OFFERING CIRCULAR

TÜRKİYE PETROL RAFİNERİLERİ A.Ş.

USD700,000,000 4.50 per cent. Notes due 2024

Issue Price: 100.00 per cent.

Türkiye Petrol Rafinerileri A.Ş., a joint stock company (the "**Company**", the "**Issuer**" or "**Tüpraş**"), is issuing USD700,000,000 aggregate principal amount of 4.50 per cent. Notes due 2024 (the "**Notes**"). Interest on the Notes will be paid in arrear on the 18th day of each April and October, commencing on 18 April 2018, provided that if any such date is not a business day (as defined in Condition 7), then such payment will be made on the next business day. Principal of the Notes is scheduled to be paid on 18 October 2024, but may be paid earlier under certain circumstances as further described herein. The Notes initially will be sold to investors at a price equal to 100.00 per cent. of the principal amount thereof. For a more detailed description of the Notes, see "*Terms and Conditions of the Notes*".

The Notes have not been and will not be registered under the United States Securities Act of 1933, as amended (the "**Securities Act**"), or the securities or "**blue sky**" laws of any state of the United States of America ("**United States**" or "**US**"), the United Kingdom or any other jurisdiction, and are being offered: (a) for sale in the United States (the "**US Offering**") to qualified institutional buyers only (each, a "**QIB**") as defined in, and in reliance upon, Rule 144A under the Securities Act ("**Rule 144A**"); and (b) for sale to non-US persons (as defined in Regulation S under the Securities Act ("**Regulation S**")) outside the United States (the "**International Offering**" and, with the US Offering, the "**Offering**") in reliance upon Regulation S. Prospective purchasers that are QIBs are hereby notified that the seller of the Notes may be relying on the exemption from the provisions of Section 5 of the U.S. Securities Act pursuant to Rule 144A. Investors in the Notes will be deemed to have made or be required to make certain representations and warranties in connection with purchasing the Notes. For a description of certain restrictions on sale and transfer of investments in the Notes, see "*Plan of Distribution*", "*Selling Restrictions*" and "*Transfer Restrictions*" herein.

INVESTING IN THE NOTES INVOLVES RISKS. PROSPECTIVE INVESTORS SHOULD CONSIDER THE FACTORS SET FORTH UNDER "*RISK FACTORS*" BEGINNING ON PAGE 24 OF THIS OFFERING CIRCULAR.

Application has been made to the Financial Conduct Authority under Part IV of the Financial Services and Markets Act 2000 (the "**UK Listing Authority**" and the "**FSMA**", respectively) for the Notes to be admitted to the Official List of the UK Listing Authority and to the London Stock Exchange plc (the "**London Stock Exchange**") for the Notes to be admitted to trading on the London Stock Exchange's Regulated Market. The Regulated Market of the London Stock Exchange is a regulated market for the purposes of Directive 2004/39/EC (the "**Markets in Financial Instruments Directive**"). This document comprises a prospectus for the purpose of Article 3 of Directive 2003/71/EC (the "**Prospectus Directive**").

Application has been made to the Capital Markets Board of Turkey (the "**CMB**") in its capacity as competent authority under Law No. 6362 of the Republic of Turkey ("**Turkey**") relating to capital markets (the "**Capital Markets Law**") for the issuance and sale of the Notes by the Issuer outside Turkey. The CMB approval and the issuance certificate (*ihraç belgesi*) in relation to the issuance of the Notes were obtained on 4 August 2017 by a letter of the CMB dated 7 August 2017 and numbered 29833736-105.03.01-E.9318, and (to the extent and in the form required by applicable law or regulation) a written approval will be obtained from the CMB before any sale and issuance of the Notes.

Under current Turkish tax law, a local withholding tax at the rate of 0 per cent. applies to interest on the Notes. See "*Taxation—Certain Turkish Tax Considerations*".

The Notes are expected to be rated at issuance BBB- by Fitch Ratings Ltd ("**Fitch**") and Ba1 by Moody's Investors Service Ltd. ("**Moody's**" and, together with Fitch, the "**Rating Agencies**"). A rating is not a recommendation to buy, sell or hold securities and may be subject to revision, suspension or withdrawal at any time by the assigning rating organisation. As of the date of this Offering Circular, each of the Rating Agencies is established in the European Union and is registered under Regulation (EU) No 1060/2009, as amended (the "**CRA Regulation**"), and is listed in the list of rating agencies available on the European Securities and Markets Association website.

The Notes are being offered under Rule 144A and Regulation S by each of Citigroup Global Markets Limited, HSBC Bank plc, J.P. Morgan Securities plc and Standard Chartered Bank (each, a "**Joint Bookrunner**" and together, the "**Joint Bookrunners**"), subject to their acceptance and right to reject orders in whole or in part.

The Notes will initially be represented by two global certificates in registered form (the "**Global Certificates**"), one of which will be issued in respect of the Notes ("**Rule 144A Notes**") offered and sold in reliance upon Rule 144A (the "**Restricted Global Certificate**") and will be registered in the name of Cede & Co., as nominee for DTC, and the other of which will be issued in respect of the Notes ("**Regulation S Notes**") offered and sold in reliance upon Regulation S (the "**Unrestricted Global Certificate**") and will be registered in the name of a nominee of a common depositary for Euroclear Bank SA/NV ("**Euroclear**") and Clearstream Banking, S.A. ("**Clearstream, Luxembourg**"). It is expected that delivery of the Global Certificates will be made in immediately available funds on 18 October 2017 (i.e. the fourth business day following the date of pricing of the Notes (such date being referred to herein as the "**Issue Date**" and such settlement cycle being herein referred to as "**T+4**")).

Joint Bookrunners

Citigroup **HSBC** **J.P. Morgan** **Standard Chartered Bank**

The date of this Offering Circular is 16 October 2017.

This Offering Circular constitutes a Prospectus for the purpose of Article 5 of the Prospectus Directive. This Offering Circular is to be read in conjunction with the Consolidated Financial Statements (as defined in "*Presentation of Financial and other Information – Financial Information—Financial Statements of the Group*"), which are deemed to be incorporated herein by reference (see *"Documents Incorporated by Reference*"). This Offering Circular shall be read and construed on the basis that such documents are incorporated and form part of this Offering Circular. For the avoidance of doubt, Annex A (*Summary of Significant Differences between IFRS and TFRS*) forms part of this Offering Circular.

This Offering Circular does not constitute an offer of, or an invitation by or on behalf of the Issuer and the Joint Bookrunners to subscribe for or purchase, any Notes (or beneficial interests therein). This Offering Circular is intended only to provide information to assist potential investors in deciding whether or not to subscribe for or purchase Notes (or beneficial interests therein) in accordance with the terms and conditions specified by the Joint Bookrunners. The Notes (and beneficial interests therein) may not be offered or sold, directly or indirectly, and this Offering Circular may not be circulated, in any jurisdiction except in accordance with the legal requirements applicable to such jurisdiction.

The distribution or delivery of this Offering Circular and the offer or sale of the Notes (or beneficial interests therein) in certain jurisdictions may be restricted by law. Persons into whose possession this Offering Circular may come are required by the Issuer and the Joint Bookrunners to inform themselves about and to observe any such restrictions. For a description of certain restrictions on offers, sales and deliveries of the Notes (or beneficial interests therein) and on the distribution or delivery of this Offering Circular and other offering material relating to the Notes, see "*Selling Restrictions*" and "*Transfer Restrictions*".

No person has been authorised in connection with the offering of the Notes (or beneficial interests therein) to give any information or make any representation regarding the Group (as defined below), the Joint Bookrunners or the Notes other than as contained in this Offering Circular. Any such representation or information must not be relied upon as having been authorised by the Issuer or the Joint Bookrunners. The delivery of this Offering Circular at any time does not imply that there has been no change in the Group's affairs or that the information contained in it is correct as of any time subsequent to its date or that any other information supplied in connection with the Offering of the Notes is correct as of any time subsequent to the date indicated in the document containing the same. This Offering Circular may only be used for the purpose for which it has been published. The Joint Bookrunners expressly do not undertake to review the financial condition or affairs of the Issuer during the life of the Notes or to advise any investor in the Notes of any information coming to their attention. None of the Joint Bookrunners assumes any responsibility or liability for the accuracy or completeness of the information set forth in this Offering Circular. No Joint Bookrunner accepts any liability in relation to the information contained in this Offering Circular or any other information provided by the Issuer in connection with the offer or sale of the Notes or their distribution. Each person receiving the Offering Circular acknowledges that such person has not relied on any of the Joint Bookrunners in connection with its investigation of the accuracy of such information or its investment decision and each person must rely on its own assessment of the Issuer.

Neither this Offering Circular nor any other information supplied in connection with the offering of the Notes (a) is intended to provide the basis of any credit or other evaluation or (b) should be considered as a recommendation by the Issuer or any of the Joint Bookrunners that any recipient of this Offering Circular or any other information supplied in connection with the offer or sale of the Notes should purchase the Notes. Each person contemplating making an investment in the Notes must make its own investigation and analysis of the creditworthiness of the Issuer and its own determination of the suitability of any such investment, with particular reference to its own investment objectives and experience, and any other factors that may be relevant to it in connection with such investment. 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 in this Offering Circular 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 and interest payments is different from the potential investor's currency;
- understand thoroughly the terms of the Notes and be familiar with the behaviour of the financial markets in which they participate; 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.

None of the Issuer, the Joint Bookrunners or any of their respective representatives is making any representation to any offeree or purchaser of the Notes (or beneficial interests therein) regarding the legality of any investment by such offeree or purchaser under applicable legal investment or similar laws. Each investor should consult with its own advisers as to the legal, tax, business, financial and related aspects of an investment in the Notes.

GENERAL INFORMATION

The Notes have not been and will not be registered under the Securities Act or under the securities or "blue sky" laws of any state of the United States or any other US jurisdiction. Each investor, by purchasing a Note (or a beneficial interest therein), agrees that the Notes (or beneficial interests therein) may only be reoffered, resold, pledged or otherwise transferred only upon registration under the Securities Act or pursuant to the exemptions therefrom described under "*Transfer Restrictions*". Each investor will also be deemed to have made certain representations and agreements as described therein. Any resale or other transfer, or attempted resale or other attempted transfer, that is not made in accordance with the transfer restrictions may subject the transferor and transferee to certain liabilities under applicable securities laws.

The offering of the Notes has been authorised by the CMB only for the purpose of the sale of the Notes outside of Turkey in accordance with Article 15(b) of Decree 32 on the Protection of the Value of the Turkish Currency (as amended from time to time, "**Decree 32**"), Capital Markets Law No. 6362 and Communiqué No. VII-128.8 on Debt Instruments (the "**Communiqué**"). The Notes (or beneficial interests therein) have to be offered or sold outside of Turkey and the CMB has authorised the offering of the Notes; provided that, following the primary sale of the Notes, no transaction that may be deemed as a sale of the Notes (or beneficial interests therein) in Turkey by way of private placement or public offering may be engaged in. Pursuant to Article 15(d)(ii) of Decree 32, there is no restriction on the purchase or sale of the Notes (or beneficial interests therein) by residents of Turkey; provided that they purchase or sell such Notes (or beneficial interests) in the financial markets outside of Turkey and such sale and purchase is made through banks and/or licensed brokerage institutions authorised pursuant to CMB regulations and the purchase price is transferred through Turkish banks. As such, Turkish residents should use banks or licensed brokerage institutions when purchasing Notes (or beneficial interests therein) and transfer the purchase price through Turkish banks.

The CMB amended the Communiqué to remove the requirement that issuers of debt instruments to be issued outside of Turkey had to obtain a tranche issuance certificate (*tertip ihraç belgesi*) before any sale and issuance of such instruments. As of 18 February 2017, such issuers are now only required to submit certain information to the CMB before they can proceed with the sale and issuance of such instruments; however, as of 16 October 2017, the CMB's system allowing such application has not become operational yet. Therefore, unless such system becomes operational before the Issue Date of Notes, a tranche issuance certificate (*tertip ihraç belgesi*) in respect of such Notes has to be obtained by the Issuer from the CMB on or before such Issue Date in order to proceed with the sale and issuance of such Notes. In addition, these amendments removed the previous requirement that debt instruments to be issued outside of Turkey had to be traded in an electronically registered form in the Central Registry Agency; however, such issuers are still required to notify the Central Registry Agency within three Turkey business days from the applicable issue date of the amount, issue date, ISIN (if any), interest commencement date, maturity date, interest rate, name of the custodian and currency of such debt instruments and the country of issuance.

This Offering Circular is being provided on a confidential basis in the United States to a limited number of QIBs for information use solely in connection with the consideration of the purchase of the Notes. It may not be copied or reproduced in whole or in part nor may it be distributed or any of its contents disclosed to anyone other than the prospective investors to whom it is originally submitted.

Notes offered and sold to QIBs in reliance upon Rule 144A will be represented by beneficial interests in one or more permanent global certificates in fully registered form without interest coupons. Notes offered and sold outside the United States to non-US persons pursuant to Regulation S will be represented by beneficial interests in one or more permanent global certificates in fully registered form without interest coupons. Except as described in this Offering Circular, beneficial interests in the Global Certificates will be represented through accounts of financial institutions acting on behalf of beneficial owners as direct and indirect participants in DTC, Euroclear and Clearstream, Luxembourg. Except as described in this Offering Circular, owners of beneficial interests in the Global Certificates will not be entitled to have the Notes registered in their names, will not receive or be entitled to receive physical delivery of the Notes in definitive form and will not be considered holders of the Notes under the Notes and the Fiscal Agency Agreement.

An application has been made to the UK Listing Authority for the Notes to be admitted to the Official List and to the London Stock Exchange for such Notes to be admitted to trading on the London Stock Exchange's Regulated Market; however, no assurance can be given that such application will be accepted.

In connection with the issue of the Notes, Citigroup Global Markets Limited (the "**Stabilising Manager**") (or persons acting on behalf of the Stabilising Manager) 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 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 and 60 days after the date of the allotment of the Notes. Any stabilisation action or over-allotment must be conducted by the Stabilising Manager (or persons acting on behalf of the Stabilising Manager) in accordance with all applicable laws and rules. Notwithstanding anything herein to the contrary, the Issuer may not (whether through over-allotment or otherwise) issue more Notes than have been approved by the CMB.

Other than authorisation by the CMB, the Notes have not been approved or disapproved by the US Securities and Exchange Commission (the "**SEC**"), any state securities commission or any other US, Turkish, United Kingdom or other regulatory authority, nor have any of the foregoing authorities passed upon or endorsed the merits of this Offering or the accuracy or adequacy of this Offering Circular. Any representation to the contrary may be a criminal offence.

The distribution of this Offering Circular and the offering of the Notes (and beneficial interests therein) in certain jurisdictions may be restricted by law. Persons that come into possession of this Offering Circular are required by the Issuer and the Joint Bookrunners to inform themselves about and to observe any such restrictions.

This Offering Circular does not constitute an offer to sell or the solicitation of an offer to buy the Notes (or any beneficial interest therein) in any jurisdiction to the extent that such offer or solicitation is unlawful. In particular, there are restrictions on the distribution of this Offering Circular and the offer and sale of the Notes (and beneficial interests therein) in the United States, Turkey, the United Kingdom and numerous other jurisdictions.

In this Offering Circular, "**Company**", "**Issuer**" or "**Tüpraş**" means Türkiye Petrol Rafinerileri A.Ş. on a stand-alone basis, and "**Group**" means the Issuer and its consolidated subsidiaries. Unless otherwise noted, references to "*management*" are to the members of the Issuer's board of directors and statements as to the Issuer's beliefs, expectations, estimates and options are to those of the Issuer's management.

RESPONSIBILITY STATEMENT

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

The Issuer has extracted substantially all of the information contained in this Offering Circular concerning the Turkish market from publicly available information, including press releases and filings made under various securities laws. Unless otherwise indicated, all data relating to the Turkish economy, including statistical data, has been obtained from the website of the Turkish Statistical Institute (*Türkiye Istatistik Kurumu*) ("**Turkstat**") at www.turkstat.gov.tr, the website of the Central Bank of Turkey (*Türkiye Cumhuriyet Merkez Bankası*) (the "**Central Bank**") at www.tcmb.gov.tr or the Turkish Treasury's (*T.C. Başbakanlık Hazine Müsteşarlığı*) website at www.hazine.gov.tr. Data has been downloaded/observed on various different days and may be the result of calculations made by the Issuer, and therefore may not appear in the exact same form on such websites or elsewhere. Such websites do not, and should not, be deemed to be a part of, or to be incorporated into, this Offering Circular.

Where third-party information has been used in this Offering Circular, the source of such information has been identified. In the case of the presented statistical information, similar statistics may be obtainable from other sources, although the underlying assumptions and methodology, and consequently the resulting data, may vary from source to source. Where information has been sourced from a third-party, such publications generally state that the information they contain has been obtained from sources believed to be reliable but the accuracy and completeness of such information is not guaranteed. Information regarding the Issuer's shareholders (including ownership levels and agreements) in the "*Business*" and "*Share Capital, Ownership and Related Party Transactions*" sections has been based upon public filings and announcements by such parties. Such data (including from Turkstat and the Central Bank), while believed to be reliable and accurately extracted by the Issuer for the purposes of this Offering Circular, has not been independently verified by the Issuer or any other party and prospective investors should not place undue reliance upon such data included in this Offering Circular. This information has been accurately reproduced and as far as the Issuer is aware and able to ascertain from the information published by such third-party sources, no facts have been omitted that would render the reproduction of this information inaccurate or misleading.

TURKISH TAX CONSIDERATIONS

The withholding tax rates on interest payments of notes issued by Turkish legal entities outside of Turkey vary depending upon the original maturity of such notes as specified under Decree No. 2010/1182 published on 29 December 2010 and Decree No. 2011/1854 published on 29 June 2011 (together, the "**Decrees**"). According to the Decrees, the local withholding tax rate on interest payments is 0 per cent. for notes with an initial maturity of five years and more. See "*Taxation – Certain Turkish Tax Considerations*".

AVAILABLE INFORMATION

THE ISSUER HAS AGREED THAT, FOR SO LONG AS ANY NOTES ARE "RESTRICTED SECURITIES" WITHIN THE MEANING OF RULE 144(a)(3) UNDER THE SECURITIES ACT, IT WILL, DURING ANY PERIOD IN WHICH IT IS NEITHER SUBJECT TO AND IN COMPLIANCE WITH SECTION 13 OR 15(D) OF THE UNITED STATES SECURITIES EXCHANGE ACT OF 1934, AS AMENDED (THE "**EXCHANGE ACT**"), NOR EXEMPT FROM REPORTING PURSUANT TO RULE 12g3-2(b) THEREUNDER, FURNISH UPON REQUEST TO ANY HOLDER OR BENEFICIAL OWNER OF NOTES, OR ANY PROSPECTIVE PURCHASER DESIGNATED BY ANY SUCH HOLDER OR BENEFICIAL OWNER, THE INFORMATION SPECIFIED IN, AND MEETING THE REQUIREMENTS OF, RULE 144A(d)(4) UNDER THE SECURITIES ACT.

PRESENTATION OF FINANCIAL AND OTHER INFORMATION

Financial Information

Financial Statements of the Group

As the Company is listed on the Borsa İstanbul (formerly, the Istanbul Stock Exchange), the Group is required to prepare its annual and interim consolidated financial statements in Turkish in accordance with Turkish Accounting Standards ("**TAS**")/Turkish Financial Reporting Standards ("**TFRS**") issued by the Public Oversight Accounting and Auditing Standards Authority of Turkey ("**POA**"). The Company also prepares convenience translations into English of its annual and interim financial statements.

The Consolidated Financial Statements (as defined below) have not been prepared in accordance with the international accounting standards adopted pursuant to the procedure of Article 3 of Regulation (EC) No 1606/2002. There may be material differences in the financial information had Regulation (EC) No 1606/2002 been applied to the historical financial information of the Group. For a description of significant differences between TFRS and IFRS, see "*Annex A: Summary of Significant Differences between IFRS and TFRS*".

As more fully described in Note 2.1.1 to the 2016 Consolidated Financial Statements, in accordance with the decision announced on 13 June 2013 by the CMB, a new set of illustrative financial statements and accompanying guidance was issued effective from the interim periods ended after 1 April 2013 and which is applicable to those companies that are subject to the Communiqué regarding the Principles of Financial Reporting in Capital Markets. The Consolidated Financial Statements appearing elsewhere in this Offering Circular have been prepared in accordance with the aforementioned illustrative financial statements.

Additionally, pursuant to an announcement by the CMB on 17 March 2005, effective 1 January 2005 the application of inflation accounting for Turkish companies is no longer required under TFRS. Accordingly, IAS 29 "**Financial Reporting in Hyperinflationary Economies**" is no longer applied for Turkish companies for the accounting year commencing from 1 January 2005.

This Offering Circular incorporates by reference convenience translations into English of the Group's following consolidated financial statements:

- the Group's audited consolidated financial statements as at and for the year ended 31 December 2016, which include comparative financial information as at and for the year ended 31 December 2015 (the "**2016 Consolidated Financial Statements**");

- the Group's audited consolidated financial statements as at and for the year ended 31 December 2015, which include comparative financial information as at and for the year ended 31 December 2014 (the "**2015 Consolidated Financial Statements**", and together with the 2016 Consolidated Financial Statements, the "**Audited Consolidated Financial Statements**");

- the Group's reviewed (unaudited) consolidated financial statements as at and for the six months ended 30 June 2017, which include comparative financial information as at and for the six months ended 30 June 2016 (the "**2017 Reviewed (Unaudited) Condensed Interim Consolidated Financial Statements**"); and

- the Group's reviewed (unaudited) consolidated financial statements as at and for the six months ended 30 June 2016, which include comparative financial information as at and for the six months ended 30 June 2015 (the "**2016 Condensed Interim Consolidated Financial Statements**" and together with the 2017 Reviewed (Unaudited) Condensed Interim Consolidated Financial Statements, the "**Reviewed (Unaudited) Condensed Interim Consolidated Financial Statements**").

The Reviewed (Unaudited) Condensed Interim Consolidated Financial Statements, together with the Audited Consolidated Financial Statements are referred to in this Offering Circular as the "**Consolidated Financial Statements**".

The Consolidated Financial Statements are prepared on a historical cost basis except for the derivative financial instruments and available for sale financial assets that are carried at fair value.

The Consolidated Financial Statements and audit and review reports thereon are direct and accurate translations from the Turkish language originals into English. In the event of an inconsistency between the original and translation, the Turkish language version will prevail.

The Group's Reviewed (Unaudited) Condensed Interim Consolidated Financial Statements for the six months ended 30 June 2017 prepared in accordance with Turkish Accounting Standard 34 "Interim Financial Reporting" ("**TAS 34**") in Turkish have been reviewed by PwC Bağımsız Denetim ve Serbest Muhasebeci Mali Müşavirlik A.Ş., ("**PwC Turkey**"), a member firm of PricewaterhouseCoopers International Limited. PwC Turkey's review was conducted in accordance with the Standard on Review Engagements 2410, "Review of Interim Financial Information Performed by the Independent Auditor of the Entity" as issued by the POA. A review of financial information consists of making inquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A review is substantially less in scope than an audit conducted in accordance with the Standards on Auditing and the objective of which is to express an opinion on the financial statements. Consequently, a review of financial information does not provide assurance that the audit firm will be aware of all significant matters which would have been identified in an audit.

The Group's Audited Consolidated Financial Statements for the years ended 31 December 2016, 2015 and 2014 prepared in accordance with the Turkish Accounting Standards published by the POA of Turkey have been audited by Güney Bağımsız Denetim ve Serbest Muhasebeci Mali Müşavirlik A.Ş., ("**EY Turkey**"), a member firm of Ernst & Young Global Limited. EY Turkey's audit was conducted in accordance with the standards on auditing issued by the Capital Markets Board of Turkey and standards on auditing issued by POA.

Sources of Financial Information

Unless otherwise stated herein:

- All financial information as of and for the six months ended 30 June 2017 and 2016 has been extracted from the 2017 Reviewed (Unaudited) Condensed Interim Consolidated Financial Statements;
- All financial information as of and for the year ended 31 December 2016 has been extracted from the 2016 Consolidated Financial Statements;
- All financial information as of and for the year ended 31 December 2015 has been extracted from the comparative information as of and for the year ended 31 December 2015 included in the 2016 Consolidated Financial Statements; and
- All financial information as of and for the year ended 31 December 2014 has been extracted from the comparative information as of and for the year ended 31 December 2014 included in the 2015 Consolidated Financial Statements.

Rounding Adjustments

Certain figures included in this Offering Circular 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.

Alternative Performance Measures

To supplement the Consolidated Financial Statements, the Group uses certain ratios and measures included in this Offering Circular that would be considered "alternative performance measures" (each an "**APM**") as described in the ESMA Guidelines on Alternative Performance Measures (the "**ESMA Guidelines**") published by the European Securities and Markets Authority on 5 October 2015. The ESMA Guidelines provide that an APM is understood as "a financial measure of historical or future financial performance, financial position, or cash flows, other than a financial measure defined or specified in the applicable financial reporting framework". The ESMA Guidelines also note that they do not apply to APMs "disclosed in accordance with applicable legislation, other than the applicable financial reporting framework, that sets out specific requirements governing the determination of such measures.

The APMs included in this Offering Circular are not alternatives to measures prepared in accordance with TFRS and might be different from similarly titled measures reported by other companies. The Group's management believes that

this information, when considered in conjunction with measures reported under TFRS, is useful to investors because it provides a basis for measuring the organic operating performance in the periods presented and enhances investors' overall understanding of the Group's financial performance. In addition, these measures are used in internal management of the Group, along with financial measures reported under TFRS, in measuring the Group's performance and comparing it to the performance of its competitors.

The Group's management believes that these APMs, when considered in conjunction with TFRS measures, enhance investors' and management's overall understanding of the Group's current financial performance.

For the Group, measures that might be considered to be APMs in this Offering Circular (and that are not defined or specified by TFRS or any other legislation applicable to the Group) include (without limitation) the following (such terms being used in this Offering Circular as defined below):

- *EBITDA*: EBITDA is defined as profit for the year before income tax expense, financial income, financial expense and depreciation and amortisation.

- *Capital expenditure:* Capital expenditure is comprised of property, plant and equipment purchases, intangible asset purchases and changes in advances given for property, plant and equipment.

- *Net debt*: Net debt is calculated by subtracting cash and cash equivalents from financial liabilities (which includes short-term financial liabilities, current portion of long-term financial liabilities and long-term financial liabilities).

- *Gearing ratio*: Gearing ratio is calculated by dividing net financial liabilities by net financial liabilities plus shareholders' equity.

- *Net foreign currency position*: Net foreign currency position, as of a particular date, is calculated by adding Turkish Lira equivalents of foreign currency denominated monetary assets and subtracting Turkish Lira equivalents of foreign currency denominated monetary liabilities.

- *Net foreign currency position after cash flow hedging and natural hedge*: Net foreign currency position after cash flow hedging and natural hedge, as of a particular date, is calculated by adding back the financial liabilities denominated in foreign currency which have been subject to hedge accounting under relevant provisions of TAS 39 and adding non-monetary crude oil and petroleum product inventories which are usually traded in US Dollars.

For a reconciliation of consolidated EBITDA to consolidated profit for the period and combined EBITDA to segment operating profit see "*Selected Financial Information—Other Financial Data*".

Certain Definitions

As used herein, the "**Group**" refers to the Company and its consolidated subsidiaries. However, references to the Group's management refer to the management of Tüpraş and references to Group belief or expectation statements refer to the beliefs or expectations of the management of Tüpraş.

Other Information

Third-Party Information Regarding the Company's Market and Industry

Statistical data and other information appearing in this Offering Circular relating to the oil and gas industry and certain economic data and forecasts have, unless otherwise stated, been extracted from the website of the Central Bank of Turkey, Turkstat, the Turkish Petroleum Industry Association ("**Petder**"), the Oil & Gas Journal, the Energy Markets Regulatory Authority ("**EMRA**") and Reuters, although the underlying assumptions and methodology, and consequently the resulting data, may vary from source to source.

The information described above has been accurately reproduced and, as far as the Group is aware and able to ascertain from the information published by such third parties, no facts have been omitted which would render the reproduced information inaccurate or misleading. Where third-party information has been used in this Offering Circular, the source of such information has been identified.

The Group's estimates have been based on information obtained from the Group's subsidiaries, associates, customers, suppliers, trade and business organisations and other contacts in the markets in which the Group operates. The Group believes these estimates to be accurate in all material respects as at the dates indicated. However, this information may prove to be inaccurate because of the method by which the Group obtained some of the data for these estimates or because this information cannot always be verified with complete certainty due to limits on the availability and reliability of raw data, the voluntary nature of the data gathering process and other inherent limitations and uncertainties.

This Offering Circular contains illustrations and charts derived from Tüpraş's internal information and the internal information of the Group's consolidated subsidiaries and associates, which have not been independently verified unless specifically indicated. The information described above has been accurately reproduced and, as far as the Group is aware and is able to ascertain from the information published by such third parties, no facts have been omitted which would render the reproduced information inaccurate or misleading. However, the Group does not accept responsibility for the accuracy of such information.

Currency Information

References to "**TL**" in the Consolidated Financial Statements incorporated by reference herein are references to the Turkish currency rounded to the nearest thousand. Unless otherwise indicated, references to "**USD**", "**$**", "**US dollars**", or "**Dollars**" in this Offering Circular are to United States Dollars expressed in millions. Unless otherwise indicated, references to "**EUR**", "**Euro**" and "**€**" are to the single currency of the participating member states of the European Union ("**Member States**") that was adopted pursuant to the Treaty of Rome of 27 March 1957, as amended by the Single European Act 1986 and the Treaty on European Union of 7 February 1992, as amended.

Conversion table

The Group maintains and publishes statistical information relating to its business in metric units (tonnes) rather than imperial units (barrels). Metric units amounts may be converted into imperial unit amounts using the approximate conversion factor given below:

1 tonne of LPG = 11.232 barrels	1 tonne of lubricants = 7.19 barrels
1 tonne of naphtha = 8.8589 barrels	1 tonne of fuel oil = 6.4843 barrels
1 tonne of gasoline = 8.2761 barrels	1 tonne of bitumen = 6.2898 barrels
1 tonne of refined petroleum products = 7.46 barrels (average)	1 barrel of crude oil per day = 46 metric tonnes of crude oil per year
	1 tonne = 1,000 kilogrammes (exact)
1 tonne of jet fuel = 7.8623 barrels	1 barrel = 0.159 cubic metres
1 tonne of crude oil = 7.35 barrels	1 cubic metre = 35.314 cubic feet
1 tonne of aromatics = 7.2 barrels	1 tonne of diesel oil = 7.4436 barrels

EXCHANGE RATES

The table below sets forth, for the periods indicated, the period-end, average and high and low rates determined by the Central Bank of Turkey, in each case for the purchase of TL, all expressed in TL per US dollar. The TL/US dollar exchange rate determined by the Central Bank on 12 October 2017 was TL 3.6786 to USD 1. The rates may differ from the actual rates used in the preparation of the Consolidated Financial Statements and other financial information appearing in this Offering Circular. The Issuer does not represent that the US dollar amounts referred to below could be or could have been converted into TL at any particular rate indicated or any other rate at all.

Period	High	Low	Average[(1)]	Period end[(2)]
	TL per USD 1.00			
October 2017 (through 12 October 2017)	3.6993	3.5553	3.6137	3.6786
September 2017	3.5752	3.3996	3.4712	3.5553
August 2017	3.5467	3.4441	3.5152	3.4441
July 2017	3.6343	3.5258	3.5632	3.5258
June 2017	3.5444	3.5032	3.5214	3.5200
May 2017	3.6161	3.5349	3.5663	3.5366
April 2017	3.7297	3.5536	3.6528	3.5536
March 2017	3.7556	3.5964	3.6719	3.6419
February 2017	3.7780	3.5721	3.6667	3.6111
January 2017	3.8814	3.5370	3.7505	3.7908
2016	3.5376	2.7953	3.0266	3.5224
2015	3.0627	2.2799	2.7233	2.9207
2014	2.3693	2.0730	2.1985	2.3210
2013	2.1623	1.7501	1.9029	2.1324
2012	1.8823	1.7382	1.7964	1.7819

(1) For each of the years 2012 to 2016, this represents the yearly average of the monthly averages of the TL/USD dollar exchange rates determined by the Central Bank for the relevant period, which monthly averages were computed by calculating the average of the daily TL/USD dollar exchange rates on the business days of each month during the relevant period. For the months of 2017, this represents the monthly averages of the TL/USD dollar exchange rates determined by the Central Bank for such month, which averages were computed in the same manner described above.

(2) Represents the TL/USD dollar exchange rates for the purchase of US dollars determined by the Central Bank for the last working day of the relevant period.

Fluctuations in the exchange rates between the Turkish Lira and US dollar in the past are not necessarily indicative of fluctuations that may occur in the future. No representation is made that Turkish Lira amounts referred to in this Offering Circular could have been or could be converted into US dollars at the above exchange rates or at any other rate.

DOCUMENTS INCORPORATED BY REFERENCE

The following documents which have previously been published and have been filed with the Financial Conduct Authority shall be incorporated in, and form part of, this Offering Circular:

(a) convenience translation into English of the Group's audited consolidated financial statements for the year ended 31 December 2016, together with the independent auditor's report;

(b) convenience translation into English of the Group's audited consolidated financial statements for the year ended 31 December 2015, together with the independent auditor's report;

(c) convenience translation into English of the Group's reviewed (unaudited) condensed interim consolidated financial statements for the six month period ended 30 June 2017, together with the review report; and

(d) convenience translation into English of the Group's reviewed (unaudited) condensed interim consolidated financial statements for the six month period ended 30 June 2016, together with the review report.

Following the publication of this Offering Circular a supplement may be prepared by the Issuer and approved by the UK Listing Authority in accordance with Article 16 of the Prospectus Directive. 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 modify or supersede statements contained in this Offering Circular or in a document which is incorporated by reference in this Offering Circular. Any statement so modified or superseded shall not, except as so modified or superseded, constitute a part of this Offering Circular.

Copies of documents incorporated by reference in this Offering Circular can be obtained from the registered office of the Issuer and from the specified office of the Fiscal Agent. In addition, copies of the documents will be available free of charge at the website of the Regulatory News Service operated by the London Stock Exchange at: www.londonstockexchange.com/exchange/news/market-news/market-news-home.html.

FORWARD-LOOKING STATEMENTS

This Offering Circular contains statements that may be considered to be "**forward-looking statements**" (as that term is defined in the US Private Securities Litigation Reform Act of 1995) relating to the Group's financial position, results of operations, business strategies, plans and objectives of management for future operations (including development plans and objectives relating to the Group's businesses). When used in this Offering Circular, the words "**anticipates**", "**estimates**", "**expects**", "**predicts**", "**assumes**", "**believes**", "**supposes**", "**intends**", "**plans**", "**aims**", "**may**", "**will**", "**shall**", "**could**" and any similar expression or phrase generally identify forward-looking statements. Other forward-looking statements can be identified from the context in which the statements are made. Forward-looking statements appear in a number of places throughout this Offering Circular, including (without limitation) under "*Risk Factors*", "*Use of Proceeds*", "*Management's Discussion and Analysis of Financial Condition and Results of Operations*" and "*Business*" and include, but are not limited to, statements regarding:

- strategy and objectives;
- trends affecting the Group's results of operations and financial condition;
- future developments in the markets in which the Group operates;
- anticipated legal and regulatory changes in the markets in which the Group operates; and
- the Group's potential exposure to market risk and other risk factors.

Forward-looking statements involve risks, uncertainties and assumptions. Actual results may differ materially from those expressed in these forward-looking statements. The Company has identified some of the risks inherent in these forward-looking statements under "*Risk Factors*". Important factors that could cause actual results to differ materially from those in these forward-looking statements include, among others:

- a substantial decline in refining margins, adverse changes in local and global economic conditions and fluctuations in the demand for transportation fuels;
- political, geographic and economic risks in certain countries affecting the Group's supply of crude oil imports;
- the Company's ability to respond to international sanctions requirements, including reducing its crude oil purchases from Iran;
- external factors affecting the Group's ability to complete its capital projects at expected cost and in a timely manner;
- changes in the applicable laws and regulations;
- the implementation of new refinery projects by the Group's competitors;
- significant interruptions in the operations of the Group's refineries, due to equipment failures, labour unrest or other limitations;
- the future outcome of an anti-trust investigation;
- unplanned events or accidents affecting the Group's operations or facilities, including the risk of earthquakes and acts of terrorism;
- the Group's ability to comply with environmental law and regulations and control costs in relation to managing carbon dioxide emissions;
- the effect on the Group if the Turkish government (the "**Turkish Government**") chose to exercise its "golden share" in the Company;
- the interests of the Company's principal shareholder;
- the Group's ability to attract and retain sufficient skilled personnel;
- the Company's ability to maintain reliable and secure information technology systems;

- the timing, impact and other uncertainties of future actions; and
- other factors discussed under "*Risk Factors*".

Should one or more of these factors or uncertainties materialise, or should underlying assumptions prove incorrect, actual results may vary materially from those described herein as anticipated, believed, estimated, expected or intended. There may be other risks, including some risks of which the Company is unaware, that could adversely affect the Group's results or the accuracy of forward-looking statements in this Offering Circular. Therefore, potential investors should not consider the factors discussed here or under "*Risk Factors*" to be a complete set of all potential risks or uncertainties of investing in the Notes.

Potential investors should not place undue reliance upon any forward-looking statements. Except as required by applicable law, rules or regulations, the Company does not have any intention or obligation to update forward-looking statements to reflect new information or future events or risks that may cause the forward-looking events discussed in this Offering Circular not to occur or to occur in a manner different from what the Company currently expects.

CONTENTS

Page

PRESENTATION OF FINANCIAL AND OTHER INFORMATION VI
EXCHANGE RATES X
DOCUMENTS INCORPORATED BY REFERENCE XI
FORWARD-LOOKING STATEMENTS XII
OVERVIEW OF THE GROUP 15
OVERVIEW OF FINANCIAL DATA 20
RISK FACTORS 24
OVERVIEW OF THE NOTES 42
USE OF PROCEEDS 45
CAPITALISATION OF THE GROUP 46
SELECTED FINANCIAL INFORMATION 47
MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS 51
BUSINESS 67
MANAGEMENT 88
SHARE CAPITAL, OWNERSHIP AND RELATED PARTY TRANSACTIONS 94
TERMS AND CONDITIONS OF THE NOTES 95
THE GLOBAL CERTIFICATES 110
BOOK-ENTRY CLEARANCE SYSTEMS 112
TAXATION 114
PLAN OF DISTRIBUTION 118
SELLING RESTRICTIONS 120
TRANSFER RESTRICTIONS 122
ENFORCEMENT OF JUDGMENTS AND SERVICE OF PROCESS 125
LEGAL MATTERS 127
OTHER GENERAL INFORMATION 128
GLOSSARY OF TECHNICAL AND CERTAIN INDUSTRY TERMS 130
ANNEX A: SUMMARY OF SIGNIFICANT DIFFERENCES BETWEEN IFRS AND TFRS 133

OVERVIEW OF THE GROUP

This section contains an overview of the detailed information and financial information included elsewhere in this Offering Circular. This overview may not contain all of the information that may be material to prospective investors and, therefore, should be read in conjunction with this entire Offering Circular, including the more detailed information regarding the Group's business and financial information and related notes included elsewhere in this Offering Circular. Prospective investors should also carefully consider the information set forth under the heading "Risk Factors".

Introduction

Tüpraş is currently the only oil refiner in Turkey, the seventh largest oil refinery group in Europe (as measured by refinery capacity according to Oil & Gas Journal in 2016). Tüpraş was the country's largest industrial company in 2016 as measured by net sales, according to the Istanbul Chamber of Industry. The Group's principal assets are four oil refineries located in İzmit, İzmir, Kırıkkale and Batman. The annual total design refining capacity of the four refineries is 28.1 million MT, with 2016 production of 27.9 million MT. The Group's refineries produce a full range of refined petroleum products, including diesel, jet fuel, gasoline, asphalt, LPG, naphtha, fuel oils and lubricant base stocks. The Group also imports and sells petroleum products and engages in the distribution, retailing and marine transportation of crude oil and refined products. As of 30 June 2017, 75.9 per cent. of Tüpraş's sales (by volume) were domestic, with the remainder exports.

The İzmit Refinery and the İzmir Refinery are the two largest refineries in Turkey, each with a crude oil capacity of 11.0 million MT per year. The İzmit Refinery is located 80 kilometres south-east of Istanbul on the coast of the Gulf of İzmit by the Sea of Marmara, in the region that accounted for approximately 34 per. cent of Turkish petroleum product demand in 2016, according to the 2016 EMRA Annual Report. In 2016, the İzmit Refinery processed 10.8 million MT of crude oil and 1.0 million MT of other feedstock, producing 11.0 million MT of refined products. Following the mechanical completion of the Residuum Upgrading Project ("**RUP**") at the end of 2014, the İzmit Refinery, with three distillation column trains, had a Nelson Complexity Index of 14.5 (based on design capacity) as of 31 December 2016, exceeding Tüpraş's average Nelson Complexity Index of 9.5 and making it the Group's most complex refinery. İzmit Refinery's Nelson Complexity Index is higher than the average for Mediterranean refineries as of 31 December 2016. The RUP Facility, which in 2016 converted 4.2 million MT of black products into approximately 3.5 million MT of high value, environmentally friendly white products at EU standards, including diesel, gasoline and LPG, began producing at full capacity in May 2015.

The İzmir Refinery is located on the Aegean Sea. In 2016, the İzmir Refinery processed 11.5 million MT of crude oil and 0.2 million MT of other feedstock, producing 11.2 million MT of refined products. It is the only refinery in Turkey with a base oil production unit, the design production capacity of which is 400,000 MT. The İzmir Refinery, with three distillation column trains, had a Nelson Complexity Index of 7.66 (based on design capacity) as of 31 December 2016.

The Kırıkkale Refinery, located inland 80 kilometres south-east of Ankara, has a design capacity of 5.0 million MT and has Turkey's largest road tanker filling capacity. Crude oil is supplied via BOTAŞ's Ceyhan Terminal and the Ceyhan-Kırıkkale pipeline. In 2016, it processed approximately 5.0 million MT of crude oil and 0.1 million MT of other feedstock, producing approximately 4.8 million MT of refined products. The Kırıkkale Refinery had a Nelson Complexity Index of 6.32 (based on design capacity) as of 31 December 2016.

The Batman Refinery is located inland in south-eastern Turkey, adjacent to areas of domestic crude oil production, approximately 200 kilometres north-west of the Iraq border. The Batman Refinery has a design capacity of 1.1 million MT. In 2016, the Batman Refinery processed 1.0 million MT of crude oil and produced 1.0 million MT of refined products. The Batman Refinery had a Nelson Complexity Index of 1.83 (based on design capacity) as of 31 December 2016.

Apart from the refineries, Tüpraş has a 40 per cent. share in Opet, which was the second largest petroleum products distribution company in Turkey as of 30 June 2017 in terms of sales volume, based on EMRA data. Opet is engaged in retail and wholesale activities in fuel distribution, the production and marketing of lubricating oil, the sales of air transport fuels and the international trade of petroleum products.

In addition, Tüpraş has a 79.98 per cent. share in Ditaş, which mainly carries out Tüpraş's crude oil and refined product shipping operations. Ditaş conducts crude oil shipping operations with its own tankers as well as the tankers it charters, as necessary. Ditaş also provides product shipping services for Opet and other distribution companies.

Strengths

The Group believes that its key strengths are the following:

- ***Currently sole operator of oil refineries in the growing Turkish market.*** The Group's oil refineries are currently the only operating oil refineries in Turkey and produce 100 per cent. of Turkish production as of the date of this Offering Circular. Since its establishment, the Company has been Turkey's leading supplier of refined products in each of its product markets. In 2016, the Company's share of the Turkish petroleum product market, excluding industrial products (e.g., base oil and bitumen), was approximately 60 per cent., based on diesel, gasoline, jet fuel and fuel oil data from EMRA and Company data. The Company's leading position is further augmented by having a well-established infrastructure and facilities for importing crude oil and refined products and selling refined products in Turkey, which the Company believes give it economic advantages over competitors that import refined products. The Company maintains and improves its infrastructure by continuously implementing energy efficiency and operational efficiency projects at its refineries.
- ***Flexibility of operations.*** The Group has a large number of production lines in its refineries, enabling operational flexibility and an ability to reduce operational costs in response to changing demand. By virtue of this operational flexibility, capacity utilisation can be varied to meet market and economic conditions without significantly reducing efficiency. Utilisation of semi-finished products enables the maximisation of product yields under all capacity utilisation scenarios. This flexibility allows the Group to manage variations in demand, as well as both planned and unplanned maintenance, without a major impact to sales activities, such as, for example, seasonal variations or switching from the production of jet fuel to diesel.
- ***Ability to generate favourable refining margins.*** The Group believes that the combination of a growing domestic market, with a refined product deficit in diesel and its operational flexibility, asset location, storage infrastructure and sales strengths, enables the Group to generate strong refining margins. Since the completion of investments related to Euro V petroleum products specifications, the Group has further improved its refining margins which represent a premium over the benchmark refining margin for the Mediterranean region. Tüpraş's net refining margins were USD 8.20 and USD 6.03 per barrel for the six months ended 30 June 2017 and the year ended 31 December 2016, respectively, compared to Mediterranean averages of USD 5.41 and USD 3.97 per barrel, respectively. The Group has one refinery with high complexity (the İzmit Refinery) and two refineries with medium complexity (the İzmir Refinery and Kırıkkale Refinery), all of which can process a variety of crude oils and produce a high value added mix of products. After the RUP Facility began production at full capacity, the İzmit Refinery's Nelson Complexity Index rose to 14.5, which increased the Company's overall average Nelson Complexity Index to 9.5. The less complex Batman Refinery is configured as a specialist asphalt refinery to process only domestic heavy crude oils and mainly produces asphalt to meet domestic demand.
- ***Strategic asset location.*** The Group's oil refineries are located near the main petroleum consumption regions of Turkey, whilst still having access to flexible and cost effective sea and land crude oil supply routes, which gives the Group a competitive advantage versus imported refined products and enables the Group to extract favourable refining margins. The İzmit Refinery primarily services the Marmara market (including Istanbul), which constituted approximately one-third of Turkish petroleum product demand in 2016, and the coast of the Black Sea. The İzmir Refinery principally services the markets of western Turkey, while the Kırıkkale Refinery and Batman Refinery principally service the markets of central Anatolia and east/south-eastern Anatolia, respectively. In addition, the strategic location of each of the Group's refineries ensures that the Group can obtain a wide range of crude oils at cost-efficient prices from suppliers in the Middle East, North Africa and the Mediterranean as well as Russia and Central Asia.
- ***Storage and import infrastructure.*** The Group owns approximately two-thirds of the refined product storage capacity in Turkey. It also has large scale import-export facilities at the İzmit and İzmir Refineries, which are located on the coasts of the Gulf of İzmit and Aegean Sea, respectively. The İzmit, Kırıkkale and Batman Refineries are all equipped with railway loading and unloading facilities enabling products to be transferred between them. These facilities allow the Group to import and store cargos in bulk and to opportunistically take advantage of pricing opportunities in the market, in each case reducing its cost of supply.
- ***Sales and distribution capability.*** The Group's major customers have terminals which are connected to the Group's refineries by pipeline, which decreases the customer's working capital requirements and reduces their price risk by enabling them to purchase in small quantities whilst also reducing handling costs. The Group's infrastructure enables it to supply customers at low cost at multiple points throughout the country, by pipeline, rail and sea. This capability is enhanced by Tüpraş's access to extra storage capacity at the terminals of Opet and

Aygaz A.Ş., an affiliate of the Group, in order to serve regions in Turkey where Tüpraş does not own infrastructure. In addition, the Group is the sole provider of asphalt to the Turkish ministry of transport and municipalities, and the only provider of specialist military fuels to the Turkish armed forces. In 2016, 50 per cent. of the Company's sales were made to petroleum product/LPG distributors, 18 per cent. were exports and 32 per cent. were direct sales to final consumers.

