatured Coupons*). The Principal Paying Agent will issue to the Noteholder concerned a non-transferable Put Option Receipt in respect of the Note so delivered. Payment in respect of any Note so delivered will be made, if the holder duly specified a bank account in the Change of Control Put Option Notice to which payment is to be made, on the Change of Control Put Date, by transfer to that bank account and, in every other case, on or after the Change of Control Put Date against presentation and surrender or (as the case may be) endorsement of such Put Option Receipt at the specified office the Principal Paying Agent. For the purposes of these Conditions, receipts issued pursuant thereof shall be treated as if they were Notes.

The Issuer shall redeem or purchase (or procure the purchase of) the relevant Notes on the Change of Control Put Date unless previously redeemed (or purchased) and cancelled.

For the purposes of this Condition 9(g):

"**Acting in Concert**" means acting together pursuant to an agreement or understanding (whether formal or informal).

A "**Change of Control**" occurs if any person or group of persons Acting in Concert (other than one or more Qualifying Employee(s) and/or Related Persons) acquires directly or indirectly shares to which attach more than 50 per cent. of the votes attaching to the entire issued share capital of the Parent.

"**Change of Control Put Date**" is the seventh day after the last day of the Change of Control Put Period.

"**Related Persons**" with respect to any Qualifying Employee means:

(i) in the case of any individual, any spouse, family member or relative of such individual, any trust or partnership for the benefit of one or more of such individual and any such spouse, family member or relative, or the estate, executor, administrator, committee or beneficiaries of any thereof;

(ii) any trust, corporation, partnership or other person for which one or more of the Qualifying Employees and other Related Persons, directly or indirectly constitute the whole or entire stockholders, beneficiaries, partners or owners thereof, or persons beneficially holding in the aggregate the whole or entire controlling interest therein; or

(iii) any investment fund or vehicle managed, sponsored or advised by such Qualifying Employee on its behalf or any successor thereto.

"**Qualifying Employee**" means any director or employee of the Group who, on the date of the potential change of control, is employed by the Group and has been so employed for the previous one year without interruption.

(h) ***No other redemption***: The Issuer shall not be entitled to redeem the Notes otherwise than as provided in paragraphs (a) to (f) above.

(i) ***Early redemption of Zero Coupon Notes***: Unless otherwise specified in the relevant Final Terms, the Redemption Amount payable on redemption of a Zero Coupon Note at any time before the Maturity Date shall be an amount equal to the sum of:

(i) the Reference Price; and

(ii) the product of the Accrual Yield (compounded annually) being applied to the Reference Price from (and including) the Issue Date to (but excluding) the date fixed for redemption or (as the case may be) the date upon which the Note becomes due and payable.

Where such calculation is to be made for a period which is not a whole number of years, the calculation in respect of the period of less than a full year shall be made on the basis of such Day Count Fraction as may be specified in the Final Terms for the purposes of this Condition 9(i) or, if none is so specified, a Day Count Fraction of 30E/360.

(j) ***Purchase***: The Issuer, each of the Guarantors or any Subsidiary of each of the Guarantors may at any time purchase Notes in the open market or otherwise (including by means of any tender or exchange offer) and at any price, **provided that** all unmatured Coupons are purchased therewith. The Notes so purchased or acquired may be submitted for cancellation, or held or resold, **provided that**, while held by or on behalf of the Issuer, the Guarantors or any of their respective Subsidiaries, the Notes shall not entitle the Noteholder to vote at any meetings of the Noteholders and shall not be deemed to be outstanding for the purposes of calculating quorums at meetings of the Noteholders or for the purposes of the Trust Deed or the Paying Agency Agreement.

(k) ***Cancellation***: All Notes so redeemed or purchased by the Issuer, any Guarantor or any Subsidiary of any Guarantor and any unmatured Coupons attached to or surrendered with them may be held by the Issuer, any Guarantor or any Subsidiary of any Guarantor or resold or cancelled at the Issuer's, such Guarantor's, or such Subsidiary's option.

(l) ***Notice Priority*****:** In the event of more than one notice being delivered pursuant to this Condition 9, the first in time shall prevail.

10. **Payments**

(a) ***Principal***: Payments of principal shall be made only against presentation and (**provided that** payment is made in full) surrender of Notes at the Specified Office of any Paying Agent outside the United States by cheque drawn in the currency in which the payment is due on, or by transfer to an account denominated in that currency (or, if that currency is euro, any other account to which euro may be credited or transferred) and maintained by the payee with a bank in the Principal Financial Centre of that currency.

(b) ***Interest***: Payments of interest shall, subject to paragraph (h) below, be made only against presentation and (**provided that** payment is made in full) surrender of the appropriate Coupons at the Specified Office of any Paying Agent outside the United States in the manner described in paragraph (a) above.

(c) ***Payments in New York City***: Payments of principal or interest may be made at the Specified Office of a Paying Agent in New York City if (i) the Issuer has appointed Paying Agents outside the United States with the reasonable expectation that such Paying Agents will be able to make payment of the full amount of the interest on the Notes in the currency in which the payment is due when due, (ii) payment of the full amount of such interest at the offices of all such Paying Agents is illegal or effectively precluded by exchange controls or other similar restrictions and (iii) payment is permitted by applicable United States law.

(d) ***Payments subject to fiscal laws***: All payments in respect of the Notes are subject in all cases to (i) any applicable fiscal or other laws and regulations in the place of payment, but without prejudice to the provisions of Condition 11 (*Taxation*) and (ii) any withholding or deduction required pursuant to an agreement described in Section 1471(b) of the U.S. Internal Revenue Code of 1986 (the "**Code**") or otherwise imposed pursuant to Sections 1471 through 1474 of the Code, any regulations or agreements thereunder, any official interpretations thereof, or (without prejudice to the provisions of Condition 11 (*Taxation*)) any law implementing an intergovernmental approach thereto ("**FATCA**"). No commissions or expenses shall be charged to the Noteholders or Couponholders in respect of such payments.

(e) ***Deductions for unmatured Coupons***: If the relevant Final Terms specify that the Fixed Rate Note Provisions are applicable and a Note is presented without all unmatured Coupons relating thereto:

(i) if the aggregate amount of the missing Coupons is less than or equal to the amount of principal due for payment, a sum equal to the aggregate amount of the missing Coupons will be deducted from the amount of principal due for payment; **provided**, **however**, **that** if the gross amount available for payment is less than the amount of principal due for payment, the sum deducted will be that proportion of the aggregate amount of such missing Coupons which the gross amount actually available for payment bears to the amount of principal due for payment;

(ii) if the aggregate amount of the missing Coupons is greater than the amount of principal due for payment:

(A) so many of such missing Coupons shall become void (in inverse order of maturity) as will result in the aggregate amount of the remainder of such missing Coupons (the "**Relevant Coupons**") being equal to the amount of principal due for payment; **provided**, **however**, **that** where this sub-paragraph would otherwise require a fraction of a missing Coupon to become void, such missing Coupon shall become void in its entirety; and

(B) a sum equal to the aggregate amount of the Relevant Coupons (or, if less, the amount of principal due for payment) will be deducted from the amount of principal due for payment; **provided**, **however**, **that**, if the gross amount available for payment is less than the amount of principal due for payment, the sum deducted will be that proportion of the aggregate amount of the Relevant Coupons (or, as the case may be, the amount of principal due for payment) which the gross amount actually available for payment bears to the amount of principal due for payment.

Each sum of principal so deducted shall be paid in the manner provided in paragraph (a) above against presentation and (**provided that** payment is made in full) surrender of the relevant missing Coupons. No payments will be made in respect of void Coupons.

(f) ***Unmatured Coupons void***: If the relevant Final Terms specify that this Condition 10(f) is applicable or that the Floating Rate Note Provisions are applicable, on the due date for final redemption of any Note or early redemption in whole of such Note pursuant to Condition 9(b) (*Redemption for tax reasons*), Condition 9(e) (*Redemption at the option of Noteholders*), Condition 9(c) (*Redemption at the option of the Issuer*) or Condition 12 (*Events of Default*), all unmatured Coupons relating thereto (whether or not still attached) shall become void and no payment will be made in respect thereof.

(g) ***Payments on business days***: If the due date for payment of any amount in respect of any Note or Coupon is not a Payment Business Day in the place of presentation, the holder shall not be entitled to payment in such place of the amount due until the next succeeding Payment Business Day in such place and shall not be entitled to any further interest or other payment in respect of any such delay.

(h) ***Payments other than in respect of matured Coupons***: Payments of interest other than in respect of matured Coupons shall be made only against presentation of the relevant Notes at the Specified Office of any Paying Agent outside the United States (or in New York City if permitted by paragraph (c) above).

(i) ***Partial payments***: If a Paying Agent makes a partial payment in respect of any Note or Coupon presented to it for payment, such Paying Agent will endorse thereon a statement indicating the amount and date of such payment.

(j) ***Exchange of Talons***: On or after the maturity date of the final Coupon which is (or was at the time of issue) part of a Coupon Sheet relating to the Notes, the Talon forming part of such Coupon Sheet may be exchanged at the Specified Office of the Principal Paying Agent for a further Coupon Sheet (including, if appropriate, a further Talon but excluding any Coupons in respect of which claims have already become void pursuant to Condition 13 (*Prescription*)). Upon the due date for redemption of any Note, any unexchanged Talon relating to such Note shall become void and no Coupon will be delivered in respect of such Talon.

11. Taxation

(a) ***Gross up***: All payments of principal and interest in respect of the Notes and the Coupons by or on behalf of the Issuer or the Guarantors shall be made free and clear of, and without withholding or deduction for or on account of, any present or future taxes, duties, assessments or governmental charges of whatsoever nature imposed, levied, collected, withheld or assessed by or on behalf of the jurisdiction of incorporation of the Issuer or, as the case may be, any Guarantor or any political subdivision or any authority thereof or therein having power to tax, unless the withholding or deduction of such taxes, duties, assessments or governmental charges is required by law. In that event, the Issuer or (as the case may be) the relevant Guarantor shall pay such additional amounts as will result in the receipt by the Noteholders and the Couponholders of such amounts as would have been received by them if no such withholding or deduction had been required, except that no such additional amounts shall be payable in respect of any Note or Coupon presented for payment:

(i) by or on behalf of the Noteholder or Couponholder which is liable to such taxes, duties, assessments or governmental charges in respect of such Note or Coupon by reason of its having some connection with the jurisdiction by which such taxes, duties, assessments or charges have been imposed, levied, collected, withheld or assessed other than the mere holding of such Note or Coupon; or

(ii) more than 30 days after the Relevant Date except to the extent that the Noteholder or Couponholder would have been entitled to such additional amounts if it had presented such Note or Coupon on the last day of such period of 30 days.

(b) ***FATCA**:* Notwithstanding anything in Condition 10 (*Payments*) to the contrary, none of the Issuer, any Guarantor, any paying agent or any other person shall be required to pay any additional amounts with respect to any withholding or deduction imposed pursuant to FATCA.

(c) ***Taxing jurisdiction***: If the Issuer or any of the Guarantors becomes subject at any time to any taxing jurisdiction other than, its jurisdiction of incorporation references in these Conditions to any jurisdiction shall be construed as references such other jurisdiction.

12. **Events of Default**

If any of the following events (each an "**Event of Default**") occurs and is continuing, the Trustee at its discretion may and, if so requested in writing by holders of at least one quarter in principal amount of the outstanding Notes or if so directed by an Extraordinary Resolution of the Noteholders, shall (subject to, in the case of the happening of any of the events mentioned in paragraph (b) below and, in relation to Limited Group Members other than the Issuer and the Guarantors only, paragraphs (c), (d), (e) and (f) below, the Trustee having certified in writing that the happening of such events is in its opinion materially prejudicial to the interests of the Noteholders and, in all cases to the Trustee having been indemnified, prefunded or provided with security to its satisfaction) give written notice to the Issuer (with a copy to each of the Guarantors) declaring the Notes to be immediately due and payable, whereupon they shall become immediately due and payable at their principal amount together with accrued interest without further action or formality:

(a) ***Non-payment**:* the Issuer fails to pay:

(i) any amount of principal in respect of the Notes on the due date for payment thereof, unless the non-payment:

(A) is caused by technical or administrative error; and

(B) is remedied within five Business Days of the due date; or

(ii) any amount of interest in respect of the Notes on the due date for payment thereof, unless the non-payment:

(A) is caused by technical or administrative error; and

(B) is remedied within seven Business Days of the due date; or

(b) ***Breach of other obligations***: the Issuer or any of the Guarantors defaults in the performance or observance of any of its other obligations under or in respect of the Notes, the Trust Deed or the Guarantee of the Notes and such default (i) is, in the reasonable opinion of the Trustee, incapable of remedy or (ii) being a default which is, in the reasonable opinion of the Trustee, capable of remedy, remains unremedied for 60 days after written notice thereof has been delivered by the Trustee to the Issuer and the Guarantors; or

(c) ***Cross-default***:

(i) any Financial Indebtedness (other than (i) Limited Recourse Trade Finance Indebtedness, (ii) any Project Finance Indebtedness or (iii) Financial Indebtedness incurred by a Limited Group Member which is not the Issuer or a Guarantor which is owed to another member of the Group which is not the Issuer or a Guarantor) not paid when due (after the expiry of any originally applicable grace period);

(ii) any Financial Indebtedness (other than (i) Limited Recourse Trade Finance Indebtedness, (ii) any Project Finance Indebtedness or (iii) Financial Indebtedness incurred by a Limited

Group Member which is not the Issuer or a Guarantor which is owed to another member of the Group which is not the Issuer or a Guarantor):

(A) becomes prematurely due and payable;

(B) is placed on demand; or

(C) is capable of being declared by or on behalf of a creditor to be prematurely due and payable or of being placed on demand,

in each case, as a result of an event of default or any provision having a similar effect (howsoever described);

(iii) any commitment for Financial Indebtedness (other than (i) Limited Recourse Trade Finance Indebtedness, (ii) any Project Finance Indebtedness or (iii) Financial Indebtedness incurred by a Limited Group Member which is not the Issuer or a Guarantor which is owed to another member of the Group which is not the Issuer or a Guarantor) is cancelled or suspended as a result of an event of default or any provision having a similar effect (howsoever described); or

(iv) any Limited Group Member is in default in the payment of the Apportioned Amount in respect of any Limited Recourse Trade Finance Indebtedness and that (A) such Apportioned Amount is outstanding in an aggregate principal amount of at least the greater of (x) US$50,000,000 (or its equivalent in the relevant currency of payment) and (y) three per cent. of Consolidated Net Worth and (B) is not paid by the that Limited Group Member within five days of its appropriate demand by the lender of such Limited Recourse Trade Finance Indebtedness,

unless the aggregate amount of Financial Indebtedness falling within all or any of paragraphs (i) to (iii) above is less than the greater of (x) US$50,000,000 (or its equivalent in any other currency) and (y) three per cent. of Consolidated Net Worth; provided that no Event of Default under this Condition 12(c) will occur if the relevant non-payment or event of default arises as a result of a creditor becoming a Sanctioned Person which in turn prevents the obligor from discharging its payment obligations in respect of that creditor (including, for the avoidance of doubt, pursuant to any payment to be made to a third-party agent for the account of that creditor); provided, further, that any such non-payment is remedied within 5 Business Days of such creditor ceasing to be a Sanctioned Person; or

(d) ***Insolvency***: any of the following occurs with respect to the Issuer or any Guarantor or any Limited Group Member:

(i) it is, or is deemed for the purposes of any applicable law to be, unable to pay its debts as they fall due or insolvent;

(ii) it admits its inability to pay its debts as they fall due;

(iii) by reason of actual or anticipated financial difficulties, it begins negotiations with any creditor for the rescheduling or restructuring of any of its indebtedness; or

(iv) a moratorium is declared in respect of any of its indebtedness **provided that** if a moratorium occurs in respect of the Issuer or any Guarantor or any Limited Group Member, the ending of the moratorium will not remedy any Event of Default caused by the moratorium; or

(e) ***Insolvency Proceedings***: any of the following occurs with respect to the Issuer or any Guarantor or any Limited Group Member:

(i) any step is taken with a view to a moratorium or a composition, assignment or similar arrangement with any of its creditors;

(ii) a meeting of its shareholders, directors or other officers is convened for the purpose of considering any resolution for, to petition for or to file documents with a court or any registrar for, its winding-up, administration, dissolution or judicial management or any such resolution is passed;

(iii) any person presents a petition, or files documents with a court or any registrar, for its winding-up, administration, dissolution, judicial management or reorganisation (by way of voluntary arrangement, scheme of arrangement or otherwise);

(iv) any Security Interest is enforced over any of its assets having an aggregate book value of the greater of (x) US$50,000,000 (or its equivalent in any other currency) and (y) three per cent. of Consolidated Net Worth or more;

(v) an order for its winding-up, administration, judicial management or dissolution is made;

(vi) any liquidator, trustee in bankruptcy, judicial custodian, compulsory manager, receiver, administrative receiver, administrator, receiver and manager, judicial manager, manager or similar officer is appointed in respect of it or any of its assets;

(vii) its shareholders, directors or other officers request the appointment of, or give notice of their intention to appoint, a liquidator, trustee in bankruptcy, judicial custodian, compulsory manager, receiver, administrative receiver, administrator, receiver and manager, judicial manager, manager or similar officer; or

(viii) any other analogous step or procedure is taken in any jurisdiction.

In relation to the Issuer, the (insolvency) terms referred to above shall include any steps and actions under Luxembourg law which are analogous to those described above, in particular but without limitation of the scope of paragraphs (i) to (vii) of Condition 12(e), in respect of the following Luxembourg procedures: *faillite*, *gestion contrôlée*, *suspension des paiements*, *concordat judiciaire* or *liquidation judiciaire.*

This paragraph (e) (*Insolvency proceedings*) does not apply to:

1. any step or procedure which is part of a Permitted Transaction; or

2. a petition for winding-up presented by a creditor which is (A) being contested in good faith and with due diligence or (B) frivolous or vexatious and, in any such case, is discharged, struck out or withdrawn within 21 days (in the case of the Issuer or a Guarantor) or 60 days (in the case of any other Limited Group Member); or

(f) ***Creditors' process***: (A) any attachment or sequestration affects any asset of the Issuer, any Guarantor or a Limited Group Member where the claim relating to such attachment or sequestration is for an amount of at least the greater of (x) US$50,000,000 (or its equivalent in any other currency) and (y) three per cent. of Consolidated Net Worth and is not discharged within 60 days; or (B) any distress, execution or analogous event affects any asset of the Issuer, any Guarantor or a Limited Group Member having an aggregate value of at least the greater of (x) US$50,000,000 (or its equivalent in any other currency) and (y) three per cent. of Consolidated Net Worth, and is not discharged within 21 days; or

(g) ***Cessation of business***: the Issuer, any Guarantor or a Limited Group Member ceases, or threatens to cease, to carry on business, except:

(i) as part of a Permitted Transaction; or

(ii) as a result of any disposal not prohibited by these Conditions; or

(h) ***Analogous event***: any event occurs which under the laws of (in the case of the Issuer) Luxembourg, (in the case of Trafigura Trading LLC) the State of Delaware or (in the case of Trafigura Group Pte. Ltd. and Trafigura Pte Ltd) Singapore or the jurisdiction of incorporation of any Substituted Issuer or Substituted Guarantor has an analogous effect to any of the events referred to in paragraphs (d) (*Insolvency*) to (g) (*Cessation of business*) above; or

(i) ***Guarantee not in force***: the Guarantee of the Notes is not (or is claimed by any of the Guarantors not to be) in full force and effect and is not replaced within five Business Days by a valid and enforceable guarantee.

13. Prescription

Claims for principal shall become void unless the relevant Notes are presented for payment within ten years of the appropriate Relevant Date. Claims for interest shall become void unless the relevant Coupons are presented for payment within five years of the appropriate Relevant Date.

14. Replacement of Notes and Coupons

If any Note or Coupon is lost, stolen, mutilated, defaced or destroyed, it may be replaced at the Specified Office of the Principal Paying Agent (and, if the Notes are then listed and /or admitted to trading on any stock exchange which requires the appointment of a Paying Agent in any particular place, the Paying Agent having its Specified Office in the place required by such stock exchange), subject to all applicable laws and stock exchange requirements, upon payment by the claimant of the expenses incurred in connection with such replacement and on such terms as to evidence, security, indemnity and otherwise as the Issuer and/or the Guarantors may reasonably require. Mutilated or defaced Notes or Coupons must be surrendered before replacements will be issued.

15. Trustee and Agents

The Trust Deed contains provisions for the indemnification of the Trustee and for its relief from responsibility, including provisions relieving it from taking proceedings to enforce payment unless indemnified or prefunded or secured to its satisfaction, and to be paid its costs and expenses in priority to the claims of Noteholders. The Trustee is entitled to enter into business transactions with the Issuer and/or the Guarantors and any entity related to the Issuer and/or the Guarantors without accounting for any profit.

The Trustee shall be entitled to rely on reports and certificates of two Authorised Signatories of the Issuer and/or the Guarantors, as applicable, and other persons notwithstanding any limit on liability therein by reference to monetary cap or otherwise. The Issuer has entered into certain covenants in the Trust Deed to deliver a certificate to the Trustee on a semi-annual basis identifying those Subsidiaries of the Group whose net worth represents 10 per cent. or more of Consolidated Net Worth and whose net income for the relevant period represents 10 per cent. or more of Consolidated Net Earnings for such period (such certificate being referred to herein as the "**10 Per cent. List**") and who shall, for all purposes be deemed Limited Group Members. Each Subsidiary that is not on the 10 Per cent. List (the "**Other Subsidiaries**") shall be deemed a Limited Group Member unless the Trustee shall have received a certificate of two Authorised Signatories delivered to it by the Issuer within three Business Days of a request by the Trustee confirming that such Subsidiary is or was at such time or during such period an Insignificant Subsidiary.

In the exercise of its powers and discretions under these Conditions and the Trust Deed, the Trustee will have regard to the interests of the Noteholders as a class and will not be responsible for any consequence for individual holders of Notes, Coupons or Talons as a result of such holders being connected in any way with a particular territory or taxing jurisdiction.

In acting under the Paying Agency Agreement and in connection with the Notes and the Coupons, the Paying Agents act solely as agents of the Issuer, each Guarantor or, following the occurrence of a Default, they may act as agents of the Trustee and do not assume any obligations towards or relationship of agency or trust for or with any of the Noteholders or Couponholders.

The initial Paying Agent and its initial Specified Office is listed below. The initial Calculation Agent (if any) is specified in the relevant Final Terms. The Issuer and each Guarantor reserve the right (subject to the prior approval of the Trustee) at any time to vary or terminate the appointment of any Paying Agent or the Calculation Agent and to appoint a successor principal paying agent or calculation agent and additional paying agents; **provided**, **however**, **that**:

(a) the Issuer and the Guarantors shall at all times maintain a Principal Paying Agent;

(b) if a Calculation Agent is specified in the relevant Final Terms, the Issuer and the Guarantors shall at all times, whilst any relevant Note remains outstanding, maintain a Calculation Agent; and

(c) if and for so long as the Notes are admitted to listing or trading on any stock exchange which requires the appointment of a Paying Agent in any particular place, the Issuer and the Guarantors shall maintain a Paying Agent having its Specified Office in the place required by the rules of such stock exchange.

Notice of any changes in any of the Paying Agents and Calculation Agents or in their Specified Offices shall promptly be given by the Issuer to the Noteholders in accordance with Condition 20 (*Notices*).

16. **Meetings of Noteholders; Modification and Waiver; Substitution**

(a) ***Meetings of Noteholders***: The Trust Deed contains provisions for convening meetings of Noteholders to consider matters relating to the Notes, including the modification of any provision of these Conditions or the provisions of the Trust Deed. Any such modification may be made if sanctioned by an Extraordinary Resolution. Such a meeting may be convened by the Issuer and the Guarantors (acting together) or the Trustee and shall be convened by the Trustee upon the request in writing of Noteholders holding not less than one-tenth of the aggregate principal amount of the outstanding Notes and provided it shall have been indemnified and/or secured and/or prefunded to its satisfaction. The quorum at any meeting convened to vote on an Extraordinary Resolution will be two or more Persons holding or representing more than half of the aggregate principal amount of the outstanding Notes or, at any adjourned meeting, two or more Persons being or representing Noteholders whatever the principal amount of the Notes held or represented; **provided**, **however**, **that** Reserved Matters may only be sanctioned by an Extraordinary Resolution passed at a meeting of Noteholders at which two or more Persons holding or representing not less than three-quarters or, at any adjourned meeting, one quarter of the aggregate principal amount of the outstanding Notes form a quorum. Any Extraordinary Resolution duly passed at any such meeting shall be binding on all the Noteholders and Couponholders, whether present or not.

In addition, a resolution in writing signed by or on behalf of all Noteholders who for the time being are entitled to receive notice of a meeting of Noteholders will take effect as if it were an Extraordinary Resolution. 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 Noteholders.

(b) ***Modification and Waiver***: The Trustee may agree, without the consent of the Noteholders or the Couponholders, to (i) any modification of any provision of these Conditions, the Paying Agency Agreement, or the Trust Deed which is in its opinion of a formal, minor or technical nature or is made to correct a manifest error or to comply with mandatory provisions of the law and (ii) any other modification (except as mentioned in the Trust Deed or in respect of a Reserved Matter) and any waiver or authorisation of any breach or proposed breach of any provision of these Conditions, the Paying Agency Agreement, or the Trust Deed (other than a proposed breach or breach relating to the subject of a Reserved Matter) which is in the opinion of the Trustee not materially prejudicial to the interests of the Noteholders, **provided that** it shall not agree any such waiver in contravention of any express direction by an Extraordinary Resolution or of a request in writing by the holders of not less than 25 per cent. of the aggregate principal amount of Notes then outstanding. Any such modification, authorisation or waiver shall be binding on the Noteholders and Couponholders. Unless the Trustee agrees otherwise, any such authorisation, waiver or modification shall be notified to the Noteholders as soon as practicable thereafter.

Additionally, the Issuer may, subject to Condition 7(o), vary or amend these Conditions, the Trust Deed and/or the Agency Agreement to give effect to certain amendments without any requirement for the consent or approval of the Noteholders as described in Condition 7(o) and the Trustee shall agree to such variations or amendments on the basis set out in Condition 7(o).

(c) ***Substitution:*** The Trust Deed contains provisions whereby the Trustee shall agree, without the consent of the Noteholders, to the substitution of the Issuer or any Guarantor (or any substituted company for the Issuer or a Guarantor), in the case of the Issuer, for itself as principal debtor (a "**Substituted Issuer**") or, in the case of a Guarantor, as unconditional and irrevocable guarantor (a "**Substituted Guarantor**"), as the case may be, with any Subsidiary or Affiliate of the Parent in place of the Issuer or the relevant Guarantor (or any previously Substituted Issuer or Substituted Guarantor under this Condition) as a new principal debtor under the Notes and the Coupons or a new guarantor under the Guarantee of the Notes, **provided that** (i) the Parent shall have provided to the Trustee a certificate from two Authorised Signatories of the Parent confirming that the proposed substitution will not be materially prejudicial to the interests of the Noteholders, (ii) the Substitution Conditions (as defined below) have been satisfied, and (iii) no payment in respect of the Notes or the Coupons is at the relevant time overdue or in default.

Such substitution may take place only if: (i) the Substituted Issuer or Substituted Guarantor, as the case may be, shall agree to indemnify and hold harmless each Noteholder 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 Substituted Issuer's or Substituted Guarantor's residence for tax purposes and, if different, of its incorporation with respect to any Note or Coupon or the Guarantee of the Notes 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, the Notes and Coupons represent valid, legally binding and enforceable obligations of the Substituted Issuer or the Trust Deed and the Guarantee of the Notes represents a valid, legally binding and enforceable obligation of the Substituted Guarantor, as the case may be, have been taken, fulfilled and done and are in full force and effect; (iii) the Substituted Issuer or Substituted Guarantor shall have become party to the Paying Agency Agreement and the Trust Deed with any appropriate consequential amendments, as if it had been an original party to it; (iv) the obligations of any Substituted Issuer under the Notes and the Coupons shall be unconditionally and irrevocably guaranteed by each of the Guarantors (unless a Guarantor has been substituted by another entity pursuant to the terms hereof, in which case, the Substituted Guarantor shall unconditionally and irrevocably guarantee the Notes and Coupons in place of such Guarantor); (v) legal opinions 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 16(c); and (vi) the Issuer shall have given at least 14 days' prior notice of such substitution to the Noteholders in accordance with Condition 20 (*Notices*), 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 Noteholders, will be available for inspection at the specified office of each of the Paying Agents. Conditions (i) to (vi) shall together constitute the "**Substitution Conditions**".

In the event that an entity will be substituted as a guarantor in place of Trafigura Group Pte. Ltd., (i) the Issuer shall be a wholly-owned direct or indirect subsidiary of such entity; (ii) such entity shall have, pursuant to a voluntary corporate reorganisation of the Group (the "**Group**" for such purposes being Trafigura Group Pte. Ltd. and its consolidated subsidiaries as at the date hereof), become the principal consolidating entity of the Group; and (iii) such entity shall consolidate substantially all of the consolidated assets and liabilities which appeared on the balance sheet of Trafigura Group Pte. Ltd. on the day immediately prior to the effective date of the voluntary corporate reorganisation. The Trustee shall be entitled to rely on a certificate from two Authorised Signatories of such Substituted Guarantor that such entity fulfils the requirement of this paragraph.

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 Noteholders as soon as reasonably practicable following a substitution in accordance with Condition 20 (*Notices*) 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 16(c) and the Trust Deed), the Trustee shall have regard to the general interests of the Noteholders as a class but shall not have regard to the consequences of any substitution or such exercise for individual Noteholders. In connection with any substitution or such exercise as aforesaid, no Noteholder shall be entitled to claim, whether from the Issuer, the Substituted Issuer, any Guarantor or any Substituted Guarantor 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 Noteholders except to the extent already provided in Condition 16 and/or any undertaking given in addition thereto or in substitution therefor pursuant to the Trust Deed.

17. **Enforcement**

The Trustee may at any time, at its discretion and without notice, institute such proceedings as it thinks fit to enforce its rights under the Trust Deed in respect of the Notes and/or the Guarantee of the Notes, but it shall not be bound to do so unless:

(a) it has been so requested in writing by the holders of at least one quarter in principal amount of the outstanding Notes or has been so directed by an Extraordinary Resolution; and

(b) it has been indemnified, prefunded or provided with security to its satisfaction.

No Noteholder may proceed directly against the Issuer or the Guarantors unless the Trustee, having become bound to do so, fails to do so within a reasonable time and such failure is continuing.

18. **Financial Information Covenant**

For so long as any Notes are outstanding the Issuer and the Guarantors will deliver to the Trustee and the Principal Paying Agent within 120 days of the end of each financial year a copy in the English language of the Group's audited consolidated annual financial statements and procure that copies of the same are made available (A) on the website of Euronext Dublin and (B) for inspection by Noteholders and Couponholders at the Specified Offices of the Paying Agents as soon as practicable thereafter.

In addition, for so long as any Notes are outstanding, the Issuer and the Guarantors will deliver to the Trustee and the Principal Paying Agent within 120 days of the end of the first six months in each financial year, a copy in the English language of the Group's unaudited consolidated half year financial statements and procure that copies of the same are made available (A) on the website of Euronext Dublin and (B) for inspection by Noteholders and Couponholders at the Specified Offices of the Paying Agents as soon as practicable thereafter.

19. **Further Issues**

The Issuer may from time to time, without the consent of the Noteholders or the Couponholders, create and issue further notes having the same terms and conditions as the Notes in all respects (or in all respects except for the first payment of interest) so as to form a single Series with the Notes.

20. **Notices**

Notices to the Noteholders shall be valid if published in a leading English language daily newspaper published in London (which is expected to be the Financial Times) and, in the case of Notes which are listed on the Official List of Euronext Dublin and admitted to trading on the regulated market of Euronext Dublin, and for so long as the rules of that exchange so require, filed with the Companies Announcements Office of Euronext Dublin and published on the website of Euronext Dublin (*https://live.euronext.com/*). If such publication is not practicable, publication will be made in a leading English language daily newspaper having general circulation in Europe. Any such notice shall be deemed to have been given on the date of first publication (or if required to be published in more than one newspaper, on the first date on which publication shall have been made in all the required newspapers). Couponholders shall be deemed for all purposes to have notice of the contents of any notice given to the Noteholders.

21. **Currency Indemnity**

If any sum due from the Issuer in respect of the Notes or the Coupons or any order or judgment given or made in relation thereto has to be converted from the currency (the "**first currency**") in which the same is payable under these Conditions or such order or judgment into another currency (the "**second currency**") for the purpose of (a) making or filing a claim or proof against the Issuer, (b) obtaining an order or judgment in any court or other tribunal or (c) enforcing any order or judgment given or made in relation to the Notes, the Issuer shall indemnify each Noteholder, on the written demand of such Noteholder addressed to the Issuer and delivered to the Issuer or to the Specified Office of the Principal Paying Agent, against any loss suffered as a result of any discrepancy between (i) the rate of exchange used for such purpose to convert the sum in question from the first currency into the second currency and (ii) the rate or rates of exchange at which such Noteholder may in the ordinary course of business purchase the first currency with the second currency upon receipt of a sum paid to it in satisfaction, in whole or in part, of any such order, judgment, claim or proof.

This indemnity constitutes a separate and independent obligation of the Issuer and shall give rise to a separate and independent cause of action.

22. Rounding

For the purposes of any calculations referred to in these Conditions (unless otherwise specified in these Conditions or the relevant Final Terms), (a) all percentages resulting from such calculations will be rounded, if necessary, to the nearest one hundred-thousandth of a percentage point (with 0.000005 per cent. being rounded up to 0.00001 per cent.), (b) all United States dollar amounts used in or resulting from such calculations will be rounded to the nearest cent (with one half cent being rounded up), (c) all Japanese Yen amounts used in or resulting from such calculations will be rounded downwards to the next lower whole Japanese Yen amount, and (d) all amounts denominated in any other currency used in or resulting from such calculations will be rounded to the nearest two decimal places in such currency, with 0.005 being rounded upwards.

23. Governing Law and Jurisdiction

(a) ***Governing law***: The Notes, the Trust Deed 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.

(b) ***Jurisdiction***: Each of the Issuer and the Guarantors (i) agrees for the benefit of the Trustee, the Paying Agents, the Noteholders and the Couponholders that the courts of England shall have exclusive jurisdiction to settle any dispute (a "**Dispute**") arising out of or in connection with the Notes (including any non-contractual obligation arising out of or in connection with the Notes); (ii) agrees that those courts are the most appropriate and convenient courts to settle any Dispute and, accordingly, that it will not argue that any other courts are more appropriate or convenient; and (iii) designates a person in England to accept service of any process on its behalf. Nothing contained in this Condition shall limit the right of any of the Trustee, the Paying Agents, the Noteholders or the Couponholders from taking proceedings relating to a Dispute ("**Proceedings**") in any other courts with jurisdiction and that, to the extent allowed by law, any of the Trustee, the Paying Agents, the Noteholders or the Couponholders may take concurrent Proceedings in any number of jurisdictions.

(c) ***Process Agent***: Each of the Issuer and the Guarantors agree that the documents which start any Proceedings and any other documents required to be served in relation to those Proceedings may be served on any of them by being delivered to Trafigura Limited at its registered office (being 14 St. George Street, London W1S 1FE, United Kingdom as of the Issue Date) or to such other person with an address in England or Wales and/or at such other address in England or Wales as the Issuer and the Guarantors may specify by notice to the Noteholders in accordance with Condition 20 (*Notices*).

Nothing in this paragraph shall affect the right of any of the Trustee, the Paying Agents, the Noteholders or the Couponholders to serve process in any other manner permitted by law. This Condition applies to Proceedings in England and to Proceedings elsewhere.

(d) ***Third Parties***: No person shall have any right to enforce any term or Condition of this Note, the Trust Deed or the Paying Agency Agreement under the Contracts (Rights of Third Parties) Act 1999.

FORM OF FINAL TERMS

Set out below is the form of Final Terms which will be completed for each Tranche of Notes issued under the Programme.

[**MiFID II product governance / Professional investors and ECPs only target market:** Solely for the purposes of [the/each] manufacturer's product approval process, the target market assessment in respect of the Notes has led to the conclusion that: (i) the target market for the Notes is eligible counterparties and professional clients only, each as defined in Directive 2014/65/EU (as amended, "**MiFID II**"); and (ii) all channels for distribution of the Notes to eligible counterparties and professional clients are appropriate. Any person subsequently offering, selling or recommending the Notes (a "**distributor**") should take into consideration the manufacturer['s/s'] target market assessment; however, a distributor subject to MiFID II is responsible for undertaking its own target market assessment in respect of the Notes (by either adopting or refining the manufacturer['s/s'] target market assessment) and determining appropriate distribution channels.]

[**UK MiFIR product governance / Professional investors and ECPs only target market**: Solely for the purposes of [the/each] manufacturer's product approval process, the target market assessment in respect of the Notes has led to the conclusion that: (i) the target market for the Notes is only eligible counterparties, as defined in the FCA Handbook Conduct of Business Sourcebook ("**COBS**"), and professional clients, as defined in Regulation (EU) No 600/2014 as it forms part of domestic law by virtue of the European Union (Withdrawal) Act 2018 (the "**EUWA**") ("**UK MiFIR**"); and (ii) all channels for distribution of the Notes to eligible counterparties and professional clients are appropriate. Any [person subsequently offering, selling or recommending the Notes (a "**distributor**")][distributor] should take into consideration the manufacturer['s/s'] target market assessment; however, a distributor subject to the FCA Handbook Product Intervention and Product Governance Sourcebook (the "**UK MiFIR Product Governance Rules**") is responsible for undertaking its own target market assessment in respect of the Notes (by either adopting or refining the manufacturer['s/s'] target market assessment) and determining appropriate distribution channels.]

PROHIBITION OF SALES TO EEA RETAIL INVESTORS: The Notes 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**")/MiFID II]; or (ii) a customer within the meaning of Directive (EU) 2016/97 (as amended, the "**Insurance Distribution Directive**"), 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 (the "**PRIIPs Regulation**") for offering or selling the Notes or otherwise making them available to retail investors in the EEA has been prepared and therefore offering or selling the Notes or otherwise making them available to any retail investor in the EEA may be unlawful under the PRIIPs Regulation.

PROHIBITION OF SALES TO UK RETAIL INVESTORS: The Notes 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 UK. For these purposes, a retail investor means a person who is one (or more) of: (i) a retail client, as defined in point (8) of Article 2 of Regulation (EU) No 2017/565 as it forms part of domestic law by virtue of the [European Union (Withdrawal) Act 2018 (the "**EUWA**")/EUWA]; or (ii) a customer within the meaning of the provisions of the Financial Services and Markets Act 2000 (as amended, the "**FSMA**") and any rules or regulations made under the FSMA to implement the Insurance Distribution Directive, where that customer would not qualify as a professional client, as defined in point (8) of Article 2(1) of Regulation (EU) No 600/2014 as it forms part of domestic law by virtue of the EUWA. Consequently, no key information document required by the PRIIPs Regulation as it forms part of domestic law by virtue of the EUWA (the "**UK PRIIPs Regulation**") for offering or selling the Notes or otherwise making them available to retail investors in the UK has been prepared and therefore offering or selling the Notes or otherwise making them available to any retail investor in the UK may be unlawful under the UK PRIIPs Regulation.

[**Notification under Section 309B(1)(c) of the Securities and Futures Act 2001 of Singapore** – Solely for the purposes of its obligations pursuant to sections 309B(1)(a) and 309B(1)(c) of the Securities and Futures Act 2001 of Singapore (the "**SFA**"), the Issuer has determined, and hereby notifies all relevant persons (as defined in section 309A of the SFA) that the Notes are ["prescribed capital markets products”]/[“capital markets products other than prescribed capital markets products”] (as defined in the Securities and Futures (Capital Markets Products) Regulations 2018).][1]

Final Terms dated [•]

TRAFIGURA FUNDING S.A.
Issue of [Aggregate Nominal Amount of Tranche] [Title of Notes]

LEI: 549300IDCRNFW0C0TJ66

Guaranteed by TRAFIGURA GROUP PTE. LTD., TRAFIGURA TRADING LLC AND TRAFIGURA PTE LTD
under the EUR 3,000,000,000

Euro Medium Term Note Programme

PART A – CONTRACTUAL TERMS

[Terms used herein shall be deemed to be defined as such for the purposes of the Conditions (the "**Conditions**") set forth in the Base Prospectus dated 10 May 2023 [and the supplemental base prospectus dated [•]] which [together] constitute[s] a base prospectus (the "**Base Prospectus**") for the purposes of Regulation (EU) 2017/1129 (the "**Prospectus Regulation**") [This document constitutes the Final Terms of the Notes described herein for the purposes of the Prospectus Regulation and must be read in conjunction with the Base Prospectus in order to obtain all the relevant information].[2]]

Full information on the Issuer and the offer of the Notes is only available on the basis of the combination of these Final Terms and the Base Prospectus. The Base Prospectus has been published on the website of Euronext Dublin (*https://live.euronext.com/*) and is also available for viewing, and electronic copies may be obtained at https://www.trafigura.com/resource-centre/publications. Once issued, the Final Terms will be available on the website of Euronext Dublin (*https://live.euronext.com/*) and at https://www.trafigura.com/resource-centre/publications.

[In accordance with the Prospectus Regulation, no prospectus is required in connection with the issuance of the Notes described herein.][3]

[*Include whichever of the following apply or specify as "Not Applicable" (N/A). Note that the numbering should remain as set out below, even if "Not Applicable" is indicated for individual paragraphs (in which case the sub-paragraphs of the paragraphs which are not applicable can be deleted). Italics denote guidance for completing the Final Terms.*]

1.	(i)	Issuer:	Trafigura Funding S.A.
	(ii)	Guarantors:	Trafigura Group Pte. Ltd., Trafigura Trading LLC and Trafigura Pte Ltd
2.	[(i)	Series Number:]	[•]
	[(ii)	Tranche Number:]	[•]
	[(iii)	Date on which the Notes become fungible:]	[Not Applicable/The Notes shall be consolidated, form a single series and be interchangeable for trading purposes with the [•] on [[•]/the Issue Date/exchange of the Temporary Global Note for interests in the Permanent Global Note, as

[1] Issuer to consider, prior to offer of Notes, whether the Notes are prescribed capital market products.

[2] Delete where the Notes are neither admitted to trading on a regulated market in the European Economic Area nor offered in the European Economic Area in circumstances where a prospectus is required to be published under the Prospectus Regulation.

[3] Delete where the Notes are neither admitted to trading on a regulated market in the European Economic Area nor offered in the European Economic Area in circumstances where a prospectus is required to be published under the Prospectus Regulation.

		referred to in paragraph 22 below [which is expected to occur on or about [•]].]
3.	Specified Currency or Currencies:	[•]
4.	Aggregate Nominal Amount:	[•]
	[(i)] [Series]:	[•]
	[(ii) Tranche:	[•]]
5.	Issue Price:	[[•] per cent. of the Aggregate Nominal Amount [plus accrued interest from [•]]
6.	(i) Specified Denominations:	[•] *(N.B. Where multiple denominations above EUR 100,000 or equivalent are being used the following sample wording should be followed:* *"EUR 100,000 and integral multiples of EUR 1,000 in excess thereof up to EUR 199,000. No Notes in definitive form will be issued with a denomination above EUR 199,000").*[4]
	(ii) Calculation Amount:	[•]
7.	(i) Issue Date:	[•]
	(ii) Interest Commencement Date:	[[•]/Issue Date/Not Applicable]
8.	Maturity Date:	[•] *[If the Maturity Date is less than one year from the Issue Date and either (a) the issue proceeds are received by the Issuer in the United Kingdom, or (b) the activity of issuing the Notes is carried on from an establishment maintained by the Issuer in the United Kingdom, (i) the Notes must have a minimum redemption value of £100,000 (or its equivalent in other currencies) and be sold only to "professional investors" or (ii) another applicable exemption from section 19 of the FSMA must be available].*
9.	Interest Basis:	[[•] per cent. Fixed Rate] [•] month [EURIBOR/alternative reference rate] [+/– [•] per cent. Floating Rate] [Zero Coupon] (further particulars specified in paragraph [14/15/16] below)
10.	Redemption/Payment Basis:	Subject to any purchase and cancellation or early redemption, the Notes will be redeemed on the

4 Note that the Specified Denomination plus integral multiples option should not be utilised in respect of Notes where item 22 specifies "Temporary Global Note exchangeable for Definitive Notes" or "Permanent Global Note exchangeable for Definitive Notes".

		Maturity Date at [100] per cent. of their nominal amount.
11.	Change of Interest or Redemption/Payment Basis:	[Applicable/Not Applicable]
12.	Put/Call Options:	[Investor Put] [Change of Control Put Option] [Issuer Call] [(further particulars specified in paragraphs [17/18/19] below)]
13.	[Date [Board] approval for issuance of Notes [and Guarantee] [respectively]] obtained:	[•] [and [•], respectively

PROVISIONS RELATING TO INTEREST (IF ANY) PAYABLE

14.	**Fixed Rate Note Provisions**		[Applicable/Not Applicable]
	(i)	Rate[(s)] of Interest:	[•] per cent. per annum payable in arrear on each Interest Payment Date
	(ii)	Interest Payment Date(s):	[•] in each year
	(iii)	Fixed Coupon Amount[(s)]:	[•] per Calculation Amount
	(iv)	Broken Amount(s):	[•] per Calculation Amount, payable on the Interest Payment Date falling [in/on] [•]
	(v)	Day Count Fraction:	[30/360 / 30E/360 / 30E/360 (ISDA) / Actual/Actual (ICMA) / Actual/Actual (ISDA) / Actual/Actual / Actual/360 / Actual/365 / Actual/365 (Fixed) / Eurobond basis]
15.	**Floating Rate Note Provisions**		[Applicable/Not Applicable]
	(i)	Interest Period(s):	[•]
	(ii)	Specified Period	[•] *(Specified Period and Specified Interest Payment Dates are alternatives. A Specified Period, rather than Specified Interest Payment Dates, will only be relevant if the Business Day Convention is the FRN Convention, Floating Rate Convention, or Eurodollar Convention. Otherwise, insert "Not Applicable")*
	(iii)	Specified Interest Payment Dates:	[Not Applicable/[•], subject to adjustment in accordance with the Business Day Convention set out in (iv) below] *(Specified Period and Specified Interest Payment Dates are alternatives. If the Business Day Convention is the FRN Convention, Floating Rate Convention, or Eurodollar Convention, insert "Not Applicable")*

(iv)	[First Interest Payment Date]:	[•]
(v)	Business Day Convention:	[Following Business Day Convention/ Modified Following Business Day Convention/Modified Business Day Convention/Preceding Business Day Convention/FRN Convention/Floating Rate Convention/Eurodollar Convention/No Adjustment]
(vi)	Additional Business Centre(s):	[Not Applicable/[•]]
(vii)	Manner in which the Rate(s) of Interest is/are to be determined:	[Screen Rate Determination/ISDA Determination]
(viii)	Party responsible for calculating the Rate(s) of Interest and/or Interest Amount(s) (if not the Principal Paying Agent):	[•] shall be the Calculation Agent
(ix)	Screen Rate Determination:	[Applicable/Not Applicable]
	• Reference Rate:	[•] month [EURIBOR/SOFR/SONIA/€STR, SARON]
	• Observation Method:	[Lag/Observation Shift]
	• Lag Period:	[5 / [●] TARGET Settlement Days/U.S. Government Securities Business Days/London Banking Days/Zurich Banking Days/Not Applicable]
	• Observation Shift Period:	[5 / [●] TARGET Settlement Days/U.S. Government Securities Business Days/London Banking Days /Zurich Banking Days/Not Applicable] (*NB: A minimum of 5 should be specified for the Lag Period or Observation Shift Period, unless otherwise agreed with the Calculation Agent*)
	• D:	[360/365/[●]] / [Not Applicable]
	• Interest Determination Date(s):	[•]
	• Relevant Screen Page:	[•]
	• Relevant Time:	[•]
	• Relevant Financial Centre:	[•]
	• Benchmark Discontinuation:	[Applicable/Not Applicable]

(x)	ISDA Determination:	[Applicable/Not Applicable]
•	ISDA Definitions:	[2006/2021] ISDA Definitions
•	Floating Rate Option:	[•]
•	Designated Maturity:	[•]
•	Reset Date:	[•]
•	Compounding:	[Applicable/Not Applicable] *(If not applicable delete the remaining sub-paragraphs of this paragraph)*
	• Compounding Method:	[Compounding with Lookback: Lookback: [●] Applicable Business Days] [Compounding with Observation Period Shift: Observation Period Shift: [●] Observation Period Shift Business Days Observation Period Shift Additional Business Days: [●]/[Not Applicable]] [Compounding with Lockout: Lockout: [●] Lockout Period Business Days Lockout Period Business Days: [●]/[Applicable Business Days]]
•	Averaging:	[Applicable/Not Applicable] *(If not applicable delete the remaining sub-paragraphs of this paragraph)*
	• Averaging Method:	[Averaging with Lookback: Lookback: [●] Applicable Business Days] [Averaging with Observation Period Shift: Observation Period Shift: [●] Observation Period Shift Business Days Observation Period Shift Additional Business Days: [●]/[Not Applicable]] [Averaging with Lockout: Lockout: [●] Lockout Period Business Days Lockout Period Business Days: [●]/[Applicable Business Days]]

	(xi)	Linear Interpolation:	[Not Applicable / Applicable – the Rate of Interest for the [long/short] [first/last] Interest Period shall be calculated using Linear Interpolation (*specify for each short or long interest period*)]
	(xii)	Margin(s):	[[+/-][•] per cent. per annum/Not Applicable]
	(xiii)	Minimum Rate of Interest:	[[•] per cent. per annum/Not Applicable]
	(xiv)	Maximum Rate of Interest:	[[•] per cent. per annum/Not Applicable]
	(xv)	Day Count Fraction:	[30/360 / 30E/360 / 30E/360 (ISDA) / Actual/Actual (ICMA) / Actual/Actual (ISDA) / Actual/Actual / Actual/360 / Actual/365 / Actual/365 (Fixed) / Eurobond basis]
16.	**Zero Coupon Note Provisions**		[Applicable/Not Applicable]
	(i)	Accrual Yield:	[•] per cent. per annum
	(ii)	Reference Price:	[•]
	(iii)	Day Count Fraction in relation to Early Redemption Amounts:	[30/360 / 30E/360 / 30E/360 (ISDA) / Actual/Actual (ICMA) / Actual/Actual (ISDA) / Actual/Actual / Actual/360 / Actual/365 / Actual/365 (Fixed) / Eurobond basis]

PROVISIONS RELATING TO REDEMPTION

17.	Call Option		[Applicable/Not Applicable]
	(i)	Optional Redemption Date(s):	[•]
	(ii)	Optional Redemption Amount(s):	[•] per Calculation Amount
	(iii)	If redeemable in part:	
		(a) Minimum Redemption Amount:	[•] per Calculation Amount
		(b) Maximum Redemption Amount	[•] per Calculation Amount
	(iv)	Notice period:	[•]
18.	Put Option		[Applicable/Not Applicable]
	(i)	Optional Redemption Date(s):	[•]
	(ii)	Optional Redemption Amount(s):	[•] per Calculation Amount
	(iii)	Notice period:	[•]
19.	Change of Control Put Option:		[Applicable/Not Applicable]
20.	Final Redemption Amount:		[•] per Calculation Amount
21.	Early Redemption Amount (Tax):		[Not Applicable / [•] per Calculation Amount]

GENERAL PROVISIONS APPLICABLE TO THE NOTES

22.	Form of Notes:	Bearer Notes: [Temporary Global Note exchangeable for a Permanent Global Note which is exchangeable for Definitive Notes in the limited circumstances specified in the Permanent Global Note] [Temporary Global Note exchangeable for Definitive Notes on [•] days' notice] [Permanent Global Note exchangeable for Definitive Notes in the limited circumstances specified in the Permanent Global Note]
23.	Additional Financial Centre(s):	[Not Applicable/*give details*.]
24.	Talons for future Coupons or Receipts to be attached to Definitive Notes (and dates on which such Talons mature):	[Yes/No. As the Notes have more than 27 coupon payments, talons may be required if, on exchange into definitive form, more than 27 coupon payments are left.]
25.	Relevant Benchmark[s]:	[[specify benchmark] is provided by [administrator legal name]. As at the date hereof, [[administrator legal name][appears]/[does not appear]] in the register of administrators and benchmarks established and maintained by ESMA pursuant to Article 36 (Register of administrators and benchmarks) of the Benchmarks Regulation]/[Not Applicable]]

THIRD PARTY INFORMATION

[(Relevant third party information) has been extracted from (specify source).] [Each of the] [The] Issuer [and the Guarantor(s)] confirms that such information has been accurately reproduced and that, so far as it is aware, and is able to ascertain from information published by (specify source), no facts have been omitted which would render the reproduced information inaccurate or misleading.]

The Issuer and each Guarantor accepts responsibility for the information contained in these Final Terms.

Signed on behalf of **TRAFIGURA FUNDING S.A.**:

By: ....
Duly authorised

By: ....
Duly authorised

Signed on behalf of **TRAFIGURA GROUP PTE. LTD.**:

By: ....
Duly authorised

By: ....
Duly authorised

Signed on behalf of **TRAFIGURA TRADING LLC**:

By: ....
Duly authorised

By: ....
Duly authorised

Signed on behalf of **TRAFIGURA PTE LTD**:

By: ....
Duly authorised

By: ....
Duly authorised

PART B – OTHER INFORMATION

1.	**LISTING AND ADMISSION TO TRADING**	[Application has been made by the Issuer (or on its behalf) for the Notes to be admitted to trading on the regulated market of the Irish Stock Exchange plc trading as Euronext Dublin/[•] with effect from [•].] [Not Applicable.] The total expenses related to admission to trading are estimated to be [EUR1,000/[•]].

2. **INTERESTS OF NATURAL AND LEGAL PERSONS INVOLVED IN THE ISSUE/OFFER**

[Save for any fees payable to the [Managers/Dealers], so far as the Issuer is aware, no person involved in the offer of the Notes has an interest material to the offer. The [Managers/Dealers] and their affiliates have engaged, and may in the future engage, in investment banking and/or commercial banking transactions with, and may perform other services for, the Issuer [and the Guarantor] and [its/their] affiliates in the ordinary course of business. (Amend as appropriate if there are other interests)]

3. **REASONS FOR THE OFFER AND ESTIMATED NET PROCEEDS**

(i) Reasons for the offer:	[•] [See ["Use of Proceeds"] in Base Prospectus/Give details] ([See ["Use of Proceeds"] wording in Base Prospectus] [*if reasons for offer different from what is disclosed in the Base Prospectus, give details here.*])
(ii) Estimated net proceeds:	[•]

4. **[Fixed Rate Notes only – YIELD**

Indication of yield:	[•]

[**Floating Rate Notes only - PERFORMANCE OF RATES**

Details of performance of EURIBOR/SOFR/SONIA/€STR/ SARON rates can be obtained, free of charge, from [Reuters/Bloomberg/give details of electronic means of obtaining the details of performance].]

5. **OPERATIONAL INFORMATION**

(i) ISIN Code:	[•]
(ii) Common Code:	[•]
(iii) FISN:	[See the website of the Association of National Numbering Agencies (ANNA) or alternatively sourced from the responsible National Numbering Agency that assigned the ISIN/Not Applicable/Not Available]
(iv) CFI Code:	[See the website of the Association of National Numbering Agencies (ANNA) or alternatively sourced from the responsible National Numbering Agency that assigned the ISIN/Not Applicable/Not Available]

	(*If the CFI and/or FISN is not required or requested, it/they should be specified to be "Not Applicable"*.)
(v) Delivery:	Delivery [against/free of] payment
(vi) Names and addresses of additional Paying Agent(s) (if any)	[•]

6. **DISTRIBUTION**

(i)	Method of distribution:	[Syndicated/Non-syndicated]
(ii)	If syndicated:	[Not Applicable]
	(a) Names and addresses of Managers and underwriting commitments:	[•]
	(b) Stabilisation Manager(s) (if any):	[Not Applicable/[•]]
(iii)	If non-syndicated, name and address of Dealer:	[Not Applicable/[•]]
(iv)	U.S. Selling Restrictions:	[TEFRA C/TEFRA D/TEFRA Not Applicable]

SUMMARY OF PROVISIONS RELATING TO THE NOTES WHILE IN GLOBAL FORM

Clearing System Accountholders

Each Global Note will be in bearer form. Consequently, in relation to any Tranche of Notes represented by a Global Note, references in the Conditions to "Noteholder" are references to the bearer of the relevant Global Note which, for so long as the Global Note is held by a depositary or a common depositary, will be that depositary or common depositary.

Each of the persons shown in the records of Euroclear and/or Clearstream, Luxembourg and/or any other relevant clearing system as being entitled to an interest in a Global Note (each an "**Accountholder**") must look solely to Euroclear and/or Clearstream, Luxembourg and/or such other relevant clearing system (as the case may be) for such Accountholder's share of each payment made by the Issuer or the Guarantors to the bearer of such Global Note and in relation to all other rights arising under the Global Note. The extent to which, and the manner in which, Accountholders may exercise any rights arising under the Global Note will be determined by the respective rules and procedures of Euroclear and Clearstream, Luxembourg and any other relevant clearing system from time to time. For so long as the relevant Notes are represented by the Global Note, Accountholders shall have no claim directly against the Issuer or the Guarantors in respect of payments due under the Notes and such obligations of the Issuer and the Guarantors will be discharged by payment to the bearer of the Global Note.

Conditions applicable to Global Notes

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

Payments: All payments in respect of the Global Note will be made against presentation and (in the case of payment of principal in full with all interest accrued thereon) surrender of the Global Note to or to the order of any Paying Agent and will be effective to satisfy and discharge the corresponding liabilities of the Issuer in respect of the Notes. On each occasion on which a payment of principal or interest is made in respect of the Global Note, the Issuer shall procure that the payment is noted in a schedule thereto.

Payment Business Day: In the case of a Global Note, shall be: if the currency of payment is euro, any day which is a TARGET Settlement Day and a day on which dealings in foreign currencies may be carried on in each (if any) Additional Financial Centre; or, if the currency of payment is not euro, any day which is a day on which dealings in foreign currencies may be carried on in the Principal Financial Centre of the currency of payment and in each (if any) Additional Financial Centre.

Exercise of put option: In order to exercise the option contained in Condition 9(e) (*Redemption at the option of Noteholders*) the bearer of the Permanent Global Note must, within the period specified in the Conditions for the deposit of the relevant Note and put notice, give written notice of such exercise to the Principal Paying Agent specifying the principal amount of Notes in respect of which such option is being exercised. Any such notice will be irrevocable and may not be withdrawn.

Partial exercise of call option: In connection with an exercise of the option contained in Condition 9(c) (*Redemption at the option of the Issuer*) in relation to some only of the Notes, the Permanent Global Note may be redeemed in part in the principal amount specified by the Issuer in accordance with the Conditions and the Notes to be redeemed will not be selected as provided in the Conditions but in accordance with the rules and procedures of Euroclear and Clearstream, Luxembourg (to be reflected in the records of Euroclear and Clearstream, Luxembourg as either a pool factor or a reduction in principal amount, at their discretion).

Notices: Notwithstanding Condition 20 (*Notices*), while all the Notes are represented by a Permanent Global Note (or by a Permanent Global Note and/or a Temporary Global Note) and the Permanent Global Note is (or the Permanent Global Note and/or the Temporary Global Note are) deposited with a depositary or a common depositary for Euroclear and/or Clearstream, Luxembourg and/or any other relevant clearing system, notices to Noteholders 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 Noteholders in accordance with Condition 20 (*Notices*) on the date of delivery to Euroclear and/or Clearstream, Luxembourg and/or any other relevant clearing system, except that (i) for so long as the Notes are listed on the Official List of Euronext Dublin and its rules so require, all notices to holders will also be published by the Issuer by delivery to the Companies Announcement

Office in Dublin and on the website of Euronext Dublin (*https://live.euronext.com/*); and (ii) in the case of Notes listed, traded or quoted on any other listing authority, stock exchange and/or quotation system, the requirements of such other listing authority, stock exchange or quotation system are complied with.

USE OF PROCEEDS

The net proceeds of the issue of each Tranche of Notes will be applied by the Group for general corporate purposes.

DESCRIPTION OF THE GROUP

Since 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) has 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, #29-01/05 Ocean Financial Centre, 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. This is particularly important in times of lower volatility, when global commodity trading margins are under pressure, as well as during disruptive periods, when access to liquidity and a vast geographic footprint are particularly important. As a result, there has been consolidation in the industry, putting mid-tier companies under pressure, with global players such as the Group becoming more prominent. These changes provide the Group with scope for growth in its core commodity activities, as demonstrated by strong results over the financial year ended 30 September 2022 in both core trading divisions.

The Group also notes a more recent trend amongst the main independent global commodity traders to ramp up their investments in renewable energy as demand surges for clean fuels and investors increasingly look for projects related to the transition to a lower-carbon world. The industry is set to play a key role in the technologies and materials needed to support the energy transition.

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

For the financial year ended 30 September 2022, the Group had a turnover (revenue) of USD 318 billion, with 67 per cent. generated by oil and petroleum products (including the renewables division) and 33 per cent. generated by the metals and minerals business division compared to a turnover of USD 231 billion with 61 per cent. and 39 per cent. generated by oil and petroleum products and by the metals and minerals business division, respectively, for the financial year ended 30 September 2021. For the financial year ended 30 September 2022, the Group traded approximately 6.6 million barrels of physical oil per day (“**mbpd**”), compared to the daily average of 7.0 million barrels in financial year 2021. This reduction in oil and petroleum volumes mostly happened in the second half of the financial year, driven by the termination of long-term contracts for Russian crude oil in light of international sanctions, reduced availability of hedging in derivatives markets used to manage price risk, and a decision to focus on higher-margin opportunities. Based on its own market intelligence, the Group believes itself to be world’s second largest independent trader of oil & petroleum products, LNG and non-ferrous metals.

The Group is one of the only three truly global commodity traders, the others being Glencore (although it has become more of a marketer of its own production since the merger with Xstrata in 2012) and Vitol.

With global energy demand set to increase, driven by rising prosperity in developing economies, the Group is well positioned to leverage its already leading position in the marketplace. Non-OECD countries are set to grow faster than OECD countries. Strong demographic and economic drivers like population increase, urbanisation and income growth are expected to foster demand for conventional energy sources for years to come.

Trafigura is also well placed to benefit from the accelerating decarbonisation agenda, which will rely heavily on the ability to source non-ferrous metals needed for energy storage and renewable energy generation, as well the ability to source and market fuels with lower carbon intensity such as natural gas, LNG and low GHG emissions intensity oil.

Extensive global network

The Group's operations are geographically diversified with exposure to high growth supply and demand regions. The Group maintains a global presence with 61 offices and is active in 156 countries across Europe, Asia, Australia, North America, Latin America and Africa, employing an average of 12,347 people over the financial year. It is noted that the equivalent figures five years ago were approximately 3,900 employees, not including Puma Energy, which was consolidated in the Group's balance sheet from 30 September 2021, and which currently represents approximately 2,900 additional employees.

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 scope of activities. 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 and zinc. In November 2019, the Group announced the establishment of a new business line trading and investing in power and renewable energy, as the Group is well placed to assist the global transition to a lower-carbon world. In October 2022, Trafigura announced the combination of its trading activities in natural gas, liquified natural gas, power and carbon into a new division: gas and power trading; with a separate renewable energy division covering investments in renewable power, green hydrogen and clean energy technologies.

The Group has a diverse customer base with no single external customer representing more than 3.2 per cent. of turnover for oil and petroleum products, and 2.5 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 2022, the Group's top 10 customers in either business constitute less than 24 per cent. of revenues for the 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 where possible, as well as having the control of logistics tools (e.g. time charters vessels, storage facilities, ports etc.). The Group's investments, whether in the oil and petroleum products 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.

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.

With global seaborne trade volumes increasing and growing port and storage capacity tightness worldwide, the benefits of having access to competitive assets are expected to continue. The rise in demand for refining capacity, import and export terminals, and the need for large storage capacities of oil and other commodities will drive the growth of the global storage and handling market. The Group is well placed to benefit from its access to state-of-the-art facilities and expertise as a supply chain operator, as cost of storage and handling are expected to grow in the future. Companies like Puma Energy and Impala Terminals will play a critical role for the Group in providing these services as well as satisfying increasing global demand.

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 8,373 million as of 30 September 2022, compared to USD 9,351 million at financial year 2021 end. This reduction by USD 978 million is mostly due to the disposal of the Vostok Oil investment in July 2022 following Russia's invasion of Ukraine, which represented USD 862 million as of financial year 2021 end. Additional decreases relate to impairments of Nyrstar and Puma assets due to challenging market conditions. However, those impairments were mostly offset by an increase in environmental emission allowances (held for own use) recognised under intangible assets. These fixed assets correspond mainly to the Group's investment in (i) Puma Energy, a global midstream and downstream energy company; (ii) Impala Terminals, the Group's metals and minerals warehousing division and logistics provider (which transferred some of its operations to a 50:50 joint venture with IFM in September 2018); (iii) Nyrstar, a global multi-metals mining and smelting business, with a market-leading position in zinc and lead; (iv) the Group's oil storage and export terminals (e.g. fully-owned Petromining terminal in Argentina); (v) various other assets held as part of its mining portfolio; and (vi) carbon credits for own use, related to oil trading activities, as well as power trading.

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 over 25 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 superior 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 underlying EBITDA (defined as operating profit or loss before depreciation and amortisation excluding share-based payments (non-cash) and exceptional and/or non-operational items) increased at a 45 per cent. compound annual growth rate ("**CAGR**") over the last 5 years (2018-2022).

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 2022, the Group sourced funds from about 140 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 91 per cent. from USD 38.2 billion to approximately USD 72.9 billion as of 30 September 2022 (excluding Puma).

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

As mentioned above, the Group's investments, whether in the oil and petroleum products 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. 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 correspond mainly to the Group's investment in (i) Puma Energy, a global midstream and downstream energy company; (ii) Impala Terminals, the Group’s metals and minerals warehousing division and logistics provider (which transferred some of its operations to a

50:50 joint venture with IFM in 2018); (iii) Nyrstar, a global multi-metals mining and smelting business, with a market-leading position in zinc and lead; (iv) the Group's oil storage and export terminals (e.g. fully-owned Petromining terminal in Argentina); (v) various other assets held as part of its mining portfolio; and (vi) carbon credits for own use, related to oil trading activities, as well as power trading.

The Group has demonstrated its ability to divest fixed assets and recycle capital over time, allowing the Group to crystallise gains from its investments and to 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. Over the years, significant divestment included the full or partial sale of mining assets (Volcan (2010), Anvil (2012), Tiger (2012), CMC (2013) and MATSA (2021)); more than 50 per cent. of Puma Energy in 2013; the creation of an oil storage and export facility at Corpus Christi (Texas) and subsequent sale of a majority stake to Buckeye Partners L.P. in 2014, while retaining commercial rights; 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; and more recently the 50:50 joint venture with IFM to operate some of Impala Terminal's assets.

A recent highlight was the sale of MATSA, the Group's Spanish polymetallic mining joint venture, to Sandfire Resources. The transaction was announced in September 2021 and was completed in February 2022, following receipt of necessary regulatory approvals. As part of the sale agreement, Trafigura retained a life of mine concentrate agreement for 100 per cent. of offtake from MATSA. The receivable from Sandfire Resources in relation to this sale was settled during financial year 2022.

During financial year 2022, following Russia's invasion of Ukraine in February, Trafigura froze its investments in Russia and announced a review of the Group's 10 per cent. non-operational, passive shareholding in Vostok Oil, with the intention of exiting. The Group terminated its long-term contracts with Russian state-owned entities ahead of sanctions taking effect in May. Then, in July 2022, Trafigura completed the exit of the Vostok investment, including associated non-recourse bank debt at the structured entity level. No loss was recorded at the exit from the investment structure.

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

The Group is owned exclusively by its management and senior employees, with over 1,100 shareholders. This ownership model ensures focus on the long term success of the business, promoting management depth and stability, with a comprehensive and prudent risk management framework. By virtue of having capital at risk, employees are incentivised to take a long term view on the Group's overall performance and to protect its capital.

The Group benefits from an experienced management team which has developed the expertise required to manage a global 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 Group'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 by:

- Keeping sufficient, immediately-available cash on hand to be prepared for a potential high volatility period, and associated possible margin calls, or any urgent cash outflow. As of 30

September 2021 and as of 30 September 2022, the Group maintained USD 5.4 billion and USD 8.6 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;

- Keeping sufficient headroom in case of a strong increase in volumes traded and/or commodities prices: utilisation of transactional lines for the 2022 financial year averaged about 68 per cent., while average utilisation of revolving credit facilities over the same period was around 67 per cent.;

- Advanced funding sublimit incorporated in the European RCF (USD 1,425 million) and Asian RCF allowing same-day drawing of funds (otherwise T+3); and

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

Recent Financial Results for the financial years ended 30 September 2022 and 30 September 2021

Profit and Loss

Consolidated Statement of income	**Year ended 30 September**	
USD million	**2022**	**2021**
Revenue	318,476.4	231,308.1
Materials, transportation and storage	(302,899.4)	(222,056.1)
Employee benefits	(1,443.9)	(1,233.7)
Services and others	(2,151.3)	(1,128.0)
Operating profit/(loss) before depreciation and amortisation	**11,981.8**	**6,890.3**
Depreciation (right-of-use assets)	(1,216.3)	(1,094.7)
Depreciation and amortisation (PP&E and intangible fixed assets)	(584.2)	(361.3)
Impairments (fixed assets)	(535.9)	(685.5)
Impairments (financial assets and prepayments)	(103.3)	2.9
Operating profit/(loss)	**9,542.1**	**4,751.7**
Share of profit/(loss) of equity-accounted investees	54.2	(110.8)
Disposal results and impairments of equity-accounted investees	(51.6)	(440.3)
Income/(expenses) from investments	(44.3)	88.5
Result from equity-accounted investees and investments	**(41.7)**	**(462.6)**
Finance income	739.6	405.9
Finance expense	(2,280.5)	(1,252.3)
Result from financing activities	**(1,540.9)**	**(846.4)**
Profit before tax	**7,959.5**	**3,442.7**
Income tax	(933.3)	(368.0)
Profit for the year	**7,026.2**	**3,074.7**
Profit attributable to		
Owners of the Issuer	6,994.2	3,100.0
Non-controlling interests	32.0	(25.3)
Profit for the year	**7,026.2**	**3,074.7**

Revenue for financial year ended 30 September 2022 rose by 38 per cent. to USD 318 billion compared to the financial year ended 30 September 2021, primarily as a result of higher average commodity prices over the period. The Group traded an average of 6.6 million barrels of oil and petroleum products per day, a 6 per cent. decrease over the prior year. This was due to a reduction in oil and petroleum volumes in the second half of the financial year which was primarily driven by the termination of long-term contracts for Russian crude oil and products in light of international sanctions, reduced availability of hedging in derivatives markets, which are used by the Group to manage price risk, and a decision to focus on higher-margin opportunities. Non-ferrous metals traded volumes for the financial year ended 30 September 2022 were flat at 23.3 million metric tonnes, while bulk minerals volumes, driven by increased iron ore volumes, rose by 10 per cent. to 91.3 million metric tonnes.

Underlying EBITDA increased by 73 per cent. to USD 12,089 million for the financial year ended September 2022, from USD 6,996 million for the financial year ended September 2021. This represented an underlying EBITDA margin of 3.8 per cent. compared to 3.0 per cent. recorded for the financial year ended September 2021 – an increase driven by focus on higher margin opportunities and increased premium placed on Trafigura's services in a highly volatile environment.

The oil and petroleum products division continued to benefit from market volatility and the recovery of global demand. Metals and minerals, had a strong result as well, however, a decrease in underlying EBITDA compared to 2021 was primarily driven by weaker demand in China. Trading desks once again managed extreme market volatility across a broad spectrum of commodities and performed strongly regardless of market conditions. Fundamental to this performance were the Group's strong risk controls and the depth of its market knowledge and expertise, incorporating the increased use of data analytics.

Net financing costs rose to USD 1,541 million for the financial year ended 30 September 2022 from USD 846 million for the financial year ended 30 September 2021. This largely reflected the rise in interest rates throughout the year, with USD interest rates moving from 0.15 per cent. in September 2021 to 3.5 per cent. a year later. Impairments of fixed and financial assets totalled USD 639 million for the financial year ended 30 September 2022, compared to USD 683 million for the financial year ended 30 September 2021. These included a write down of the value of Nyrstar's Australian smelter assets, and goodwill and various assets within Puma Energy. Net assets held for sale decreased due to strategic disposals by Puma Energy (Angola and Infrastructure division).

From an operating profit perspective, the Group believes that underlying EBITDA is the most appropriate indicator to assess performance as it does not consider investment gains and impairments – i.e. exceptional items and share-based payments (non-cash). Underlying EBITDA for the financial year ended 30 September 2022 was a record USD 12,089 million, compared to USD 6,996 million in for the financial year ended 30 September 2021, an increase of 73 per cent. year-on-year.

Assets and Liabilities

USD million	As at 30 September 2022	2021
Assets		
Property, plant and equipment	4,377.1	4,761.9
Intangible assets	2,112.7	1,815.3
Right of use assets	3,904.5	2,406.2
Equity-accounted investees	979.6	842.2
Prepayments	1,534.1	1,804.6
Loans receivable	307.5	347.7
Other investments	595.5	1,584.2
Derivatives	1,125.2	331.8
Deferred tax assets	210.4	265.7
Other non-current assets	4,285.9	917.9
Total non-current assets	**19,432.5**	**15,077.5**
Inventories	22,583.6	29,653.5
Trade and other receivables	27,630.5	24,906.6
Derivatives	7,179.0	2,621.7
Prepayments	2,117.2	1,675.1
Income tax receivable	311.4	143.7
Other current assets	3,422.3	2,536.3
Deposits	642.0	460.0
Cash and cash equivalents	14,881.3	10,677.5
Total current assets	**78,767.3**	**72,674.4**
Assets classified as held for sale	**434.1**	**2,425.4**
Total assets	**98,633.9**	**90,177.3**

* Restated as a result of amendments to the provisional assessment of the identifiable assets acquired in the acquisition of Puma Energy. For further details, see notes 2.6 and 7.2 of the audited consolidated financial statements of the Group as of and for the year ended 30 September 2022 incorporated by reference in this Base Prospectus.

As at 30 September 2022, the Group's total assets amounted to USD 98.6 billion, an increase of 9 per cent. from USD 90.2 billion as at 30 September 2021. Current assets rose to USD 78.8 billion as at 30 September 2022 from USD 72.7 billion as at 30 September 2021. This increase was primarily due to high commodity prices as reflected in higher trade and other receivables and derivatives. The growth was partially offset by inventories, which fell from USD 29.7 billion to USD 22.6 billion due to improved working capital management. In accordance with Trafigura policy, 100 per cent. of these inventories are either hedged or pre-sold. Cash and cash equivalents at the end of the period grew by USD 4.2 billion due to strong cash flow generation.

Non-current assets also rose to USD 19.4 billion as at 30 September 2022 from USD 15.1 billion as at 30 September 2021, largely reflecting the increasing number and value of shipping leases on Trafigura's books and long-term LNG contracts. There was also an increase in 'Other non-current assets' due to non-financial hedged items as the Group continues to use derivative financial instruments to hedge certain tolling, transportation and long-term LNG off-take agreements. 'Property, plant and equipment', decreased as the Group realised impairments on fixed assets in Puma Energy, Nyrstar and Magdalena River supply chain operations.

	As at 30 September	
USD million	**2022**	**2021***
Equity		
Share capital	1,503.7	1,503.7
Capital securities	654.1	1,173.9
Reserves	(537.5)	(289.5)
Retained earnings	13,288.4	7,914.8
Equity attributable to owners of the Issuer	**14,908.7**	**10,302.9**
Non-controlling interests	169.9	242.7
Total group equity	**15,078.6**	**10,545.6**
Liabilities		
Loans and borrowings	9,614.5	10,911.6
Long-term lease liabilities	2,817.1	1,646.8
Derivatives	2,723.7	804.3
Provisions	474.2	449.9
Other non-current liabilities	521.9	551.9
Deferred tax liabilities	380.4	394.9
Total non-current liabilities	**16,531.8**	**14,759.4**
Loans and borrowings	29,663.6	34,269.5
Short-term lease liabilities	1,170.1	925.3
Trade and other payables	25,649.5	22,814.6
Current tax liabilities	1,037.9	648.0
Other current liabilities	1,562.1	1,427.1
Derivatives	7,910.9	4,326.3
Total current liabilities	**66,994.1**	**64,410.8**
Liabilities classified as held for sale	**29.4**	**461.5**
Total Group equity and liabilities	**98,633.9**	**90,177.3**

* Restated as a result of amendments to the provisional assessment of the identifiable assets acquired in the acquisition of Puma Energy. For further details, see notes 2.6 and 7.2 of the audited consolidated financial statements of the Group as of and for the year ended 30 September 2022 incorporated by reference in this Base Prospectus.

With respect to liabilities, long-term and short-term loans and borrowings decreased by 13 per cent. as at 30 September 2022, driven primarily by a decrease in short-term debt, reflecting the improved working capital management which resulted in a decrease in inventories, while oil traded volumes were slightly reduced. Similar to the trend on trade and other receivables, trade and other payables grew by 12 per cent. to USD 25.6 billion, mostly due to higher commodity prices. There was also an increase in current derivatives positions, predominantly caused by physical forward contracts (mostly related to LNG trades) – it is of note that the losses/gains booked on these contracts are offset by similar losses/gains on associated cash settled hedge derivatives, resulting in no net loss/profit being taken on such forward physical contracts.

Group equity was USD 15,079 million as at 30 September 2022, up from USD 10,546 million as at 30 September 2021. Such increase year-on-year, by a record USD 4,533 million, is the result of significant retained earnings (only partly offset by USD 1.7 billion in dividends).

Cash Flow

Consolidated statement of cash flows	**Year ended 30 September**	
	2022	**2021**
USD million		
Operating cash flow before working capital changes	12,125.0	6,988.3
Cash generated from/(used in) operating activities	15,955.2	881.8
Net cash from/(used in) operating activities	13,744.9	(233.5)
Net cash from/(used in) investing activities	(535.7)	(2,727.9)
Net cash from/(used in) financing activities	(9,005.4)	7,881.9
Net increase/(decrease)in cash and cash equivalents	4,203.8	4,920.5
Cash and cash equivalents at 30 September	14,881.3	10,677.5

The Group's trading performance continued to generate strong cash flows, with operating cash flow before working capital changes of USD 12,125 million for financial year ended 30 September 2022, an increase from USD 6,988 million for financial year ended 30 September 2021. The Group believes this operating cash flow metric is the most reliable measures of financial performance, since the level of working capital is predominantly driven by prevailing commodity prices and such price variations are financed under the Group's self-liquidating finance lines. Over the years, cash outflows/inflows from changes in working capital have mostly been netted off by drawdowns/repayments under the Group's transactional lines.

For the financial year ended 30 September 2022, net cash generated by operating activities was higher as compared to the financial year ended 30 September 2021, at USD 13,745 million compared to negative USD 234 million, reflecting the Group's strong organic cash flow generation and reduction in inventories. Investing activities resulted in a net cash use of USD 536 million for the financial year ended 30 September 2022 compared to an outflow of USD 2,728 million for the financial year ended 30 September 2021. Higher cash outflow in 2021 was partly driven by the Vostok Oil investment made in December 2020, noting that the Company exited this investment in July 2022 following Russia's invasion of Ukraine.

For the financial year ended 30 September 2022, net cash flows used in financing activities was USD 9,005 million, compared to an inflow of USD 7,882 million for the financial year ended 30 September 2021. The Group was able to decrease the use of financing lines even though the balance sheet grew thanks to exceptional cash generation and an improved working capital cycle.

The overall balance of cash and cash equivalents as of 30 September 2022 was USD 14,881 million, compared to USD 10,678 million as at 30 September 2021, including USD 8.6 billion of immediately (same day) available cash in liquidity funds.

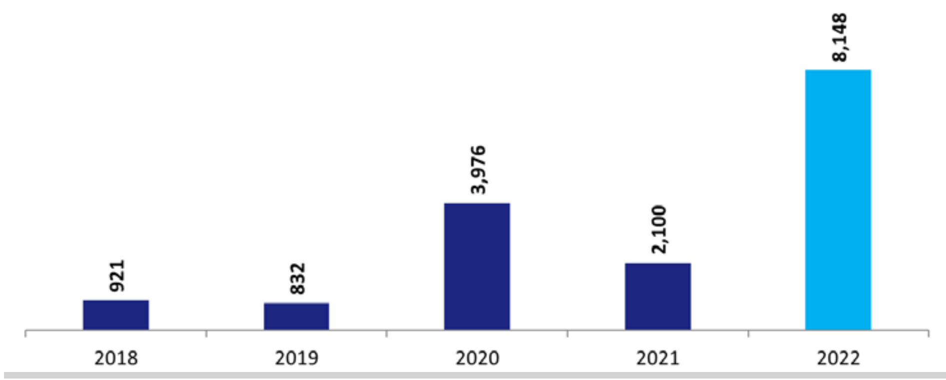
Operating Free Cash Flow ("Operating FCF")

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 cashflow 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, focus should be on the 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.

The Group continued to generate strong Operating FCF in the financial year 2022 of USD 9,379 million (USD 8,148 million when eliminating USD 1,231 million in payments of lease liabilities, in relation to IFRS 16). This reflects the Group's consistent cash flow generation since the financial year 2016, in conjunction with an updated investment approach following a phase of strategic investments in the 2013-2015 period. From the financial year 2017 to the financial year 2020, the Group reduced its annual Capex (as defined below) spent, with a Capex (net of divestments) threshold of USD 500 million per year, often including partners when directly making new investments, and worked on the disposal of non-core assets. It is also worth noting that Operating FCF has largely covered the Group's share buybacks over the last six years, which further demonstrates the Group's commitment to a conservative capital structure, increasing the Group's equity base from USD 5.8 billion at 30 September 2016 to USD 15.1 billion at 30 September 2022.

OPERATING FREE CASH FLOW AFTER ADJUSTING FOR IFRS 16 LEASE LIABILITIES (USD MILLION)*



* As from 1 October 2019, the Company adopted IFRS 16. Operating Free Cash Flow as presented above excludes the impact of IFRS 16. Compliance with IFRS 16 would increase the financial year 2022, 2021 and 2020 Operating FCF by USD 1,231 million, USD 1,045 million and USD 999 million, respectively.

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 typical industrial companies may not apply. For the Group and its peers, banks and investors have historically considered financial leverage after excluding some specific balance sheet items (for example, inventories or non-recourse securitisation programmes), resulting in the use of adjusted debt as an appropriate leverage metric. The following adjustments are made to calculate the Group's adjusted debt metric:

- Cash and cash equivalents and short-term deposits are deducted from total debt as reported;
- Pre-sold or hedged stock is deducted from debt (including purchased and prepaid inventories which are being released). 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;
- The Trade Receivables Securitisation Programmes are taken out on the basis that they are entirely distinct legal entities from the Group, with no recourse to the Group, and are only consolidated into the financial statements in accordance with the Group's accounting rules; and
- Non-recourse invoice discounting or specific portion of loans (for example, non-recourse portions of bank lines used to extend prepayments to counterparties) are deducted from total debt as reported.

The ratio of adjusted debt to Group equity moved to negative 0.47x as of 30 September 2022, compared to negative 0.21x as of 30 September 2020. This reduction principally reflected strong retained earnings during the year, continued strong cash flow generation and improved working capital. In more details, key drivers were:

- Approximately USD 4.5 billion increase in Group equity thanks to significant retained earnings in the financial year ended 30 September 2022 (resulting from strong profitability measured dividend pay-out policy);

- Steady cash generation with approximately USD 8.1 billion in Operating Free Cash Flow after deducting lease financial liabilities (i.e. the IFRS 16 impact); and
- Decrease in total debt, thanks to the reduction in Trafigura's inventories.

It is important to note that the nature of this ratio means it fluctuates over time, as it is highly correlated to commodity prices. Whilst the ratio of adjusted debt to Group equity was particularly low as of 30 September 2022, the Group's intention remains to maintain it to a level of around 1.0x. Any upward fluctuation of this ratio towards 1.0x in the future should not be considered as a sign of the Group relaxing its disciplined effort to maintain a solid credit standing.