- ***Flexibility in the procurement of crude oil***. The Group has access to diverse sources of crude oil supply and buys various types of crude oil. In 2016, the Group bought and processed 18 different types of crude oil, with gravities ranging between 19 API and 48 API, from 10 countries, helped by the convenient geographic location of Turkey and the increased refinery conversion capacity and supply flexibility for crude oil after the commissioning of the RUP Facility. The configuration of the Group's refineries allows the Group flexibility in the selection of crude oil because the refineries are able to refine many different types of crude oil. The Group's management is able to make key decisions in the procurement of crude oil on a monthly basis based on its supply contracts and purchases on the spot market. The Group's procurement decisions are aided by PIMS, an industry-specific software, enabling it to determine which blend of crude oils are the most cost-effective in producing the desired refined products at each of the Group's refineries.
- ***Heightened complexity and competitive position.*** Since the privatisation of Tüpraş in 2006, the Group has accelerated its rate of investment in the İzmit Refinery, İzmir Refinery and Kırıkkale Refinery, enabling the production of the latest specification of automotive fuels prior to the change in Turkish standards, increasing each refinery's complexity and improving its white product yields. The Group reached mechanical completion for the RUP Facility at the İzmit Refinery in 2014, which had a total capital investment of USD 3.26 billion (including the pier, railroad links and other complementary projects) and is the largest single industrial investment made in Turkey to date. The RUP Facility significantly improved the Group's capacity utilisation rate to 111.5 per cent. for the six months ended 30 June 2017 from 68.5 per cent. in 2014. The RUP Facility has increased the İzmit Refinery's Nelson Complexity Index to 14.5 from 7.78 before completion of the RUP Facility. The RUP Facility also uses the excess black products produced by the Group's other refineries, which enables them to run at maximum capacity.
- ***Beneficial financing terms.*** As the largest industrial company in Turkey (in 2016 as measured by net sales, according to the Istanbul Chamber of Industry) and part of Koç Holding, the largest investment holding company in Turkey (in terms of revenues, exports and market capitalisation on the Borsa İstanbul as of 31 December 2016), the Company believes that it has access to both domestic and international financial markets on favourable terms, and has a Ba1 (positive) credit rating from Moody's and benefits from above sovereign investment grade credit ratings of BBB- (stable) from Fitch.
- ***Financial discipline.*** The Group aims to maintain financial discipline with financial and risk management policies focusing on areas such as leverage, liquidity, credit, interest rate, commodity and currency risks. To keep these financial risks under control, a variety of financial indicators, including net financial debt/EBITDA, net foreign currency position/shareholders' equity, current ratio, the fixed/floating profile of financial debt and counterparty risk limits, are monitored and kept within set limits. See "*Management's Discussion and Analysis of Financial Condition and Results of Operations—Risk Management Governance*".

Strategy

The Company's overall strategic goal is to lead the sector with innovative practices, maximise customer satisfaction and meet Turkey's national refined petroleum product demand. The Company intends to achieve this goal by continuing to implement the following key strategies:

- ***Using the RUP Facility to run all refineries at full capacity.*** Before the RUP Facility became operational, it was not cost effective to run the Group's refineries at maximum capacity due to the excess of low value black products being produced. However, the Group's ability to utilise these low value products (i.e., fuel oil) as feed for the RUP Facility, which is then converted into white products (i.e., diesel, gasoline, LPG and jet fuel), now permits the Group to operate its refineries at much higher capacities. The Group's refineries reached full capacity utilisation in 2016 after the RUP Facility became operational. As a result of increased production by the Group, imports of middle distillate products into Turkey as a whole fell by 5.0 million MT compared to the year before the RUP Facility commenced operations. After the RUP Facility began production at full capacity, the İzmit Refinery's Nelson Complexity Index rose to 14.5, which increased the Company's overall average Nelson Complexity Index to 9.5. The Company also aims to utilise the RUP Facility to maintain increased white product yield. See *"—Residuum Upgrading Project"*.
- ***Increasing efficiency and decreasing costs.*** The Group aims to strengthen its sustainable profitability potential through increasing efficiency and minimising costs whilst maintaining high levels of operational excellence. In an increasingly competitive environment, Tüpraş is differentiating itself from competitors by decreasing input

costs such as energy and crude oil. The Group has the advantage of proximity to sources of crude oil and the ability, as a result of the RUP Facility, to process a wider range of crude oils, including heavier and sour crude oils. These factors enable the Company to choose the most profitable crude oils according to its plan of operations and, therefore, bolster its sustainable profitability.

- ***Being environmentally responsible.*** The Group places great importance on environmental sensitivity and the efficient use of natural resources in all of its operations. The Company achieved an industry first with its residential greywater treatment and reuse project at the İzmit Refinery, which in 2016 began treating waste water from the Körfez municipality region for industrial reuse. At the İzmir Refinery, a new water treatment plant has started to treat waste water for industrial reuse in 2017.

- ***Prioritising safety.*** The Group has established a process safety management system that meets international standards and practices. The system enables continuous monitoring of process safety and procedures, and included training on process safety leadership, process safety information systems, process hazard analysis, mechanical integrity and quality assurance, high-risk business procedures, contractor management and accident investigations, amongst other topics. In 2016, the Group issued seven new Technical Safety Standards and revised 24 existing standards. Through international consultation, the Group aims to achieve excellence in 15 main safety categories and maintain full compliance with international standards.

- ***Implementing energy management projects.*** The Group aims to implement energy management projects at each of its refineries to avoid energy losses, reduce its refineries' emissions and enhance its sustainable profitability potential, including through the application of "Best Available Technology" in operational development. Energy efficiency is measured using the Energy Intensity Index (EII). In 2016, the Company's EII was 101.8 according to management estimates. From 2008-2016, the Group has implemented a number of projects for energy saving purposes that have accounted for approximately USD 416 million. At the İzmit Refinery, the implementation of the RUP included a new power plant with gas turbines and a steam turbine with heat recovery steam generators, as well as modification of the existing steam turbine and heat recovery steam generator. At the İzmir Refinery, current projects include improvements to cracking units and base oils complex units, the renewal of pumps and compressor unloader applications. At the Kırıkkale Refinery, construction of a new power plant to include a gas turbine, steam turbine and heat recovery steam generator will begin in the fourth quarter of 2017. In addition, a solar energy project for the Batman Refinery and a wind power project for the İzmir Refinery are in consideration, with both renewable energy projects still at the engineering stage. The Company is aiming to achieve an EII figure of 96 by 2021 through continuing optimisation of energy management and its investment projects.

- ***Implementing enhancement and cost reduction projects to improve operational efficiency of refineries.*** The Group continuously aims to improve the operational efficiency of its refineries by implementing investment projects that achieve fewer shutdowns and lower maintenance costs whilst decreasing energy costs, improving product yields and lowering accident rates. Between June 2006 and Dec 2009, the Group, together with Shell Global Solutions, a global industry consulting firm, selected and implemented 80 investment projects requiring little or no capital expenditures focusing on better maintenance planning, improving efficiency, improving process control and eliminating core reasons for accidents. According to management estimates and Shell Global Solutions, implementation of these projects generated cumulative cost savings of over USD 300 million between 2007 and 2011. In March 2010, the Group, together with Shell Global Solutions, launched its "New Horizons" operational excellence program and selected 15 investment projects that were implemented by March 2013. These included advance process control implementation, combustion engineering, implementation of a "permit to work system" and creation of energy roadmaps. These investment projects required little or no capital expenditures, and were designed to increase energy efficiency and improve profitability at each of the refineries.

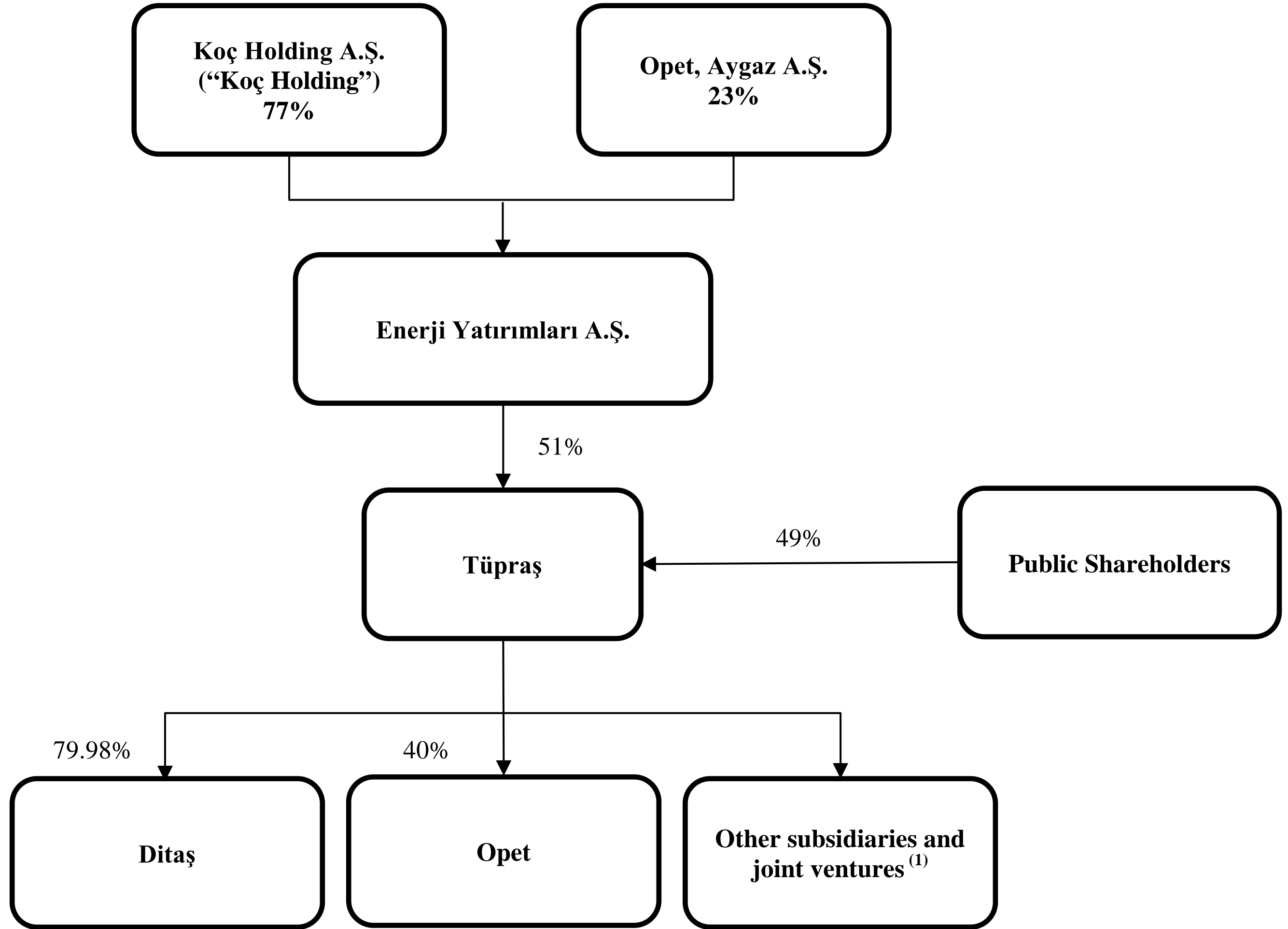
- ***Ongoing efforts to improve corporate organisation.*** In 2016, the Company carried out a restructuring with the purpose of streamlining its organisation and strengthening its personnel. The focus of management extended to include a philosophy of innovation, digital transformation and technical safety. Career planning, balanced scorecard evaluations and bonus schemes were introduced and new training programmes were launched which included tailored Masters' Degrees. The Company intends to continue such programmes and introduce new initiatives to improve the Company's knowledge base and improve staff retention.

- ***Investment in research and development.*** The Company's R&D Center at İzmit opened in 2010 and focuses primarily on process optimisation and improvement, energy efficiency and cutting-edge technologies in reaction engineering and materials science. A new research campus consisting of a design building, laboratory building and a pilot testing facility was opened at İzmit in 2014. The Turkish Government encourages investment into new research and development projects through tax incentives which partially offset the costs of the projects and the Company intends to maximise the benefits from such tax incentives and increase its capital expenditure on

R&D. In addition, the Company intends to develop certain R&D projects jointly with leading academic institutions. See "—*Research and Development*".

Corporate Structure

The following chart sets forth a summary of the Group's corporate and ownership structure.



(1) See Note 1 to the 2016 Consolidated Financial Statements for more information.

Company Address

The Company's principal office is located at Güney Mahallesi Petrol Cad. No 25, 41790 Körfez-Kocaeli Turkey and the Company's telephone number is +90 262 316 30 00.

OVERVIEW OF FINANCIAL DATA

The following tables set forth selected financial data for the Group as at and for each of the six months ended 30 June 2017 and 2016 and each of the years ended 31 December 2016, 2015 and 2014. The selected financial data has been extracted from the Consolidated Financial Statements without material adjustment and should be read in conjunction with, and is qualified in its entirety by reference to, the Consolidated Financial Statements included elsewhere in this Offering Circular. See *"Presentation of Financial and Other Information"*.

The Consolidated Financial Statements have been prepared in accordance with TFRS. TFRS differ in certain significant respects from IFRS. See Annex A: *"Summary of Significant Relevant Differences between TFRS and IFRS"*.

Income Statement Data:

	Six months ended 30 June Reviewed (Unaudited)		Year ended 31 December		
				Reclassified	
			(in thousands of TL)		
	2017	**2016**	**2016**	**2015**	**2014**
Revenue	25,000,318	14,644,570	34,854,851	36,893,328	39,722,712
Cost of sales (-)	(21,796,759)	(13,512,197)	(31,205,624)	(32,766,949)	(38,459,914)
Gross profit	**3,203,559**	**1,132,373**	**3,649,227**	**4,126,379**	**1,262,798**
Marketing, selling and distribution expenses (-)	(119,754)	(95,794)	(221,602)	(192,855)	(169,639)
General administrative expenses (-)	(368,617)	(345,601)	(748,280)	(661,458)	(545,943)
Research and development expenses (-)	(8,790)	(13,464)	(25,565)	(22,764)	(16,220)
Other operating income	139,980	99,902	184,751	142,681	173,845
Other operating expenses (-)	(56,556)	(10,647)	(481,242)	(640,215)	(269,098)
Operating profit	**2,789,822**	**766,769**	**2,357,289**	**2,751,768**	**435,743**
Income/(loss) from investment activities, net	(12,147)	(136)	161	2,560	(319)
Income/(loss) from investments accounted by equity method	118,887	68,671	158,750	70,080	(16,380)
Operating profit before financial income (expense)	2,896,562	835,304	2,516,200	2,824,408	419,044
Financial income	227,153	131,551	1,173,872	862,715	498,917
Financial expense (-)	(637,158)	(472,302)	(1,746,050)	(1,461,751)	(734,300)
Profit before tax from continued operations	2,486,557	494,553	1,944,022	2,225,372	183,661
Tax income (expense)	(147,277)	(76,428)	(131,232)	338,555	1,286,460
—Taxes on income (expense)	(259,687)	(48,441)	(91,633)	(133,346)	(5,147)
—Deferred tax income (expense)	112,410	(27,987)	(39,599)	471,901	1,291,607
Net profit from continued operations	**2,339,280**	**418,125**	**1,812,790**	**2,563,927**	**1,470,121**
Other comprehensive income:					
Items not to be reclassified to profit or loss	**—**	**—**	**(4,433)**	**7,632**	**(8,670)**
Actuarial gains/(losses) arising from defined benefit plans	—	—	(5,260)	9,414	(10,390)
Tax effect of other comprehensive income / (loss) not to be reclassified to profit or loss	—	—	827	(1,782)	1,720
—Deferred tax income/(expense)	—	—	827	(1,782)	1,720
Items to be reclassified as profit or loss	114,915	(52,103)	(580,386)	(476,853)	8,828
Cash flow hedge other comprehensive gains/(losses)	142,479	(64,888)	(777,964)	(637,390)	(559)
—Share of other comprehensive income of associates accounted for equity method that will be reclassified to profit or loss	(119)	—	40,402	28,005	7,094
Income (loss) from translation of foreign currency of investments using equity method	(119)	(30)	5,636	5,498	2,683
Tax effect of other comprehensive income / (loss) to be reclassified as to profit or loss	(27,445)	12,815	151,540	127,034	(390)
—Deferred tax (expense) income	(27,445)	12,815	151,540	127,034	(390)
Other comprehensive	114,915	(52,103)	(584,819)	(469,221)	158

income/(expense)					
Total comprehensive income	**2,454,195**	**366,022**	**1,227,971**	**2,094,706**	**1,470,279**
Distribution of profit for the period:					
Non-controlling interests	13,297	8,696	19,523	13,759	11,158
Attributable to equity holders of the parent	2,325,983	409,429	1,793,267	2,550,168	1,458,963
Distribution of other comprehensive income:					
Non-controlling interests	14,349	8,444	15,307	13,472	11,002
Attributable to equity holders of the parent	2,439,846	357,578	1,212,664	2,081,234	1,459,227

Balance Sheet Data:

	As at 30 June Reviewed (Unaudited)	As at 31 December		
		(in thousands of TL)		
	2017	2016	2015	2014
Assets				
Current assets	15,141,275	13,667,060	8,742,285	6,991,378
Cash and cash equivalents	5,540,022	6,050,721	3,027,546	3,898,396
Trade receivables	3,997,830	3,180,282	2,539,832	169,835
—Due from related parties	1,114,745	751,824	658,673	7,383
—Trade receivables from third parties	2,883,085	2,428,458	1,881,159	162,452
Other receivables	37,450	25,626	25,815	30,866
—Other receivables from third parties	37,450	25,626	25,815	30,866
Prepaid expenses	117,119	97,903	107,775	124,031
Inventories	4,188,188	3,608,439	2,102,161	2,370,534
Current income tax assets	115,159	95,928	4,317	1,235
Derivative instruments	336,485	34,731	18,845	64,606
Other current assets	809,022	573,430	915,994	331,875
Non-current assets	**17,476,006**	**17,551,120**	**16,727,831**	**14,941,182**
Financial investments	5,500	4,000	4,000	4,000
Investments accounted by equity method	972,762	923,994	762,217	726,494
Investment properties	4,621	4,621	4,621	4,621
Property, plant and equipment	11,727,966	11,741,476	11,479,744	10,663,393
Intangible assets	52,325	55,106	59,409	60,569
—Other intangible assets	52,325	55,106	59,409	60,569
Derivative instruments	79,522	368,882	250,027	—
Prepaid expenses	321,125	238,352	179,695	260,314
Deferred tax assets	3,311,996	3,227,031	3,202,503	2,623,134
Other non-current assets	1,000,189	987,658	785,615	598,657
Total assets	**32,617,281**	**31,218,180**	**25,470,116**	**21,932,560**
Liabilities				
Current liabilities	**15,901,792**	**12,660,262**	**8,828,240**	**8,561,001**
Short-term financial liabilities	142,886	385,524	94,023	40,248
Current portion of long-term financial liabilities	3,863,795	1,572,434	1,777,358	737,056
Trade payables	7,610,162	6,987,843	3,860,567	5,610,001
—Due to related parties	88,817	88,017	62,804	67,849
—Trade payables, third parties	7,521,345	6,899,826	3,797,763	5,542,152
Other payables	11,248	27,953	31,757	10,282
—Other payables to related parties	—	18,546	17,469	—
—Other payables to third parties	11,248	9,407	14,288	10,282
Provisions	128,508	65,056	70,604	108,824
—Provisions for employee benefits	46,212	13,571	7,952	6,870
—Other provisions	82,296	51,485	62,652	101,954
Deferred income	3,220	15,417	23,111	18,701
Current income tax liabilities	259,687	141,217	133,346	5,147
Liabilities for employee benefits	46,277	92,442	70,129	93,297
Derivative instruments	56,377	29,454	40,379	68
Other current liabilities	3,779,632	3,342,922	2,726,966	1,937,377
Non-current liabilities	**7,651,368**	**10,390,885**	**8,273,427**	**7,158,929**
Long-term financial liabilities	7,424,983	10,176,307	8,048,039	6,977,706
Provisions	218,600	207,415	193,973	176,023

—Provisions for employee benefits	218,600	207,415	193,973	176,023
Deferred income	4,098	3,992	2,560	2,648
Derivative instruments	2,406	1,782	27,244	491
Other non-current liabilities	1,281	1,389	1,611	2,061
Total liabilities	**23.553.160**	**23.051.147**	**17.101.667**	**15.719.930**
Equity	**9,064,121**	**8,167,033**	**8,368,449**	**6,212,630**
Share capital	250,419	250,419	250,419	250,419
Adjustment to share capital	1,344,243	1,344,243	1,344,243	1,344,243
Share premiums/discounts	—	172	172	172
Accumulated other comprehensive income/(expense) not to be reclassified to profit or loss	(7,986)	(7,986)	(3,622)	(11,186)
—Gains/ losses on revaluation and re-measurement	(6,124)	(6,124)	(2,771)	(10,115)
—Actuarial gains/(losses) arising from defined benefit plans	(6,124)	(6,124)	(2,771)	(10,115)
—Share of other comprehensive income of investments accounted using equity method that will not be reclassified to profit or loss	(1,862)	(1,862)	(851)	(1,071)
Accumulated other comprehensive income/(expense) to be reclassified to profit or loss	(873,007)	(986,870)	(410,631)	65,867
—Hedging gains/(losses)	(1,018,743)	(1,132,725)	(510,448)	(447)
—Cash flow hedge gains/(losses)	(1,018,743)	(1,132,725)	(510,448)	(447)
—Share of other comprehensive income of investments accounted using equity method that will be reclassified to profit or loss	145,736	145,855	99,817	66,314
Restricted reserves	279,668	331,337	163,401	163,401
Retained earnings	5,651,805	5,363,804	4,410,959	2,884,837
Net income	2,325,983	1,793,267	2,550,168	1,458,963
Total equity attributable to equity holders of the parent	**8,971,125**	**8,088,386**	**8,305,109**	**6,156,716**
Non-controlling interests	**92,996**	**78,647**	**63,340**	**55,914**
Total equity and liabilities	**32,617,281**	**31,218,180**	**25,470,116**	**21,932,560**

Other Financial Data:

	Six months ended 30 June Reviewed (Unaudited)		Year ended 31 December		
	2017	**2016**	**2016**	**2015**	**2014**
			(in thousands of TL)		
EBITDA[1]	3,117,409	1,023,544	3,396,329	3,798,897	739,506
Capital expenditure[2]	379,177	372,793	885,401	1,257,213	2,513,731
Net Debt[3]	5,891,642	6,918,135	6,083,544	6,891,874	3,856,614
Gearing ratio (per cent.)[4]	39.39 %	48.64%	42.69%	45.16%	38.30%

(1) EBITDA is a non-IFRS performance measure which the Group defines as profit for the year before income tax expense, financial income, financial expense and depreciation and amortisation. For additional information regarding the use of EBITDA, see *"Presentation of Financial and Other Information—Alternative Performance Measures"*.

A reconciliation between EBITDA and profit for the period is set forth below:

	Six months ended 30 June Reviewed (Unaudited)		Year ended 31 December		
	2017	**2016**	**2016**	**Reclassified 2015**	**2014**
			(in thousands of TL)		
Profit (loss) before tax from continued operations	2,486,557	494,553	1,944,022	2,225,372	183,661
Add back:					
Credit finance gains	(92,733)	(59,529)	(123,632)	(127,385)	(144,854)
Credit finance charges	40,938	5,320	13,398	8,223	9,093
Financial income	(227,153)	(131,551)	(1,173,872)	(862,715)	(498,917)
Financial expense	637,158	472,302	1,746,050	1,461,751	734,300
Foreign exchange income/expense on trade receivables, net	5,738	1,124	(9,147)	(3,651)	(6,233)
Foreign exchange income/expense on trade payables, net	(29,909)	(28,673)	458,668	613,849	149,016

Income from investment activities	12,147	136	(161)	(2,560)	319
Tax fines	—	—	—	—	54,998
Depreciation and amortisation	284,666	269,862	541,003	486,013	258,123
EBITDA	**3,117,409**	**1,023,544**	**3,396,329**	**3,798,897**	**739,506**

(2) Capital expenditure is comprised of property, plant and equipment purchases, intangible asset purchases and changes in advances given for property, plant and equipment.

(3) Equals financial liabilities (which includes short-term financial liabilities, current portion of long-term financial liabilities and long-term financial liabilities), less cash and cash equivalents (**"Net Debt"**). A calculation of Net Debt is set forth below:

	Six months ended 30 June Reviewed (Unaudited)		**Year ended 31 December**		
	2017	**2016**	**2016**	**2015**	**2014**
			(in thousands of TL)		
Short-term financial liabilities	142,886	795,321	385,524	94,023	40,248
Current portion of long-term financial liabilities	3,863,795	2,684,163	1,572,434	1,777,358	737,056
Long-term financial liabilities	7,424,983	8,038,997	10,176,307	8,048,039	6,977,706
Less:					
Cash and cash equivalents	5,540,022	4,600,346	6,050,721	3,027,546	3,898,396
Net Debt	**5,891,642**	**6,918,135**	**6,083,544**	**6,891,874**	**3,856,614**

(4) Equals Net Debt divided by total capital invested.

RISK FACTORS

An investment in the Notes involves certain risks. Prior to making an investment decision, prospective purchasers of the Notes should carefully read the entire Offering Circular. In addition to the other information in this Offering Circular, prospective investors should carefully consider the following risks relating to the Group and the Notes before making an investment in the Notes. If any of the following risks actually occur, the Group's business, financial condition, results of operations, cash flows, liquidity and prospects may be materially and adversely affected, and the Issuer's ability to make payments under the Notes and/or the market price of the Notes may be adversely affected. In addition, factors that are material for the purpose of assessing the market risks associated with the Notes are also described below. The Company believes that the factors described below represent the principal risks inherent in investing in the Notes, but the Company does not represent that the statements below regarding the risks of holding any Notes are exhaustive. For purposes of this section, the indication that a risk, uncertainty or problem may or will have a "material adverse effect" on the Group or that the Group may experience a "material adverse effect" means that the risk, uncertainty or problem could have a material adverse effect on the Group's business, financial condition, results of operations, cash flows, liquidity and prospects, or the ability of the Issuer to make payments under the Notes and/or the market price of the Notes, except as otherwise indicated or as the context may otherwise require. You should view similar expressions in this section as having a similar meaning.

This Offering Circular contains forward-looking statements that involve risks and uncertainties. See "Forward-Looking Statements". The Group's actual results could differ materially and adversely from those anticipated in these forward-looking statements as a result of certain factors, including the risks facing the Issuer described below and elsewhere in this Offering Circular.

Risks Relating to the Group and the Industry

A substantial or extended decline in refining margins would negatively impact the Group's financial results.

The Group's financial results are primarily affected by the margin between the prices at which the Group sells refined products and the prices at which the Group purchases crude oil and other feedstocks. The Group currently purchases all of the crude oil it refines principally from Iran, Iraq, Russia, Saudi Arabia, Kuwait and Kazakhstan, and also domestically. The Group primarily processes medium, heavy and sour crudes, which offer a cost advantage over lighter, sweeter crudes. Changes in the level of the light/heavy price differential could have an adverse effect on its refining margins.

The price of the crude oil the Group refines and the price at which the Group can sell its refined products may also fluctuate independently of each other due to a variety of factors beyond the Group's control, including regional and global supply of, and demand for, crude oil, gasoline, diesel, and other feedstocks and refined products. These in turn depend on, among other things, the availability and quantity of imports, the production levels of suppliers, levels of refined product inventories, productivity and growth (or the lack thereof) of regional and global economies, political affairs, and the extent of governmental regulation. Factors that may affect refining margins include:

- changes in aggregate demand and supply for crude oil, other feedstocks and refined petroleum products;
- fluctuations in the prices of crude oil, other fossil fuels and feedstocks, as well as refined petroleum and renewable products;
- evolution of worldwide refining capacity and, in particular, refining capacity that relates to petroleum and renewable products;
- new domestic refining capacity in Turkey;
- pricing and other actions taken by Tüpraş's competitors that impact the market;
- adverse weather conditions, natural disasters or other events (such as equipment malfunctions, explosions, fires or spills) affecting the Group's refineries, or those of competitors, vendors and/or suppliers;
- availability of price arbitrage for refined petroleum products between different geographical markets;
- changes in the cost and availability of logistics services for feedstocks and for refined petroleum products;
- disruptive technologies affecting demand for refined petroleum products;
- changes in the costs related to alternative ways of fulfilling regulated bio-mandates; and
- general political and economic conditions.

Depending on the nature of each factor and the particular circumstances, these factors may have either a short-term or long-term material adverse effect.

Refining margins are also significantly impacted by additional refinery conversion capacity through the expansion of existing refineries or the construction of new refineries. Worldwide and regional refining capacity expansions may result in refining production capability exceeding refined product demand, which would have an adverse effect on refining margins. See "*—Implementation of new refinery projects by competitors could adversely affect the Group's business, financial condition and results of operations in the future*" below.

The Group purchases refinery feedstocks weeks before refining and selling the refined products. Price level changes during the period between purchasing feedstocks and selling the refined products from these feedstocks could have a significant positive or negative effect on the Group's financial results. Although an increase or decrease in the price of crude oil generally results in a corresponding increase or decrease in the price of the majority of refined products, changes in the prices of refined products generally lag behind upward and downward changes in crude oil prices. As a result, a rapid and significant increase or decrease in the market price for crude oil has an adverse impact on refining margins. Historically, refining margins have been volatile and are likely to continue to be so in the future.

In addition, the Group purchases crude oil in US Dollars and sells refined products in Turkish Lira. The Group's forward pricing mechanism enables it to pass some of the impact of fluctuations in foreign exchange rates to domestic prices. However, due to the time lag described above, the impact of foreign exchange gains and losses on refining margins can be significant during periods of exchange rate volatility.

Future volatility or a decline in refining margins could have a material adverse effect on the Group's business, financial condition and results of operations.

Adverse changes in local and global economic conditions and the demand for transportation fuels may adversely impact the Group's business, financial condition and results of operations.

Prolonged downturns in the economy or any stalled economic recoveries or failure to recover could result in declines in consumer and business confidence and spending as well as increased unemployment and reduced demand for transportation fuels, which could adversely affect the business and economic environment in which the Group operates. Lower levels of economic activity in Turkey could result in declines in energy consumption, including declines in the demand for, and consumption of, the Group's refined products. As a substantial portion of the Group's sales (by volume) are domestic, this could cause the Group's revenues and margins to decline. Additionally, these risks could lead to increased volatility in prices for refined products and, as a result of these factors, materially and adversely affect the Group's business, financial condition and results of operations.

Growth of electric or alternative fuel vehicles could adversely affect demand for the Group's products.

Changes in technology or consumer preferences that alter fuel choices or affect demand for fuel, such as electric vehicles and the growth of car-sharing, may negatively affect demand for the Group's refined products. In 2016 the global stock of electric cars reached 2.0 million, forming about 0.2 per cent. of the global car fleet. While the current growth of electric cars is strong, it is occurring at an arithmetic rather than an exponential rate. The growth rate is expected to increase with technological advancements and lower-cost electricity, mainly through the development of alternative energy sources. There can be no assurance that the Company will be successful in anticipating the rate of change or be successful in identifying alternative sources of demand for its refined products.

Under the International Energy Agency's ("**IEA**") base-case scenario, the number of electric vehicles in operation is expected to reach 10 million in 2020, over 30 million by 2025 and 150 million in 2040, reducing oil demand by around 0.3mb/d in 2025 and by 1.3 mb/d in 2040. If policy incentives, such as tighter fuel-economy and emissions regulations as well as financial incentives, become stronger and more widespread, the IEA forecasts that some 715 million electric cars may be in use by 2040 (around 37 per cent. of global car fleet) and displace approximately 6 mb/d of oil demand. If such policies become commonplace or are implemented more quickly and extensively than anticipated as in the latter scenario of IEA, this could have a material adverse effect on the Group's business, financial condition and results of operations.

Disruption of the Group's ability to obtain crude oil could adversely affect Tüpraş's operations.

The Group imports a high proportion of its total crude oil from many of the world's major oil suppliers, including principally Iran, Iraq, Russia, Saudi Arabia, Kuwait and Kazakhstan (89.8 per cent. for the year ended 31 December 2016). See *"Business—Operations—Crude Supply"*. The Group is, therefore, subject to the political, geographic, and economic risks attendant to doing business with suppliers located in, and supplies originating from, these areas including the Middle East. If one or more of Tüpraş's supply contracts were terminated, or if political events disrupt the Group's crude oil supply to a significant extent and it is unable to obtain adequate crude oil volumes from other sources or the market prices for such volumes are at unfavourable levels, the Group's business, financial condition and results of operations could be materially adversely affected, including reduced sales volumes of refined products or reduced

margins as a result of higher crude oil costs.

Importation of crude oil from Iran could subject the Group to sanctions, which may have an adverse effect on the Group's business, financial condition, results of operations and reputation.

The Group purchases a substantial proportion of its crude oil from Iran. Previously, Iran was subject to international sanctions, including US extraterritorial sanctions that provided the US government with authority to impose sanctions on purchasers of crude oil from Iran unless the US government had issued an applicable exemption. During that period, the Group benefitted from an exemption from certain US sanctions relating to the purchase of crude oil from Iran, which the US government granted to Turkey on 11 June 2012.

Following the Implementation Day (16 January 2016) under the Joint Comprehensive Plan of Action ("**JCPOA**"), international sanctions no longer apply to Iranian oil exports if they do not involve any "prohibited persons"; i.e., persons designated as sanctions targets for this purpose by the UN, US or EU. However, the US sanctions that remain in place against Iran prohibit the involvement of US persons or the US financial system in such Iranian oil transactions. The Group maintains procedures intended to avoid the involvement of such US elements or prohibited persons in its Iran-related transactions, but cannot guarantee the effectiveness of such procedures.

Violations of EU, US or other international sanctions, if they occur, could subject the Group to penalties that could have a material adverse effect on the Group's ability to obtain goods and services in the international markets or access the US or international capital or bank debt markets, or cause reputational damage which could have a material adverse effect on the Group's business, financial condition and results of operations. In addition, violations of EU, US or other international sanctions could result in an event of default under the Group's various financing agreements which could result in an event of default under the Notes if the indebtedness under such agreements is accelerated.

In addition, the JCPOA provides for a "snap-back" mechanism, whereby international sanctions may be reinstated in the event of Iranian violations of the JCPOA. Furthermore, sanctions could be reinstated, or new sanctions imposed, unilaterally by any participant in the event of a dispute over Iran's compliance with its nuclear commitments or for other reasons. If any of the foregoing occurs, the ability of the Group to purchase Iranian crude oil and/or perform any contractual obligations it might have under pre-existing Iranian contracts could be put at risk, and the Group could incur material commercial losses and/or liability under the re-imposed international sanctions, depending on whether and how such sanctions might apply at such future time.

The Group also, to a lesser extent, engages in purchases of crude oil from Russia and Iraq, which are countries subject to limited, predominantly list-based US and international sanctions. Such transactions are also subject to the Group's compliance procedures, but the Group similarly cannot guarantee the effectiveness of such procedures. In addition, new sanctions measures may in the future be imposed, or re-imposed, with respect to Russia and Iraq, which may have an adverse effect on the Group's business.

Implementation of new refinery projects by competitors could adversely affect the Group's business, financial condition and results of operations in the future.

The refining business is essentially a regional one, in which competition occurs across national borders, and events in other countries, even other regions, can lead to significant impacts on the business. Accordingly, although Tüpraş is currently the only refining company in Turkey, the Group faces competition from imported refined products, as there are no regulatory or tariff barriers. As there is currently a shortfall in domestic diesel production, making the Turkish market an attractive one, global traders and other refineries may become increasingly competitive in offering refined products for export to Turkey. The Group is competing in the Mediterranean market, where there are approximately 54 refineries in operation. This regional market is impacted by events elsewhere, particularly the Black Sea region, the Middle East and North West Europe. Supply/demand balances in the region are the primary driver of Mediterranean refining margins. New greenfield refinery projects in Turkey and the Middle East may also put pressure on product prices. For example, The State Oil Company of The Azerbaijan Republic (**"SOCAR"**) is constructing a greenfield refinery in İzmir, located next to Petkim, a petrochemical plant owned by SOCAR. SOCAR Türkiye has a refining licence in Turkey (awarded in June 2010), for a refinery with a capacity of 10 million MT. Its construction began in 2014 and the refinery (STAR Refinery) is expected to be mechanically completed by the end of 2017 and to begin operations in late 2018, according to SOCAR. The expected jet fuel production for the STAR Refinery may contribute to a surplus in the Turkish market for jet fuel in 2019, and may result in the Group exporting its surplus jet fuel production. In addition, Çalik Enerji A.Ş. (**"Çalik Energy"**) was awarded a refinery licence in 2008, but there has been no progress since the grant of this licence. In June 2017, Vitol Investment Partnership Limited, an investment vehicle of Vitol Holding B.V., successfully acquired OMV Petrol Ofisi A.Ş. ("**POAŞ**"), a Turkish fuel supply and distribution company which purchased 3.8 million MT of refined products from the Group in 2016. Tüpraş is closely monitoring the potential effects of the acquisition on the volume of its sales to POAŞ, and any adverse impact cannot currently be predicted. If the Group's competitors are successful in establishing these and other refineries, the increased supply of refined products in the Mediterranean region would have a negative effect on the Group's refining margins and could adversely affect the Group's business, financial

condition and results of operations.

The Group's business could be impaired by political, social and economic instability in countries from which it obtains crude oil supplies.

Any political, social and economic instability in countries from which the Group purchases crude oil could lead to deterioration of supplier relationships due to local political pressure as governments seek greater control over their oil and gas industries. As a result, any such instability, civil disturbances or similar event in such countries could have a material adverse effect on the Group's business, financial condition and results of operations.

Oil refining is capital intensive and requires substantial on-going capital investment and the Group's capital expenditure requirements may be higher than expected.

The activities of the Group are capital intensive. The Group's business may require significant expenditure in excess of its planned investments for the purchase, maintenance and improvement of its assets, equipment and infrastructure or to comply with more stringent legal or regulatory requirements or standards voluntarily adopted by management or expected by investors.

The Group may enter into significant borrowing arrangements or raise equity financing for its operations, development or production plans, such as investments for capacity increase, petrochemical investments and/or vertical integration investments in crude oil production or distribution. For example, the total capital investment made by Tüpraş in the RUP Facility, which was mechanically completed in 2014, amounted to USD 3.26 billion (including the associated pier, railroad links and other complementary projects). A variety of factors, some of which are outside of the Group's control (including, but not limited to, the global credit environment and factors impacting emerging markets, including Turkey), may mean that the Group may be unable to obtain debt financing or equity financing in the amounts required for its expenditures, on favourable terms or at all.

If the Group fails to generate or obtain sufficient resources to fund its capital expenditure for its operations, development or production plans, this could have a material adverse effect on the Group's business, financial condition and results of operations or the Group's ability to fund the development or development of the business in the longer term.

If the Group is unable to complete its capital projects at the expected cost and in a timely manner, the Group's business, financial condition and results of operations could be materially and adversely affected.

Delays or cost increases related to capital spending programs involving engineering, procurement and construction of facilities, and improvements and repairs to the Group's other facilities, could materially adversely affect the Group's profitability and competitiveness in the future. Delays in making required changes or planned upgrades to the Group's refineries could affect its ability to supply certain products that it produces at profitable prices or volumes. Such delays or cost increases may arise as a result of unpredictable factors, many of which are beyond the Group's control, including:

- denial of or delay in receiving requisite regulatory approvals and/or permits;
- unplanned increases in the cost of construction materials or labour;
- disruptions in transportation of components or construction materials;
- adverse weather conditions, natural disasters or other events (such as equipment malfunctions, explosions, fires or spills) affecting the Group's refineries, or those of vendors or suppliers;
- shortages of sufficiently skilled labour, or labour disagreements resulting in unplanned labour unrest;
- market-related increases in a project's debt or equity financing costs; and
- non-performance by, or disputes with, vendors, suppliers, contractors or subcontractors.

Any one or more of these factors could have a significant impact on the Group's capital projects. If the Group is unable to make up the delays associated with such factors or to recover the related costs, the Group's business, financial condition and results of operations could be materially and adversely affected.

Tüpraş is a regulated entity and changes to applicable laws or regulations, the interpretation or enforcement of such laws or regulations or the failure to comply with such laws or regulations could have an adverse impact on Tüpraş's business, financial condition and results of operations.

Tüpraş is regulated by EMRA, a public entity, related to Turkey's Ministry of Energy and Natural Resources. Tüpraş's continued operations depend upon ownership of a refinery licence which is granted by EMRA. A refinery licence allows its holder to (i) establish and operate a refinery facility, (ii) purchase and sell oil, (iii) develop new products from crude oil, and (iv) purchase and sell crude oil locally with other refiners and producers. Tüpraş is subject to several key regulatory requirements, including:

- compulsory stocking;

- potential price ceilings set by EMRA for purchases and sales of refined products;
- the application of an EMRA-specified national marker on retail network products, such as gasoline and diesel;
- the satisfaction of Turkish standards (as adopted by the Turkish Standards Institution), which are similar to European standards (as adopted by one of three European Standardisation Organisations), on all products sold domestically by Tüpraş; and
- the payment of excise duty on domestically sold products.

A failure to satisfy these regulations could result in penalties, fines and cancellation of the refinery licence and/or any authorisations. Additionally, if any regulations applicable to Tüpraş should change, for example, if the stocking requirement increases or demand for its products fall due to excise duty increases, such regulations could have a material adverse effect on the Group's business, financial condition and results of operations.

The International Maritime Organisation decided in October 2016 to reduce the maximum allowable levels of sulphur and other pollutants in marine fuels used on the open seas from 3.5 per cent. by weight to 0.5 per cent. by weight by 2020. Tüpraş is adjusting its operations to comply with this requirement. While Tüpraş does not believe that this regulation will materially impact its sales volumes, there can be no assurance that future regulatory changes, to the extent they require lower levels of pollutants to be included in marine fuels, will not adversely impact Tüpraş's fuel oil sales volumes.

EMRA has issued a regulation which requires all diesel sold by distributors (excluding refineries) to contain at least 0.5 per cent. biodiesel by 1 January 2018. Tüpraş is adjusting its operations to comply with this requirement. While Tüpraş does not believe that this regulation will materially impact its sales volumes, there can be no assurance that future regulatory changes, to the extent they require higher levels of biofuel to be included in gasoline and diesel, will not adversely impact Tüpraş's sale volumes.

A significant interruption in one or more of the Group's refineries could adversely affect the Group's business.

The Group's refineries are its principal operating assets. As a result, the Group's operations could be subject to significant interruption if one or more of its refineries, particularly the İzmit Refinery or the İzmir Refinery which have larger capacities, were to experience a major accident or mechanical failure, encounter a slowdown in production or sales due to labour unrest, be damaged by severe weather, earthquakes or other natural or man-made disasters, such as an act of terrorism, or otherwise be forced to shut down. See also *"—The Group's business could be adversely impacted by the risk of earthquakes inherent in the location of its refining operations"*. Although it did not materially affect the Group's operations, the Company experienced a fire in the RUP Facility in February 2016 and suspended production at the hydrocracker unit of the RUP Facility from 3 February 2016 to 8 March 2016 and from 13 March 2016 to 7 April 2016. If any refinery were to experience an interruption in operations, earnings from the refinery could be materially adversely affected (to the extent not recoverable through insurance) because of lost production and repair costs. Additionally, if such an interruption to the Group's refining operations were to occur, the Group could find it more difficult to access capital and to obtain insurance coverage that it considers adequate. Any of the foregoing could have a material adverse effect on the Group's business, financial condition and results of operations.

A substantial decrease in the price of crude oil and refined products may reduce the value of the Group's assets.

The Group holds significant amounts of crude oil and product stocks in inventory as required by its operations, which are treated as assets and valued according to Brent crude oil and Mediterranean product prices in the international markets, and the profitability of the Group is heavily influenced by fluctuations in these prices. The Group manages its exposure to crude oil prices through both operational (via keeping stocks at optimal level and purchasing crude oil through forward-priced contracts) and financial (via entering into derivative transactions) measures. However, there are no assurances that the Group will continue to take these measures and that such measures, if taken, will be able to fully mitigate the impact of this risk on the Group's financial performance. Rapid decreases in crude oil and refined product prices may result in inventory losses, which could impact the Group's costs of sales and have a material adverse effect on the Group's business, financial condition and results of operations.

Unfavourable outcomes in pending or future litigation or investigations and regulatory actions may result in material financial penalties.

Historically, the Company has faced anti-trust investigations in Turkey and been subject to regulatory fines. The Turkish Anti-trust Law provides for substantial fines of up to 10 per cent. of the total turnover of a relevant entity, although fines have generally been substantially below the higher end of the range and are subject to appeal. A substantial legal liability or adverse regulatory outcome, and the substantial cost to defend the litigation or regulatory proceedings, may have an adverse effect on the Group's business, operating results, financial condition, cash flows and reputation.

In January 2014, the Turkish Competition Authority (the **"Competition Authority"**) imposed an administrative fine of approximately TL 412 million on the Company for allegedly abusing its dominant market position through excessive

pricing and tying. Following the decision, Tüpraş paid TL 309 million (with an early payment discount of 25 per cent.) and filed a lawsuit before the Council of State in June 2014 for the annulment of the Competition Authority ruling. An oral hearing was held in October 2016 and the lawsuit is currently pending and it is not certain that Tüpraş will prevail in its appeal. There can be no certainty that the Company will be successful in avoiding future investigations and fines, which could materially and adversely affect the Group's business, financial condition and results of operations.

For further information about the appeal, see *"General Information—Legal Proceedings"*.

The Group is subject to operational risks and its insurance may not be sufficient to cover all potential losses arising from operating hazards.

The Group's operations are subject to various hazards common to the industry, including explosions, fires, toxic emissions, maritime hazards, and natural catastrophes. Any of these risks could result in damage to or destruction of equipment, personal injury and property damage, suspension of operations or environmental damage. In addition, the amount of refined products required to be transported among each of the Group's refineries has increased since 2015 as a result of the RUP implementation, resulting in an increase in these operational risks. As protection against these hazards, Tüpraş maintains insurance coverage against such potential losses and liabilities. Tüpraş currently maintains property damage and business interruption insurance, with a coverage limit of USD 2 billion on any one occurrence, which may not be sufficient in the event of a catastrophic incident. See "*—The Group's business could be adversely impacted by earthquakes inherent in the location of the Group's refining operations*" and "*—Acts of terrorism could severely disrupt the Group's business*" below. Tüpraş may not be able to maintain or obtain insurance of the type and amount it desires at reasonable rates going forward. As a result of market conditions, premiums and deductibles for certain of Tüpraş's insurance policies could increase substantially. In some instances, certain insurance could become unavailable or available only for reduced amounts of coverage. If Tüpraş were to incur a significant liability for which it was not fully insured, the Group's business, financial position, results of operations and cash flow could be materially and adversely affected.

The Group's business could be adversely impacted by earthquakes inherent in the location of the Group's refining operations.

On 17 August 1999, a devastating earthquake measuring 7.4 on the Richter scale struck the area surrounding Kocaeli near the city of İzmit, killing approximately 18,000 people and destroying many buildings. At the İzmit Refinery there was damage but no fatalities and only one injury. The principal damage was to the refinery's main crude processing unit which was rendered inoperable and as a direct result of the earthquake, several fires erupted at the İzmit Refinery, most significantly in the pipe rack, tank farm and warehouse areas. Remediation at the İzmit Refinery took over a year to complete and the costs of remediation of approximately USD 50 million were fully-covered by insurance proceeds. Despite a significant short term impact on production at the İzmit Refinery, the Group was able to increase capacity utilisation at the Group's other refineries, and increased the volume of its imports, thereby neutralising the impact on revenue and profits in the periods following the earthquake. In an assessment from Munich Re, an insurance group that maintains a national catastrophe loss database that provides annual statistics on major global natural catastrophes, the İzmit Refinery was identified as being within the most susceptible or highest risk earthquake zone in Turkey while the İzmir and Batman Refineries fall within the next highest risk category. The Kırıkkale Refinery is in a lower risk earthquake zone. Accordingly, there remains a risk that further earthquakes may occur, which could result in significant damage to the Group's plants and could materially and adversely affect the Group's production capacity during a period of repairs. Because not all of the risks are insured, any such event could have a material and adverse effect on the Group's business, financial condition and results of operations.

The Group's compliance with environmental laws and regulations could affect the Group's result of operations.

The Group conducts its business within a strict environmental regime and may be exposed to potential liabilities and increased compliance costs. The Group is subject to increasingly stringent laws and regulations relating to environmental protection in Turkey, including laws and regulations governing emissions into the air, discharge into waterways, soil contamination and the generation, storage, handling treatment and disposal of waste materials. The Group incurs, and expects to continue to incur with respect to laws and regulations in Turkey and EU regulations that are adopted into Turkish law, capital and operating costs to comply with environmental laws and regulations. The technical requirements of environmental laws and regulations are becoming increasingly expensive, complex and stringent. These laws may provide for strict liability for damage to natural resources or threats to public health and safety. Strict liability can render a party liable for environmental damage whether or not negligence or fault on the part of that party can be shown and, if imposed by way of fine or penalty, is generally not something for which insurance can be procured. Some environmental laws provide for joint and several strict liability for remediation of spills and releases of hazardous substances.

The Group is required to obtain permits from governmental authorities for many aspects of the Group's operations, including oil refining. These laws, regulations and permits can often require the Group to purchase and install expensive pollution control equipment or to make operational changes to limit the actual or potential impacts of the Group's

operations to the environment and/or to the health of the Group's employees. Violations of such laws and regulations or permit conditions may result in substantial fines or criminal sanctions, revocations of operating permits and/or shutdowns of the Group's facilities.

The Group could be exposed to administrative and criminal sanctions, including warnings, fines and closure orders for non-compliance with these environmental regulations, which, amongst other things, limit or prohibit emissions or spills of toxic substances produced in connection with the Group's operations. Waste disposal and emissions regulations may also require the Group to clean up or retrofit the Group's refineries or other facilities at substantial cost and could result in substantial liabilities. Various Turkish and other environmental agencies inspect the Group, and may impose fines, restrictions on the Group's operations or other sanctions in connection with these inspections. In addition, the Group is subject to environmental laws that require the Group to incur significant costs to cover damage that a project may cause to the environment. These additional costs may have a negative impact on the profitability of the projects the Group intends to implement, or may make such projects economically unfeasible.

The Group cannot assure that the Group's costs of complying with current and future environmental and health and safety laws, and the Group's liabilities arising from past or future releases of, or exposure to, hazardous substances will not materially and adversely affect the Group.

In addition, due to the possibility of changes to environmental regulations and other unanticipated changes, the amount and timing of future environmental expenditures may vary substantially from those currently anticipated. Stricter enforcement of existing laws and regulations, the introduction of new laws and regulations, the discovery of previously unknown contamination or the imposition of new or increased requirements could require the Group to incur costs or become the basis of new or increased liabilities that could reduce earnings and cash available for operations and, as a result, adversely affect the Group's business, financial condition and results of operations.

Changes in Turkish tax laws may have an adverse impact on the taxes applicable to the Group's business.

The Turkish government may implement changes to tax regimes that may affect the Group and its customers. These changes include changes in prevailing tax rates and, occasionally, enactment of temporary taxes, the proceeds of which are earmarked for designated governmental purposes. Some of these changes may result in increases in the Group's tax payments, which could adversely affect profitability and increase the prices of its services, restrict its ability to do business in its existing and new markets and cause its financial results to suffer. There can be no assurance that the Group will be able to maintain its projected cash flow and profitability following increases in Turkish taxes applicable to the Group and its operations.

Acts of terrorism could severely disrupt the Group's business.

Security threats require continuous oversight and control. Strategic infrastructure targets such as energy-related assets (which could include the Group's refineries) may be at greater risk of future terrorist attacks than other targets. Acts of terrorism against the Group's refineries and other facilities, pipelines, transportation, computer systems or employees could severely disrupt business and operations and cause severe harm to people. Turkey currently has two crude oil import pipelines: the Baku-Tbilisi-Ceyhan (BTC) pipeline from Azerbaijan and a pipeline from northern Iraq to Ceyhan, Turkey. The Iraq pipeline has two branches. The original line of the Iraq pipeline stretches from Fishkhabur, on the Iraq-Turkey border, to Kirkuk, Iraq. However, this part of the pipeline has been shut down since the Islamic State in Iraq and the Levant ("**ISIS**") began seizing territory in the area in early 2014 and the pipeline was sabotaged. More recently, flows on the operating Turkish section of the pipeline have been interrupted because of security concerns and sabotage. In February and March of 2016, the pipeline was shut down for more than three weeks as a result of violence in southeast Turkey. The BTC pipeline has also been targeted in the past. There remains a risk that such acts could have a material adverse effect on the Group's business, financial condition and results of operations.

Any erosion of the Group's reputation could have a material adverse impact on the Group

The reputation of the Group and its products is critical to the maintenance of effective relationships with key stakeholders and other constituencies, such as customers and suppliers. The Group devotes significant resources to programmes designed to protect and preserve its reputation, such as social responsibility and environmental sustainability. If the Group is unable to effectively manage real or perceived issues, including concerns about safety, quality, efficiency or similar matters, these issues could negatively impact the Group or its products, and its ability to operate could be impaired and its results could suffer.

In highly competitive industries, it is critical to maintain and develop a positive image. To do so, it is critical to maintain and increase customer confidence by providing high-quality products that meet customer demands. If the Group is unable to effectively uphold its reputation, the Group's sale prices, revenues and profits may not increase and may decrease, adversely affecting the Group's business, financial condition and results of operations.

The Privatization Administration of Turkey, which holds a "golden share" in Tüpraş, may have interests that conflict

with Noteholders.

The Privatization Administration holds a class C (preferential) share, or "golden share", in Tüpraş that carries a right to appoint one director to the Company's board of directors. Pursuant to Tüpraş's articles of association, any amendments to Tüpraş's articles of association affecting the quorums of the Board of Directors, the rights of the class C (preferential) share, or accommodation of the needs of the Turkish Armed Forces; any decisions concerning a spin-off or merger or closure, sale, limitation of any kind or capacity decrease of more than 10 per cent. of any of the Group's refineries that may restrict and/or hinder the accommodation of the needs of the Turkish Armed Forces; and any decision relating to the liquidation of Tüpraş, can only be taken with the affirmative vote of the class C (preferential) share. While the Privatization Administration has never previously exercised its veto rights pursuant to the class C (preferential) share, if it were to exercise any such rights conferred to it as a result of it holding the golden share in Tüpraş, it could have a material adverse effect on the Group's business, financial condition and results of operations. See *"Share Capital, Ownership and Related Party Transactions—Share Capital and class C (Preferential) Share"*.

The Company is a publicly listed company that is subject to the CMB's regulatory regime

CMB regulations subject publicly listed companies in Turkey to regulatory obligations with respect to major corporate governance and operational issues, including the structure of the board of directors, handling of material transactions such as major asset purchases or divestitures, related party transactions, dividend distributions, reorganisations such as mergers and acquisitions and disclosure obligations. If the CMB's regulatory regime should change to adopt new rules or regulations, or the interpretation or enforcement of existing rules or regulations change, or there is a failure to comply with such rules or regulations, the Company may be materially and adversely affected, which may have an indirect material adverse effect on the Group's business, financial condition and results of operations.

The interests of Tüpraş's principal shareholder, Koç Holding may be inconsistent with the interests of the Noteholders.

Tüpraş is an affiliate of, and indirectly controlled by Koç Holding. As a result, Koç Holding has, directly or indirectly, the power, among other things, to affect Tüpraş's legal and capital structure and Tüpraş's day-to-day operations, as well as the ability to elect and change Tüpraş's management and to approve other changes to the Group's operations. The interests of Koç Holding and its affiliates could, in certain circumstances, conflict with those of the Noteholders, particularly if Tüpraş encounters financial difficulties or is unable to pay its debts when due. For example, Koç Holding could vote to cause Tüpraş to incur additional indebtedness. Koç Holding and its affiliates could also have an interest in Tüpraş pursuing acquisitions, divestitures, financings or other transactions that, in their judgment, could enhance their equity investment, although such transactions might involve risks to Noteholders.

The Group may be unable to attract and retain sufficient skilled personnel to meet its operational requirements.

Demand for engineers and other technical personnel has been and remains high worldwide while supply is limited, particularly in the case of skilled and experienced engineers. The Group's continued success will depend, in part, on its ability to continue to retain, motivate and attract qualified and experienced personnel. While the Group believes it has effective staff recruitment, training and incentive programs in place, it is not possible to guarantee that constraints in human resources will not arise in the future. A failure to recruit, train and/or retain necessary personnel could have an adverse effect on the Group's business, financial condition and results of operations. In particular, in connection with their human resources needs, new greenfield refinery projects in Turkey have and will continue to attempt to poach the Group's qualified and experienced personnel, which could negatively impact the Group's operations if sufficiently qualified replacements are not available.

The Group may be subject to labour disputes from time to time that may adversely affect the Group.

The Group is exposed to the risk of labour disputes and other industrial actions. A significant number of the Group's employees within production facilities are represented by labour unions and are covered by collective bargaining agreements which are subject to periodic renegotiation. The Group may experience strikes, work stoppages or other industrial actions in the future. Under Turkish legislation, strikes are only allowed during the periodic renegotiation of collective labour agreements, and work stoppages and other industrial actions may qualify as unlawful labour disruption should the conditions prescribed for by the legislation not be met and therefore be sanctioned by law. In addition, certain strategic industries such as banking and oil refining, amongst others, benefit from immunity from strikes and work stoppages, and Tüpraş benefits from such immunity provided under law. However, Tüpraş may nevertheless experience demonstrations and work slowdowns by its employees induced by the work-union to the extent permitted under the applicable law. Moreover, the Group may not conclude collective labour negotiations on satisfactory terms, which may result in increases in the cost of labour, or labour disturbances that could disrupt the Group's operations which may have a material adverse effect on the Group's business, financial condition or results of operations. For a description of labour-related matters, see "*Business—Employees*".

Costs associated with carbon dioxide emissions could significantly increase the Group's costs.

The Group expects continued political attention to issues concerning climate change and adaptation or mitigation through regulation that could materially affect the Group's operations. Internationally, the United Nations Framework Convention on Climate Change and the Paris Agreement address greenhouse gas emissions, and several countries including the European Union have established greenhouse gas regulatory systems.

Carbon dioxide ("**CO_2**") is a by-product of the burning of fuels (including oil and gas), and is considered a greenhouse gas. The Group's operations result in the emission of carbon dioxide. Although Turkey is a signatory of the Paris Agreement, and may be a party to similar agreements in the future, the Paris Agreement has not yet been ratified by the Turkish government and currently there is no mechanism for controlling carbon dioxide emissions in Turkey, although Turkish regulations require the monitoring, reporting and verification of greenhouse gas emissions. Compliance with the Paris Agreement may require reduction of CO_2 emissions in Turkey, and the responsibilities of Turkish companies may change following the implementation of any Turkish CO_2 mitigation regulations. If Turkey were to introduce such a mechanism, compliance could result in increased: (i) costs to operate and maintain the Group's refineries, (ii) capital expenditures to install new emission controls at the Group's refineries, and (iii) costs to administer and manage any potential greenhouse gas emissions or cap and trade or other control programs. These increased operating and compliance costs could have a material adverse effect on the Group's business, financial condition and results of operations.

Major disruption of Tüpraş's information technology systems could have a material adverse effect on the Group's business.

Tüpraş is increasingly dependent on its technology infrastructure and maintains and relies upon certain critical information systems for the effective operation of its business. Sophisticated information technology ("**IT**") systems are vulnerable to a number of problems, such as software or hardware malfunctions, malicious hacking, phishing and ransomware attacks, physical damage to vital IT centres and computer virus infection. Recent cyber-attacks have become more targeted and have caused significantly detrimental consequences on the affected businesses. The occurrence of any of the above may also significantly disrupt the Group's technology systems and may lead to important data being irretrievably lost or damaged, or to a significant interruption in normal operations. As a result, IT systems need regular upgrading to meet the needs of changing security, business and regulatory requirements and to keep pace with the requirements of Tüpraş's existing operations. In the future, Tüpraş may not be able to implement necessary upgrades on a timely basis, and upgrades may fail to function as planned. Consequently, any major disruption of its existing IT systems could have a material adverse effect on the Group's business, financial condition and results of operations.

Risks Relating to Turkey

Political developments in Turkey could have a material adverse effect on the Group's business, financial condition and results of operations.

Turkey has been a parliamentary democracy since 1923. Unstable coalition governments have been common, and in the 94 years since its formation Turkey has had numerous, short-lived governments, with political disagreements frequently resulting in early elections. The Justice and Development Party (Adalet ve Kalkinma Partisi) (the "**AKP**") has been in power since 2002 and is the first party since 1987 to have a parliamentary majority and has thus been able to govern without reliance upon a coalition partner.

Turkey held its inaugural presidential election on 10 August 2014 based on the changes in the constitution that were accepted at a referendum dated 21 October 2007. Recep Tayyip Erdoğan, leader of the ruling AKP, won the election in the first round with 51.8 per cent. of the votes. On 15 July 2016, the Turkish government was subject to an attempted coup by a Gülenist organization which is classified as a terrorist organization by Turkey under the assigned name Gülenist Terror Organisation (Fethullahçı Terör Örgütü, FETÖ). The Turkish government and the Turkish security forces (including the Turkish army) took control of the situation in a short period of time and the ruling government remained in control.

Under Article 120 of the Turkish Constitution, in the event of serious indications of widespread acts of violence aimed at the destruction of the free democratic order, a state of emergency may be declared in one or more regions of, or throughout, the country for a period not exceeding six months; however, this period may be extended. On 20 July 2016, the government declared a three-month state of emergency in the country, entitling the government to exercise additional powers. The Grand National Assembly of Turkey extended the state of emergency four times subsequently. The latest extension was approved on 17 July 2017, which extended the state of emergency for an additional three-month period. There can be no guarantee that the state of emergency will not be extended again. The state of emergency entitles the government to exercise additional powers. In this respect, investigations and similar actions have been initiated to identify the members of the Gülenist organisation and a significant number of the suspects (numbering in the thousands) across various sectors (including government, business, the military and the judiciary) have been dismissed from their roles and/or arrested. There may be further arrests and actions taken by the governmental and judicial authorities in relation to these investigations, including changes in policies and laws.

The impact on political and social circumstances following the attempted coup and its aftermath (including ratings downgrades of Turkey) has been significant and could reasonably be expected to have a material adverse impact on the Turkish economy (including the value of the TL, international investors' willingness to invest in Turkey, the cost of financing and domestic demand).

On 16 April 2017, a majority of Turkish voters approved a referendum amending certain articles of the Turkish Constitution. The amendments expand the powers of the president to create an executive presidency and are expected to be implemented gradually by November 2019, the expected date for the next general and presidential election. Following the entry into force of the package of constitutional amendments:

- the current parliamentary system will be transformed into a presidential system;
- the president will be entitled to be the head of a political party and to appoint the ministers;
- the office of the prime minister will be abolished;
- the parliament's right to interpellate ministers (that is, to submit questions requesting explanation of an act or a policy) will be annulled;
- the president will be entitled to issue decrees as the head of the government (except for certain matters such those relating to the fundamental rights and liberties and political rights); and
- the president will be entitled to dissolve parliament and call for new general elections along with presidential elections.

There can be no assurance that the political situation in Turkey will not deteriorate. Actual or perceived political instability in Turkey or any negative changes in the political environment, including further conflicts between senior politicians in Turkey or the failure of the government to devise or implement appropriate economic programmes, may individually or in the aggregate adversely affect the Turkish economy and, in turn, the Group's business, financial condition and results of operations. In addition, any changes in the treatment of the petroleum industry or the Group's regulatory environment could materially and adversely affect the Group's business, financial condition and results of operations.

Economic instability in Turkey could have a material adverse effect on the Group's business, financial condition, results of operations and prospects.

In spite of its economic development since 2001, Turkey has experienced recent economic difficulties and remains vulnerable to both external and internal shocks, including volatile oil prices and terrorist activity, as well as domestic political uncertainty and changing investor sentiment.

In 2016, Turkey's GDP growth slowed to 2.9 per cent., compared to 6.1 per cent. in 2015 and 5.2 per cent. in 2014, as the attempted coup, an increase in terrorist attacks and rising foreign exchange rates contributed to economic uncertainty. In addition, tourism revenues declined and economic growth in the EU, Turkey's biggest export market, remained slow. Turkish exports to Russia fell significantly and the Middle East export market weakened as a result of security concerns. See"—*Conflict, civil unrest and terrorism within Turkey or nearby countries could have a material adverse effect on the Group's business, financial condition and results of operations*". These factors also contributed to the Turkish Lira's depreciation against major currencies, including the Turkish Lira's 17.3 per cent. depreciation against the US Dollar on a nominal basis in the fourth quarter of 2016.

Furthermore, since the global financial crisis, the Turkish unemployment rate has remained high (10.5 per cent. as at April 2017) (Source: Turkstat), and the unemployment rate may increase in the future. Continuing high levels of unemployment may adversely affect the demand of retail customers for petroleum-based products, which could have a material adverse effect on the Group's business, financial condition and results of operations.

The Turkish economy has experienced significant inflationary pressures in the past and may be subject to similar pressures in the future. Consumer price inflation was 8.2 per cent., 8.8 per cent. and 8.5 per cent. in 2014, 2015 and 2016, respectively, and the year-on-year rate reached an eight-year high of 11.9 per cent. in April 2017. Any inflation-related measures that may be taken by the Turkish government or the Central Bank, such as the tightening of monetary policy, may reduce liquidity in the Turkish market and could have an adverse effect on the Turkish economy. If the level of inflation in Turkey were to continue to fluctuate or increase significantly, this could have a material adverse effect on the Group's business, financial condition and results of operations.

On 20 July 2016, S&P downgraded Turkey's sovereign credit rating to "BB" from "BB+", and assigned its outlook as "negative", citing, amongst other reasons, the polarisation of Turkey's political landscape. On 23 September 2016, Moody's downgraded Turkey's sovereign credit rating to "Ba1" from "Baa3" with stable outlook. On 27 January 2017, Fitch downgraded Turkey's sovereign credit rating to sub-investment grade in line with the ratings of S&P and Moody's. On the same date, S&P revised its outlook for Turkey's sovereign credit rating from "stable" to "negative" and affirmed

its credit rating at "BB". On 17 March 2017, Moody's revised its outlook for Turkey's sovereign credit rating from "stable" to "negative". Following the constitutional referendum in Turkey, on 18 April 2017 Fitch issued a statement noting that while the outcome of the referendum reflected a political shift that was negative for credit ratings, it could facilitate credit-positive economic reforms. On 19 April 2017, Moody's issued a report stating that the ability of the Turkish government to implement structural economic reforms may be limited by the potential government's focus on the domestic political agenda and geopolitical security risks. These changes in ratings and outlook may materially affect the Group's ability to obtain financing and may result in an increase in its borrowing costs.

It is not certain whether Turkey will be able to remain economically stable during any periods of renewed global economic weakness. Future negative developments in the Turkish economy could impair the Group's business strategy and have a materially adverse effect on the Group's business, financial condition and results of operations.

Turkey is an emerging market economy and may continue to be negatively affected by uncertainty regarding the global macroeconomic environment.

The US Federal Reserve began to normalise its monetary policy by raising the US federal funds rate in December 2015, December 2016 and March and June 2017. Any increase or expected increase in the US federal funds rate may encourage outflows of capital from emerging markets, a reduction of external financing to corporate entities in emerging markets, foreign currency depreciation against the US Dollar and higher long-term interest rates. Corporations with US Dollar-denominated debt may also face higher costs of borrowing due to currency depreciation. As a result, market reaction to increases in the US federal funds rate may indirectly adversely affect the Group's business, financial condition and results of operations. Emerging markets, including Turkey, experienced volatility in 2016 amid concerns that the level of foreign investment inflows would decline substantially as the liquidity-enhancing measures in the United States were tapered down. There can be no guarantee that such volatility will not continue if the US Federal Reserve raises interest rates or if market participants anticipate any further increases. Further, any slowing or reversal of accommodative monetary policies in the European Union may also cause capital outflows from emerging economies and generate a negative impact on emerging economies, which may adversely affect the Group's business, financial condition and results of operations.

Turkey's high current account deficit may result in Turkish government policies that negatively affect the Group's business.

The size of Turkey's current account deficit could lead to exchange rate adjustments and higher inflation, which could have a material adverse effect on the Group's business, financial condition and results of operations. See "—*Economic instability in Turkey could have a material adverse effect on the Group's business, financial condition, results of operations and prospects*." Sharp declines in oil and other commodity prices, combined with subdued demand for investment goods, led to a decline in the current account deficit to USD 32.2 billion (3.7 per cent. of GDP) at the end of 2015, and the current account deficit increased slightly to USD 32.6 billion at the end of 2016 (3.8 per cent. of GDP). The current account deficit for May 2017 rose to USD 5.2 billion, the largest monthly current account deficit since December 2014 and an increase from USD 3.1 million in May 2016.

Various events, including a decline in tourism revenues, poor economic conditions in Turkey's primary export customers and geopolitical risks (such as the tensions between Turkey and Russia in 2016), have led to, and may continue to result in, increases in the current account deficit. Current government policies designed to stimulate the economy, such as large-scale infrastructure projects and an interest-free loan programme for small businesses, may also increase Turkey's high current account deficit. A significant decline in the economic growth of any of Turkey's major trading partners, such as the European Union, could have an adverse impact on Turkey's balance of trade and adversely affect Turkey's economic growth.

This could in turn limit the Company's access to credit markets and foreign financial markets and negatively impact its ability to comply with its obligations, including those under the Notes. There can be no assurance that government intervention designed to counteract inflationary pressure and reduce the current account deficit, but which may be harmful to the Group's business, financial condition and results of operations, will not occur in the future.

Exchange rate movements could have a material adverse effect on the Group's business, financial condition and results of operations.

The Group's business has significant exposure to foreign currencies, including revenues, expenses and foreign currency debt, including the US Dollar and the Euro. Accordingly, fluctuations in exchange rates can have a significant effect on the Group's results and financial condition. In particular, any significant depreciation of the Turkish Lira against the US Dollar or other major currencies might also have a negative effect on the Group's ability to repay any debt denominated in currencies other than the Turkish Lira.

In particular, the Turkish Lira has demonstrated a significant degree of volatility in recent years, with particularly sharp depreciation, which has increased the foreign currency risk for the Group.

Due to market volatility, the Turkish Lira depreciated to TL 1.7826 per US Dollar at 31 December 2012, TL 2.1343 per US Dollar at 31 December 2013, TL 2.3189 per US Dollar at 31 December 2014, TL 2.9076 per US Dollar at 31 December 2015 and TL 3.5192 per US Dollar at 31 December 2016. In the first six months of 2017, the Turkish Lira appreciated 0.3 per cent. against the US Dollar. If the Turkish economy is negatively affected by continuing uncertainty in the international financial markets and a contraction of the global economy, this could result in further volatility in the Turkish Lira exchange rate. Any significant rise in the US Dollar against the Turkish Lira may have an adverse effect on the Group's business, financial condition and results of operations. See "*Management's Discussion and Analysis of Financial Condition and Results of Operations—Changes in currency exchange rates*".

The government has significant influence on the Turkish economy.

Traditionally, the government has exercised, and continues to exercise, significant influence over many aspects of the Turkish economy. The government is also directly involved in the Turkish economy through its ownership and administration of State Economic Enterprises ("**SEEs**") which, despite the divestments undertaken in the government's privatisation programme, continue to represent a significant portion of the Turkish economy. Any decisions taken by the government with respect to the SEEs or other economic institutions may have an impact on the Turkish economy and thus may indirectly adversely affect the Group's business, financial condition and results of operations.

Conflict, civil unrest and terrorism within Turkey or nearby countries could have a material adverse effect on the Group's business, financial condition and results of operations.

Turkey is located in a region that has been subject to ongoing political and security concerns, especially in recent years. Political uncertainty within Turkey and in certain neighbouring and nearby countries, such as Iraq, Syria, Iran, Georgia, Cyprus, Egypt, Tunisia, Israel, Armenia and Russia has historically been one of the potential risks associated with an investment in Turkish securities.

Turkey experiences ongoing tensions with domestic terrorist and ethnic separatist groups, such as the People's Congress of Kurdistan, known as the PKK, and jihadist militant groups in neighbouring countries, such as ISIS. In the past several years, these have resulted in a number of bombing incidents in several Turkish cities and regions, including in Reyhanlı, Suruç, Istanbul and Ankara, as well as attacks against Turkish armed forces in the south-eastern part of Turkey. On 17 February 2016, a large explosion in Ankara killed over 20 people and injured over 60 people. On 1 January 2017, a gunman attacked a nightclub in Istanbul, with ISIS later claiming responsibility for the attack. If additional attacks occur in the future, Turkey's capital markets, levels of tourism and foreign investment, amongst other things, may suffer, which could have a material adverse effect on the Group's business, financial condition and results of operations.

Since December 2010, political instability has increased markedly in a number of countries in the Middle East and North Africa, such as Syria, Iraq, Egypt, Libya, Tunisia, Jordan, Bahrain and Yemen. Unrest in these countries, as well as global tensions with Iran and between Russia and Ukraine, may have political implications in Turkey or otherwise have a negative impact on the Turkish economy, including both the financial markets and the real economy.

In addition, on 24 August 2016, Turkey began military operations in Syria in an effort to remove ISIS from the Turkish-Syrian border. These operations have resulted in, and may continue to lead to, retaliatory attacks by terrorist groups, such as ISIS or others, and create additional security risks in Turkey. There is on-going tension in the region, which was elevated following a request by Iraq on 5 October 2016 for the UN Security Council to hold a meeting to discuss the presence of Turkish troops in northern Iraq and certain Syrian border regions. Regional instability has also resulted in an influx of displaced persons into Turkey, which is expected to increase.

Furthermore, military activities in Ukraine and on its borders, including Russia effectively taking control of Crimea (followed by Crimea's independence vote and absorption by Russia) have combined with Ukraine's very weak economic conditions to create great uncertainty in Ukraine. Resolution of Ukraine's political and economic conditions will likely not be obtained for some time, and the situation could deteriorate. Whilst not directly affecting Turkey's territory, the dispute could negatively affect Turkey's economy, including through its impact on the global economy and the impact it might have on Turkey's access to Russian energy supplies.

On 24 November 2015, a Turkish fighter jet shot down a Russian military aircraft near the Turkish-Syrian border. The incident resulted in political tension, and Russia imposed certain economic sanctions on Turkey. This led to a decrease in export-import and investment activity between the countries and an escalation of geopolitical tensions. Although the restrictions have since been lifted, there can be no certainty that the relationship between the countries will not worsen in the future. The impact on Turkey's economic relationship with Russia and the geopolitical implications remain uncertain.

In June 2017, Saudi Arabia, Bahrain, the United Arab Emirates and Egypt severed diplomatic ties with Qatar and suspended air, sea and land travel to and from Qatar due to a dispute over relations with Iran. While the diplomatic standoff has not affected shipments of the Group's products, the escalation of events or circumstances such as war or hostilities could raise the prospect of supply disruptions to the flow of crude oil from the Middle East, including from Saudi Arabia, Iran and Qatar, through the Strait of Hormuz. Should these supply disruptions materialise, there can be no

assurance that the Group would be able to procure a sufficient amount of crude oil to keep its refineries operating at full or substantially full capacity, which would have a material adverse effect on its business, financial condition and results of operations.

On 25 September 2017, the residents of Kurdish-controlled areas within Iraq voted in favour of independence for the Kurdistan Region of Iraq, a semi-autonomous region within Iraq's current borders, which has substantial cross-border trade with Turkey and an oil pipeline to the Mediterranean via Turkish territory. Whilst Tüpraş conducts no business with the Kurdistan Regional Government and only purchases a small amount of Kirkuk crude oil from SOMO, the Iraq National Oil Company, in the event that Turkey or another stakeholder decides to close the border or cut the Kurdistan Region's export pipeline, this could have a negative impact on the economy in that region and the supply of energy.

The circumstances stated above have had and could continue to have a material adverse effect on the Turkish economy and the Group's customers and clients, and could in turn have a material adverse effect on the Group's assets, business, financial condition, results of operations and prospects.

The market for Turkish securities is subject to a high degree of volatility due to developments and perceptions of risks in Turkey and other countries.

In general, investing in the securities of issuers that have operations primarily in emerging markets like Turkey involves a higher degree of risk than investing in the securities of issuers with substantial operations in the United States, the member states of the EU or other similar jurisdictions. Summarised below are a number of risks relating to operating in Turkey and other emerging markets.

The market for securities issued by Turkish companies is influenced by economic and market conditions in Turkey, as well as, to varying degrees, by market conditions in both emerging market countries and more developed economies including those in the European Union and the United States. Although economic conditions differ in each country, the reaction of investors to developments in one country may cause capital markets in other countries to fluctuate. Developments or economic conditions in other emerging market countries have at times significantly affected the availability of credit to the Turkish economy and resulted in considerable outflows of funds and declines in the amount of foreign investments in Turkey. Crises in other emerging market countries may diminish investor interest in securities of Turkish issuers, including the Company's, which could adversely affect the market price of the Company's securities.

Moreover, financial turmoil in any emerging market country tends to adversely affect the prices of equity and debt securities of all emerging market countries as investors move their money to more stable, developed markets. An increase in the perceived risks associated with investing in emerging economies could dampen capital flows to Turkey and adversely affect the Turkish economy. There can be no assurance that investors' interest in Turkey will not be negatively affected by events in other emerging markets or the global economy in general. Exchange controls implemented by the Turkish government could adversely affect the business, financial condition and results or operations of the Group.

Any claims against the Company under the Notes and the related transaction documents will be unsecured claims payable from, among other sources, the Company's funds in Turkey. The ability of the Company to make any such payments from Turkey will depend, among other factors, upon the Turkish government not having imposed any prohibitive foreign exchange controls, the Company's ability to obtain USD in Turkey and the Company's ability to secure any applicable necessary approval from the relevant authority, which could be affected by changes in Turkish exchange controls. Any such restrictions or failure to obtain the necessary approval could affect the Company's ability to make payment of interest and principal under the Notes.

Uncertainties relating to Turkey's accession to the European Union may adversely affect the Turkish financial markets and result in greater volatility.

Turkey has a long-standing relationship with the EU. In 1963, Turkey signed an association agreement with the EU, and a supplementary agreement was signed in 1970 providing for a transitional second stage of Turkey's integration into the EU. Turkey commenced negotiations on its accession to the EU in October 2005. However, Turkey's accession depends on a number of economic and political factors relating to both Turkey and the EU. Although the shared objective of the negotiations is accession, these negotiations are an open ended process, the outcome and timing of which cannot be guaranteed. The EU decided in December 2006 to suspend negotiations in eight out of 35 parts, or "chapters", and not to "close" the other 27 chapters of Turkey's accession negotiations because of Turkey's restrictions with respect to the Greek Cypriot Administration. On 24 November 2016, the European Parliament voted to temporarily suspend accession negotiations with Turkey. This decision, however, is not legally binding. On 25 April 2017, the Parliamentary Assembly of the Council of Europe voted to restart monitoring Turkey in connection with human rights, the rule of law and the state of democracy. This decision might result in (or contribute to) a deterioration of the relationship between Turkey and the EU. Although Turkey continues to express a desire to become a member state of the EU, it may not become one for several more years, if at all. Delays or other adverse developments in Turkey's accession to the EU, such as the

dismantling of the customs union agreement, may have a negative effect on Turkey's economy in general, and Turkey's economic performance and credit ratings in particular and could, as a result, have an adverse effect on the Group's business, financial condition and results of operations. There can be no assurance that the EU will continue to maintain an open approach to Turkey's EU membership, that Turkey will be able to meet all the criteria applicable to becoming a member state or that Turkey will become a member state.

Turkish disclosure standards differ in certain significant respects from those in more developed markets, leading to a relatively limited amount of information being available.

The disclosure obligations applicable to Turkish companies differ in certain respects from those applicable to similar companies in the United States and the United Kingdom. There is also less publicly available information regarding Turkish companies than public companies in the United States, the United Kingdom and other more developed markets. As a result, investors might not have access to the same depth of disclosure relating to the Group as they would for investments in companies in the United States, the EU and other more-developed markets.

The Company's credit ratings may not reflect all risks, and changes to Turkey's credit ratings may affect the Company's ability to obtain funding.

Credit ratings affect the cost and other terms upon which the Company is able to obtain funding. Rating agencies regularly evaluate the Company and their ratings of its long-term debt are based on a number of factors, including its financial strength as well as conditions affecting the oil and gas industry generally. On 8 September 2017, the Company's long-term credit rating and outlook was confirmed as "Ba1" with positive outlook by Moody's. On 16 August 2017, the Company's long-term domestic and foreign currency rating was affirmed at "BBB-" (stable) by Fitch. The Notes are expected to be rated BBB- by Fitch and Ba1 by Moody's. Any ratings of either the Company or the Notes may not reflect the potential impact of all risks related to the Notes' structure, the global financial market and the Turkish refining sector, additional factors described in this *"Risk Factors"* section and any other factors that may affect the value of the Notes. There can be no assurance that the rating agencies will maintain the Company's current ratings or outlooks, which could materially adversely affect the trading values of the Notes and the Group's ability to finance its operations and the expected expansion of its business going forward, either of which could materially adversely affect the Group's business, financial condition and results of operations. A downgrade or potential downgrade of the Turkish sovereign rating could negatively affect the perception these agencies could have of the Company's rating. Investors should be aware that a credit rating is not a recommendation to buy, sell or hold securities and may be revised or withdrawn by its assigning rating agency at any time.

Risks Related to the Notes

US persons investing in the Notes may have indirect contact with countries sanctioned by the Office of Foreign Assets Control of the US Department of Treasury as a result of the Group's business with countries on the sanctions list

The Office of Foreign Assets Control of the US Department of Treasury ("**OFAC**") administers regulations that restrict the ability of US persons to invest in, or otherwise engage in business with, certain countries and territories, including Iran, Crimea, Cuba, Syria, North Korea and Sudan (each, a "**Restricted Country**"), and specially designated nationals (together, "**Sanction Targets**"). Because it is not US-based or US-owned, the Issuer is not prohibited from doing business in countries that are the subject of OFAC sanctions. In addition, because the Group is not a Sanction Target, OFAC regulations do not prohibit US persons from investing or otherwise engaging in business with the Group. However, to the extent the Group invests in, or otherwise engages in business with, Sanction Targets, US persons investing in the Group may incur the risk of indirect contact with Sanction Targets. In addition, certain US state and local governments and colleges have restrictions on the investment of public funds or endowment funds, respectively, in companies with activities in certain countries that are the subject of US sanctions. The US Department of State and other US government entities, the United Nations, the European Union and member states therein and other governments also administer and enforce sanctions against Iran and certain other countries, persons and entities. While neither the Issuer nor any of its subsidiaries is currently the target of any such sanctions, if the Issuer is designated as a sanctions target, Noteholders could be unable to sell, transfer or otherwise deal in or receive distributions with respect to the Notes and the market price of the Notes could be adversely affected.

Investors may have difficulty enforcing foreign judgments against the Issuer or its management

The majority of the Issuer's directors and executive officers are residents of Turkey and all or a substantial portion of the assets of the Issuer and such persons are located in Turkey. As a result, it may be difficult for investors to effect service of process upon the Issuer or such persons outside Turkey, or to enforce judgments or arbitral awards obtained against such parties outside Turkey.

Under the Code Concerning Private International Law and Civil Procedures (Law No. 5718), a judgment of a court established in a country other than the Republic of Turkey may not be enforced in Turkish courts in certain

circumstances. There is no treaty between Turkey and the United States or between Turkey and the United Kingdom providing for reciprocal enforcement of judgments. There is no de facto reciprocity between Turkey and the United States. Turkish courts have rendered at least one judgment in the past confirming de facto reciprocity between Turkey and the United Kingdom. However, since de facto reciprocity is decided by the relevant court on a case-by-case basis, there is uncertainty as to the enforceability of court judgments obtained in the United States or the United Kingdom by Turkish courts in the future. Moreover, there is uncertainty as to the ability of an investor to bring an original action in Turkey based on US federal, or any other non-Turkish, securities laws.

The Conditions of the Notes are governed by English law and the terms are specified with reference to that law as in effect as of the date of this Offering Circular. Similarly, the enforcement rights of the Noteholders against the Issuer and its assets in Turkey assume the application of Turkish law as presently in effect. Any possible judicial decision or change to English or Turkish law or administrative practice after the date of this Offering Circular may impact the Notes.

An active trading market for the Notes may not develop

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. In addition, liquidity may be limited if the Issuer makes large allocations to a limited number of investors. 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. Illiquidity may have a severely adverse effect on the market value of the Notes.

Application has been made to the London Stock Exchange for the Notes to be admitted to listing on the Official List and to trading on the Regulated Market of the London Stock Exchange. There can be no assurance that either such listing or admission to trading will be obtained or, if such listing or admission to trading is obtained, that an active trading market will develop or be sustained. In addition, the liquidity of any market for the Notes will depend on the number of holders of the Notes, the interest of securities dealers in making a market in the Notes, and other factors. Accordingly, there can be no assurance as to the development or liquidity of any market for the Notes.

The trading price of the Notes may be volatile

The market for the Notes will be influenced by economic and market conditions in Turkey and, to varying degrees, interest rates, currency exchange rates and inflation rates in other countries, such as the United States, the member states of the EU and elsewhere. There can be no assurance that an active trading market for the Notes will develop, or, if one does develop, that events in Turkey or elsewhere will not cause market volatility, or that such volatility will not adversely affect the liquidity or the price of the Notes or that economic and market conditions will not have any other adverse effect. If the Notes are traded after their initial issuance, they may trade at a discount to their offering price, depending upon prevailing interest rates, the market for similar securities, general economic conditions, the financial condition of the Group or other factors. Any such volatility could have a material adverse effect on the Group's business, financial condition, results of operations and prospects, as well as on the trading price of the Notes.

Financial turmoil in emerging markets could cause the market price of the Notes to be adversely affected

While in recent years Turkey has undergone significant political and economic reform, which has increased domestic political and economic stability and contributed to economic growth, Turkey is nonetheless considered by international investors to be an emerging market. In general, investing in the securities of issuers that have operations primarily in emerging markets like Turkey involves a higher degree of risk than investing in the securities of issuers with substantial operations in the United States, the countries of the European Union or similar jurisdictions. The market price of the Notes is influenced by economic and market conditions in Turkey and, to a varying degree, economic and market conditions in both emerging market countries and more developed economies, including those in the European Union and the United States. Financial turmoil in Turkey and emerging markets in the past has adversely affected market prices in the world's securities markets for companies that operate in developing economies. Even if the Turkish economy remains relatively stable, financial turmoil in these countries could materially adversely affect the market price of the Notes.

Transfer of the Notes will be subject to certain restrictions

Although the Notes have been authorised by the CMB as debt securities to be offered outside Turkey, the Notes have not been and will not be registered under the Securities Act or any US state securities laws. Prospective investors may not offer or sell the Notes, except pursuant to an exemption from, or in a transaction not subject to, the registration requirements of the Securities Act and applicable state securities laws. Similar restrictions will apply in other jurisdictions. Prospective investors should read the discussion under the heading "*Transfer Restrictions*" for further

information about these transfer restrictions. It is the obligation of investors to ensure that their offers and sales of the Notes within the United States, Turkey and other countries comply with any applicable securities laws.

Redemption for taxation reasons – The Issuer will have the right to redeem the Notes upon the occurrence of certain changes requiring it to pay withholding taxes in excess of current levels, if any, applicable to interest or other payments on the Notes

In the event that the Issuer is 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 the Republic of Turkey 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. In particular, the withholding tax rate on interest payments in respect of notes issued by Turkish entities outside of Turkey varies depending on the original maturity of such notes. Pursuant to Turkish law, with respect to notes with a maturity of less than one year, the withholding tax rate on interest is 10 per cent., with respect to notes with a maturity of at least one and less than three years, the withholding tax rate on interest is 7 per cent., with respect to notes with a maturity of at least three and less than five years, the withholding tax rate on the interest is 3 per cent., and for notes with a maturity of five years or more the withholding tax rate is 0 per cent. Accordingly, the withholding tax rate on interest on the Notes is 0 per cent.

Changes in respect of the credit ratings of the Notes may materially and adversely affect the trading price of the Notes and otherwise materially and adversely affect the Issuer

Credit ratings affect the cost and other terms upon which the Issuer is able to obtain funding. As at 16 October 2017, the Issuer's long-term domestic and foreign currency rating was BBB- (stable) from Fitch and Ba1 (positive) from Moody's. The Notes are expected to be rated BBB- by Fitch and Ba1 by Moody's. Each of Fitch and Moody's is established in the European Union and is registered under the CRA Regulation. In addition to the ratings on the Notes provided by Fitch and Moody's, one or more other independent credit rating agencies may assign credit ratings to the Notes. The ratings do not address the likelihood that the principal on the Notes will be prepaid, paid on an expected final payment date or paid on any particular date before the legal final maturity date of the Notes. Credit ratings assigned to the Notes do not necessarily mean that they are a suitable investment. The ratings of the Notes are not a recommendation to purchase, hold or sell the Notes by the rating organisation or any other person, and the ratings do not address or comment on the marketability of the Notes, the market price of the Notes or suitability for any particular investor. The ratings may not reflect the potential impact of the risks discussed herein, as well as any other factors that may affect the value of the Notes. The ratings are subject to revision or withdrawal at any time by the assigning rating organisation and each rating should be evaluated independently of any other rating. Similar ratings on different types of notes do not necessarily mean the same thing.

There can be no assurance that the rating agencies will maintain the Issuer's current ratings or outlooks, which could materially adversely affect the trading values of the Notes. The Issuer cannot be certain that a credit rating of the Notes will remain for any given period of time or that a credit rating will not be downgraded or withdrawn entirely by the relevant rating organisation if, in its judgment, circumstances in the future so warrant. The assigned ratings may be raised or lowered depending on, among other factors, the rating agencies' respective assessment of the Issuer's financial strength, as well as their assessment of Turkish sovereign or corporate risk generally. Neither the Issuer nor any of the Joint Bookrunners has any obligation to inform the Noteholders of any such revision, downgrade or withdrawal. Any adverse change in an applicable credit rating could have a material adverse effect on the trading price of the Notes.

In addition, credit ratings impact the interest rates paid by the Issuer on funds that are borrowed and the market's perception of the Issuer's financial strength. If the ratings on the Notes were reduced and the market were to perceive any such reduction as a deterioration of the Issuer's financial strength, the Issuer's cost of borrowing would likely increase and the Issuer's results of operations could decrease, all of which could have a material adverse effect on the Issuer.

Claims of Noteholders under the Notes are effectively subordinated to those of certain other creditors and liabilities of the Issuer

The Issuer's obligations under the Notes will constitute unsecured and unsubordinated obligations. Accordingly, any claims against the Issuer under the Notes would be unsecured claims. The ability of the Issuer to pay such claims will depend upon, among other factors, its liquidity, overall financial strength and ability to generate cash flows and to receive cash flows from its direct and indirect subsidiaries and joint ventures. The Notes will rank equally with all of the Issuer's other unsecured and unsubordinated indebtedness; however, the Notes will be effectively subordinated to the Issuer's secured indebtedness, if any, to the extent of the value of the assets securing such transactions, and will be subordinated to certain preferential obligations under Turkish law in the event of bankruptcy, such as wages of

employees. Generally, lenders and trade and other creditors of the Issuer's subsidiaries and joint ventures are entitled to payment of their claims from the assets of such subsidiaries or joint ventures before these assets are made available for distribution to the Issuer, as direct or indirect shareholder. Moreover, the ability of the Issuer to make payments from Turkey will depend upon, among other factors, the Turkish Government not having imposed any restrictive foreign exchange controls, the Issuer's ability to obtain US dollars and the Issuer's ability to secure any necessary approval that may be required as a result of the imposition of or any change to Turkish exchange controls.

The Notes are subject to exchange rate risks and exchange controls

The Issuer will pay principal and interest on the Notes in US dollars. 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 US dollars. These include the risk that exchange rates may significantly change (including changes due to the depreciation of the US dollar or appreciation 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 US dollar would decrease: (i) the Investor's Currency-equivalent yield on the Notes; (ii) the Investor's Currency-equivalent value of the principal payable on the Notes; and (iii) the Investor's Currency-equivalent market value of the Notes.

Governments and monetary authorities may impose (as some have in the past) exchange controls that could materially adversely affect an applicable exchange rate. As a result, investors may receive less interest or principal than expected, or no interest or principal at all. This could have a material adverse effect on the trading price of the Notes.

The value of the Notes may be adversely affected by movements in market interest rates

Investment in the Notes involves the risk that if market interest rates subsequently increase above the rate paid on the Notes, this will adversely affect the value of the Notes.

The Terms and Conditions of the Notes provide for decisions of majorities to bind all Noteholders

The Terms and Conditions of the Notes 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. As a result, such binding decisions made by majorities of Noteholders may be adverse to the interests of potential investors.

Substitution of the Issuer

The Terms and Conditions of the Notes provide that the Issuer, or any previous substituted company, may at any time, without the consent of the Noteholders, substitute for itself as principal debtor under the Notes any company (the "**Substitute**"), provided that no payment in respect of the Notes is at the relevant time overdue. The substitution shall be made by a deed poll (the "**Substitution Deed Poll**"), to be substantially in the form exhibited to the Fiscal Agency Agreement.

The obligations of the Substitute under the Substitution Deed Poll and the Notes shall be unconditionally guaranteed by the Issuer by means of the Substitution Deed Poll, except where the Substitute is a Successor in Business (such term as defined in Condition 12(c), and which could include a member of the Koç Holding Group (as defined in Condition 12(c)) to whom substantially all, rather than all of the assets and undertakings of the Issuer are transferred, and which carries on substantially all, rather than all of the business carried on by the Issuer immediately prior thereto), in which event a guarantee from the Issuer shall not be required. Accordingly, where the Substitute is a Successor in Business, the Noteholders shall not receive the benefit of such a guarantee from the Issuer.

In addition, the assumption by a Substitute of the obligations of the Issuer under the Notes pursuant to a substitution might be treated for US federal income tax purposes as a deemed disposition of Notes by a US Holder in exchange for new notes issued by the new obligor. As a result of this deemed disposition, a US Holder could be required to recognise capital gain or loss for US federal income tax purposes equal to the difference, if any, between the fair market value at that time of the US Holder's Notes, and the US Holder's tax adjusted basis in those Notes. US Holders should consult their tax advisors concerning the US federal income tax consequences to them of a change in obligor with respect to the Notes. See "*Taxation - Certain US Federal Income Tax Consequences - Substitution of the Issuer*".

Change of law could adversely impact Noteholders

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

Investors in the Notes must rely on DTC, Euroclear and Clearstream, Luxembourg procedures

The Rule 144A Notes will be represented on issue by a Rule 144A Global Note that will be deposited with a custodian for DTC. The Regulation S Notes will be represented on issue by a Regulation S Global Note that will be deposited with a common depositary for Euroclear and Clearstream, Luxembourg. Except in the limited circumstances described in "*The Global Certificates – Exchange and Registration of Title*", owners of interests in the Notes will not be entitled to receive physical delivery of Global Certificates. DTC, Euroclear and Clearstream, Luxembourg and their respective direct and indirect participants 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 DTC, Euroclear and Clearstream, Luxembourg and their respective direct and indirect participants, as more fully described in "*Book-Entry Clearance Systems*". While the Notes are represented by the Global Notes, the Issuer will discharge its payment obligation under the Notes by making payments through the relevant clearing systems. A holder of a beneficial interest in a Global Note must rely on the procedures of the relevant clearing system and its participants to receive payments under the Notes. The Issuer has no responsibility or liability for the records relating to, or payments made in respect of, beneficial interests in either Global Note. Holders of beneficial interests in a Global Note 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 the relevant clearing system and its participants to appoint appropriate proxies.

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) the Notes are legal investments for it, (2) the Notes can be used as collateral for various types of borrowing, and (3) other restrictions apply to its purchase or pledge of the Notes. Financial institutions should consult their legal advisers or the appropriate regulators to determine the appropriate treatment of the Notes under any applicable risk-based capital or similar rules.

OVERVIEW OF THE NOTES

The following is an overview of certain information relating to the offering of the Notes, including the principal provisions of the terms and conditions thereof. This overview is indicative only, does not purport to be complete and is qualified in its entirety by the more detailed information appearing elsewhere in this Offering Circular. See, in particular, "Terms and Conditions of the Notes".

Issue:	USD700,000,000 principal amount of 4.50 per cent. Notes due 2024.
Issuer:	Türkiye Petrol Rafinerileri A.Ş.
Issue Date:	18 October 2017.
Maturity Date:	18 October 2024.
Issue Price:	100.00 per cent. of the principal amount.
Interest and Interest Payment Dates:	The Notes will bear interest from and including 18 October 2017 at the rate of 4.50 per cent. per annum, payable semi-annually in arrear on each of 18 April and 18 October in each year (each, an "**Interest Payment Date**"); provided that, as described in Condition 7, if any such date is not a business day (as defined in Condition 7), then such payment will be made on the next business day. The first payment (for the period from and including the Issue Date to but excluding 18 April 2018 and amounting to USD22.50 per USD1,000 principal amount of Notes) will be made on 18 April 2018.
Per Annum Yield:	4.50 per cent.
Use of Proceeds:	The net proceeds of the Offering will solely be used to redeem or pay interest on the Issuer's USD 700,000,000 aggregate principal amount of 4.125 per cent. notes due 2 May 2018.
Status:	The Notes will constitute direct, unconditional, unsubordinated and (subject to Condition 4) unsecured obligations of the Issuer and rank, and shall at all times rank *pari passu* and without any preference among themselves. The payment obligations of the Issuer under the Notes shall, save for such exceptions as may be provided by applicable legislation and subject to Condition 4, at all times rank at least equally with all other present and future unsecured and unsubordinated obligations of the Issuer.
Negative Pledge:	The terms of the Notes contain a negative pledge provision binding on the Issuer as further described in Condition 4.
Certain Covenants:	The Issuer will agree to certain covenants, including covenants limiting transactions with affiliates. See "*Terms and Conditions of the Notes – Condition 4*" for the details of such covenants.
Taxation Payment of Additional Amounts:	All payments of principal and interest in respect of the Notes by or on behalf of the Issuer shall be made without withholding or deduction for, or on account of, any present or future taxes, duties, assessments or governmental charges of whatever nature ("**Taxes**") imposed, levied, collected, withheld or assessed by or on behalf of the Relevant Jurisdiction (as defined in Condition 8), unless such withholding or deduction of Taxes is required by law. In that event, the Issuer will (subject to certain exceptions) pay such additional amounts as may be necessary in order that the net amounts received by the Noteholders after the withholding or deduction shall equal the respective amounts which would have been receivable in respect of the Notes in the absence of the withholding or deduction. Under current Turkish law, withholding tax at the rate of 0 per cent. applies on interest on notes with an initial maturity

of five years and more. See "*Taxation – Certain Turkish Tax Considerations*".