Reconciliation from loans and borrowings to adjusted debt and adjusted debt to group equity ratio

	30 Sep 2022	**30 Sep 2021**	**30 Sep 2020**	**30 Sep 2019**	**30 Sep 2018**
USD million					
Non-current loans and borrowings.......	9,614.5	10,911.6	7,070.1	8,492.1	8,462.1
Current loans and borrowings.............	29,663.6	34,269.5	25,783.5	22,455.5	23,741.6
Total debt as reported	**39,278.1**	**45,181.1**	**32,853.6**	**30,947.6**	**32,203.7**
Adjustments:					
Cash and cash equivalents	(14,881.3)	(10,677.5)	(5,757.0)	(6,267.2)	(5,355.8)
Deposits	(642.0)	(460.0)	(466.0)	(374.2)	(334.4)
Inventories including pre-sold / hedged inventories..	(23,873.6)	(30,508.8)	(20,921.8)	(14,137.2)	(15,620.6)
Securitisation debt	(5390.7)	(5,150.6)	(2,750.6)	(4,422.1)	(4,294.1)
Non-recourse debt	(1,607.1)	(555.4)	(198.4)	(437.2)	(562.2)
Adjusted total debt	**(7,116.6)**	**(2,171.3)**	**2,759.8**	**5,309.7**	**6,036.6**
Group equity	15,078.6	10,545.6	7,789.9	6,804.7	6,250.1
Adjusted debt / Group equity...........	**(0.47)x**	**(0.21)x**	**0.35x**	**0.78x**	**0.97x**

Corporate Debt to EBITDA Ratio

As mentioned above, there are some limitations to using the adjusted debt metric, primarily as 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. Therefore, the Group is also using another leverage ratio referred to as corporate debt to EBITDA ratio, defined as corporate debt divided by underlying EBITDA. The Group believes this is a more relevant ratio for senior creditors than only cash 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 (in general 1 to 3 months) and very low default rate due to the strategic nature of the goods. 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 Group but rather by the completion of the trade flow cycle (through the payment of the invoice or the resale of the commodity). As a result, corporate debt focuses on debt which is repaid by underlying EBITDA generation. It considers all debt, whether short-term or long-term, and removes:

- Cash and cash equivalents and short-term deposits;
- Pre-sold or hedged stock (including purchased and pre-paid inventories being released);
- Trade receivables in excess of trade payables (including 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).

It is important to note that the Trade Receivables Securitisation Programmes do 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 in order to avoid double counting (as receivables in excess of payables are already deducted).

Following an intensive cycle of investments in fixed assets from the financial year 2012 to the financial year 2015, the Group decided in the financial year 2017 to limit total annual capital expenditures and investments (net of divestments) to USD 500 million for the years to come. This decision combined with strong Operating FCF generation starting from the financial year 2016 led to a strong reduction in corporate debt level as of the end of the financial year 2017. The increase of approximately USD 1.2 billion in corporate debt during the financial year 2018 was mainly related to an increase in long-term loans and borrowings, as a result of a USD 500 million perpetual bond repayment and significant collateral posting in relation to LNG and US crude hedges. Further, the increase of approximately USD 450 million in corporate debt during the financial year ended 30 September 2019 was primarily driven by higher prepayments and the repayment of the SGD 200 million perpetual bond. The sharp decrease in corporate debt over the financial year ended 30 September 2020 was mostly driven by an exceptional cash generation level mentioned previously while limiting capital expenditures (net of divestments), as underlying EBITDA increased 2.2 times compared to the previous year (on a like-for-like basis – excluding the effect of IFRS 16).

Over the financial year ended 30 September 2021, corporate debt increased again, by approximately USD 2.1 billion, mostly due to an increase in debt following the consolidation of Puma Energy, together with cash outflows relating to payment of margin calls on LNG hedges. This more than offset a record underlying EBITDA generation over that financial year, which increased by 13 per cent. compared to financial year ended 30 September 2020. As of 30 September 2022, corporate debt stood at a negative USD 1.4 billion, a significant decrease compared to USD 3.1 billion as of 30 September 2021, driven by the exceptional cash generation of USD 8.1 billion Operating FCF (after IFRS 16 adjustment). The ratio of corporate debt to EBITDA decreased from 0.4x as of 30 September 2021 to negative 0.1x as of 30 September 2022, as reduced corporate debt was combined with a strong 73 per cent. increase in underlying EBITDA. Noting that the Company keeps its long-term target for this ratio in the range of 2.0x to 3.0x, a level consistent with an investment grade profile.

Reconciliation from loans and borrowings to corporate debt and corporate debt to EBITDA ratio

	30 Sep 2022	**30 Sep 2021**	**30 Sep 2020**	**30 Sep 2019**	**30 Sep 2018**
USD million					
Non-current loans and borrowings......	9,614.5	10,911.6	7,070.1	8,492.1	8,462.1
Current loans and borrowings.............	29,663.6	34,269.5	25,783.5	22,455.5	23,741.6
Total debt as reported	**39,278.1**	**45,181.1**	**32,853.6**	**30,947.6**	**32,203.7**
Adjustments:					
Cash and cash equivalents	(14,881.3)	(10,677.5)	(5,757.0)	(6,267.2)	(5,355.8)
Deposits	(642.0)	(460.0)	(466.0)	(374.2)	(334.4)
Inventories including pre-sold / hedged inventories...	(23,873.6)	(30,508.8)	(20,921.8)	(14,137.2)	(15,620.6)
Trade receivables in excess of trade payables*	(1,249.1)	(387.4)	(4,709.1)	(5,010.0)	(6,064.4)
Non-recourse debt	(25.9)	(17.2)	(4.0)	(87.1)	(202.2)
Corporate debt.................................	**(1,393.8)**	**3,130.1**	**995.8**	**5,071.9**	**4,626.3**
Underlying EBITDA[5] last 12 months..	12,088.6	6,995.5	6,164.7	2,223.7	1,867.7
Corporate debt/ Underlying EBITDA...	**(0.1)x**	**0.4x**	**0.2x**	**2.3x**	**2.5x**

* Deferred revenue was reclassified from trade and other payables to other current liabilities in financial year 2021. Information for financial years ended 30 September 2018, 2019 and 2020 has been restated to reflect this.

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 crises – as demonstrated again in recent years, amid the COVID-19 pandemic, with strong performance in an extraordinary period for the global economy, including commodity markets. Trafigura's performance in the financial year ended 30 September 2022 again set new records in terms of overall profitability. Net profit, underlying EBITDA and turnover for the year were the highest in Trafigura's 29-year history, consolidating the strong performance in 2021. Those results demonstrated a structural rebasing of the quality and consistency of the Group's financial performance and service to suppliers and customers. The Company also made excellent progress over the course of the year in further diversifying its business to play a meaningful role in the ongoing energy transition.

Today, the Group operates in a market space previously dominated by major producers, which have since focused on upstream exploration and production and have reduced involvement in distribution activities. As a consequence, the Group is part of a small group of global players, with a strong asset footprint to support

[5] Underlying EBITDA is defined as operating profit or loss before depreciation and amortisation excluding share-based payments (non-cash) and exceptional and/or non-operational items. As from 1 October 2019, the Company adopted IFRS 16. The impact of IFRS 16 on underlying EBITDA for the financial years 2022, 2021 and 2020 amounted to +USD 1,358 million, +USD 1,270 million and +USD 1,194 million, respectively. Prior year numbers have not been restated for IFRS 16. For further details regarding underlying EBITDA, see page 178.

physical trading activities. Given the Group's global presence and scale, there continues to be scope for growth in its core commodity markets. 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 pursues a low risk physical arbitrage model, purchasing and delivering products to customer 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 industrial clients and whose paper trading activities relate predominantly to the hedging of its physical business and not to speculative trading.

The Group creates value by 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 'high-touch' distribution and logistics of physical commodities: purchasing raw commodities, potentially blending/transforming them, and then supplying them to customers at the right time, the right location and with the right specifications. In parallel, the Group manages 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 entrenched 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, 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

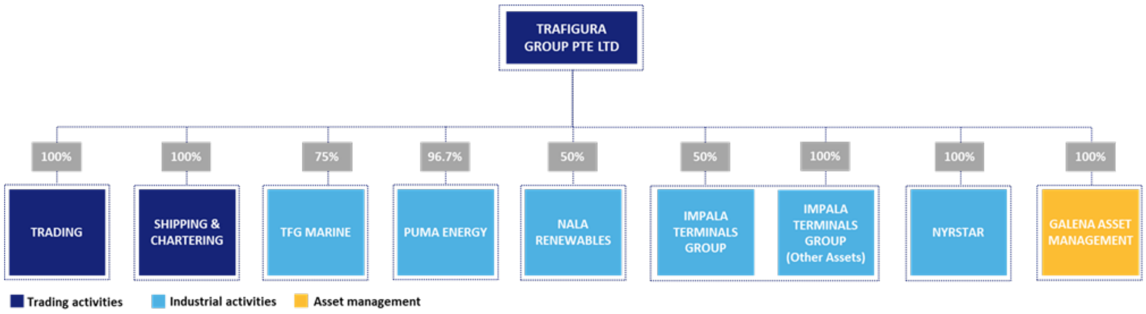
The Group's parent company, TGPL (as defined below), is a company incorporated under the laws of Singapore.

The Group is composed of a number of trading companies and industrial asset-based businesses related to its core trading activities. TPTE (as defined below), 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 (main entities are described hereafter).

At the end of the Group's 30 September 2015 financial year the Group's incumbent reference parent entity, TBBV (as defined below), 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 (AS OF SEPTEMBER 2022)



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:

Trafigura Group Pte. Ltd. ("TGPL")	• Corporate head office • Parent company and consolidating entity for the Group
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 (Group's main trading entity), 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 • Responsible for conducting trading business in the U.S.
Trafigura Investment China Co Ltd. ("TIC")	• Wholly-owned indirect subsidiary of TGPL • Responsible for conducting trading business in China
Puma Energy Holdings Pte. Ltd. (together with its subsidiaries, "Puma Energy Group")	• Wholly owned indirect subsidiary of TGPL • Holds the Group's 96.7 per cent. ownership in Puma Energy
Impala Holdings Limited (together with its subsidiaries, "Impala Terminals Group")	• Wholly-owned indirect subsidiary of TGPL • Consolidates the bulk-commodity warehousing and logistics activities which do not fall under the joint venture agreement with IFM Investors (the Simba JV and Infra JV)
Urion Holdings (Malta) Limited and Urion Mining International B.V. (together with respective subsidiaries, "Mining Group")	• Wholly owned indirect subsidiary of TGPL • Managing the Group's mining related investments

Nyrstar Netherlands (Holdings) B.V. (together with its subsidiaries, "Nyrstar")	• Wholly-owned indirect subsidiary of TGPL • Holding of the Group's 100 per cent. ownership in the operating business of Nyrstar

As of 30 September 2022, the Group also owns:

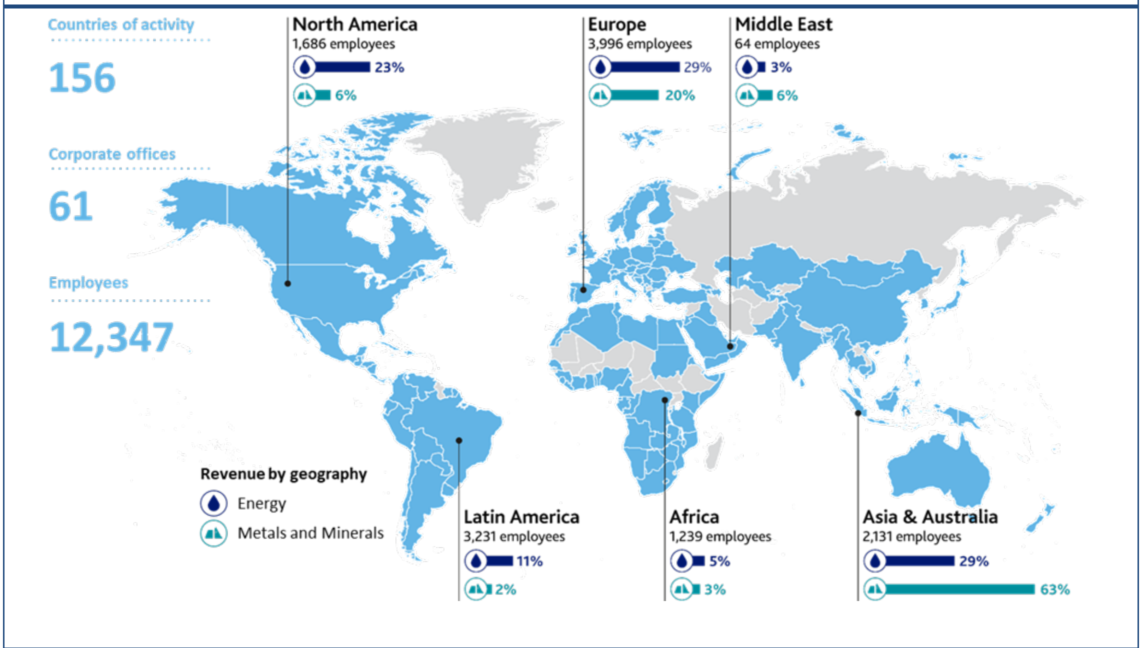
- Shipstern Holdings S.à R.L. which in turn owns 50 per cent. interest in two joint ventures with IFM Investors ("**IFM**"):
    - the Simba JV (established in 2018): owning and operating dry bulk infrastructure assets in Mexico, Spain, Peru and Paraguay, together with a global freight forwarding operation; and
    - the Infra JV (established in 2021): owning and operating energy infrastructure assets recently acquired from Puma Energy in the UK, Central America, Mauritius, Namibia, UAE, Australia and Tasmania; together recently renamed as ITG;
- 50 per cent. interest in the Nala Renewables JV with IFM, investing in solar, wind and power storage projects globally; and
- 75 per cent. interest in TFG Marine Pte Ltd, a global marine fuel supply and procurement joint venture created by Trafigura and shipping firms Frontline and Golden Ocean.

Office Network

As at 30 September 2022, the Group's network of 61 offices, with activities in 156 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.

KEY GLOBAL LOCATIONS



Business Operations

Oil and Petroleum Products[6]

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

Revenue generated by the energy segment, which combines the oil and petroleum products business and the power and renewable division, makes up the majority of Group turnover. The division reported revenue of USD 214 billion (67 per cent. of total revenue) in the financial year ended 30 September 2022, an increase of 53 per cent. year-on-year, reflecting higher commodity prices. The Group traded an average of 6.6 million barrels of oil and petroleum products per day in the financial year ended 30 September 2022, a 6 per cent. decrease over the prior year. This was due to a reduction in oil and petroleum volumes in the second half of the financial year which was primarily driven by the termination of long-term contracts for Russian crude oil and products in light of international sanctions, reduced availability of hedging in derivatives markets, and a decision to focus on higher-margin opportunities.

As significant dislocations continued to affect global markets during the financial year ended 30 September 2022, in particular following Russia’s invasion of Ukraine, the oil and petroleum products teams performed exceptionally well, adapting quickly to changing trade flows and identifying supply bottlenecks where Group’s operations could add value in markets including crude oil, distillates and LNG. Trafigura navigated policy, price volatility, market liquidity and increasingly complex logistics to deliver a larger number of cargoes to Europe to help offset the decline in Russian gas flows.

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. In addition, whilst oil will remain important and required for many years, through the energy transition process, the Group is currently focusing on providing cleaner fuels and investing in alternative energy sources.

[6] Most financial figures are now reported with reference to the Energy segment, which includes both the Group’s oil and petroleum products and power and renewables divisions.

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

Historically, 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. Therefore, while these contracts are short-term and on a revolving basis, they can be thought of 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.

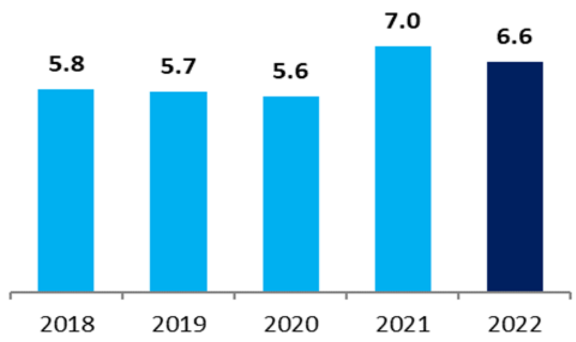
Many of these trading relationships are deepened by the giving and receiving of credit lines. These significant relationships all span in excess of a decade and represent a cross section of business activities ranging from spot and term business in different product lines. The Group's top ten clients in the oil division made up less than 24 per cent. of overall oil revenue in financial year ended 30 September 2022, generally in line with financial year ended 30 September 2021. No single external customer accounted for more than 3.2 per cent. of overall oil and petroleum products turnover.

Statistics on market share of the oil market are not available. However, the following market share estimates are based on the Group's market experience. It is estimated that:

- About half of the world market is international non-traded business, i.e. handled by producers directly to consumers (for example, none of the approximately 10-12 mbpd of Saudi crude oil is traded as it is sold directly to end users) or domestic non-traded business (for example, about 4 mbpd produced and consumed in China, and similar amounts in Russia, the United States, etc.);
- As a result, about half of the volume represents the 'tradable market', i.e. the international oil traded market where physical traders such as the Group operate.

The Group's oil volumes have increased significantly and consistently during the 2014-2018 period, along with its corresponding market share. In 2019 and 2020, oil traded volumes remained in the range of 5.7 mbpd, with the Group initially focusing on the most profitable trades and then managing the reduced demand due to the COVID-19 pandemic. However, over 2021, the oil and petroleum products division traded on average approximately 7.0 mbpd underpinned by the recovery of the global economy, and related demand, and the Group's increased market share gained through continued reliable client service and ample access to liquidity during 2021. Traded volumes slightly decreased over financial year ended 30 September 2022 mostly driven by the termination of long-term contracts with Russia, following the invasion of Ukraine.

HISTORICAL AVERAGE DAILY TRADING VOLUMES OF OIL AND PETROLEUM PRODUCTS (MBBL/DAY)[7]



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

As of 30 September 2022, the Group estimates that it trades the second largest volume in oil and petroleum products for an independent trading company after Vitol. The entire market remains very fragmented with no company representing more than 10 per cent. of total physical trading market volume.

Metals and Minerals

Centralised in Geneva, Switzerland, the Group's non-ferrous metals activities comprise four main trading books including copper, lead & zinc, alumina and aluminium, and nickel & cobalt. Post-restructuring in 2019, the division formally integrated the concentrates and refined books for each product, together with associated derivatives desk – noting that the Group also trades silver and gold as by-products. The financial year ended 30 September 2020 was the first complete year following this restructuring and integration proved successful. During the financial year ended 30 September 2022, the Group continued to reap the fruits of this decision, resulting into more seamless collaboration, sharing of market intelligence, and ultimately, better customer service.

The Company's minerals activities include the iron ore and coal trading books. Similar to the oil business, no price-risk is taken on the physical business and the hedging of the index price on physical trades occurs through Trafigura Pte. Ltd., which acts as an internal broker. Apart from Geneva, other key trading offices for the metals and minerals commodities business include Johannesburg, Houston, Lima, Mexico City, Montevideo, Mumbai, Shanghai and Singapore.

Revenue generated by the metals and minerals division, and related industrial activities, represented 33 per cent. of the Group's turnover in the financial year ended 30 September 2022. The segment reported revenues of USD 104 billion in the financial year ended 30 September 2022, an increase of 15 per cent. year-on-year, due to a robust increase in volumes traded, particularly for bulk minerals, and higher average commodity prices (especially over first half of the financial year ended 30 September 2022). While non-ferrous metals traded volumes were relatively flat compared to financial year ended 30 September 2021, at 23.3 million metric tonnes, bulk minerals volumes, rose by 10 per cent. to 91.3 million metric tonnes, driven by increased iron ore volumes. The main driver for market dynamics in 2022 was Chinese demand. China's zero-COVID-19 policy and weak property sector drove investor sentiment, which put pressure on prices during second half of the year. In this environment, the metals and minerals teams delivered a robust performance, as supply and demand fundamentals remain strong in many of the metals crucial to the energy transition.

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 Jinchuan Group, Aurubis Group, Yunnan Copper, China-Base Ningbo, amongst others. The Group has also been taking advantage of various recent investments which offer synergies with its core trading activities by facilitating recurrent supplies and outlets, whilst having their own industrial rationale. During the financial year 30 September 2022, synergies have continued to be derived from the close cooperation between the lead and zinc trading desk and Nyrstar smelting business (acquired in July 2019 following a restructuring process) and other asset investments, including the acquisition of a minority interest in the Prony Resources nickel mining operation in New Caledonia in March 2021. These assets bring optionality and flexibility to the trading books.

The growth of Asian metals consumption, driven by significant smelting and refining capacity in China and India can be seen in the Group's metals and minerals revenue split. The growth of the Group's Asian 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. Again, other contracts are traded on a spot basis.

Over the financial year ended 30 September 2022, the Group's top ten clients in the metals and minerals business made up approximately 17 per cent. of the division's turnover, compared to 18 per cent. in the financial year 30 September 2021. No one customer accounted for more than 2.5 per cent. of overall Metals and Minerals turnover.

As mentioned earlier, the dominant theme in financial year ended 30 September 2022 was Chinese demand, overwhelming all other factors, including record low inventories for key metals such as copper. The impact of China's zero-COVID-19 policy and weak property sector drove investor sentiment to the degree that even though demand was strong in the second half of the year and stocks decreased, prices declined. Regarding the impact of the war in Ukraine, while Russia is an important producer of many metals, both in terms of widely-used base metals (aluminium, nickel, copper) and more specialised metals (titanium, palladium), the impact of the conflict has not been as significant as it has been in the energy markets, as sanctions were less focused on the sector.

Copper is a particularly good example of this 'micro' versus 'macro' dichotomy. By the end of September 2022, copper stocks had fallen to the lowest level in modern history in terms of days of use, and the lowest absolute levels since 2007. However, the price was USD 3,000 per tonne below the record levels reached in March. The price has started to pick up since the start of October, helped by a rebound in Chinese demand. The growth has been led by many of the same sectors that drove ex-China growth in the past, but with particular emphasis on the expansion of the grid and electric vehicle production.

Many of the non-ferrous metals the Group supplies have been identified as strategically important for electrification and the energy transition to low- and zero-emissions power and fuels that will be required to meet the world's climate goals. This means that demand growth, which for many years had been mainly a Chinese phenomenon, is now global. Despite this volatile environment, Trafigura has been able to navigate those changing dynamics and maintain the Group's position as one of the world's largest independent metals traders. This has been made possible thanks to Company's global network of customer relationships among producers, refiners and consumers and the Group's storage, blending, risk management and logistics capabilities.

In bulk minerals, the Group's iron ore business had a strong year, growing volumes and increasing market share. The coal trading business also experienced a stronger than average year due to increased price volatility, price dislocations and significant shifts in global trade flows.

In the metals and minerals sector, similar to the energy sector, market share statistics are not freely available. However, Trafigura believes it is a significant purchaser and supplier of non-ferrous metals globally. The Group considers that in the metals sector it ranks as the second largest independent trader behind Glencore, with Glencore acting mostly as a marketer of their 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.

Trafigura's Role in the Energy Transition

The Group's role is to connect the world with the resources it needs. This includes supplying critical metals and minerals required for the transition to a low-carbon economy, and for reliable, affordable, cleaner energy. As one of the world's largest suppliers of metals such as copper, nickel, zinc, aluminium and cobalt, the Group also has a key role to play in financing, responsibly sourcing and helping to decarbonise the production and supply of these transition metals.

The world is moving fast towards a low-carbon future, and the metals the Company sources and supplies are crucial to this transition. Electrification and electric vehicle ("**EV**") sales are rising rapidly around the globe. Battery powered EVs contain significantly more aluminium, copper and nickel than internal combustion engine cars. Similarly, for wind and solar power compared to conventional thermal, the metal use is materially larger. This translates, into significant additional demand for these metals. To address this, Trafigura has invested to facilitate new sources of supply of nickel and cobalt – key components of lithium-ion batteries for electric vehicles – including supporting the construction of a new, low-carbon intensity nickel sulphate plant at Terrafame in Finland. The Group has acquired a minority stake in the Prony Resources nickel and cobalt mine in New Caledonia, helping to secure long-term financing, technical and customer support, in collaboration with local stakeholders and the French government. As part of the Group's initiative to link global car and battery companies to responsibly sourced metal producers, the Company is supporting the development of a new UK-based refinery which will supply European EV and battery manufacturers with battery-grade lithium hydroxide.

In addition, the Group has increased its efforts to develop the responsible sourcing of cobalt from formalised artisanal and small-scale mining in the Democratic Republic of the Congo, through the Group's agreements with the state-owned entity established for this purpose, Enterprise Générale du Cobalt ("**EGC**"), and the international non-governmental organisation Pact. The Group's work with EGC is an example of the Group's leading responsible sourcing programme, through which the Group identifies and mitigates risks to people and the environment from its supply chain and works with suppliers to ensure that natural resources drive sustainable development.

The Group is seeing increased interest in the traceability, responsible sourcing and carbon footprint of the commodities it supplies from its downstream customers across a number of sectors, in particular from manufacturers of electric vehicles, which are significantly more metals intensive. The Group already offers low-carbon zinc from Nyrstar's European smelters, powered primarily by renewable energy, and low-carbon aluminium through a financing facility, which enables it to pay premiums to suppliers for lower-carbon production. The Group is now developing an innovative programme with leading blockchain tracking services provider Circulor to track dynamically and attribute GHG emissions throughout its nickel and cobalt supply chains, enabling the Group to offer customers low-carbon, responsibly sourced battery metals. In 2022, Trafigura partnered with Palantir to launch Agora – a proprietary carbon calculator which was developed to quantify supply chain emissions to provide customers with information about the carbon footprint of the commodities Trafigura supplies. The Agora platform enables companies to share and receive emissions data from operations and allows organisations to gain visibility into emissions across their supply chains using primary data where available.

The transition to a low-carbon economy is both urgent and achievable, but the transition cannot happen overnight. At the same time, global energy demand continues to grow. Oil and gas will continue to be needed for many years to come, even as consumption of fossil fuels eventually declines over the next several decades. The Group believes that low-carbon intensity, low-cost and high-quality sources of oil and gas will be the most resilient and in greater demand over time.

Over recent years, the Group has continued to diversify its energy trading book to reflect a changing global market, including reconfiguring and growing its biofuels business. Now an integral element of the Group's refined products offering, the Group offers customers tailored solutions to reduce their carbon footprint, supplying biofuels produced from secondary recycled oil and purpose-grown crops across a range of markets from road transportation to maritime bunker fuels.

Carbon intensity is also becoming a major new specification in oil and gas markets, and the Group is working with a growing number of producers and customers to quantify, reduce and find solutions to abate or compensate upstream Scope 3 GHG emissions. This includes, for example, an agreement with Rosneft to verify and identify opportunities to reduce GHG emissions associated with the production and transportation of Rosneft's export crude oil from three major ports.

Climate change is a key strategic focus for Trafigura. Following significant progress in reducing Scope 1 and Scope 2 greenhouse gas emissions from the Group's operations by 30 per cent. since 2020, the Company has revised its climate change strategy and set longer term targets.

Indeed, this year, the Group has set three new climate change targets:

1. To achieve a more than 50 per cent. reduction in Scope 1 and Scope 2 GHG emissions by the end of financial year 2032 compared to financial year 2020. This new target is based upon maintaining the 30 per cent. reductions already achieved and reducing the Group's total direct emissions by an additional 20 per cent. by financial year 2032. This target is aligned with the Paris agreement and a 1.5°C reduction pathway;
2. A new Scope 3 target to reduce the GHG intensity of all the non-ferrous metals Trafigura sources and supplies to customers, from extraction to processing, by 10 per cent. by 2030 compared to 2020. This new target reflects the Group's position in the commodity supply chain and Trafigura's ambition to reduce the emissions intensity of the commodities Trafigura supplies; and
3. To invest in renewable hydrogen projects with a total production capacity of 3GW by the end of financial year 2030.

Power and Renewables Division

In November 2019, the Group announced the establishment of a new business line trading and investing in power and renewable energy. In the 2021 financial year, this vision took shape, with the ramp-up of electricity trading activities in Europe and the US, the creation of a carbon trading desk and investments in renewable power, battery storage and new energy technology projects. The focus during this first full year of operations was recruitment, setting strategy and establishing necessary infrastructure. The Group made a good start in trading both power and carbon. This activity generated underlying EBITDA of USD 80 million. Combined investments by the Nala Renewables joint venture and the Group's Clean Energy Ventures Fund amounted to more than USD 170 million. In October 2022, Trafigura announced the combination of its trading activities in natural gas, liquified natural gas, power and carbon into a new division: gas and power trading; with a separate renewable energy division covering investments in renewable power, green hydrogen and clean energy technologies.

Achieving profitability in the first year of trading activity is encouraging and underlines the Group's view that the Power and Renewables division is set to become a third significant pillar of the Group's trading business alongside Oil and Petroleum Products and Metals and Minerals. Of particular interest are the synergies with other parts of the Group's business. Power trading is a natural complement to the Group's established positions in gas, for example, while carbon trading enables the Group to offer a range of new services to its clients, including carbon-offset investments.

Power trading

2022 was one of the most extraordinary years in the energy markets in general and in power in particular, with geopolitical events changing trade flows and impacting supply and demand. This placed significant strains on the liquidity and risk appetite of market participants. As a result, the ability to hedge physical price risk in the futures market became much more challenging.

The Power Trading team managed the turbulent conditions, growing business in Europe and the US and entering into several new types of transactions, including agreements to purchase battery capacity. Overall, trading volumes increased in financial year ended 30 September 2022, while profitability was slightly down compared to the previous year.

In 2022, the decision was made to combine gas, power and carbon teams into a new division, which will allow for closer cooperation across the energy generation spectrum from fuel to power, including carbon permits and renewable certificates, and help facilitate business development. Looking ahead, higher capital requirements and greater regulatory intervention may lead to structural changes in the power market and also the competitive landscape. In particular, long-term hedging of energy offtake agreements may become challenging for some market participants. Trafigura's focus for the next 12 months will be to expand physical footprint in the power market globally and continue to build customer base.

Carbon trading

In April 2021, the Group announced the establishment of a new carbon trading desk, focused on global compliance and voluntary carbon markets. Both categories of carbon market are the subject of increasing trading interest: the price of carbon allowances in regulated emissions trading systems has been steadily rising, while voluntary markets are becoming increasingly relevant to corporations in meeting their net zero commitments.

The Group's carbon trading desk has three areas of priority focus: day trading and arbitrage in global compliance and voluntary markets; working with developers of carbon projects to structure and finance new transactions or the expansion of existing projects; and offering a suite of services to established Trafigura clients looking to reduce the carbon footprint of their supply chains.

In its first full year of operation, the Carbon Trading team was active across global voluntary and regulatory markets and also invested in carbon removal projects as well as investment in technology to provide greater transparency of supply chain GHG emissions. Among this year's highlights was the first issuance of credits from Delta Blue Carbon, a mangroves restoration project in Pakistan. Covering 350,000 hectares of tidal wetlands on the South-east coast of Pakistan, it is the largest project of its kind in the world. Trafigura also launched Agora, an emissions tracking joint venture with US technology company Palantir. Initially focused on providing greater transparency in the reporting and verification of mining and metals value chain GHG emissions, the scope of the platform will extend to energy, helping customers calculate and manage their GHG emissions across oil, gas and power value chains. Looking forward, a key focus for the Carbon Trading team will be the ongoing developments related to carbon in Article 6 of the Paris Agreement on climate change. This part of the accord allows countries to trade and facilitate capital into emission removal and emission reduction activities, underpinning a global carbon market for the first time.

Nala Renewables

Nala Renewables is a 50:50 joint venture between Trafigura Group and IFM Investors established in September 2020 with the aim of investing in on-shore wind, solar and power storage projects.

Since its inception, Nala Renewables has been transformed from a concept to an early stage business with some of its first assets operational or in construction. Nala Renewables now owns and is developing renewable energy generation and storage assets in Belgium, Chile, France, Greece, Netherlands, Poland and the US. To date, the Company has grown its renewable energy asset portfolio to 2.8GW and is well on track to meet its 4GW target by the end of 2025.

A key focus for the last twelve months has been to build and strengthen the team, acquire late stage assets and secure new development partnerships for greenfield development opportunities in several different countries. In the last financial year, Nala Renewables has focused on building its presence in Chile where it initially acquired a portfolio of 110MWp of ready-to-build solar assets. This acquisition set the foundation for Nala Renewables' regional cluster approach for expanding its pipeline. More recently, it has acquired a further 60MWp in Chile, and it plans to increase its presence in the country further over the coming year. Nala Renewables has set up a regional office in Santiago to oversee its activities in Latin America and provide local expertise as its portfolio begins construction and operation.

The company also expanded into the Greek market with the acquisition of a 106MWp ready-to-build portfolio of solar assets and entered into development agreements in Spain to build an early stage project pipeline. In each of these countries, Nala Renewable's plan is to continue its expansion to complement its existing portfolios to create scale and a deeper presence.

Assets that have entered construction in the last financial year include a 198MWp wind project being developed by North American clean energy development and investment platform Swift Current Energy. This asset is targeting commercial operations in the first quarter of 2024. The Balen Battery project, which involves investment of up to EUR 30 million to develop one of Belgium's largest battery energy storage systems at Nyrstar's zinc smelting facility, is also in construction with commercial operations targeted to begin in the first quarter of 2023. Utilising lithium-ion battery technology, the 100MWh battery project will be able to store 25MW for over four hours. The battery energy storage system will provide stability and balancing services for the Belgium grid, as well as help shift renewable energy production into high-energy demand periods.

Investments in Clean Energy Technologies

In 2019, the Group established an internal VC-like fund to invest in various start-up projects involved in alternative and renewable energy technologies. The focus for investment is three-fold: to gain access to experienced teams and intellectual property in early-stage, pre-revenue companies in the sustainable energy space; to support the conversion of their intellectual property into viable development projects; and ultimately, to help generate trading flows for existing or new Trafigura trading desks. The investment decisions are guided by an investment committee comprising four members of Trafigura's Management Committee, thus ensuring all activities are fully aligned with Group strategy.

To date, ten investments have been made of a total value of more than USD 60 million in three technology areas of priority focus: hydrogen and hydrogen-based fuels; medium-to-long-term electricity storage; and emissions capture. They are already providing the Group with unique insights into sectors that will be extremely important to its future strategy.

The rapidly growing field of green hydrogen is linked to three of these investments, of which the largest is in H2 Energy, a Swiss-based company that was the first in the Western world to deliver hydrogen fuel cell trucks to commercial users and to create an ecosystem based on green hydrogen. H2 Energy's trucks are already in operation for large transporters and retailers in Switzerland, fuelled by green hydrogen generated by hydropower. The company, working in partnership with Hyundai, Linde and Alpiq, leases fuel-cell trucks to users and provides the necessary refuelling infrastructure.

Alongside the Group's investment in H2 Energy, the two companies have established a 50:50 joint venture, H2 Energy Europe, with the aim of investing in hydrogen trucking projects elsewhere in Europe. In February 2022, H2 Energy Europe announced a new 50:50 joint venture with Phillips 66 to develop up to 250 retail hydrogen refuelling stations across Germany, Austria and Denmark by 2026.

The two other hydrogen-related investments are Hy2gen, a German-based developer of green hydrogen production facilities with a project pipeline of over 500MW of electrolysed capacity, and OneH2, a provider of scalable hydrogen fuel production systems in North America currently focused on the forklift truck market. Hy2gen is working with the Group and Copenhagen Investment Partners to establish a project in Sauda, Norway, which will produce green hydrogen from hydropower in Norway and use it to produce green ammonia for use in the shipping industry. The project will have an initial electrolyzer capacity of 240 megawatts to produce 600 metric tons of green ammonia per day, with the aim to significantly scale up production in the future.

Three further investments are in the following companies:

- US-based Quidnet Energy, which has developed a novel form of energy storage using geo-mechanical pumped storage technology to pump water under pressure into subsurface geological reservoirs. At times when variable renewable energy is not available, the water is released to drive hydroelectric turbines and power the electrical grid.
- UK-based Bboxx, a company that provides decentralised solar powered systems that enable access to cleaner energy for cooking in developing countries.
- Swiss-based Daphne Technologies, which provides innovative technology solutions to remove toxic and greenhouse gas emissions from fuel use in shipping. It can remove emissions such as sulphur oxides, nitrogen oxides and methane from the combustion gas of any fuel type, including heavy fuel oil, LNG, biofuels and ammonia.

Trafigura has continued its investment activity during the financial year ended 30 September 2022, with the following major announcements:

- In May 2022, Trafigura and lithium processing company Green Lithium agreed terms to support the development of one of the first centralised commercial lithium refineries in Europe. The new refinery will supply European electric vehicle and battery manufacturers with battery-grade lithium chemicals;
- In May 2022, Trafigura together with Palantir Technologies Inc. announced the development of a technology services platform for carbon emissions calculation, reporting and collaboration across commodity supply chains which will enable participants across global energy and commodities supply chains to model lifecycle carbon intensities and allows industry participants to work together for enhanced visibility and reporting;
- In June 2022, Trafigura invested in Malta Inc., a leading innovator of grid-scale, long-duration energy storage. Malta's new technology collects and stores energy from any power generation source in any location, enabling reliable and predictable operation of the grid; and
- In June 2022, Trafigura participated in a USD 34 million financing round led by SK Gas (a subsidiary of South Korea's second-largest conglomerate) for C-Zero Inc., a clean energy company that has developed a technology for natural gas decarbonization.

Going forward, the Clean Energy Ventures team will continue to support its current portfolio of investments and expand into the carbon capture and utilisation schemes (CCUS).

Trafigura's Work to Decarbonise shipping

The decarbonisation of shipping is an urgent and achievable goal. The industry is investing in energy efficiency but it still contributes to over three per cent. of global GHG emissions. Without significant action, emissions from the sector are set to materially increase by 2050. The Group is committed to the transition to zero emissions shipping and its new decarbonisation target – a 25 per cent. reduction in carbon intensity by 2030 against the 2019 International Maritime Organisation ("**IMO**") baseline across our entire chartering operation – is a statement of the Group's intent.

The Group is advocating for industry-wide action on shipping emissions and investing in new technologies and vessels to help achieve a more sustainable shipping industry. The Group is a member of the Getting to Zero Coalition, through which over 200 shipping industry participants have issued a Call to Action for rapid action from governments to decarbonise the sector. In September 2020, the Group published a whitepaper that called for a global carbon levy on maritime fuels to incentivise low-carbon innovation and the Group remains encouraged by the growing support for this proposal.

The Group is also a founding member of the COP26-launched First Movers Coalition, which is focused on reducing emissions in key hard-to-abate industries. As part of its pledge to the First Movers Coalition, the Group has also committed to convert six vessels – 18 per cent. of its current owned fleet – to use zero-emissions fuels by 2030.

Other initiatives in which the Group is involved include co-sponsoring MAN Energy Solutions green ammonia two-stroke engine and co-funding studies focused on using green ammonia as a zero-emissions shipping fuel. The Group is also investing in Hy2gen, a developer of hydrogen and e-fuels production technologies, and in Daphne Technologies, which is developing innovative technology to remove emissions such as nitrogen oxides, methane and carbon dioxide from the combustion gas of any fuel.

Trafigura is also a signatory of The Sea Cargo Charter, which provides a global framework for aligning chartering activities with responsible environmental behaviour to promote international shipping's decarbonization.

RCF Sustainability Linked Loan Structure

In 2021, the Group's strong and stable relationships with approximately 140 banks, together with the Group's progress in sustainability and responsible business to date with the potential to achieve significant further milestones, have enabled the Company to structure its flagship syndicated revolving credit facilities, as sustainability linked loans ("**SLL**").

In line with the mechanism implemented during the successful European RCF refinancing in March 2023, this updated structure will allow the Group to secure preferential financing rates if the Group is successful in achieving key environmental and social targets - 'key performance indicators' or "**KPI**s". The Group's compliance with KPIs will be tested annually and certified by an independent external expert (ERM CVS).

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 'stand-alone' capacity but largely remain within the same commodities industry as its core trading business.

The Group initially established three main industrial groups: Puma Energy Group, which manages the Group's oil storage and distribution assets; Impala Terminals Group - Trafigura's bulk-commodity warehousing division and logistics provider; and the Mining operations, which manages the Group's existing mining assets as well as mining exploration opportunities. In July 2019, a fourth major industrial group was added with the consolidation of Nyrstar (the Group previously owned an approximately 24 per cent. stake), a global multi-metals mining and smelting business, with a market-leading position in zinc and lead, following a restructuring process of the company. Those four industrial groups are structured as independent companies with their own dedicated management and resources, transacting with the Group on an entirely arm's length basis, with service level agreements in place where appropriate.

Until 30 September 2020, the financials of three of those four industrial divisions: Impala Terminals (the part of the business which was not transferred to the Simba JV (now ITG), the Group's Mining operations and Nyrstar, were consolidated into the Group's financial statements. The Group's fourth industrial division, Puma Energy, used to be minority owned, following the sale of a portion of the Group's stake to existing shareholders in 2013 (with the Group losing the majority of decision-making power in the Board of Directors at the time). However, following a series of transactions announced in April 2021, the Group acquired control of Puma Energy (with a 93.4 per cent. shareholding as of the financial year 2021 end), and consolidated the company in its financials as of 30 September 2021.

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 8,373 million as at 30 September 2022 compared to USD 9,351 million as at 30 September 2021. This reduction by USD 978 million is mostly due to the disposal of the Vostok Oil investment in July 2022 following Russia's invasion of Ukraine, which represented USD 862 million as of 30 September 2021. Additional decreases relate to Nyrstar and Puma assets due to impairments driven by challenging market conditions. However, those were mostly offset by an increase in environmental emission allowances (held for own use) recognised under intangible assets.

Puma Energy

Puma Energy is a leading emerging markets energy business, safely providing energy solutions in 33 countries across six continents. The company has approximately 2,000 retail sites a presence at approximately 100 airports and a network of 62 storage terminals, with a total storage capacity of 3.25 million m3 – noting that those figures relate to the terminals remaining following the divestment of 19 assets to ITG S.à r.l. in October 2022. In the last twelve months ("**LTM**") ended September 2022, Puma Energy sold approximately 20.4 million m3 of refined oil products. The company creates value from supplying, distributing and delivering refined oil products, such as fuels, lubricants and bitumen as well as related retail activities and services. It benefits from quality supply at competitive prices through its arms-length commercial supply contracts with the Group.

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 a leading independent global midstream and downstream company. In 2000, Puma Energy came under the direct ownership and management of the Group, one of its original founding partners. In 2008, Puma Energy was reorganised as a separate and standalone division of the Group with a detailed carve-out plan and independent balance sheet. 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.