See "*Terms and Conditions of the Notes – Condition 8*".

Redemption at the Option of the Issuer:

The Issuer may redeem all (but not some only) of the Notes at any time during the period commencing on (and including) the day that is 90 days prior to the Maturity Date to (but excluding) the Maturity Date at their principal amount, together with interest accrued to the date fixed for redemption.

At any time prior to the day that is 90 days prior to the Maturity Date the Issuer may at its option redeem all (but not some only) of the Notes at the Make-Whole Redemption Price (as defined in the Terms and Conditions of the Notes).

Redemption for Taxation Reasons:

The Notes may be redeemed at the option of the Issuer in whole, but not in part, at any time (subject to certain conditions), at their principal amount (together with interest accrued to the date fixed for redemption) if:

- the Issuer has or will become obliged to pay additional amounts as provided or referred to in Condition 8 as a result of any change in, or amendment to, the laws or regulations of the Republic of Turkey 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, which change or amendment becomes effective on or after 16 October 2017, and

- such obligation cannot be avoided by the Issuer taking reasonable measures available to it.

See "*Terms and Conditions of the Notes – Condition 6*".

Events of Default:

The Notes will be subject to certain Events of Default including (among others) non-payment of principal for 3 Business Days, non-payment of interest for 7 Business Days, failure to perform or observe any of the other obligations in respect of the Notes, cross-acceleration and certain events related to bankruptcy and insolvency, all as further described in Condition 9. See "*Terms and Conditions of the Notes – Condition 9*".

Substitution of the Issuer:

The terms of the Notes contain provisions allowing for the substitution of the Issuer as principal debtor. See "*Terms and Conditions of the Notes – Condition 12(c)*" and "*Taxation -Certain US Federal Income Tax Consequences - Substitution of the Issuer*".

Form, Transfer and Denominations:

Notes offered and sold in reliance upon Regulation S will be represented by beneficial interests in the Unrestricted Global Certificate in registered form, without interest coupons attached, which will be delivered to a common depositary for, and registered in the name of a common nominee of, Euroclear and Clearstream, Luxembourg. Notes offered and sold in reliance upon Rule 144A will be represented by beneficial interests in the Restricted Global Certificate(s), in registered form, without interest coupons attached, which will be deposited with the Custodian and registered in the name of Cede & Co. as nominee for

	DTC. Except in limited circumstances, certificates for the Notes will not be issued in exchange for beneficial interests in the Global Certificates. See "*Terms and Conditions of the Notes – Condition 1*". Interests in the Rule 144A Notes will be subject to certain restrictions on transfer. See "*Transfer Restrictions*". Interests in the Global Certificates will be shown on, and transfers thereof will be effected only through, records maintained by Euroclear and Clearstream, Luxembourg, in the case of the Regulation S Notes, and by DTC and its direct and indirect participants, in the case of Rule 144A Notes. Notes will be issued in denominations of USD200,000 and integral multiples of USD1,000 in excess thereof.
Governing Law:	The Fiscal Agency Agreement and the Notes 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.
Listing and Trading:	Application has been made to the UK Listing Authority for the Notes to be admitted to the Official List and to the London Stock Exchange for the Notes to be admitted to trading on the London Stock Exchange's Regulated Market; however, no assurance can be given that such applications will be accepted.
Selling Restrictions:	The Notes have not been and will not be registered under the Securities Act or any state securities laws, and beneficial interests therein may not be offered or sold within the United States or to, or for the account or benefit of, any US person (as defined in Regulation S under the Securities Act) except to QIBs in reliance upon the exemption from the registration requirements of the Securities Act provided by Rule 144A or otherwise pursuant to an exemption from, or in a transaction not subject to, the registration requirements of the Securities Act. The offer and sale of Notes (or beneficial interests therein) is also subject to restrictions in Turkey and the United Kingdom. See "*Selling Restrictions*".
Risk Factors:	For a discussion of certain risk factors relating to the Group, Turkey and the Notes that prospective investors should carefully consider prior to making an investment in the Notes, see "*Risk Factors*".
Regulation S Notes Security Codes:	ISIN: XS1686704948 Common Code: 168670494
Rule 144A Notes Security Codes:	ISIN: US90015MAB19 CUSIP: 90015M AB1 Common Code: 169614903
Representation of Noteholders:	There will be no trustee.
Expected Rating(s):	BBB- by Fitch and Ba1 by Moody's. A credit rating is not a recommendation to buy, sell or hold securities and may be subject to revision, suspension or withdrawal at any time by the assigning rating organisation.
Fiscal Agent, Paying Agent and Transfer Agent:	Citibank, N.A., London Branch
Registrar:	Citigroup Global Markets Deutschland AG

USE OF PROCEEDS

The net proceeds from the issuance of the Notes will solely be used to redeem or pay interest on the Issuer's USD 700,000,000 aggregate principal amount of 4.125 per cent. notes due 2 May 2018.

CAPITALISATION OF THE GROUP

The following table sets forth the short-term and long-term debt, shareholders' equity and capitalisation of the Group as at 30 June 2017. This table should be read in conjunction with the Consolidated Financial Statements included elsewhere in this Offering Circular.

	As of 30 June 2017
	(TL thousands)
Short-term financial liabilities	**4,006,681**
Long-term financial liabilities	**7,424,983**
Shareholders' Equity	
Share Capital	250,419
Adjustment to share capital	1,344,243
Accumulated other comprehensive income/(expense) not to be reclassified to profit or loss	(7,986)
Accumulated other comprehensive income/(expense) to be reclassified to profit or loss	(873,007)
Restricted reserves	279,668
Retained earnings	5,651,805
Net income for the period	2,325,983
Equity holders of the parent	**8,971,125**
Non-controlling interests	**92,996**
Total capitalisation	**20,495,785**

SELECTED FINANCIAL INFORMATION

The following tables set forth selected financial data for the Group as at and for each of the six months ended 30 June 2017 and 2016 and each of the years ended 31 December 2016, 2015 and 2014. The selected financial data has been extracted from the Consolidated Financial Statements without material adjustment and should be read in conjunction with, and is qualified in its entirety by reference to, the Consolidated Financial Statements included elsewhere in this Offering Circular. See *"Presentation of Financial and Other Information"*.

The Consolidated Financial Statements have been prepared in accordance with TFRS. TFRS differ in certain significant respects from IFRS. See Annex A: *"Summary of Significant Relevant Differences between TFRS and IFRS"*.

Income Statement Data:

	Six months ended 30 June Reviewed (Unaudited)		**Year ended 31 December**		
				Reclassified	
			(in thousands of TL)		
	2017	**2016**	**2016**	**2015**	**2014**
Revenue...	25,000,318	14,644,570	34,854,851	36,893,328	39,722,712
Cost of sales (-)...................................	(21,796,759)	(13,512,197)	(31,205,624)	(32,766,949)	(38,459,914)
Gross profit	**3,203,559**	**1,132,373**	**3,649,227**	**4,126,379**	**1,262,798**
Marketing, selling and distribution expenses (-)	(119,754)	(95,794)	(221,602)	(192,855)	(169,639)
General administrative expenses (-)	(368,617)	(345,601)	(748,280)	(661,458)	(545,943)
Research and development expenses (-)	(8,790)	(13,464)	(25,565)	(22,764)	(16,220)
Other operating income	139,980	99,902	184,751	142,681	173,845
Other operating expenses (-)................	(56,556)	(10,647)	(481,242)	(640,215)	(269,098)
Operating profit.................................	**2,789,822**	**766,769**	**2,357,289**	**2,751,768**	**435,743**
Income/(loss) from investment activities, net	(12,147)	(136)	161	2,560	(319)
Income/(loss) from investments accounted by equity method	118,887	68,671	158,750	70,080	(16,380)
Operating profit before financial income (expense)	2,896,562	835,304	2,516,200	2,824,408	419,044
Financial income	227,153	131,551	1,173,872	862,715	498,917
Financial expense (-)	(637,158)	(472,302)	(1,746,050)	(1,461,751)	(734,300)
Profit before tax from continued operations...	2,486,557	494,553	1,944,022	2,225,372	183,661
Tax income (expense)	(147,277)	(76,428)	(131,232)	338,555	1,286,460
—Taxes on income (expense)..............	(259,687)	(48,441)	(91,633)	(133,346)	(5,147)
—Deferred tax income (expense)	112,410	(27,987)	(39,599)	471,901	1,291,607
Net profit from continued operations	**2,339,280**	**418,125**	**1,812,790**	**2,563,927**	**1,470,121**
Other comprehensive income:					
Items not to be reclassified to profit or loss	**—**	**—**	**(4,433)**	**7,632**	**(8,670)**
Actuarial gains/(losses) arising from defined benefit plans............................	—	—	(5,260)	9,414	(10,390)
Tax effect of other comprehensive income / (loss) not to be reclassified to profit or loss	—	—	827	(1,782)	1,720
—Deferred tax income/(expense)	—	—	827	(1,782)	1,720
Items to be reclassified as profit or loss	114,915	(52,103)	(580,386)	(476,853)	8,828
Cash flow hedge other comprehensive gains/(losses)	142,479	(64,888)	(777,964)	(637,390)	(559)
—Share of other comprehensive income of associates accounted for equity method that will be reclassified to profit or loss..................	(119)	—	40,402	28,005	7,094
Income (loss) from translation of foreign currency of investments using equity method	(119)	(30)	5,636	5,498	2,683
Tax effect of other comprehensive income / (loss) to be reclassified as to profit or loss	(27,445)	12,815	151,540	127,034	(390)
—Deferred tax (expense) income	(27,445)	12,815	151,540	127,034	(390)
Other comprehensive	114,915	(52,103)	(584,819)	(469,221)	158

income/(expense)					
Total comprehensive income	**2,454,195**	**366,022**	**1,227,971**	**2,094,706**	**1,470,279**
Distribution of profit for the period:					
Non-controlling interests	13,297	8,696	19,523	13,759	11,158
Attributable to equity holders of the parent	2,325,983	409,429	1,793,267	2,550,168	1,458,963
Distribution of other comprehensive income:					
Non-controlling interests	14,349	8,444	15,307	13,472	11,002
Attributable to equity holders of the parent	2,439,846	357,578	1,212,664	2,081,234	1,459,227

Balance Sheet Data:

	As at 30 June	As at 31 December		
		(in thousands of TL)		
	2017	2016	2015	2014
Assets				
Current assets	15,141,275	13,667,060	8,742,285	6,991,378
Cash and cash equivalents	5,540,022	6,050,721	3,027,546	3,898,396
Trade receivables	3,997,830	3,180,282	2,539,832	169,835
—Due from related parties	1,114,745	751,824	658,673	7,383
—Trade receivables from third parties	2,883,085	2,428,458	1,881,159	162,452
Other receivables	37,450	25,626	25,815	30,866
—Other receivables from third parties	37,450	25,626	25,815	30,866
Prepaid expenses	117,119	97,903	107,775	124,031
Inventories	4,188,188	3,608,439	2,102,161	2,370,534
Current income tax assets	115,159	95,928	4,317	1,235
Derivative instruments	336,485	34,731	18,845	64,606
Other current assets	809,022	573,430	915,994	331,875
Non-current assets	**17,476,006**	**17,551,120**	**16,727,831**	**14,941,182**
Financial investments	5,500	4,000	4,000	4,000
Investments accounted by equity method	972,762	923,994	762,217	726,494
Investment properties	4,621	4,621	4,621	4,621
Property, plant and equipment	11,727,966	11,741,476	11,479,744	10,663,393
Intangible assets	52,325	55,106	59,409	60,569
—Other intangible assets	52,325	55,106	59,409	60,569
Derivative instruments	79,522	368,882	250,027	—
Prepaid expenses	321,125	238,352	179,695	260,314
Deferred tax assets	3,311,996	3,227,031	3,202,503	2,623,134
Other non-current assets	1,000,189	987,658	785,615	598,657
Total assets	**32,617,281**	**31,218,180**	**25,470,116**	**21,932,560**
Liabilities				
Current liabilities	**15,901,792**	**12,660,262**	**8,828,240**	**8,561,001**
Short-term financial liabilities	142,886	385,524	94,023	40,248
Current portion of long-term financial liabilities	3,863,795	1,572,434	1,777,358	737,056
Trade payables	7,610,162	6,987,843	3,860,567	5,610,001
—Due to related parties	88,817	88,017	62,804	67,849
—Trade payables, third parties	7,521,345	6,899,826	3,797,763	5,542,152
Other payables	11,248	27,953	31,757	10,282
—Other payables to related parties	—	18,546	17,469	—
—Other payables to third parties	11,248	9,407	14,288	10,282
Provisions	128,508	65,056	70,604	108,824
—Provisions for employee benefits	46,212	13,571	7,952	6,870
—Other provisions	82,296	51,485	62,652	101,954
Deferred income	3,220	15,417	23,111	18,701
Current income tax liabilities	259,687	141,217	133,346	5,147
Liabilities for employee benefits	46,277	92,442	70,129	93,297
Derivative instruments	56,377	29,454	40,379	68
Other current liabilities	3,779,632	3,342,922	2,726,966	1,937,377
Non-current liabilities	**7,651,368**	**10,390,885**	**8,273,427**	**7,158,929**
Long-term financial liabilities	7,424,983	10,176,307	8,048,039	6,977,706
Provisions	218,600	207,415	193,973	176,023
—Provisions for employee benefits	218,600	207,415	193,973	176,023

Deferred income	4,098	3,992	2,560	2,648
Derivative instruments	2,406	1,782	27,244	491
Other non-current liabilities	1,281	1,389	1,611	2,061
Total liabilities	**23.553.160**	**23.051.147**	**17.101.667**	**15.719.930**
Equity	**9,064,121**	**8,167,033**	**8,368,449**	**6,212,630**
Share capital	250,419	250,419	250,419	250,419
Adjustment to share capital	1,344,243	1,344,243	1,344,243	1,344,243
Share premiums/discounts	—	172	172	172
Accumulated other comprehensive income/(expense) not to be reclassified to profit or loss	(7,986)	(7,986)	(3,622)	(11,186)
—Gains/ losses on revaluation and re-measurement	(6,124)	(6,124)	(2,771)	(10,115)
—Actuarial gains/(losses) arising from defined benefit plans	(6,124)	(6,124)	(2,771)	(10,115)
—Share of other comprehensive income of investments accounted using equity method that will not be reclassified to profit or loss	(1,862)	(1,862)	(851)	(1,071)
Accumulated other comprehensive income/(expense) to be reclassified to profit or loss	(873,007)	(986,870)	(410,631)	65,867
—Hedging gains/(losses)	(1,018,743)	(1,132,725)	(510,448)	(447)
—Cash flow hedge gains/(losses)	(1,018,743)	(1,132,725)	(510,448)	(447)
—Share of other comprehensive income of investments accounted using equity method that will be reclassified to profit or loss	145,736	145,855	99,817	66,314
Restricted reserves	279,668	331,337	163,401	163,401
Retained earnings	5,651,805	5,363,804	4,410,959	2,884,837
Net income	2,325,983	1,793,267	2,550,168	1,458,963
Total equity attributable to equity holders of the parent	**8,971,125**	**8,088,386**	**8,305,109**	**6,156,716**
Non-controlling interests	**92,996**	**78,647**	**63,340**	**55,914**
Total equity and liabilities	**32,617,281**	**31,218,180**	**25,470,116**	**21,932,560**

Other Financial Data:

	Six months ended 30 June Reviewed (Unaudited)		Year ended 31 December		
	2017	**2016**	**2016**	**2015**	**2014**
			(in thousands of TL)		
EBITDA[1]	3,117,409	1,023,544	3,396,329	3,798,897	739,506
Capital expenditure[2]	379,177	372,793	885,401	1,257,213	2,513,731
Net Debt[3]	5,891,642	6,918,135	6,083,544	6,891,874	3,856,614
Gearing ratio (per cent.)[4]	39.39 %	48.64%	42.69%	45.16%	38.30%

(1) EBITDA is a non-IFRS performance measure which the Group defines as profit for the year before income tax expense, financial income, financial expense and depreciation and amortisation. For additional information regarding the use of EBITDA, see *"Presentation of Financial and Other Information—Alternative Performance Measures"*.

A reconciliation between EBITDA and profit for the period is set forth below:

	Six months ended 30 June Reviewed (Unaudited)		Year ended 31 December		
	2017	**2016**	**2016**	**Reclassified 2015**	**2014**
			(in thousands of TL)		
Profit (loss) before tax from continued operations	2,486,557	494,553	1,944,022	2,225,372	183,661
Add back:					
Credit finance gains	(92,733)	(59,529)	(123,632)	(127,385)	(144,854)
Credit finance charges	40,938	5,320	13,398	8,223	9,093
Financial income	(227,153)	(131,551)	(1,173,872)	(862,715)	(498,917)
Financial expense	637,158	472,302	1,746,050	1,461,751	734,300
Foreign exchange income/expense on trade receivables, net	5,738	1,124	(9,147)	(3,651)	(6,233)
Foreign exchange income/expense on trade payables, net	(29,909)	(28,673)	458,668	613,849	149,016
Income from investment activities	12,147	136	(161)	(2,560)	319

Tax fines	—	—	—	—	54,998
Depreciation and amortisation	284,666	269,862	541,003	486,013	258,123
EBITDA	**3,117,409**	**1,023,544**	**3,396,329**	**3,798,897**	**739,506**

(2) Capital expenditure is comprised of property, plant and equipment purchases, intangible asset purchases and changes in advances given for property, plant and equipment.

(3) Equals financial liabilities (which includes short-term financial liabilities, current portion of long-term financial liabilities and long-term financial liabilities), less cash and cash equivalents. A calculation of Net Debt is set forth below:

	Six months ended 30 June Reviewed (Unaudited)		**Year ended 31 December**		
	2017	**2016**	**2016**	**2015**	**2014**
			(in thousands of TL)		
Short-term financial liabilities	142,886	795,321	385,524	94,023	40,248
Current portion of long-term financial liabilities	3,863,795	2,684,163	1,572,434	1,777,358	737,056
Long-term financial liabilities	7,424,983	8,038,997	10,176,307	8,048,039	6,977,706
Less:					
Cash and cash equivalents	5,540,022	4,600,346	6,050,721	3,027,546	3,898,396
Net Debt	**5,891,642**	**6,918,135**	**6,083,544**	**6,891,874**	**3,856,614**

(4) Equals net debt divided by net debt plus total equity.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion should be read in conjunction with the Consolidated Financial Statements, including the notes thereto, which appear elsewhere in this Offering Circular. TFRS differ in certain respects from IFRS. For a discussion of significant differences between TFRS and IFRS, as applicable to the Group, see Annex A: "Summary of Significant Relevant Differences among TFRS and IFRS".

Overview

With its TL 34.9 billion in revenue for 2016, the Company was the country's largest industrial company in 2016 as measured by revenue, according to the Istanbul Chamber of Industry. Tüpraş is currently the only oil refiner in Turkey and the seventh largest oil refinery group in Europe by refinery capacity, according to Oil & Gas Journal in 2016.

Tüpraş is 51 per cent. owned by Enerji Yatırımları A.Ş, a Koç Holding company. In 2016, the Group generated approximately half of the consolidated revenue of Koç Holding, the largest investment holding company in Turkey in terms of revenues, exports and market capitalisation on the Borsa İstanbul as of 31 December 2016. Koç Holding is also the only Turkish company listed in the Fortune 500, and has long-term joint ventures with international corporations such as Ford Motor Company and Fiat.

Tüpraş has achieved its success and growth by maintaining its focus on exceptional management quality and robust risk management systems in line with those of Koç Holding. Risks are closely monitored by the Company's Risk Management Committee, with oversight from the Board of Directors. Since its privatisation, robust procedures from Koç Holding have also contributed to Tüpraş's strategy, risk management and governance.

Tüpraş has been listed on the Istanbul Stock Exchange Corporate Governance Index since 2007 and Sustainability Index since 2014. In 2016, Tüpraş established an Enterprise Risk Management (ERM) Directorate with the aim to strengthen operational and business continuity. See "—*Risk Management Governance*".

In addition to its well-established management model, Tüpraş has alliances with international oil and gas engineering groups, such as Shell Global Solutions (since 2009) and DuPont (since 2014). With the help of these alliances, the Group constantly evaluates and improves the performance of its refining operations against international benchmarks, with a special focus on health, safety and environment.

The Group's principal assets are four oil refineries with an annual total design refining capacity of 28.1 million MT. The Group's refineries produce a full range of refined petroleum products, including diesel, fuel oils, jet fuel, gasoline and asphalt. The Group also imports and sells petroleum products and engages in the distribution, retailing and marine transportation of crude oil and refined products. Tüpraş's recent RUP Facility investment, which started producing at full capacity in 2015, enables the Group to process heavier crudes whilst having higher diesel yields, and increases the capacity utilisation of the Group's refineries such that Tüpraş can make use of all of its assets. See "*—Business—Residuum Upgrading Project*". In the 11 years since joining the Koç Group in 2006, as of 30 June 2017 Tüpraş's total investment spending has amounted to USD 5.8 billion and its net book value USD 3.4 billion, with a replacement value of approximately USD 12 billion. Tüpraş has a strong position in the growing Turkish market for diesel, which experienced a compound annual growth rate of more than 11 per cent. over the past five years, reaching consumption of 22.3 million MT in 2016. By comparison, gasoline consumption was 2.2 million MT. The Group believes that its existing refinery configuration is best suited for the market, with more than 36 per cent. diesel yield versus 21 per cent. for gasoline.

As of 30 June 2017, 75.9 per cent. of Tüpraş's sales (by volume) were domestic. The geographical distribution of its assets enables the Group to sell throughout Turkey, and provides a logistical competitive advantage to Tüpraş over imports in terms of meeting customers' needs regarding time, location and quantity. Further to the Company's extensive coverage, Turkey is located in proximity to over 60 per cent. of the world's proven oil reserves and the Group is capable of handling very large crude carriers (VLCC). The Group therefore imports a high proportion of its total crude oil from many of the world's major oil suppliers and has direct contacts with the national oil companies. Moreover, as Tüpraş has the flexibility to purchase more than 100 different types of crudes with varying grades and quantities, it can benefit from diversification of supply and economies of scale.

As of 31 December 2016, Tüpraş has an average Nelson Complexity Index[1] of 9.5, whilst the İzmit Refinery, the main hub of Tüpraş's refining system, has a Nelson Complexity Index of 14.5. As a result of its high complexity and ability to process mainly heavy grades at its refineries, Tüpraş can obtain higher discounts on its crude oil purchases. The Group's refining margins are therefore consistently higher than the reference Mediterranean refining margin, helped by its recent RUP Facility investment and competitive advantages in feedstock supplies. In 2016, the Group's net refining margin

[1] NCI values are calculated with respect to Nelson Complexity calculation methodology by the Group.

exceeded the average benchmark Mediterranean refining margin by 51.9 per cent. See "*—Significant Factors Affecting the Group's Results of Operations—Changes in refining margins*".

The Group believes that it has sufficient resources to fulfil the funding requirements relating to its current and planned capital expenditures, as well as to maintain a capital structure with low working capital requirements. Given its effective supply chain management, short operating cycle and ability to extend the weighted average of its debt maturities, the Group anticipates that it can meet its short-term financial obligations with adequate liquidity remaining.

Recent Developments

In the third quarter of 2017, supply outages in European refineries positively affected refining margins. At the beginning of July, a fire in Hellenic's Elefsis refinery, which has a capacity of approximately 100,000 barrels per day, took the refinery offline until mid-September. Furthermore, strikes in Portuguese refineries and extended maintenance periods at Germany's Lingen and Leuna refineries contributed to an increase in product crack margins in July. At the beginning of August, the already tightened product supply was further constrained by the power outage and subsequent fire at Shell's Pernis facility, which is the largest refinery in Europe with a capacity of approximately 400,000 barrels per day. Production at this facility was halted until the third week of August. These disruptions, together with healthy seasonal demand, led to an increase in average diesel crack margins by USD 2 per barrel to USD 12.4 per barrel in July and USD 12.9 per barrel in August.

Improved margins have been further supported by stronger than usual hurricanes impacting the United States in the last week of August. In particular, Hurricane Harvey caused flooding in Texas, which is the oil refining hub of the United States, and made approximately 35 per cent. of US refining capacity idle. Whilst this disruption in US refining capacity helped all of the crack margins to improve, it had a pronounced effect on gasoline, with margins reaching USD 20 per barrel on a daily basis. Hurricanes Irma and Maria followed Harvey but their impact on the refining sector was not considerable.

Significant Factors Affecting the Group's Results of Operations

Management believes that the following factors have been the key drivers affecting the Group's business, results of operations and financial condition since 2014, and will continue to be so.

Changes in refining margins

The Group's results of operations are dependent on Tüpraş's gross refining margins, the difference between the current market prices in US Dollars of the refined petroleum products produced in the relevant period and the US Dollar price of the crude oil and other feedstock purchased in order to produce such products. Tüpraş calculates its net refining margin by subtracting operating expenses from its gross refining margin.

The main factors affecting the Group's profitability are regional refining margins and the performance of the domestic market. Whilst the refining sector is influenced by factors such as variations in demand for refined products and changes in refinery capacities, as well as crude oil differentials, domestic market conditions are shaped by the growth pattern of Turkish demand for petroleum products. The Group's performance is closely linked to macro-economic conditions and their impact on demand, which in turn can affect refining margins. See "*Risk Factors—Risks relating to Tüpraş and the Industry—A substantial or extended decline in refining margins would negatively impact the Group's financial results.*" However, as the Group is currently the only refiner in Turkey and the shortage of diesel in the Turkish market (by more than 13 million MT according to EMRA) can only be met by imports, customers' only alternative to purchasing from Tüpraş is to import from other countries. Considering the cost of transporting petroleum products from foreign refineries, the Group is able to use import parity pricing in its domestic sales to improve its profitability across different market cycles.

The following table sets forth Tüpraş's average refining margins and the average benchmark refining margin in the Mediterranean region for each of the periods under review. As explained in further detail below, the Group's net refining margins are higher than the benchmark Mediterranean margins, mainly due to the high complexity of its refineries, the strong domestic market and the greater diversity of its crude supplies.

	For the six months ended 30 June		Year ended 31 December		
(USD/Barrel)	**2017**	**2016**	**2016**	**2015**	**2014**
Tüpraş Net Refining Margin	$8.20	$4.03	$6.03	$6.47	$3.21
Tüpraş Gross Refining Margin (A)	$12.68	$9.41	$11.22	$11.86	$10.55
Mediterranean Benchmark (B)[1]	$5.41	$3.52	$3.97	$4.83	$1.95
Difference (A-B)	**$7.27**	**$5.89**	**$7.25**	**$7.03**	**$8.60**

(1) *Source: Reuters*

2014: During 2013, benchmark refining margins in the Mediterranean region (which are calculated on a gross margin basis) fell into negative territory in certain months, especially towards the end of the year, mainly as a result of falling demand in a weak economic environment and the rise in product supply. Consequently, benchmark refining margins were very close to zero in the beginning of 2014, reaching as low as USD -0.61 per barrel in June 2014. However, improving demand led to significant recovery in refining margins towards the end of the year, and the annual average for 2014 was USD 1.95 per barrel.

2015: At the beginning of 2015, substantial increases in gasoline and jet fuel crack margins together with stable and healthy diesel crack margins resulted in strong Mediterranean refining margins in the first quarter, which remained between USD 5 and 6 per barrel. Subsequently, the slowdown in the Chinese economy, which negatively affected demand, as well as new capacity additions in the Middle East and increased global refining capacity utilisation, which resulted in more production, caused margins to weaken in October to below USD 3 per barrel.

2016: In addition to the factors above for late 2015, mild winter conditions at the beginning of 2016 led to lower diesel consumption and higher gasoline demand, upsetting the demand-supply balance for these products. Refineries continued higher capacity utilisation to benefit from the increased gasoline crack margins, at the same time resulting in increased production of middle distillates such as diesel and jet fuel, which suffered declining demand and surplus production. As a result, benchmark refining margins in the Mediterranean region in 2016 were approximately USD 4 per barrel on average.

2017: Mediterranean complex refining margins according to Reuters for the first half of 2017 reflected strong net gains with margins increasing to an average of USD 5.41 per barrel. Middle distillate margins recovered compared to 2016, as weather conditions normalised, leading to higher demand for heating oil and increased diesel consumption in the winter of 2016-2017. Higher global economic growth rates also boosted the industrial consumption of diesel, and the consumption of diesel by shale oil producers in the United States increased. Supply effects also supported margins, including a decline in the surplus from 2016 due to the increased consumption described above, as well as lower production in China and Latin America. During the same period, Tüpraş achieved a higher net margin of USD 8.20 per barrel due to the healthy refining environment and its RUP Facility enabling full capacity utilisation.

Historically, the Group has maintained a significant premium to the benchmark refining margin for the Mediterranean region due to a number of factors:

- Major infrastructure investments in Turkey, including the ongoing construction of the third airport in İstanbul, the İstanbul-İzmir Highway and large-scale urban transformation projects, have resulted in growing diesel consumption driven by heavy duty vehicles. For example, construction of the third airport has involved the continuous operation of more than 2,000 trucks to move 1.4 million cubic metres of soil daily, with diesel consumption of approximately 250,000 MT per annum. In addition to this infrastructure related consumption, diesel demand growth is also supported by increasing car ownership in Turkey and the country's geographical location as an important trading conduit between Asia, the Middle East and Europe. Accordingly, the compound annual growth rate of diesel consumption was more than 11 per cent. from 2011-2016, according to EMRA, and this trend is expected to continue in the near term. This deficit of certain refined products in the Turkish domestic market, including diesel, leads to a domestic pricing dynamic based on import parity pricing.
- The Group has a diversified portfolio of assets throughout Turkey, including refineries in proximity to the three largest cities of Istanbul, Ankara and Izmir, and utilises Opet's terminals across Turkey. As Turkey is continuing to urbanise and demographic studies indicate that more than 65 per cent. of the population is aged under 40, the Group's ability to reach the biggest cities and different parts of Turkey gives it a competitive advantage over imports in terms of availability in different consumption areas with different transport options. The Group has access to cheaper sources of crude oil (due to its refinery configurations which allow the use of heavier and sour crudes) and is proximate to major suppliers (which reduces transport costs as compared to many competitors);
- The Group has the biggest inventory capacity in Turkey (8.4 million m^3), and the marine jetties at the İzmit Refinery and İzmir Refinery can receive VLCCs. Its well established infrastructure and facilities for crude oil and refined products enable Tüpraş to import variable quantities and secure certain price advantages benefitting from economies of scale.
- The Group spends approximately half of its operating costs on energy, and views investing in and optimising its existing energy assets as a priority. Accordingly, since 2008 the Group has been identifying and implementing cost reduction measures, including energy efficiency programs. As a result, the Group's Energy Intensity Index (EII) has been continuously declining, from 116.1 in 2008 to 101.8 in 2016, which contributed to the improvement of the Group's refining margins in recent years.
- The RUP Facility has led to a significant improvement in the conversion capacity of the Group's refineries, such that even when processing heavy crudes, Tüpraş's white product yields are higher than the theoretical yields used in the benchmark calculation (i.e., approximately 77-80 per cent. depending on the crude slate). As white

products, in particular diesel, jet fuel and gasoline, are higher value than fuel oil, Tüpraş has been able to achieve better refining margins than the benchmark Mediterranean refining margin.

- The Turkish petroleum products market is characterised by a significant amount of imports, given its liberal market structure and considerable shortage in diesel. When providing these imports, however, distribution companies supply the products in bulk and in large quantities in order to reduce transportation costs, which in turn involves risks associated with storage capacity, hedging and inventory pricing. By contrast, Tüpraş benefits from direct pipeline connections with domestic clients and the competitive advantage of being able to supply its products with more flexibility regarding time, location and quantity.

Set forth below are certain key factors which have impacted the Group's refining margins during the periods under review and which may impact future refining margins:

Crude oil differentials

The Group processes a range of different crudes from a number of different sources, each of which has its own special characteristics and pricing. In 2016, the Group purchased 18 different types of crude oil from 10 countries. Medium heavy and sour crudes offer a cost advantage over lighter sweet crudes. As the Group's complexity is higher than the industry average and its refineries have excess de-sulphurisation capacity, the Group's refineries are able to process medium heavy crudes with high sulphur content. Particularly when light/heavy crude differentials are wide, this ability leads to lower average purchase prices per barrel of the Group's crude oils compared to benchmark Brent and Ural crudes.

Crude oil differentials can vary significantly depending on supply and demand dynamics. Flexibility of supply enables the Group to take advantage of relatively cheaper crude oils, and provides mitigation during periods of poor differentials. The Group's decision-making process for crude oil purchasing selection, which is bolstered by its proximity to the main crude suppliers and long-standing relationships with a number of major state-owned oil producing companies, has a significant impact on its profitability. The Group uses Aspen-Tech's PIMS linear programming tool for modelling production and sales estimates and uses its linear optimisation results to make crude oil purchase decisions. The Group has additional flexibility given the diverse set of crudes that it can process.

The effects of the Group's optimisation methodology can be exemplified by its crude selection process in 2016. The RUP Facility increased the Group's ability to process heavier crudes and resulted in Tüpraş diverting its crude purchases to Iraqi grades. However, starting from 2016, more Iranian crude oil cargoes became available in the market following the lifting of many of the previous sanctions against Iran (which exports medium and heavy crude), including the extra-territorial US sanctions affecting non-US purchasers of Iranian crude oil, and production increased for southern Iraqi grades such as Basrah Light and Basrah Heavy and Kuwaiti Export blend. Consequently, as supply increased in the heavy segment of the Mediterranean crude oil market, light/heavy crude differentials widened. Whilst the base Brent price decreased substantially to levels around USD 25 per barrel, light/heavy crude differentials continued to range between USD -5 to -8 per barrel. The Group reacted swiftly to this development and revisited its crude selection model to capture opportunities. As a result and in addition to its existing crude oil purchases from Iraq, the Group increased its Iranian and Kuwaiti crude oil purchases at favourable prices, without impacting its white product yields.

Domestic pricing mechanism

The Company sets its domestic sales prices according to Petroleum Market Law No: 5015, which allows product prices to be set at the Mediterranean market (CIF Med Genoa/Lavera), the closest accessible market, and effective foreign exchange rates. Changes in prices in the Mediterranean market and exchange rates are evaluated daily by management with the methodology and tariff agreed by Tüpraş and EMRA, which has been applicable since 2009. According to the current methodology, if calculated prices differ significantly from current sales prices, refinery sales prices are updated. This pricing mechanism enables the Company to adjust its domestic prices in accordance with the international markets, without any significant delays, and creates a natural hedge for possible price and currency fluctuations. As the Company operates in a fully liberalised market, it can set pricing competitively by following nearby European markets and import prices are always taken into consideration when setting the domestic prices. Consequently, the Group sells nearly all of its diesel production to the domestic market and meets all local market gasoline demand at favourable prices.

Valuation of inventory

The Group values its crude oil and refined products inventories, as reflected in its balance sheet, at the lower of cost or net realisable value using the moving weighted average method. During a period of falling prices, use of this valuation method results in a time-lag during which the Group recognises in its income statement a higher cost of raw materials due to the moving weighted average valuation of its inventory than the market price which adversely affects the Group's refining margins. Conversely, during a period of rising prices, this valuation method results in a time-lag during which the Group recognises in its income statement a lower cost of raw materials than the market price which benefits the Group's margins. The Group's refining margins benefitted from this effect in 2015 as crude oil prices increased in the

first part of the year. However, the Group's refining margins were adversely affected in 2016 by this effect as a result of crude oil prices declining significantly in late 2015.

Cost saving measures and improvements

During the periods under review, the Group has been implementing a series of cost saving measures, including the RUP and energy efficiency initiatives, to reduce its cost of sales. The Group's RUP Facility commenced operations on 15 December 2014, with production at full capacity commencing in May 2015. As a result, all Tüpraş refineries became able to operate at full capacity, with the Group's capacity utilisation rate increasing from 71.3 per cent. in 2014 to 100.9 per cent. in 2016, which enabled the Group to reduce unit costs. The RUP Facility also significantly increased the Group's yields of white products, which are higher margin products than black products. In 2016, the Group achieved a white product yield reached 76.6 per cent., compared to 72.2 per cent. in 2014. The impact of these cost savings and yield improvements has positively contributed to the Group's refining margins in each period.

Changes in refining sales volumes

The Group has substantially increased its refining sales volumes in each period under review, reflecting increases in demand in Turkey driven by infrastructure investments and new car ownership. The following table sets forth a breakdown of the Group's refining sales volumes in each period.

	For the six months ended 30 June		Year ended 31 December		
(1,000 MT)	**2017**	**2016**	**2016**	**2015**	**2014**
Production volumes	14,877	13,339	27,928	27,268	20,101
Imported volumes[(1)]	702	1,720	2,622	1,758	2,185
Inventory Decrease/(Increase)	(302)	(529)	(295)	(287)	(92)
Total refining sales volumes	15,278	14,530	30,255	28,739	22,194

(1) Includes HS & LS Diesel, Jet Fuel and Fuel oil

Production and sales volumes increased throughout the periods under review, with the significant increase in 2016 compared to 2014 attributable to the improvement in the Mediterranean refining margin and the RUP Facility's commencing operations at full capacity in May 2015, which increased the Group's white product yields and also increased its capacity utilisation by 29.6 per cent. compared to 2014. Production volumes increased in the first half of 2017 principally due to improved crack margins in middle distillate products and the RUP Facility's beneficial impact on the Group's capacity utilisation, which reached 111.5 per cent. during the period.

Changes in currency exchange rates

Movements in currency exchange rates, principally between the US Dollar and Turkish Lira, can impact the Group's results of operations. A significant portion of the Group's crude oil and refined product purchases are denominated in US Dollars. In addition, the Group finances its capital expenditures mostly through borrowings denominated in US Dollars. The Group is able to mitigate some of the impact of volatility in exchange rates through natural hedges, as global oil prices are quoted in US Dollars and Tüpraş typically passes on the impact of fluctuations in the TL/USD exchange rate to domestic prices, which are denominated in Turkish Lira. However, in order to maintain an appropriate balance between its US Dollar assets and liabilities, the Group considers its crude oil and refined product inventories as US Dollar denominated assets. Accordingly, when there is a significant decline in the Turkish Lira versus the US Dollar, the Group generally realises a foreign exchange loss on its balance sheet for trade payables, but offsets that loss through increased profit realised from the sale of oil inventories that are linked to US Dollar pricing. The Group also manages its US Dollar exposure by using export revenue, i.e., by matching foreign currency receivables with its foreign currency payables. The impact of foreign exchange gains and losses can be significant during periods of exchange rate volatility, although on a net basis the impact is generally substantially lower due to the natural hedge described above. The Group also uses derivative instruments to manage currency exchange risks.

In addition, the Group's loans that financed the RUP were found eligible and qualified for cash flow hedge accounting treatment. In this context, Tüpraş started to apply cash flow hedge accounting effective from 1 March 2015. Foreign exchange gains/losses arising from RUP financing loans are recognised under equity as "hedging reserve" until the realisation of the cash flows of the hedged item, with no immediate impact on profit and loss.

Taking into account the cash flow hedge accounting treatment of the RUP financing loans designated as hedging instruments of highly probable export revenues, the above-mentioned natural hedge and derivative instruments, as well

as other foreign exchange denominated assets and liabilities, the Group's consolidated net foreign currency position after cash flow hedging and natural hedge amounted to USD 34 million as of 30 June 2017.

Crude oil prices

The Group's results of operations depend to an extent on the prices of crude oil in the international markets, which in turn are influenced by international supply and demand and global and regional political and economic developments. Crude oil prices have been particularly volatile in recent years, rising to USD 115 per barrel in June 2014, then falling sharply to USD 55 per barrel in the second half of 2014 and declining further in 2015 and early 2016 to USD 25 per barrel before settling in the range of USD 45-55 per barrel in 2017. The Group closely follows global market developments in order to respond quickly to significant events. Although the price of crude oil impacts the Group's results indirectly, through inventory effects, working capital requirements and demand dynamics, sharp increases in prices may lead to significant inventory gains, whilst rapid decreases in prices may result in inventory losses. These inventory gains and losses may impact the Group's costs of sales and, accordingly, its profitability. Higher oil prices also create a greater working capital requirement for the Group because payments for supplies increase. High absolute prices or rapid price increases can also negatively impact consumer demand.

The Group employs an optimum stock policy to address the above-mentioned risks arising from oil price fluctuations. The Group does not take any stock positions specifically related to oil price expectations and keeps only the necessary amount of inventories to continue its operations at a sustainable level. Nevertheless, there are significant amounts of crude oil and product stocks in the Group's inventory, as required by its operations. The Group enters into commodity derivative transactions in order to mitigate the price risk in relation to the value of its crude oil and refined product inventories and maintains the minimum amount of stock required for its refining activities in order to avoid the risk of inventory losses. Derivative instruments as well as operational hedging methods, such as forward pricing to match the pricing period of purchases with the selling period of products, have been used to mitigate the price risk in relation to inventories.

The Group is also exposed to risk in relation to its crack margins, which are the spread between product and crude oil prices and the primary indicator of earnings for oil refining companies. In order to manage the risk of declines in individual crack margins (mainly for gasoline, diesel and jet fuel), Tüpraş uses derivative instruments to secure crack margins in accordance with the relevant policy and procedures.

Turkey's economy

The key drivers of growth in demand for Tüpraş's refined products are increases in vehicle numbers, road construction, urban renovation projects, infrastructure projects (such as the third airport and new highways) and industrial production in Turkey. In recent years, economic growth, higher levels of spending on infrastructure, historically low interest rates and tax advantages have led to record sales of automobiles and light commercial vehicles in the transportation sector, a major driver of growth in demand for petroleum products. In 2016, whilst the Turkish economy grew by 2.9 per cent., diesel consumption rose by 8.5 per cent. and, in certain years, diesel consumption has also increased in periods of declining Turkish GDP.

The following table sets forth selected economic indicators for Turkey as of and for the years ended 31 December 2016, 2015 and 2014.

	As of or for the year ended 31 December		
	2016	**2015**	**2014**
GDP (TL billions)[1]	2,591	2,337	2,044
GDP (USD billions)	858	859	934
GDP growth (%) (real)[2]	2.9	6.1	5.2
GDP per capita (USD)	10,807	11,014	12,112
Unemployment (%)	10.9	10.3	10.0
CPI(%)	8.5	8.8	8.2
Exports (USD billions)[3]	142.6	143.7	157.6
Imports (USD billions)	198.6	207.2	242.2
Trade deficit (USD billions)	56	63.3	84.6
Current account deficit (USD billions)	77	48.6	14
Budget deficit (TL billions)	29.3	22.6	22.7
Nominal appreciation (depreciation) of the Turkish Lira against the US Dollar (%)	(21.5)	(25.4)	(8.6)
CPI-based real effective exchange rate appreciation (depreciation) (%)[4]	(5.5)	(7.1)	4.7

Source: Central Bank and Turkstat.

(1) On 12 December 2016, Turkstat changed the method of calculation to determine economic growth in Turkey and revised the figures announced for the previous periods that were calculated in line with the former method. The figures in this table reflect GDP growth revised in line with the calculations made using the new method.

(2) Real GDP is an inflation-adjusted measure of gross domestic product that reflects the value of all goods and services produced in a given year, expressed in base-year prices.

(3) For the year ended 31 December 2016, the Turkish Exporters Assembly reported exports totalling USD 142.6 billion.

(4) Real effective exchange rate is the weighted geometric average of the prices in Turkey relative to the prices of its principal trade partners in international markets. An increase in the real effective exchange rate represents an appreciation of the TL in real terms, denoting a rise in the value of Turkish commodities in terms of foreign commodities.

The economies of developing countries have been losing growth momentum throughout recent years, and fluctuations in the global economy have also affected the Turkish economy. See "*Risk Factors—Risks Relating to Turkey—Turkey's high current account deficit may result in Turkish Government policies that negatively affect the Group's business*".

However, according to the World Bank's June 2017 Global Economic Prospects, growth in advanced economies is expected to increase to 1.9 per cent. in 2017, which will also benefit the trading partners of these countries. Global financing conditions remain favourable and commodity prices have stabilised. Against this improving international backdrop, growth in emerging market and developing economies is expected to increase to 4.1 per cent. in 2017 compared to 3.5 per cent. in 2016. The World Bank has raised Turkey's economic growth projections for the next three years. Turkey is projected to grow by 3.5 per cent. in 2017, supported by accommodative fiscal policies, and by 3.9 per cent. in 2018, reflecting increases of 0.4 per cent. from previous estimates for both years, as uncertainty abates, tourism recovers, and corporate balance sheets mend.

The following table sets forth domestic refined product sales volumes for the periods presented:

Turkey's Consumption (million MT)	**2016**	**2015**	**2014**	**2016/2015 per cent. change**	**2015/2014 per cent. change**
Diesel	22.3	20.6	17.8	8.5%	15.5%
LPG	4.1	4.1	3.8	1.1%	7.3%
Jet Fuel (including transit)	4.4	4.6	4.1	(3.9)%	11.7%
Gasoline	2.2	2.1	1.9	6.5%	9.2%
Fuel Oil	0.6	0.6	0.7	(3.5)%	(14.6)%
Total Petroleum Product Consumption	**33.6**	**32.0**	**28.3**	**5.0%**	**13.1%**

Source: EMRA

As a result of lower tax rates on diesel and LPG (automobile gas) as compared to gasoline, domestic demand for diesel and LPG has increased significantly in recent years. The commissioning of the RUP Facility has further increased the Group's production of diesel whilst reducing its fuel oil production. It is expected, however, that a deficit in diesel production in Turkey will remain, which the Group expects to be filled by a combination of imports and greenfield refining projects by third parties. See *"Business—Competition"*.

Seasonality

There are seasonal variations in demand in the Mediterranean market for certain refined petroleum products. Demand for automotive fuels such as diesel, LPG and gasoline increase during March through November in connection with the driving season, as well as activity in the tourism, agriculture and construction sectors. Tourism also impacts demand for jet fuel which peaks during summer. In addition, bitumen sales increase in summer, with road construction and maintenance activities, and decline between November and March.

Prior to 2015, as a result of low bitumen demand in the winter months, the Group experienced lower capacity utilisation between November and March. After the RUP Facility, which started producing at full capacity in May 2015, the Group has been able to increase its white product yield and convert heavy products into middle distillates and light distillates. Consequently, the Group's refineries can now operate throughout the year with minimal seasonality, and the Group generates more balanced production and sales figures.

Results of operations for the six months ended 30 June 2017 and 2016

The following discussion is based on the results of operations of the Group for the six months ended 30 June 2017 and 2016 as extracted from the Reviewed (Unaudited) Condensed Interim Consolidated Financial Statements. See "Presentation of Financial and Other Information ".

Sales/Gross Profit

The Group's results of operations for the six months ended 30 June 2017 were positively impacted by improved margins and capacity utilisation, which reached 111.5 per cent. in the first half of 2017 compared to 100.9 per cent. in the same period of 2016. This resulted in gross profit of TL 3,204 million in the first half of 2017 compared to a gross profit of TL 1,132 million in the same period of 2016, an increase of 182.9 per cent.

Mediterranean product prices increased significantly during the period, including an increase in diesel of 29 per cent, and the Group's sales volumes increased to approximately 15.278 thousand MT in the first half of 2017 compared to sales volumes of 14.530 thousand MT in the same period of 2016, an increase of 5.1 per cent. The higher product prices and sales volumes together with a strengthening of the US dollar versus the Turkish lira by 25 per cent. caused revenue to increase by TL 10.4 billion or 70.7 per cent.

Cost of sales was TL 21,797 million for the six months ended 30 June 2017 as compared to TL 13,512 million for the comparable period of 2016, an increase of 61.3 per cent. The increase was principally due to a 30 per cent. increase in crude oil prices, as well as increased capacity utilisation and the above referenced change in foreign exchange rates.

Operating Income/Expenses

	For the six months ended 30 June		
	2017	**2016**	**Change %**
General administrative expense………………………..	(368,617)	(345,601)	6.7%
Marketing, selling and distribution expenses…………..	(119,754)	(95,794)	25.0%
Research and development expenses…………………	(8,790)	(13,464)	(34.7%)
Other operating income……………………………….	139,980	99,902	40.1%
Other operating expenses……………………………..	(56,556)	(10,647)	431.2%

The increase in both general administrative expenses and marketing expenses were due principally to increased personnel expenses. These included increases in marketing expenses due to the impact of increased sales volumes on the cost of port logistics.

The decrease in research and development expenses related principally to the transfer of certain personnel expenses to production costs in March 2017 which previously had been booked as research and development expenses.

The increase in other operating income was principally due to higher credit finance gains that accompanied increased revenues as well as the increase in foreign exchange rates described above.