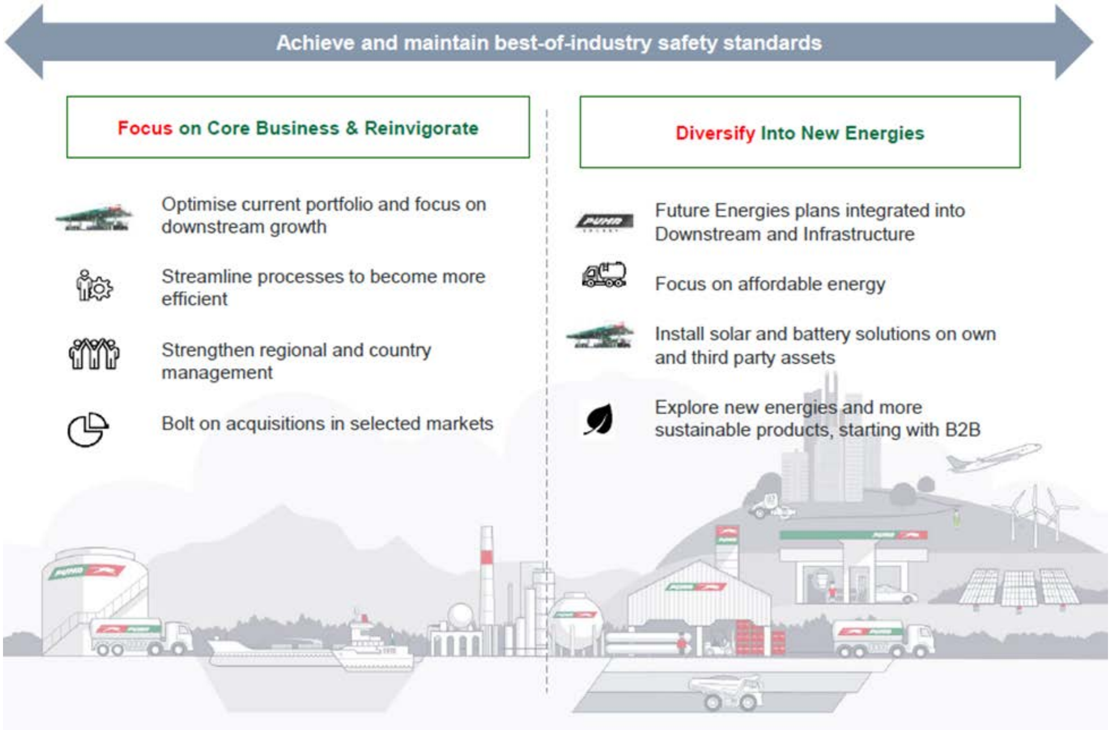
In 2013, the Group further reduced its ownership in Puma Energy by selling a portion of its stake to existing minority shareholders, including the Angolan state-owned energy company Sonangol Holdings ("**Sonangol**") and Cochan Holdings ("**Cochan**"). Puma Energy also benefited from a capital contribution 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 49.5 per cent., leading to the deconsolidation of Puma Energy from the Group's 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 at the time, by capitalising on opportunities to expand its portfolio of mid- and downstream assets. More recently, in June 2020, Puma Energy completed a shareholding restructuring transaction with Cochan and the Group, resulting in a reduction in Cochan's stake in Puma Energy to below 5 per cent., while the Group's shareholding increased to 55.5 per cent. However, this increase in shareholding did not result in the Group gaining control over Puma Energy and the equity investment in Puma Energy continued to be accounted for under the equity method.

In April 2021, Puma Energy Holdings, the Group and Sonangol announced a series of transactions which have further transformed Puma Energy's shareholding structure. The Group, together with a number of minority shareholders, subscribed for a rights issue in Puma Energy for a total amount of USD 500 million, completed on 30 September 2021. As a result, Puma Energy was consolidated into the Group as of 30 September 2021. The recapitalisation included the sale of Puma Energy's Angolan business to Sonangol for USD 600 million and the acquisition by the Group of Sonangol's shares in Puma Energy for a similar amount. This transaction closed in December 2021 and the Group's shareholding in Puma Energy increased to 93.4 per cent. Finally, late December 2021, Trafigura's shareholding in Puma Energy further increased by approximately 3.3 per cent., to 96.7 per cent. in aggregate, as Cochan ceased to be a shareholder.

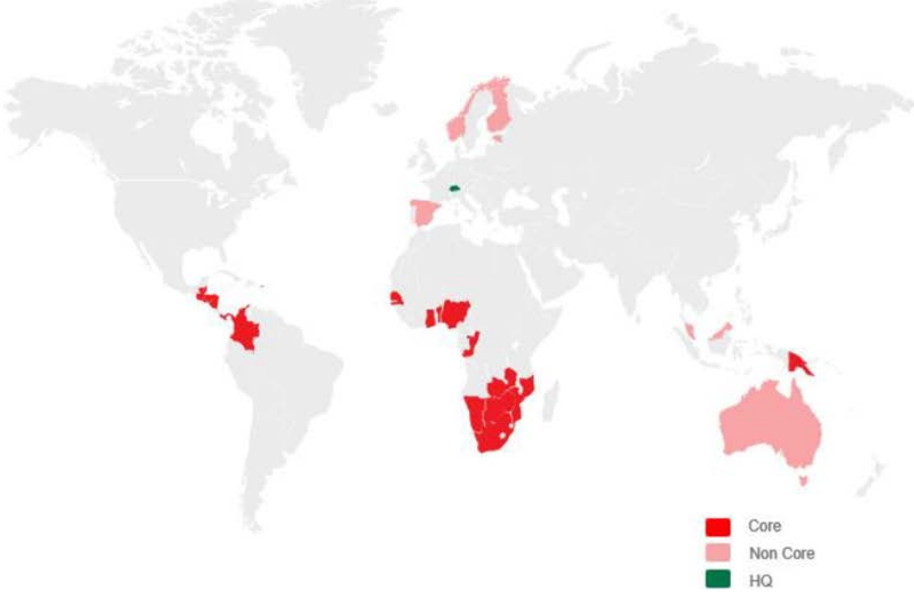
Puma Energy Business Model

Puma Energy is highly diversified in terms of business lines, geographies and customers, with no single customer accounting for more than 5 per cent. of sales. As of 30 September 2022, Puma Energy directly employed approximately 2,870 people. To support its activities, Puma Energy maintains commercial independence on a regional level (Africa, Latin America and Asia Pacific), while still maintaining oversite and reporting of central functions (Finance, Credit, Legal, IT, etc.) from its headquarters in Geneva, Switzerland.

BUSINESS MODEL ACROSS THE VALUE CHAIN



PUMA ENERGY GROUP'S GLOBAL LOCATIONS AS AT SEPTEMBER 2022



Description of Business Lines

Puma Energy provides customers around the world with secure access to a wide range of fuel and non-fuel products and services through its business lines supported by its global refining, supply, storage and transportation infrastructure. Over the last couple years, the company has reorganised its operations as follows:

- **The core Downstream business unit** is managed under two regions: the 'West' consisting of the Americas, with Puerto Rico as regional headquarters, and the 'East' consisting of Africa, Middle East and Asia-Pacific, with Johannesburg as regional headquarters. Main activities under this unit are:
  - **Retail:** providing high-quality, competitively priced fuels and lubricants, supplementary services such as car washes, ATMs, products through convenience stores, cafes and restaurants;
  - **Commercial:** offering energy solutions to business customers through various specific channels (agriculture, mining, transport, construction, power generation, marine, industrial, governments/state owned enterprises, non-Puma Energy branded retail);
  - **Lubricants:** lubrication solutions for businesses and consumers through retail, wholesale, and industrial market channels;
  - **Aviation:** supply and fuel services to airline customers, from importation, handling, storage, bridging and transportation, to into-plane operations at the company's airport fuelling depots;
  - **Bitumen:** sourcing and supply of bitumen with integrated logistics services available at the company's terminals, with connections to the Puma Energy's specialist bitumen vessels and containers; and
  - **Refining and Storage:** downstream storage terminals to leverage Puma Energy's sourcing, transportation and storage capabilities. Refining, while not being a core part of the business, is an integral part of the downstream markets.
- **The Infrastructure business unit** consists primarily of marine terminals. It focuses on storage operations, maximizing commercial value of these assets. Noting that in 2021, Puma Energy decided to divest its Infrastructure division as part of its strategy to streamline the business and focus on its core downstream retail business, while keeping access to those strategic infrastructure and storage facilities. The main completion of the transaction took place in October 2022.

- **Transition into new fuels** – Puma Energy has set ambitious ESG targets to achieve 30 per cent. of Africa EBITDA from transition fuels and clean energy by the end of 2027. To do this, Puma Energy is focussing on growing volumes of LPG, compressed natural gas, and sustainable aviation fuels and in the future may focus on other fuels like Hydrogen and Ammonia. Puma Energy intends to meet its ESG targets through organic growth and bolt on acquisitions. Another way Puma Energy intends to reach 30 per cent. of cleaner EBITDA in Africa is by continuing to install solar panels across assets (service stations and terminals). More specifically there is a plan in place to install solar panels across 200 retail and terminal sites by 2023. As of 30 September 2022, Puma is on track to meet this goal with over 150 sites solarized.

<u>**Downstream Business**</u>

Retail

- **Fuel**

As of 30 September 2022, Puma Energy's retail operations sold 4,615 million m^s of fuel during the LTM, through Puma Energy's expansive network of retail sites in countries across Africa, the Americas and Asia-Pacific. The company also sold 14,375 million m3 of fuel, bitumen and lubricants to industrial and commercial customers during the LTM. Finally, Puma Energy provided 1,366 million m3 and of refined oil products to airlines, aircraft operators and owners across the Americas, Africa and Asia-Pacific during the LTM.

Puma Energy has a large and well-invested network of retail sites. To take advantage of this large network, Puma Energy is focusing on its retail strategies, including network optimisation, strengthening customer value propositions, building brand loyalty and strengthening the offer to dealers and site operators.

The retail sites operate under three principal models depending on whether Puma Energy or an independent dealer owns or is responsible for the operation of a particular retail site: (i) CoDo – Company owner & Dealer operated; (ii) DoDo – Dealer owned & Dealer operated; and (iii) CoCo – Company owned & Company operated. Noting that Puma Energy has identified opportunities to further create value by optimising the mode of service operation ("**MOSO**") in line with market and customer needs.

- **Non-Fuel**

To complement Puma Energy's retail sites, the group operated 745 convenience stores (such as Super7 and Shop Express), 160 car washes, 40 truck stops and 50 restaurants and cafes as of 30 September 2022. Puma Energy's non-fuel offer allows the company to capture further value from retail operations. One of the key global improvement initiatives as part of Puma Energy's new customer-led strategy involves expanding and improving Puma Energy's convenience retail offering. Puma Energy combines learned best practices with innovative training techniques to meet customer's needs.

Commercial

Within the Commercial business line, Puma Energy supplies refined oil products to industrial and commercial customers across Africa, Europe, the Americas and Asia-Pacific. Customers operate across a wide range of sectors, including transport, power generation, industrial and manufacturing activities, mining, agriculture and construction. Puma Energy aims to offer competitive prices to industrial customers and provide reliable supply of refined oil products as well as LPG, wholesale and bunkering activities. Due to its modern facilities and infrastructure, competitive pricing and reliable supply, the company has developed long-term sustainable relationships with a number of customers.

Aviation

Puma Energy's aviation business line provides aviation fuel to commercial and general aviation customers, primarily by performing "into-plane operations", where Puma Energy employees supply aviation fuel directly into aircrafts: JET A-1 (Jet fuel) and aviation gasoline 100LL (Avgas).

While the business line has been hit hard by the disruption in the aviation industry as a result of the global COVID-19 pandemic, it is a model for the global consistency, quality and customer-focused solutions that Puma Energy has been developing across all different business lines.

As of 30 September 2022, Puma Energy operated in 98 airports worldwide, 73 in Africa, 11 in the Asia-Pacific and 14 in the Americas. The group seeks to serve airports in high-potential markets and aims at becoming the most reliable supplier in the airports where it operates.

Bitumen

Puma Energy is a global market leader in bitumen, supplying customers around the world with high performance product safely, efficiently and on time. Customers benefit from the integrated logistics services available, through Puma Energy's own carrier fleet and state-of-the-art-terminals, including the largest private bitumen terminal in Europe (Cadiz, Spain). Puma Energy also has bitumen storage and distribution facilities in Malaysia, Australia and Guatemala.

Lubricants

Puma Energy supplies own-branded lubricants and is the exclusive marketer of Castrol lubricants in certain Southern African and Central American countries. Puma Energy has a strong lubricants presence in more than 25 countries globally, serving the agricultural, construction, mining, industrial and transportation sectors of the market, as well as providing automotive lubricants.

Supply

In 2020, Puma Energy established a new arm's-length cooperation agreement with the Group to manage its supply and trading activities. This will enable the company to extract more value in supporting the Downstream business – optimising working capital requirements and leveraging the Group's global scale and expertise. A value chain optimisation organisation was created to work closely with the Group in ensuring that Puma Energy delivers the best possible fuel quality and the lowest possible cost-to-serve for its customers.

Refining

Puma Energy does not currently operate, nor intends to develop, significant refining operations. From time to time, Puma Energy has acquired refining assets as a by-product of acquisitions of larger business operations. In most cases, Puma converted refineries to create additional storage capacity. The company currently owns and operates two refineries: a 20,000 barrels of oil per day refinery in Nicaragua acquired from ExxonMobil in 2012 and a 32,500 barrels of oil per day refinery in Papua New Guinea.

Storage & Non-Marine Terminals

The storage and non-marine terminals business line incorporates mainly inland storage facilities providing services to the Downstream business line of the company.

Infrastructure Business

This business line incorporates 25 marine terminals and two inland terminals, the pipelines and associated land, mostly consistent with Puma Energy's historical 'Midstream operations'. The company concluded the sale of 19 of these terminals in October 2022.

Strategic Objectives

Following years of growth through investments, Puma is now refocusing on optimising its existing portfolio, creating more value from the existing business. The company has been strengthening its balance sheet as well as its structure, capabilities and processes to provide a solid foundation for the next stage of growth.

September 2022 marks the one-year anniversary of the new management team and the new strategy. The main focus of Puma Energy is centered on the following objectives:

1. **Business Simplification:** a return to the core downstream business, investing strategically in downstream assets to grow market share. This implies a number of divestments in non-core entities and a better allocation of capital expenditures. During 2021, Puma Energy successfully closed the sale of its Pakistan and DRC activities, as well as its Ivory Coast terminal in Abidjan. In 2022, the company divested its operations in Russia (Mursmak terminal), downstream activities in Ivory Coast, and exited Myanmar for humanitarian reasons. In March 2022, Puma Energy agreed to sell a significant part of its Infrastructure business to the ITG S.à r.l., allowing the company to focus on its core business while remaining an important customer of the infrastructure and storage business to be divested. The main completion of this sale occurred in October 2022.
2. **Diversifying into New Energies:** the company will prepare for the future of energy by continuing to help customers and communities secure access to affordable energy while helping to advance the transition to a lower carbon future. Specifically, the company will be focusing on solar, biofuel, and LPG in the near future and LNG, hydrogen for commercial vehicles and ammonia as bunker fuel in the medium to long term. A renewed ESG policy with concrete targets was published in July 2022, focusing on four strategic pillars: supporting energy transition, reducing environmental impact, enabling socioeconomic progress and ensuring responsible business practices.
3. **Deeper collaboration with the Group:** increasing its competitiveness by leveraging the Group's energy market intelligence and expertise in supply chain optimisation, ensuring that Puma Energy is able to capture all the revenue synergies available.

Recent Milestones

Some key milestones in Puma's development over the last 24 months are listed below:

- **April 2021** – Puma Energy announced a USD 500 million rights issue. Proceeds will be used to repay outstanding debt, strengthening the company's balance sheet. At the same time, Puma Energy agreed the sale of its Angolan business and assets to Sonangol for USD 600 million, while the Group acquired Sonangol's shares in Puma Energy for a similar amount subject to regulatory approvals – please see '*Puma Energy Organisational Structure and Shareholding*' for more details;
- **September 2021** – Puma Energy completed the rights issue process announced in April 2021, making the consolidation into the Group effective. Hadi Hallouche and Carlos Pons were named Chief Executive Officer and Chief Financial Officer of Puma Energy respectively;

- **December 2021** – Puma Energy, the Group and Sonangol announced the completion of the Group's acquisition of Sonangol's shareholding in Puma Energy for USD 600 million and the sale of Puma Energy's business in Angola to Sonangol following receipt of all relevant regulatory approvals; and
- **December 2021** – Cochan ceased to be a shareholder of Puma Energy which, together with the Sonangol transaction, increases the Group's shareholding into Puma Energy to 96.6 per cent;
- **March 2022** – Puma Energy announced the agreement to sell a significant part of its infrastructure and storage business to the ITG S.à r.l.. Puma Energy will remain an important customer of those assets;
- **April 2022** – Puma Energy successfully closed a multi-year USD 700 million credit facility, split between a USD 595 million revolving line and a USD 105 million term loan;
- **July 2022** – Puma Energy publishes its Sustainability Report including ESG Performance for 2021 and outlining the new ESG strategy with pledges on carbon reduction and clean energy; and
- **October 2022** – Puma Energy finalised the sale of 19 terminals to ITG S.à r.l. and received approximately USD 900 million in net proceeds. Subsequent completion of additional terminals is expected to occur by mid-2023.

Financial Highlights

Puma Energy's financial year runs to December 31. Volumes and margins across all segments were higher in the LTM ended 30 September 2022. This is due to demand returning to the pre COVID-19 levels as well as various operational improvements that the new management team has implemented. Particularly the aviation business has made an important recovery and its volumes are close to pre-pandemic levels. Additionally, the bitumen segment had a significant turnaround during the period. In 2022, when countries eased lock down measures and increased their infrastructure spending, Puma Energy was well placed to capitalize on the increase in demand and supply required volumes for road building and infrastructure industry. Puma Energy is also reaping the benefits of a deeper integration with Trafigura, which allows the company to have better collaboration and communication across the teams. This is particularly helpful in segments like B2B where collaboration allows Puma Energy to be more competitive. Some key figures over the period were:

- USD 756 million gross debt reduction in the first 3 quarters of 2022;
- 3 consecutive quarters in 2022 of positive net income, for the first time since 2018; and
- Operational cash flow in excess of USD 150 million for the first 3 quarters of 2022.

Puma Energy Organisational Structure and Shareholding

Puma Energy is coordinated from its global headquarters in Geneva, Switzerland and employs approximately 2,870 people (employees and contractors) in 33 countries. Despite the recent consolidation within the Trafigura Group, Puma Energy is still managed as an independent industrial group, with its own dedicated management, which transacts with the Group on an arm's length basis. Puma Energy operates a two-tier management structure comprising a Board of Directors and an Executive Committee.

In April 2021, Puma Energy, the Group and Sonangol announced the signing of a series of transactions which would transform Puma Energy's shareholding structure, while improving its balance sheet position. First, the Group agreed to purchase Sonangol's entire shareholding in Puma Energy for an amount of USD 600 million. At the same time, Puma Energy agreed the sale of its Angolan business and assets to Sonangol for the same amount of USD 600 million. This included the acquisition of the Pumangol retail network of service stations, airport terminals and marine terminals. This transaction was completed in December 2021.

In addition, the Group, together with a number of minority shareholders, subscribed for a convertible debt instrument under a rights issue in Puma Energy for a total amount of USD 500 million. This convertible debt instrument would convert into equity on receipt of relevant regulatory (anti-trust) approvals. The proceeds from this transaction enabled Puma Energy to repay outstanding debt and strengthen its balance sheet.

The rights issue was completed on 30 September 2021, while the Sonangol transactions closed in December 2021. As a result, the Group's shareholding in Puma Energy increased to 93.4 per cent., triggering the consolidation of the company in the financial statements of the Group, with Sonangol no longer holding shares in Puma Energy nor having representation on the Company's Board.

In December 2021, Cochan also ceased to be a shareholder of Puma Energy, resulting in an increase of the Group's shareholding to 96.7 per cent. at the end of calendar year 2021.

ITG: Energy Infrastructure and Dry Bulk and Logistics

ITG S.à r.l. ("**ITG**") is a 50:50 joint venture between Trafigura and IFM Investors, the global investment management firm. Its primary focus is on the design, implementation, ownership and operation of multimodal logistics assets. This includes the safe, reliable storage and transfer of dry and liquid bulk cargoes and containers to and from inland sites of production and consumption, through deep-sea ports. ITG owns, manages and operates two segments: liquid terminals recently acquired from Puma Energy ("**Energy Infrastructure**"), and its initial business, covering metal concentrates & bulk infrastructure, liquid transport & distribution, and a freight forwarding service ("**Dry Bulk and Logistics**"). The segments are referred to externally as Impala Terminals Energy Infrastructure and Impala Terminals Dry Bulk and Logistics.

Energy Infrastructure is a diversified portfolio of 19 terminals across 10 countries with approximately 3.4 mcbm of storage capacity, mainly located at deep water ports. Dry Bulk and Logistics operates base metals terminals in Mexico, Peru and Spain; refined oil products storage and distribution in Paraguay and fluvial operations on the Parana-Paraguay waterway; multimodal transportation services in sub-Saharan Africa; and a global freight-forwarding business.

Historically, Impala Terminals Dry Bulk and Logistics was a wholly-owned subsidiary of the Trafigura Group. In 2018, the decision was taken to bring in a strategic partner who would support the growth of the business into new markets and services. In September 2018, Trafigura agreed to establish a long-term partnership with IFM Investors to invest in and operate certain Impala Terminals mature assets. A 50:50 joint venture, initially known as Simba Holding S.à r.l. and subsequently renamed ITG, was created to own and operate those assets. This created the basis to bring together Trafigura's trading expertise and operational know-how together with the investment experience of IFM, having a 25-year track record, principally in infrastructure investments in Australia, North America and Europe. The transaction also created a robust governance framework at the company, which operates at arm's length from the Trafigura Group under an independent management team, specific corporate governance and clear board rules.

The ambition of the joint venture is to create a new partnership for future investments in infrastructure related to commodities as well as a solid platform for future growth – both in existing locations and markets, and in new jurisdictions. This was first demonstrated in October 2019 with the purchase of Puma Energy's business in Paraguay, including two fuel storage terminals and approximately 180 retail sites.

More recently, in March 2022, ITG entered into an acquisition agreement to acquire a 100 per cent. interest from Puma Energy in Energy Infrastructure – a global liquid bulk storage terminals portfolio. Main completion of this transaction was announced in October 2022, with 19 infrastructure assets located in 10 countries being moved into the ITG perimeter. Puma Energy will remain an important customer of the infrastructure and storage business.

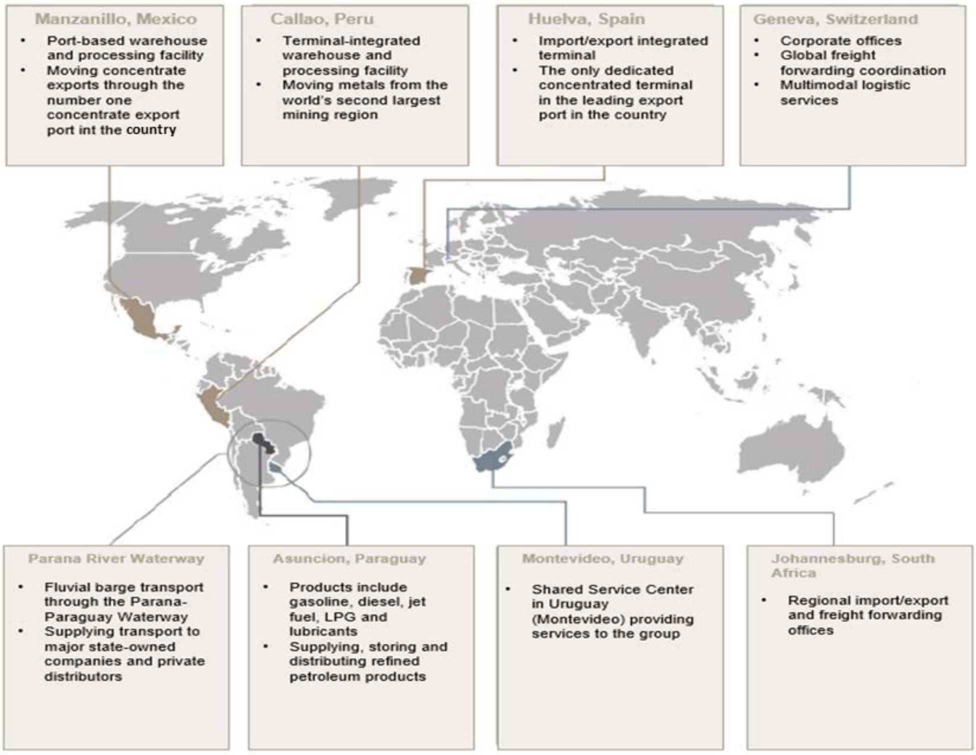
The Energy Infrastructure and Dry Bulk and Logistics businesses shall be run separately, with dedicated management teams (albeit relying on overlapping back office).

Assets operated under Dry Bulk and Logistics

The assets operated by Dry Bulk and Logistics include three concentrates terminals strategically located in Mexico, Spain and Peru – countries well positioned on copper, zinc and lead concentrate export markets – with a total throughput capacity of approximately 6.4 million tonnes. The business also manages a fluvial transportation network located on the Parana-Paraguay River and acquired Puma Energy's storage and distribution business in Paraguay in October 2019. Finally, Dry Bulk and Logistics provides end-to-end logistics solutions for mineral resources and value-add central services of consulting and freight forwarding.

The unit also provides logistics and multi-modal services in various regions, comprising solutions for warehousing, short and long hauls, via trucks and trains, as well as sea freight. Moreover, the company offers end-to-end delivery solutions for imports and exports via a combination of road and rail networks combined with onward ocean container freight services.

DRY BULK AND LOGISTICS OPERATIONS



<u>Concentrates Terminal in Peru</u>

The business started in Peru with a non-ferrous concentrates warehousing and blending operation in Callao, Peru's main commercial port. This terminal is the largest facility in Latin America for handling copper, zinc and lead concentrates. In 2017, a project was completed to cover 175,000 m2 of warehousing space (the largest covered warehouse in Latin America). The warehouse is the most environmentally compliant in Peru as it controls and measures air, water and soil particles to ensure that protection extends from both inside to outside the walls of the facility. The operation at Callao includes a participation in a consortium which operates a circa 3-km conveyor, which transports bulk metal concentrates safely and efficiently to a dedicated berth. Dry Bulk and Logistics exports approximately 2.5 MMT of metals concentrates per year from the Callao terminal, which represents approximately 60 per cent. of the total addressable market (i.e. the central Peruvian region, excluding mine-to-port integrated solutions). In 2021, the company added to the range of the cargoes handled by opening a new general cargo site and a metals storage area which operates in conjunction with the mineral concentrates operation.

<u>Fluvial Infrastructure at Parana</u>

The fluvial transportation network located on the Parana-Paraguay River, one of South America's most important waterways connecting Argentina, Uruguay, Paraguay, Brazil and Bolivia and has become one of the most important economic development areas enabling domestic and international trade. With an investment of over USD 100 million, a reliable fluvial corridor was created, shipping liquid products including diesel and gasoline fuel over a distance of 2,785 kilometers, with a fleet of pushers and double hulled tanker barges. In 2021, the company added dry cargoes to the range of fluvial services offered.

In October 2019, the Paraguay operations were complimented with the acquisition of Puma Energy's business in the country including two fuel storage terminals with approximately 72,300 m3 and a network of retail sites. This acquisition presented good synergies with the existing fluvial logistics operations along the Parana-Paraguay waterway.

Concentrates Terminal in Mexico

Manzanillo is the largest concentrates export port in the country, where the JV has owned and operated its warehouse and processing facility since 2012. The terminal has 130,000 m2 of warehousing space and offers a number of value-added services. The company exports approximately 0.8 MMT of concentrates per year from Manzanillo, via its direct access to third-party berth. In 2021, the construction of a new empty container terminal was finished together with a new laboratory. Moreover, solar panels were installed in 2021, which will supply up to 50 per cent. of Impala Dry Bulk and Logistics Mexico's energy needs.

Global Freight Forwarding

The ability to secure competitive rates is aided by the strong relationships with all the major shipping lines and the company's expertise in world-class logistics solutions. Through large global captive volumes and a continuous drive for operational excellence, the container bookings have been growing substantially, particularly across Latin America, Europe, Africa and Middle East. Besides offering freight forwarding services, through the extensive network and terminal assets, the business offers various value-added services such as container stuffing and un-stuffing, container storage, sampling and testing and documentation formalities.

Assets operated under Energy Infrastructure

Energy Infrastructure's asset portfolio boasts best-in-class marine infrastructure characterized by strong connectivity, deep draft levels and product flexibility. Terminals are predominantly used for storage of products such as gasoline, diesel and jet fuel. The portfolio is well diversified geographically, with exposure to favourable demand dynamics at key distribution locations in ten emerging countries and three developed countries, across five continents. These assets are a critical part of regional and country-level supply-chains, driving captive trade flow across key demand hubs. These terminals are primarily located in import dependent markets, which are structurally deficit with limited access to refining, as well as import and distribution markets with the assets supplying neighbouring or other hinterland markets.

ENERGY INFRASTRUCTURE FOOTPRINT

South America

With over 30 years of experience in the Americas, the business has developed a solid market position with strong distribution angles serving structurally short markets with no access to domestic refining supply. Energy Infrastructure operates 9 terminals for a total capacity of 732 kcbm across Belize, El Salvador, Guatemala, Honduras and Panama that are crucial to satisfying fuel demand in this region due to lack of domestic refining capacity, rising middle class population, and the developing industrial economy.

Africa

Since commencing operations in Africa in 2004, the business has created a critical and well-connected storage portfolio in the region through a combination of downstream acquisitions and integrations, construction of terminals, refurbishment of existing terminals and greenfield projects to meeting the region's growing demand. Energy Infrastructure now operates nine terminals for a total capacity of 400 kcbm across Mozambique and Namibia, with well-positioned demand underpinned by motor fuels growth across expanding populations, vehicle ownership rates, and logistical requirements to support increasing industrial activity.

The storage terminals cater not to only the domestic markets, but also to some of the land-locked countries. Indeed, the terminals are located in structurally short countries with little or no access to domestic refineries, making the need for storage terminals crucial.

Europe

The business has built a diverse portfolio in Europe serving customers' transhipment and domestic flows. Energy Infrastructure operates four terminals for a total capacity of 1,488 kcbm in the United Kingdom, capable of facilitating movement of product driven by structural needs and less impacted by expected decline in demand for traditional refined product as the region shifts towards alternative energy sources.

Rest of the world

Energy Infrastructure's facilities in UAE and Australia are increasingly acting as transhipment hubs, underpinned by increasing bilateral product flows for gasoline and diesel.

Main other assets (fully owned by Trafigura)

Fluvial and Port Infrastructure in Colombia

In Colombia, Impala has invested approximately USD 1.1 billion since 2012, 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. 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 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, Impala 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 of crude oil and naphtha and disposes of over 150,000 TEU of container storage. Impala also owns and operates a fluvial fleet of double hull oil and dry barges and pushers. The products handled are diverse, including crude oil, naphtha, fuel oil, LPG and dry bulk steel.

In 2021, the company handled record volumes of oil, dry and product cargoes at Barrancabermeja and a record number of barges were discharged at Cartagena, with light crude oil a key growth market. During the year, Impala Terminals signed an agreement to connect the Ecopetrol Refinery to the Impala Terminals infrastructure. In 2022, Barrancabermeja port terminal handled a number of new commodities, including non-ferrous concentrates. Impala Terminals continues to work closely on its plans to expand a 250,000-barrel per day refinery, which will eventually be connected to Impala Terminals' terminal at Barrancabermeja via pipeline. This will provide greater flexibility to import and export products and feedstocks by barge instead of truck.

Bulk Terminal in Brazil

In 2014, Trafigura acquired indirectly an approximately 50 per cent. equity stake in Porto Sudeste do Brasil ("**PSB**") alongside Mubadala Development Company ("**Mubadala**"), the Abu Dhabi sovereign development fund. In parallel to acquiring approximately 99 per cent. of the PSB equity, Trafigura and Mubadala purchased approximately 90 per cent. of the PSB (FPOR11/PSVM11) debt securities on a combined basis. Those debt securities, which are junior to debt but senior to equity, provide cash flow benefits whereas the equity provides control of PSB. Holders of the debt securities are entitled to receive quarterly variable income based on the volumes handled by PSB and a fixed royalty, payment being made subject to availability of cash, and otherwise accrued. The combined holding of PSB debt securities and PSB equity provides full benefit of ownership (i.e. both economic and control).

PSB is a USD 2 billion iron ore export terminal, which is located in Itaguaí, about 90 km west of Rio de Janeiro, Brazil. 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 offers them unprecedented access to global markets, for the second largest producing country, representing more than 20 per cent. of world supply.

Over the last five years, volumes handled have been ramping up progressively. Back in 2017, Porto Sudeste signed logistics contracts with Mineração Morro do Ipê S.A. in respect of the Ipe iron ore mine as well as a contract with Mineracao Usiminas. Since then, Trafigura and Mubadala have been working on sourcing additional volumes, e.g. from mines they operate in the region (Tico Tico) for export through PSB in the mid-term.

Bulk Terminal in the United States

In June 2011, Impala 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 Terminal 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 MMT 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.

However, in 2020, the decrease in volume of US coal exports and a challenging alumina market caused a 40 per cent. fall in throughput volumes compared to 2019, prompting significant cost cuts. In 2021 and 2022, the company continued its focus on diversifying activity, in particular targeting opportunities with third parties in renewable fuels, which is a long-term market for the business. In 2022, Impala Terminals Burnside closed a deal to sell a portion of land to a major gas and chemicals group, which is weighing up plans to build a plant producing low-carbon ammonia. This initiative shows how Burnside, which is better known for its handling of coal, can also play a role in the shift to cleaner fuels.

Warehousing in Africa and Middle East

In Africa, Impala Terminals operates a portfolio of warehouses and port terminals, which provide handling, storage and other related services for bonded and non-bonded cargoes. At its warehousing sites in the DRC, Tanzania and Zambia, Impala Terminals offers enhanced services for the handling of goods and employs the latest technology and processes. The company is a major player in the African Copper belt, Southern, Eastern and Central Africa and is currently expanding its logistics capacity serving these regions by rail, truck and ocean container freight. This will allow producers and consumers to access international markets with greater speed, efficiency and safety whilst reducing cost.

In 2021, assets in Zambia and the DRC handled increased volumes on the back of an upturn in import flows as company sites in the region continued to exploit key synergies. The growth of volumes is supported by Impala Terminal's expertise of handling rail cargoes on the key corridors and ability to handle block trains at all of its inland terminals. Impala Terminals established additional warehousing capacity in Kolwezi in the DRC as a result of an increase in demand in the Copperbelt, while the development of rail and road services continued. In the financial year ended 30 September 2022, these assets enjoyed another good year, growing services and cargo-handling volumes in particular for imports destined for the mines around the terminals. There was strong demand for imported chemicals, mining reagents and project cargoes for use in the Copperbelt.

Impala also operates a dedicated warehouse in Jebel Ali Free Zone Area (JAFZA) in Dubai, with storage and handling of refined metals and third-party goods. Impala is strategically located within 10 km of the two biggest container terminals within Jebel Ali free Port, which offers a great competitive import and export advantage to its customers. In 2021, Impala Terminals Middle East reported strong performance for the year, with revenue, profit and volume all rising as the customer base was expanded. The business grew its industry footprint and moved further into the e-commerce space, while looking ahead, it is considering opportunities in the region.

Warehousing in Chile and Bolivia

In 2021, Impala Terminals' four Chilean sites, in Antofagasta, Arica, Copiapo and Coquimbo, performed well in the face of significant COVID-19-related headwinds, including the impact of the pandemic on the supply chain. Despite significant disruption to mining production in the country, the company handled increased volumes of concentrates in 2021. Some services were withdrawn at the Copiapo site while volumes handled increased at Antofagasta, with Impala Terminals targeting the expansion of its warehousing capacity at the latter. Similarly, in Bolivia, Impala Terminals saw a healthy performance in 2021. Operations at Oruro and Potosi both recorded growth for the year, benefitting from increased mining production in the region and the addition of new producers to its customer base. The company reported zero lost-time incidents in the country for the third year in a row.

In the financial year ended 30 September 2022, robust performance was seen in both Chile and Bolivia, with Impala's assets handling increased volumes of copper, lead and zinc concentrates, benefiting from strong demand and increased mining production. In both locations the company looks to expand its offering and services and customer base.

Mining Operations

Trafigura invests in mining assets that are closely related to and have strong synergies with the Group's core metals and minerals trading business. The group manages a dozen operations in Europe, Latin America, North America and Africa. Its investments include wholly-owned subsidiaries in addition to cornerstone shareholdings in both private and publicly traded entities. Trafigura Mining operations employ thousands of people worldwide (some on a consolidated basis, e.g. at Catalina Huanca), including highly skilled personnel such as geologists, mining and processing engineers.

Mining operations generate equity value for the Group, procuring commodities for the Group's metals trading books and also providing advisory and support services to the rest of the Group. The Mining team has also gained credentials in the development and execution of mid-size projects (i.e. around USD 300 million). The project pipeline includes projects at feasibility study stage and construction projects in Finland, Brazil and a number of other countries.

For many of the Group's assets the financial year 30 September 2022 proved to be another demanding year, with challenges including rising costs and volatile commodity prices. Electricity and diesel prices increased as did the cost of processing reagents. In addition, the war in Ukraine led to a significant rise in the price of ammonium nitrate, the main component of explosives used at Trafigura's mines. At the same time, metals prices fell sharply in the second half of the financial year, dragged down by the strong US dollar, concerns about slowing global growth and weak demand in China.

Unfortunately, the Group's financial year ended 30 September 2022 safety record in mining remained unsatisfactory. Regrettably, two fatalities were recorded at the Group's operations during the financial year: one internal and one external. Safety improvement plans are in place at each site and Trafigura is determined to eliminate fatalities across its business.

The primary focus for the Mining team in the year ahead will be completing construction works in Brazil, at the MMI iron ore project. The Group is also considering reconfiguring its supply chain so that the operations can source raw materials close to mines which would improve competitiveness and reduce carbon footprint.

Iberian Minerals / MATSA

In 2013, the Group completed the purchase of Iberian Minerals Corp ("**Iberian**"), giving the Group 100 percent ownership in the mining group. Iberian's main asset was Minas Aguas Tenidas SAU ("**MATSA**"). MATSA owns and operates mines located on the Iberian pyrite belt in Spain. The region is well-known amongst the international mining community, since it hosts one of the largest occurrences of volcanic massive sulphide deposits in the world, 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, Magdalena and Sotiel. Magdalena commenced production towards the end of 2016 following its discovery in 2014 – such turnaround from discovery to start of operation is an industry record. Sotiel is an older mine reactivated in 2015. Over the years, MATSA accumulated excellent exploration permits in Spain, mainly located around the Aguas Tenidas mine, and more recently in Portugal through a farm-in agreement with Avrupa. 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 lead concentrate on a smaller scale. 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 in 2015, 4.4 million tonnes in 2016 and around 4.6 million tonnes per year since then.

In June 2015, 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 those of both its shareholders.

Under the joint venture, MATSA became a world-class mining and processing complex, using state-of-the-art technology and a very high level of automation in the plant. This allowed rising metallurgical recovery up by approximately 10 per cent. over recent years, despite the metallurgical complexity of the ore. Those improvements, together with continued investments in IT and automation at the mine, helped MATSA decrease its operating costs despite the deepening of the mines. The reserves have stayed stable over the years, despite the mine extraction.

In September 2021, the Group sold its 50 per cent. stake in MATSA to Sandfire Resources. The transaction was completed in February, 2022. This sale was the culmination of significant investment in the MATSA mining complex by both the Group and Mubadala to develop a world-class mining asset with a highly experienced workforce. As part of the sale agreement, Trafigura Group will retain a life of mine concentrate agreement for 100 per cent. of offtake from MATSA.

Catalina Huanca Sociedad Minera

Catalina Huanca is a wholly-owned zinc and lead underground mine in Peru, with a concentration plant with a capacity of around 800,000 tonnes of ore per year, producing 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. The performance of Catalina Huanca has been very consistent over the last four years. Production volumes were satisfactory in the financial year ended 30 September 2022, leading to a solid yearly performance.

*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 (located approximately 40 km away from MATSA operations). The mine restarted production during the third quarter of 2015 and reached commercial production in February 2016. The mine currently has a processing plant with a 15 Mtpa capacity. The Group has an offtake agreement for approximately 20 per cent. of the life of mine reserves.

Nyrstar

Nyrstar is presented in detail in the following section "Nyrstar". The Mining team is providing technical and operational services to Nyrstar, and manages directly, on behalf of Nyrstar, the Canadian mining operations. These mines were formally transferred to the Group in October 2020. The Myra Falls mine located in British Columbia is still in a ramp-up phase towards its long-term target of 800ktpa.

Unfortunately, output fell short of expectations in the financial year ended 30 September 2022. However, a new management team has now been appointed to work on operational improvements.

*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, in which construction began in 2015 and was completed in October 2017. The project is between the Group and Cuban parastatal Geominera, who manages the mine. The project was delivered on time and within budget. Emincar now employs close to 800 people and highlights the Group's ability to put its expertise and investment to work in challenging economic or political environments.

In 2018, the mine ramped 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. In 2019, the mine overcame some operational issues to achieve a significant improvement in plant performance, both in terms of overall throughput and concentrate quality, closing the year with favourable results. Total production rose to the original capacity level of 1 million tonnes.

The financial year ended 30 September 2021 was a particularly difficult year, as the mine suffered a severe COVID-19-related production shortfall. The financial year ended 30 September 2022 saw a recovery in Emincar's performance, with production volumes reaching satisfactory levels.

*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. Following various capital increases since 2017, Mubadala and the Group's shareholding increased to approximately 50 per cent., diluting minority shareholders.

The majority shareholders have invested more than USD 75 million in the Ipê and Tico-Tico mines and processing facilities to date. MMI employs approximately 700 people directly, and roughly the same number of permanent contractors, and the first ore was produced in March 2017. The original plan was to process existing iron ore stocks until 2021 and then shut the Ipe plant. But thanks to operational improvements by Trafigura's local team, the life of the plant was expanded further to 2024, which is enough to complete the construction of the Tico plant. In 2019, the tailings dam incident at Vale's Brumadinho mine affected production at the Group's Ipê mine directly and indirectly, while 2020 was a year of good production. Over the financial year ended 30 September 2021, MMI recorded strong operational, safety and financial progress.