The significant increase in other operating expenses was due principally to the increase in extended payment with respect to certain of the Group's purchases of raw materials.

Operating Profit

Operating profit increased by TL 2,023 million or 263.8 per cent. to TL 2,790 million in the six months ended 30 June 2017 from TL 766,8 million in the six months ended 30 June 2016, due principally to the increase in gross profit as explained above.

Financial Income and Expense

	For the six months ended 30 June		
	2017	**2016**	**Change %**
	(in thousands of TL, except percentages)		
Interest income on deposits…………………………..…	227,153	114,983	98%
Foreign exchange gains on borrowings…………………	-	16,568	(100%)
Total financial income……...………………………….	**227,153**	**131,551**	**73%**
Foreign exchange losses on borrowings……………….	(138,693)	-	-
Interest expenses…………………………………………	(344,271)	(303,369)*	13%
Foreign exchange losses on derivative instruments….	(108,387)	(96,857)	12%
Foreign exchange losses on deposits……………….	(43,977)	(68,898)	(36%)
Other………………………………………………….……	(1,830)	(3,178)*	(42%)
Total financial expense….……………………………..	**(637,158)**	**(472,302)**	**35%**

* In preparing the 2017 Reviewed (Unaudited) Condensed Interim Consolidated Financial Statements, the Group has reclassified insurance payments for borrowings amounting to TL 16,525 thousands under other which was previously classified under interest expenses. Interest expenses and other were TL 286,844 thousands negative and TL 19,703 thousands negative, respectively, in the 2016 Reviewed (Unaudited) Condensed Interim Consolidated Financial Statements.

Total financial income for the six months ended 30 June 2017 increased primarily due to higher interest income on deposits attributable to both volume and rate increases.

Total financial expense for the six months ended 30 June 2017 increased largely due to an increase in foreign exchange losses on borrowings and due to foreign exchange losses on deposits in view of the volatility of the Turkish lira versus the US dollar. Interest rates on borrowings also increased.

Income Tax Expense

Income tax expense increased for the six months ended 30 June 2017 primarily due to increases in the Group's profit before tax from continuing operations.

Results of operations for the years ended 31 December 2016 and 2015

The following discussion is based on the results of operations of the Group for the years ended 31 December 2016 and 2015 as extracted from the 2016 Consolidated Financial Statements. See "Presentation of Financial and Other Information".

Sales/Gross Profit

In 2016, the industry experienced low crude oil prices due to the economic slowdown in developing countries, the lifting of many of the previous sanctions against Iran, including the extra-territorial US sanctions affecting non-US purchasers of Iranian crude oil, and high oil inventories worldwide, which was followed by some recovery in the second half of the year. For Turkey in particular, tourism revenues declined; economic recovery in the EU, traditionally Turkey's biggest export market, did not reach desired levels; the Middle East market contracted due to geopolitical concerns; and exports to Russia fell significantly. In addition, the Mediterranean refining margin declined by USD 0.86 per barrel compared to 2015 as a result of increased supply caused by new refinery capacities in the Middle East and China and higher exports by US refineries.

Average crude oil and Mediterranean product prices also decreased significantly between 2015 and 2016. Despite the increase of 5 per cent. in the Group's sales volume, revenue decreased due to lower product prices. The Group's net sales were TL 34.9 billion in 2016, a decrease of TL 2.0 billion or 5.5 per cent. compared to TL 36.9 billion in 2015.

Cost of sales was TL 31.2 billion in 2016 compared to TL 32.8 billion in 2015, a TL 1.6 billion, or 4.8 per cent. decline due to lower costs of feedstocks including crude oil and imported refined products.

Gross profit in 2016 decreased by TL 477.2 million or 11.6 per cent. to TL 3.6 billion, compared to TL 4.1 billion in 2015. The decrease in gross profit was due principally to the decline in refining margins.

Operating Expenses

The following table sets forth the components of the Group's operating expenses for the years ended 31 December 2016 and 2015.

	For the year ended 31 December		
	2016	**2015**	**Change %**
	(in thousands of TL, except percentages)		
General administrative expenses	(748,280)	(661,458)	13.1%
Marketing, selling and distribution expenses	(221,602)	(192,855)	14.9%
Research and development expenses	(25,565)	(22,764)	12.3%
Other operating income	184,751	142,681	29.5%
Other operating expenses	(481,242)	(640,215)	(24.8)%

General administrative expenses increased by TL 86.8 million or 13.1 per cent. to TL 748.3 million in 2016 from TL 661.5 million in 2015, and marketing expenses rose by TL 28.7 million or 14.9 per cent. to TL 221.6 million in 2016 from TL 192.9 million in 2015, principally reflecting increased personnel expenses.

Research and development expenses were TL 25.6 million in 2016, a TL 2.8 million or 12.3 per cent. increase from TL 22.8 million in 2015, primarily due to ongoing research and development projects and licence acquisitions.

Other operating income in 2016 increased by TL 42.1 million or 29.5 per cent. to TL 184.8 million from TL 142.7 million in 2015 due to a pension fund provision related to a tax inspection no longer being required, foreign exchange gain from trade receivables, an increase in penalty and compensation income received from contractors and one-off profit

recognised from the disposal of platinum catalysts from the İzmit Refinery following catalyst changes in its diesel de-sulphurisation units.

Other operating expenses declined by TL 159.0 million or 24.8 per cent. in 2016 to TL 481.2 million from TL 640.2 million, reflecting lower foreign exchange loss from trade payables, as average trade payables were lower for 2016 compared to 2015.

Operating Profit

Operating profit decreased by TL 394.5 million or 14.3 per cent. to TL 2.4 billion in 2016 from TL 2.8 billion in 2015, due to the decline in gross profit as explained above.

Financial Income and Expense

The following table sets forth the components of the Group's financial income and financial expenses for the years ended 31 December 2016 and 2015.

	For the year ended 31 December		
	2016	**2015**	**Change %**
	(in thousands of TL, except percentages)		
Interest income on deposits…………………………..…	319,513	184,133	73.5%
Foreign exchange gains on deposits…………………...	709,477	419,633	69.1%
Foreign exchange gains on derivative instruments………………………………………………..	144,882	258,949	(44.0)%
Total financial income……..………………………….	**1,173,872**	**862,715**	**36.1%**
Interest expenses…………………………………………	(708,359)	(532,997)	32.9%
Foreign exchange losses on borrowings……………….	(976,068)	(924,395)	5.6%
Foreign exchange losses on derivative instruments….	(55,555)	(4,350)	>100%
Other……………………………………………….……	(6,068)	(9)	>100%
Total financial expense….…………………………….	**(1,746,050)**	**(1,461,751)**	**19.4%**

The increase of approximately 11 per cent. in the average annual foreign exchange rate between the US Dollar and the Turkish Lira for 2016 compared to 2015 had an impact on the Group's financial income and expenses for the period.

Total financial income in 2016 increased by TL 311.2 million or 36.1 per cent. to TL 1.2 billion from TL 862.7 million in 2015, primarily due to foreign exchange gains on deposits.

Total financial expense in 2016 increased by TL 284.3 million or 19.4 per cent. to TL 1.7 billion from TL 1.5 billion in 2015, largely due to a significant increase in interest expenses.

Both interest income on deposits and interest expenses increased substantially in 2016 compared to 2015 as a result of the Group's decision to take advantage of an interest rate arbitrage opportunity, pursuant to which it borrowed funds at a lower interest rate and deposited them at a higher interest rate.

Income Tax Expense

Income tax expense was TL 131.2 million in 2016 compared to a gain of TL 338.6 million in 2015. The tax gain in 2015 primarily reflected investment incentive income of TL 768.4 million. In the first quarter of 2011, Tüpraş was granted a "Large Scale Investment Incentive Certificate" providing tax shield benefits on its capital expenditures related to the RUP. The corporate tax rate for earnings associated with the RUP was reduced to 10 per cent. from 20 per cent. The 10 per cent. corporate tax rate was effective until the tax collected from the RUP-specific earnings reached a cap of 30 per cent. of the project value. In addition to its Large Scale Investment Incentive Certificate, the RUP investment was further included in the "Strategic Investment Incentive Certificate" category on 7 October 2013. As a result, RUP-related expenses incurred after 2013 benefitted from this new Strategic Investment Incentive scheme, and the corporate tax rate for earnings associated with the RUP is reduced to 2 per cent. from 20 per cent. The 2 per cent. corporate tax rate is effective until the tax collected from the RUP-specific earnings reaches a cap of 50 per cent. of the project value.

Results of operations for the years ended 31 December 2015 and 2014

The following discussion is based on the results of operations of the Group for the years ended 31 December 2015 and 2014 as extracted from the 2015 Consolidated Financial Statements. See "Presentation of Financial and Other Information".

Sales/Gross Profit

After the commissioning of the RUP Facility in late 2014, the Group's capacity utilisation increased significantly, resulting in an increase in sales volumes to 28.7 million MT in 2015 from 22.2 million MT in 2014. Average Mediterranean product prices, however, decreased significantly during this period (e.g., diesel prices decreased by 41 per cent.). As a result, net sales were TL 36.9 billion in 2015, a decrease of TL 2.8 billion or 7.1 per cent., compared to TL 39.7 billion in 2014.

Cost of sales was TL 32.8 billion compared to TL 38.5 billion in 2014, a TL 5.7 billion or 14.8 per cent. decrease. The decrease in cost of sales was largely due to lower costs of raw materials resulting from the low prices of crude oil and imported refined products.

Gross profit in 2015 increased by TL 2.9 billion to TL 4.1 billion, compared to TL 1.3 billion in 2014. The increase in gross profit was due principally to the significant improvement in refining margins compared to 2014. The Mediterranean refining margin rose from USD 1.95 per barrel in 2014 to USD 4.83 per barrel in 2015, reflecting increased global demand supported by low crude oil prices, improved gasoline demand due to the strength of Chinese and Indian gasoline-powered vehicle sales, and extra naphtha demand from the petrochemical industry due to high LPG prices. Over the same period, Tüpraş's net refining margin rose from USD 3.21 per barrel to USD 6.47 per barrel after the commissioning of the RUP Facility.

Operating Expenses

The following table sets forth the components of the Group's operating expenses for the years ended 31 December 2015 and 2014.

	For the year ended 31 December		
	2015	**2014**	**Change %**
	(in thousands of TL, except percentages)		
General administrative expenses	(661,458)	(545,943)	21.2%
Marketing, selling and distribution expenses	(192,855)	(169,639)	13.7%
Research and development expenses	(22,764)	(16,220)	40.3%
Other operating income	142,681	173,845	(17.9)%
Other operating expenses	(640,215)	(269,098)	>100%

General administrative expenses increased by TL 115.5 million or 21.2 per cent. to TL 661.5 million in 2015 from TL 545.9 million in 2014, mainly due to higher insurance expenses resulting from an improvement in the scope of coverage, depreciation and amortisation expense and outsourced services.

Marketing expenses rose by TL 23.2 million or 13.7 per cent. to TL 192.9 million in 2015 from TL 169.6 million in 2014 primarily due to the impact of increased sales volumes on port related logistics costs.

Research and development expenses were TL 22.8 million in 2015, a TL 6.5 million or 40.3 per cent. increase from TL 16.2 million in 2014, primarily due to the recruitment of research and development personnel.

Other operating income in 2015 decreased by TL 31.2 million or 17.9 per cent. to TL 142.7 million from TL 173.8 million in 2014 due to lower net sales causing a decline in credit finance gains.

Other operating expenses increased by TL 371.1 million in 2015 to TL 640.2 million from TL 269.1 million in 2014, due to foreign exchange loss from trade payables, reflecting the depreciation of the Turkish Lira against the US Dollar during that period.

Operating Profit

Operating profit increased by TL 2.3 billion to TL 2.8 billion in 2015 from TL 435.7 million in 2014, due to the increase in gross profit as explained above

Financial Income and Expense

The following table sets forth the components of the Group's financial income and financial expenses for the years ended 31 December 2015 and 2014.

	For the year ended 31 December		
	2015	**2014**	**Change %**
	(in thousands of TL, except percentages)		
Foreign exchange gains on deposits…………………..	419,633	296,465	41.5%
Interest income on deposits…………………………..…	184,133	137,846	33.6%

Foreign exchange gains on derivative instruments……………………………………………..	258,949	64,606	>100%
Total financial income……..………………………….	**862,715**	**498,917**	**72.9%**
Foreign exchange losses on borrowings……………….	(924,395)	(438,328)	>100%
Interest expenses…………………………………………	(532,997)	(294,960)	80.7%
Foreign exchange losses on derivative instruments….	(4,350)	-	-
Other………………………………………………….……	(9)	(1,012)	(99.1)%
Total financial expense….……………………………..	**(1,461,751)**	**(734,300)**	**99.1%**

The increase of approximately 24 per cent. in the average annual foreign exchange rate between the US Dollar and the Turkish Lira for 2015 compared to 2014 had an impact on the Group's financial income and expenses for the period.

Total financial income in 2015 increased by TL 363.8 million or 72.9 per cent. to TL 862.7 million from TL 498.9 million in 2014, primarily due to foreign exchange gains on derivative instruments and deposits, and higher interest income on deposits.

Total financial expense in 2015 increased by TL 727.5 million or 99.1 per cent. to TL 1.5 billion from TL 734.3 million in 2014, largely due to an increase in foreign exchange losses on borrowings as a result of the significant increase in foreign currency loans during the period and higher interest expenses.

Income tax expense

The Group had income tax gains amounting to TL 338.6 million in 2015 and TL 1.3 billion in 2014, reflecting investment incentive income of TL 768.4 million and TL 1.3 billion, respectively, in relation to the RUP as discussed above.

Liquidity and Funding

Historically, the Group's principal uses of cash have been for capital expenditure, to fund its working capital requirements, to service its debt obligations and to pay dividends to Tüpraş's shareholders. The Group has funded these requirements from cash flows from operating activities as well as from debt financing. Diversified funding sources are available to the Group, due to its strong balance sheet structure and access to international financial markets. The ability to optimise working capital enables the Group to manage liquidity and generate substantial cash flows.

The main responsibility for the Group's funding activities, financial and liquidity planning and risk management lies with the Group's finance department.

At 30 June 2017, the Group had cash and cash equivalents of TL 5.5 billion. The Group intends to finance its future cash needs using a combination of cash flow from operating activities and borrowings. Borrowings may take the form of additional borrowings from banks and/or capital market debt financings.

Cash Flows

The following table sets out the principal components of the Group's cash flows for the periods indicated.

	For the six months ended 30 June		**For the year ended 31 December**		
	2017	**2016**	**2016**	**2015**	**2014**
			(TL thousands)		
Net cash from/(used in) operating activities	2,107,420	2,006,780*	4,705,447	(294,387)	2,435,230
Net cash from/(used in) investing activities	(308,221)	(330,529)	(841,751)	(888,504)	(2,187,284)
Net cash from/(used in) financing activities	(2,339,240)	(122,457)*	(1,749,939)	(248,980)	(124,410)
Net increase/(decrease) in cash and cash equivalents	(584,018)	1,484,896	2,823,234	(1,012,238)	123,536

* In preparing the 2017 Reviewed (Unaudited) Condensed Interim Consolidated Financial Statements, the Group has reclassified insurance payments for borrowings amounting to TL 16,525 thousands under cash flows from financing activities which was previously classified under cash flows from operating activities. Cash flows from operating activities and cash flows from financing activities were TL 1,990,255 thousands positive and TL 105,932 thousands negative, respectively, in the 2016 Reviewed (Unaudited) Condensed Interim Consolidated Financial Statements.

Net Cash From/(Used) in Operating Activities

Net cash from operating activities for the six months ended 30 June 2017 was TL 2,107 million as compared to net cash from operating activities of TL 2,007 million for the six months ended 30 June 2016. Cash flows from operating activities increased from a cash inflow of TL 1.8 billion in the first half of 2016 to TL 2.3 billion in the first half of 2017,

or 25.9 per cent., principally reflecting the increase in the Group's operating profit and increases in the foreign exchange rates in the first half of 2017. However this increase was more than offset by changes in working capital resulting from the decrease in factoring in the first half of 2017, as compared to the use of factoring in the first half of 2016 when factoring costs were more favourable.

Net cash from operating activities in the year ended 31 December 2016 was TL 4.7 billion as compared to net cash used in operating activities in the year ended 31 December 2015 of TL 294.4 million. Cash from operating activities increased from a cash outflow of TL 191 million in 2015 to cash inflows of TL 4.7 billion in 2016, an increase of TL 4.8 billion was principally as a result of changes in working capital by TL 5.6 billion which was, in turn, principally the result of increased trade payables as the Group increased purchases on extended payment terms as compared to 2015.

Net cash used in operating activities in the year ended 31 December 2015 was TL 294.4 million as compared to net cash from operating activities in the year ended 31 December 2014 of TL 2.4 billion. Cash from operating activities decreased from a cash inflow of TL 2.8 billion in 2014 to cash outflows of TL 191 million in 2015, a decrease of TL 3.0 billion, primarily due to changes in working capital by TL 5.5 billion mainly as a result of an increase in trade receivables due to decreased use of factoring in 2015 as compared to 2014..

Net Cash From/(Used) in Investing Activities

Net cash used in investing activities in the six months ended 30 June 2017 was TL 308.2 million and principally related to capital expenditures on the Group's ongoing investments. See *"—Capital Expenditures"*.

Net cash used in investing activities in the year ended 31 December 2016 was TL 841.8 million and principally related to capital expenditures on the Group's ongoing investments. See *"—Capital Expenditures"*.

Net cash used in investing activities in the year ended 31 December 2015 was TL 888.5 million and primarily related to capital expenditure in connection with the RUP. See *"—Capital Expenditures"*.

Net cash used in investing activities in the year ended 31 December 2014 was TL 2,187 million and primarily related to capital expenditure in connection with completion and commissioning of the RUP Facility. See *"—Capital Expenditures"*.

Net Cash From/(Used) in Financing Activities

Net cash used in financing activities in the six months ended 30 June 2017 was TL 2,339 million, primarily reflecting significant repayments of bank borrowings which more than offset by proceeds from bank borrowings.

Net cash used in financing activities in the year ended 31 December 2016 was TL 1,750 million, primarily reflecting significant proceeds from bank borrowings which more than offset the dividends paid to shareholders.

Net cash used in financing activities in the year ended 31 December 2015 was TL 249.0 million reflecting interest paid and dividends paid to shareholders, as well as relatively low amounts of borrowings from banks.

Net cash used in financing activities in the year ended 31 December 2014 was TL 124.4 million reflecting interest paid and dividends paid to shareholders, which more than offset the amount of borrowings from banks.

Indebtedness

As of 30 June 2017, the Group had outstanding financial indebtedness of TL 11.4 billion, of which short term financial liabilities was TL 142.9 million, current portion of long term financial liabilities was TL 3.9 billion and long term financial liabilities was TL 7.4 billion. The vast majority of this indebtedness is denominated in US Dollars. The Group is currently not in breach of any of its financial covenants. In line with current business practices, the Group continues to assess opportunities to diversify its sources of financing.

As of 30 June 2017, the redemption schedule of long-term financial liabilities is as follows:

Year Due	**30 June 2017**
	(in thousands of TL)
2018	1,362,136
2019	1,697,496
2020	1,482,245
2021	1,166,217
2022 and after	1,716,889
Total	**7,424,983**

The following table provides details of the Group's borrowings larger than USD 100 million at 30 June 2017.

Bank/agent name	Drawn Amount	Financial Covenants	Maturity	Type of loan
Banco Santander SA	$1,078,511,265	Leverage, interest coverage	15 October 2023	Amortising Syndicated Structured ECA Finance (CESCE)
Banco Bilbao Vizcaya Argentaria, S.A. Milan Branch	$597,445,825	Leverage, interest coverage	15 October 2023	Amortising Syndicated Structured ECA Finance (SACE)
HSBC Bank PLC	$359,000,000	Leverage, interest coverage	15 October 2018	Amortising Syndicated Bank Loan
Citigroup, Global Markets Limited; Deutsche Bank AG(1)	$700,000,000	Negative pledge	2 May 2018	Eurobond
EBRD	$150,000,000	Leverage, interest coverage	1 August 2024	Amortising Project Financing
ING Bank N.V.	$157,500,000	Leverage, interest coverage	16 March 2021	Amortising Syndicated Facility
ING Bank N.V.	€261,500,000	Leverage, interest coverage	16 March 2021	Amortising Syndicated Facility
Garanti Bankası	TL 400,000,000	No	20 July 2018	Non-amortising Pre-export Financing Loan

As of 30 June 2017, the Company's total credit limit was USD 14.7 billion, of which USD 9.4 billion was unutilised.

The first three loan agreements described in the table above were arranged by a group of ten banks and were used to finance a significant portion of the Group's capital expenditures for the RUP. The loan originally amounting to USD 1.1 billion, which was insured by CESCE, the Spanish export credit agency, and the loan originally amounting to USD 624.3 million, which was insured by SACE, the Italian export credit agency, have a 12 year maturity, with no principal payments due in the first four years. The third loan amounting to USD 359 million has a 7 year maturity, with no principal payments due in the first four years. The unutilised portion of the Spanish and Italian export credit loans have been cancelled. The three loan agreements each contain financial covenants which test the Company's interest coverage ratio, leverage ratio and EBITDA coverage ratio on a semi-annual basis. In 2016, the Company signed a club loan for USD 433 million with a three-year grace period and two-year repayment period. Also in 2016, the Company successfully agreed USD 150 million of project financing with the EBRD, with a 3.5-year grace period and 4.5-year repayment period.

Contractual Obligations

The following table summarises the Group’s financial liabilities and trade payables as of 30 June 2017 (in thousands of TL):

	Payment due by period				
Contractual Obligations	**Total**	**Less than 1 year**	**1-3 years**	**3-5 years**	**More than 5 years**
Long-term financial liabilities	7,424.983	—	3,800,755	2,304,769	1,319,459
Current portion of the long-term financial liabilities	3,863,795	3,863,795	—	—	—
Short-term financial liabilities	142,886	142,886	—	—	—
Trade payables...	7,610,162	7,610,162	—	—	—
Total contractual obligations	19,041,826	11,616,843	3,800,755	2,304,769	1,319,459

Off Balance Sheet Arrangements and Contingencies

The Group does not have any off balance sheet contractual arrangements other than guarantees related to operating activities. Total guarantees given by the Group as of 30 June 2017 amounted to TL 2.2 billion of which 15 per cent. related to letters of credit given in connection with the import of crude oil and 36 per cent. related to customs offices for foreign trade purposes while the remainder was given principally to government entities. As at 30 June 2017, letters of guarantee given to banks are given for loans which were used by companies within the scope of consolidation amounting to TL 380,882 thousand and for derivative financial instruments amounting to TL 36,828 thousand. For information

regarding certain contingent liabilities of the Group, see footnote 22 to the Reviewed (Unaudited) Condensed Interim Consolidated Financial Statements.

Capital Expenditures

The Group's operations require significant capital expenditures both for upkeep and maintenance of its operations as well as for improvements.

The Group's total capital expenditures for the periods indicated are set forth in the table below:

	For the six months ended 30 June		**For the year ended 31 December**		
	2017	**2016**	**2016**	**2015**	**2014**
			(in thousands of TL)		
Tüpraş	276,417	216,739	657,101	1,219,903	2,468,736
Ditaş	102,760	156,054	228,300	37,310	44,995
Total capital expenditures[1]	**379,177**	**372,793**	**885,401**	**1,257,213**	**2,513,731**

(1) Changes in advances given for property, plant and equipment are included.

Over the past 11 years since privatisation, Tüpraş's capital expenditure relating to new investments totalled approximately USD 5.8 billion as at 30 June 2017. In 2016, in addition to investing in its refineries, Tüpraş's total capital expenditures included the tanker purchases undertaken by Ditaş to expand its fleet.

Dividend Policy

Tüpraş pays annual dividends to its shareholders in compliance with the provisions of the Turkish Commercial Code, the Capital Markets Regulations, the Tax Regulations and other related regulations and the related provisions of the Company's Articles of Association regarding dividend distribution. In compliance with the Corporate Governance Principles, the Company pursues a balanced and consistent policy between shareholder and Company benefits when paying dividends.

In principle, subject to applicable laws and regulations, investment planning and the financial condition of the Group, the entire amount of the "net distributable profit for the period", calculated within the framework of the Capital Markets Regulations, and the lower of the TFRS accounting results or the statutory results, is provided as a dividend. Such dividend is distributed in cash – taking into consideration the market expectations, long term company strategies, investment and financing policies, profitability and cash position. The General Assembly or the Board of Directors, if authorised, may decide to distribute dividends with instalments in compliance with the Capital Markets Regulations. In accordance with this policy, Tüpraş paid TL 1.6 billion, TL 1.6 billion and TL 0 in dividends for each of the years 2016, 2015 and 2014, respectively.

There is no privilege in the Articles of Association regarding participation in dividend distributions. The aim is to make the dividend distribution within one month at the latest after the General Assembly meeting, since the dividend distribution date is decided by the General Assembly.

Risk Management, Governance and Compliance

In 2016, Tüpraş established an Enterprise Risk Management (ERM) Directorate, the aim of which was to ensure operational and business continuity, tackle the underlying causes of uncertainty, manage extraordinary situations successfully, and to protect the Company's reputation. Tüpraş developed the ERM system to safeguard the existing assets of the Company, create more shareholder value and manage opportunities. This system also serves to communicate risks that have been identified in all functions in line with the risk appetite acceptable to Koç Holding, the Board of Directors and the Senior Management across all processes.

In order to implement the ERM system and GRC module of SAP, which allows the Company to monitor the evolution of its risks, KPMG was appointed as the ERM consultant for Tüpraş. The types of risk to which Tüpraş is exposed have been categorised into seven groups: Hazards and Environmental, Financial, Commercial, Operational, Strategic, Legal and Compliance, and Reputation. Within these seven groups, the top 10 Risks have been identified for reporting to the Board by means of the Group's internally published ERM guidelines and principles.

The risks identified by the ERM system are supervised by two different committees: one at the Board level and the other at the management level. The Risk Management Committee's aim is to inform the Board of Directors about the early detection and assessment of all kinds of risks that may endanger the Company's existence. The Risk Monitoring Committee functions under the General Manager and aims to take necessary measures regarding identified risks and develop policies and practices necessary to effectively carry out ERM processes.

Tüpraş has compliance policies consisting of: the Anti-Corruption Policy, Export Control Policy, Code of Ethics and

Business Conduct and US Persons Recusal Policy, all of which will assist Tüpraş to monitor its compliance procedures effectively. Tüpraş applies its Export Control Policy considering not only economic sanctions currently in effect as they apply to Tüpraş but also evaluates how sanctions regimes may impact its business counterparties.

Technical safety is given particular importance at Tüpraş, in order to minimise the effects of accident risks such as fire, power/water cuts, occupational accidents, earthquake, flood, terrorism and sabotage. All employees, including those of the contractors, are expected to comply with the Health, Safety and Environmental (HSE) standards. Technical safety and fire-fighting systems have been equipped with the latest technology. Fire and evacuation drills, distress plan drills, and for those refineries with a coast, drills under the ISPS Code, are performed. The Distributed Control System (DCS) installed in the refinery units help to minimise human error and ensure safer operating conditions. In addition, priority is given to the recognition and management of risks as well as the allocation of resources to critical operations.

The Group manages environmental risks such as emissions, noise, waste, soil and water pollution, solid wastes and sea pollution within the context of national and international standards. The environmental performance of all refineries is regularly audited by the Head Office, Koç Holding Environment Commission, British Standards Institute, insurance companies, provincial Directorates of Environment and Forestry Municipality Environmental Protection and Control Departments.

In order to eliminate transportation related risks, suppliers are expected to maintain specific standards for vessel tankers. Suppliers must use vessel tankers which are acceptable by ports as having ISO 9001 and class certificates and complying with ISPS (International Ship and Port facility Security Code) requirements.

Tüpraş's laboratories have excellence certificates granted by international institutions and accreditation certificates given by the Turkish Accreditation Institution. These laboratories help to eliminate product feature risks by performing the necessary evaluations in each phase of production and sale.

The Group is also exposed to a variety of financial risks due to its operations. These risks include credit risk, liquidity risk and market risk (foreign exchange risk, interest rate risk and commodity price risk). The Group's overall risk management strategy focuses on the unpredictability of financial markets and tries to minimise potential adverse effects on the Group's financial performance. The Group also uses derivative instruments to mitigate risk exposures. See "—*Quantitative and Qualitative Disclosure about Market Risk*".

The Group aims, in accordance with its risk management policy, to maintain financial discipline with financial and risk management policies focusing on areas such as leverage, liquidity, credit, interest rate, commodity and currency risks. To keep these financial risks under control, a variety of financial indicators, i.e., net financial debt/EBITDA, net foreign currency position/shareholders' equity, current ratio and fixed/floating profile of the debt, and counterparty risk limits are monitored and kept within pre-set limits.

Although the Group has adopted procedures and policies aimed at minimising risk, these measures might not adequately protect the Group's overall business. See "*Risk Factors*".

Quantitative and Qualitative Disclosures about Market Risk

The Group's activities expose it to a variety of financial risks, including the effects of changes in debt commodity price risks, foreign currency exchange rates and interest rates, which are detailed in note 32 to the Group's 2016 Consolidated Financial Statements.

Significant Accounting Evaluations, Assumptions and Estimates

The estimates and assumptions made by the Group's management that have a significant risk of causing a material adjustment to the carrying amounts of the Group's assets and liabilities are detailed in note 2.5 to the Group's 2016 Consolidated Financial Statements. The estimates and assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances. Since management judgement involves making estimates concerning the likelihood of future events, actual results could differ from those estimates.

BUSINESS

Introduction

Tüpraş is currently the only oil refiner in Turkey, the seventh largest oil refinery group in Europe (as measured by refinery capacity according to Oil & Gas Journal in 2016). The Company was the country's largest industrial company in 2016 as measured by net sales, according to the Istanbul Chamber of Industry. The Group's principal assets are four oil refineries located in İzmit, İzmir, Kırıkkale and Batman. The annual total design refining capacity of the four refineries is 27.9 million MT, with 2016 production of 28.3 million MT. The Group's refineries produce a full range of refined petroleum products, including diesel, jet fuel, gasoline, asphalt, LPG, naphtha, fuel oils and lubricant base stocks. The Group also imports and sells petroleum products and engages in the distribution, retailing and marine transportation of crude oil and refined products. As of 30 June 2017, 75.9 per cent. of Tüpraş's sales (by volume) were domestic, with the remainder exports.

The İzmit Refinery and the İzmir Refinery are the two largest refineries in Turkey, each with a crude oil capacity of 11.0 million MT per year. The İzmit Refinery is located 80 kilometres south-east of Istanbul on the coast of the Gulf of İzmit by the Sea of Marmara, in the region that accounted for approximately 34 per. cent of Turkish petroleum product demand in 2016, according to the 2016 EMRA Annual Report. In 2016, the İzmit Refinery processed 10.8 million MT of crude oil and 1.0 million MT of other feedstock, producing 11.0 million MT of refined products. Following the mechanical completion of the Residuum Upgrading Project ("**RUP**") at the end of 2014, the İzmit Refinery, with three distillation column trains, had a Nelson Complexity Index of 14.5 (based on design capacity) as of 31 December 2016, exceeding Tüpraş's average Nelson Complexity Index of 9.5 and making it the Group's most complex refinery. İzmit Refinery's Nelson Complexity Index is higher than the average for Mediterranean refineries as of 31 December 2016. The RUP Facility, which in 2016 converted 4.2 million MT of black products into approximately 3.5 million MT of high value, environmentally friendly white products at EU standards, including diesel, gasoline and LPG, began producing at full capacity in May 2015.

The İzmir Refinery is located on the Aegean Sea. In 2016, the İzmir Refinery processed 11.5 million MT of crude oil and 0.2 million MT of other feedstock, producing 11.2 million MT of refined products. It is the only refinery in Turkey with a base oil production unit, the design production capacity of which is 400,000 MT. The İzmir Refinery, with three distillation column trains, had a Nelson Complexity Index of 7.66 (based on design capacity) as of 31 December 2016.

The Kırıkkale Refinery, located inland 80 kilometres south-east of Ankara, has a design capacity of 5.0 million MT and has Turkey's largest road tanker filling capacity. Crude oil is supplied via BOTAŞ's Ceyhan Terminal and the Ceyhan-Kırıkkale pipeline. In 2016, it processed approximately 5.0 million MT of crude oil and 0.1 million MT of other feedstock, producing approximately 4.8 million MT of refined products. The Kırıkkale Refinery had a Nelson Complexity Index of 6.32 (based on design capacity) as of 31 December 2016.

The Batman Refinery is located inland in south-eastern Turkey, adjacent to areas of domestic crude oil production, approximately 200 kilometres north-west of the Iraq border. The Batman Refinery has a design capacity of 1.1 million MT. In 2016, the Batman Refinery processed 1.0 million MT of crude oil and produced 1.0 million MT of refined products. The Batman Refinery had a Nelson Complexity Index of 1.83 (based on design capacity) as of 31 December 2016.

The following table sets out summary information about each of the Group's refineries:

Refinery	Nelson Complexity[1]	Location	Capacity (million MT/year)	Storage Capacity	Production in 2016 (million MT)	Capacity Utilisation Rate in 2016	Key Features
İzmit	14.5	80 kilometres south-east of Istanbul on the coast of the Gulf of İzmit by the Sea of Marmara	11.0	3.03 million m^3	11.0	107.4%	RUP Facility; Located at centre of a consumption hub; Capable of producing at Euro-V standards
İzmir	7.66	On the Aegean Sea	11.0	2.51 million m^3	11.2	106.3%	Only refinery with a base oil production unit
Kırıkkale	6.32	80 kilometres inland south-east of Ankara	5.0	1.41 million m^3	4.8	101.3%	Turkey's largest road tanker filling capacity
Batman	1.83	Inland in south-eastern Turkey, approximately 200 kilometres	1.1	253,000 m^3	1.0	92.5%	Adjacent to areas of domestic crude oil production

north-west of the
Iraq border

[1] Nelson Complexity values are calculated with respect to Nelson Complexity calculation methodology by the Group.

Apart from the refineries, Tüpraş has a 40 per cent. share in Opet, which was the second largest petroleum products distribution company in Turkey as of 30 June 2017 in terms of sales volume, based on EMRA data. Opet is engaged in retail and wholesale activities in fuel distribution, the production and marketing of lubricating oil, the sales of air transport fuels and the international trade of petroleum products.

In addition, Tüpraş has a 79.98 per cent. share in Ditaş, which mainly carries out Tüpraş's crude oil and refined product shipping operations. Ditaş conducts crude oil shipping operations with its own tankers as well as the tankers it charters, as necessary. Ditaş also provides product shipping services for Opet and other distribution companies.

History and Development

Tüpraş was formed in 1983 as one of several government-controlled petroleum businesses, with a mandate to purchase and process crude oil, import and export petroleum products, and to operate petroleum refineries. The privatisation of Tüpraş began in 1990, as ownership of Tüpraş was transferred to the Republic of Turkey's Prime Ministry Privatisation Administration (the **"Privatisation Administration"**). Between 1990 and 2006, 49 per cent. of the Turkish Government's shares were listed on the Istanbul and London Stock Exchanges. In 2005, the Privatisation Administration resolved upon the sale of the remaining shares to Enerji Yatırımları A.Ş. (**"EYAŞ"**), a company controlled by Koç Holding, and the relevant shares were transferred to EYAŞ in 2006 in accordance with a share purchase agreement executed between EYAŞ and the Privatisation Administration, thus completing the privatisation of Tüpraş. On 22 October 2002, Tüpraş acquired a controlling stake in Ditaş, raising its total shareholding to 78.98 per cent. share in Ditaş and, on 27 December 2006, Tüpraş acquired a 40 per cent. share in Opet.

Since its privatisation, the Group has undertaken numerous initiatives to improve its corporate governance, risk compliance and overall efficiencies. Since 2007, the Group has been implementing the Systems, Applications and Products in Data Processing (**"SAP"**) system, which is an enterprise software solution that integrates the Company's internal business functions.

In 2007, the İzmit Refinery CCR Reformer Unit and Diesel Hydrodesulphurisation Complex were commissioned, enabling all diesel produced in the refinery to meet Euro V fuel regulations limiting sulphur content of diesel to 10 ppm.

In 2008, the Group initiated the RUP for the İzmit Refinery with the purpose of decreasing black products yield (primarily fuel oils) in line with decreasing consumption due to natural gas substitution, while simultaneously increasing white products yield (i.e., diesel, jet fuel, gasoline and LPG). The RUP project had a total capital investment of USD 3.26 billion (including the associated pier, railroad links and other complementary projects) and took six years until mechanical completion. The RUP Facility was mechanically completed in 2014 and commenced operations with an opening ceremony on 15 December 2014. In addition, the investment to improve the İzmir Refinery's Gasoline Specification and Kırıkkale Refinery's Diesel Desulphurisation and CCR Reformer units were commissioned.

In 2009, the investment to improve the İzmit Refinery's gasoline specifications was commissioned, in order to meet Euro V product specifications.

In 2010, Tüpraş opened its Research & Development Center in İzmit and launched the Waste Management Program (utilising an SAP module) at its refineries.

In 2011, the USD 2.1 billion in loan agreements for the RUP, insured, in part, by the Spanish export credit agency CESCE and the Italian export credit agency SACE, were signed.

In 2012, Tüpraş issued USD 700 million 4.125 per cent. notes due May 2018 on the international market on 2 November 2012.

In 2013, Tüpraş added the energy management system certification and information security management systems certification to its quality management system certifications and ranked ninth nationwide in spending on research and development, moving up five places in keeping with its corporate targets.

In 2014, the İzmit Refinery's RUP Facility was completed and the R&D Center Campus, covering 12,950 square metres, commenced operations.

In 2015, as a result of the RUP Facility reaching production at full capacity in May 2015 and favourable refining margins, Tüpraş's capacity utilisation rate reached record high levels. White product yield rose to 75.4 per cent. and total production amounted to 27.3 million MT. At the European Business Awards for the Environment, Tüpraş won first prize under the Turkish National Scheme for its project "Using Membrane Deaerated Cold Boiler Feed Water For Energy Recovery," which both improves energy efficiency and promotes environmental protection.

In 2016, the İzmit Refinery's PLT-62 Greywater Treatment Unit, which treats discharge water for industrial reuse, started operations. Construction of the Kırıkkale Refinery's Wagon Maintenance and Repair Workshop, the most comprehensive workshop of its kind in Turkey, was completed and operations commenced to conduct maintenance and repair work on tank wagons owned by the Company in line with European standards. Also in 2016, the European Bank for Reconstruction and Development extended a USD 150 million loan to Tüpraş to support the Company's energy and water efficiency efforts. Tüpraş was assigned a Corporate Governance Rating of 9.42 and was included in the BIST Sustainability Index. According to the World Corporate Governance Index (DKYE) published on 1 June 2016 by SAHA Kurumsal Yönetim ve Kredi Rating Hizmetleri A.Ş. (SAHA Corporate Governance and Credit Rating Services Inc.), Tüpraş is listed in the first group.

Strengths

The Group believes that its key strengths are the following:

- ***Currently sole operator of oil refineries in the growing Turkish market.*** The Group's oil refineries are currently the only operating oil refineries in Turkey and produce 100 per cent. of Turkish production as of the date of this Offering Circular. Since its establishment, the Company has been Turkey's leading supplier of refined products in each of its product markets. In 2016, the Company's share of the Turkish petroleum product market, excluding industrial products (e.g., base oil and bitumen), was approximately 60 per cent., based on diesel, gasoline, jet fuel and fuel oil data from EMRA and Company data. The Company's leading position is further augmented by having a well-established infrastructure and facilities for importing crude oil and refined products and selling refined products in Turkey, which the Company believes give it economic advantages over competitors that import refined products. The Company maintains and improves its infrastructure by continuously implementing energy efficiency and operational efficiency projects at its refineries.
- ***Flexibility of operations.*** The Group has a large number of production lines in its refineries, enabling operational flexibility and an ability to reduce operational costs in response to changing demand. By virtue of this operational flexibility, capacity utilisation can be varied to meet market and economic conditions without significantly reducing efficiency. Utilisation of semi-finished products enables the maximisation of product yields under all capacity utilisation scenarios. This flexibility allows the Group to manage variations in demand, as well as both planned and unplanned maintenance, without a major impact to sales activities, such as, for example, seasonal variations or switching from the production of jet fuel to diesel.
- ***Ability to generate favourable refining margins.*** The Group believes that the combination of a growing domestic market, with a refined product deficit in diesel and its operational flexibility, asset location, storage infrastructure and sales strengths, enables the Group to generate strong refining margins. Since the completion of investments related to Euro V petroleum products specifications, the Group has further improved its refining margins which represent a premium over the benchmark refining margin for the Mediterranean region. Tüpraş's net refining margins were USD 8.20 and USD 6.03 per barrel for the six months ended 30 June 2017 and the year ended 31 December 2016, respectively, compared to Mediterranean averages of USD 5.41 and USD 3.97 per barrel, respectively. The Group has one refinery with high complexity (the İzmit Refinery) and two refineries with medium complexity (the İzmir Refinery and Kırıkkale Refinery), all of which can process a variety of crude oils and produce a high value added mix of products. After the RUP Facility began production at full capacity, the İzmit Refinery's Nelson Complexity Index rose to 14.5, which increased the Company's overall average Nelson Complexity Index to 9.5. The less complex Batman Refinery is configured as a specialist asphalt refinery to process only domestic heavy crude oils and mainly produces asphalt to meet domestic demand.
- ***Strategic asset location.*** The Group's oil refineries are located near the main petroleum consumption regions of Turkey, whilst still having access to flexible and cost effective sea and land crude oil supply routes, which gives the Group a competitive advantage versus imported refined products and enables the Group to extract favourable refining margins. The İzmit Refinery primarily services the Marmara market (including Istanbul), which constituted approximately one-third of Turkish petroleum product demand in 2016, and the coast of the Black Sea. The İzmir Refinery principally services the markets of western Turkey, while the Kırıkkale Refinery and Batman Refinery principally service the markets of central Anatolia and east/south-eastern Anatolia, respectively. In addition, the strategic location of each of the Group's refineries ensures that the Group can obtain a wide range of crude oils at cost-efficient prices from suppliers in the Middle East, North Africa and the Mediterranean as well as Russia and Central Asia.
- ***Storage and import infrastructure.*** The Group owns approximately two-thirds of the refined product storage capacity in Turkey. It also has large scale import-export facilities at the İzmit and İzmir Refineries, which are located on the coasts of the Gulf of İzmit and Aegean Sea, respectively. The İzmit, Kırıkkale and Batman Refineries are all equipped with railway loading and unloading facilities enabling products to be transferred

between them. These facilities allow the Group to import and store cargos in bulk and to opportunistically take advantage of pricing opportunities in the market, in each case reducing its cost of supply.

- ***Sales and distribution capability.*** The Group's major customers have terminals which are connected to the Group's refineries by pipeline, which decreases the customer's working capital requirements and reduces their price risk by enabling them to purchase in small quantities whilst also reducing handling costs. The Group's infrastructure enables it to supply customers at low cost at multiple points throughout the country, by pipeline, rail and sea. This capability is enhanced by Tüpraş's access to extra storage capacity at the terminals of Opet and Aygaz A.Ş., an affiliate of the Group, in order to serve regions in Turkey where Tüpraş does not own infrastructure. In addition, the Group is the sole provider of asphalt to the Turkish ministry of transport and municipalities, and the only provider of specialist military fuels to the Turkish armed forces. In 2016, 50 per cent. of the Company's sales were made to petroleum product/LPG distributors, 18 per cent. were exports and 32 per cent. were direct sales to final consumers.
- ***Flexibility in the procurement of crude oil***. The Group has access to diverse sources of crude oil supply and buys various types of crude oil. In 2016, the Group bought and processed 18 different types of crude oil, with gravities ranging between 19 API and 48 API, from 10 countries, helped by the convenient geographic location of Turkey and the increased refinery conversion capacity and supply flexibility for crude oil after the commissioning of the RUP Facility. The configuration of the Group's refineries allows the Group flexibility in the selection of crude oil because the refineries are able to refine many different types of crude oil. The Group's management is able to make key decisions in the procurement of crude oil on a monthly basis based on its supply contracts and purchases on the spot market. The Group's procurement decisions are aided by PIMS, an industry-specific software, enabling it to determine which blend of crude oils are the most cost-effective in producing the desired refined products at each of the Group's refineries.
- ***Heightened complexity and competitive position.*** Since the privatisation of Tüpraş in 2006, the Group has accelerated its rate of investment in the İzmit Refinery, İzmir Refinery and Kırıkkale Refinery, enabling the production of the latest specification of automotive fuels prior to the change in Turkish standards, increasing each refinery's complexity and improving its white product yields. The Group reached mechanical completion for the RUP Facility at the İzmit Refinery in 2014, which had a total capital investment of USD 3.26 billion (including the pier, railroad links and other complementary projects) and is the largest single industrial investment made in Turkey to date. The RUP Facility significantly improved the Group's capacity utilisation rate to 111.5 per cent. for the six months ended 30 June 2017 from 68.5 per cent. in 2014. The RUP Facility has increased the İzmit Refinery's Nelson Complexity Index to 14.5 from 7.78 before completion of the RUP Facility. The RUP Facility also uses the excess black products produced by the Group's other refineries, which enables them to run at maximum capacity.
- ***Beneficial financing terms.*** As the largest industrial company in Turkey (in 2016 as measured by net sales, according to the Istanbul Chamber of Industry) and part of Koç Holding, the largest investment holding company in Turkey (in terms of revenues, exports and market capitalisation on the Borsa İstanbul as of 31 December 2016), the Company believes that it has access to both domestic and international financial markets on favourable terms, and has a Ba1 (positive) credit rating from Moody's and benefits from above sovereign investment grade credit ratings of BBB- (stable) from Fitch.
- ***Financial discipline.*** The Group aims to maintain financial discipline with financial and risk management policies focusing on areas such as leverage, liquidity, credit, interest rate, commodity and currency risks. To keep these financial risks under control, a variety of financial indicators, including net financial debt/EBITDA, net foreign currency position/shareholders' equity, current ratio, the fixed/floating profile of financial debt and counterparty risk limits, are monitored and kept within set limits. See "*Management's Discussion and Analysis of Financial Condition and Results of Operations—Risk Management Governance*".

Strategy

The Company's overall strategic goal is to lead the sector with innovative practices, maximise customer satisfaction and meet Turkey's national refined petroleum product demand. The Company intends to achieve this goal by continuing to implement the following key strategies:

- ***Using the RUP Facility to run all refineries at full capacity.*** Before the RUP Facility became operational, it was not cost effective to run the Group's refineries at maximum capacity due to the excess of low value black products being produced. However, the Group's ability to utilise these low value products (i.e., fuel oil) as feed for the RUP Facility, which is then converted into white products (i.e., diesel, gasoline, LPG and jet fuel), now permits the Group to operate its refineries at much higher capacities. The Group's refineries reached full capacity utilisation in 2016 after the RUP Facility became operational. As a result of increased production by the Group, imports of middle distillate products into Turkey as a whole fell by 5.0 million MT compared to the

year before the RUP Facility commenced operations. After the RUP Facility began production at full capacity, the İzmit Refinery's Nelson Complexity Index rose to 14.5, which increased the Company's overall average Nelson Complexity Index to 9.5. The Company also aims to utilise the RUP Facility to maintain increased white product yield. See *"—Residuum Upgrading Project"*.

- ***Increasing efficiency and decreasing costs.*** The Group aims to strengthen its sustainable profitability potential through increasing efficiency and minimising costs whilst maintaining high levels of operational excellence. In an increasingly competitive environment, Tüpraş is differentiating itself from competitors by decreasing input costs such as energy and crude oil. The Group has the advantage of proximity to sources of crude oil and the ability, as a result of the RUP Facility, to process a wider range of crude oils, including heavier and sour crude oils. These factors enable the Company to choose the most profitable crude oils according to its plan of operations and, therefore, bolster its sustainable profitability.
- ***Being environmentally responsible.*** The Group places great importance on environmental sensitivity and the efficient use of natural resources in all of its operations. The Company achieved an industry first with its residential greywater treatment and reuse project at the İzmit Refinery, which in 2016 began treating waste water from the Körfez municipality region for industrial reuse. At the İzmir Refinery, a new water treatment plant has started to treat waste water for industrial reuse in 2017.
- ***Prioritising safety.*** The Group has established a process safety management system that meets international standards and practices. The system enables continuous monitoring of process safety and procedures, and included training on process safety leadership, process safety information systems, process hazard analysis, mechanical integrity and quality assurance, high-risk business procedures, contractor management and accident investigations, amongst other topics. In 2016, the Group issued seven new Technical Safety Standards and revised 24 existing standards. Through international consultation, the Group aims to achieve excellence in 15 main safety categories and maintain full compliance with international standards.
- ***Implementing energy management projects.*** The Group aims to implement energy management projects at each of its refineries to avoid energy losses, reduce its refineries' emissions and enhance its sustainable profitability potential, including through the application of "Best Available Technology" in operational development. Energy efficiency is measured using the Energy Intensity Index (EII). In 2016, the Company's EII was 101.8 according to management estimates. From 2008-2016, the Group has implemented a number of projects for energy saving purposes that have accounted for approximately USD 416 million. At the İzmit Refinery, the implementation of the RUP included a new power plant with gas turbines and a steam turbine with heat recovery steam generators, as well as modification of the existing steam turbine and heat recovery steam generator. At the İzmir Refinery, current projects include improvements to cracking units and base oils complex units, the renewal of pumps and compressor unloader applications. At the Kırıkkale Refinery, construction of a new power plant to include a gas turbine, steam turbine and heat recovery steam generator will begin in the fourth quarter of 2017. In addition, a solar energy project for the Batman Refinery and a wind power project for the İzmir Refinery are in consideration, with both renewable energy projects still at the engineering stage. The Company is aiming to achieve an EII figure of 96 by 2021 through continuing optimisation of energy management and its investment projects.
- ***Implementing enhancement and cost reduction projects to improve operational efficiency of refineries.*** The Group continuously aims to improve the operational efficiency of its refineries by implementing investment projects that achieve fewer shutdowns and lower maintenance costs whilst decreasing energy costs, improving product yields and lowering accident rates. Between June 2006 and Dec 2009, the Group, together with Shell Global Solutions, a global industry consulting firm, selected and implemented 80 investment projects requiring little or no capital expenditures focusing on better maintenance planning, improving efficiency, improving process control and eliminating core reasons for accidents. According to management estimates and Shell Global Solutions, implementation of these projects generated cumulative cost savings of over USD 300 million between 2007 and 2011. In March 2010, the Group, together with Shell Global Solutions, launched its "New Horizons" operational excellence program and selected 15 investment projects to be implemented through March 2013. These included advance process control implementation, combustion engineering, implementation of a "permit to work system" and creation of energy roadmaps. These investment projects required little or no capital expenditures, and were designed to increase energy efficiency and improve profitability at each of the refineries.
- ***Ongoing efforts to improve corporate organisation.*** In 2016, the Company carried out a restructuring with the purpose of streamlining its organisation and strengthening its personnel. The focus of management extended to include a philosophy of innovation, digital transformation and technical safety. Career planning, balanced scorecard evaluations and bonus schemes were introduced and new training programmes were launched which

included tailored Masters' Degrees. The Company intends to continue such programmes and introduce new initiatives to improve the Company's knowledge base and improve staff retention.

- ***Investment in research and development.*** The Company's R&D Center at İzmit opened in 2010 and focuses primarily on process optimisation and improvement, energy efficiency and cutting-edge technologies in reaction engineering and materials science. A new research campus consisting of a design building, laboratory building and a pilot testing facility was opened at İzmit in 2014. The Turkish Government encourages investment into new research and development projects through tax incentives which partially offset the costs of the projects and the Company intends to maximise the benefits from such tax incentives and increase its capital expenditure on R&D. In addition, the Company intends to develop certain R&D projects jointly with leading academic institutions. See "*—Research and Development*".

Industry

The Mediterranean region in which the Group operates is characterised by intensified competition due to new refinery capacities in the Middle East and Asia and increased exports from US refineries, a structural shortage in middle distillates, such as diesel and gasoil, and overcapacity in fuel oil, gasoline and naphtha. Currently there are 54 refineries in the Mediterranean region and an additional 17 refineries in the Black Sea region with a combined design refining capacity of 9.6 million bpd, according to Oil & Gas Journal, Reuters and other publicly reported data. While the Company is currently the only operating oil refiner in Turkey, additional refineries are being constructed by international energy companies in Turkey. For example, SOCAR Türkiye has a refining licence in Turkey (awarded in June 2010), for a refinery with a capacity of 10 million MT. Its construction began in 2014 and the refinery (STAR Refinery) is planned to be mechanically completed by the end of 2017 and to begin operations in late 2018, according to SOCAR. See *"—Competition"*.

The refining capacities in Europe & Eurasia decreased slightly to 23.4 million bpd in 2016 from 23.7 million bpd in 2015 and refining capacities in North America decreased slightly to 21.7 million bpd in 2016 from 21.9 million bpd in 2015, according to IEA reports. The decrease in refining capacities was mainly concentrated in Europe (France and UK) and Japan where oil consumption remained almost flat. In regions with developing economies, such as India and China, the number of refineries increased and investments were made in existing refineries to increase capacity or optimise production.

Demand for petroleum products is on the rise in Turkey in parallel with expanding national income and a growing youth population, as well as large-scale infrastructure investment and urban transformation projects. Total consumption of petroleum products in Turkey increased by 7.6 per cent. in 2016 compared to 2015, reaching 26.7 million MT. In particular, record-high sales of automobiles and light commercial vehicles in the transportation sector, which accounts for a large share of total petroleum product demand, became one of the most important factors that boosted consumption. In December 2016, there were 21.1 million vehicles in Turkey according to Turkstat and this figure is expected to continue to rise, as vehicle ownership is low compared to developed market levels. The tourism industry, and therefore the air transportation industry, suffered a decline in 2016 as aircraft traffic decreased by 0.3 per cent. and air passenger traffic fell by 4.1 per cent. (or 7 million passengers) to about 174 million passengers. As a result, jet fuel consumption in 2017 has decreased by 12.6 per cent. compared to 2016, with 0.51 million MT being produced in the first quarter of 2017 compared to 0.59 million MT in the first quarter of 2016. However, total oil demand in Turkey is expected to grow steadily until 2025, spurred by increasing demand for diesel and jet fuel. Turkish consumption of diesel and jet fuel production in the first quarter of 2017 was 20 per cent. higher than in 2016, with 3.6 million MT produced compared to 3 million MT in the first quarter of 2016 and 2.5 million MT in the first quarter of 2015.

According to EMRA, diesel consumption in Turkey was 22.3 million MT in 2016, an increase of 8.5 per cent. from 2015. Diesel demand is expected to maintain its growth trend due to major new infrastructure projects such as the Çanakkale Bridge, which is currently at the beginning stage. The bulk of diesel demand comes from "goods vehicles", as Turkey depends heavily on road transportation, and major investment projects like the third airport and the connecting roads of the third bridge in İstanbul, the İstanbul-İzmir Highway and large-scale urban transformation projects. During the first half of 2017, diesel consumption increased by 3 per cent. compared to the same period in 2016, with a production of 3.1 million MT. Gasoline consumption declined by 1.4 per cent. in the first two months of 2017, despite having increased by 7 per cent. during 2016 due to the improved efficiency of gasoline engines and greater numbers of cars on the roads. As a result of its competitive advantages such as storage capacity and terminal infrastructure, the Group was able to meet the entire gasoline demand in Turkey in 2016. Fuel oil demand in Turkey continued to decline in 2017, with a decline of 10.1 per cent. due to the promotion of natural gas consumption for heating and industrial purposes.

Turkey's petroleum industry is regulated pursuant to the Petroleum Market Law (Law No. 5015), which liberalised the market as of 1 January 2005. It allows prices to be set by the market and removed all restrictions on importing refined products, except those relating to product specifications. It also stipulated that all market participants acquire a license from EMRA to operate in Turkey. Licenses are granted for a maximum period of 49 years but may be renewed. Refining licenses may be terminated by EMRA if (i) the license holder becomes bankrupt; (ii) the legal entity of the license holder

is terminated; (iii) death of the license holder; (iv) validity of a document submitted during the application is challenged (except for the workplace opening and operation certificate); (v) the license holder fails to fulfil an obligation of the license; or (vi) the workplace opening and operation certificate is terminated after the application process.

The Group's domestic product prices are directly correlated with CIF Genoa Mediterranean Platts prices, as Genoa constitutes the closest market as specified under the Petroleum Market Law. Product prices are determined under conditions of full competition, since imports are completely liberalised in the domestic market.

In Turkey, Euro V specifications came into force as of 1 January 2011. With investments of USD 2 billion, the Group's refineries have become capable of production in accordance with high environmental standards at the same time as refineries in the EU. Accordingly, the Group is capable of exporting high standard products worldwide, particularly to the developed Europe and US markets.

Operations

Overview

The principal operating assets of the Group are the İzmit, İzmir, Kırıkkale and Batman refineries, which have a total combined design capacity of 28.1 million MT per year. The Group imported approximately 25.2 million MT of crude oil in 2016 at a total cost of USD 7.6 billion. The Group has a diverse supply of crude oil imports with the bulk coming from Iran, Iraq, Russia, Saudi Arabia, Kuwait and Kazakhstan, and with domestic production accounting for another 2.6 million MT of crude oil. Taking into account movements in crude oil stocks, total crude oil processed by the Group was 28.3 million MT in 2016, giving an average refinery capacity utilisation rate of 100.9 per cent. If semi-finished products used for feedstock are also included, the Group's capacity utilisation rate in 2016 increased to 105.3 per cent. In addition, in 2016 the Company imported 3.7 million MT of refined products and semi-finished products to bridge domestic production gaps and meet seasonal demand peaks. The Group's principal refined products include diesel, gasoline, fuel oil, jet fuel, asphalt, LPG, naphtha and lubricant base stocks.

Crude Supply

As a result of the importance the Group places on the security of its crude oil supply, it prefers to diversify the crude oil grades that it processes as well as the number of suppliers, from whom it purchases oil via spot and term contracts. The Group generally enters into one-year supply agreements with foreign suppliers, which are reviewed and renegotiated on an annual basis, although the Group has executed supply contracts of shorter duration with suppliers in some countries. Tüpraş also has crude oil supply contracts with some national oil companies. These contracts specify the level of crude oil to be supplied and the indexed price, which is calculated based on the supplier's monthly official selling price less a discount; the official selling price is published as a differential to Brent crude or other reference crude. The Group provides its crude oil requirements to the contractual suppliers on a monthly basis. On the 5th day of each month, the Group submits a nomination letter to the supplier, which designates the number of cargoes of a particular crude it wishes to purchase, and normally receives a response from the supplier by the 20th day of the month at the latest. The supply agreements are structured to allow the Group to make adjustments to the number of cargoes it purchases each month from different suppliers (without paying a penalty), in order to account for rapidly changing economic conditions. In addition to contractual purchases, the Group also makes strategic purchases of crude oil on the spot market. For domestic crude, as the only refining company in Turkey the Group is required by Turkish law to purchase domestic crude oil produced in Turkey from 11 different companies, including Türkiye Petrolleri Anonim Ortakliği (**"TPAO"**) and Perenco, one of the largest independent E&P companies in EMEA.

The coastal locations of the İzmit and İzmir Refineries permit them to receive waterborne crude supplies via their marine facilities. The İzmir Refinery's location is on the coast of the Aegean Sea, allowing for lower delivery costs on cargoes originating from the south and vice versa, and the İzmit Refinery is located on the coast of the Sea of Marmara, giving it cost advantages on cargoes coming from the Black Sea region. The Kırıkkale Refinery is land-locked and supplied through a pipeline from a marine terminal in Ceyhan, both of which are owned by BOTAŞ, which is a Turkish state-owned company.

The following table sets out the total volumes of crude oil purchased by the Group for processing by country of origin for the periods indicated:

	For the year ended 31 December		
Country*	**2016**	**2015**	**2014**
		(millions MT)	
Iraq	9.3	11.5	5.7
Iran	7.0	5.5	5.3
Domestic	2.6	2.6	2.4
Russia	3.2	3.1	0.6
Saudi Arabia	2.3	2.4	2.4

Country*	For the year ended 31 December		
	2016	2015	2014
Kazakhstan	0.6	0.6	1.6
Libya	0.0	0.0	0.1
Nigeria	0.0	0.4	1.8
Italy	0.0	0.3	0.2
Kuwait	2.6	0.1	0.0
Other	0.3	0.5	0.1
Total	27.7	27.4	20.2

* Crude oil purchased on the spot market is aggregated in the table above with its country of origin.

Tüpraş maintains diverse sources of supply. In 2015 and 2016, purchases of Iraqi crude oil increased from 2014 due to better yields of Iraqi crude oil, the operational compatibility of Iraqi oil grades with Tüpraş's refineries and the ongoing sanctions applicable to Iranian crude oil purchases. Tüpraş purchased 9.3 million MT and 3.6 million MT of crude oil from Iraq in 2016 and the first half of 2017, respectively. In 2016 and 2017, following the introduction of the JCPOA and the lifting of many of the previous sanctions against Iran, including the extra-territorial US sanctions affecting non-US purchasers of Iranian crude oil, purchases of Iranian crude oil increased. Tüpraş purchased 7.0 million MT and 6.5 million MT of crude oil from Iran in 2016 and the first half of 2017, respectively.

Crude Oil Purchases from Iran

In recent years, Tüpraş has purchased significant volumes of crude oil from Iran, as Iranian crude oil became cheaper and more profitable for the Group when light/heavy crude differentials increased, when the RUP Facility gave the Group increased refinery conversion capacity to convert black products into white products, and since Iranian crude is best suited to producing bitumen for meeting asphalt demand in Turkey. International sanctions no longer apply to purchases of Iranian crude oil if they do not involve any "prohibited persons"; i.e., persons designated as sanctions targets for this purpose by the UN, US or EU. However, US primary sanctions (i.e. those restricting the ability of US persons to deal with Iran) remain in place against Iran and prohibit the involvement of US persons or the US financial system in Iranian oil transactions. Tüpraş maintains policies and procedures intended to avoid the involvement of such US elements or prohibited persons in its Iran-related transactions. See "*Risk Factors—Risks Relating to the Businesses of the Group—Importation of crude oil from Iran could subject Tüpraş to sanctions, which may have an adverse effect on the Group's business, financial condition, results of operations and reputation*".

Other Imports

In addition to crude oil, to maintain operational flexibility, Tüpraş also imports refined products and semi-finished products, such as ASRFO (Atmospheric Straight Run Fuel Oil), HVGO (Heavy Vacuum Gas Oil), naphtha and high sulphur gas oil, to bridge domestic production gaps and meet seasonal demand peaks. In 2016, the Company imported 203 thousand MT of jet fuel, 1,097 thousand MT of low-sulphur fuel oil and 628 thousand MT of HVGO. The principal refined product imported by Tüpraş is diesel, for which domestic production only satisfied approximately 42 per cent. of domestic demand in 2016, according to EMRA. Tüpraş imported 1,240 thousand MT of diesel in 2016. Tüpraş generally enters into one-year supply agreements with its diesel suppliers, which are negotiated on an annual basis. Imported refined products are processed (in the case of high-sulphur diesel) and sold to distributors.

The following table sets out the total volumes of refined products and semi-finished products imported by Tüpraş for the periods indicated:

Product	For the six months ended 30 June				
	2017	2016	2016	2015	2014
			(thousand MT)		
MTBE	35	52	112	93	80
Jet Fuel	0	203	203	61	274
Fuel oil (low sulphur)	449	588	1,097	804	692
High Sulphur gasoil	316	160	465	637	882
Low Sulphur diesel	60	978	1,240	588	532
HVGO	701	400	628	671	253
Naphtha	0	0	0	49	24
LCGO	0	5	6	62	183
Others	0	0	0	35	0
Total	1,560	3,386	3,749	2,999	2,920

Refinery Production

The following table sets out the crude oil distillation design capacity, quantity of crude oil and other feedstock processed, total capacity utilisation rate (including crude oil processing) and quantity of refined products produced by each of the Group's refineries for the year ended 31 December 2016:

	Capacity	Capacity Utilisation	Crude Oil Processed	Refined Products	Other Feedstock
	(million MT)	*(per cent.)*		*(million MT)*	
Refinery					
İzmit	11.0	107.4	10.8	11.0	0.97
İzmir	11.0	106.3	11.5	11.2	0.2
Kırıkkale	5.0	101.3	5.0	4.8	0.1
Batman	1.1	92.5	1.0	1.0	0.0
Total/Average	28.1	100.9	28.3	27.9	1.2

The following table sets out the total volumes of crude oil processed at each of the Group's refineries for the periods indicated:

	For the six months ended 30 June		For the year ended 31 December		
	2017	2016	2016	2015	2014
			(million MT)		
Refinery					
İzmit	5.7	5.0	10.8	11.2	8.6
İzmir	5.9	5.6	11.5	11.1	8.0
Kırıkkale	2.7	2.4	5.0	4.2	3.1
Batman	0.4	0.4	1.0	1.0	0.4
Total	14.7	13.4	28.3	27.6	20.0

The following table sets out the consolidated total production yields and the approximate percentages of consolidated total production by product for the Group's refineries for the periods indicated:

	For the six months ended 30 June				For the year ended 31 December					
	2017		2016		2016		2015		2014	
	('000 MT)	*(per cent.)*	*('000 MT)*	*(per cent.)*	('000 MT)	(per cent.)	('000 MT)	(per cent.)	('000 MT)	(per cent.)
White Product										
LPG	557.5	3.7	479.5	3.6	976	3.5	904	3.3	702	2.6
Gasoline	3,013.8	20.3	2,768.0	20.8	5,772	20.7	5,560	20.4	4,346	15.9
Naphtha	188.3	1.3	185.8	1.4	306	1.1	263	1.0	100	0.4
Total Light Distillate	3,759.5	25.3	3,433.3	25.7	7,054	25.3	6,727	24.7	5,148	18.9
Jet fuel/Kerosene	2,406.4	16.2	2,265.4	17.0	4,565	16.3	5,126	18.8	3,610	13.2
Diesel	5,203.0	35.0	4,099.0	30.7	9,361	33.5	8,219	30.1	5,307	19.5
Total Middle Distillate	7,609.4	51.1	6,364.4	47.7	13,927	49.9	13,345	48.9	8,917	32.7
Black Products										
Fuel Oil	1,331.2	8.9	1,284.5	9.6	1,979	7.1	2,907	10.7	3,483	12.8
Asphalt	1,292.1	8.7	1,449.6	10.9	3,436	12.3	2,876	10.5	1,920	7.0
Base Oils	98.7	0.7	78.8	0.6	126	0.5	133	0.5	114	0.4
ASRFO/Vacuum	48.0	0.3	65.0	0.5	75	0.3	106	0.4	0	0.0
Coke	467.6	3.1	274.4	2.1	682	2.5	473	1.7	0	0.0
Total Black Product	3,237.7	21.8	3,152.2	23.6	6,302	22.6	6,495	23.8	5,517	20.2
Others	271.0	1.8	389.0	2.9	649	2.3	701	2.6	518	28.2

TOTAL	14,877.6	100.0	13,339.0	100.0	27,928	100	27,268	100	20,101	100
Total White Product Yield (per cent.)	77.6		75.6		76.56		75.43		72.18	

Feedstocks

The Group emphasises operational flexibility in setting its production policy. In addition to crude oil refining, the Group also processes and converts semi-finished products, or feedstock, that it imports. As a result, Tüpraş is able to produce higher margin white products in a cost-efficient manner. Feedstocks are processed by running conversion units at 100 per cent. utilisation rather than utilising capacity of the distillation units which would produce black products.

The following table sets out the aggregate volumes of feedstock processed at the Group's refineries for the periods indicated, including stock movements:

	For the six months ended 30 June				For the year ended 31 December					
	2017		2016		2016		2015		2014	
Feedstocks	*('000 MT)*	*(per cent.)*	*('000 MT)*	*(per cent.)*	*('000 MT)*	*(per cent.)*	*('000 MT)*	*(per cent.)*	*('000 MT)*	*(per cent.)*
Crude	14,668	93.7	13,437	94.8	28,348	95.8	27,559	95.7	20,044	95.2
HVGO....................................	674	4.3	462	3.3	666	2.3	658	2.3	374	1.8
ASRFO	0	0.0	0	0.0	0	0.0	0	0.0	138	0.7
Others	57	0.4	64	0.5	124	0.4	171	0.4	291	1.4
Natural gas	263	1.7	208	1.5	463	1.6	418	1.6	203	1.0
Total Feedstocks	15,662	100.0	14,171	100.0	29,601	100.0	28,807	100.0	21,050	100.0
Average crude gravity (degrees API)	30.7	—	31.0	—	30.6	—	31.4	—	32.3	—

Residuum Upgrading Project

In recent years, demand for fuel oil in Turkey, a black product, has decreased rapidly, while demand for diesel and jet fuel, which are white products, has increased. The average price differential between fuel oil and diesel was USD 180 per MT in 2016. The RUP is designed to transform 4.2 million MT of black products into 3.5 million MT of white products (of which 2.9 million MT are diesel) at Euro V product standards and produce 780 thousand MT of side products, including petroleum coke and sulphur on an annual basis.

The mechanical completion of the project was achieved in November 2014 and the RUP Facility began producing at full capacity in May 2015.

After the RUP Facility began producing at full capacity, the Nelson Complexity Index of the İzmit Refinery increased to 14.5 (based on design capacity). As a result, Tüpraş reached a capacity utilisation rate of 100.9 per cent. in 2016 based on crude oil processing.

In the first quarter of 2011, Tüpraş was granted a "Large Scale Investment Incentive Certificate" providing tax shield benefits on its capital expenditures related to the RUP. The corporate tax rate for earnings associated with the RUP was reduced to 10 per cent. from 20 per cent. The 10 per cent. corporate tax rate was effective until the tax collected from the RUP-specific earnings reached a cap of 30 per cent. of the project value. The RUP investment, which had already been granted a Large Scale Investment Incentive Certificate, was further included in the "Strategic Investment Incentive Certificate" category on 7 October 2013, effective as of 19 October 2012, by the Turkish Ministry of Economy, General Directorate of Incentive and Implementation. According to the "Strategic Investment Incentive Certificate", the corporate tax rate for earnings associated with the RUP is reduced to 2 per cent. from 20 per cent. The 2 per cent. corporate tax rate is effective until the tax collected from the RUP-specific earnings reaches a cap of 50 per cent. of the project value.

Sales

In 2016, the Company's share of the Turkish petroleum product market was approximately 60 per cent. based on diesel, gasoline, jet fuel and fuel oil data from EMRA and Company data. The remainder of the market is served via imports by other oil companies, including major oil companies.

The majority of petroleum products produced in Turkey are consumed domestically, although significant volumes of gasoline and fuel oil are exported to Russia, Spain, Belgium, the Netherlands and India, amongst others, due to the domestic surplus of these products. The following table sets out total sales of petroleum products, sold by the Group's refineries, split by domestic sales and export sales, for the periods indicated:

	For the six months ended 30 June		For the year ended 31 December		
	2017	2016	2016	2015	2014
			(thousand MT)		
Product					
Domestic Sales					
LPG	622	548	1,126	1,031	803
Naphtha	185	140	219	246	122
Gasoline	1,008	995	2,155	2,043	1,830
Jet fuel/Kerosene	1,918	2,080	4,280	4,519	3,611
Diesel	5,075	4,918	10,640	8,973	6,508
Fuel oil	607	674	1,343	1,191	1,292
Asphalt	1,212	1,335	3,367	2,871	1,945
Base oil	78	60	126	133	120
Coke	501	307	682	473	0
Other	391	414	826	764	630
Total	11,596	11,471	24,764	22,245	16,861
Per cent. of total sales (export + domestic)	75.9	78.9	81.8	77.4	76.0
Total Sales	15,278	14,530	30,255	28,739	22,194

	For the six months ended 30 June		For the year ended 31 December		
	2017	2016	2016	2015	2014
			(thousand MT)		
Product					
Export Sales					
LPG	19	14	27	30	23
Naphtha	0	0	9	27	15
Gasoline/Reformate	1,994	1,731	3,536	3,532	2,493
Jet fuel	302	124	194	280	29
High-sulphur gasoil	0	0	0	45	47
Low-sulphur diesel	191	34	67	24	53
Fuel oil	1,173	955	1,493	2,551	2,670
ASRFO	0	159	159	0	0
Other	3	1	5	5	2
Total	3,682	3,059	5,491	6,494	5,333
Per cent. of total sales (export + domestic)	24.1	21.1	18.2	22.6	24.0
Total Sales	15,278	14,530	30,255	28,739	22,194

The following tables set out total sales of refined products, split by key customers and by key distribution companies, for the past three years:

	For the year ended 31 December		
	2016	2015	2014
	(in thousand MT)		
Sales			
Distributors	15,243	12,877	9,637
Exports	5,491	6,494	5,333
Jet Fuel	4,280	4,519	3,611
Asphalt	3,367	2,746	1,998
Other	100	356	237
LPG Distributors	1,126	1,031	803
Military	429	470	454
Petkim	219	246	122
Total	30,255	28,739	22,194

	For the year ended 31 December		
	2016	2015	2014
	(in thousand MT)		
Sales to Distribution Companies			
POAŞ	3,837	3,175	2,221
Shell	2,543	1,737	1,344
Opet	2,870	2,250	1,812
BP	298	730	511
Total	523	243	382
Türkiye Petrolleri	478	297	253
Other	2,873	3,750	3,018
Total	13,871	11,642	8,905

Sales to distributors in Turkey are made pursuant to framework contracts at prices established by the Company (pursuant to a formula which is based on Platts Genova Italian **"CIF"** prices plus a margin below a maximum which has been approved by EMRA). The Company applies the same pricing mechanism to all distributors that it sells to, including Opet. Export sales are generally made to traders, typically at FOB spot prices.

İzmit Refinery

The İzmit Refinery started production in 1961 with an annual crude oil processing capacity of one million MT and has since been significantly expanded and upgraded to become one of the larger and more complex refineries in the Mediterranean region following modernisation efforts to increase white product productivity. As a result of significant capacity augmentation and investments, its design capacity reached 11.5 million MT per year. The İzmit Refinery is capable of producing at Euro V standards in compliance with EU norms and, in 2016, its capacity utilisation rate based on crude oil processing was 107.4 per cent. As of 31 December 2016, the İzmit Refinery had 1,923 employees.

The RUP Facility, which was mechanically completed at the end of 2014, annually converts 4.2 million MT of black products into approximately 3.5 million MT of high-value, environmentally friendly white products at EU standards, including diesel, gasoline and LPG. After the RUP Facility started producing at full capacity in May 2015, the İzmit Refinery's Nelson Complexity Index rose to 14.5, one of the highest scores in the world.

In 2016, a total of 11.8 million MT of material, including 10.8 million MT of crude oil and semi-finished products, were processed at the RUP Facility at maximum capacity. The production of the main petroleum products at the İzmit Refinery, namely LPG, naphtha, gasoline, jet fuel, kerosene, diesel, heating oil, fuel oil and bitumen, amounted to 11.0 million MT. Total domestic sales amounted to 12.3 million MT, with total sales of 14.8 million MT.

As of 30 June 2017, the latest modifications to the İzmit Refinery include:

- The PLT-62 Greywater Treatment Unit, which treats discharge water from the İSU Körfez Wastewater Treatment Plant for industrial reuse and started operations in 2016;
- Implementation of a hydrocracker heat integration project designed to boost energy savings and maximise operational availability at the PLT-47 hydrocracker unit;
- Installation of a C3/C4 splitter and selective hydro generation units;
- Installation of a new propane tank to use the additional production capacity of the RUP Facility and to boost propane sales and storage capacity; and
- Implementation of an off-gas recovery project to treat hydrogen sulfide-containing gases from vacuum columns for reuse at furnace burner systems.

The İzmit Refinery has a power generation unit with a gas turbine and a steam turbine with a total capacity of 85 MW that is able to supply the refinery's energy demand. The refinery's process water needs are supplied from the Körfez Wastewater Treatment Plant and freshwater needs are supplied from Sapanca Lake, which is located approximately 40 kilometres from the refinery, through two pump stations, two pipelines and three storage tanks at the refinery. All effluent from the İzmit Refinery is treated by the refinery's wastewater treatment system and discharged to the sea.

Configuration of the İzmit Refinery

With the implementation of the RUP Facility, the Group believes that the İzmit Refinery is now one of the most complex refineries in the Mediterranean region. It has three crude distillation trains, a fluidised catalytic cracker unit, two hydrocracker units and a flexicoker, enabling it to produce a higher value-added mix of refined products. Diesel desulphurisation units, kerosene and LPG sweetening units and gasoline specification units enable the refinery to produce

clean fuels at Euro V specification. Isomerisation and reformer units enable the refinery to maximise gasoline production. After the RUP Facility started producing at full capacity, the İzmit Refinery reached a Nelson Complexity Index of 14.5 (based on design capacity) at 31 December 2016.

Processing and Sales

Typical crude purchases for the İzmit Refinery include Iranian Heavy and Light, Iraqi Heavy and Light, Russian Ural and Siberian Light and Kazakh CPC, though a wide range of other crudes can also be processed. The refinery also processes domestic crude, with 9 per cent. of its annual crude source in 2016 produced primarily in south-eastern Turkey and also the Thrace area, which is located in south-eastern Europe and is a landmass shared by Turkey, Greece and Bulgaria.

Approximately 84 per cent. of the İzmit Refinery's total sales (including imported refined products) in 2016 were sold in the domestic Turkish market to Petrol Ofisi A.Ş. (**"POAŞ"**), Shell, Opet, BP, among others, and the remainder of the İzmit Refinery's total sales were exports to the international market.

Supply, Distribution and Storage

The İzmit Refinery has an annual crude unloading capacity in excess of its production and storage capacity. The refinery receives all of its crude supply by tanker at its marine terminal which consists of two marine jetties, designed to handle smaller cargoes, and a marine platform island, which is designed to unload large vessels, including VLCCs. The İzmit Refinery is the principal Turkish port for diesel imports.

The Group's product distribution system at İzmit includes the three marine jetties of the marine terminal (47 per cent. of total product sales in 2016), a pipeline network to nearby distribution companies and the military for the distribution of refined products. LPG is distributed from the refinery through a separate pipeline network to LPG distribution companies adjacent to the refinery (38 per cent. of total product sales in 2016) and tanker truck loading racks (14 per cent. of total product sales in 2016). The Group also has rail loading racks which are used primarily for product transfers between refineries.

As of 30 June 2017, the İzmit Refinery had a total of 159 storage tanks located at the refinery site with a combined capacity of 3.0 million m^3 comprising 136 intermediate and final product storage tanks with a total capacity of 1.9 million m^3 and 23 crude storage tanks with a total capacity of 1.1 million m^3.

İzmir Refinery

The İzmir Refinery began operations in 1972 with an annual crude oil processing capacity of approximately 3.0 million MT and has since been significantly expanded and upgraded. The İzmit and İzmir Refineries are the largest refineries in Turkey, each with a current design capacity of 11 Million MT. The İzmir refinery had 1,353 employees as of 31 December 2016. It is located near Aliaga on the Aegean Sea coast, approximately 60 kilometres north of İzmir, and principally serves the regional markets of western Turkey. In 2016, the İzmir Refinery's capacity utilisation rate (including imported semi-finished products) was 106.3 per cent. and its main marketable refined products were diesel, gasoline, fuel oil, base oil, heating oil, jet fuel, asphalt, LPG, naphtha, wax extracts and other products. The refinery also produces raw material for the petrochemical industry and is the only refinery in Turkey with a base oil production unit. Lubricant base stocks produced at the İzmir Refinery include spindle oil, light neutral, heavy neutral and bright stock.

As of 30 June 2017, the latest modifications to the İzmir Refinery include:

- Commissioning of kerosene sweetening units and the Caustic Neutralization Unit
- Expansion of the capacity of the CCR platforming unit so that heavy straight-run naphtha can be processed to increase platformate and hydrogen product yields.
- Implementation of a crude oil unit revamp project to operate the existing crude oil unit at maximum sustainable capacity at a wider API range and improve energy efficiency by replacing some of the furnaces and equipment.
- Construction of a new water treatment unit to improve the desalinisation system and increase the quality of raw water.

Certain information regarding the Group's ongoing and planned capital investment projects at the İzmir Refinery is contained at *"Management's Discussion and Analysis of Financial Condition and Results of Operations— Capital Expenditures"*.

The İzmir Refinery has a power generation unit that is able to supply the refinery's energy with two gas turbines and one steam turbine with a total capacity of 90 MW. The refinery's water needs are supplied by Petkim from Güzelhisar Dam, which is located approximately 12 kilometres from the refinery, through a pipeline to the refinery where it is stored in five storage tanks. Treated effluent from the refinery's wastewater treatment system is discharged to the sea.

In 2016, the İzmir Refinery submitted five projects for the EBSO Environment Awards, a competition organised by the Aegean Region Chamber of Industry, and won first prize for reducing CO_2 emissions by 210,000 MT and saving 100,000 Gcal of energy per year.

Configuration of the İzmir Refinery

The İzmir Refinery is a medium complexity refinery, with two crude distillation trains. It has both a Fluidised Catalytic Cracker unit and a Hydrocracker unit, enabling it to produce a higher value added mix of refined products. Diesel desulphurisation units, kerosene and LPG sweetening units and gasoline specification units enable the refinery to produce Euro V specification clean fuels. Isomerisation and reformer units enable the refinery to maximise gasoline production. It has a visbreaker unit, solvent deasphalter and other units for the production of lubricating base oils. The İzmir Refinery, with two distillation column trains, had a Nelson Complexity Index of 7.66 (based on design capacity) at 31 December 2016.

Processing and Sales

Typical crude purchases for the İzmir Refinery include Arabian Light, Iranian Heavy and Light, Iraqi Kirkuk though a wide range of other crudes can also be processed. Between 1 and 2 per cent. of the crude processed at the İzmir Refinery is domestic crude produced in south-eastern Turkey.

Approximately 70 per cent. of the İzmir Refinery's total sales (including imported refined products) in 2016 were sold in the domestic Turkish market. Approximately 30 per cent. of the İzmir Refinery's total sales were exports to the international market and 154 thousand MT of naphtha (1.5 per cent. of total sales) was supplied to PETKİM as petrochemical feedstock.

Supply, Distribution and Storage

The İzmir Refinery has an annual crude unloading capacity in excess of its production and storage capacity. The refinery receives all of its crude supply by tanker at its marine terminal which consists of two marine jetties, one of which is designed to accommodate large vessels and the second which can accommodate VLCCs. A LPG marine unloading platform is also located at the İzmir Refinery.

The İzmir Refinery's product distribution system includes the two marine jetties of the marine terminal (48 per cent. of total product sales in 2016) and a pipeline network to nearby distribution companies and the military for the distribution of refined products. LPG is distributed from the refinery through a separate pipeline network to LPG distribution companies adjacent to the refinery (31 per cent. of total product sales in 2016) and tanker truck loading racks (21 per cent. of total product sales in 2016).

As of 30 June 2017, the İzmir Refinery had a total of 180 storage tanks located at the refinery site with a combined capacity of 2.5 million m^3, including crude storage. The tanks are allocated between crude, intermediate products and finished products. The refinery had 161 intermediate and final product storage tanks with a total capacity of 1.6 million m^3 and 19 crude storage tanks with a total capacity of 0.9 million m^3.

Kırıkkale Refinery

The Kırıkkale Refinery is the third-largest refinery in Turkey, established in 1986, with a current annual crude oil processing capacity of approximately 5 million MT. The refinery is a medium-sized, medium-complexity refinery by Mediterranean standards and has Turkey's largest road tanker filling capacity. Its main refined petroleum products were diesel, gasoline, fuel oil, jet fuel, asphalt and LPG. The refinery had 865 employees as of 31 December 2016. It is located inland near the city of Kırıkkale, approximately 80 kilometres south-east of Ankara, and principally serves the regional markets of Central Anatolia. In 2016, the Kırıkkale Refinery's capacity utilisation rate was 101.3 per cent.

As of 30 June 2017, the latest modifications to the Kırıkkale Refinery include the construction of a new power plant that is intended to be more cost-effective and safer, which will be fully commissioned in the third quarter of 2017.

Certain information regarding the Group's ongoing and planned capital investment projects at the Kırıkkale Refinery is contained at *"Management's Discussion and Analysis of Financial Condition and Results of Operations—Capital Expenditures"*.

The Kırıkkale Refinery has a power generation unit with a single steam turbine with capacity of 45 MW that is able to supply the refinery's energy needs. The refinery's raw water needs are supplied by the State Water Works from Kapulukaya Dam on the Kizilirmak River which is located approximately 1.5 kilometres from the refinery. Water is pumped from the dam through a Tüpraş pipeline to two storage tanks. The Company was granted free water supply by the State Water Authority for the economic life of the Kapulukaya Dam in exchange for its assistance in financing the construction of the dam in 1984. The treated effluent from the refinery's wastewater treatment system is discharged to the Kizilirmak River.

Configuration of the Kırıkkale Refinery

The Kırıkkale Refinery is a medium complexity refinery, with a single crude distillation train, it has a Hydrocracker unit, enabling it to produce a higher value added mix of refined products. Diesel desulphurisation units, kerosene and LPG sweetening units and gasoline specification units enable the refinery to produce Euro V specification clean fuels. Isomerisation and reformer units enable the refinery to maximise gasoline production. The Kırıkkale Refinery had a Nelson Complexity Index of 6.32 (based on design capacity) as of 31 December 2016.

Processing and Sales

Typical crude purchases for the Kırıkkale Refinery include Iraqi Kirkuk, Iranian Heavy and Light, though a wide range of other crudes can also be processed, with approximately 21 per cent. of processed crude domestically produced and the remainder imported.

All of the Kırıkkale Refinery's total sales (including imported refined products) in 2016 were sold in the domestic Turkish market with asphalt sales constituting approximately 23 per cent. of the Kırıkkale Refinery's total sales.

Supply, Distribution and Storage

The Kırıkkale Refinery is supplied by the BOTAŞ-owned Ceyhan-Kırıkkale pipeline and has an annual crude unloading capacity of 5.0 million MT. The refinery receives all of its crude supply via the pipeline, which connects the refinery with the marine terminal at Ceyhan on the Mediterranean coast 448 kilometres from the refinery. Although the Kırıkkale Refinery does not supply imported LPG to customers, sales of LPG from the Group's Dortyol facilities are included in Kırıkkale's sales figures.

The Kırıkkale Refinery's product distribution system includes tanker truck loading racks (48 per cent. of total product sales in 2016), railcar loading racks (10 per cent. of total product sales in 2016) and a pipeline network to nearby distribution companies for the distribution of refined products. LPG can be distributed from the refinery through a separate pipeline network to LPG distribution companies adjacent to the refinery (43 per cent. of total product sales in 2016).

As of 30 June 2017, the Kırıkkale Refinery had 11 crude storage tanks with a total capacity of 0.5 million m^3.

Batman Refinery

The Batman Refinery is Turkey's first refinery and began operations in 1955 with an annual crude oil processing capacity of approximately 330,000 MT. The refinery has since been expanded and upgraded through a debottlenecking project in 1960 and the commissioning of a new crude unit in 1972. It was converted to an asphalt refinery in 2006. It is a small-sized, low-complexity refinery by Mediterranean standards. The refinery had 463 employees as of 31 December 2016. It is located inland in south-eastern Turkey, close to domestic sources of crude oil, in the town of Batman, approximately 200 kilometres north-west of the Iraqi border. The Batman Refinery principally serves the regional markets of south-eastern and eastern Anatolia. In 2016, the Batman Refinery's total capacity utilisation ratio was 92.5 per cent. and its main refined petroleum products were asphalt, diesel, naphtha, and semi-finished products. Approximately 61 per cent. of the Batman Refinery's product yield is asphalt, all of which is sold domestically. The remaining 39 per cent. of the Batman Refinery's yield consists of semi-finished products transported to the Company's other refineries for further processing in exchange for refined products to be sold by the Batman Refinery.

Improvements to the Batman Refinery include the setting up of Emergency Shut-Down/Burner Management systems and the conversion of the furnace to natural gas.

Certain information regarding the Group's ongoing and planned capital investment projects at the Batman Refinery is contained at *"Management's Discussion and Analysis of Financial Condition and Results of Operations—Capital Expenditures"*.

The Batman Refinery has a power generation unit with a steam turbine and diesel generator with a total capacity of 6.5 MW and a connection to the national grid that is able to supply the refinery's energy requirements. The refinery's raw water needs are supplied by a Tüpraş pipeline from wells near the Batman River, which are located approximately 9 kilometres from the refinery. Water is pumped from the wells directly to the refinery where it is immediately used as the refinery does not have raw water storage tanks. Treated effluent from the Batman Refinery's wastewater treatment system is discharged to the Batman River.

Configuration of the Batman Refinery

The Batman Refinery is a simple refinery with two atmospheric and one vacuum distillation units, a reformer to convert naphtha to gasoline and an asphalt unit. The Batman Refinery had a Nelson Complexity Index of 1.83 (based on design capacity) at 31 December 2016.

Processing and Sales

The Batman Refinery processes only heavy crude which it purchases domestically.

Approximately 100 per cent. of the Batman Refinery's total sales in 2016 were sold in the domestic Turkish market. Asphalt sales constitute approximately 80 per cent. of the Batman Refinery's total sales.

Supply, Distribution and Storage

The Batman Refinery processes only domestic crude and it has an annual crude unloading capacity in excess of its production and storage capacity. The refinery receives all of its crude supply via a BOTAŞ-owned pipeline, which connects the refinery to a nearby TP-AO tank farm.

The Batman Refinery's product distribution system includes tanker truck loading racks.

The Batman Refinery has 9 crude storage tanks with a total capacity of 36,147 m^3.

Opet

Tüpraş holds a 40 per cent. share in Opet. The remaining 60 per cent. share consists of: (i) 10 per cent. held by other Koç Group companies (**"Koç Group"**) and Koç family members and (ii) 50 per cent. held by the Öztürk family (**"Öztürk"**), including family members and companies controlled by family members of Öztürk. Opet is governed by and managed in accordance with a joint venture agreement. Opet is engaged in retail, commercial and industrial sales, storage operations, the production and marketing of lubricating oil in Turkey, the sales of air transport fuels in Turkey and the international trade of petroleum products. Opet manufactures and sells lubricating oil through Opet-Fuchs, its 50/50 joint venture with Fuchs, a German lubricant manufacturer. Opet also distributes and sells jet fuel through THY-Opet, a 50/50 joint venture with Turkish Airlines.

In 2016, the number of Opet's stations in Turkey increased to 1,504 from 1,444 in 2015. Of these stations, 1,073 operate under the brand Opet and the remaining 431 under the brand Sunpet. Opet generally does not own its stations and is not involved in any leasing arrangements for these businesses. Instead, Opet enters into 5-year dealership agreements with distributors who operate stations where, in return for a small investment in the business, Opet acts as the exclusive supplier of refined products to the stations.

According to EMRA, as of 31 December 2016, Opet had the largest storage capacity in the fuel distribution sector in Turkey, with a total storage capacity of 1.1 million m^3 (with five supply terminals with import capability), and Tüpraş and Opet jointly controlled close to 70 per cent. of Turkey's total storage capacity for refined petroleum products and crude oil. Based on figures from Petder, as of 31 March 2017, Opet was the second largest refined petroleum products distributor in Turkey with a market share of 10.5 per cent. for black products (fuel oil and heating oil) and a market share of 18.9 per cent. for white products (gasoline and diesel).

Opet has one of the leading brands in the petroleum products sector in Turkey. It has consistently held the highest level of customer satisfaction in the petrol sector for the past 11 years according to the results of Turkish Customer Satisfaction Index (TCSI), carried out from 2006-2016.

Marine Transport

Ditaş was founded in March 1974 with the purpose of purchasing, chartering and running a range of marine vessels to carry out domestic and overseas shipping of crude oil and refined petroleum products. A 29 per cent. share of Ditaş held by İPRAŞ (İzmit Petroleum Refinery Co.) was transferred to Tüpraş in 1983 as part of reorganising and regrouping all state-owned refineries with Tüpraş as the parent company. Tüpraş then acquired an additional 50.98 per cent. of Ditaş shares from the Privatisation Administration in October 2002, increasing its shareholding to 79.98 per cent.

Ditaş carries out its crude oil shipping operations, which constitute 96 per cent. of its total marine transport, pursuant to Tüpraş's requirements. Depending on timing and transportation line requirements, Ditaş uses its own or chartered tankers for crude oil shipping which include a 165,000 MT crude tanker and eight product tankers. Ditaş also provides refined product shipping services for Petkim, Opet, Opet THY and other distribution companies. In addition to its shipping operations, Ditaş offers pilot, tugging and mooring services at İzmit Refinery's sea terminal and İzmir Refinery's sea terminal via its seven mooring boats, eleven tugboats and one pilot boat.

In 2016, Ditaş ordered two 158,000 MT tankers to carry out transport operations. The tankers are expected to be delivered at the end of 2017.

In 2016, Ditaş's crude oil shipments amounted to a total of 9.3 million MT, while its shipment of refined petroleum products amounted to 5.9 million MT. Approximately 95.5 per cent. of all crude oil shipments and 49 per cent. of petroleum product shipments during the year were conducted in line with the needs of Tüpraş refineries. In 2016, Ditaş also provided product transportation services to THY-Opet and other distribution companies.

In recent years, Ditaş has undertaken a number of initiatives to improve its compliance with international safety and operation standards. The vessels operated by Ditaş comply with the OCIMF SIRE (Ship Inspection Report Program), and are regularly inspected by OCIMF members. The Company's İzmit and İzmir Terminals hold ISO 9001-2008 Quality Management System and ISO 14001-2004 Environmental Management System certifications. Furthermore, the İzmir Terminal obtained the ISPO (International Standard for Pilot Organizations) certification for pilotage, mooring and tug services; as a result, Ditaş became the first company in Turkey and the 11th company in the world to hold this designation. Efforts are underway to implement the Tanker Management and Self-Assessment Scheme 2 (TMSA 2), a major credential for tanker management operations that petroleum companies are expected to implement. Ditaş is also member of KalDer (Turkish Quality Association) and TURMEPA (Turkish Marine Environment Protection Association).

Refinery Maintenance and Safety

Each of the Group's refineries has a maintenance department which performs the bulk of refinery maintenance. Each refinery has a two-year maintenance planning cycle with the goal of performing a major shutdown on each crude distillation unit only once during the two year period. The next scheduled maintenance shutdown will be at the İzmit Refinery in 2018.

Each refinery has a safety department that co-ordinates regular safety training for employees and investigates accidents. The following table sets out safety statistics for each of the Group's refineries for the periods indicated:

	For the six months ended 30 June		For the year ended 31 December		
Safety Statistic	2017	2016	2016	2015	2014
	(per million man hours worked)				
Number of lost time accidents (per million man hours worked)	**2.4**	**2.3**	**1.9**	**2.5**	**1.3**
İzmit	2.4	4.0	3.7	1.9**	0.7**
İzmir	2.7	1.2	1.0	5.4	5.9
Kırıkkale	3.0	2.2	0.9	0.6	0
Batman	1.2	0	0	1.3	4.2
Number of lost work days*	**64**	**705**	**354**	**315**	**378**
İzmit	52	1,827	962	26**	441**
İzmir	121	22	30	1,222	132
Kırıkkale	30	82	35	21	0
Batman	18	0	0	32	111
Number of fires*	**13**	**15**	**22**	**15**	**10**
İzmit	4	4	4	1	3
İzmir	4	4	7	7	4
Kırıkkale	5	4	8	6	3
Batman	0	3	3	1	0

* Includes General Management

** Includes İzmit Zone A together with the RUP Facility

The Company is performing root cause analysis and providing training to improve its safety performance further.

Environmental Matters and Energy Efficiency

The management of environmental issues is addressed by Tüpraş's Environment Department which was established in 2011. All of the staff within the department have obtained environmental officer certification from the Ministry of Environment and Urbanization. The Environmental Department is responsible for ensuring compliance with all national and international environmental legislation applicable to Tüpraş and coordinating environmental matters among Tüpraş's refineries, including the application of the "Best Available Technology" principle in operational development. Each refinery has an environmental superintendent who works in parallel with the Environmental Department on environmental issues as well as regulatory compliance. The Company seeks to work towards internationally accepted standards of good practice on environmental matters, including EU and World Bank Group policies and guidelines.

Each of Tüpraş's four refineries has obtained the necessary environmental permits under Turkish law. In addition, Tüpraş has also taken steps to meet various industry and EU environmental best practices standards. As part of its overall strategy, Tüpraş has implemented various energy efficiency projects, which are intended to eliminate energy losses and improve unit performance. Recent projects include waste heat recovery, the modernisation of furnaces, boilers and process units and heat integration. Between 2011 and 2016, the Company achieved approximately 1.15 million MT of greenhouse gas mitigation and 3.6 million Gcal of energy savings.

Tüpraş also measures and monitors CO_2 and other greenhouse gas emissions generated by its operations on a monthly basis. In 2016, Tüpraş decreased its CO_2 emissions and improved its performance in natural resource utilisation, particularly water consumption, with projects intended to lower environmental impact. As a result of Tüpraş's efforts, Tüpraş estimates that 77,666 MT of CO_2 emissions were prevented and 20.0 million m^3 of waste water was recycled.

Research and Development

Tüpraş's research and development studies were gathered under the R&D Center in 2010 and, in 2014, the new research campus, consisting of an office building, a laboratory building and a pilot plant facility, was opened in Kocaeli. The Tüpraş R&D Center currently aims to develop innovative solutions to the technical requirements of the refineries and to develop new technologies using its refinery know-how.