In parallel, MMI has obtained regulatory permits to reopen the neighbouring Tico-Tico mine and build a new 6 Mtpa processing plant. Construction of the new Tico Tico processing plant is well advanced and completion is scheduled in the first half of 2023. Tico Tico will process the mine's friable and semi compact ores, a more competitive and better-quality iron ore, enabling the production of high-quality pellet feed for steelmakers.

A new environmental licensing process was 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 friendly, removing the need for tailing dams. The permit was successfully received in 2020, and earthwork together with ancillary construction work started in 2021.

Goro Resources

In March 2021, the Group acquired a 19 per cent. interest in Goro Resources via its shareholding in Prony Resources New Caledonia ("**PRNC**"). Goro Resources is a significant nickel mining operation on the Pacific island and PRNC is a joint venture which includes investors, mine management, employees and local government and community organisations. PRNC has secured direct employment for more than 1,500 people and indirect employment for more than 2,000 contractors New Caledonia.

Following the takeover, in April 2021, the facility was successfully restarted and ramped up to produce 3,000 tonnes of mixed hydroxide precipitate ("**MHP**") per month, meeting electric vehicle battery specifications in just three months. Strong market conditions for MHP intermediates, as a result of growing demand for electric vehicles, supported the decision to shift the facility from producing nickel oxide for stainless steel production to MHP for batteries. Other developments in 2021 included the successful management of the impact of COVID-19 on employees.

Priorities for 2023 include progressing the tailings dry-stacking project, known as Project Lucy, which is aimed at reducing waste storage risk and protecting the environment. Overall, work continues to build up the operation so that production can be increased to at least 36,000 tonnes of nickel a year in a safe and stable manner.

Galena Asset Management

Galena Asset Management's teams operate wholly independently of the Group, but benefit from the Mining Group's expertise. Galena Asset Management is discussed in more detail below.

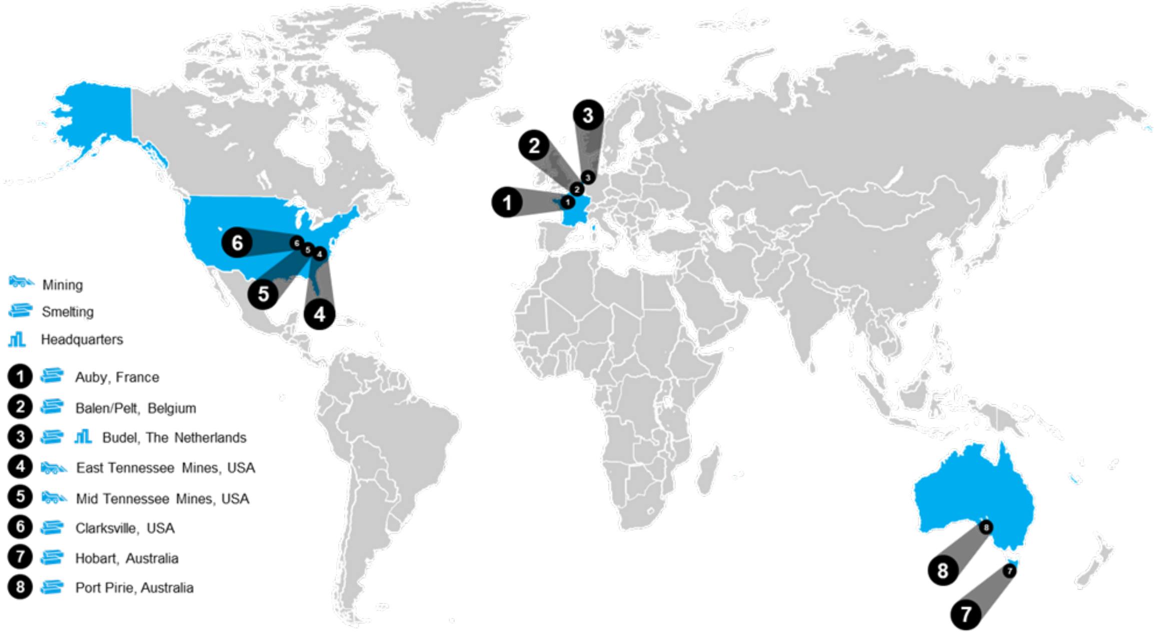
Nyrstar

Nyrstar is an international producer of critical minerals and metals essential for a low carbon future. With a market leading position in zinc and lead, Nyrstar has mining, smelting and other operations located in Europe, the United States and Australia and employs approximately 4,000 people. Its corporate office is based in Budel-Dorplein, in the Netherlands.

Global Presence

Nyrstar 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.

NYRSTAR GLOBAL PRESENCE



Nyrstar has two key operating segments: metals processing and mining.

Metals Processing

The metals processing segment comprises six smelters in Auby (France), Balen (Belgium), Budel (The Netherlands), Clarksville (U.S.), Hobart (Australia) and Port Pirie (Australia). 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. While Nyrstar's smelters are mostly primary zinc smelters, its smelter in Port Pirie is a primary lead smelter with multi-metal recovery capabilities, i.e. with the possibility to process a wide range of lead-containing feedstocks to produce refined lead, zinc in fume, silver, copper and gold.

Nyrstar is one of the largest producers of zinc metal in the world, producing over 1 million metric tonnes per annum of this critical metal for a low-carbon future.

Mining

The mining segment currently consists of Nyrstar Tennessee Mines (U.S.). To allow the company to focus on its core business, i.e. smelting, the Myra Falls and Langlois mines, in Canada, were transferred to Trafigura's Mining Group in October 2020. In recent years, the mining segment sales to the metals processing division accounted for the vast majority of the segment's revenue.

Main economic drivers of Nyrstar's business

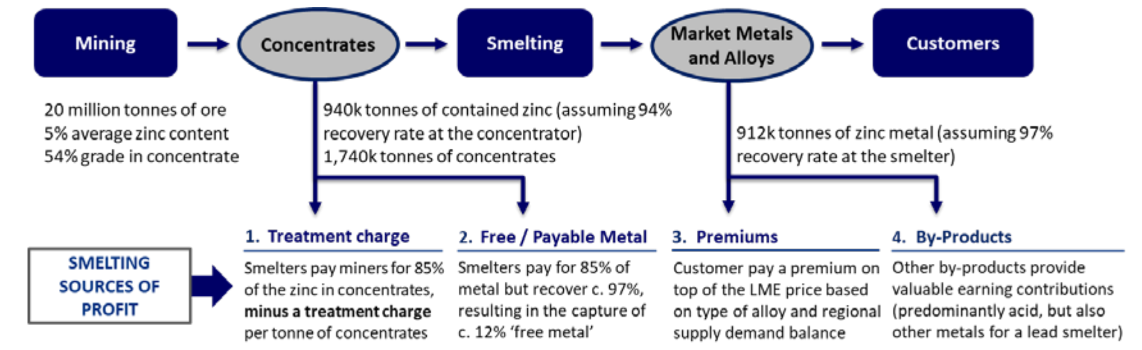
General

Smelters are essentially processing businesses that generate earnings on the concentrates and other feedstocks they convert to primary metal and valuable by-products. The mining segment generates earnings on the minerals it extracts and subsequently processes into concentrates. Profits that Nyrstar realises through the production and sale of refined zinc, lead and other metals (metals processing segment), and through the production and sale of concentrates (mining segment) are affected by a number of interrelated factors, most notably the commodity prices for zinc and lead and the treatment charges ("TCs") for processing of zinc and lead concentrates. These pricing dynamics are conceptually similar but differ in specifics for zinc, lead, and other base and precious metals. The focus in the discussion below is on the metal processing segment and the remuneration components.

Economic drivers of the Metal Processing Segment

The below chart illustrates the elements of gross profit of the smelting business (rates presented below are indicative only).

ELEMENTS OF GROSS PROFIT OF THE SMELTING BUSINESS



A smelter earns revenue from the four following elements:

- The **TCs** received from the mine (as a discount per tonne of concentrates purchased) to process the metal in concentrate into the refined product;
- The value of **free metal** it can produce and sell over and above the metal content it has paid or in concentrates purchased from the miner;
- The **premium** it can earn on the refined products it sells to its customers (i.e. sales of refined metal made by the smelter at prices above the LME prices); and
- **Sale of by-products** extracted from the process of refining zinc and lead.

While the relative weight of the contributors to smelter margins will vary according to the relationship between metal prices and TCs, Nyrstar's metals processing segment and other smelters have historically obtained the majority of their margins from TCs and to a lesser extent from free metal, metal premiums and by-product sales.

Focus on TCs

The market price of zinc is a key component in determining the value of the zinc concentrate. The dynamics of how that value is shared between mining companies and smelting companies 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 the smelter typically captures a greater share of such value.

Negotiation of the applicable TCs is a key mechanism by which the value of the contained zinc in concentrate shifts between the miner and the smelter. As is customary in the industry, smelting companies generally negotiate TCs with each supplier of zinc concentrate annually, early in the contract year, based on the smelting company's and the miner's expectations of future market conditions. In any given year, TCs tend to settle around norms established through negotiations between the major buyers and sellers of concentrate. These norms are commonly referred to as the "Benchmark" TC. A spot TC market also exists; however, it is relatively illiquid.

Nyrstar's results therefore partly correlate to the levels of TCs that it charges zinc miners to refine zinc concentrates and lead miners to refine lead concentrates. These TCs are cyclical in nature – see below for more information on zinc TCs (including historical data).

Other components of the smelting remuneration: free metal contributions, premiums and by-products

Free metal in relation to zinc is the value of the difference between the amount of zinc that is paid for in the concentrates and the total zinc recovered for sale by the smelter.

In a typical zinc concentrate contract, the metals processing segment pays the mine for 85 per cent. of the zinc contained in the purchased concentrate. This has historically been the industry standard. Assuming the zinc smelters achieve an average zinc recovery of approximately 97 per cent. (this would depend on the concentrate quality and production efficiencies), the value of the free zinc of 12 per cent. (being the difference between 97 per cent. and 85 per cent.) is retained by the smelter.

In a standard lead concentrate contract, the metals processing segment typically pays the mine for 95 per cent. of the lead metal contained in the concentrate. Accordingly, the proportion of free lead metal the metals processing segment obtains (being the difference between the amount of refined lead metal recovered for sale and the amount of lead metal paid for) is less than the equivalent proportion for zinc. If lead recoveries are approximately 98 per cent. to 99 per cent., the amount of free metal is approximately 3 per cent. to 4 per cent. of the lead in the concentrates. In addition to lead concentrates, Port Pirie also feeds leach products with significantly lower lead payables, which results in higher amounts of free metal.

Nyrstar's focus on operational excellence aims to allow extracting maximum free metal to supplement earnings coming from TCs. Moreover, the portion of free metal is expected to increase with Port Pirie fully operational, processing a higher share of raw materials with low payables (e.g. leach products).

A premium is the difference between the base LME price and the higher price that the metals processing segment achieves on sales of the refined zinc and lead metal. The premium reflects a combination of factors, including the service provided by the smelter in delivering zinc or lead of a certain size, shape or quality specified by its customers and transportation costs, as well as the conditions of supply and demand prevailing in the regional or local market where the metal is sold. Premiums tend to vary from region to region as transportation costs and the value attributable to customer specifications tend to be influenced by regional or local customs rather than being a function of global dynamics. Based on Nyrstar's Research & Development activities and technical know-how, a significant portion of Nyrstar's zinc and lead production is expected to be above standard commodity grade.

Although the metals processing segment's principal products are zinc and lead metal, it also sells silver, copper, gold, indium, sulfuric acid and other by-products from the process of refining zinc and lead. Nyrstar intends to further monetise these by-products. The quantity of by-products produced is dependent on a number of factors including the chemical composition of the concentrate and the recovery rates achieved. Concentrates from some mines contain higher levels of by-product metals than concentrates from other mines. In addition, the higher the rate of by-product recovery, the greater the amount of by-products that can be produced and sold. By volume, sulfuric acid is the major by-product the metals processing segment produces and sells.

Port Pirie redevelopment project and ramp-up

Port Pirie is an integrated multi-metals recovery plant with the flexibility to process a wide range of lead rich concentrates and smelting industry by-products. Port Pirie is one of the world's largest primary lead smelting facilities and the third largest silver producer, which allows it to generate significant economies of scale.

The Port Pirie redevelopment project, started in 2013 (feasibility studies), involved the conversion of the Port Pirie operations into an advanced metal recovery and refining facility enabling the facility to capture a greater proportion of the value contained within the feed material consumed by its global network of smelters as well as third party residues. Moreover, it aims to reduce environmental footprint, providing a step change reduction in airborne metal and dust emissions.

The redevelopment of the Port Pirie smelter was commissioned in January 2018. However, the smelter encountered some technical difficulties during the first months of its operation, resulting in periodic production outage. In August 2019, an incident occurred with the hearth in the primary smelter, which resulted in a forced shut down for approximately 3 months. In November 2019, the Port Pirie smelter was restarted and the site returned to normal production. Thanks to investments and refurbishment of the furnace following the Group's acquisition, the Port Pirie smelter was able to raise production to its design rate on several occasions in 2020 while reducing emissions. Still, Australian smelting operations, both at Port Pirie and, to a lesser extent, at Hobart, continued to face operating challenges in 2021, which resulted in lower than planned processed feedstock levels. This led to the recognition of an impairment loss of USD 125 million in financial year ended 30 September 2021.

In 2022, Nyrstar's Australian assets faced another year of operational challenges, which had a significant impact on the company's overall performance. A USD 177 million impairment charge was recognised against the value of its Australian assets in financial year ended 30 September 2022. Shortly after the end of the financial year, the Port Pirie site in South Australia was closed for a planned major maintenance intended to improve the performance of the plant and reduce emissions.

In spite of these challenges, Nyrstar continued to improve the sustainability of its operations. Nyrstar became the first company in Australia to receive accreditation to recycle and export raw materials from alkaline batteries. Household batteries from across Australia can now be processed at Port Pirie and become commodities such as copper or zinc, or go into green cement.

Operational and financial issues – 2019 restructuring process

The Group became a significant shareholder of Nyrstar Group, acquiring its shareholding through various acquisitions between October 2014 and February 2016, to finally reach an approximately 24.4 per cent. stake. The Group has had commercial arrangements with Nyrstar since its inception in 2007 and longer term-structured arrangements since acquiring a substantial shareholding in the company during 2015.

In 2018, Nyrstar was impacted by a number of operational and financial issues, which negatively affected its performance. In 2019, the company was burdened with an unsustainably heavy debt load due to overexpansion and encountered increasing financial difficulties. This significant deterioration of operational and financial performance lead to a loss of market confidence and available liquidity and necessitated a fundamental capital restructuring. After several months of negotiation, the Group became 98 per cent. owner of the holding company of the operating business of Nyrstar, now a non-listed company, consolidated within the Group's balance sheet, effective as at 31 July 2019. In July 2022, Trafigura acquired the remaining 2 per cent. of the outstanding Nyrstar operating business shares, making the company wholly-owned by Trafigura.

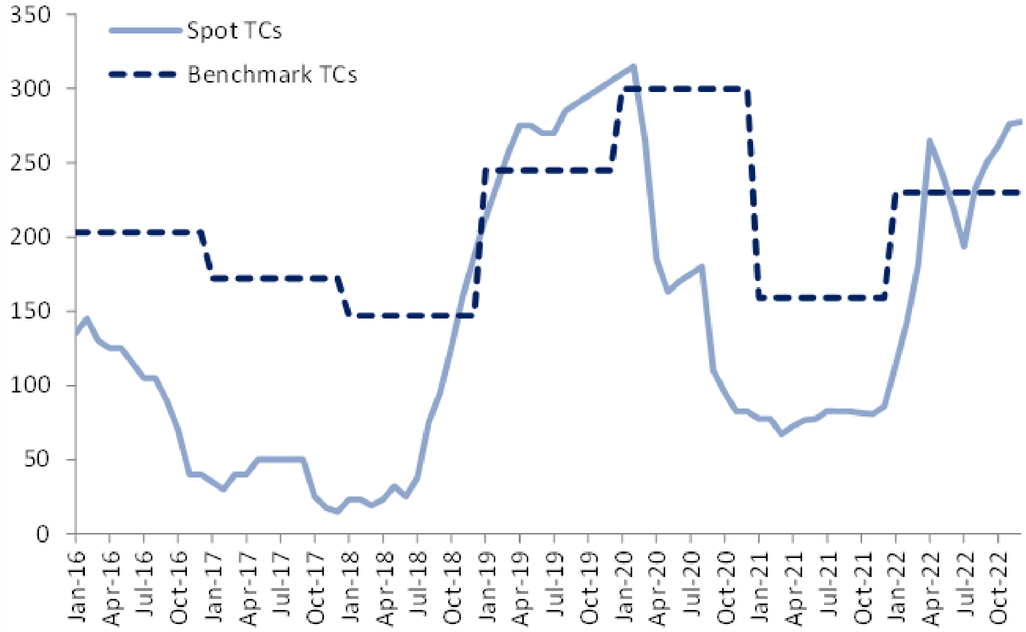
As a part of the restructuring and in exchange for the discharge of Nyrstar's obligations under its previous outstanding bonds and convertible notes, the Group provided to Nyrstar's bondholders and convertible noteholders a pro rata share of each of the following instruments: a EUR 262.5 million perpetual bond, a USD 88 million senior bond and USD 251 million zero coupon commodity-linked instruments. Nyrstar also negotiated long-term bank financing with its bank creditors, including the reinstatement of financing facilities and completion of a USD 160 million new money facility, to ensure sufficient liquidity resources to operate the company on a long-term basis and permit higher smelter utilisation rates. This restructuring strengthened Nyrstar's balance sheet with a material reduction of its indebtedness considering the haircut on banks lines and investors notes.

Market fundamentals

The Group acquired the operating assets of Nyrstar, as part of the restructuring, with a view to avoiding Nyrstar's insolvency and to protect its original investment, having determined that its global industrial multi-metal business is complementary to the existing trading activities of the Group. The Group sees significant potential in the company, which benefits from world-class facilities, strategically located close to key customers and major transport hubs, and a market leading position in zinc and lead.

The Group's support to Nyrstar was also driven by a positive outlook for zinc smelting, which would support the improvement in Nyrstar's profitability. Noting the conducive market backdrop at the time with a significant increase of spot zinc TCs that climbed from a low of USD 20/tonne early 2018 to more than USD 300/tonne in January 2020, improving operational profit. Zinc TCs recovery in 2018 was explained by a combination of rising mine supply and limited smelter capacity. The reduction of smelting capacity was notably explained by a radical shift in the environmental policy supported by China as part of their new 2020 action plan for air pollution. Indeed, zinc smelting is typically less environmentally friendly than copper smelting because of larger proportions of noxious fumes and lead as by-product. Chinese authorities implemented a reduction of zinc smelting capacity in the country by introducing more cumbersome rules for smelters to operate. As a result, a number of zinc smelters in China were forced to shut down or significantly reduce their production at the time.

ZINC TREATMENT CHARGES: JAN. 2016 – DEC. 2022 (USD/TONNE)



Source: Fastmarkets MB, Trafigura Research

The decline spot TCs during the year 2020 was a direct result of the COVID-19 pandemic, with a significant drop in refined metal's demand during the first half of 2020, following quarantine measures implemented in China early in the year. During the second half of 2020, the strong restart of the Chinese economy resulted into consistent demand for zinc concentrates from smelters, while supply was limited due to disruptions at numerous mines across the globe. This drove spot TCs further down, to approximately USD 80/tonne around calendar year-end. However, with numerous important zinc mines back in operation, limitations on concentrates supply started to decrease in 2021, while product demand was increasing, resulting into a rebound in spot TCs towards the end of the year, which was confirmed during most of 2022.

Also noting that as a mitigant to the volatility of spot TCs, similar to other major players in the zinc market, Nyrstar purchases a portion of its concentrate supplies based on Benchmark TCs. This typically represents about half or even more of total supplies, hence limiting uncertainties on costs and, as a result, increasing visibility on future cash flows and liquidity needs.

Beyond this, other factors such as underlying metals prices, foreign exchange rates and interest rates (given the company's ongoing working capital requirements) are drivers of Nyrstar's profitability. For example, zinc cash price has increased by more than 120 per cent. since the lows of early April 2020 and the end of April 2022, compensating for the relatively low spot TCs environment. The Group has taken advantage of this and implemented a risk management programme, hedging some key macro parameters in order to provide cash flow stability. Bearing in mind that with further infrastructure spending coming in both the US and Europe, the shortage of microchips expected to ease in coming months and the required replenishment of housing inventory in the US, the zinc market is likely to remain relatively tight going forward.

Nyrstar restructuring progress and outlook

As the change of ownership took effect, the Group appointed Daniel Vanin, a seasoned company executive with 40 years' experience in the metals industry, including leadership of mining and smelter development projects, as CEO of Nyrstar's operational business. Other senior appointments followed, including a new CFO, Karl Söderberg, who has more than 20 years of experience in the mining and metals industry. Effective December 2022, another major change in Nyrstar leadership was implemented as Guido Janssen and Dale Webb – previously Nyrstar's regional Vice Presidents for Europe & USA and Australia, respectively – were appointed to lead Nyrstar as Co-CEOs. They succeed Daniel Vanin, who has decided to step down after having been the company's CEO for the past 3 years. The Nyrstar management team is now composed of a mix of top industry, Trafigura/former Trafigura and Nyrstar professionals.

Nyrstar's management has a strategy aimed at positioning the business for a sustainable future as a leading metals processing business. Through its deep market insight and unique processing capabilities, Nyrstar aims to generate superior returns by extracting the maximum value inherent in the mineral resources and by-products it processes. Since completion of the restructuring in July 2019, the company has been in turnaround mode with significant capital investment in operational improvement and modernisation, following years of underinvestment. During 2021, this resulted into USD 267 million in capital expenditure across Nyrstar's global smelting operations and mining assets (USD 280 million in 2020). This trend has continued over the financial year ended 30 September 2022 with investments in the Nyrstar industrial facilities of USD 276 million.

Nyrstar is now headquartered adjacent to its major zinc smelting plant in Budel (Netherlands), nearby its Balen (Belgium) and Auby (France) smelters. Beyond the operational rationale, this relocation from Zurich (Switzerland) permitted a significant overhead cost reduction. The management is implementing a more decentralised approach, and Nyrstar is being carved into three distinct operating regions: Europe, Australia and North America, each reporting to headquarters on its own profitability. The intention is to drive greater accountability and focus on profit margins.

In the financial year ended 30 September 2022, Nyrstar recorded a loss due to operational issues in Australia and soaring power prices which forced the company to curtail production at its European smelters:

- Nyrstar's sites in Europe were impacted by a range of factors, including elevated energy prices. This resulted in periods of care and maintenance for some and/or reduced production at all of the sites. The operation level of these sites in the short to medium term will be dependent upon market conditions, which remain extremely challenging;
- In Australia, Nyrstar faced a further year of operational challenges, which had a significant impact on the company's overall performance. A USD 177 million impairment charge was recognised against the value of its Australian assets; and
- In the USA, production volumes at Middle Tennessee, a US zinc mining complex owned by Nyrstar, were satisfactory. At the East Tennessee site, production volumes were lower than expected. Management teams at both mines have now been consolidated and improved performance is expected over the next financial year.

In spite of these challenges, Nyrstar continued to improve the sustainability of its operations. Highlights from the financial year ended 30 September 2022 included the commissioning of an innovative wind park at the Balen site and, in collaboration with Nala Renewables, the construction of the largest lithium-ion battery energy storage system in Belgium at the same location. At Budel (Netherlands), Nyrstar has applied for permission to increase the capacity of its solar park to 96 MWp from 44 MWp. As mentioned earlier, Nyrstar became the first company in Australia to receive accreditation to recycle and export raw materials from alkaline batteries. Household batteries from across Australia can now be processed at Port Pirie and become commodities such as copper or zinc, or go into green cement. In the US, Nyrstar is studying the potential to build a state-of-the-art germanium and gallium recovery and processing facility at its primary zinc smelter in Clarksville, Tennessee. The company is engaging with federal and state government to secure support for the project, which would enable these critical minerals to be produced domestically in the US, boosting security of supply.

These activities underpin Nyrstar's role as a responsible and reliable producer of strategic and critical minerals and metals to further advance the energy transition. Now that the company has been fully integrated into Trafigura, it benefits from the Group's expertise, leveraging Trafigura's trading teams and best practice in terms of sourcing concentrates and marketing refined metal output and refined products, leading to better plant utilisation and more consistent performance for customers.

Looking ahead, Nyrstar will continue to seek to stabilise production across its operations. Challenges are however expected to remain significant, in particular in the form of ongoing very high energy prices and general cost inflationary impacts.

TFG Marine

Established in 2020, TFG Marine is a marine fuels supply and procurement joint venture, between the Group and ship owning companies Frontline and Golden Ocean Group. The joint venture brings together three companies that are market-leaders in their respective fields, each with solid credentials and complementary strengths in global commodity trading and shipping. The company work closely with the Group's in-house trading and shipping teams to source and sell competitively priced fuels both to vessels under Trafigura time charter and to the wider shipping market.

The combined marine fuel demand from the Group, Frontline and Golden Ocean, covering a fleet of more than700 owned and chartered vessels, provides economies of scale, and lays the foundation for TFG Marine to become one of the world's largest fuel procurement and supply alliances, generating substantial demand in key bunkering hub ports globally. One of the key focusses of the company is to improve transparency in new markets and provide customers with more sustainable marine fuels.

TFG Marine offers a variety of IMO 2020 compliant fuel products to the shipping industry, including marine gasoil ("**MGO**"), 0.5 per cent. very low-sulphur fuel oil ("**VLSFO**"), 0.1 per cent. low-sulphur gas oil ("**LSGO**") and high-sulphur fuel oil ("**HSFO**") for ships with on-board scrubbers. By the end of 2020, the company's rapidly expanding offer included a range of advanced marine biofuels to customers in the ports of Amsterdam-Rotterdam-Antwerp (Netherlands).

The company has been rapidly scaling up its global footprint over its first two years of operations and plans to continue growing volumes during 2023. The map below shows the global footprint of TFG Marine's supply operations, covering most of the key bunkering hubs, such as Singapore, Panama or Amsterdam-Rotterdam-Antwerp. The company also announced in January 2022 the start of operations in the New York Harbor, a welcome addition to the existing US footprint in the Gulf Coast. TFG Marine is now operational in 35 key hubs along the world's major shipping routes.

Over the financial year 2021, the global tanker market provided a sombre backdrop, one of the toughest years on record for bunkering as a result of oversupply. However, TFG Marine made strong progress, increasing its footprint and volumes in all regions, to the point where it is already one of the top three physical bunker suppliers in the market. A key advantage is the strong financial backing of the Trafigura Group: in the current environment of rising oil prices, this has enabled TFG Marine to provide favourable payment terms to customers where some other suppliers have struggled to do so. During 2021, TFG Marine more than held its own, even in the most challenging parts of the market, such as Africa and Singapore, and secured licences to enable further expansion in the European port complex of Amsterdam-Rotterdam-Antwerp, the Mediterranean and China.

In the financial year ended 30 September 2022, TFG Marine was able to successfully navigate highly volatile market conditions and meet the needs of its growing customer base as many of its rivals struggled in a market defined by unprecedented volatility. As a result, the joint venture recorded stronger-than-expected profit over the financial year.

Digitisation and decarbonisation will be two key areas of focus for the business going forward. TFG Marine will continue to promote the need for mass flow meters, a digital technology that accurately measures marine fuel deliveries, to shift the industry away from outdated operational practices and to bring greater transparency. Moreover, as the shipping industry transitions from carbon intensive fuels to low-carbon alternatives such as green ammonia and methanol, TFG Marine plans to work with its shareholders and customers to ensure that they can reach their decarbonisation goals and access the fuels of the future.

Looking forward, the Group expects further turbulence in the year ahead as the bunker market is affected by geopolitical events and fears of recession.

TFG MARINE'S SUPPLY OPERATIONS

Galena Asset Management

Founded in 2003, Galena Asset Management is the Group's wholly-owned and regulated investment subsidiary. Galena operates a number of funds focusing on opportunities that are linked to the Group's investment activities in mining, metals, energy, shipping and infrastructure. It offers third-party investors the opportunity to invest alongside the Group on an equal basis. Galena manages potential conflicts of interest and ensures that its structures have the appropriate governance and that independent oversight is in place.

The Galena Private Equity Resources Fund raised USD 400 million in 2013 to invest in the equity and debt of metals and mining companies, of which, the Group has committed USD 100 million in the fund pari-passu to external investors. The fund became fully invested in 2017, holding positions in three assets located in the Democratic Republic of Congo (Mawson West copper mine), the U.S. (bituminous coal producer Wolverine Fuels) and Finland (zinc, nickel and cobalt producer Terrafame). A successor fund was established in 2018 to undertake a second investment in Terrafame, with the aim of adding a new production unit for nickel sulphate, a product in growing demand for use in batteries for electric vehicles. This fund closed with investment of USD 225 million during 2019.

In addition, in November 2018, the Galena Multistrategy Fund was established with an initial allocation of USD 45 million to invest in liquid, commodity-related strategies across multiple asset classes. This fund was the main focus of activity in the financial year 2021, up 82 per cent. over the financial year, making it one of the best performing commodity hedge funds globally. The fund was able to capitalise on the unique investment opportunities created in the macro and commodities space by the dislocations arising from COVID-19 and its aftermath – in particular the collision between a strong revival in demand for commodities and a more constrained supply response, coupled with substantial logistical bottlenecks. Galena was able to leverage the Group's market intelligence, relying on market specialists with detailed and timely information in order to understand the underlying realities of the physical markets. In the financial year ended 30 September 2022, the fund continued to perform well, despite a complex year, with extreme volatility in commodity prices and financial markets in general.

In June 2021, Galena successfully completed the first funding within a USD 155 million, closed-ended 3-year committed prepayment portfolio fund. This fund, a first of its kind in the commodities industry, was raised with private equity and senior debt provided by a syndicate of core banks for the Group. The fund is managed independently from the Group and has been established to purchase insured prepayments from the Group, for commodities including oil, metals and minerals, thus increasing the Group's ability to agree further prepayments with producing counterparties. Those prepayments are used to organise upfront loans for commodity producing counterparties and are repaid over time in commodity shipments.

On the private equity side of Galena’s activities, substantial progress was made in 2021 on Terrafame. Although the company suffered delays as a result of the global pandemic, it started producing nickel sulphate in its plant during the summer. Through this project, Terrafame is transitioning into one of the most efficient, low-carbon battery-grade nickel sulphate producers in the world. In 2022, Terrafame continued to make progress with its new battery chemicals plant, gradually ramping up production. Once at full capacity, the plant will be capable of producing 170,000 tonnes of low-carbon nickel sulphate a year, which is enough metal for around one million electric vehicles.

The highlight of 2022 was the launch of the Galena Structured Credit Resources Fund, which specialises in trade finance. It started deploying capital in March 2022 and has currently lent a total of USD 50 million to three upstream oil players – two in Canada and one in West Africa. The fund enables Trafigura and external investors to access an attractive investment strategy that provides stable returns and indirect exposure to commodity prices. In the coming years, strong growth in alternative capital sources is expected that will allow the funding of efficient new projects that are needed in the energy and metals space.

For the year ahead, the high level of volatility is expected to continue as microeconomic fundamentals such as the lack of investment in new production capacity and low inventories bump up against macroeconomic and geopolitical headwinds.

Galena 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 (in particular Impala Terminals, the Mining operations and Nyrstar, since consolidation in 2019), but also, more recently, increasingly 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, except for the approximately USD 250 million in yearly maintenance Capex at Nyrstar since its consolidation, providing 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 of a smaller size or with a shorter track record. The assets often contribute on a standalone basis to the Group's earning potential, 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, CMC and 50 per cent. of MATSA);
- Equity investments (Corpus Christi Holdings, Chinalco Mining, Mexican Tuxpan pipeline);
- Portions of its stake in Puma Energy in 2011 and 2013 to existing minority stakeholders;
- Some of Impala Terminals' logistics assets to a joint venture with IFM Investors in 2018 (the Simba JV/ITG 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 financial year ended 30 September 2016, the Group reached the end of an intensive cycle of investments in industrial and logistical assets and accordingly booked a reduced level of Capex. the Group decided in the financial year ended 30 September 2017 to limit total annual capital expenditures and investments (net of divestments) to USD 500 million for the years to come. This remained the case until the financial year ended 30 September 2020, with Capex (net of divestments) amounting to USD 265 million. Such reduced capital expenditures supported the Group's deleveraging plan over that period. Noting that Trafigura continued to invest in assets that offer opportunities, where appropriate, firstly in the form of joint ventures and partnerships, as the Group seeks to expand its business and trading flows with a partnership-oriented growth model, as opposed to the full asset ownership model that had been pursued in the past.

Over the financial year ended 30 September 2021, for the first time in years, Capex (net of divestments) was USD 2,728 million, well above the envelope of USD 500 million set by the Group in the financial year ended 30 September 2017, mostly due to the Vostok Oil investment in December 2020. The decision to proceed with such investment was made following an exceptional Operating Free Cash Flow generation in the financial year ended 30 September 2020 of USD 4.0 billion (after IFRS 16 adjustment) which continued over the financial year ended 30 September 2021. Despite this significant acquisition, Operating Free Cash Flow for the year remained at a very strong level of USD 2.1 billion (after IFRS 16 adjustment).

During the financial year ended 30 September 2022, Capex (net of divestments) was USD 536 million, with USD 1,032 million additional 'Property, plant and equipment', mainly related to investments in the Nyrstar industrial facilities and mines, and vessels; together with USD 568 million additional 'Intangible assets', mostly consisting of environmental emission credits and allowances held for own use. This was partially offset by (i) USD 481 million in disposals, primarily related to sale and lease-back transactions on a number of vessels, and (ii) the receipt of USD 727 million due from Sandfire Resources in relation to the sale of MATSA.

During the financial year ended 30 September 2022, following Russia's invasion of Ukraine in February, Trafigura froze its investments in Russia and announced a review of the Group's 10 per cent. non-operational, passive shareholding in Vostok Oil, with the intention of exiting. The Group terminated its long-term contracts with Russian state-owned entities ahead of sanctions taking effect in May. Then, in July 2022, Trafigura completed the exit of the Vostok investment, including associated non-recourse bank debt at the structured entity level. No loss was recorded at the exit from the investment structure.

Industry Overview Oil Market

Crude Oil

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.

The physical global supply and demand of crude oil determines its long-term price, like all commodities. However, given crude oil's role as one of the world's key economic drivers, its short-term price can become especially volatile due to geopolitical events, financial positioning, macro-economic developments and regulatory changes. These events can quickly shift the short-term supply and demand fundamentals causing a sharp price response.

The physical supply of crude oil is born from exploration and production projects that are executed by national energy companies, like Saudi Aramco, or private enterprise, which can be independent or integrated energy companies, like British Petroleum (BP). Oil producing nations are often differentiated as being part of the Organisation of the Petroleum Exporting Countries (OPEC) or not (non-OPEC). As at end of 2018, OPEC countries held approximately 79 per cent. of the world's proven oil reserves (with the bulk of those reserves located in the Middle East), but they only accounted for around 40 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. Over the financial year 2022, the Group traded an average of 6.6 mbpd of physical oil and petroleum products.

There exist hundreds of different varieties or "grades" of crude oil, which are valued differently by refiners due to their chemical compositions and yields of refined products from the refining process. The pricing of the many varieties of crude oil amongst buyers and sellers is done on the basis of premiums or discounts to a much smaller number of "benchmark" crude oils. Benchmark crude oils include Brent crude oil ("**Brent**") Dubai, and West Texas Intermediate ("**WTI**"). Brent crude is estimated to price two thirds of internationally traded crude oil supplies, which is why a major international event is typically reflected in the price of Brent futures in the short-term. Dubai crude is used as a benchmark to price crude oils sold from the Arab Gulf into Asia. WTI is the benchmark for sales into the United States and is often compared to the price of Brent as a price differential. More recently, the Shanghai crude futures were introduced to represent an Asian benchmark.

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.

Oil Products

Global oil refined products ("**liquids**") demand growth generally trends with global economic growth given its role in the industrial, construction, and transportation sectors. Looking at the past twenty years, this trend has mainly been upwards except for the years of 2008 and 2009 when consumption of energy fell because of the global economic recession and during the COVID-19 pandemic (in 2020 and 2021) when fuel demand dropped due to lockdowns across the globe. Even then, the upward trend quickly resumed in the years that followed those years of liquids demand contraction. A sizeable boost to oil liquids demand occurred in the years that followed 2015 as lower priced motor fuels benefited consumers in the OECD countries, plus China and India. This was a result of a sharp fall in the price of crude oil that began in late 2014, which trickled down to the prices of refined products, particularly gasoline and diesel.

Since the lows in early 2016, a slow rise in oil price has occurred, but refined product demand growth continued while the world witnessed robust in-sync economic growth in 2016 and 2017 headlined by OECD countries. However, as central banks responded to economic strength with higher interest rates and oil prices climbed higher on tighter supply and demand balances, fears of refined product demand erosion started to arrive in 2018. The addition of a trade war narrative between the United States and China escalated the fears of economic decline quicker than originally surmised by the market. Demand and prices remained subdued in 2019 as global growth began to slow from its 2018 peak, due in no small part to the trade war. Then, in 2020, the emergence of COVID-19 caused an unprecedented drop in product demand. Since that initial drop however, demand for oil products has been trending steadily upwards, with the notable exception of China in 2022, as the second-largest oil consumer struggled with COVID. Global demand should reach a new record high in 2023 as global growth continues, and China's re-opening causes a boost to both economic and oil demand growth.

The correlation between oil liquids growth and global GDP growth has weakened, reflecting the increased use of alternative fuels and improved efficiency. Oil liquids consumption increased by approximately 1.4 per cent. (compounded annually) since 2004, compared with a purchasing power parity 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 liquids consumption increase of approximately 200,000 barrels per day. However, the relationship remains stronger in developing countries, as per capita income levels are key. When these hit around USD 4,000 per capita, overall energy consumption, and in particular road transport consumption, tends to increase at a much higher rate than GDP growth. Therefore, peak oil demand in these countries will likely come later than in the Western world, where regulations, demographics and the more advanced rise of renewables will hasten its arrival. As a result, growth for oil liquids demand is now concentrated in non-OECD countries, where the growth and market share has overtaken OECD countries and will continue to do so.

Refining Capacity and Other Fundamental Factors

A clear view on refining capacity helps to shape the forward view on crude oil demand and refined oil products supply. For example, refining capacity becomes a bottleneck when crude supply is sufficient but oil products demand outstrips the production capacity able to supply oil products demand. The historic pattern has been that when demand for refined products increases at a rate greater than additions in refining capacity, refining margins widen to incentivise additional 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.

Other oil market fundamental factors include environmental seasonality and weather events, which can affect price similar to geopolitical risks given the unpredictability of such events. Cold weather regions experience a boost in demand for heating products. Surprise weather events, like hurricanes, can greatly affect both the production of crude oil and supply of refined products simultaneously, as offshore rigs and refineries need to be “shut in” in the Gulf of Mexico, creating high price volatility.

On a different scale, factors such as the U.S. 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.

Crude Oil Price Analysis-Focus since financial year ended 30 September 2020

Crude oil prices were relatively stable in percentage terms from 2012 to the first half of 2014. However, a notable decline ensued in the second half of 2014. Brent fell from USD 115/bbl in June to around USD 55/bbl in December, as offline production in Libya and Iran masked rapid production growth in North America and other regional gains for some time. Prices then stayed in a USD 40-60/bbl range for the next four years, as price moves above that level led to increased US production, and prices below were met with OPEC production cuts, leaving the market in relative stasis.

Structural declines started to show in many producing countries in 2018, leading prices to start to move higher before a major ramp-up in Saudi, Russian and US production combined with Iranian sanctions relief led to a rapid increase in available barrels, bringing prices down again.

On 14 September 2019, the 7-mbpd oil processing facility in Abqaiq, Saudi Arabia was attacked by drones, essentially shutting off approximately 7 per cent. of global oil production. Oil price briefly spiked 20 per cent., or nearly USD 11/bbl, at market open marking its biggest jump in 28 years’ time before settling 10 per cent. higher, or USD 6/bbl, at around USD 66/bbl. It was a significant moment for Saudi Aramco as it was in the process of its launching the company’s IPO and the world watched as it quickly handled the situation given the magnitude of the event shifting physical crude oil cargoes and restarting production in just weeks' time. Crude within a month's time fell back to levels before the event took place as the main themes of trade war and US production growth hampered a constructive flat price view, knocking it back below USD 60/bbl again. As 2019 closed, the US and China trade talks took a positive turn with an announcement of a Phase 1 deal and crude oil traded back to around USD 65/bbl.

Heading into 2020, the macro backdrop was finally looking more positive. In addition, the Middle East suffered its latest dramatic geopolitical event with the killing of Iran's critical General Soleimani, which again whipsawed crude oil price up to around USD 70/bbl as fears of a US and Iran war seemed imminent. But, as Iran responded in minimal fashion, and President Trump held a news conference that tempered fears, crude oil price fell back to levels before the death of Soleimani, trading again around USD 65/bbl.

However, that was pre-COVID. Just as the year was getting started, reports emerged of a new virus spreading rapidly in Wuhan, China, leading to the authorities locking down first the city, then the province and eventually the whole country. The virus nonetheless spread outside the country's borders, leading to a global pandemic the likes of which the world has not seen since the 1918 Flu Pandemic. As of this writing, the global death toll is in the millions, with many tens of millions more having suffered from the virus. As a result, governments around the world put in place strict curtailments on movement and economic activity in a bid to halt the spread of the disease. This shutdown of movement was unprecedented in modern times, leading to the sharpest ever fall in oil demand, approximately 20-25 per cent. However, just prior to the shutdowns, OPEC+ had a fateful meeting wherein they failed to agree on new production quotas, which meant every member was free to ramp up production to their operating limits, which they promptly all did. That ramp up to record high supply just at the time that demand was hitting record lows meant that inventories began to pile up rapidly, reaching maximum limits in some areas. In the US, at the main delivery point for WTI, the main marker grade, negative prices were seen for the first time ever, as the physical requirements for storage exceeded available capacity, and therefore prices needed to incentivize flows to move elsewhere.

Negative prices were the signal to oil producers that they needed to curtail supplies, and quickly. The result was a historic agreement between OPEC+ and other major producers including Brazil, Norway, Canada and Mexico, to reduce supplies by at least 10 mbpd (approximately 10 per cent. of the global oil market). While the US did not join in the agreement, low prices (and, later in the year, storms in the Gulf of Mexico) forced many producers to reduce production in any case, removing almost 3 mbpd at the lowest point.