At the R&D Center, research and development projects are led by the following six specialised technical teams: Process Development and Optimisation, Modelling and Control, Material Development and Reaction Engineering, Catalyst Management and Development, Modelling and Characterisation, and Product Development. In addition, the following three teams work in coordination with the technical teams: Project Management, Intellectual Property Rights, and Laboratories and Pilot Plant. The laboratory building houses four operating laboratories: material development, fuel development, catalyst development and characterisation and bitumen upgrading and development.

A pilot plant to assess the performance of hydroprocessing catalysts, which will be the first performance test system established in Turkey of its scale, is undergoing the commissioning process. The realised investment to date for this facility is approximately Euro 1.6 million.

Current research and development projects focus primarily on process optimisation and improvement, energy efficiency, cutting-edge technologies in reaction engineering and materials science. More than 100 projects have been launched since the establishment of the R&D Center, a considerable number of which have involved academic contributions from different universities in Turkey.

To date, 25 research and development projects have been granted funding support by The Scientific and Technological Research Council of Turkey (TÜBİTAK). In addition, Tüpraş has been involved in eight projects that are financially supported by the European Commission. Among these projects, two EUREKA projects and a "Seventh Framework" project have been successfully completed. The other five projects that are within the scope of the Horizon 2020 support program are still in progress (Indus3ES, FUDIPO, iPerm, SafeAST and INTEGRIOL). Within the context of these projects, Tüpraş's R&D Center has a cooperation network comprised of 37 partners (universities, SMEs and corporate companies) from 13 countries. Based on official data published by the European Commission on 31 May 2017, Tüpraş is in third place among the most successful Turkish industrial organisations in terms of the total budget granted by European Union funding support programs.

Real Property

The Group's principal operating facilities, including its refineries and their associated supply and distribution facilities, are owned in material part by the Undersecretariat of the Treasury, with usufruct rights granted to the Group pursuant to the Petroleum Market Law for periods of 49 and 99 years as long as it maintains refining operations at those facilities. The Group owns a part of these facilities and, in addition, owns 3.3 million m^2 and 3.6 million m^2 of land adjacent to the İzmir and Kırıkkale Refineries, respectively, that are suitable for expansion.

Competition

The refining business is essentially a regional one, in which competition occurs across national borders, and events in other countries, even other regions, can lead to significant impacts on the business. Accordingly, although Tüpraş is currently the only refining company in Turkey, Tüpraş faces competition from imported refined products, as there are no regulatory or tariff barriers. As there is currently a shortfall in domestic diesel production, making the Turkish market an attractive one, global traders and other refineries may become increasingly competitive in offering refined products for export to Turkey.

The Group is competing in the Mediterranean market, where there are approximately 54 refineries in operation. This regional market is impacted by events elsewhere, particularly the Black Sea region, the Middle East and North West Europe. Supply/demand balances in the region are the primary driver of Mediterranean refining margins. New greenfield refinery projects in Turkey and the Middle East may also put pressure on product prices. For example, SOCAR is constructing a greenfield refinery in İzmir, located next to Petkim, a petrochemical plant owned by SOCAR. SOCAR Türkiye has a refining licence in Turkey (awarded in June 2010), for a refinery with a capacity of 10 million MT. Its construction began in 2014 and the refinery, STAR Refinery, is planned to be completed in 2018. STAR Refinery will not be producing gasoline and its light products (such as LPG and naphtha) will be used in the nearby Petkim petrochemical facility; the Group believes that this will not have an adverse effect on the Group's market share for those products. The expected diesel production for the STAR Refinery is 4.8 million MT per year and, accordingly, the Group

believes that even this additional production in Turkey would be outpaced by the expected growth in demand for diesel and the continued shortfall in Turkish diesel production. Diesel consumption in Turkey was 22.3 million MT in 2016 and the Group, as the only operating Turkish refinery, met 48 per cent. of domestic diesel demand that year. However, the expected jet fuel production for the STAR Refinery may contribute to a surplus in the Turkish market for jet fuel in 2019, and may result in the Group exporting its surplus jet fuel production. In addition, Çalik Enerji was awarded a refinery licence in 2008, but there has been no progress since the grant of this licence. In June 2017, Vitol Investment Partnership Limited, an investment vehicle of Vitol Holding B.V., acquired POAŞ, a Turkish fuel supply and distribution company which purchased 3.8 million MT of refined products from the Group in 2016. Tüpraş is closely monitoring the potential effects of the acquisition on the volume of its sales to POAŞ but does not believe there will be a near-term effect. See *"Risk Factors—Risks relating to the Group and the Industry—Implementation of new refinery projects by competitors could adversely affect the Group's business, financial condition and results of operations in the future"*.

Insurance

The Company maintains property and liability insurance against its business risks to the extent management considers appropriate. The Company enters into insurance arrangements for all its refineries through its general management offices and has a number of insurance policies that cover most of its assets. The arrangement of these policies is made through Anadolu Sigorta A.Ş. a fronting group, and various brokers such as AON, Marsh and Willis Towers Watson. Significant policies are supplied from the London and Arab Gulf Insurance Markets.

The Company's property damage and business interruption insurance has a coverage limit of USD 2 billion per occurrence for the current period, and is renewed annually in April. The Company has maintained a separate policy with coverage of USD 1.5 billion per occurrence for damages due to terrorism. The Company is not insured for losses resulting from single occurrences of property damage that do not exceed USD 2.5 million.

In an assessment from Munich Re, an insurance group that maintains a national catastrophe loss database that provides annual statistics on major global natural catastrophes, the İzmit Refinery was identified as being within the most susceptible or highest risk earthquake zone in Turkey while the İzmir and Batman Refineries fall within the next highest risk category. Although the İzmit Refinery was identified as being within the highest risk earthquake zone in Turkey, the earthquake protection level for İzmit Zone A was designated as grade A and İzmit Zone B (the RUP Facility) as grade AA (AA being the highest grade available) by Swiss Re's risk engineering report in 2015.

Through its employer's liability insurance, the Company is insured against compensation and damages to employees from work-related accidents, compensation demands incurred as a result of tankers approaching crude oil ports or other product loading ports at the İzmit and İzmir Refineries and compensation demands resulting from general refinery activities. The Company also has third-party liability and environmental liability insurance policies to provide coverage for relevant claims.

Through its cargo insurance, the Company is insured against damage to crude oil to be imported to or transported within Turkey by the Company, damage to refined petroleum products to be imported to, exported from or transported within Turkey by the Company, damage to equipment, spare parts or chemicals to be imported to, exported from, or transported within Turkey by the Company.

Employees

As of 30 June 2017, the Group had 5,487 employees (including employees of Ditaş) of which 4,996 were employed by Tüpraş. The following table sets out the number of employees of Tüpraş, split by department, for the periods indicated:

	For the six months ended 30 June		**For the year ended 31 December**		
	2017	**2016**	**2016**	**2015**	**2014**
Department					
Refineries:					
Processing units	2,130	2,130	2,158	1,684	1,671
Maintenance	882	851	852	778	776
Project, control and inspection	276	260	271	251	218
Technical, safety and environment	281	272	279	317	187
Personnel and social affairs	117	114	113	125	149
Security	378	380	386	368	353
Others	543	520	545	554	565
Refineries sub-total	4,607	4,527	4,604	4,077	3,919
Tüpraş Headquarters	389	381	375	229	219
Total	**4,996**	**4,908**	**4,979**	**4,299**	**4,130**

Because Tüpraş operates in a sector considered strategic by the Turkish Government, it is illegal under Turkish law for Tüpraş employees to take any industrial action that will disrupt Tüpraş's operations. Tüpraş employees could, however,

create labour unrest by engaging in "working to rule" or "go slow" tactics. Nevertheless, Tüpraş has not experienced any significant work stoppage and believes that its relationships with its employees are good. Turnover among Tüpraş's personnel averaged 2 per cent. in 2016, unchanged from 2015.

All of Tüpraş's shopfloor employees are covered by a collective bargaining agreement signed in May 2017 which is due to expire at the end of 2018.

Tüpraş's training department co-ordinates regular training programmes for its engineers, inspectors and other technical employees including technical safety, civil defence and operator orientation courses. Employees also regularly attend symposiums and conferences organised by UOP, IFP, the Turkish National Petrochemical and Refinery Association and the European Refining Technology Conference. Employees also attend training programmes sponsored by equipment manufacturers and suppliers in connection with Tüpraş's capital expenditures. Regular training is also offered to Tüpraş employees involved in investment, purchasing and research and Tüpraş regularly offers training to individuals from educational institutions and other outside establishments. In 2016, a total of 4,979 employees attended a total of 284,878 hours of training.

Tüpraş has established Refining Master's Degree programmes jointly with Boğaziçi University, Middle East Technical University and İzmir Institute of Technology, with the aim in order to offer opportunities to its technical staff to develop their skills and knowledge.

Information Technology

The Company's Information Technology Department is comprised of five departments: SAP, Infrastructure & Database, Software & Development, Industrial IT and IT Risk and Compliance and employs 75 people. The Company's management information system is based on SAP. The Company has implemented 24 SAP modules since 2007, including key modules such as Financial Accounting, Asset Accounting, Controlling, Cost Centre Accounting, Product Cost Controlling, Profitability Analysis, Logistics Management, Human Resources, Treasury, Business Planning and Consolidation, and Supplier Relationship Management Systems. The Company also migrated SAP databases to Hana (as one of the first such migration projects in Turkey) to enhance and accelerate business process and business intelligence needs. Its network infrastructure system is based on servers running Windows operating systems and the Company's servers and databases are regularly backed-up by Tüpraş's disaster recovery site in accordance with its business continuity plan. The Company's back-up and disaster recovery system includes two separate disaster recovery centres, one of which includes a backup SAP system. Industrial control systems are managed by the Industrial IT team according to the operational technology vendors' best practices. The IT Risk and Compliance team regularly monitors changes to laws and regulations and IT-related risks and applies mitigation controls to non-compliant situations.

The protection of information against attempts of unauthorised access or attack is considered by the Company to be a priority and it uses trusted infrastructure protection technologies, all of which are highly rated by IT industry specialists, to ensure a high level of security. Network security is regularly tested and weaknesses identified and remedied. Furthermore, cybersecurity-related penetration tests are periodically carried out for both the internal and external network by independent security companies to resolve security vulnerabilities as soon as possible.

Intellectual Property Rights

While the Company seeks and hold various patents covering various products and processes, no individual patent or series of patents is considered material to the Group as a whole. In 2016, Tüpraş filed a total of 13 patent applications, bringing the total number of patent applications to 73 since the opening of the R&D Center. Of this total, 52 were national and 21 were international (Patent Cooperation Treaty or PCT) patents before the World Intellectual Property Organisation. Of the 21 PCT applications, the Company filed seven applications with overseas national patent offices, including five applications in Europe, one in the US, and one application in Canada.

Litigation

Competition Authority investigation

In July 2012, Tüpras was notified that the Competition Authority had opened an investigation against it alleging in general terms (i) that Tüpras had abused its dominant position in the Turkish refining market and (ii) that Tüpras and Opet had improperly acted in concert with respect to sales of refined products to third-party distributors in Turkey. The investigation was finalised on 17 January 2014. Allegations of concerted practices between Tüpraş and Opet were dismissed on lack of evidence. However, the Competition Authority ruled that Tüpraş had committed abuse of a dominant position through excessive pricing and tying, and therefore imposed an administrative fine on Tüpraş amounting to approximately TL 412 million. Following the ruling, Tüpraş paid TL 309 million (with early payment discount of 25 per cent.) and filed a lawsuit before the Council of State in June 2014 for the annulment of the Competition Authority ruling. An oral hearing was held in October 2016 and the lawsuit is pending. Tüpraş believes that the Competition Authority wrongly rejected its defences, and that the decision of the Competition Authority did not

consider the underlying economics and was inconsistent with prior case law. There is no certainty Tüpraş will prevail in its appeal.

There can be no certainty that Tüpraş will be successful in avoiding future investigations and fines. Nevertheless, beginning in 2014 Tüpraş implemented a comprehensive competition compliance program and, since then, three preliminary investigations initiated by the Competition Authority were concluded in favour of Tüpraş (without progressing to a full investigation). Furthermore, Tüpraş has applied to the Competition Authority and obtained negative clearance as per Article 8 of the Competition Law with respect to its sales contracts for petroleum products (including gasoline, diesel and fuel oil) and jet fuel, whereby the Competition Authority confirmed that the execution of these sales contracts would not violate Articles 4, 6 and 7 of the Competition Law (Law No. 4054).

Use of water from Sapanca Lake

On 31 March 2014, a criminal case was filed pursuant to Article 163/3 of the Turkish Criminal Code by the public prosecutor against the former general manager and a former vice general manager of Tüpraş alleging them of benefitting from a service without paying any consideration, in relation to Tüpraş supplying itself with water from Sapanca Lake. The criminal court of first instance ruled for the acquittal of the defendants on 11 January 2016. In its ruling, the criminal court concluded that Tüpraş had a right to supply itself with water from Sapanca Lake and, therefore, did not use this water without permission. Further, the court concluded that the relevant regulatory authorities had been aware of and overseen the supply of water by Tüpraş from Sapanca Lake. The decision of the criminal court has been appealed against and the case is pending before the Courts of Appeal.

In addition to the criminal case mentioned above, the Ministry of Forestry and Foreign Affairs filed a suit for damages before the commercial court of first instance on similar grounds, claiming compensation for the use of water by Tüpraş. The commercial court of first instance concluded that it did not have jurisdiction as the Ministry is not a merchant. The Ministry appealed against the ruling on the lack of jurisdiction, and the case is pending before the Courts of Appeal.

MANAGEMENT

The Board of Directors

Pursuant to the provisions of the Articles of Association and the TCC, all Company affairs are conducted by the Company's board of directors (the **"Board of Directors"**) elected by a resolution passed at the General Meeting.

In accordance with the TCC and CMB regulations, the Board of Directors consists of at least five members elected by the General Assembly of Shareholders. For 2017, the Board of Directors consists of fifteen members. The election of one member of the Board of Directors nominated by the class (C) shareholder is compulsory. The other members including the independent members are elected by ordinary majority vote in the General Assembly of Shareholders. The number of independent board members and necessary qualifications is determined in accordance with the Corporate Governance Regulations of the Capital Markets Board. Pursuant to the Corporate Governance Regulations of CMB, at least one-third, and no less than two, members of the Board of Directors are required to be independent members. The Company is required to obtain approval from the CMB prior to the General Assembly with respect to the independent members of the Board of Directors confirming they meet the independency qualifications determined by CMB Corporate Governance Regulations.

In case a vacancy occurs in the Board of Directors or an independent board member should lose their independent status, the vacancy must be filled by the Board of Directors through an election conducted pursuant to Article 363 of the TCC. If and when a vacancy occurs in the board members representing class (A) shareholders, the Board of Directors must fill the vacancy through an election from among the nominees nominated by the members representing class (A) shareholders in the Board of Directors. In case the board seat representing class (C) becomes vacant due to the reasons above, the vacancy must be filled by the Board of Directors through an election from among the nominee/s nominated by the class (C) shareholder. If a seat on the Board of Directors occupied by an independent director becomes vacant, the vacancy must be filled by the Board of Directors through an election from among the nominees who are deemed independent under CMB regulations.

The Board of Directors may delegate the management and representation duties among its members or transfer them fully or partially to the Executive Members or Managers that are not required to be shareholder. The Board of Directors is authorised to distribute the management and representative functions. The authority and responsibility of the Executive Members and Managers is determined by the Board of Directors and with the exception of the rights of the member representing (C) class shares, all responsibility and authority of the Board of Directors can, subject to its own conditions, provisions, and restrictions, be transferred to related persons, and these authorities can be changed and amended or removed as and when it is required. Pursuant to the Company's Articles of Association, any amendments in the Company's articles of association affecting the quorums of the Board of Directors, the rights of the class C (preferential) share, accommodation of the needs of the Turkish Armed Forces, any decisions concerning a spin-off or merger or closure, sale, limitation of any kind or capacity decrease of more than 10 percent of any of the Group's refineries that may restrict and/or hinder the accommodation of the needs of Turkish Armed Forces and liquidation of Tüpraş, can only be taken with the affirmative vote of the class C (preferential) share.

The following table provides certain information about the Board as of the date of this Offering Circular:

Name	Age	Position	Year first elected to the Board
Ömer M. Koç	55	Chairman	2006
Ali Y. Koç	50	Vice Chairman	2008
Rahmi M. Koç	86	Member	2008
Semahat S. Arsel	88	Member	2009
Temel Kamil Atay	76	Member	2006
Dr. Bülent Bulgurlu	69	Member	2014
Levent Çakıroğlu	50	Member	2016
O. Turgay Durak	65	Member	2010

Erol Memioğlu	63	Member	2006
Yağız Eyüboğlu	49	Member	2016
Süleyman Karaman......................................	61	Independent Member and Privatisation Administration Class C Representative	2017
Ahmet Turul	58	Independent Member	2014
Gökçe Bayındır..	77	Independent Member	2012
Kutsan Çelebican	71	Independent Member	2012
Osman Mete Altan	74	Independent Member	2012

The business address of each of the members of the Board is Güney Mahallesi, Petrol Caddesi No: 25 41790, Körfez, Kocaeli, Turkey.

Ömer M. Koç, Chairman (Age 55). Ömer M. Koç completed his undergraduate studies at Columbia University in 1985 and received his MBA from the same university in 1989. Ömer M. Koç began his professional career in 1985 as a Sales Clerk at Kofisa Trading Company in Switzerland and worked again as a Sales Clerk at Ramerica International Inc. in New York between 1989 to 1990. He joined Koç Holding in 1990 and served in senior positions such as Finance Coordinator at Gazal A.Ş., Vice-President and then President of the Energy Group at Koç Holding. He became a member of the Board of Koç Holding in 2004 and Vice Chairman in May 2008. On 22 February 2016, he was appointed as the Chairman of Koç Holding. Mr. Koç also serves as the Chairman of the Turkish Educational Foundation Board of Trustees, President of the Geyre Foundation, and Chairman of the Yapi Kredi Arts and Culture Publications board of directors. He has been a member of the Board of Directors since 2006, and has served as Chairman of the Board of Directors since 2008.

Ali Y. Koç, Vice Chairman (Age 50). Ali Y. Koç graduated from Rice University's Business Administration Faculty and from Harvard University's MBA Program. Between 1990 and 1991, he joined American Express Bank's Management Trainee Program, served as Coordinator at Ramerica International Inc. between 1991 and 1992 and as an analyst at the Morgan Stanley Investment Bank between 1992 and 1994. After being appointed as the New Business Development Coordinator to Koç Holding in 1997, Mr. Koç held senior positions such as President of the Information Group. Since 2006, he has served as President of Koç Holding's Corporate Communications and Information Group. He has been a board member at Koç Holding since January 2008 and a member of the Board of Directors since 2009.

Rahmi M. Koç, Member (Age 86). Rahmi M. Koç graduated from Johns Hopkins University's Industrial Management Department. He started his professional life in 1958 at the Otokoç Company of the Koç Group and throughout his career he has held senior positions at Koç Holding. In 1980, he was appointed President of the Executive Committee and then Chairman of the Board of Directors at Koç Holding. Since 2003, he has served as the Honorary Chairman of Koç Holding. Mr. Koç is also the Deputy Chairman of the board of trustees of the Vehbi Koç Foundation, Chairman of the board of trustees of Koç University, Founder and Chairman of the board of directors of the Rahmi M. Koç Museum and Culture Foundation, Chairman of the board of directors at VKV American Hospital, Founder and Honorary Chairman of the Clean Seas Association (TURMEPA), Honorary Chairman of the High Advisory Council of the Turkish Industrialists and Businessmen Association (TÜSİAD) and member of the Advisory Council of the Turkish Confederation of Employers' Unions (TİSK). Mr. Koç has been a member of the Board of Directors since 2008.

Semahat S. Arsel, Member (Age 88). Having graduated from the American College for Girls in Istanbul, Semahat Arsel participated in German language programs at the Goethe Institute and is fluent in English and German. She started her professional career in 1964 as a member of the board of directors at Koç Holding. Apart from this position, Ms. Arsel currently acts as Chairman of the board of directors at the Vehbi Koç Foundation, Chairman of the board of directors at the Tourism Group, Second Chairman of the Florence Nightingale Foundation and Chairman of Semahat Arsel Nursing Education & Research Center. The founder of Koç University's Faculty of Nursing, Ms. Arsel has been a member of the Board of Directors since 2009.

Temel Kamil Atay, Member (Age 76). Temel Kamil Atay is a graduate of Istanbul Technical University's Mechanical Engineering Department and Wayne State University's Business Administration Department. He started his professional career as Product Development Engineer at Chrysler Industries in 1965 and the following year he joined Koç Group,

where he served as CEO of Otoyol Sanayi A.Ş. and Tolas Turk Otomobil Fab. A.Ş. Moreover, he has been serving in various executive positions at Koç Holding as Vice President of Technical Projects at Koç Holding and President of the Tolas Group. Between 2000 and 2001, he was CEO of Koç Holding. Since 1996 he has been a board member at Koç Holding and has been a member of the Board of Directors since 2006.

Dr. Bülent Bulgurlu, Member (Age 69). After graduating from Ankara University's Faculty of Engineering and Architecture, Dr. Bülent Bulgurlu earned his Ph.D. from Norwegian University of Science and Technology. He began his career in 1972 as a Civil Engineer at Elliot Strömme A/S in Oslo. In 1977, he joined Garanti Construction as Field Engineer, and later served as Engineering, Planning and Construction Manager, Site Coordination and Construction Manager, Assistant General Manager, and General Manager, respectively. In 1996, Dr. Bulgurlu joined Koç Holding, where he served as the President of Tourism & Services Group, President of Tourism and Construction Group, and President of Durable Goods and Construction Group. Dr. Bulgurlu is a Member of the Turkish Industry and Business Association (TÜSİAD), and the Turkish Marine Environment Protection Association (TURMEPA). Dr. Bulgurlu has been a member of the Board of Directors since 2014, following a previous role from 2007 to 2012.

Levent Çakıroğlu, Member (Age 50). Levent Çakıroğlu graduated from Ankara University, Faculty of Political Sciences, Department of Business Administration. He went on to earn his MA at the University of Illinois. Mr. Çakıroğlu began his professional career as an Auditor at the Ministry of Finance in 1988. From 1997 to 1998, he taught as a part-time Instructor at Bilkent University, and served as Vice President of the Financial Crimes Investigation Board at the Ministry of Finance. He joined Koç Holding in 1998 as Financial Coordinator. Subsequently, he worked as the General Manager at Koçtaş (2002-2007) and General Manager at Migros (2007-2008). In 2008, he was appointed General Manager at Arçelik while at the same time serving as President of the Consumer Durables Group at Koç Holding from April 2010. On 17 February 2015, Mr. Çakıroğlu was appointed Deputy Chief Executive Officer at Koç Holding. He has served as CEO since April 2015. Mr. Çakıroğlu has been a member of the Board of Directors since 30 March 2016.

O. Turgay Durak, Member (Age 65). O. Turgay Durak completed his undergraduate studies in Mechanical Engineering at Northwestern University in the US and obtained his MA from the same university. He started his professional career as an Application Engineer at Otosan and subsequently was appointed Project Coordination Manager in 1982 and Project Coordination Department Director in 1984. In 1986, he became Assistant General Manager—Marketing, in 1987 Assistant General Manager—Procurement and in 2000 Chief Assistant General Manager at Ford Otomotiv Sanayi A.Ş. From 2002 to 2007, he served as General Manager of Ford Otomotiv Sanayi A.Ş. Fie and then as President of the Automotive Group of Koç Holding between 2007 and 2009, as Vice CEO at Koç Holding between 2009 and 2010 and served as CEO of Koç Holding between 2010 and 2015. Mr. Durak has been a member of the Board of Directors since 5 April 2010.

Erol Memioğlu, Member (Age 63). Erol Memioğlu is a graduate of the Middle Eastern Technical University's Petroleum Engineering Department. He started his business career in 1979 as Senior Engineer at the Turkish Petroleum Corporation (TPAO) and later became Production Manager and President of the Overseas Projects Group. He was appointed Vice President of the Koç Holding Energy Group in 1999, later serving as an executive board member at Koç Holding Energy Group between 2003 and 2004, and as President of the same Group between May 2004 and April 2016. Mr. Memioğlu has been a member of the Board of Directors since 2006.

Yağız Eyüboğlu, Member (Age 49). Mr. Yağız Eyüboğlu graduated from Boğaziçi University's Department of Economics in 1991; subsequently, he earned his MBA from Koç University in 1996. Mr. Eyüboğlu began his professional career as a Management Trainee at Arçelik A.Ş. in 1991. Starting in 1993, he worked at Koç Holding for more than 10 years, as Senior Internal Auditor, Assistant Financial Coordinator and Financial Coordinator, respectively. Between 2004 and 2009, Mr. Eyüboğlu assumed several roles within the Koç Group, including CFO of Arçelik A.Ş., CEO and board member of Beko Elektronik A.Ş., Assistant to the President of Koç Holding Foreign Trade and Tourism Group, and Human Resources Director of Koç Holding. In 2009, he joined Aygaz A.Ş. where he served as CEO until October 2015. Following his assignment to Koç Holding as Deputy President of the Energy Group in October 2015, he has served as the President of the Energy Group at Koç Holding since 6 April 2016. Mr. Yağız Eyüboğlu is also a board member at Koç Group's various companies and several non-governmental organizations. Mr. Eyüboğlu has been member of the Board of Directors since 4 April 2016.

Süleyman Karaman, Privatization Administration Class C Representative and Independent Member (Age 61). A graduate of Istanbul Technical University's Faculty of Mechanical Engineering in 1978, Süleyman Karaman later earned his MA in Mechanical Engineering with high honours from the same university. Between 1979 and 1981, he worked on prototypes of engine, tractor and agriculture machines at Istanbul Technical University. Between 1984 and 1994, he worked in the automotive industry as an Operations Manager, Assistant General Manager and board member, respectively. In 1994, he was appointed as Assistant General Manager at IETT and worked at İSBALT, İSBAK, İSTON, İSMER and BELTUR, which are organisations of Istanbul Metropolitan Municipality. On 31 December 2002, he became the General Manager of TCDD Operations and chairman of the board of directors. In this period he contributed to the realisation of more than 100 railway projects, specifically the High Speed Train project. He received an Innovation Award from President of the Republic of Turkey due to his works at TCDD General Management. He served the board of directors of Türk Telekom, TTNET and TÜRKSAT as a board member. In 2015, he resigned from his position at TCDD and became a deputy candidate for nomination from Erzincan for the AKP. He is currently serving as Vice Chairman of the board of directors of TÜRKSAT.

Ahmet Turul, Independent Member (Age 58). Born in Van in 1959, Ahmet Turul graduated from Ankara University's Department of Political Science in 1980. Between 1980 and 1988, he worked as Assistant Public Accountant and later as Public Accountant at the Ministry of Finance. From 1988 to 1999, he served as Assistant Coordinator of Financial Affairs, and Financial Affairs Coordinator at Koç Holding, and from 1999 to 2002, he was the Vice President of Financial Affairs at Koç Tüketici Finansmanı A.Ş. Mr. Turul served as Vice President of Financial Affairs at Allianz Sigorta A.Ş. and Allianz Hayat ve Emeklilik A.Ş. between 2002 and 2010. Since 2010, he has been a board member of Allianz Sigorta A.Ş. and Allianz Hayat ve Emeklilik A.Ş., and a board member of Allianz Yaşam ve Emeklilik A.Ş. since 2013. Additionally, Mr. Turul serves as board member and member of the non-life executive board at the Insurance Association of Turkey (TSB); board member at the Pension Monitoring Center; and Member of the Tax Council on behalf of TSB. Mr. Ahmet Turul has been an independent member of the Board of Directors since 31 March 2014.

Gökçe Bayındır, Independent Member (Age 77). Born in Istanbul in 1939, Gökçe Bayındır graduated from Robert College, and then from Boğaziçi University's Department of Business Administration in 1965, where he also received his MBA. Following military service, he started his professional career in 1967, and was appointed marketing manager of Tofaş Oto Ticaret A.Ş. in 1971. Later he worked in Tofas Trade Ltd as Assistant General Manager and from 1979, General Manager. After this, he was appointed Tofaş Group Vice President at Koç Holding, and later held the position of Tofas Group President before retiring from the Koç Group in 2000.Whilst employed by Koç Group, he was a board member at various companies, including Tofaş Oto Ticaret A.Ş. and Tofaş Türk Otomobil Fabrikası A.Ş.. Mr. Bayındır has been an independent member of the Board of Directors since 4 April 2012.

Kutsan Çelebican, Independent Member (Age 71). A graduate of Ankara University's Faculty of Political Sciences, Kutsan Çelebican began his career in 1969 at the Ministry of Finance- Board of Public Auditors, before becoming Assistant General Manager of the Treasury at the same ministry between 1979 and 1982. He later served as Deputy Executive Director at the World Bank (IBRD). Mr. Çelebican joined Koç Group in 1987 and served as Finance Coordinator, Vice President and President of the Finance Group. He retired as in December 2001 and is currently running his own business as a financial consultant. Mr. Çelebican has been an independent member of the Board of Directors since 4 April 2012.

Osman Mete Altan, Independent Member (Age 74). Born in Eskişehir in 1942, Osman Mete Altan Osman Mete Altan graduated in mechanical engineering from Yildiz Technical University in 1965 and completed his MA at the same university and later earned an MBA from Uludağ University. Between 1966 and 1968, Mr. Altan worked for the American company TUMPANE Co. Inc., and upon completing his military service in 1970, he went on to work at the Tofaş Automobile Factory where he became Workshop Engineer, Production Engineer and Assistant General Manager of Production. In 1995, he was appointed General Manager of Otoyol Corp. a position he held until retiring in July 2003. Mr. Altan has been an independent member of the Board of Directors since 4 April 2012.

Executive Management

The following table provides certain information about the executive management as of the date of this Offering Circular:

Name	Age	Position	Year first appointed to Executive Management
İbrahim Yelmenoğlu....................................	46	General Manager	2016
Doğan Korkmaz..	43	Assistant General Manager	2016
Levent Zağra...	47	Assistant General Manager	2016
Özgür Kahramanzade	48	Assistant General Manager	2016
Serdar Kemaloğlu ………………………	48	Assistant General Manager	2017
Atilla Ulusu	42	Assistant General Manager	2017

The business address of each of the executive management is Güney Mahallesi, Petrol Caddesi No: 25 41790, Körfez, Kocaeli, Turkey.

Board Committees

Corporate Governance Committee

The Corporate Governance Committee was established to monitor the harmonisation of the Company with Corporate Governance Principles adopted by the Board of Directors on 20 November 2007 and assess justification for non-compliance with principles not yet implemented and advise the Board of Directors with proposals for improvement of practices. The Committee also fulfils the functions relating to remuneration of the Board of Directors and key executives and Board of Directors nominations. Kutsan Çelebican, Yağız Eyüboğlu, and Doğan Korkmaz are members of the committee.

Risk Governance Committee

The Risk Governance Committee was established to make recommendations to the Board of Directors with regards to issues dealing with identifying, measuring, analysing, monitoring and reporting risk that the Company is exposed to and to decrease controllable and uncontrollable risk. Gökçe Bayındır and Temel Kamil Atay are members of the committee.

Audit Committee

The Audit Committee was established to monitor financial affairs, assess periodical financial charts and endnotes, take necessary action within the framework of the Corporate Governance Principles and to present its proposal on financial results to the Board of Directors based on existing information and examination of the Independent External Audit and to oversee internal audit processes. The Audit Committee meets on a quarterly basis and at a minimum of four times per year and receives information from the Company's external auditor, currently E&Y. Kutsan Çelebican and Osman Mete Altan are members of the committee.

Implementation Committee

The Implementation Committee was created to create ideas and strategies within the Company, to ensure coordination between relevant departments and accordingly, to determine the areas of specialisation in sectors in which the Company operates, to convey recommendations and suggestions to the Board of Directors in designing new projects and investments and to monitor the management of accepted strategies and projects. Rahmi M. Koç, Semahat S. Arsel, Ömer M. Koç, Ali Y. Koç, Temel Kamil Atay, and Dr. Bülent Bulgurlu are members of the committee.

Ethics Committee

The Code of Ethics covers the basic behavioural principles of the Company, including ethical principles its employees should comply with, its approach towards employee health and security and towards environmental issues as well as its relationship with its shareholders (the **"Code"**). The Ethics Committee undertakes responsibility for monitoring and controlling the implementation of the Code. Ibrahim Velmenoğlu, Doğan Korkmaz, Nezih Akçinar, and Fatma Devrim are members of the committee.

Remuneration of the Board and Executive Management

The aggregate remuneration paid by the Group to its Board of Directors and executive management was TL 61.2 million for the year ended 31 December 2016. General Managers and executive management are entitled to the same retirement benefits as the Group's other employees. See *"Business—Employees"*.

Conflict of Interests

There is no actual or potential conflict of interests between the duties of any of the members of the Board of Directors or the executive management and their respective private interests or other duties.

SHARE CAPITAL, OWNERSHIP AND RELATED PARTY TRANSACTIONS

Share Capital and Class C (Preferential) Share

The registered capital of the Company is TL 500,000,000 and is divided into 50,000,000,000 shares with a registered nominal value of 1 Kurus¸ ("**Kr**") each. The authorised and paid-in share capital of the Company comprises 25,041,919,999 class A shares with a registered nominal value of Kr1 and one class C (preferential) share held by the Privatisation Administration. Pursuant to the Company's articles of association, any amendments in the Company's articles of association affecting the quorums of the board of directors, the rights of the class C (preferential) share, accommodation of the needs of the Turkish Armed Forces, any decisions concerning spin-off or merger or closure, sale, limitation of any kind or capacity decrease of more than 10 per cent. of any of Tüpraş's refineries that may restrict and/or hinder the accommodation of the needs of the Turkish Armed Forces and liquidation of the Company, can only be taken with the affirmative vote of the class C (preferential) share. The primary role of the class C (preferential) share is to ensure a sustained supply of refined products to meet Turkey's supply security requirements. In addition, the holder of the class C (preferential) share is entitled to appoint one director to the Company's board of directors. Mr. Süleyman Karaman is the current representative who was appointed by the class C (preferential) shareholder. See "*Risk Factors—*

Risks Relating to the Group and the **Industry***—The Privatization Administration which holds a "golden share" in Tüpraş may have interests that conflict with Noteholders.*"

Ownership

A controlling stake in the Company (51 per cent.) is currently held by Enerji Yatırımları A.Ş ("**EYAŞ"**), while 49 per cent. of the Company is publicly held. The Company's shares are listed on the Istanbul Stock Exchange and its global depository receipts are listed on the London Stock Exchange.

EYAŞ is a holding company which is controlled by Koç Holding, which itself is owned by members of the Koç family and companies and trusts under control of the Koç family.

Koç Holding is the largest investment holding company in Turkey and operates in four core business sectors: energy, automotive, consumer durables and finance. In the energy sector, in addition to the Company, Koç Holding's flagship companies include Opet, Aygaz A.Ş., Turkey's leading LPG company, and Entek Elektrik Üretimi A.Ş., a power generation company.

Related Party Transactions

For information regarding the Group's related party transactions, see Note 31 in the 2016 Consolidated Financial Statements.

TERMS AND CONDITIONS OF THE NOTES

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

The issue of the USD700,000,000 4.50 per cent. Notes due 2024 (the "**Notes**", which expression includes any further notes issued pursuant to Condition 13 and forming a single series therewith) of Türkiye Petrol Rafinerileri A.Ş. (the "**Issuer**") was authorised by a resolution of the Board of Directors of the Issuer dated 17 July 2017 No.: 2017/15. A fiscal agency agreement dated 18 October 2017 (the "**Fiscal Agency Agreement**") has been entered into in relation to the Notes between the Issuer, Citibank, N.A., London Branch as fiscal agent and principal paying and transfer agent, Citigroup Global Markets Deutschland AG as registrar and as paying and transfer agent. The fiscal agent, the paying and transfer agents and the registrar are referred to below respectively as the "**Fiscal Agent**", the "**Paying and Transfer Agent**" and the "**Registrar**", which expressions include in each case any successor thereto appointed from time to time in connection with the Notes. The expression "**Paying and Transfer Agents**" shall include the Fiscal Agent. The Fiscal Agency Agreement includes the form of the Notes.

The holders of Notes (the "**Noteholders**") are entitled to the benefit of a deed of covenant (the "**Deed of Covenant**") dated 18 October 2017 and made by the Issuer. The original of the Deed of Covenant is held by the common depository for Euroclear Bank SA/NV and Clearstream Banking, S.A. Copies of the Fiscal Agency Agreement, the Deed of Covenant and a deed poll (the "**Deed Poll**") dated 18 October 2017 made by the Issuer in favour of the holders of "restricted securities" within the meaning of the U.S. Securities Act of 1933 (as amended) are available for inspection during normal business hours at the specified offices of the Paying and Transfer Agents. The Noteholders are deemed to have notice of all the provisions of the Fiscal Agency Agreement, the Deed Poll and the Deed of Covenant applicable to them.

All capitalised terms that are not defined in these terms and conditions (the "**Conditions**") will have the meanings given to them in the Fiscal Agency Agreement.

1. Form, Specified Denomination and Title

(a) **Form and Denomination**: The Notes are in registered form, serially numbered and in denominations of USD200,000 and integral multiples of USD1,000 in excess thereof (each, an "**authorised denomination**"). The Notes are represented by registered certificates (the "**Certificates**") and, save as provided in Condition 2(a), each Certificate shall represent the entire holding of Notes by the same holder.

(b) **Title**: Title to the Notes shall pass by registration in the register that the Issuer shall procure to be kept by the Registrar in accordance with the provisions of the register (the "**Register**"). Except as ordered by a court of competent jurisdiction or as required by law, the holder (as defined below) of any Note shall be deemed to be and may be treated as its absolute owner for all purposes whether or not it is overdue and regardless of any notice of ownership, trust or an interest in it, any writing on the Certificate representing it or the theft or loss of such Certificate and no person shall be liable for so treating the holder.

In these Conditions, "**Noteholder**" and "**holder**" means the person in whose name a Note is registered.

2. Transfers of Notes

(a) **Transfer**: A holding of Notes may, subject to Condition 2(d), be transferred in whole or in part in an authorised denomination upon the surrender (at the specified office of the Registrar or any Transfer Agent) of the Certificate(s) representing such Notes to be transferred, together with the form of transfer endorsed on such Certificate(s) (or another form of transfer substantially in the same form and containing the same representations and certifications (if any), unless otherwise agreed by the Issuer), duly completed and executed and any other evidence as the Registrar or a Paying and Transfer Agent may reasonably require. In the case of a transfer of part only of a holding of Notes represented by one Certificate, a new Certificate shall be issued to the transferee in respect of the part transferred and a further new Certificate in respect of the balance of the holding not transferred shall be issued to the transferor. In the case of a transfer of Notes to a person who is already a holder

of Notes, a new Certificate representing the enlarged holding shall only be issued against surrender of the Certificate representing the existing holding. All transfers of Notes and entries on the Register will be made in accordance with the detailed regulations concerning transfers of Notes scheduled to the Fiscal Agency Agreement. The regulations may be changed by the Issuer, with the prior written approval of the Registrar and the Fiscal Agent. A copy of the current regulations will be made available by the Registrar to any Noteholder upon request.

(b) **Delivery of New Certificates**: Each new Certificate to be issued pursuant to Condition 2(a) shall be available for delivery within three business days of receipt of a duly completed form of transfer and surrender of the existing Certificate(s). Delivery of the new Certificate(s) shall be made at the specified office of a Paying and Transfer Agent or of the Registrar (as the case may be) to whom delivery or surrender of such form of transfer or Certificate shall have been made or, at the option of the holder making such delivery or surrender as aforesaid and as specified in the relevant form of transfer or otherwise in writing, be mailed by uninsured post at the risk of the holder entitled to the new Certificate to such address as may be so specified, unless such holder requests otherwise and pays in advance to the relevant Paying and Transfer Agent or the Registrar (as the case may be) the costs of such other method of delivery and/or such insurance as it may specify. In this Condition 2(b), "**business day**" means a day, other than a Saturday or Sunday, on which banks are open for business in the place of the specified office of the relevant Paying and Transfer Agent or the Registrar (as the case may be).

(c) **Transfer or Exercise Free of Charge**: Certificates, on transfer, exercise of an option or partial redemption, shall be issued and registered without charge by or on behalf of the Issuer, the Registrar or any Paying and Transfer Agent, but upon payment of any tax or other governmental charges that may be imposed in relation to such transfer, exercise, partial redemption or registration (or the giving of such indemnity as the Registrar or the relevant Paying and Transfer Agent may require).

(d) **Closed Periods**: No Noteholder may require the transfer of a Note to be registered (i) during the period of 15 days ending on (and including) the due date for redemption of that Note, (ii) after any such Note has been called for redemption, or (iii) during the period of seven days ending on (and including) any Record Date (as defined below).

3. Status

The Notes constitute direct, unconditional, unsubordinated and (subject to Condition 4) unsecured obligations of the Issuer and rank, and shall at all times rank, *pari passu* and without any preference among themselves. The payment obligations of the Issuer under the Notes shall, save for such exceptions as may be provided by applicable legislation and subject to Condition 4, at all times rank at least equally with all other present and future unsecured and unsubordinated obligations of the Issuer.

4. Covenants

So long as any Note remains outstanding (as defined in the Fiscal Agency Agreement):

(a) **Negative pledge**:

The Issuer will not create or permit to subsist any mortgage, charge, pledge, lien or other form of security interest ("**Security Interest**") (other than a Permitted Security Interest) upon the whole or any part of its present or future undertaking, assets or revenues (including any uncalled capital) to secure any Indebtedness for Borrowed Money or any Indebtedness Guarantee in respect of any Indebtedness for Borrowed Money, unless, at the same time or prior thereto, the Issuer's obligations under the Notes are secured equally and rateably therewith or have the benefit of such other arrangement as shall be approved by an Extraordinary Resolution (as defined in the Fiscal Agency Agreement) of the Noteholders.

(b) **Financial statements:**

The Issuer shall send to the Fiscal Agent as soon as they become available but in any event (i) within 180 days after the end of each of its financial years, a copy of the Issuer's audited annual consolidated financial statements for such financial year, together with the report thereon by the Issuer's independent auditors, and (ii) within 90 days after the end of each first half year of each of its financial years, a copy of the Issuer's consolidated financial statements for such six-month period, certified by two directors of the Issuer as fairly representing the financial position of the Issuer and its consolidated subsidiaries as at the relevant date, and the results of operations and changes in financial position of the Issuer and its consolidated subsidiaries for the relevant period then ended, each prepared and presented in accordance with the relevant laws of the Republic of Turkey. Upon request from the Issuer, the Fiscal Agent shall deliver a copy of such financial statements, together with, in respect of any audited annual consolidated financial statements, the relevant auditors' report thereon, to any Noteholder promptly upon written request by such Noteholder.

(c) **Maintenance of Authorisations**:

The Issuer shall (i) take all action considered necessary, in the opinion of the Issuer, to ensure the continuance of its corporate existence, its business and/or operations; and (ii) take all necessary action to obtain, and do or cause to be done all things necessary to (a) ensure the continuance of, all consents, licences, approvals and authorisations in the Republic of Turkey, and (b) make or cause to be made all registrations, recordings and filings, which may be required in the Republic of Turkey, for, in the case of both (a) and (b), the execution, delivery or performance of the Notes and the Fiscal Agency Agreement or for the validity, enforceability or admissibility in evidence thereof.

(d) **Transactions with Affiliates**:

The Issuer shall not directly or indirectly, enter into or permit to exist any transaction or series of related transactions (including, without limitation, the purchase, sale, transfer, assignment, lease, conveyance or exchange of any property or the rendering of any service) in any twelve month period which has or in aggregate have a value in excess of USD25,000,000 with, or for the benefit of, any Affiliate (an "**Affiliate Transaction**") including, without limitation, intercompany loans, disposals or acquisitions, unless the terms of such Affiliate Transaction are no less favourable to the Issuer than those that could be obtained (at the time of such transaction or, if such transaction is pursuant to a written agreement, at the time of the execution of the agreement providing therefor) in a comparable arm's length transaction with a Person that is not an Affiliate of the Issuer.

In these Conditions:

"**Affiliates**" of any specified person means any other persons, directly or indirectly, controlling or controlled by or under direct or indirect common control with such specified person. For the purposes of this definition, "**control**" when used with respect to any person means the power to direct the management and policies of such person, directly or indirectly, whether through the ownership of voting securities, by contract or otherwise; and the terms "controlling" and "controlled" have meanings correlative to the foregoing.

"**Incurred**" means issue, assume, guarantee, incur or otherwise become liable for; provided, however, that any Indebtedness of a Person existing at the time such Person becomes a Subsidiary of the Issuer (whether by merger, consolidation, acquisition or otherwise) shall be deemed to be Incurred by such Person at the time it becomes a Subsidiary of the Issuer.

"**Indebtedness**" means any obligation (whether Incurred as principal or as surety) for the payment or repayment of money, whether present or future, actual or contingent.

"**Indebtedness for Borrowed Money**" means any Indebtedness of any Person for or in respect of (i) moneys borrowed, (ii) amounts raised by acceptance under any acceptance credit facility, (iii) amounts raised pursuant to any note purchase facility or the issue of bonds, notes, debentures, loan stock or similar instruments, (iv) the

amount of any liability in respect of leases or hire purchase contracts which would, in accordance with generally accepted accounting standards in the jurisdiction of incorporation of the lessee, be treated as finance or capital leases, (v) the amount of any liability in respect of any purchase price for assets or services the payment of which is deferred for a period in excess of 180 days primarily as a means of raising finance or financing the acquisition of the relevant asset or service or (vi) amounts raised under any other transaction (including any forward sale or purchase agreement and the sale of receivables or other assets on a "with recourse" basis) having the commercial effect of a borrowing, excluding in each case trade supply arrangements entered into in the ordinary course of business.

"**Indebtedness Guarantee**" means, in relation to any Indebtedness of any Person, any obligation of another Person to pay such Indebtedness including (without limitation) (i) any obligation to purchase such Indebtedness, (ii) any obligation to lend money, to purchase or subscribe shares or other securities or to purchase assets or services in order to provide funds for the payment of such Indebtedness, (iii) any indemnity against the consequences of a default in the payment of such Indebtedness and (iv) any other agreement to be responsible for repayment of such Indebtedness.

"**Permitted Security Interest**" means:

(i) any Security Interest outstanding as at the Issue Date (as defined in Condition 5);

(ii) any Security Interest securing Indebtedness for Borrowed Money of a Person existing at the time that such Person is merged into or consolidated with the Issuer; provided, however, that such Security Interest was not created or increased in contemplation of such merger or consolidation or event and does not extend to any assets or property of the Issuer already existing other than those of the surviving Person and its Subsidiaries or the Person acquired and its Subsidiaries; and is released within six months of such acquisition and provided further that the aggregate amount secured by such Security Interests does not exceed USD100,000,000 or its equivalent in any other currency (on the basis of the middle spot rate for the relevant currency against the US dollar as quoted by any leading bank on the day on which this paragraph operates), at any given time;

(iii) any Security Interest already existing on assets or property acquired or to be acquired by the Issuer; provided, however, that such Security Interest was not created in contemplation of such acquisition and does not extend to any other assets or property (other than proceeds of such acquired assets or property);

(iv) any Security Interest granted upon or with regard to any property hereafter acquired or constructed in the ordinary course of business by the Issuer to secure the purchase price of such property or to secure Indebtedness for Borrowed Money Incurred solely for the purpose of financing the acquisition of such property and transactional expenses related to such acquisition and repairs related to such property; provided, however, that the maximum amount of Indebtedness for Borrowed Money thereafter secured by such Security Interest does not exceed the purchase price of such property (including transactional expenses) or the Indebtedness for Borrowed Money Incurred solely for the purpose of financing the acquisition of such property and related transactional expenses and the relevant Security Interest only extends to the property acquired;

(v) any retention of title arrangements in relation to goods supplied to the Issuer in the ordinary course of business and not resulting from a default or omission of the Issuer;

(vi) any Security Interest arising by operation of law, or pursuant to any order of attachment, distraint or similar legal process arising in connection with court proceedings which has not been foreclosed or otherwise enforced against the assets to which it applies or which is being contested in good faith provided that the Security Interest shall not remain outstanding for more than 90 days;

(vii) any Security Interest securing reimbursement obligations of the Issuer with respect to letters of credit encumbering only documents and other property relating to such letters of credit and the products or proceeds thereof in the ordinary course of business;

(viii) any Security Interest created in the ordinary course of business in favour of a bank or financial institution directly relating to ordinary margin payment, ordinary contractual set-off or netting arrangements on derivatives including, without limitation, interest and currency exchange swaps, transactions and other hedging arrangements which are in each case carried out in the ordinary course of business and for non-speculative purposes and in an aggregate amount not exceeding USD100,000,000 or its equivalent in any other currency (on the basis of the middle spot rate for the relevant currency against the US dollar as quoted by any leading bank on the day on which this paragraph operates);

(ix) any Security Interest for taxes or assessments, customs charges, government charges and similar charges, which are not overdue or are being contested in good faith;

(x) any Security Interest securing the Issuer's obligations in favour of the Turkish state or its agencies and arising out of any mandatory laws applicable to the Issuer;

(xi) any Security Interest arising from any judgment, award, decree, or other order not exceeding USD100,000,000 or its equivalent in any other currency (on the basis of the middle spot rate for the relevant currency against the US dollar as quoted by any leading bank on the day on which this paragraph operates), the time for appeal or petition for re-hearing of which has not expired and in respect of which the Issuer is in good faith pursuing an appeal or review and in respect of which a stay of execution pending such appeal or proceedings for review has been granted;

(xii) a right of set-off, a right to combine accounts or any analogous right, which any bank or other financial institution may have relating to any debit or credit balance of the Issuer;

(xiii) any Security Interest granted in favour of a Person providing Project Financing if the Security Interest is solely (x) on the property, income, assets or revenues of the project for which the financing was Incurred or (y) the share capital of a Project Finance Company provided, however, (i) such Security Interest is created solely for the purpose of securing Indebtedness for Borrowed Money Incurred by the Issuer in compliance with Condition 4(a), and (ii) no such Security Interest shall extend to any other property, income assets or revenues of the Issuer;

(xiv) any Security Interest not otherwise permitted by the preceding paragraphs (i) to (xiii) (inclusive), provided that the aggregate principal amount of the Indebtedness secured by such Security Interest does not at any time exceed 10 per cent. of the consolidated total assets of the Issuer, as determined by reference to the audited consolidated balance sheet of the Issuer as at the end of the most recent financial year of the Issuer; or

(xv) any Security Interest arising out of the refinancing, extension, renewal or refunding of any Indebtedness for Borrowed Money secured by a Security Interest permitted by any of the above exceptions, provided, however, that the Indebtedness for Borrowed Money thereafter secured by such Security Interest does not exceed the amount of the original Indebtedness for Borrowed Money and such Security Interest is not extended to cover any property not previously subject to such Security Interest.