In 2021, oil prices (Brent) rebounded by more than 90 per cent. over the course of the financial year, rising by approximately USD38 per barrel. This increase in prices came despite a brutal second wave of COVID-19 infections and lockdowns over the northern hemisphere winter, followed by another sharp hit from the Delta wave in late summer which meant that oil demand had not yet fully recovered to 2019 levels as at the end of September 2021.

Coming into 2022, Russia's invasion of Ukraine led to a major re-wiring of global oil trade flows, as Russian barrels (both crude and refined products) that historically went to Europe were re-routed to India and China, with Europe replacing the Russian volumes with barrels from the Middle East and US that normally would have gone to those Asian markets. Oil cargoes now had to spend much longer on the water, and shipping costs rose sharply to adjust to the new requirements. Crude prices came off after an initial spike, due to an unprecedented release of barrels from OECD countries' Strategic Petroleum Reserves (SPRs), especially from the US. These barrels masked the underlying lack of supply capacity, the result of years of under-investment. The other factor weighing on prices was concerns about the macro environment, as China's lockdowns and fears of an impending Fed-induced recession in the rest of the world, caused traders and funds to doubt the strength of any apparent recovery. But coming in to 2023, production capacity remains constrained despite projected growth in some non-OPEC countries, while China's re-opening after the lifting of Zero COVID Policies looks like it will add substantial demand. This could lead to a sustained move higher in prices, as long as the world manages to avoid a deep recession.

Shale Revolution Gas Side Effects and Opportunities

In addition to crude oil, increased US shale gas production has had an 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 trading increasingly attractive. The Group is well placed as the second 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.

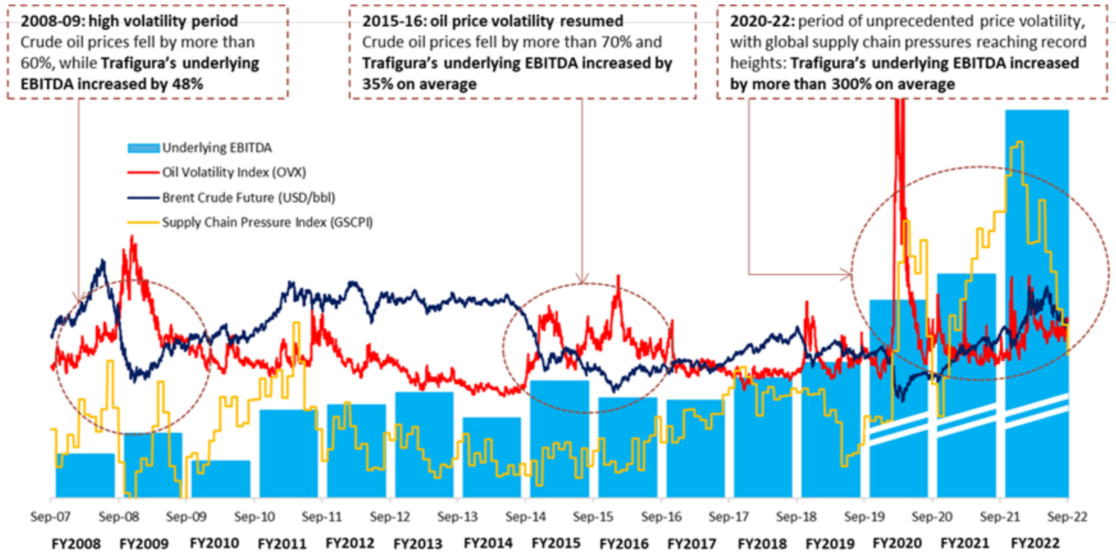
As one of the main structural changes over the past decade, increased natural gas production has garnered greater attention as an alternative fuel source to coal for supplementing world energy demands. The Group continues to believe coal is likely to remain essential to worldwide energy consumption for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

Analysis of the Impact of Declining Oil Prices on the Group

From September 2014 to September 2017 oil prices 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 - bearing in mind that the Group is not active in oil exploration and production.

The Group's business model benefits from volatility in commodities markets and, historically, declines in commodity 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 and, as a result, commodity price decreases have no impact on the Company's profitability. In financial year 2020, the exceptional trading performance of the Group was mainly driven by unprecedented volatility in commodities markets due to the COVID-19 pandemic on global economy and the emergence of contango forward price curves during the year. At the same time, oil prices fell by more than 50 per cent. during first half of 2020. Such trend has been clearly demonstrated since the Group's inception, through historic oil price crashes, e.g. 2008-09 and 2015-16, as presented in the chart below. At times like these, the Group's expertise in solving disconnects in global markets between supply and demand becomes more relevant than ever.

The Group operates as a global supply chain manager, providing valuable services to customers across the globe. In periods of higher supply chain pressures Trafigura is able to leverage its expertise in the field. Over financial year 2021 and 2022, while volatility did not match the exceptional levels of the financial year ended 30 September 2020, it remained relatively elevated (when compared to the last ten years). However, the progressive recovery from the COVID-19 pandemic and geopolitical tensions in recent years, culminating with Russia's invasion of Ukraine in February 2022, triggered historically unseen congestion in global supply chains, impacting global trade flows. In this environment, the Group benefited from its global scale, experience and flight to quality, both in terms of customer relationships and financial liquidity.



Source: Public market data (Bloomberg): Brent – Generic 1st Crude Oil future ('CO1 Comdty') // CBOE Crude Oil ETF Volatility Index ('OVX Index') measures market's expectation of 30-day volatility of crude oil prices by applying the VIX® methodology to United States Oil Fund (USO) options spanning a wide range of strike prices // The Global Supply Chain Pressure Index (GSCPI) – index to measure of supply chain conditions, created by the Federal Reserve Bank of New York

Note: Underlying EBITDA is defined as operating profit or loss before depreciation and amortisation excluding share-based payments (non-cash) and exceptional and/or non-operational items. As from 1 October 2019, the Company adopted IFRS 16. The impact of IFRS 16 on underlying EBITDA for the financial years 2022, 2021 and 2020 amounted to increases of USD 1,358 million, USD 1,270 million and USD 1,194 million, respectively. Prior year numbers have not been restated for IFRS 16.

The Impact of Contango and Backwardation

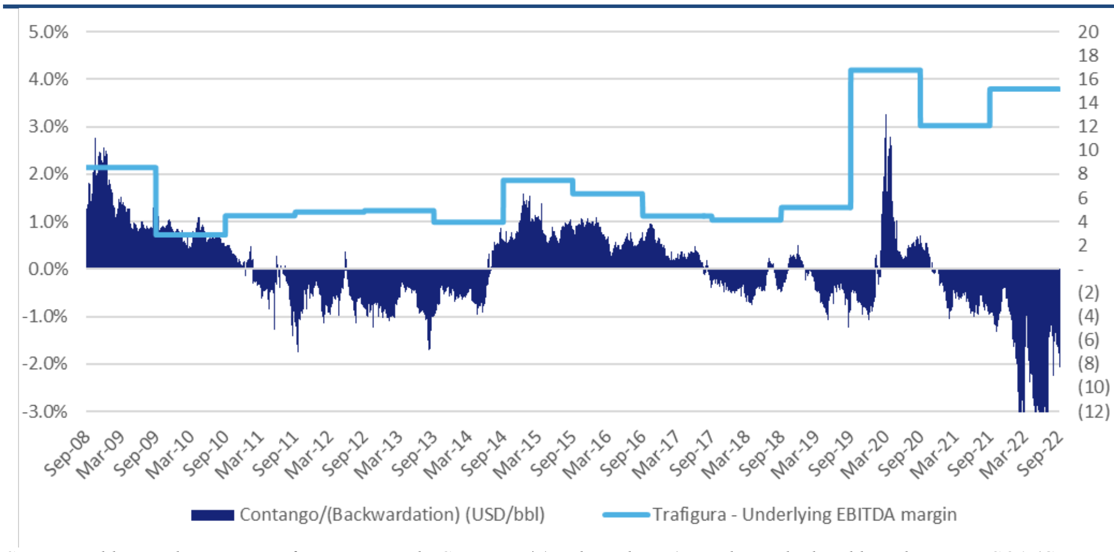
In a contango market, where forward prices are higher than current spot prices, the Group is able to buy and place cargoes in storage whilst selling the equivalent forward contract. As long as the cost of the transaction, which includes storage, insurance and financing, does not exceed the price differential 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, the global oil market was 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.

Conversely, with the price curve showing a steep contango for much of the year, 2020 was a favourable environment for physical commodities trading, and the Group was able to deliver a record trading profit for the year. The contango structure reached a peak in the oil market as at March 2020 end with a differential between one-month and six-month futures reaching USD 13 per barrel, allowing the Group to generate a significant gain over the cost of carry.

During the financial year ended 30 September 2021, crude oil market was in shallow backwardation, making for more challenging trading conditions. However, in a volatile environment, the Group's services in supply chain management and connecting supply and demand remained in great demand. Rather than releasing oil to the market in aggregate as typically takes place in a backwardated market, the Group continued to focus on serving its customers along the forward price curve. Over the financial year ended 30 September 2022, while most commodities markets were in deeper backwardation, the substantial dislocations in energy markets triggered significant pressure on global supply chains, together with volatility spikes, which put a premium on Trafigura's ability to move commodities globally, to where they are in highest demand as efficiently as possible, hence resulting into higher margins.

The chart below shows the historical impact that the move from contango to backwardation, and vice versa, has had on Trafigura's underlying EBITDA margins.

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) – Note: Underlying EBITDA is defined as operating profit or loss before depreciation and amortisation excluding share-based payments (non-cash) and exceptional and/or non-operational items. As from 1 October 2019, the Company adopted IFRS 16. The impact of IFRS 16 on underlying EBITDA for the financial years 2022, 2021 and 2020 amounted to increases of USD 1,358 million, USD 1,270 million and USD 1,194 million, respectively. Prior year numbers have not been restated for IFRS 16.

Metals and Minerals Market

The metals industry is the processing, trade and transformation of a variety of unique and distinct products used in the global economy. Dynamics can vary widely from one metal to another, with each product being, in effect, their own sub-industry that can operate very differently. Metals are broadly categorised into two categories – ferrous and non-ferrous. The ferrous industry comprises the steel value chain including iron ore mining, crude steel making and steel product processing. By volume, the ferrous industry accounts for over 90 per cent. of the refined metal traded across the world.

Non-ferrous metals, the second category, account for a wide range of products that have higher unit value but lower volumes traded than ferrous products. While there are dozens of different metal products under this category, the largest five are commonly called "LME metals", named after the largest exchange that trades these products – the London Metal Exchange. These five metals are: aluminium, copper, zinc, lead and nickel.

The metal supply chain starts with mining activities to create an ore. This mined ore then typically undergoes some initial processing at the mine site which increases the metal content of what has been mined, hence why this product is called a *metal concentrate*. Concentrates go through further processing that consists of one-to-two steps of processing (the number depends on the metal) at heavy industrial facilities called *refineries* or *smelters* (the name also varies from one metal to another). The output from this refining/smelting process is *refined metal*, which is (partially) analogous to pure metal. Refined products are traded on futures exchanges, such as the LME, and are the focal point of liquidity across the metals value chain.

Fabricators are the primary consumers of refined metals, where they turn metal into a wide variety of products including rods, sheets, and frames. Even though refined metals are consumed at this point, it is not truly the end of the supply chain. The *downstream industry* refers to the compilation of manufacturing and processing required to turn metals and other materials into widely used final products including cars, buildings, soda cans, foil and electronics. The share of metal consumption used in each final product varies by region and metal.

The variety of applications in which metals are used for is a constant theme, with no one end use sector dominating metals consumption. While aluminium is widely used in the *transport sector* (engines, wheels, car bodies, etc), copper use is lower – although the use of copper is expected to increase as electric vehicles become more prevalent. Meanwhile, both copper and aluminium are heavily used in the *construction sector*, although they are needed for different components in construction. Copper is used in the electrical infrastructure of buildings, while aluminium is primarily used as window frames. In the *utilities sector*, both copper and aluminium are used for their conductivity but are still used in different applications – aluminium for long distance cables and copper for shorter distance distribution. Aluminium is found in *consumer products* such as soda cans and household foil, while copper will be in every electronic good purchased in the world.

To get metals from the ground to become a finished product is not a straightforward process, with products traded across the world many times along the way. Areas of the world that hold the largest reserves of metal ore in the ground are typically not the same places where it makes the most sense for metal to be processed. Similarly, metal is not always consumed where it is processed, hence a second round of trade flows is required. One example is in the aluminium industry: Guinea is the largest producer of bauxite (ore) but has no smelting (processing) capacity and minimal consumption in the country, while China is the largest consumer worldwide but produces less than 50 per cent. of the ore it eventually consumes.

The energy transition

The demand outlook for the metals industry is closely tied to the energy transition required to reduce carbon emissions and thereby lower the impact of climate change on the planet. The main challenge of undergoing this transition is finding ways to replace fossil fuels with other energy sources. Fossil fuels are direct sources of highly concentrated energy that can be flexibly deployed to provide the world with the energy it needs. Many of the proposed replacements involve harnessing energy from indirect sources, which is transformed into forms that are more useable to the world. An example of this is comparing solar energy to coal, which can be transported across the world via ocean freight from where it is mined to wherever there is an energy requirement. Solar energy does not have this luxury – the only place it can be used is wherever the sun happens to be shining at a particular time. The same is true of other energy transition solutions such as wind power and hydroelectricity. To tap into the energy potential that these sources offer, methods were developed to harness and transform this energy into more useable forms. Transformation into electricity is the prevalent method today, while transformation into hydrogen is a quickly developing technology.

These transformation processes turn lower density and logistically challenging energy sources (wind, solar) into higher density and more flexible sources (electricity, hydrogen). These processes require specialised equipment that optimises the funnelling of difficult-to-capture energy sources – namely solar panels, wind turbines and hydroelectric dams. This equipment requires materials with specific technical characteristics, including metal products. A rule of thumb is the harder the energy is to capture and transform, the more materials and metals are needed in the electrical transformation capacity built.

Reducing fossil fuel use in favour of new energy sources creates a metals demand multiplier effect. This energy requires more difficult transformation techniques and therefore more metal will be contained in the new infrastructure to be built. The switching from thermal to electrical energy is notably positive for copper demand, as it is the main material used worldwide as an electrical conductor. The more remote the energy source, the more copper needed to harness and carry the electricity to consumption locations. Other materials are also required, but will depend on the type of energy source used and how it is used. For example, solar energy needs large areas of land that have high structural integrity and conductivity. Aluminium is the metal that fits this profile best, meaning much higher consumption of the metal per unit of capacity installed.

The other challenge of the energy transition is that the supply of new energy sources is more volatile than their fossil fuel counterparts. Oil rig production is determined by operators, while winds blow at their own discretion. On top of this, electricity cannot be stored as easily as conventional fuels. New energy sources increase supply disruption risk and highlight the increasing need to reliably store energy. The demand for metals used in batteries is therefore increasing, with growing attention paid to finding ways to source metals such as nickel, lithium and cobalt. In the case of many metals, the increasing prevalence of batteries will exponentially increase their demand. For example, annual nickel demand is less than 10 per cent. of the 50 million tonnes needed to electrify every car in the world.

The importance of metals in the global economy continues to increase, with new themes such as the energy transition complementing existing drivers of growth such as urbanisation and globalisation. Metal supply chains are becoming more complicated, and applications are becoming more varied. The need for in-depth knowledge of the range of metal markets is therefore increasing, as is the value that Trafigura brings to this industry.

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
- Smaller independent traders that are focused on niche markets defined either geographically or by single commodities.

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 is more global and therefore its profit generation sources are more diversified. Glencore focuses primarily on metals, 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. On the contrary, Trafigura's assets are more downstream-focused and the Company only engages in highly synergistic investments that are complimentary to its core trading activity.

Over the Group's 29-year history, competition in the global commodities market has altered as a result of a number of structural changes in the industry. These changes have caused challenges, but have also created 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 resulted in the disposal of some infrastructure and logistical assets and enabled some commodity traders to build up scale 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 developments in the banking market during 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 Group 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 and was supplemented in January 2020 with a dedicated section on prepayments.

The Importance of Functioning Derivative Markets

Trafigura systematically hedges index price exposure related to its physical transactions and no outright price risk, resulting from exposure to movements in spot prices or forward prices, is taken by the Company. Trafigura uses derivative markets to manage this price risk and lock in profit margins from physically moving commodities from where they are produced to where they are consumed.

In the exceptionally volatile market conditions of February, March and April 2022, access to these derivative markets became more difficult and expensive. This was because exchanges and clearing brokers significantly increased margins – or cash deposits – required for each transaction. This sometimes happened at very short notice. As a result of these margin calls and fearful of a cash drain, some users backed away from the market and liquidity dried up. While larger, well-funded companies such as Trafigura are able to withstand these pressures, it is vital that measures are in place to ensure an orderly market even at times of high volatility, so that the real-world movement of goods is not impacted. For some smaller market participants, the decision to hedge, or keep some hedging positions, might have effectively resulted in insolvency, even if related physical transactions were profitable. This significantly reduced the open interest – the total number of futures contracts held by market participants – and effectively contributed to a breakdown in the proper functioning of some commodity markets like natural gas and nickel.

In order to manage those additional liquidity requirements, Trafigura moved quickly to secure USD 2.3 billion of additional liquidity in March 2022, from a number of relationship banks, to provide an additional cash buffer. Moreover, the Company reduced its trading volumes, focusing on higher margin business.

Although liquidity on exchanges has improved over recent months, it has not returned to its pre-pandemic levels yet. Some markets are still particularly hard to access and this results in challenges to fully offset the index price risk associated with underlying physical transactions. This can sometimes result into such physical transactions not taking place altogether, which in turn increases the likelihood of market disruptions and shortages of certain products in certain regions.

Operational Organisation and Procedure

The main commercial and operational responsibilities of the Group are split geographically between Athens, Calgary, Geneva, Houston, Johannesburg, Lima, Montevideo, Singapore, and Shanghai. 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.

Similar to financial services company, all of the Group's 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 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 is also responsible for all elements of the on-boarding process covering new business structures, as part of the ongoing business development strategy of the Group. Those responsibilities cover:

- Monitoring of projects that introduce new business to the Group;
- Coordination with heads of departments to develop the staff support structures required to transition business opportunities from a project to the 'business as usual' state;
- Coordination of technology and business support department to ensure the alignment of 'people, process and systems'; and
- Manage the resourcing and budget for each project and maintain transparent reporting on these throughout the delivery process.

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's trading operations are organised by product desk. The main desks are:

- Crude oil, fuel oil, biodiesel, middle distillates, gasoline, naphtha, condensates for the oil trading business;
- Copper (refined metal and concentrates), lead and zinc (refined metal and concentrates), alumina and aluminium and nickel and cobalt, with silver and gold as by-products of refined metals, for the metals division; and the iron-ore and coal desks on the minerals trading side; and
- LPG, LNG, natural gas, power and carbon trading for the gas and power division.

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. Noting that the finance department has a final veto on any transaction.

There are established risk control procedures in place for the Group's 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 further enhances the Group’s market risk management on a Group-wide basis. The Group’s CRO is responsible for ensuring a full and accurate awareness of risk throughout the Group and that these risks are professionally reported, 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 set of transactions, from inception to completion, including involvement and co-operation with the related departments for the following aspects of a trade:

- 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 provides shipping and freight services to the Group's various trading teams and to third-party clients. It operates as a service provider securing competitive and reliable freight for the Group's in-house oil, metals and minerals traders; noting that wet and dry freight desks also operate respectively as profit centres in their own right.

The Chartering Department consists of specialised professionals based in the Group's main trading offices. All post-fixture operations, which include issuing voyage orders, completing stowage plans, negotiating with port agents and handling demurrage claims are managed centrally from the Group's Athens office. 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 any potential non-standard contractual terms.

The contracts administration staff seek authorisation from the traffic/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 Group's 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. Beyond sourcing and structuring funding lines, 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;
- Corporate Funding, and
- Treasury

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, and the dedicated finance teams for the Group's main industrial assets.

Structured Finance Department

The Structured Finance Department is centralised in Geneva with representatives in Johannesburg, Mumbai, Singapore, Shanghai, Montevideo and Houston. The team is responsible for structuring complex trade finance transactions supporting commercial operations. The Structured Finance professionals are regionally specialised and deal with a diverse range of commodities and funding requirements. The team has a varied role and plays a significant part in the transactions, working with traders from inception to conclusion, adding value to the commercial proposal. They have regular meetings with the Trade Finance and Credit Departments in which they review all trading activities and key exposures. 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 transactions, sales and purchases, can be financed by various instruments such as open accounts, documentary collections, Letters of Credit ("**L/C**"), guarantees, letters of indemnity or advance payments.

Trade finance staff 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 Risk Department

The Group's Credit Risk department performs fundamental credit analysis, with a team primarily based in Geneva, with representation in eight other offices worldwide. The Credit Risk department's key role is to safeguard the receivables assets on the Group's balance sheet. It assesses the credit risk associated with the Group'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, or when a credit risk trigger is hit. Any exposure above the credit limits is covered on the insurance or financial markets. The Credit Risk 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, working closely with the trading team.

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 Credit, 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.

Treasury Department

The Treasury department is split up across Geneva, Shanghai, Montevideo and Mumbai. The principal objective of the 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 the Corporate Funding team who consolidates the information on a Group basis. The Treasury department also has the responsibility to maintain the integrity of payments. The team 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 that 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.

Back Office

Trafigura Global Services

Trafigura Global Services Private Limited (TGS) is the Group's fully owned shared service centre, 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, including Accounting Operations, Deals Desk, Treasury, Trade Finance, Compliance, Insurance and Operations Settlement – providing critical support to other teams located in offices around the world. Furthermore, TGS supports Group functions such as IT (on application, infrastructure support, etc.) and 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, Houston and Montevideo. 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. 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.

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 such offices and non-front office staff, whose role is to provide a focal point for the escalation of local compliance issues.

Compliance officers act as advisors to employees on any compliance-related matters including:

- The application of, or compliance with, the Group's code of business conduct (the "**Code of Business 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
- Escalating issues, risks and breaches to senior management and the compliance committee.

The compliance representatives act as a local, initial point of contact for any employee to raise any compliance-related issues. The compliance representatives may then escalate the issue and assist with implementing any necessary resolution action.

The Compliance department 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 Code of Business Conduct 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 front office staff and face-to-face training is provided by compliance to those employees;
- Online mandatory training is completed periodically by all staff, not only on the Code of Business Conduct but also on 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 also involved in the Group's KYC procedure and works closely with traders and the Credit department on those matters.

Internal Control Department

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 Group's control framework is based on the following key phases:

- Management identifies and measures the inherent business risks on an annual basis (financial reporting, operational, and compliance risks);
- Annually, management identifies and adapts the necessary controls and risks 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;
- 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 the Group's Governance, Risk and Compliance tool called BWise. 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 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. The team also assists local management in improving controls related to specific locally identified risks, and to promote increased standardisation of procedures across the Group by performing targeted and focussed review of processes and/or locations.

Corporate Affairs Department

The Corporate Affairs department has representatives in Geneva, Montevideo and Houston. The responsibility of the team is twofold: 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.

IT Department

The IT department is distributed across the Group's 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 comprises trading IT, Security and Infrastructure. Together, these functions provide a cohesive and well-integrated organisation that supports the Group's businesses. The trading IT function is largely outsourced, with the majority of the technology and support function based in India.

In order to support the growing business, the Group continues to enhance its enterprise systems adding new modules and SaaS (cloud) based solutions 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 approximately USD 200 million per year on information technology across a number of platforms including Titan, which shows the importance of technology to the Group and the value/benefit derived from it.

The core business is captured and managed by the Group's two key bespoke information systems: "**Pluto**" (which will ultimately be replaced by the new CTRM/ETRM offering for Energy in Titan) for the oil business and "**Titan**" for the bulk, concentrates and 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 moment 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.

As a rule, the Group actively manages and lays off wherever possible a large majority of all risks inherent to its activity. These 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 index price exposure related to physical transactions. 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). The hedging process is centralised with the Deals Desk team ensuring that all market price risks are captured and hedge actions are executed, as well as the timely allocation of physical, swap and futures trades.

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 globally.

Price Risk Management

The three main reinforcing components of the Group's risk management process are the Chief Risk Officer ("**CRO**"), the Market Risk Management Committee and the trading teams. The Market Risk Management Committee, which comprises members of the Management Committee and the CRO, is responsible for applying the Group's risk management capabilities to improving the overall performance of the Group. The committee meets at least weekly to discuss and set risk and concentration limits, review changing market conditions and analyse new market risks and opportunities.

The CRO 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 the Group'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 team develops computationally intensive non-linear risk simulations and advanced statistical models that incorporate non-normal market price dynamics that are an important feature of commodity markets. 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 Group 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. Value at Risk and performance indicators such as “**Sharpe Ratios**”. VaR is a statistical estimate of the potential loss in value of the Group's positions and unsold in-transit material due to adverse market movements. In line with industry’s best practice approach, Trafigura uses an integrated VaR model based on Monte Carlo simulation method. The model captures risks including, inter alia, commodity prices, interest rates, equity prices, currency rates. Through many random draws the model simulates price movements and resulting profit or loss. As a result, one can analyse and estimate VaR across portfolios comprised of a range of different risk exposures. In addition to standard VaR approach, Trafigura also fits simulated profit and loss outcomes to non-normal or ‘heavy-tailed’ probability distributions. This allows to account for unlikely outcomes, which might lack historical precedents. The Company regularly back-tests its VaR model and, if needed, makes necessary adjustments to re-calibrate it.

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. Potential excesses are covered by collateral called in the form of cash or standby letters of credit. The Collateral Management team handles all margin calls issued and received.

The Credit team is also involved in the negotiation of various standard Master agreements, such as ISDAs and master netting agreements. These documents provide a trading framework for the execution of OTC transactions and are negotiated bilaterally with each counterparty, with the assistance of 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 Trafigura’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, these cover are arranged by the Trade Finance/Structured Trade Finance teams.

The Credit department consists of staff based in Geneva, Mumbai, Singapore, Shanghai, Houston, Buenos Aires 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 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 Credit Committee if required – the committee meets on an ad-hoc basis and consists of a minimum of three senior finance managers, including the Group's Head of Credit and the CFO. 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 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 each physical transaction, from inception to completion, including booking of vessels and 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 on-going 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 storage position was USD 22.6 billion as at 30 September 2022 (2021: USD 29.7 billion), although it can vary substantially over time due to seasonal trading plays in energy as well as forward price structure (contango, backwardation and overall price levels) in both energy and metals business. Inventories reported in the Group's financials (i.e. from an accounting perspective) include storage inventories as well as cargoes in transit, for which title transfers at the discharge port. With regard to stock value, inspection reports are regularly received detailing/confirming the quality and the quantity stored.

Various global insurance policies provide a broad and comprehensive coverage for both assets and third-party liability risks, as follows:

- 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 generally 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). The limit is 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 terminal assets the Group also has USD 500 million of Terminal Operators Liability insurance covering the marine operations and potential third-party exposures arising therefrom.

Currency and Interest Rate Risk

The Group's functional currency is US dollar and the majority of transactions undertaken by Trafigura are denominated in US dollar. In cases where FX exposure does arise, the Group's policy is to hedge all of its residual foreign exchange exposure relating to its trading and financing activities. The exposure is monitored daily by the Treasury teams, mainly in Singapore, Mumbai and Montevideo, with central oversight in Geneva. The Company primarily uses cross-currency swaps to manage its FX risk.

The Group is not exposed to significant interest rate risk as the majority of its funding is short-term, ranging from a few weeks to a few months and commercial transactions consider current interest rate levels. For its long-term funding, on a case by case basis, Trafigura may enter into interest rate derivative transactions to lock-in interest rate levels and therefore reduce the Group's exposure to floating interest rates arising from its corporate funding lines.

Risk Limits

On the physical side, each transaction has its own profit and loss record, which is set up 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 final costs become known. On any day, changes of USD 25,000 or more (in either direction) are reported and explained to senior management, allowing the Group to closely monitor risks.

On the physical side:

- No specific limits are set outside any credit requirements; and
- The head trader on each desk liaises the respective oil or metals management committee on a daily basis, highlighting current issues and new business opportunities.

In addition to its physical trading business, Trafigura enters into limited speculative positions (using paper derivatives), 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 Value at Risk and stop-loss limits per position. The Company has a Group-wide VaR limit, as well as limits per segment. All trading books and individual traders have well-defined VaR limits as well, and management is automatically notified whenever a book nears its risk limit, as well as whenever a VaR overage occurs. Also, Trafigura's Deals Desk team is automatically notified whenever statistically anomalous changes occur in the profit and loss of any deal.

As a rule, the Group maintains conservative consolidated risk limits and ensures that its overall risk exposure remains well within these limits – e.g. maintaining global aggregate VaR below 1 per cent. of Group equity. Strategies are also given specific stop losses (e.g. USD 1 to 2 per barrel), which are monitored by the Deals Desk team. Finally, positions are marked-to-market on a daily basis (or multiple times per day during highly volatile periods) based on forward curves. 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.

Trafigura's policy is that basis risk should be kept to a minimum. If a trader wants to take on a specific position, he must report in a speculative book where VaR and associated stop losses can be easily monitored.

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 Management Committee and 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 integrated VaR model captures risk, including commodity prices, interest rates, equity prices and currency rates. The Group's CRO reports to the Group's Chief Operating Officer.

Mark to market

Mark-to-market and customised risk reports are produced and automatically distributed on a daily basis to 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 and key items are discussed during weekly Market Risk Management Committee meetings (or on ad hoc basis when necessary).

Market Risk and Stress Testing

Over the financial year ended 30 September 2022, the average 1-day 95 per cent. VaR was USD 199.8 million, which represents approximately 1.33 per cent. of Group's equity, a significant increase compared to USD 47.9 million over the financial year ended 30 September 2021. Those exceptional levels were due to the extreme and unprecedented volatility experienced following the start of the war in Ukraine (the most significant military event in Europe since 1945). Actions were swiftly taken to bring back the VaR within acceptable risk limits, including but not limited to reducing stocks and traded volumes, as well as entering into back-to-back trades. Thanks to these efforts, the average VaR in the second half of the year was USD 142.9 million (0.95 per cent. of Group equity) and decreased further in the last quarter of the financial year ended 30 September 2022 to 115.8 million (0.77 per cent. of Group equity). One of the key components to maintain this VaR at low levels (disregarding the days following the start of the war in Ukraine) is the diversification benefits from Trafigura's exposures to a broad range of commodity types and markets.

Fully automated system

The Company's risk system is largely automated. Trades entered in the systems by the Deals Desk team are automatically included in the risk report calculation. Trafigura's risk reporting system daily highlights exposures that are nearing their VaR limit and also when 10 per cent., 20 per cent. and 30 per cent. drawdowns occur. All books have well defined VaR risk limits and management is notified whenever a book nears its limit, as well as whenever a VaR excess occurs, resulting in automated emails to the relevant trader, desk managers and the Market Risk Management Committee. 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, these daily reports provide a comprehensive view of Trafigura's risk exposures, classified according to various risk factors. The reports emphasise the risk diversification created by the Group's variety of activities and highlight any excessive risk concentrations. Numerous indicators detail how the Group is performing relative to a wide range of benchmarks.

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 "**Initial Trade Receivables Securitisation Programme**" or "**TSF**"). In May 2020, the Group put in place a new securitisation programme to finance its receivables currently not eligible under TSF (the "**Non-traditional Trade Receivables Securitisation Programme**", together with TSF, the "**Trade Receivables Securitisation Programmes**"). Those Trade Receivables Securitisation Programmes allow 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 Initial Trade Receivables Securitisation

Programme, the Group also launched its first inventory backed securitisation programme in November 2017, leveraging inventories of oil products and refined metals, with a structure which is similar to repurchase agreements (the “**Inventory Securitisation Programme**”).

The main advantage of this financing model is that short term uncommitted transactional facilities (which finances the daily trading activities) and the securitisation programmes (which finance 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 support from a network of around 140 financial institutions, with credit lines totalling approximately USD 72.9 billion (excluding Puma). As of 30 September 2022, the Group’s top 10 banks provided approximately 47 per cent. of the Group’s available bank funding. In order to keep strengthening its funding model, the Group aims to continue diversifying its funding sources in order to ensure the unhindered growth and profitability of its trading divisions and industrial assets, and the maximisation of its 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 2022 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.

It is also important to note that Trafigura follows a policy of matching the maturity of Group’s assets and liabilities, with longer-term assets supported by longer-term borrowings. This way the Group mitigates the risk associated with maturity transformation. Moreover, the Group takes a conservative approach to managing its liquidity, aiming to keep about a third of its committed facilities unutilised at all times, under normal market conditions, together with a sizable buffer of cash, immediately (same day) available.

The Group maintains two main revolving credit facilities, an Asian RCF and a European RCF. These are generally refinanced annually.

The Group had around USD 66.3 billion of available credit facilities as at 30 September 2021 and USD 72.9 billion as at 30 September 2022 (excluding Puma).

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 approximately 24 per cent. of the Group's total credit facilities as at 30 September 2022, 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 (the “**Samurai loan**”). In addition to this, in May 2018, the Group raised a Swiss franc senior bond for CHF 165 million, with a maturity of 5 years – followed by a second smaller issuance in September 2019 (the “**CHF bonds**”). Finally, over 2018 and 2019, the Group raised renminbi-denominated bond in total of RMB 2,240 million (approximately USD 335 million) in four tranches under its Panda Bond programme, each issuance having a 3-year maturity.

Capital Markets, Capital Issues and Private Placements

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.

May 2019 – The Group successfully issued a new RMB 540 million bond in China’s mainland debt market, with a 3-year maturity. The final coupon significantly tightened since the first tranche issued in April 2018, confirming the strong appetite of the Chinese market for the Group's long-term debt. The total amount raised under the Group's Panda Bond programme is approximately USD 335 million.

September 2019 – The Group issued a further CHF 55 million 5-year bond into the Swiss retail market, priced at 3.25 per cent. This incremental transaction allowed the Group to increase liquidity raised in the Swiss market to CHF 220 million, following its inaugural bond issued in May 2018.

March 2020 – The Group raised USD 203 million of notes in the US Private Placement ("USPP") market with tenors of 5, 7 and 10 years. It was the fifth issuance of the Group in the USPP market and the second largest in size. The Group achieved its tightest ever all-in pricing level. Proceeds were used to refinance USD 51.5 million of maturing USPP notes and to support the refinancing of the Group's EUR 550 million bond repaid in April 2020.

September 2020 – The Group issued a USD 400 million senior bond with 5-year maturity. The bond priced at 5.875 per cent., with about 90 investors distributed across Asia and Europe participating in the transaction, and significant oversubscription (more than two times). The transaction was issued under the Group's EMTN programme and is listed on Euronext Dublin.

January 2021 – The Group issued a EUR 400 million senior bond with a 5-year maturity. The bond priced at 3.875 per cent., with about 120 investors participating, which was oversubscribed by approximately two times, enabling the Group to increase the size of the transaction. This transaction marked the return of the Group to the Euro bond primary market after a hiatus of six years since the last Euro denominated issuance in 2015. In March 2021, the Group proceeded with a tap of this Euro bond for a further EUR 50 million.

February 2021 – The Group successfully issued its inaugural Schuldschein loan. The EUR 110 million loan was increased from an initial EUR 75 million following strong investor demand and is split over 3 and 5-year maturities. This transaction marked the Group's entry into the Schuldschein loan market, which the Group sees as a prospective source of future capital, and demonstrates its continued ability to attract funding from a wide range of investors.

April 2021 – The Group raised USD 204 million of notes in the USPP market with tenors of 5, 7 and 10 years. It was the sixth issuance of the Group in this market and the largest sustainability-linked financing on record in the USPP market to date. The transaction incorporated KPIs designed to incentivise the Group to meet ambitious targets related to the reduction of greenhouse gas emissions. Proceeds were used to refinance a USD 98 million USPP maturity and also raised over USD 100 million of additional liquidity for the Group. The transaction was upsized from an initial USD 100 million following strong investor demand, with over half of the total amount raised in the 10-year tranche.

September 2021 – The Group issued a USD 400 million perpetual subordinated bond with a 6-year call option. The bond priced at 5.875 per cent., the tightest coupon achieved by the Group for a perpetual bond. About 160 investors participated in the transaction which was oversubscribed by almost 4 times. The issuance set the longest tenor attained by the Group in the public debt capital markets. Proceeds were used to partially repay the Group's outstanding USD 800 million perpetual bond issued in 2017, following a tender offer that was launched at the same time.

March 2023 – The Group raised USD 225 million of notes in the USPP market with tenors of 7 and 10 years. It was the seventh issuance of the Group in this market and was the second largest Trafigura issuance in the USPP market to date.

Revolving Credit Facilities

Over the last 17 years, the Group has maintained two revolving credit facilities, an Asian RCF and a European RCF. In October 2022, the Group refinanced its Asian RCF and term loan facilities for approximately USD 2.4 billion-equivalent. The facility was well oversubscribed and upsized from the launch amount of USD 1.75 billion-equivalent, with 28 financial institutions participating in the transaction, including three new lenders. It comprises of a 365-day USD revolving credit facility (USD 685 million), a 1-year CNH term loan facility (approximately USD 1,217 million equivalent) and a 3-year USD term loan facility (USD 469 million). The size of the transaction, in line with the previous year, showed the confidence of the banking market about the Group's ability to weather different commodity and credit cycles. In line with the Group's 2022 European RCF, the facilities included a sustainability-linked loan structure, with the same set of KPIs. Similar to previous years, the facility was used to refinance the maturing facilities, as well as for general corporate purposes.

In March 2023, Trafigura refinanced and extended its flagship European RCF totalling USD 5,420 million, comprised of a USD 1,900 million 365-day RCF and a USD 3,520 million three-year RCF. The 365-day facility was initially launched at USD 1.5 billion and closed substantially oversubscribed, while an extension option was exercised for the three-year facility. Similar to 2021 and 2022, the facilities included a sustainability-linked loan structure, with an updated set of key performance indicators to improve Trafigura's sustainability performance, aligned with material issues for its business.

Other Corporate Facilities

In March 2022, the Group returned for the sixth time to the Japanese domestic syndicated bank loan market, since the first close in 2012. Trafigura refinanced its JPY-denominated term loan credit facility (Samurai loan) with a total value of JPY 93.75 billion (c. USD 790 million-equivalent at closing exchange rate), an increase of JPY 16.95 billion (c. USD 140 million) from the 2020 Samurai loan. The facility is comprised of a JPY 84.75 billion 3-year credit facility (refinanced in financial year 2022, maturing in March 2025) and a JPY 9 billion 5-year credit facility (amended but not refinanced in financial year 2022, maturing in March 2025). In line with the Group's European and Asian RCFs, and a first for Trafigura's Samurai loan, the Company structured the 3-year tranche of the Samurai loan as a sustainability-linked loan. This transaction continues to increase the diversification of Trafigura's funding base and strengthens its banking presence in Asia, in particular in the Japanese domestic lending market.

In March 2022, Trafigura also closed the syndication of a 9-month multi-currency RCF of USD 2.3 billion-equivalent, as the Company managed the unprecedented increase in commodity prices as a result of the war in Ukraine. The transaction was set up following the renewal of the Group's European RCF at a time of major uncertainties in global markets. This facility provided an additional funding buffer for the Group in order to proactively anticipate and mitigate liquidity requirements as a result of the substantial volatility in global commodity markets at the time. Following various initiatives to improve the Group's liquidity position, Trafigura was able to voluntary cancel 45 per cent. of this facility in July 2022, while the balance matured early December.

Trafigura is continuously working to secure new sources of liquidity in order to help the Group diversifying its access to funding. In September 2022, Trafigura entered into a USD 800 million five-year loan agreement, which was guaranteed by the government of Germany acting through the German Export Credit Agency ("**ECA**") Euler Hermes Aktiengesellschaft. The guarantee is provided to support the commitment by Trafigura to deliver, under a five-year supply agreement, non-ferrous metals to Germany. Also in September 2022, the Group entered into a five-year USD 500 million loan guaranteed by SACE, Italy's insurance and finance group controlled directly by the Ministry of the Economy and Finance to support Italian exports and ensure Italian industry receives the commodities it needs.

Additionally, after the financial year close, in October 2022, The Group entered into a USD 3.0 billion four-year loan agreement guaranteed by the government of Germany acting through the German ECA. This loan will support a new commitment by Trafigura to deliver substantial volumes of gas to Securing Energy for Europe (SEFE), which was recently recapitalised by the German government, over the next four years.

The Trade Receivables Securitisation Programme

The Group manages two trade receivables securitisation programmes through separately capitalised special purpose vehicles: TSF and the recent Non-traditional Trade Receivables Securitisation Programme.

The Group's Initial Trade Receivables Securitisation Programme (TSF) 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, subject to strict eligibility criteria. The programme currently has ten bank-sponsored conduits. Since most physical transactions are financed on a transactional basis with letters of credit or loans under existing lines, the securitisation of the Group's receivables accelerates the rotation of these existing credit lines, since secured bilateral loans are repaid faster with the programme proceeds following the sale of the receivables. This mechanism 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, while maximising the amount of net financing;
- Benefit from attractive funding costs, thanks to TSF's investment-grade ratings from Moody’s and S&P (including a senior Aaa/AAA tranche and a junior Baa2/BBB tranche);
- Faster rotation of transactional lines, facilitating the growth of traded volumes;
- 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 5,685 million of external funding as at 30 September 2022– a USD 782 million increase year-on-year reflecting the Group’s needs for additional working capital financing in a market with generally higher commodity prices. The maturity of the TSF Variable Funding Notes (VFN) have also been staggered to diversify the maturity profile of such notes. The aim of this is to mitigate the ‘liquidity wall’ risk associated with a single maturity date for a significant funding amount. 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 May 2020, the Group put in place an innovative securitisation programme to finance its receivables currently not eligible for the TSF securitisation programme. This USD 300 million programme is enhanced by an insurance policy and initially syndicated with three financial institutions. It is currently funded through short-term variable funding notes only. As per the other securitisation programmes, the main purpose is to ultimately syndicate this product with institutional investors, with a potential medium-term notes issuance, in order to continue the diversification of funding sources.

In July 2021, TSF issued a new series of public notes (TSF 2021-1) on the 144A and Reg S asset-backed securities (ABS) markets. This was the sixth public ABS transaction since the inception of the programme. The 3-year tenor USD 300 million of public notes were placed with US investors including: USD 139.5 million floating rate notes (AAA/Aaa) at 1m Libor +53bps, USD 139.5 million fixed rate notes (AAA/Aaa) at mid-swap +55bps and USD 21 million fixed rate notes (BBB/Baa2) at mid-swap +125bps. The transaction was very well received, with the participation from a total of 16 investors in the fixed and floating rate tranches. This proves that investors were mindful of the strong performance of the programme during the COVID-19 pandemic, proving once again its resilience.

The Inventory Securitisation Programme

Following the success of the trade receivables securitisation programme, the Group pioneered an inventory securitisation programme in November 2017, renewed yearly since then. Trafigura Commodities Funding Pte. Ltd. ("**TCF**"), a standalone vehicle was established in Singapore to raise non-recourse funding backed by inventories of oil products and refined metals. A second vehicle, Trafigura Global Commodities Funding Pte Ltd (“**TGCF**”), was added to the structure in February 2020 to permit the purchase of U.S. commodities.

TCF/TGCF issued USD 355 million of senior variable notes which were placed on a private basis with six financial institutions. The proceeds of the notes enable TCF/TGCF to purchase oil products and refined metals inventories from the Group across twelve jurisdictions in Europe, Middle East and Asia-Pacific, together with U.S. and South Africa which became eligible jurisdictions in February 2020 and November 2022 respectively. Various amendment processes over the last couple years allowed programme utilisation to reach record levels and pave the way for the implementation of the next phase: seeking committed term financing in the asset-backed securitisation markets.

The commodities are sold on a ‘true sale’ basis under a purchase agreement, granting TCF/TGCF 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. The programme was designed to withstand a potential default of the Group via collateral and liquidation agency agreements.

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 book, 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 early 2011, the Group has grown its bilateral lines by approximately USD 29 billion, with total available lines (including bilateral trade lines, borrowing bases and repo lines) amounting to approximately USD 49 billion as of 30 September 2022.

- *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.

Main Recent Transactions

In September 2020, the Group established a 'low-carbon aluminium' financing platform of USD 500 million, with two financial institutions supporting the design and structuring of this instrument. As the first financing of its kind for the Group and for the wider market, the facility has been designed to meet growing demand from downstream manufacturers for low carbon aluminium and to support upstream producers in accelerating their transition to low carbon technologies. The platform will enable the Group to access financing at a preferential interest rate and, in turn, to pay a premium to low carbon aluminium producers. It follows the Group's establishment of a low carbon aluminium-trading desk in 2019.

In June 2021, Trafigura Trading LLC successfully renewed its North American borrowing base credit facility. The Group initially launched a USD 4.0 billion 2-year facility (in line with the existing size of the transaction) and received over USD 4.5 billion in total commitments, but the Group decided to close at USD 4.425 billion. This increased liquidity positions the Group to continue to grow its market share in trading crude, petroleum products, natural gas and natural gas liquids, as well as expanding its power and renewable energy trading. The Group continues to be one of the largest domestic marketers and exporters of crude and petroleum products in North America, supported by its vast network and logistic assets, as well as its access to crude supplies from Eagle Ford to the Permian Basin.

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 tends to track the underlying oil price. Between September 2014 and September 2015, when average oil prices fell below USD 45/bbl, utilisation of bilateral lines also tapered off. As the Group saw oil prices increasing from early 2016 to mid-2018, the headroom under its trade finance lines contracted. Increases in traded volumes are also reflected in higher utilisation levels (in USD terms): since the financial year ended 30 September 2014, traded volumes increased from approximately 2.5 mbpd to 6.6 mbpd on average over the financial year ended 30 September 2022. Over the second half of financial year 2022, while oil price surged, the decrease in oil volumes traded resulted into a relatively flat utilisation level. However, despite price fluctuations and traded volumes increment, the Group was able to maintain significant headroom in its bilateral lines (albeit with a slower pace of growth in overall size).

The divergence between total short-term transactional lines and net utilisation from mid-2018 to late 2019is 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. The Group notes that this trend stopped in mid-2020 to late 2021 due to the rally in commodities prices, combined with higher traded volumes, as global demand grew with the progressive recovery from the pandemic.

Transactional Finance compared to Unsecured Lenders

A key point to note is that the Group's use of bilateral trade finance lines does not negatively impact the position of unsecured lenders. Since financing is generally provided at 100 per cent. of the value of the underlying assets and marked to market 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 case of an unforeseen problem with the Group, the bilateral lenders would simply liquidate the underlying transaction and as they are financing 100 per cent. of the collateral value, current asset and short-term debt would simply cancel out, i.e. the balance sheet would shrink without impacting the net working capital that is available to the unsecured creditors which was USD 12.6 billion as at 30 September 2022, excluding (i) current assets and liabilities of the securitisation programmes and (ii) current assets and liabilities in respect of operating leases.

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 (as 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 to managing its relationships 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 understandably caused some nervousness among banks. Since the end of 2016 until 2019 the stabilisation in oil prices led to a rise of available credit facilities.

In 2020, turbulent markets, amid the Covid-19 pandemic and US-China trade conflict, raised worries about risks to the financial and trading system. Given the scale of recent price movements, attention has naturally turned to the commodities trading sector. This attention was further sharpened by the difficulties experienced by some trading firms, mostly in Singapore. However, large physical commodities trading firms, such as the Group, are playing a central role in managing the inherent financial and other risks that arise in such volatile markets, and smoothing over the disruptions resulting from such supply and demand shocks.

Over the last year, market volatility and increasing commodities prices generated an increased need for credit lines, which was exacerbated by the start of the war in Ukraine. However, Trafigura took rapid and decisive actions to build an ample liquidity buffer at the outset of the crisis, in order to weather the unprecedented turbulences in both the physical and derivatives commodity markets in late February and March 2022.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:

Pro-active and Clear Communication with Banks

The Group maintains a clear and open communication channel with banks. At the end of 2012, the Group carried out a survey on members of its lending group to gauge the perception of external stakeholders towards the Group and its operations. A 70 per cent. response rate was achieved, which highlighted key differentiators of the Group in comparison to its peer group and the challenges faced by the Group, as well as the main positive and negative drivers of the Group's reputation with lenders. The study has proved helpful in developing and shaping the Group's communication channels and strategy.

Following the successful engagement in 2012, the Group conducted a further survey in 2015 to gain an improved understanding of the operational and reputational risks and opportunities that the financial community, namely lending stakeholders, ascribes to the commodities sector as a whole and to the Group in particular. The exercise was also used to measure any tangible improvements following the learning outcomes of the 2012 survey. A total of 35 banks, spread across Europe, North America, Asia Pacific and Africa, were contacted for comment regarding various metrics and personal experiences with the Group. Overall, the lenders acknowledged the significance of the Group as a key player in the industry and highlighted its high level of transparency and communication in topics ranging from strategic objectives to risk management and compliance.

In April 2018, the Group commissioned a third assessment with about fifteen of its key relationship lenders and investors to re-evaluate the Group's reputation, as well as to ascertain their opinions on the impact and quality of the Group's reporting suite. The general consensus from respondents was that the Group is seen to act as if it was a 'public company' and is considered to be at the forefront of the responsibility agenda for the sector and decisive in shaping it. The Group's reporting is considered to embody transparency, from a more ambitious Responsibility Report through higher financial transparency in the Annual Report and to industry thought leadership with various white papers such as Commodities Demystified.

In 2021, Trafigura engaged a specialist consultancy to conduct a new extensive reputation audit of key external stakeholders comprising commercial counterparts and financial investors and banks across business divisions and geographic regions. The research was designed to understand stakeholder expectations for commodity trading companies and Trafigura's perceived performance against those expectations across key areas including products and services, operations, financial stability, transparency and ESG. The Group is seen as a market leader in key areas including global presence, industry knowledge and financial stability. It is also viewed as a company that is agile with the ability to adapt to the changing macro environment and that is well-positioned to address the energy transition, with the potential to be an industry leading voice on decarbonization. Finally, in a relationship-driven industry, Trafigura is frequently praised by counterparts for its long-term approach to customer relationship building.

Trafigura values highly this type of feedback and will repeat this exercise in the future, applying recommendations in order to keep shaping and improving its business practices, banking relations and reputation.

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 of 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 around 140 banks around the world. The Group has developed strong banking relationships on a global basis. 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 banks were significantly reduced in a specific region, the Group would be in a position to mitigate the effects of such a reduction through increases of its banking lines in other regions.

Additionally, the Group is in a strong position having developed its trade receivables securitisation programme into the largest in the industry. Since this programme is funded from the USD capital markets (whether directly or indirectly via conduits) this significantly reduces the amount of USD liquidity required from its banks in the form of traditional lending. Another milestone was achieved in November 2017 when the Group successfully launched its first ever inventory-backed securitisation programme (non-recourse funding), 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, 2015 and 2021), the US private placement market (2006, 2011, 2013, 2018, 2020, 2021 and 2023) and the hybrid capital market (2013, 2014, 2017 and 2021). Additionally, the Group has had a JPY-denominated 3-year term loan since 2012, which it has now re-financed six times (last in March 2022), upsizing the loan each time. Finally, since the beginning of the Group's 2018 fiscal year, the Group has also been active in a number of different markets, tapping new sources of liquidity through senior CHF bonds and CNH Panda bonds.

Moreover, recent large financing transactions guaranteed by the Export Credit Agencies (ECAs) have created another meaningful pocket of liquidity for Trafigura. In September and October 2022, Trafigura closed three long-term financing transactions guaranteed by the German and Italian ECAs totalling USD 4.3 billion to deliver natural gas and non-ferrous metals. Those facilities help the Group to further diversify its sources of funding as well as increase liquidity headroom (see "Other Corporate Facilities").

Financial Discipline

Trafigura does not hold a public rating and does not seek to obtain one. The Group receives financing from a wide pool of stakeholders who understand the Group's business model and whose funding decisions are not driven by external ratings. As a result, Trafigura's business and investment decisions do not need to be taken on the basis of a particular rating level. This enables Trafigura to focus on long-term value creation and growth. Nevertheless, 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 always strives to disclose to its financial stakeholders information necessary to understand its business model and financial performance. As a testament to this approach, the Group also releases its interim and full year financial reports publicly on its website (www.trafigura.com/financials). 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.

In February 2023, Trafigura has commenced legal proceedings against a group of companies connected to and apparently controlled by Mr Prateek Gupta including TMT Metals and companies owned by UD Trading Group. These proceedings concern a fraud involving containerised nickel in transit during 2022 and misrepresentation and presentation of a variety of false documentation. The fraud is isolated to one specific line of business. There is currently no evidence to suggest that anyone at Trafigura was involved or complicit in this illegal activity. The Group recorded a USD577 million charge in the first half of 2023 for Trafigura Group Pte Ltd.

The aforementioned case and other 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. Neither the Issuer nor the Guarantors are aware of any governmental, legal or arbitration proceedings (including any such proceedings which are pending or threatened of which the Issuer and Guarantors are aware), except the aforementioned case, during the past 12 months which may have, or have had, a significant effect on the financial position or profitability of the Issuer or Guarantors.

Group’s net profits in the first half of its 2023 financial year are expected to exceed first half 2022 net profits, notwithstanding this impairment.

Ownership Structure

The Group is owned by approximately 1,100 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 (noting that, as a first step, dividends are paid from TGPL to TBBV).

Management Structure

Board of Directors and sub-committees

The Board of Directors of TGPL has overall responsibility for the strategic direction and management of the Group across all its investments and activities. 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 2023)**	**Years in Commodities**
Andrew Vickerman	Non-Executive Director	Former member of the Operating and Executive Committees of Rio Tinto; Former Global Head of Communication & External Relations of Rio Tinto	14	33
Jeremy Weir	Executive Chairman and Chief Executive Officer	None	23	10
Jose Larocca	Executive Director	None	30	32
Mark Irwin	Non-Executive Director	Former Financial and Corporate Controller of the Group	Since inception	32
Pierre Lorinet	Non-Executive Director	Former Group Chief Financial Officer of the Group	22	23
Sipko Schat	Non-Executive Director	Former member of Rabobank Executive Board; Non-Executive Director of various companies	8	8

The business address of each member of the Board of Directors is 10 Collyer Quay, Ocean Financial Centre, #29-01/05 Singapore 049315. As at the date of this Base Prospectus, 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.

There are four committees that sit within the Board of Directors and the Management Committee:

- ESG Committee: Group’s material environmental, social and governance (ESG) risks and strategy;

- Audit Committee: oversight responsibilities for the financial reporting process, the internal control and the audit process;
- Nomination and Remuneration Committee: more specifically for Executive Directors, the Management Committee and other senior employees; and
- Compliance Committee: ensuring that the Group identifies and robustly implements all processes and controls necessary to implement compliance with all applicable laws and regulations as well as its Code of Business Conduct.

Management committee

The Management Committee was created in December 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. The creation of the Management Committee marked 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 2022)**	**Years in Commodities**
Ben Luckock	Co-Head of Oil Trading	16	23
Christophe Salmon	Group Chief Financial Officer	12	23
Gonzalo De Olazaval	Co-Head of Metals and Minerals Trading	16	22
Jeremy Weir	Executive Chairman and Chief Executive Officer	23	31
Jesus Fernandez	Head of M&A	19	19
Jose Larocca	Executive Director	30	32
Julien Rolland	Head of Power and Renewables Division	18	27

Name	Position / Background	Years with the Group (as at 1 January 2022)	Years in Commodities
Kostas Bintas	Co-Head of Metals and Minerals Trading	15	18
Hadi Hallouche	Co-Head of Oil Trading	13	19
Richard Holtum	Head of Gas and Power	10	11

Other committees

The Management Committee is supported by four corporate committees which are more focused on the day-to-day management of the Group, as opposed to the Group strategy. Each committee maintains regular contact with Trafigura's Management Committee and the Board. They are comprised as follows:

- Market Risk Management Committee: meets at least weekly to manage overall exposures, assess the impact of changing market dynamics and limit risk exposures and concentrations;
- Finance Committee: responsible for assessment of financial risk and has the capacity to veto any transaction; and
- Operational HSEC Steering Committee and Commercial ESG Steering Committee: promote best practice, oversee the management of ESG risks, and health, safety, environment, and community (HSEC) risks at the Group's operations and ensure that Trafigura's Corporate Responsibility Policy and Business Principles are adopted, appropriately adapted and implemented across the organisation.

Sustainability

Comprehensive Framework and approach

The Group recognises the critical importance of conducting its business and operations responsibly, demonstrating integrity, professionalism and diligence at all times. Trafigura's governance structure, management systems and associated policy framework are designed to support Group's efforts to comply with applicable laws and regulations. They also establish the high standards of professional behaviour, integrity and diligence expected from staff.

The Group has robust governance structures and management systems, that support compliance and efforts to address the environmental and social risks associated with Trafigura's activities. In 2021, the Group launched a revised sustainability governance structure that has brought more focused direction at Board level and greater oversight and involvement at Senior Management level in the Group's health and safety, environmental and social performance and has enabled greater sharing of good practice, common risks and challenges. To further strengthen company's commitments and approach, Trafigura is undertaking a comprehensive review of the policy framework in 2023.

Health and Safety

Protecting the health and safety of employees, contractors and the communities within which Trafigura operates is the highest priority. The Group is fully committed to the goal of zero harm, with the aim that everyone goes home safe every day.

The Group aims to build a culture across the business in which the vital importance of safety is understood at every level of the workforce. Trafigura seeks to embed health and safety objectives into the ethos of the business and maintain a culture where everyone is responsible for their own safety and those of others, and commercial objectives are never pursued at the expense of someone's safety.

The Group's overall approach to workplace safety is:

- Aim for zero work-related fatalities;
- Seek to reduce the number and severity of incidents;
- Work to share lessons from incidents and near misses, with a view to continually improve the Group's performance;
- Will report on safety performance and initiatives; and
- Comply with applicable laws and regulations, as well as the standards the Company has set for its operations.

Over the past three years Trafigura has worked to apply leadership behavioural, psychological and safety culture models to create greater alignment between managers and workers, to understand the role of supervisors in delivering change, to establish visible and felt leadership on the ground and to better recognise and reward positive behaviours. The Group has engaged external consultants to undertake safety culture assessments across company's producing mining assets and has acted on the recommendations made.

The Group systematically assesses leading and lagging health and safety indicators to track, monitor and report performance on a monthly basis, determine the effectiveness of the controls in place and to support continual improvement through undertaking investigations to identify direct causes, contributing factors and root causes of significant incidents and near misses.

The Group's safety performance has continued to improve over the course of 2022. The Group's Lost Time Incident rate ("LTIR") fell by 19 per cent. to 1.38 per million hours worked in the financial year ended 30 September 2022 (compared to 1.70 in 2021). This follows reductions of 13 per cent. and 27 per cent. in 2020 and 2019 respectively. With the release of the new sustainability report the Group announced a new health and safety target to reduce the LTIR by 30 per cent. by end of the financial year ending 30 September 2025, including 15 per cent. reduction in the financial year ending 30 September 2023, compared to financial year 2022.

A thorough update on 2022 achievements is available in the Group's 2022 Sustainability Report.

Transparency and engagement

As a major facilitator of global trade, the Group believes 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 manages natural resources gives the populations in countries where it operates 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 Company has taken significant steps to provide greater transparency to stakeholders. The Group believes 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 Group's core business and is increasingly viewed both internally and externally as a business enabler and a competitive differentiator.

In 2014, the Group became the first independent commodity trading company to publicly support the Extractive Industries Transparency Initiative ("**EITI**") and to develop a disclosure policy in collaboration with the organisation. The EITI is a global standard that promotes transparency and accountability in the oil, gas and mining sectors and requires the disclosure of information along the extractive industry value chain from the point of extraction, to how revenues make their way through the government and how they benefit the public. By doing so, the EITI seeks to strengthen public and corporate governance, promote understanding of natural resource management, and provide data to inform reforms for greater transparency and accountability in the extractives sector.

Over recent years, the Group has taken a number of important steps to advance commodity trading transparency. Beyond the Group's participation in the International Board of the EITI, as well as the Working Group on Transparency in Commodity Trading, the Group frequently engages with its existing as well as prospective commercial counterparts on such matters.

Trafigura believes that commercially-appropriate transparency is important in building trust with stakeholders and see open and constructive dialogue and engagement with stakeholders as a vital element of responsible business.

Responding to climate change

As a leading supplier of commodities and energy globally, Trafigura has a crucial role to play in the transition to a low-carbon future. The Company recognises the latest scientific assessments as set out by the United Nations Intergovernmental Panel on Climate Change (IPCC) and supports the climate change goals of the United Nations Framework Convention on Climate Change and the Paris Agreement. Trafigura's approach to climate change is aligned with the principles of the Task Force on Climate-related Financial Disclosures (TCFD).

The Group's purpose is to connect the vital resources required to power and build the world. The Group supplies global customers with energy and commodities to meet today's needs and to support the transition to low- and zero-carbon sources of energy. This includes delivering the critical minerals and metals to build infrastructure required for the energy transition. The Group is also investing to develop new sources of low- and zero-carbon energy, and to commercialise technologies and projects to reduce, capture and compensate for emissions. Finally, the Group engages regularly with governments, regulators, industry and civil society groups to provide information about the markets the Group operates in and to advocate for a just and fair energy transition and a level playing field for companies investing in climate-positive change.

Addressing climate change is a key strategic focus for Trafigura. Following significant progress in reducing Scope 1 and Scope 2 greenhouse gas emissions from operations by 30 per cent. since 2020, the Group has revised its climate change strategy and set longer term targets. The 2022 Sustainability Report sets out a roadmap aiming for operational carbon neutrality by 2050, including a medium-term target to reduce Scope 1 and Scope 2 emissions by more than 50 per cent. over the next decade, compared to 2020. The Group's 2032 target is aligned with the Paris Agreement and a 1.5°C reduction pathway.

Moreover, the Company is committed to the transition to zero emissions shipping and believes that the decarbonisation of shipping is an urgent and achievable goal. The decarbonisation target set in financial year 2021 – a 25 per cent. reduction in carbon intensity by 2030 against the 2019 IMO normalised industry baseline across company's entire chartering operation – reflects this commitment. This covers the Group's total shipping emissions comprising Scope 1 and Scope 3 GHG emissions. Trafigura has made good progress to date against the GHG emissions intensity reduction target, showing an 11 per cent. reduction towards the 25 per cent. target.

In addition, the work the Group has done in recent years to understand the carbon intensity of the supply chains the Group manages has enabled Trafigura to set a new Scope 3 upstream emissions reduction target, aligned with the Group's commercial strategy. By 2030, the Group will aim to reduce the GHG emissions intensity of the production and processing of all the non-ferrous metals it sources and supplies to customers globally, by 10 per cent. compared to 2020.

Lastly, the Group continues to expand investments in renewable technologies and in clean energy sectors such as green hydrogen and ammonia, with a target of investing in renewable hydrogen projects with a total production capacity of three gigawatts by the end of 2030. Next to that, the Group's Nala Renewables joint venture is pressing ahead with a range of solar power, onshore wind and battery storage investments. The joint venture is on track to achieve its aim of building a portfolio of operating, in construction and late-stage development projects with a cumulative generating capacity of four gigawatts by 2025. To date, Nala Renewables has invested USD224 million in a range of projects and companies in Chile, the US and Europe, including a EUR30 million battery energy storage system on the site of the Nyrstar zinc smelter in Balen, Belgium that is expected to come on stream in 2023.

Responsible Value Chains

Over the past several years, the Group has developed a robust approach to assessing and addressing human rights concerns and wider social and environmental issues associated with the origin of minerals and metals Trafigura sources and supplies. Responsible sourcing and supply chain due-diligence are important topics for customers, regulators and financiers and are now an integral part of the Group's business.

Trafigura's Responsible Sourcing Programme directly reflects the OECD's Due Diligence Guidance for Responsible Supply Chains (OECD Guidance) and is aligned with relevant regulatory requirements, including Section 1502 of the US Dodd-Frank Act, the EU's Conflict Minerals Regulation and LME regulations. Importantly, the programme extends to the purchase of specific metals and minerals from geographies and activities that Trafigura deems to be of greater risk.

In 2020, the Group undertook a full revision of its Responsible Sourcing Programme, setting ambitious objectives for the future and extending the scope of due diligence to cover all metals and minerals traded from point-of-origin to point-of-sale. Additionally, the Group is working to align the programme with the international ISO 20400:2017 sustainable procurement standard by end of financial year 2023. At the end of the financial year ended 30 September 2022, the Group had closed an additional 54 per cent. of remaining gaps (against a 40 per cent. target) and remains on track to achieve this target.

Trafigura is also committed to respecting internationally recognised human rights in line with the UN Guiding Principles on Business and Human Rights (UNGPs). The Group has determined its salient human rights risks as those that are at risk of the most severe negative impact through the Group's activities and business relationships, through a process of engaging with both internal stakeholders from across various business functions and external stakeholders. Trafigura assesses the severity of the impacts identified based on scale, scope and irremediability. Human rights risks are present in two key areas: company's workforce and workers in supply chain; and local communities connected to both the Group's operations and those of its suppliers. For each risk area, the Group has identified specific teams that are responsible for the management, mitigation and, where appropriate, remediation of identified risks, both in terms of operations and supply chains.

In 2022 the Company set a target to obtain full alignment with the Voluntary Principles on Security and Human Rights at all Trafigura Group operations by end of financial year 2024.

The Group's human rights performance is documented in Trafigura's annual Human Rights Report and also in Modern Slavery Report, available on Trafigura's website.

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 Group conducts itself worldwide. The Group's Compliance Department has developed global systems and safeguards that ensure the Group 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; and

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 Group’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. 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.

Financial Year

The financial year of the Company ends on 30 September.

Auditors

For the financial years ended 30 September 2022 and 30 September 2021, 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.

KEY PERFORMANCE INDICATORS

The Group uses certain financial measures derived from its consolidated financial statements, accounting records and other management sources to evaluate period to period changes that are not required or presented in accordance with IFRS because the Group believes these measures will assist securities analysts, investors and other interested parties in the understanding of the Group's results of operations and financial position.

These supplemental financial measures are not measures of the Group's financial performance or liquidity under IFRS and should not be considered as an alternative to consolidated net income as an indicator of the Group's performance or as an alternative to cash flows from operating activities or as a measure of the Group's liquidity. Accordingly, they may differ from similarly-titled measures reported by other companies and may not be comparable. Investors are cautioned not to place undue reliance on these alternative performance measures, which should be considered supplemental to, and not a substitute for, the financial measures presented in the consolidated financial statements prepared in accordance with IFRS and incorporated by reference in this Base Prospectus. These supplemental financial measures include underlying EBITDA, adjusted debt to Group equity ratio, corporate debt to underlying EBITDA ratio, operating free cash flow and industrial assets.

This section only contains the alternative performance measures used in the Base Prospectus. This overview is not complete given that the Group also uses IFRS performance measures. For these measures, reference is made to the Group Financial Statements and the Group Interim Financial Statements, incorporated by reference into this Base Prospectus.

Underlying EBITDA

As of 1 October 2020, the Group changed the presentation of the consolidated statement of income from a classification based on the function of expense to a classification based on the nature of expense. As a result of this change, the consolidated statement of income no longer presents gross profit as a separate subtotal and performance metric. As a replacement, the Group has introduced the operating profit before depreciation and amortisation subtotal and the underlying EBITDA metric. For further details, see note 2.6 of the consolidated financial statements of the Group as of and for the year ended 30 September 2021 incorporated by reference in this Base Prospectus. Income statement information for the financial year ended 30 September 2020 or earlier years shown in this Base Prospectus has been restated for the new presentation.

From an operating profit perspective, Trafigura believes that underlying EBITDA is the most appropriate measure to assess its operating performance. Underlying EBITDA is defined as operating profit or loss before depreciation and amortisation excluding share-based payments (non-cash) and exceptional and/or non-operational items. Underlying EBITDA as presented in the Base Prospectus may not be comparable to similarly title measures reported by other companies due to differences in the way these measures are calculated.

The following table sets out a reconciliation of the Group's underlying EBITDA and underlying EBITDA margin for the financial years ended 30 September 2018 to 2022.

In USD million	Financial year ended 30 September 2018 *, **	2019 *, **	2020 *	2021	2022
Operating profit or (loss) before depreciation and amortisation	**1,780**	**2,115**	**6,035**	**6,890**	**11,982**
Adjustments:					
Share-based payments	88	109	130	106	107
Adjustments	**88**	**109**	**130**	**106**	**107**
Underlying EBITDA	**1,868**	**2,224**	**6,165**	**6,996**	**12,089**
Revenue	180,744	171,474	146,994	231,308	318,476
Underlying EBITDA margin	**1.0%**	**1.3%**	**4.2%**	**3.0%**	**3.8%**

* Information for financial years ended 30 September 2018, 2019 and 2020 has been restated for the new income statement presentation as described in the introduction to this section.

** As from 1 October 2019, the Company adopted IFRS 16. The impact of IFRS 16 on underlying EBITDA for the financial years 2022, 2021 and 2020 amounted to increases of USD 1,358 million, USD 1,270 million and USD 1,194 million, respectively. Information for the financial years ended 30 September 2018 and 2019 have not been restated for IFRS 16.

Adjusted debt to Group equity ratio

As a physical trading group, Trafigura 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 (for example, 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:

- Cash and cash equivalents and short-term deposits are deducted from total debt as reported;
- Pre-sold or hedged stock 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, Trafigura's policy is to have 100 per cent. of stock hedged or pre-sold at all times; and
- The receivables securitisation programmes are taken out on the basis that they are entirely distinct legal entities from Trafigura with no recourse to the Group and is only consolidated into the financial statements in accordance with the Group's accounting rules; 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 total debt as reported.

A reconciliation of the Group's current and non-current loans and borrowings to adjusted debt to Group equity ratio for the years ended 30 September 2018 to 30 September 2022.

In USD million	2018	2019	2020	2021	2022
	Financial year ended 30 September				
Non-current loans and borrowings	8,462	8,492	7,070	10,912	9,615
Current loans and borrowings	23,742	22,456	25,784	34,270	29,644
Total debt	**32,204**	**30,948**	**32,854**	**45,181**	**39,278**
Adjustments:					
Cash and cash equivalents	5,356	6,267	5,757	10,678	14,881
Deposits	334	374	466	460	642
Inventories including pre-sold/hedged inventories	15,621	14,137	20,922	30,509	23,874
Receivables securitisation debt	4,294	4,422	2,751	5,151	5,391
Non-recourse debt	562	437	198	555	1,607
Adjusted total debt	**6,037**	**5,310**	**2,760**	**(2,171)**	**(7,117)**
Group Equity	6,250	6,805	7,790	10,546	15,079
Adjusted debt to Group equity ratio at the end of the period	**0.97x**	**0.78x**	**0.35x**	**(0.21)x**	**(0.47)x**

Corporate debt to EBITDA ratio

The Group is using leverage ratio referred to as corporate debt to EBITDA ratio, defined as corporate debt divided by underlying EBITDA. Trafigura 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 Group 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 underlying EBITDA. The corporate debt to EBITDA ratio considers all debts, whether short-term or long-term, and removes:

- Cash and cash equivalents and short-term deposits;
- Pre-sold or hedged stock (including purchased and pre-paid inventories being released);
- Trade receivables in excess of trade payables and derivatives; and
- Any corporate debt for which lenders do not have recourse to Trafigura (for example, non-recourse financings for prepayments) which are not captured in the above adjustments.

The Trade Receivables Securitisation Programme does not need to be deducted separately since the excess of trade receivables over trade payables would capture it.

The following table sets out a reconciliation of the Group's current and non-current loans and borrowings to corporate debt to EBITDA ratio for the financial years ended 30 September 2018 to 2022 using underlying EBTIDA for the last twelve months ending on the respective date.

In USD million	Financial year ended 30 September 2018	2019	2020	2021	2022
Non-current loans and borrowings...	8,462	8,492	7,070	10,912	9,615
Current loans and borrowings	23,742	22,456	25,784	34,270	29,664
Total debt	**32,204**	**30,948**	**32,854**	**45,181**	**39,278**
Adjustments:					
Cash and cash equivalents................	(5,356)	(6,267)	(5,757)	(10,678)	(14,881)
Deposits..	(334)	(374)	(466)	(460)	(642)
Inventories including pre-sold/hedged inventories....................	(15,621)	(14,137)	(20,922)	(30,509)	(23,874)
Trade receivables in excess of trade payables (incl. current derivatives)*	(6,065)	(5,010)	(4,709)	(387)	(1,249)
Non-recourse debt	(202)	(87)	(4)	(17)	(26)
Corporate debt................................	**4,626**	**5,072**	**996**	**3,130**	**(1,394)**
Underlying EBITDA over the last 12 months	1,868	2,224	6,165	6,996	12,089
Corporate debt/Underlying EBITDA over the last 12 months..	**2.5x**	**2.3x**	**0.2x**	**0.4x**	**(0.1)x**

* Deferred revenue was reclassified from trade and other payables to other current liabilities in financial year 2021. Information for financial years ended 30 September 2018, 2019 and 2020 has been restated to reflect this.

Industrial Assets

Trafigura presents the industrial assets which are calculated as total non-current assets, minus non-current prepayments, non-current derivatives and deferred tax assets.

The following table sets out a reconciliation of the Group's total non-current assets to industrial assets as at 30 September 2020, 2021 and 2022.

In USD million	Financial year ended 30 September 2020	2021 *	2022
Total non-current assets..	**11,116**	**15,078**	**19,433**
Adjustments:			
Non-current prepayments	(1,061)	(1,805)	(1,534)
Right of use assets	(2,091)	(2,406)	(3,905)
Lease receivables..	(124)	-	-
Non-current derivatives	(233)	(332)	(1,125)
Deferred tax assets..	(124)	(266)	(210)
Other non-current assets	(192)	(918)	(4,286)
Total Industrial Assets	**7,291**	**9,351**	**8,373**

* Restated as a result of amendments to the provisional assessment of the identifiable assets acquired in the acquisition of Puma Energy. For further details, see notes 2.6 and 7.2 of the audited consolidated financial statements of the Group as of and for the year ended 30 September 2022 incorporated by reference in this Base Prospectus.

Operating Free Cash Flow

Trafigura's funding model is structurally designed to absorb significant working capital requirements, as demonstrated over time. Operating free cash flow ("**Operating FCF**") generation (defined as operating cashflow before working capital changes, minus net interest paid, plus dividends received, tax paid and net cash used in investing activities) provides another useful metric of performance and Trafigura's leverage position.

To understand the Group's underlying cash flow generation, one should focus on 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.

The Group has generated USD 16.0 billion of Operating FCF (after IFRS 16 adjustment) over the last five fiscal years. This reflects the Group's consistent cash flow generation in conjunction with an updated investment approach, involving a reduction in annual Capex spent, often including partners when directly making new investments and a disposal of non-core assets. It is also worth noting that Operating FCF has also more than covered the Company's share buybacks over the last five years, which further demonstrates the Group's commitment to a conservative capital structure.

The following table sets out a reconciliation of the Group's Operating cash flow before working capital changes to Operating FCF generated for the financial years ended 30 September 2018 to 2022.

	Financial year ended 30 September				
In USD million	**2018 ***	**2019 ***	**2020 ***	**2021**	**2022**
Operating cash flow before working capital changes..........	**1,836**	**2,201**	**6,214**	**6,988**	**12,125**
Adjustments:					
Interest paid	(1,374)	(1,605)	(1,246)	(1,211)	(2,260)
Interest received...	620	704	475	337	709
Dividends (paid)/received...	50	-	5	166	26
Tax (paid)/received..	(116)	(183)	(208)	(407)	(685)
Net cash used in investing activities...	(95)	(285)	(265)	(2,728)	(536)
Total Operating Free Cash Flow...	**921**	**832**	**4,975**	**3,145**	**9,379**
IFRS 16 lease liabilities adjustment			(999)	(1,045)	(1,231)
IFRS 16 adjusted Operating Free Cash Flow **	**921**	**832**	**3,976**	**2,100**	**8,148**

* Information for financial years ended 30 September 2018, 2019 and 2020 has been restated for the new income statement presentation as described in the introduction to this section.

** As from 1 October 2019, the Company adopted IFRS 16. Operating Free Cash Flow as presented in the IFRS 16 Adjusted Operating Cash Flow line above excludes the impact of IFRS 16.

DESCRIPTION OF THE ISSUER

Business overview

The Issuer is a wholly-owned indirect subsidiary of the Company. The direct shareholder of the Issuer is Trafigura Holdings Pte Ltd. The Issuer is a special purpose financing entity. The corporate objects of the Issuer as set out in its Articles of Incorporation include the taking and maintaining of any participating interests, the granting of assistance to other Group companies or companies in which the Issuer has an interest, the issue of notes, bonds, debentures and any kind of debt and/or equity securities in any form and the granting of security interests over all or some of the Issuer's assets. The Issuer has no material business operations, no direct subsidiaries and no employees.

The Issuer is a wholly-owned finance company for the Group and its principal purpose is to issue debt instruments in the capital markets and lend the proceeds arising therefrom to members of the Group (although principally the lending is to TPTE, which performs treasury functions for the Group). The Issuer is dependent upon the members of the Group to which it lends to repay such loans in order to service the Notes. The Notes also benefit from guarantees of certain other members of the Group.

The Issuer is a limited liability company (*société anonyme*) incorporated and existing under the laws of the Grand Duchy of Luxembourg under the name Trafigura Funding S.A. The Issuer was incorporated on 13 December 2012. The Issuer is registered in Luxembourg with the Registre de Commerce et des Sociétés under number B 173718. The registered office of the Issuer is at 7, rue Robert Stümper, L-2557 Luxembourg, Grand Duchy of Luxembourg and its telephone number is +352 208 001 4001. The Issuer was incorporated for an indefinite duration and has no other commercial name. There have been no recent events particular to the Issuer which are relevant to the evaluation of the Issuer's solvency.

Members of the Board of Directors

The directors of the Issuer as at the date of this Base Prospectus are as follows:

Name	Position	Other Principal Activities (outside the Group)
Christopher Salmon	Class A Director	None
Robbert Maas	Class A Director	None
François Cottong	Class B Director	Associate Director – Business Unit Leader of Ocorian Services (Luxembourg) S.à r.l.; various non-executive positions
Rémy Cornet	Class B Director	Head of Corporate Services - Luxembourg of Ocorian Services (Luxembourg) S.à r.l.; various non-executive positions

The business address of each of the Issuer's directors is 7, rue Robert Stümper L-2557 Luxembourg, Grand Duchy of Luxembourg.

As at the date of this Base Prospectus, to the best of the Issuer's knowledge, no potential conflicts of interest exist between the duties to the Issuer of any director, and its private interests and/or other duties.

Financial Year

The financial year of the Issuer ends on 30 September.

Auditors

For the financial years ended 30 September 2022 and 30 September 2021, the auditor of the Issuer was PricewaterhouseCoopers, Société coopérative, whose registered office is at 2, rue Gerhard Mercator, L-

1014 Luxembourg. PricewaterhouseCoopers, Société coopérative is a member of the Luxembourg Institute of Auditors (*Institut des Réviseurs d'Entreprises*).

DESCRIPTION OF TRAFIGURA TRADING LLC

Business overview

TTL is a wholly-owned indirect subsidiary of the Company. TTL is engaged in buying and selling commodities, with its principal office in Houston (Texas). TTL is the member of the Group responsible for conducting business in the United States.

TTL is a limited liability company incorporated under the laws of the State of Delaware under the name Trafigura Trading LLC. TTL was incorporated on 31 January 2015. TTL is registered in the State of Delaware with Federal Identification Number 06-1436098. The registered office of TTL is at 1209 Orange Street, Wilmington, New Castle County, Delaware 19801 and its telephone number is +1 832 2036400. The principal place of business of TTL is at 1401 McKinney, Suite 1500, Houston, Texas 77010. TTL was incorporated for an indefinite duration and has no other commercial name. There have been no recent events particular to TTL which are relevant to the evaluation of TTL's solvency.

TTL was previously incorporated on 14 July 1995 as a limited liability company existing under the laws of Switzerland under the name Trafigura AG. On 31 January 2015, TTL re-domesticated as a Delaware corporation under the name of Trafigura Inc. and subsequently converted to a limited liability company incorporated under the laws of the State of Delaware and changed its name to Trafigura Trading LLC (the "**Re-domestication**").

Management

The management of TTL as at the date of this Base Prospectus are as follows:

Name	Position	Other Principal Activities (outside the Group)
Corey Prologo	President/Director	None
Robert Kreider	Secretary/Director	None

The business address of each of TTL's directors is 1401 McKinney, Suite 1500, Houston, TX 77010, USA.

As at the date of this Base Prospectus, to the best of TTL's knowledge, no potential conflicts of interest exist between the duties to TTL of any director, and its private interests and/or other duties.

Financial Year

The financial year of TTL ends on 30 September.

Auditors

For the financial year ended 30 September 2022 and 30 September 2021, the auditor of TTL was PricewaterhouseCoopers SA, Geneva Branch whose registered office is at 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.

DESCRIPTION OF TRAFIGURA PTE LTD

Business overview

TPTE is a wholly-owned indirect subsidiary of the Company and is a Singaporean corporation engaged in buying and selling oil commodities in the Far East. TPTE was established in Singapore as the regional headquarters for the Group's oil trading activities. TPTE is the focal point for Trafigura's Asian branch network which includes offices in Brisbane, Jakarta, Mumbai, Seoul, Shanghai, Singapore, Tokyo and Ulaanbaatar and is the principal entity through which the Group's trading transactions are booked.

TPTE is a limited private company incorporated and existing under the laws of Singapore under the name Trafigura Pte Ltd. TPTE was incorporated on 7 March 1996. TPTE is registered in Singapore with the Accounting and Corporate Regulatory Authority in Singapore under number 199601595D. Its registered office and principal place of business is at 10 Collyer Quay, #29-01/05 Ocean Financial Centre, Singapore 049315 and its telephone number is +65 6319 2960. TPTE was incorporated for an indefinite duration and has no other commercial name. There have been no recent events particular to TPTE which are relevant to the evaluation of TPTE's solvency.

Members of the Board of Directors

The directors of TPTE as at the date of this Base Prospectus are as follows:

Name	Position	Other Principal Activities (outside the Group)
Stephan Arjan Jansma	Director	None
Edmundo Abdon Vidal Cornelio	Director	None
Tan Chin Hwee	Director	None

The business address of each of TPTE's directors is 10 Collyer Quay, #29-01/05 Ocean Financial Centre, Singapore 049315. As at the date of this Base Prospectus, to the best of TPTE's knowledge, no potential conflicts of interest exist between the duties to TPTE of any director, and its private interests and/or other duties.

Financial Year

The financial year of TPTE ends on 30 September.

Auditors

For the financial years ended 30 September 2022 and 30 September 2021, the auditor of TPTE was PricewaterhouseCoopers LLP, whose registered office is at 7 Straits View, Marina One, East Tower, Level 12, Singapore 018936. PricewaterhouseCoopers LLP are registered as Public Accountants and Certified Public Accountants with the Accounting and Corporate Regulatory Authority in Singapore.

TAXATION

The following is a general description of certain tax considerations relating to the Notes. It does not purport to be a complete analysis of all tax considerations relating to the Notes, whether in those countries or elsewhere. Prospective purchasers of Notes should consult their own tax advisers as to which countries' tax laws could be relevant to acquiring, holding and disposing of Notes and receiving payments of interest, principal and/or other amounts under the Notes and the consequences of such actions under the tax laws of those countries. This summary is based upon the law as in effect on the date of this Base Prospectus and is subject to any change in law that may take effect after such date.

Luxembourg Taxation

Please note that a reference to Luxembourg income tax encompasses corporate income tax (*impôt sur le revenu des collectivités*), municipal business tax (*impôt commercial communal*), a solidarity surcharge (*contribution au fonds pour l'emploi*) as well as personal income tax (*impôt sur le revenu*) generally. Investors may further be subject to net wealth tax (*impôt sur la fortune*) as well as other duties, levies or taxes. Corporate income tax, municipal business tax as well as the solidarity surcharge invariably apply to most corporate taxpayers resident in Luxembourg for tax purposes. Individual taxpayers are generally subject to personal income tax and, the solidarity surcharge. Under certain circumstances, where an individual taxpayer acts in the course of the management of a professional or business undertaking, municipal business tax may apply as well.

Luxembourg tax residency of Noteholders

A Luxembourg non-resident Noteholder will not become resident, nor be deemed to be resident, in Luxembourg, by reason only of its holding of Notes, or the execution, performance, delivery and/or enforcement of its entitlements thereunder.

Withholding tax

In principle, Luxembourg does not levy a withholding tax on at-arm's-length interest, except for interest on certain profit sharing bonds or similar instruments and interest paid as a profit share under certain silent partnership type arrangements, subject to the application of the Luxembourg law dated 23 December 2005, as amended (the "**Relibi Law**").

Luxembourg non-resident individuals

Under the Luxembourg tax law currently in effect, there is no withholding tax on payments of interest (including accrued but unpaid interest) that are not profit sharing and other similar income made to a Luxembourg non-resident holder of the Notes. There is also no Luxembourg withholding tax, upon repayment of the principal, or subject to the application of the Relibi Law, upon redemption or exchange of the Notes.

Luxembourg resident individuals

Under the Relibi Law, payments of interest or similar income made or ascribed by a paying agent established in Luxembourg to or for the immediate benefit of an individual beneficial owner who is a resident of Luxembourg or a foreign residual entity, as defined by the Relibi Law, that secures interest payments on behalf of such individuals (unless such entity has opted to be treated as an undertaking for collective investments in transferable securities (UCITS) recognised in accordance with the Council Directive 85/611/EEC, as replaced by the European Council Directive 2009/65/EC (as amended), or for the exchange of information regime) will be subject to a withholding tax of 20 per cent. Such withholding tax will be in full discharge of income tax if the beneficial owner is an individual acting in the course of the management of his/her/its private wealth. Responsibility for the withholding of the tax will be assumed by the Luxembourg paying agent.

Pursuant to the Relibi Law, Luxembourg resident individuals, acting in the course of their private wealth, can opt to self-declare and pay a 20 per cent. tax on interest payments made by paying agents located in a Member State other than Luxembourg or a member state of the European Economic Area.

Taxation of Noteholders

Taxation of Luxembourg resident individuals

Luxembourg resident individual Noteholders acting in the course of managing their private wealth are subject to Luxembourg income tax at progressive rates in respect of payments received under the Notes, except if (i) a final withholding tax has been levied on such payments or, (ii) where available, the Noteholder opts to self-declare and pay a 20 per cent. tax (see the above section "*Withholding tax – Luxembourg resident individuals*"). A gain realised by a Luxembourg resident individual Noteholder acting in the course of managing its private wealth, upon the sale or disposal of the Notes is not subject to Luxembourg income taxes **provided that** the sale or disposal took place more than six months after the Notes were acquired. However, any portion of such gain corresponding to accrued but unpaid interest income is subject to Luxembourg income tax, except if tax has been levied on such interest in accordance with the Relibi Law.

Luxembourg resident individual Noteholders acting in the course of managing a professional or business undertaking to which the holding of Notes is connected are required to include any remuneration received, as well as any gain realised on the sale or disposal of the Notes, in their taxable income for Luxembourg income tax assessment purposes (including income tax levied at progressive rates and municipal business tax). For Luxembourg resident individuals receiving payments under the Notes as income from assets held in a professional capacity, the 20 per cent. withholding tax levied is credited against their final tax liability. The same tax treatment applies to non-resident Noteholders who have a permanent establishment or a permanent representative in Luxembourg to which the holding of Notes is connected.

Taxation of Luxembourg corporate residents

Luxembourg corporate Noteholders must include any payments received in connection with their holding of Notes and any gain realised on the sale or disposal of the Notes in their taxable income for Luxembourg income tax assessment purposes (including corporate income tax and municipal business tax).

Taxation of Luxembourg corporate residents benefiting from a special tax regime

Luxembourg corporate resident Noteholders that benefit from a special tax regime, including but not limited to (i) undertakings for collective investment subject to the law dated 17 December 2010 (as amended), (ii) specialised investment funds subject to the law dated 13 February 2007 (as amended), (iii) family wealth management companies subject to the law dated 11 May 2007 (as amended), and (iv) reserved alternative investment funds subject to the law dated 23 July 2016 and treated as a specialised investment fund for Luxembourg tax purposes, are exempt from income tax in Luxembourg and thus income derived from the Notes, as well as any gains realised thereon, are not subject to Luxembourg income tax.

Taxation of non-resident Noteholders

Noteholders who are non-residents of Luxembourg and who have neither a permanent establishment nor a permanent representative in Luxembourg to which the holding of Notes is connected are not liable for any Luxembourg income tax, whether they receive payments of principal or other payments or realise capital gains upon the redemption, sale or exchange of any Notes.

Noteholders who are non-residents of Luxembourg and who have a permanent establishment or a permanent representative in Luxembourg to which the holding of Notes is connected are required to include any interest accrued or received under the Notes and any capital gain realised on the sale or disposal of the Notes in their taxable income for Luxembourg income tax assessment purposes.

Net Wealth Tax

Individuals

Net wealth tax will not be levied on an individual Noteholder in respect of its holding of Notes, whether or not he/she is resident of Luxembourg.

Corporations

Corporate Luxembourg resident Noteholders or non-resident Noteholders which maintain a permanent establishment, fixed place of business or a permanent representative in Luxembourg to which the holding of Notes or any resulting income is connected, are subject to an annual Luxembourg net wealth tax on such Notes except if the Noteholder is (i) an undertaking for collective investment subject to the law dated 17 December 2010 (as amended), (ii) a securitisation vehicle governed by the law dated 22 March 2004 on securitisation (as amended), (iii) a company governed by the law dated 15 June 2004 on venture capital vehicles (as amended), (iv) a specialised investment fund subject to the law dated 13 February 2007 (as amended), (v) a family wealth management company subject to the law dated 11 May 2007 (as amended), or (vi) a reserved alternative investment fund subject to the law dated 23 July 2016.

Net wealth tax is levied at a 0.5 per cent. rate up to EUR 500 million taxable base and at a 0.05 per cent. rate on the taxable base in excess of EUR 500 million. Securitisation vehicles and investment companies in risk capital (*Société d'investissement en capital à risque* (SICAR)), a regulated structure designed for private equity and venture capital investments (organised as tax opaque companies), are subject to net wealth tax up to the amount of the minimum net wealth tax.

The minimum net wealth tax is levied on companies having their statutory seat or central administration in Luxembourg. For entities for which the sum of fixed financial assets, receivables against related companies, transferable securities and cash at bank exceeds 90 per cent. of their total gross assets and EUR 350,000, the minimum net wealth tax is currently set at EUR 4,815. For all other companies having their statutory seat or central administration in Luxembourg which do not fall within the scope of the EUR 4,815 minimum net wealth tax, the minimum net wealth tax ranges from EUR 535 to EUR 32,100, depending on the company's total gross assets.

Other taxes

Registration taxes and stamp duties

There is no Luxembourg registration tax, stamp duty or any other similar tax or duty payable in Luxembourg by the Noteholders as a consequence of the issuance of the Notes, nor will any such taxes be payable as a consequence of a subsequent transfer, redemption or repurchase of the Notes. There is no obligation to register the Notes in Luxembourg. However, a registration duty may apply (i) upon voluntary registration of the Notes in Luxembourg, (ii) if the Notes are attached as an annex to an act (*annexés à un acte*) that itself is subject to mandatory registration, or (iii) if the Notes are deposited in the minutes of a notary (*déposés au rang des minutes d'un notaire*).

Value added tax

There is no Luxembourg value added tax payable in respect of payments in consideration for the issuance of the Notes or in respect of payments made under the Notes or the transfer of the Notes. Luxembourg value added tax may, however, be payable in respect of fees charged for certain services rendered to the Issuer, if for Luxembourg value added tax purposes such services are rendered or are deemed to be rendered in Luxembourg and an exemption from Luxembourg value added tax does not apply with respect to such services. Due to the activity of the Issuer, this value added tax could be a final cost. Foreign value added tax that might be payable in respect of fees charged for certain services rendered to the Issuer may also be a final cost.

Inheritance tax and gift tax

No estate or inheritance taxes are levied on the transfer of the Notes upon death of a Noteholder in cases where the deceased was not a resident of Luxembourg at the time of his death for inheritance tax purposes. Where a Noteholder is a resident of Luxembourg for tax purposes at the time of his death, the Notes are included in his taxable estate for inheritance tax assessment purposes. Gift tax may be due on a gift or donation of Notes if embodied in a Luxembourg notarial deed or otherwise recorded in Luxembourg.

Common Reporting Standard

The Organisation for Economic Co-operation and Development has developed a new global standard for the automatic exchange of financial information between tax authorities (the "**CRS**"). Luxembourg is a signatory jurisdiction to the CRS and the CRS has been implemented in Luxembourg via the law dated

December 18, 2015, concerning the automatic exchange of information on financial accounts and tax matters and implementing the EU Directive 2014/107/EU.

The regulations may impose obligations on the Issuer and the Noteholders, if the Issuer is considered as a Reporting Financial Institution (e.g. an Investment Entity) under the CRS, so that the latter could be required to conduct due diligence and obtain (among other things) confirmation of the tax residency, tax identification number and CRS classification of Noteholders in order to fulfil its own legal obligations. Further, the Noteholders have permitted the Issuer to share such information with the relevant taxing authority.

Prospective Noteholders should contact their own tax advisers regarding the application of CRS to their particular circumstances.

The proposed 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, a "**participating Member State**"). However, Estonia has ceased to participate.

The Commission's proposal has very broad scope and could, if introduced, apply to certain dealings in Notes (including secondary market transactions) in certain circumstances. The issuance and subscription of Notes 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 Notes 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 Notes are advised to seek their own professional advice in relation to the FTT.

SUBSCRIPTION AND SALE

Notes may be sold from time to time by the Issuer to any one or more of Citigroup Global Markets Limited, Credit Suisse International, Deutsche Bank Aktiengesellschaft, ING Bank N.V. and Société Générale (the "**Dealers**"). The arrangements under which Notes may from time to time be agreed to be sold by the Issuer to, and subscribed by, the Dealers are set out in an amended and restated dealer agreement dated 10 May 2023 (the "**Dealer Agreement**") and made between the Issuer, the Guarantors and the Dealers. If in the case of any Tranche of Notes the method of distribution is an agreement between the Issuer, the Guarantors and a single Dealer for that Tranche to be issued by the Issuer and subscribed by that Dealer, the method of distribution will be described in the relevant Final Terms as "Non-syndicated" and the name of that Dealer and any other interest of that Dealer which is material to the issue of that Tranche beyond the fact of the appointment of that Dealer will be set out in the relevant Final Terms. If in the case of any Tranche of Notes the method of distribution is an agreement between the Issuer, the Guarantors and more than one Dealer for that Tranche to be issued by the Issuer and subscribed by those Dealers, the method of distribution will be described in the relevant Final Terms as "Syndicated", the obligations of those Dealers to subscribe the relevant Notes will be joint and several and the names and addresses of those Dealers and any other interests of any of those Dealers which is material to the issue of that Tranche beyond the fact of the appointment of those Dealers (including whether any of those Dealers has also been appointed to act as Stabilisation Manager in relation to that Tranche) will be set out in the relevant Final Terms.

Any such agreement will, *inter alia*, make provision for the form and terms and conditions of the relevant Notes, the price at which such Notes will be subscribed by the Dealer(s) and the commissions or other agreed deductibles (if any) payable or allowable by the Issuer in respect of such subscription. The Dealer Agreement makes provision for the resignation or termination of appointment of existing Dealers and for the appointment of additional or other Dealers either generally in respect of the Programme or in relation to a particular Tranche of Notes. The Dealers are entitled in certain circumstances to be released and discharged from their obligations under any such agreement prior to the closing of the issue of the Notes.

Certain of the Dealers and their respective affiliates have engaged, and may in the future engage, in investment banking and/or commercial banking transactions with, and may perform services for, the Issuer and their affiliates in the ordinary course of business. In addition, in the ordinary course of their business activities, the Dealers and their respective affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers. Such investments and securities activities may involve securities and/or instruments of the Issuer or Issuer's affiliates. Certain of the Dealers or their respective affiliates that have a lending relationship with the Issuer routinely hedge their credit exposure to the Issuer consistent with their customary risk management policies. Typically, such Dealers and their respective affiliates would hedge such exposure by entering into transactions which consist of either the purchase of credit default swaps or the creation of short positions in securities, including potentially the Notes issued under the Programme. Any such short positions could adversely affect future trading prices of Notes issued under the Programme. The Dealers and their respective affiliates may also make investment recommendations and/or publish or express independent research views in respect of such securities or financial instruments and may hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

***United States of America**: Regulation S Category 2; TEFRA D or TEFRA C as specified in the relevant Final Terms or neither if TEFRA is specified as not applicable in the relevant Final Terms.*

Neither the Notes nor the Guarantees have been and will not be registered under the Securities Act or with any securities regulatory authority of any state or other jurisdiction of the United States and may not be offered, sold or delivered within the United States or to, or for the account or benefit of, U.S. persons (as defined in Regulation S) except in certain transactions exempt from the registration requirements of the Securities Act. Accordingly, Notes and the Guarantees are being offered and sold only to non-US persons outside the United States in reliance upon Regulation S under the Securities Act.

Subject to sub-clause (a) of the previous paragraph, each Dealer has agreed that, except as permitted by the Dealer Agreement, it will not offer, sell or deliver Notes, (i) as part of their distribution at any time or (ii) otherwise until 40 days after the completion of the distribution of the Notes comprising the relevant Tranche within the United States or to, or for the account or benefit of, U.S. persons, and such Dealer will have sent to each dealer to which it sells Notes during the distribution compliance period relating thereto a confirmation or other notice setting forth the restrictions on offers and sales of the Notes within the United States or to, or for the account or benefit of, U.S. persons.

In addition, until 40 days after the commencement of the offering of Notes comprising any Tranche, any offer or sale of Notes within the United States (other than in accordance with the first paragraph under the heading "*United States of America*") by any dealer (whether or not participating in the offering) may violate the registration requirements of the Securities Act.

Prohibition of Sales to EEA Retail Investors

Each Dealer has represented, warranted and agreed, and each further Dealer appointed under the Programme will be required to represent, warrant and agree, that it has not offered, sold or otherwise made available and will not offer, sell or otherwise make available any Notes which are the subject of the offering contemplated by this Base Prospectus as completed by the Final Terms (or are the subject of the offering contemplated by a Drawdown Prospectus, as the case may be) in relation thereto 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 Directive 2014/65/EU (as amended, "**MiFID II**"); or

(ii) a customer within the meaning of the Insurance Distribution Directive, where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II.

Prohibition of Sales to UK Retail Investors

Each Dealer has represented, warranted and agreed, and each further Dealer appointed under the Programme will be required to represent, warrant and agree, that it has not offered, sold or otherwise made available and will not offer, sell or otherwise make available any Notes which are the subject of the offering contemplated by this Base Prospectus as completed by the Final Terms (or are the subject of the offering contemplated by a Drawdown Prospectus, as the case may be) in relation thereto to any retail investor in the United Kingdom. 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 (8) of Article 2 of Regulation (EU) No 2017/565 as it forms part of domestic law by virtue of the EUWA; or

(ii) a customer within the meaning of the provisions of the FSMA and any rules or regulations made under the FSMA to implement the Insurance Distribution Directive, where that customer would not qualify as a professional client, as defined in point (8) of Article 2(1) of Regulation (EU) No 600/2014 as it forms part of domestic law by virtue of the European Union (Withdrawal) Act 2018.

Selling Restrictions Addressing Additional Securities Law

United Kingdom

Each Dealer has represented, warranted and agreed that:

(a) ***No deposit-taking:*** in relation to any Notes having a maturity of less than one year:

(i) it is a person whose ordinary activities involve it in acquiring, holding, managing or disposing of investments (as principal or agent) for the purposes of its business; and:

(ii) it has not offered or sold and will not offer or sell any Notes other than to persons:

(A) whose ordinary activities involve them in acquiring, holding, managing or disposing of investments (as principal or agent) for the purposes of their businesses; or

(B) who it is reasonable to expect will acquire, hold, manage or dispose of investments (as principal or agent) for the purposes of their businesses,

where the issue of the Notes would otherwise constitute a contravention of Section 19 of the FSMA by the Issuer;

(b) ***Financial promotion:*** it has only communicated or caused to be communicated and will only communicate or cause to be communicated any invitation or inducement to engage in investment activity (within the meaning of section 21 of the FSMA) received by it in connection with the issue or sale of any Notes in circumstances in which section 21(1) of the FSMA does not apply to the Issuer or the Guarantors; and

(c) ***General compliance***: it has complied and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to any Notes in, from or otherwise involving the United Kingdom.

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 Programme or the Notes has been, or will be, lodged with the Australian Securities and Investments Commission ("**ASIC**") or any other regulatory authority in Australia. Each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that (unless the applicable Final Terms or another supplement to this Base Prospectus otherwise provides) it:

(a) has not (directly or indirectly) offered, and will not offer for issue or sale and has not made or invited, and will not make or invite, applications for issue, or offers to purchase, the Notes in or to the Commonwealth of Australia (including an offer or invitation which is received by a person in the Commonwealth of Australia); and

(b) has not distributed or published, and will not distribute or publish, this Base Prospectus or any other offering material or advertisement relating to any Notes in the Commonwealth of Australia,

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 and 761GA of the Corporations Act;

(iii) such action complies with all applicable laws, regulations and directives (including without limitation, the licensing requirements set out in Chapter 7 of the Australian Corporations Act) in Australia; and

(iv) such action does not require any document to be lodged with ASIC or any other regulatory authority in Australia.

Belgium

Each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to agree, that it has not made and will not make an offer of the Notes to the public, as defined in Article 4, 2 of the Belgian law of 11 July 2018 on the offering of investment instruments to the public and the admission of investment instruments to trading on regulated markets, as amended from time to time, (the "**Belgian Prospectus Law**"), save in those circumstances set out in Article 7, §1 and 10, §2-5 of the Belgian Prospectus Law, provided that no such offer of Notes shall require the Issuer or any Dealer to publish a prospectus or supplement thereto pursuant to Articles 7, §2 and 8 of the Belgian Prospectus Law or an information note *(informatienota/note d'information*) pursuant to Articles 10, §1 and 11 of the Belgian Prospectus Law.

The offering is exclusively conducted under applicable private placement exemptions and therefore it has not been and will not be notified to, and this Base Prospectus or any other offering material relating to the Notes has not been and will not be approved by, the Belgian Financial Services and Markets Authority (*Autorité des Services et marchés financiers / Autoriteit voor financiële diensten en markten*).

This Base Prospectus has been issued to the intended recipients for personal use only and exclusively for the purpose of the offering of Notes. Accordingly, the information contained herein may not be used for any other purpose nor disclosed to any other person in Belgium.

Denmark

Each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that it has not offered or sold and will not offer, sell or deliver any of the Notes directly or indirectly in the Kingdom of Denmark by way of a public offering, unless, as applicable, in compliance with the Prospectus Regulation, the Danish Consolidated Act No. 2014 of 1 November 2021 on Capital Markets, as amended, supplemented or replaced from time to time and any Executive Orders issued thereunder, including the Executive Order No. 191 of 31 January 2022, as amended, supplemented or replaced from time to time, issued pursuant to the Danish Financial Business Act.

France

Each of the Dealers has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree that:

(i) Offer to the public in France:

it has only made and will only make an offer of Notes to the public in France in the period beginning on the date of notification to the *Autorité des marchés financiers* (the "**AMF**") of the approval of the prospectus relating to those Notes by the competent authority of a Member State of the European Economic Area, other than the AMF, all in accordance with articles L.412-1 and L.621-8 of the French Code *monétaire et financier* and the *Règlement general* of the AMF and ending at the latest on the date which is 12 months after the date of the approval of this Base Prospectus; or

(ii) Private placement in France:

it has not offered or sold and will not offer or sell, directly or indirectly, Notes to the public in France, and it has not distributed or caused to be distributed and will not distribute or cause to be distributed to the public in France, the Base Prospectus, the relevant Final Terms or any other offering material relating to the Notes and such offers, sales and distributions have been and will be made in France only to (a) providers of investment services relating to portfolio management for the account of third parties (*personnes fournissant le service d'investissement de gestion de portefeuille pour compte de tiers*), and/or (b) qualified investors (*investisseurs qualifiés*) acting for their own account, and/or (c) a limited circle of investors (*cercle restreint*) acting for their own account, as defined in, and in accordance with, Articles L. 411-1, L. 411-2, D. 411-1 and D. 411-4 of the *French Code monétaire et financier* and defined in Article 2(e) of the Prospectus Regulation.

Germany

Each Dealer has represented and agreed, and any further Dealer appointed under the programme will be required to represent and agree, that the Notes have not been and will not be offered, sold or publicly promoted or advertised by it in the Federal Republic of Germany other than in compliance with the Prospectus Regulation, the German Securities Prospectus Act (*Wertpapierprospektgesetz*), as amended, or any other laws applicable in the Federal Republic of Germany governing the issue, offering, sale and distribution of securities.

Hong Kong

Each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that:

(a) it has not offered or sold and will not offer or sell in Hong Kong, by means of any document, any Notes (except for Notes which are a “structured product” as defined in the Securities and Futures Ordinance (Cap. 571) of Hong Kong) (the "**SFO**") other than (a) to "professional investors" as defined in the SFO 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

(b) it has not issued or had in its possession for the purposes of issue, and will not issue or have in its possession for the purposes of issue, whether in Hong Kong or elsewhere, any advertisement, invitation or document relating to the Notes, 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) other than with respect to Notes which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" as defined in the SFO and any rules made under that Ordinance.

Republic of Italy

The offering of any Notes issued under the Programme has not been registered with the *Commissione Nazionale per la Società e la Borsa* ("CONSOB") pursuant to Italian securities legislation. Each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that the Notes may not be offered, sold or delivered, nor may copies of this Base Prospectus or any other document relating to the Notes be distributed in the Republic of Italy, except:

(i) to qualified investors (*investitori qualificati*), as defined in Article 2 of the Prospectus Regulation and any applicable provision of Italian laws and regulations; or

(ii) in other circumstances which are exempted from the rules on solicitation of investments pursuant to Article 1 of the Prospectus Regulation, Legislative Decree No. 58 of 24 February 1998, as amended (the "**Financial Services Act**"), Article 34, first paragraph, of CONSOB Regulation No. 11971 of 14 May 1999 ("**Regulation No. 11971**") and applicable Italian laws, each as amended from time to time.

Furthermore, each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that any offer, sale or delivery of the Notes or distribution of copies of this Base Prospectus or any other document relating to the Notes in the Republic of Italy under paragraph (i) or (ii) above 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 relevant provisions of Legislative Decree No. 58 of 24 February 1998, CONSOB Regulation No. 20307 of 15 February 2018 and Legislative Decree No. 385 of 1 September 1993 (the "**Banking Act**") (in each case, as amended from time to time) and any other applicable laws or regulations;

(b) in compliance with Article 129 of the Banking Act and the implementing guidelines of the Bank of Italy issued on 25 August 2015, as amended from time to time, pursuant to which the Bank of Italy may request information on the offering or issue of securities in the Republic of Italy or by Italian persons outside of the Republic of Italy; and

(c) in compliance with any other applicable laws and regulations or requirement imposed by CONSOB or any other Italian authority.

Each Dealer has represented, warranted and agreed, and each further Dealer appointed under the Programme will be required to represent, warrant and agree that any offer, sale or delivery of the Notes or distribution of copies of this Base Prospectus or any other document relating to the Notes in the Republic of Italy will be made in accordance with all Italian securities, tax and exchange control and other applicable laws and regulations.

Japan

The Notes 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, each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that it has not, directly or indirectly, offered or sold and will not, directly or indirectly, offer or sell any Notes in Japan or to, or for the benefit of, any resident of Japan, or to others for re-offering or resale, directly or indirectly, in Japan or to, or for the benefit of, a resident in Japan, except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the FIEA and any other applicable laws, regulations and ministerial guidelines of Japan. As used in this paragraph, "**resident of Japan**" means any person resident in Japan, including any corporation or other entity organised under the laws of Japan.

Jersey

Each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that it has not circulated or made available, and will not circulate or make available, this Base Prospectus or any offer for subscription, sale or exchange of the Notes in Jersey except in accordance with all relevant legal and regulatory requirements of Jersey law.

The Netherlands

Zero Coupon Notes (as defined below) in definitive form of the Issuer may only be transferred and accepted, directly or indirectly, within, from or into the Netherlands through the mediation of either the Issuer or a member firm of Euronext Amsterdam N.V. in full compliance with the Dutch Savings Certificates Act (*Wet inzake spaarbewijzen*) of 21 May 1985 (as amended) and its implementing regulations. No such mediation is required: (a) in respect of the transfer and acceptance of rights representing an interest in a Zero Coupon Note in global form, or (b) in respect of the initial issue of Zero Coupon Notes in definitive form to the first holders thereof, or (c) in respect of the transfer and acceptance of Zero Coupon Notes in definitive form between individuals not acting in the conduct of a business or profession, or (d) in respect of the transfer and acceptance of such Zero Coupon Notes within, from or into the Netherlands if all Zero Coupon Notes (either in definitive form or as rights representing an interest in a Zero Coupon Note in global form) of any particular Series are issued outside the Netherlands and are not distributed into the Netherlands in the course of initial distribution or immediately thereafter.

As used herein "**Zero Coupon Notes**" are Notes that are in bearer form and that constitute a claim for a fixed sum against the Issuer and on which interest does not become due during their tenor or on which no interest is due whatsoever.

Norway

The Notes have not been registered with the Norwegian Central Securities Depositary (the "**VPS**"). Accordingly, each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that it has not offered or sold, and will not offer or sell, directly or indirectly, Notes denominated in Norwegian Kroner within Norway or in any other circumstance which would require the Notes to be registered with the VPS pursuant to Norwegian law and regulations. In addition, each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that it will comply with all laws, regulations and guidelines applicable to the offering of Notes within Norway or to or for the account or benefit of persons domiciled in or citizens of Norway.

Grand Duchy of Luxembourg

Each Dealer has represented, warranted and agreed, and each further Dealer appointed under the Programme will be required to represent, warrant and agree, that it has not offered or sold, and will not offer or sell, directly or indirectly, the Notes 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 part II of the Luxembourg law of 16 July 2019, on prospectuses for securities, which applies the Prospectus Regulation (the "**Luxembourg Prospectus Law**") if Luxembourg is the home Member State as defined under the Prospectus Regulation; or

(b) if Luxembourg is not the home Member State as defined under the Prospectus Regulation, 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 Notes has been duly approved in accordance with the Prospectus Regulation and with a copy of that prospectus; or

(c) the offer of Notes benefits from an exemption from, or constitutes a transaction not subject to, the requirement to publish a prospectus or similar document under the Luxembourg Prospectus Law.

Korea

The Notes 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 and its subordinate decrees and regulations (collectively, the "**FSCMA**"). Each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that the Notes may not be offered, sold or delivered, directly or indirectly, or offered or sold to any person for re-offering or resale, directly or indirectly, in Korea or to any resident of Korea except as otherwise permitted under the applicable laws and regulations of Korea, including the FSCMA and the Foreign Exchange Transaction Law and its subordinate decrees and regulations (collectively, the "**FETL**"). Without prejudice to the foregoing, the number of the Notes offered in Korea or to a resident in Korea shall be less than fifty, and for a period of one year from the Issue Date of the Notes, none of the Notes may be divided resulting in an increased number of the Notes. Furthermore, the Notes may not be resold to Korean residents unless the purchaser of the Notes complies with all applicable regulatory requirements (including but not limited to government reporting requirements under the FETL) in connection with the purchase of the Notes.

People's Republic of China

Each of the Dealers has represented, warranted and undertaken, and each further Dealer appointed under the Programme will be required to represent, warrant and undertake, that the Notes may not be offered, sold or delivered, or offered or sold or delivered to any person for reoffering or resale or redelivery, in any such case directly or indirectly in the People's Republic of China (excluding Hong Kong, Macau and Taiwan, the "**PRC**") in contravention of any applicable laws.

This Base Prospectus does not constitute an offer to sell or the solicitation of an offer to buy any Notes in the PRC to any person to whom it is unlawful to make the offer or solicitation in the PRC.

Each of the Dealers do not represent that this Base Prospectus may be lawfully distributed, or that any Notes may be lawfully offered, in compliance with any applicable registration or other requirements in the PRC, or pursuant to an exemption available thereunder, or assume any responsibility for facilitating any such distribution or offering. In particular, it is not the Dealers intention and no action has been taken by the Dealers which would permit a public offering of any Notes or distribution of this document in the PRC. Accordingly, the Notes are not being offered or sold within the PRC by means of this Base Prospectus or any other document. Neither this Base Prospectus nor any advertisement or other offering material may be distributed or published in the PRC, except under circumstances that will result in compliance with any applicable laws and regulations.

Republic of China (Taiwan)

Unless the offer of the Notes has been and will be registered with the Financial Supervisory Commission or other regulatory authorities or agencies of Taiwan, the Republic of China pursuant to relevant securities laws and regulation, each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that the Notes, if not listed on the Taipei Exchange, may be made available: (i) to Taiwan resident investors outside Taiwan for purchase by such investors outside Taiwan; (ii) to the Offshore Banking Units of Taiwan banks ("**OBU**"), the Offshore Securities Units of Taiwan securities firms ("**OSU**") or the Offshore Insurance Unit of Taiwan insurance companies ("**OIU**") purchasing the Notes either for their proprietary account or for the accounts of their non-Taiwan clients or for re-sale to qualifying Taiwan and non-Taiwan investors ("**OBU/OSU/OIU Channel Sales**"); and/or (iii) to investors in Taiwan through certain licensed Taiwan financial institutions to the extent permitted under relevant Taiwan laws and regulations, but may not, otherwise be offered, sold or resold in Taiwan.

To the extent the Notes are offered to non-Taiwan clients via OBU/OSU/OIU Channel Sales, the relevant offering documents provided to such clients shall contain the following notification:

"*The Notes offered herein have not been reviewed or approved by the Taiwan authorities and are not subject to any filing or reporting requirement. The Notes are only permitted to be recommended or introduced to or purchased by clients of an OBU/OSU/OIU which clients reside outside Taiwan Clients of an OBU/OSU/OIU are not eligible to use the financial consumer dispute resolution mechanism under the Taiwan Financial Consumer Protection Law.*"

Singapore

Each Dealer has acknowledged, and each further Dealer appointed under the Programme will be required to acknowledge, that no documents in connection with the offer of the Notes (including, without limitation, this Base Prospectus) have been registered with the Monetary Authority of Singapore. Accordingly, each Dealer has represented, warranted and undertaken, and each further Dealer appointed under the Programme will be required to represent, warrant and undertake, to the Issuer and the Guarantors that it has not offered or sold any Notes or caused such Notes to be made the subject of an invitation for subscription or purchase and will not offer or sell any Notes or cause such Notes to be made the subject of an invitation for subscription or purchase, and has not circulated or distributed, nor will it circulate or distribute, this Base Prospectus or any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the Notes, whether directly or indirectly, to any person in Singapore other than (i) to an institutional investor (as defined in Section 4A(1)(c) of the Securities and Futures Act 2001 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, or (iii) pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the Notes 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(1)(a) 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,

the 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 Notes pursuant to an offer made under Section 275 of the SFA except:

(a) 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)(c)(ii) of the SFA and in accordance with the conditions specified in Section 275 of the SFA;

(b) where no consideration is or will be given for the transfer;

(c) where the transfer is by operation of law;

(d) as specified in Section 276(7) of the SFA; or

(e) as specified in Regulation 37A of the Securities and Futures (Offers of Investments) (Securities and Securities-based Derivatives Contracts) Regulations 2018.

Spain

Neither the Notes nor this Base Prospectus have been or will be registered with the Spanish Securities Market Commission (*Comisión Nacional del Mercado de Valores*). The Notes may not be offered, sold or distributed, nor may any subsequent resale of Notes be carried out in Spain, except in compliance with the provisions of the Prospectus Regulation and the consolidated text of the Spanish Securities Market Law approved by Royal Legislative Decree 4/2015 of 23 October (*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. No publicity or marketing of any kind shall be made in Spain in relation to the Notes.

Each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree that it has not and will not direct or make any offer of the Notes to investors located in Spain.

Switzerland

Each Dealer has undertaken and agreed, and each further Dealer appointed under the Programme will be required to undertake and agree, that this Base Prospectus is not intended to constitute an offer or solicitation to purchase or invest in the Notes and the Notes may not be publicly offered, directly or indirectly, in Switzerland within the meaning of the Swiss Financial Services Act ("**FinSA**") and no application has or will be made to admit the Notes to trading on any trading venue (exchange or multilateral trading facility) in Switzerland. Neither this Base Prospectus nor any other offering or marketing material relating to the Notes constitutes a prospectus pursuant to the FinSA, and neither this Base Prospectus nor any other offering or marketing material relating to the Notes may be publicly distributed or otherwise made publicly available in Switzerland.

United Arab Emirates (excluding the Dubai International Financial Centre)

Each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that the Notes have not been and will not be offered, sold or publicly promoted or advertised by it in the United Arab Emirates ("**UAE**") other than in compliance with any laws applicable in the UAE governing the issue, offering and sale of securities.

Dubai International Financial Centre

Each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that it has not offered and will not offer the Notes 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**") Rulebook; 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 of the DFSA Rulebook.

General

Each Dealer has represented, warranted and agreed that it has complied and will comply with all applicable laws and regulations in each country or jurisdiction in or from which it purchases, offers, sells or delivers Notes or possesses, distributes or publishes this Base Prospectus, any Final Terms, any Drawdown Prospectus or any related offering material, in all cases at its own expense. Other persons into whose hands this Base Prospectus, any Final Terms or any Drawdown Prospectus comes are required by the Issuer, the Guarantors and the Dealers to comply with all applicable laws and regulations in each country or jurisdiction in or from which they purchase, offer, sell or deliver Notes or possess, distribute or publish this Base Prospectus, any Final Terms, any Drawdown Prospectus or any related offering material, in all cases at their own expense.

The Dealer Agreement provides that the Dealers shall not be bound by any of the restrictions relating to any specific jurisdiction (set out above) to the extent that such restrictions shall, as a result of change(s) or change(s) in official interpretation, after the date hereof, of applicable laws and regulations, no longer be applicable but without prejudice to the obligations of the Dealers described in the paragraph headed "*General*" above.

Selling restrictions may be supplemented or modified with the agreement of the Issuer.

GENERAL INFORMATION

Authorisation

1. The 2023 updating of the Programme was authorised by written resolution of the board of directors of the Issuer passed on 13 April 2023. The 2023 updating of the Programme was duly authorised by the respective directors of TGPL and TPTE under the resolutions of their respective boards of directors dated 13 April 2023 (in the case of TGPL) and 12 April 2023 (in the case of TPTE), and by the managing member of TTL under the written consent of the managing member dated 12 April 2023. Each of the Issuer and the Guarantors has obtained or will obtain from time to time all necessary consents, approvals and authorisations in connection with the issue and performance of the Notes and the giving of the guarantee relating to them.

Listing Agent

2. Walkers Listing Services Limited is acting solely in its capacity as listing agent for the Issuer in relation to the Notes and is not itself seeking admission of the Notes to the Official List or to trading on the regulated market of Euronext Dublin.

Legal and Arbitration Proceedings

3. Aside from the legal proceedings against Mr Prateek Gupta and the companies suspected to be involved in the fraud outlined in the risk factor "*Due to the nature of its business and operations, Trafigura is exposed to the risks of fraud and corruption*", there are no other governmental, legal or arbitration proceedings, (including any such proceedings which are pending or threatened, of which the Issuer or the Guarantors are aware), which may have, or have had during the 12 months prior to the date of this Base Prospectus, a significant effect on the financial position or profitability of the Issuer or the Guarantors or their subsidiaries.

Material Change in Prospects

4. Since 30 September 2022, there has been no material adverse change in the prospects of the Issuer, the Guarantors or any of their subsidiaries.

Significant Change in Financial or Trading Position

5. Since 30 September 2022 (the date of the Group's last published audited consolidated financial statements) there has been no significant change in the financial performance or financial position of the Issuer, the Guarantors or any of their subsidiaries.

Auditors

6. The consolidated financial statements of the Group for the years ended 30 September 2022 and 30 September 2021 have been audited without qualification by PricewaterhouseCoopers SA, avenue Giuseppe-Motta 50, CH-1211 Geneva 2, Switzerland, independent auditors, as stated in the respective auditors' reports, incorporated by reference in this Base Prospectus.

7. The financial statements of the Issuer for the years ended 30 September 2022 and 30 September 2021 have been audited without qualification by PricewaterhouseCoopers, Société coopérative, 2, rue Gerhard Mercator, L-1014 Luxembourg, Grand Duchy of Luxembourg, independent auditors, as stated in the respective auditors' reports, incorporated by reference in this Base Prospectus.

8. For the financial years ended 30 September 2022 and 30 September 2021, the auditor of TTL was PricewaterhouseCoopers SA, Geneva Branch whose registered office is at avenue Giuseppe-Motta 50, 1211 Geneva, Switzerland.

9. For the financial years ended 30 September 2022 and 30 September 2021, the auditor of TPTE was PricewaterhouseCoopers LLP, who registered office is at 7 Straits View, Marina One, East Tower, Level 12, Singapore 018936.

Documents on Display

10. Electronic copies of the following documents (together, if necessary, with English translations thereof) will, when published, be available for inspection from (in respect of (a) below) https://www.trafigura.com/financials/ and https://www.trafigura.com/resource-centre/publications (in respect of (b) to (e) below) for 12 months from the date of this Base Prospectus:

    (a) the Group Annual Reports;

    (b) the Paying Agency Agreement;

    (c) the Trust Deed;

    (d) a copy of this Base Prospectus; and

    (e) any supplements to this Base Prospectus and Final Terms to this Base Prospectus.

11. Electronic copies of the following documents (together, if necessary, with English translations thereof) will, when published, be available for inspection from the website of Euronext Dublin (https://live.euronext.com/en/product/bonds-detail/p422%7C25294/documents) for 12 months from the date of this Base Prospectus:

    (a) the constitutive documents of the Issuer;

    (b) the constitutive documents of the Guarantors; and

    (c) the Issuer Financial Statements.

Clearing of the Notes

12. The Notes have been accepted for clearance through Euroclear and Clearstream, Luxembourg. The appropriate common code, International Securities Identification Number (ISIN), Financial Instrument Short Name (FISN) and Classification of Financial Instruments (CFI) code (as applicable) in relation to the Notes of each Tranche will be specified in the relevant Final Terms. The relevant Final Terms shall specify any other clearing system as shall have accepted the relevant Notes for clearance together with any further appropriate information.

Notes Having a Maturity of Less Than One Year

13. Where Notes have a maturity of less than one year and either (a) the issue proceeds are received by the Issuer in the United Kingdom or (b) the activity of issuing the Notes is carried on from an establishment maintained by the Issuer in the United Kingdom, such Notes must: (i) have a minimum redemption value of £100,000 (or its equivalent in other currencies) and be issued only to persons whose ordinary activities involve them in acquiring, holding, managing or disposing of investments (as principal or agent) for the purposes of their businesses or who it is reasonable to expect will acquire, hold, manage or dispose of investments (as principal or agent) for the purposes of their businesses; or (ii) be issued in other circumstances which do not constitute a contravention of section 19 of the FSMA by the Issuer.

Issue Price and Yield

14. Notes may be issued at any price. The issue price of each Tranche of Notes to be issued under the Programme will be determined by the Issuer, the Guarantors and the relevant Dealer(s) at the time of issue in accordance with prevailing market conditions and the issue price of the relevant Notes or the method of determining the price and the process for its disclosure will be set out in the applicable Final Terms. In the case of different Tranches of a Series of Notes, the issue price may include accrued interest in respect of the period from the interest commencement date of the relevant Tranche (which may be the issue date of the first Tranche of the Series or, if interest payment dates have already passed, the most recent interest payment date in respect of the Series) to the issue date of the relevant Tranche.

The yield of each Tranche of Notes set out in the applicable Final Terms will be calculated as of the relevant issue date on an annual or semi-annual basis using the relevant issue price. It is not an indication of future yield.

The Legal Entity Identifiers

15. The Legal Entity Identifier (LEI) code of the Issuer is 549300IDCRNFW0C0TJ66.

16. The Legal Entity Identifier (LEI) code of Trafigura Group Pte. Ltd. is 549300HJ8VS88NIO3006.

17. The Legal Entity Identifier (LEI) code of Trafigura Trading LLC is 5493007VXQNREL92V435.

18. The Legal Entity Identifier (LEI) code of Trafigura Pte Ltd is 549300Z2X1L1L3MID765.

REGISTERED OFFICE OF THE ISSUER

Trafigura Funding S.A.
7 rue Robert Stümper
2557
Grand Duchy of Luxembourg

REGISTERED OFFICES OF THE GUARANTORS

Trafigura Group Pte. Ltd.
10 Collyer Quay
#29-01/05 Ocean Financial Centre
Singapore 049315
Singapore

Trafigura Trading LLC
1209 Orange Street
Wilmington New Castle County
Delaware 19801
United States

Trafigura Pte Ltd
10 Collyer Quay
#29-01/05 Ocean Financial Centre
Singapore 049315
Singapore

ARRANGER

ING Bank N.V.
Foppingadreef 7
1102 BD Amsterdam
The Netherlands

DEALERS

Citigroup Global Markets Limited
Citigroup Centre
Canada Square
Canary Wharf
London E14 5LB
United Kingdom

Credit Suisse International
One Cabot Square
London E14 4QJ
United Kingdom

Deutsche Bank Aktiengesellschaft
Mainzer Landstr. 11-17
60329 Frankfurt am Main
Germany

ING Bank N.V.
Foppingadreef 7
1102 BD Amsterdam
The Netherlands

Société Générale
29, boulevard Haussmann
75009 Paris
France

PRINCIPAL PAYING AGENT

Citibank, N.A., London Branch
Citigroup Centre
Canada Square
Canary Wharf
London E14 5LB
United Kingdom

TRUSTEE

Citicorp Trustee Company Limited
Citigroup Centre
Canada Square
Canary Wharf
London E14 5LB
United Kingdom

LEGAL ADVISERS

To the Issuer and the Guarantors as to English and Delaware law:

Duane Morris
Citypoint, 16th Floor
One Ropemaket Street
London EC2Y 9AW
United Kingdom

To the Dealers and the Trustee as to English law:

Clifford Chance LLP
10 Upper Bank Street
London E14 5JJ
United Kingdom

To the Issuer and Guarantors as to Singapore law

Duane Morris & Selvam LLP
16 Collyer Quay, Singapore
049318

To the Issuer and the Guarantors as to Luxembourg law:

Pinsent Masons Luxembourg
69, Boulevard de la Pétrusse
L-2320 Luxembourg

AUDITORS TO THE COMPANY

PricewaterhouseCoopers SA
avenue Giuseppe-Motta 50
CH-1211 Geneva 2
Switzerland

LISTING AGENT

Walkers Listing Services Limited
5th Floor, The Exchange,
George's Dock,
Dublin 1, D01 W3P9
Ireland