"**Project Finance Company**" means a special purpose company (a) whose sole business comprises a project for the ownership, creation, construction, improvement, operation, development or exploitation of its assets; and (b) which has no Indebtedness other than Indebtedness Incurred for the purposes of the project referred to in (a).

"**Project Financing**" means any arrangement for the provision of funds which are to be used solely to finance the acquisition, construction, development, operation or exploitation of any assets pursuant to which the persons providing such funds agree that the principal source of repayment of such funds will be the project and the revenues (including insurance proceeds) generated by such project.

"**Person**" means any individual, company, corporation, firm, partnership, joint venture, association, unincorporated organisation, trust or other judicial entity, including, without limitation, any state or agency of a state or other entity, whether or not having separate legal personality.

"**Subsidiary**" means, in relation to any Person (the "**first Person**") at any particular time, any other Person (the "**second Person**") (i) in which such first Person owns more than 50 per cent. of share capital or (ii) whose affairs and policies the first Person controls or has the power to control, whether by ownership of share capital, contract, the power to appoint or remove members of the governing body of the second Person or otherwise, and includes any company which is a Subsidiary of a Subsidiary of such Person.

5. Interest

The Notes bear interest on their outstanding principal amount from and including 18 October 2017 (the "**Issue Date**") at the rate of 4.50 per cent. per annum, payable semi-annually in arrear in equal instalments of USD22.50 per Calculation Amount (as defined below) on 18 April and 18 October in each year (each an "**Interest Payment Date**").

Each Note will cease to bear interest from the due date for redemption unless, upon surrender of the Certificate representing such Note, payment of principal is improperly withheld or refused. In such event it shall continue to bear interest at such rate (both before and after judgment) until whichever is the earlier of (a) 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 holder, and (b) the day seven days after the Fiscal Agent has notified Noteholders of receipt of all sums due in respect of all the Notes up to that seventh day (except to the extent that there is failure in the subsequent payment to the relevant holders under these Conditions).

If interest is required to be calculated for a period of less than a complete Interest Period (as defined below), the relevant day-count fraction will be determined on the basis of a 360-day year consisting of 12 months of 30 days each and, in the case of an incomplete month, the number of days elapsed.

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

Interest in respect of any Note shall be calculated per USD1,000 in principal amount of the Notes (the "**Calculation Amount**"). The amount of interest payable per Calculation Amount for any period shall be equal to the product of 4.50 per cent., the Calculation Amount and the day-count fraction for the relevant period, rounding the resulting figure to the nearest cent (half a cent being rounded upwards).

6. Redemption and Purchase

(a) **Final Redemption**:

Unless previously redeemed, or purchased and cancelled, the Notes will be redeemed at their principal amount on 18 October 2024 (the "**Maturity Date**"). The Notes may not be redeemed at the option of the Issuer other than in accordance with this Condition 6.

(b) **Optional Redemption**:

(i) The Issuer may, on giving not less than 30 nor more than 60 days' notice to Noteholders and the Fiscal Agent in accordance with Condition 14 (which notices shall be irrevocable and shall specify the date fixed for redemption and the applicable Record Date (as defined in Condition 7(a)(ii)), redeem all (but not some only) of the Notes at any time during the period commencing on (and including) the day that is 90 days prior to the Maturity Date to (but excluding) the Maturity Date at their principal amount, together with interest accrued to the date fixed for redemption.

(ii) At any time prior to the day that is 90 days prior to the Maturity Date, the Issuer may at its option, having given not less than 30 nor more than 60 days' notice to the Noteholders and the Fiscal Agent in accordance with Condition 14 (which notices shall be irrevocable and shall specify the date fixed for redemption and the applicable Record Date), redeem all (but not some only) of the Notes at the Make-Whole Redemption Price.

For the purpose of this Condition 6(b)(ii):

(A) "**Make-Whole Redemption Price**" means, in respect of each Note, the greater of (a) 100 per cent. of the principal amount of the Notes and (b) the sum of the present values of the Remaining Scheduled Payments discounted to the date of redemption on a semi-annual basis (assuming a 360-day year consisting of 12 months of 30 days each) at the U.S. Treasury Rate plus a spread of 35 basis points, together with accrued interest on the principal amount of the Notes to the date of redemption, all as determined by the Determination Agent;

(B) "**U.S. Treasury Rate**" means, with respect to any redemption date, the rate per annum equal to the semi-annual equivalent yield to maturity (computed as of the third business day immediately preceding that redemption date) of the Comparable Treasury Issue, assuming a price for the Comparable Treasury Issue (expressed as a percentage of its principal amount) equal to the Comparable Treasury Price for that redemption date;

(C) "**Comparable Treasury Issue**" means the United States Treasury security or securities selected by the Determination Agent that would be utilised, at the time of selection and in accordance with customary financial practice, in pricing new issues of corporate debt securities of comparable maturity to the remaining term of the Notes;

(D) "**Comparable Treasury Price**" means, with respect to any redemption date, the average of three Reference Treasury Dealer Quotations for the redemption date;

(E) "**Reference Treasury Dealer**" means each of the three nationally recognised firms selected by the Determination Agent that are primary U.S. Government securities dealers;

(F) "**Reference Treasury Dealer Quotation**" means, with respect to each Reference Treasury Dealer and any redemption date, the average, as determined by the Determination Agent, of the bid and asked prices for the Comparable Treasury Issue (expressed in each case as a percentage of its principal amount) quoted in writing to the Determination Agent by such Reference Treasury Dealer at 5.00 p.m., New York City time on the third business day immediately preceding such redemption date;

(G) "**Remaining Scheduled Payments**" means, with respect to the Notes, the remaining scheduled payments of the principal thereof and interest thereon that would be due after the related redemption date but for such redemption, provided, however, that if that redemption date is not an Interest Payment Date, the amount of the next succeeding scheduled interest payment thereon will be reduced by the amount of interest accrued thereon to the redemption date; and

(H) "**Determination Agent**" means a leading investment bank or financial institution of international standing (i) selected by the Issuer for the purposes of calculating the Make-Whole Redemption Price, and (ii) notified to the Noteholders by the Issuer in accordance with Condition 14.

(c) **Redemption for Taxation Reasons**:

The Notes may be redeemed at the option of the Issuer in whole, but not in part, at any time, on giving not less than 30 nor more than 60 days' notice to the Noteholders (which notice shall be irrevocable), at their principal amount, (together with interest accrued to the date fixed for redemption), if (i) the Issuer has or will become obliged to pay additional amounts as provided or referred to in Condition 8 as a result of any change in, or amendment to, the laws or regulations of the Republic of Turkey 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, which change or amendment becomes effective on or after 16 October 2017, and (ii) such obligation cannot be avoided by the Issuer taking reasonable measures available to it, provided that no such notice of redemption shall be given earlier than the first day of the Interest Period in relation to which the relevant additional amounts will be payable. Prior to the publication of any notice of redemption pursuant to this Condition 6(c), the Issuer shall deliver to the Fiscal Agent a certificate signed by two directors of the Issuer stating that the Issuer is entitled to effect such redemption and setting forth a statement of facts showing that the conditions precedent to the right of the Issuer so to redeem have occurred, and an opinion of independent legal advisers of recognised standing to the effect that the Issuer has or will become obliged to pay such additional amounts as a result of such change or amendment.

(d) **Purchase**: the Issuer or any of its Subsidiaries may at any time purchase Notes in the open market or otherwise at any price. The Notes so purchased, while held by or on behalf of the Issuer or any such Subsidiary, shall not entitle the holder to vote at any meetings of the 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 Condition 12(a).

(e) **Cancellation**: All Notes purchased by or on behalf of the Issuer or any of its Subsidiaries may be cancelled or held and resold, provided that any Notes so purchased shall not entitle the holder to vote at any meetings of the Noteholders. Any Notes so surrendered for cancellation may not be reissued or resold and the obligations of the Issuer in respect of any such Notes shall be discharged.

7. Payments

(a) **Method of Payment**:

(i) Payments of principal shall be made (subject to surrender of the relevant Certificates at the specified office of any Paying and Transfer Agent or of the Registrar if no further payment falls to be made in respect of the Notes represented by such Certificates) in the manner provided in Condition 7(a)(ii) below.

(ii) Interest on each Note shall be paid on the due date for payment thereof to the person shown on the Register at the close of business on the record date (the "**Record Date**"), being the seventh business day before the due date for payment thereof. Payments of interest on each Note shall be made in the relevant currency by cheque drawn on a bank and mailed to the holder (or to the first named of joint holders) of such Note at its address appearing in the Register. Upon application by the holder to the specified office of the Registrar or any Paying and Transfer Agent before the Record Date, such payment of interest may be made by transfer to an account in the relevant currency maintained by the payee with a bank.

(iii) If the amount of principal being paid upon surrender of the relevant Certificate is less than the outstanding principal amount of such Certificate, the Registrar will annotate the Register with the amount of principal so paid and will (if so requested by the Issuer or a Noteholder) issue a new

Certificate with a principal amount equal to the remaining unpaid outstanding principal amount. If the amount of interest being paid is less than the amount then due, the Registrar will annotate the Register with the amount of interest so paid.

(b) **Payments subject to Fiscal Laws**: All payments are subject in all cases to: (i) any applicable fiscal or other laws, regulations and directives in the place of payment, but without prejudice to the provisions of Condition 8 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, as amended (the "**Code**"), or otherwise imposed pursuant to Sections 1471 through 1474 of the Code and any regulations or agreements thereunder or official interpretations thereof ("**FATCA**") or (without prejudice to the provisions of Condition 8) any law implementing an intergovernmental approach to FATCA. No commission or expenses shall be charged to the Noteholders in respect of such payments.

(c) **Payment Initiation**: Where payment is to be made by transfer to an account in the relevant currency, payment instructions (for value the due date, or if that is not a business day, for value the first following day which is a business day) will be initiated, and, where payment is to be made by cheque, the cheque will be mailed on the last day on which the Fiscal Agent is open for business preceding the due date for payment or, in the case of payments of principal where the relevant Certificate has not been surrendered at the specified office of any Paying and Transfer Agent or of the Registrar, on a day on which the Fiscal Agent is open for business and on which the relevant Certificate is surrendered.

(d) **Appointment of Agents**: The Fiscal Agent, the Registrar, and the Paying and Transfer Agents initially appointed by the Issuer and their respective specified offices are listed below. The Fiscal Agent, the Registrar, and the Paying and Transfer Agents act solely as agents of the Issuer and do not assume any obligation or relationship of agency or trust for or with any Noteholder. The Issuer reserves the right at any time to vary or terminate the appointment of the Fiscal Agent, the Registrar, or any Paying and Transfer Agent and to appoint additional or other Paying and Transfer Agents, provided that the Issuer shall at all times maintain (i) a Registrar and a Fiscal Agent, (ii) Paying and Transfer Agents having specified offices in at least two major European cities outside of the Republic of Turkey and (iii) so long as the Notes are listed on any stock exchange or admitted to listing by any other relevant authorities, there will at all times be a Paying and Transfer Agent with a specified office in such place as may be required by the rules and regulations of the relevant stock exchange or other relevant authority. Notice of any such change or any change of any specified office shall promptly be given to the Noteholders in accordance with Condition 14.

(e) **Delay in Payment**: Noteholders will not be entitled to any interest or other payment for any delay after the due date in receiving the amount due on a Note if the due date is not a business day, if the Noteholder is late in surrendering or cannot surrender its Certificate (if required to do so) or if a cheque mailed in accordance with Condition 7(a)(ii) arrives after the due date for payment.

(f) **Non-Business Days**: If any date for payment in respect of any Note is not a business day, the holder shall not be entitled to payment until the next following business day nor to any interest or other sum in respect of such postponed payment. In this Condition 7, "**business day**" means a day (other than a Saturday or a Sunday) on which banks and foreign exchange markets are open for business including dealings in foreign currencies in the place of the specified office of the relevant Paying and Transfer Agent to whom the relevant Note is surrendered.

8. Taxation

All payments of principal and interest in respect of the Notes by or on behalf of the Issuer 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 whatever nature ("**Taxes**") imposed, levied, collected, withheld or assessed by or on behalf of the Relevant Jurisdiction, unless the withholding or deduction of the Taxes is required by law. In that event, the Issuer will pay such additional amounts as may be necessary in order that the net amounts received by the Noteholders after the withholding or deduction shall equal the respective amounts

which would have been receivable in respect of the Notes in the absence of the withholding or deduction; except that no additional amounts shall be payable in relation to any payment in respect of any Note:

(a) the holder of which is liable to the Taxes in respect of the Note by reason of his having some connection with any Relevant Jurisdiction other than the mere holding of the Note; or

(b) presented for payment in the Republic of Turkey; or

(c) presented for payment more than 30 days after the Relevant Date (as defined below) except to the extent that a holder would have been entitled to additional amounts on presenting the same for payment on the last day of the period of 30 days assuming that day to have been a business day (as defined in Condition 7).

Notwithstanding any other provisions of these Conditions, in no event will the Issuer be required to pay any additional amounts in respect of the Notes for, or on account of, any withholding or deduction required pursuant to FATCA (including pursuant to any agreement described in Section 1471(b) of the Code) or any law implementing an intergovernmental approach to FATCA.

In this Condition:

(a) **Relevant Date** means the date on which the payment first becomes due but, if the full amount of the money payable has not been received by the Fiscal Agent on or before the due date, it means the date on which, the full amount of the money having been so received, notice to that effect has been duly given to the Noteholders by the Issuer in accordance with Condition 14;

(b) **Relevant Jurisdiction** means the Republic of Turkey or any political subdivision or any authority thereof or therein having power to tax or any other jurisdiction or any political subdivision or any authority thereof or therein having power to tax to which payments made by the Issuer of principal and interest on the Notes become generally subject; and

(c) Any reference to principal and/or interest shall be deemed to include any additional amounts which may be payable under this Condition.

9. Events of Default

If any of the following events ("**Events of Default**") occurs and is continuing:

(a) **Non-Payment**: the Issuer fails to pay any amount of principal or interest on any of the Notes when due and such failure continues for a period of seven Business Days in the case of interest or three Business Days in the case of principal; or

(b) **Breach of Other Obligations**: the Issuer does not perform or comply with any one or more of its other obligations in the Notes which is not remedied within 45 days after written notice of such default shall have been given to the Fiscal Agent at its specified office by any Noteholder; or

(c) **Cross-Acceleration/Cross-Default**: (i) any Indebtedness for Borrowed Money of the Issuer becomes due and payable prior to its stated maturity by reason of any event of default (howsoever described), or (ii) any Indebtedness for Borrowed Money of the Issuer is not paid when due or, as the case may be, within any originally applicable grace period, or (iii) any Indebtedness Guarantee given by the Issuer in respect of Indebtedness for Borrowed Money of any other Person is not paid when due or, as the case may be, within any originally applicable grace period, provided that in the case of (i), (ii) and (iii) the aggregate principal amount of such Indebtedness for Borrowed Money or such Indebtedness Guarantee given by the Issuer in respect of Indebtedness for Borrowed Money, as the case may be, exceeds USD50,000,000 or its equivalent in any other currency (on the basis of the middle spot rate for the

relevant currency against the US dollar as quoted by any leading bank on the day on which this paragraph operates); or

(d) **Enforcement Proceedings**: one or more judgments or orders or arbitration awards is rendered against any part of the property, assets or revenues of the Issuer, that is not being contested in good faith by the Issuer and is not discharged or stayed within 60 days, provided that the value of such claim exceeds USD50,000,000 or its equivalent in any other currency (on the basis of the middle spot rate for the relevant currency against the US dollar as quoted by any leading bank on the day on which this paragraph operates); or

(e) **Security Enforced**: any mortgage, charge, pledge, lien or other encumbrance, present or future, created or assumed by the Issuer becomes enforceable and any step is taken to enforce it (including the taking of possession or the appointment of a receiver, manager or other similar person) and is not being contested in good faith by the Issuer and is not discharged or stayed within 60 days, provided that the value of the claim of any such enforcement action exceeds USD50,000,000 or its equivalent in any other currency (on the basis of the middle spot rate for the relevant currency against the US dollar as quoted by any leading bank on the day on which this paragraph operates); or

(f) **Insolvency**: (i) the Issuer becomes (or is, or could be, deemed by law or a court to be) insolvent or bankrupt or unable to pay its debts as they fall due, or (ii) an administrator or liquidator is appointed in respect of the Issuer or the whole or a material part of the business or operations of the Issuer (or application for any such appointment is made and such application is not being contested in good faith by the Issuer and is not discharged or stayed within 60 days), or (iii) the Issuer takes any action for a readjustment or deferment of any of its obligations, or makes a general assignment or an arrangement or composition with or for the benefit of its creditors, or declares a moratorium, in each case in respect of all of, or a material part of, its debts; or

(g) **Winding-up**: an order is made by a competent court or an effective resolution passed for the winding-up or dissolution of the Issuer, provided that such event is not being contested in good faith by the Issuer and is not discharged or stayed within 60 days, or the Issuer ceases or threatens to cease to carry on all or substantially all of its business or operations, save in each case: (A) for the purpose of and followed by a reconstruction, amalgamation, reorganisation, merger or consolidation or solvent voluntary winding-up on terms approved by an Extraordinary Resolution of the Noteholders; or (B) for the purpose of a Permitted Substitution; or

(h) **Illegality**: it is or will become unlawful for the Issuer to perform or comply with any one or more of its obligations under any of the Notes or one or more of its material obligations under the Fiscal Agency Agreement; or

(i) **Analogous Events**: any event occurs which under the laws of any relevant jurisdiction has an analogous effect to any of the events referred to in paragraphs (d) to (g) of this Condition 9,

then any Note may, by notice in writing given by the holder to the Issuer be declared immediately due and payable whereupon it shall become immediately due and payable at its principal amount together with accrued interest without further formality.

In this Condition 9:

"**Business Day**" means a day on which banks are open for business in London, New York and Istanbul; and

"**Permitted Substitution**" means a substitution pursuant to Condition 12(c) where the Substitute is a Successor in Business (as such terms are defined in Condition 12(c)).

10. Prescription

Claims against the Issuer for payment in respect of the Notes shall be prescribed and become void unless made within 10 years (in the case of principal) or five years (in the case of interest) from the appropriate Relevant Date in respect of them.

11. Replacement of Certificates

If any Certificate is lost, stolen, mutilated, defaced or destroyed, it may be replaced, subject to applicable laws, regulations or other relevant regulatory authority regulations, at the specified office of the Registrar or such other Paying and Transfer Agent as may from time to time be designated by the Issuer for that purpose and notice of whose designation is given to Noteholders, in each case on payment by the claimant of the fees and costs incurred in connection therewith and on such terms as to evidence, security, indemnity and otherwise as the Issuer may require (provided that the requirement is reasonable in light of prevailing market practice). Mutilated or defaced Certificates must be surrendered before replacements will be issued.

12. Meetings of Noteholders

(a) **Meetings of Noteholders:** The Fiscal Agency Agreement contains provisions for convening meetings of the Noteholders to consider any matter affecting their interests, including the modification by Extraordinary Resolution of any of these Conditions or any of the provisions of the Fiscal Agency Agreement. The quorum at any meeting for passing an Extraordinary Resolution will be one or more persons present holding or representing more than 50 per cent. in principal amount of the Notes for the time being outstanding, or at any adjourned meeting one or more persons present whatever the principal amount of the Notes held or represented by him or them, except that at any meeting the business of which includes any matter defined in the Fiscal Agency Agreement as a Reserved Matter, including the modification of certain of these Conditions (including the date of maturity of the Notes or any date for payment of interest thereon, reducing or cancelling the amount of principal or the rate of interest payable in respect of the Notes or altering the currency of payment of the Notes), the necessary quorum for passing an Extraordinary Resolution will be one or more persons present holding or representing not less than two-thirds, or at any adjourned meeting not less than one-third, of the principal amount of the Notes for the time being outstanding. The Fiscal Agency Agreement provides that (i) a resolution passed at a meeting duly convened and held in accordance with the Fiscal Agency Agreement by a majority consisting of not less than three-fourths of the votes cast on such resolution, (ii) a resolution in writing signed by or on behalf of the holders of not less than three-fourths in principal amount of the Notes for the time being outstanding or (iii) consent given by way of electronic consents through the relevant clearing system(s) (in a form satisfactory to the Fiscal Agent) by or on behalf of the holders of not less than three-fourths in principal amount of the Notes for the time being outstanding, shall, in each case, be effective as an Extraordinary Resolution of the Noteholders. An Extraordinary Resolution passed by the Noteholders will be binding on all Noteholders, whether or not they are present at any meeting and whether or not they voted on the resolution.

(b) **Modification**: The Fiscal Agent and the Issuer may agree, without the consent of the Noteholders, to any modification of any of these Conditions or any of the provisions of the Fiscal Agency Agreement which is, in the opinion of the Issuer, either (i) for the purpose of curing any ambiguity or of curing, correcting or supplementing any manifest or proven error or any other defective provision contained herein or therein or (ii) following the advice of an independent financial institution of international standing, not materially prejudicial to the interests of the Noteholders. Any modification shall be binding on the Noteholders and, unless the Fiscal Agent agrees otherwise, any modification shall be notified by the Issuer to the Noteholders as soon as practicable thereafter in accordance with Condition 14.

(c) **Substitution**: The Issuer, or any previous substituted company, may at any time, without the consent of the Noteholders, substitute for itself as principal debtor under the Notes any company (the "**Substitute**"), provided that no payment in respect of the Notes is at the relevant time overdue. The substitution shall be made by a deed poll (the "**Substitution Deed Poll**"), to be substantially in the form exhibited to the Fiscal Agency Agreement, and may take place only if (i) the Substitute shall, by means of the Substitution Deed Poll, agree to indemnify

each Noteholder against any tax, duty, assessment or governmental charge which is imposed on it by (or by any authority in or of) the jurisdiction of the country of the Substitute's residence for tax purposes and, if different, of its incorporation with respect to any Note 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 cost or expense, relating to the substitution, (ii) the obligations of the Substitute under the Substitution Deed Poll and the Notes shall be unconditionally guaranteed by the Issuer by means of the Substitution Deed Poll (except where the Substitute is a Successor in Business, in which event a guarantee from the Issuer shall not be required), (iii) all action, conditions and things required to be taken, fulfilled and done (including the obtaining of any necessary consents) to ensure that the Substitution Deed Poll and the Notes represent valid, legally binding and enforceable obligations of the Substitute and, in the case of the Substitution Deed Poll, of the Issuer, have been taken, fulfilled and done and are in full force and effect, (iv) the Substitute shall have become party to the Fiscal Agency Agreement, with any appropriate consequential amendments, as if it had been an original party to it, (v) legal opinions addressed to the Noteholders shall have been delivered to them (care of the Fiscal Agent) from independent legal advisers of recognised standing in each jurisdiction referred to in (i) above and in England as to the fulfilment of the preceding conditions of this Condition 12(c) and the other matters specified in the Substitution Deed Poll and (vi) the Issuer shall have given at least 14 days' prior notice of such substitution to the Noteholders, stating that copies, or 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 Fiscal Agent, the Registrar and the Paying and Transfer Agents. References in Condition 9 to obligations under the Notes shall be deemed to include obligations under the Substitution Deed Poll, and, where the Substitution Deed Poll contains a guarantee, the events listed in Condition 9 shall be deemed to include that guarantee not being (or being claimed by the guarantor not to be) in full force and effect and the provisions of Condition 9 shall be deemed to apply in addition to the guarantor.

In these Conditions:

"**Koç Holding Group**" means Koç Holding A.Ş. and its Subsidiaries;

"**Permitted Reorganisation**" means any solvent reconstruction, amalgamation, reorganisation, merger or consolidation of the Issuer as a result of which: (i) all or substantially all of the assets and undertaking of the Issuer are transferred to or otherwise vested in a member of the Koç Holding Group and (ii) such member of the Koç Holding Group carries on, as successor to the Issuer, all or substantially all of the business carried on by the Issuer immediately prior thereto (such actions, together, being a "**reorganisation**"), and where:

(a) upon any such reorganisation taking effect, such member of the Koç Holding Group forthwith assumes the obligations of the Issuer in respect of the Notes; and

(b) any such reorganisation will not result in any credit rating assigned by a Rating Agency to the Notes at such time being withdrawn or downgraded;

"**Rating Agency**" means each of Fitch Ratings Ltd and Moody's Investors Service Ltd. and/or any other internationally recognised credit rating agency; and

"**Successor in Business**" means a member of the Koç Holding Group which assumes the obligations of the Issuer in respect of the Notes as a result of a Permitted Reorganisation.

13. Further Issues

The Issuer may from time to time without the consent of the Noteholders create and issue further securities either having the same terms and conditions as the Notes in all respects (or in all respects except for the first payment of interest on them) and so that such further issue shall be consolidated and form a single series with the outstanding securities of any series (including the Notes) or upon such terms as the Issuer may determine at the time of their issue; *provided* that the Issuer shall ensure that such further securities will be fungible for U.S.

federal income tax purposes as a result of their issuance being a "qualified reopening" under U.S. Treasury Regulation §1.1275-2(k). References in these Conditions to the Notes include (unless the context requires otherwise) any other securities issued pursuant to this Condition and forming a single series with the Notes.

14. Notices

(a) Notices to the Noteholders

Notices to the holders of Notes shall be mailed to them at their respective addresses in the Register and deemed to have been given on the fourth weekday (being a day other than a Saturday or a Sunday) after the date of mailing, provided that, if at any time by reason of the suspension or curtailment of postal services within the United Kingdom or elsewhere the Issuer is unable effectively to give notice to Noteholders through the post, notices to Noteholders will be valid if published in a leading newspaper having general circulation in London (which is expected to be the Financial Times) or, if such publication shall not be practicable, in an English language newspaper of general circulation in Europe. Any such notice shall be deemed to have been given on the date of such publication or, if published more than once, on the first date on which publication is made.

(b) Notices from the Noteholders

Notices to be given by any Noteholder shall be in writing and given by lodging the same, together with the relative Certificate, with the Fiscal Agent or, if the Certificates are held in a clearing system, may be given through the clearing system in accordance with its standard rules and procedures.

15. Currency Indemnity

US dollars is the sole currency of account and payment for all sums payable by the Issuer under or in connection with the Notes, including damages. Any amount received or recovered in a currency other than US dollars (whether as a result of, or of the enforcement of, a judgment or order of a court of any jurisdiction, in the insolvency, winding-up or dissolution of the Issuer or otherwise) by any Noteholder in respect of any sum expressed to be due to it from the Issuer shall only constitute a discharge to the Issuer to the extent of the US dollar amount which the recipient is able to purchase with the amount so received or recovered in that other currency on the date of that receipt or recovery (or, if it is not practicable to make that purchase on that date, on the first date on which it is practicable to do so). If that US dollar amount is less than the US dollar amount expressed to be due to the recipient under any Note, the Issuer shall indemnify it against any loss sustained by it as a result. In any event, the Issuer shall indemnify the recipient against the cost of making any such purchase. For the purposes of this Condition, it will be sufficient for the Noteholder to demonstrate that it would have suffered a loss had an actual purchase been made. These indemnities constitute a separate and independent obligation from the Issuer's other obligations, shall give rise to a separate and independent cause of action, shall apply irrespective of any indulgence granted by any Noteholder and shall continue in full force and effect despite any other judgment, order, claim or proof for a liquidated amount in respect of any sum due under any Note or any other judgment or order.

16. Contracts (Rights of Third Parties) Act 1999

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

17. Governing Law and Jurisdiction

(a) **Governing Law**: The Fiscal Agency Agreement, the Deed of Covenant, the Deed Poll and the Notes 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**: The Issuer has irrevocably agreed for the benefit of the Noteholders that the High Court of Justice of England and Wales in London (and any competent United Kingdom appellate court in respect of any appeal relating to any judgment or order originally of the High Court of Justice of England and Wales) is to have exclusive jurisdiction to settle any disputes which may arise out of or in connection with the Notes and any non-contractual obligations arising therefrom and accordingly has submitted to the exclusive jurisdiction of the High Court of Justice of England and Wales in London (and any competent United Kingdom appellate court in respect of any appeal relating to any judgment or order originally of the High Court of Justice of England and Wales). The Issuer has waived any objection to the High Court of Justice of England and Wales in London (and any competent United Kingdom appellate court in respect of any appeal relating to any judgment or order originally of the High Court of Justice of England and Wales) on the grounds that they are an inconvenient or inappropriate forum.

To the extent permitted by law, the Noteholders may take any suit, action or proceeding arising out of or in connection with the Notes (together referred to as "**Proceedings**") against the Issuer in any other court of competent jurisdiction and concurrent Proceedings in any number of jurisdictions.

(c) **Agent for Service of Process**: The Issuer irrevocably appoints Beko Plc of Beko House, 1 Greenhill Crescent, Watford, Hertfordshire, WD18 8QU as its agent in England to receive service of process in any Proceedings in England based on any of the Notes. If for any reason the Issuer does not have such an agent in England, it will promptly appoint a substitute process agent and notify the Noteholders of such appointment. Nothing herein shall affect the right to serve process in any other manner permitted by law.

(d) **Consent to Enforcement**: The Issuer agrees, without prejudice to the enforcement of a judgment obtained in the High Court of Justice of England and Wales in London (and any competent United Kingdom appellate court in respect of any appeal relating to any judgment or order originally of the High Court of Justice of England and Wales) according to the provisions of Article 54 of the International Private and Procedural Law of Turkey (Law No. 5718), that in the event that any action is brought in relation to the Issuer in a court in Turkey in connection with the Notes, any final judgment obtained in the High Court of Justice of England and Wales in London (and any competent United Kingdom appellate court in respect of any appeal relating to any judgment or order originally of the High Court of Justice of England and Wales) in connection with such action shall constitute conclusive evidence of the existence and amount of the claim against the Issuer, pursuant to the provisions of the first sentence of Article 193 of the Civil Procedure Code of Turkey (Law No. 6100) and Articles 58 and 59 of the International Private and Procedural Law of Turkey (Law No. 5718).

(e) **Waiver of Immunity**: To the extent that the Issuer may in any jurisdiction claim for itself or its assets or revenues immunity from suit, execution, attachment (whether in aid of execution, before the making of a judgment or an award or otherwise) or other legal process including in relation to the enforcement of an arbitration award and to the extent that such immunity (whether or not claimed) may be attributed in any such jurisdiction to the Issuer or its assets or revenues, the Issuer agrees not to claim and irrevocably waives such immunity to the full extent permitted by the laws of such jurisdiction.

THE GLOBAL CERTIFICATES

The Global Certificates contain the following provisions which apply to the Notes in respect of which they are issued whilst they are evidenced by the Global Certificates, some of which modify the effect of the Conditions of the Notes. Terms defined in the Conditions of the Notes have the same meaning in paragraphs 1 to 7 below.

1. HOLDERS

For so long as any of the Notes are evidenced by the Global Certificates, each person (other than another clearing system) who is for the time being shown in the records of DTC or Euroclear or Clearstream, Luxembourg (as the case may be) as the holder of a particular aggregate principal amount of the Notes (in which regard any certificate or other document issued by DTC or Euroclear or Clearstream, Luxembourg (as the case may be) as to the aggregate principal amount of such Notes standing to the account of any person shall be conclusive and binding for all purposes save in the case of manifest error) shall be treated as the holder of such outstanding principal amount of such Notes (and the expression "Noteholders" and references to "holding of Notes" and to "holder of Notes" shall be construed accordingly) for all purposes other than with respect to payments on such Notes, for which purpose the Registered Holder (the "**Registered Holder**") shall be deemed to be the holder of such aggregate principal amount of the Notes in accordance with and subject to the terms of the Global Certificates.

2. CANCELLATION

Cancellation of any Note following its redemption or purchase by the Issuer or any of its subsidiaries will be effected by reduction in the aggregate principal amount of the Notes in the register of Noteholders.

3. PAYMENTS

Until the entire outstanding principal amount of the Global Certificate has been extinguished, the Registered Holder shall (subject as provided in the Global Certificate) in all respects be entitled to the same benefits as the Notes for the time being represented thereby and shall be entitled to the benefit of the Fiscal Agency Agreement.

Distributions of amounts with respect to book-entry interests in the Unrestricted Notes held through Euroclear or Clearstream, Luxembourg will be credited, to the extent received by the Fiscal Agent, to the cash accounts of Euroclear or Clearstream, Luxembourg participants in accordance with the relevant system's rules and procedures.

Holders of book-entry interests in the Restricted Notes holding through DTC will receive, to the extent received by the Fiscal Agent, all distribution of amounts with respect to book-entry interests in such Notes from the Fiscal Agent through DTC. Distributions in the United States will be subject to relevant US tax laws and regulations.

Upon any payment of any amount payable under the Conditions on the Global Certificate the amount so paid shall be entered by the Registrar on the register, which entry shall constitute *prima facie* evidence that the payment has been made.

4. INTEREST CALCULATION

For so long as the Notes are evidenced by a Global Certificate, interest payable to the Registered Holder will be calculated by applying the rate of 4.50 per cent. per annum to the outstanding principal amount of the Notes evidenced by the Global Certificate and on the basis of a 360-day year consisting of 12 months of 30 days each and, in the case of an incomplete month, the number of days elapsed on the basis of a month of 30 days. The resultant figure is rounded to the nearest cent (half a cent being rounded upwards).

5. NOTICES

So long as the Notes are represented by a Global Certificate and such Global Certificate is held on behalf of a clearing system, notices to Noteholders may be given by delivery of the relevant notice to that clearing system for communication by it to entitled holders in substitution for notification as required by Condition 14 *provided that*, so long as the Notes are listed on any stock exchange, notices shall also be published in accordance with the rules of such exchange. Any such notice shall be deemed to have been given to the Noteholders on the day after the day on which such notice is delivered to such clearing system.

Whilst any of the Notes held by a Noteholder are represented by a Global Certificate, notices to be given by such Noteholder may be given by such Noteholder (where applicable) through the applicable clearing system's operational procedures approved for this purpose and otherwise in such manner as the Fiscal Agent and the applicable clearing system may approve for this purpose.

6. EXCHANGE AND REGISTRATION OF TITLE

Registration of title to Notes in a name other than that of the Registered Holder will not be permitted unless:

(a) in the case of an Unrestricted Global Certificate, Euroclear or Clearstream, Luxembourg notifies the Issuer that it is unwilling or unable to continue as a clearing system in connection with the Global Certificate, and a successor clearing system is not appointed by the Issuer within 90 days after receiving such notice from Euroclear or Clearstream, Luxembourg. In these circumstances title to a Note may be transferred into the names of holders notified by the Registered Holder in accordance with the Conditions, except that Certificates in respect of Notes so transferred may not be available until 21 days after the request for transfer is duly made; or

(b) in the case of a Restricted Global Certificate, DTC notifies the Issuer that it is unwilling or unable to continue as a clearing system in connection with the Global Certificate or DTC ceases to be a clearing agency registered under the US Securities Exchange Act of 1934, and in each case a successor clearing system is not appointed by the Issuer within 90 days after receiving such notice from DTC or becoming aware that DTC is no longer so registered.

In these circumstances title to a Note may be transferred into the names of holders notified by the Registered Holder in accordance with the Conditions, except that Certificates in respect of Notes so transferred may not be available until 21 days after the request for transfer is duly made.

The Registrar will not register title to the Notes in a name other than that of the Registered Holder for a period of 15 calendar days preceding the due date for any payment of principal or interest in respect of the Notes.

If only one of the Global Certificates (the "**Exchanged Global Certificate**") becomes exchangeable for Certificates in accordance with the above paragraphs, transfers of Notes may not take place between, on the one hand, persons holding Certificates issued in exchange for beneficial interests in the Exchanged Global Certificate and, on the other hand, persons wishing to purchase beneficial interests in the other Global Certificate.

In the event that the Global Certificate (or any part of it) has become due and repayable in accordance with the Conditions or that the Maturity Date has occurred and, in either case, payment in full of the amount due has not been made to the Registered Holder in accordance with the provisions set out in the Global Certificate then the Global Certificate will become void at 8.00 p.m. (London time) and the Registered Holder will have no further rights under the Global Certificate (but without prejudice to the rights which the Registered Holder or any other person may have under the Deed of Covenant).

7. TRANSFERS

Transfers of book-entry interests in the Notes will be effected through the records of Euroclear, Clearstream, Luxembourg and DTC and their respective participants in accordance with the rules and procedures of Euroclear, Clearstream, Luxembourg and DTC and their respective direct and indirect participants, as more fully described under "*Clearing and Settlement Procedures*".

BOOK-ENTRY CLEARANCE SYSTEMS

The information set out below is subject to any change in or reinterpretation of the rules, regulations and procedures of each of DTC, Euroclear or Clearstream, Luxembourg (together, the "**Clearing Systems**") currently in effect. The information in this section concerning the Clearing Systems has been obtained from sources that the Issuer believes to be reliable, but none of the Joint Bookrunners takes any responsibility for the accuracy of such information. Investors wishing to use the facilities of the Clearing Systems are advised to confirm the continued applicability of the rules, regulations and procedures of such facilities. None of the Issuer nor any other party to the Fiscal Agency Agreement will have any responsibility or liability for any aspect of the records relating to, or payments made on account of, beneficial ownership interests in the Notes held through the facilities of the Clearing Systems or for maintaining, supervising or reviewing any records relating to such beneficial ownership interests.

Book-Entry Systems

Euroclear and Clearstream, Luxembourg

Euroclear and Clearstream, Luxembourg each hold securities for their customers and facilitate the clearance and settlement of securities transactions by electronic book-entry transfer between their respective account holders. Euroclear and Clearstream, Luxembourg provide various services including safekeeping, administration, clearance and settlement of internationally traded securities and securities lending and borrowing. Euroclear and Clearstream, Luxembourg also deal with domestic securities markets in several countries through established depositary and custodial relationships. Euroclear and Clearstream, Luxembourg have established an electronic bridge between their two systems across which their respective participants may settle trades with each other. Euroclear and Clearstream, Luxembourg customers are worldwide financial institutions, including underwriters, securities brokers and dealers, banks, trust companies and clearing corporations. Indirect access to Euroclear and Clearstream, Luxembourg is available to other institutions that clear through or maintain a custodial relationship with an account holder of either system.

DTC

DTC has advised the Issuer that it is a limited purpose trust company organised under the New York Banking Law, a "**banking organisation**" within the meaning of the New York Banking Law, a "**clearing corporation**" within the meaning of the New York Uniform Commercial Code, and a "**clearing agency**" registered pursuant to Section 17A of the Exchange Act. DTC holds securities that its participants deposit with DTC. DTC also facilitates the settlement among its participants of securities transactions, such as transfers and pledges, in deposited securities through electronic computerised book-entry changes in participants' accounts. Direct participants include securities brokers and dealers, banks, trust companies, clearing corporations and certain other organisations. Access to the DTC system is also available to others such as securities brokers and dealers, banks and trust companies that clear through or maintain a custodial relationship with a direct participant, either directly or indirectly.

Registration and Form

Book-entry interests in the Notes held through Euroclear and Clearstream, Luxembourg will be represented by the Unrestricted Global Certificate registered in the name of a nominee of, and held by, a common depositary for Euroclear and Clearstream, Luxembourg. Book-entry interests in the Notes held through DTC will be represented by the Restricted Global Certificate registered in the name of Cede & Co., as nominee for DTC, and held by a custodian for DTC. As necessary, the Registrar will adjust the amounts of Notes on the Register for the accounts of Euroclear, Clearstream, Luxembourg and DTC to reflect the amounts of Notes held through Euroclear, Clearstream, Luxembourg and DTC, respectively. Beneficial ownership of book-entry interests in Notes will be held through financial institutions as direct and indirect participants in Euroclear, Clearstream, Luxembourg and DTC.

The aggregate holdings of book-entry interests in the Notes in Euroclear, Clearstream, Luxembourg and DTC will be reflected in the book-entry accounts of each such institution. Euroclear, Clearstream, Luxembourg or DTC, as the case may be, and every other intermediate holder in the chain to the beneficial owner of book-entry interests in the Notes, will be responsible for establishing and maintaining accounts for their participants and customers having interests in the book-entry interests in the Notes. The Registrar will be responsible for maintaining a record of the aggregate holdings of Notes registered in the name of a common nominee for Euroclear and Clearstream, Luxembourg, a nominee for DTC and/or, if individual Global Certificates are issued in the limited circumstances described under "*The Global Certificates – Exchange and Registration of Title*", holders of Notes represented by those individual Global Certificates. The Fiscal Agent will be responsible for ensuring that payments received by it from the Issuer for holders of book-entry interests in the Notes holding through Euroclear and Clearstream, Luxembourg are credited to Euroclear or Clearstream, Luxembourg, as the case may be, and the Fiscal Agent will also be responsible for ensuring that payments received by

the Fiscal Agent from the Issuer for holders of book-entry interests in the Notes holding through DTC are credited to DTC.

The Issuer will not impose any fees in respect of holding the Notes; however, holders of book-entry interests in the Notes may incur fees normally payable in respect of the maintenance and operation of accounts in Euroclear, Clearstream, Luxembourg or DTC.

Clearing and Settlement Procedures

Initial Settlement

Upon their original issue, the Notes will be in global form represented by the two Global Certificates. Interests in the Notes will be in uncertified book-entry form. Purchasers electing to hold book-entry interests in the Notes through Euroclear and Clearstream, Luxembourg accounts will follow the settlement procedures applicable to conventional Eurobonds. Book-entry interests in the Notes will be credited to Euroclear and Clearstream, Luxembourg participants' securities clearance accounts on the business day following the Closing Date against payment (value the Closing Date). DTC participants acting on behalf of purchasers electing to hold book-entry interests in the Notes through DTC will follow the delivery practices applicable to securities eligible for DTC's Same Day Funds Settlement system. DTC participants' securities accounts will be credited with book-entry interests in the Notes following confirmation of receipt of payment to the Issuer on the Closing Date.

Secondary Market Trading

Secondary market trades in the Notes will be settled by transfer of title to book-entry interests in the Clearing Systems. Title to such book-entry interests will pass by registration of the transfer within the records of Euroclear, Clearstream, Luxembourg or DTC, as the case may be, in accordance with their respective procedures. Book-entry interests in the Notes may be transferred within Euroclear and within Clearstream, Luxembourg and between Euroclear and Clearstream, Luxembourg in accordance with procedures established for these purposes by Euroclear and Clearstream, Luxembourg. Book-entry interests in the Notes may be transferred within DTC in accordance with procedures established for this purpose by DTC. Transfer of book-entry interests in the Notes between Euroclear or Clearstream, Luxembourg and DTC may be effected in accordance with procedures established for this purpose by Euroclear, Clearstream, Luxembourg and DTC.

General

None of Euroclear, Clearstream, Luxembourg or DTC is under any obligation to perform or continue to perform the procedures referred to above, and such procedures may be discontinued at any time. None of the Issuer, the Fiscal Agent or any of their agents will have any responsibility for the performance by Euroclear, Clearstream, Luxembourg or DTC or their respective participants of their respective obligations under the rules and procedures governing their operations or the arrangements referred to above and none of them will have any liability for any aspect of the records relating to or payments made on account of beneficial interests in the Notes represented by Global Certificates or for maintaining, supervising or reviewing any records relating to such beneficial interests.

TAXATION

This is a general summary of certain US federal and Turkish income tax considerations in connection with an investment in the Notes. This summary does not address all aspects of US federal and Turkish tax law and does not discuss any state or local tax considerations. While this summary is considered to be a correct interpretation of existing laws in force on the date of this Offering Circular, there can be no assurance that those laws or the interpretation of those laws will not change. This summary does not discuss all of the income tax consequences that may be relevant to an investor in light of such investor's particular circumstances or to investors subject to special rules, such as regulated investment companies, certain financial institutions or insurance companies. **Prospective investors are advised to consult their tax advisers with respect to the tax consequences of the purchase, ownership or disposition of the Notes (or the purchase, ownership or disposition by an owner of beneficial interests therein) as well as any tax consequences that may arise under the laws of any state, municipality or other taxing jurisdiction.** References to "**resident**" herein refer to tax residents of Turkey and references to "**non-resident**" herein refer to persons who are not tax residents of Turkey.

Certain US Federal Income Tax Consequences

The following summary describes certain US federal income tax consequences of the acquisition, ownership and disposition of a Note by a US Holder (as defined below) whose functional currency is the US Dollar that acquires the Note in this Offering from the Joint Bookrunners at a price equal to the issue price of the Notes (the first price at which a substantial amount of the Notes is sold for money to investors) and holds it as a capital asset. This summary does not address all aspects of US federal income taxation that may be applicable to particular US Holders subject to special US federal income tax rules, including, among others, tax-exempt organisations, financial institutions, dealers and traders in securities or currencies, US Holders that will hold a Note as part of a "straddle," hedging transaction, "conversion transaction" or other integrated transaction for US federal income tax purposes, US Holders that enter into "constructive sale" transactions with respect to the Notes and certain US expatriates. In addition this summary does not address consequences to US Holders of the acquisition, ownership and disposition of a Note as a result of the Medicare tax on net investment income, alternative minimum tax consequences, or under any other US federal tax laws (e.g., estate or gift tax laws) or under the tax laws of any state, locality or other political subdivision of the United States or other countries or jurisdictions.

As used herein, the term "**US Holder**" means a beneficial owner of a Note that is for US federal income tax purposes: (i) an individual who is a citizen or resident of the US; (ii) a corporation created or organised in or under the laws of the US, any state thereof or the District of Columbia; (iii) an estate, the income of which is subject to US federal income taxation regardless of its source; or (iv) a trust that is subject to US tax on its worldwide income regardless of its source.

If an entity or arrangement treated as a partnership for US federal income tax purposes holds a Note, the US federal income tax treatment of a partner will generally depend upon the status of the partner and the activities of the partnership. Therefore, a partnership holding a Note and its partners should consult their own tax advisers regarding the US federal income tax consequences of the acquisition, ownership and disposition of a Note.

The discussion below is based on the Internal Revenue Code of 1986, as amended (the "**Code**"), US Treasury regulations thereunder, and judicial and administrative interpretations thereof, all as in effect as of the date of this Offering Circular and any of which may at any time be repealed, revoked or modified or subject to differing interpretations, potentially retroactively, so as to result in US federal income tax consequences different from those discussed below.

The summary of US federal income tax consequences set out below is for general information only. Prospective purchasers should consult their tax advisers as to the particular tax consequences to them of owning the Notes, including the applicability and effect of state, local, foreign and other tax laws and possible changes in tax law.

Payments of interest

Payments of interest on the Notes, including additional amounts, if any, generally will be taxable to a US Holder as ordinary income at the time that such payments are received or accrued, in accordance with such US Holder's usual method of accounting for US federal income tax purposes. Interest income on a Note generally will constitute foreign source income for US federal income tax purposes and generally will be considered "passive" income, which is treated separately from other types of income in computing the foreign tax credit that may be allowable to US Holders under US federal income tax laws. Subject to applicable restrictions and limitations, a US Holder may be entitled to claim a US foreign tax credit in respect of any Turkish withholding taxes imposed on interest received on the Notes. A US Holder who does not elect to claim a credit for foreign tax may instead claim a deduction in respect of the tax provided the US Holder elects to deduct rather than claim a credit for all foreign taxes for such taxable year. US Holders that are eligible for benefits under the double tax treaty between the United States and Turkey (the "**Double Tax Treaty**") or are

otherwise entitled to a refund for the taxes withheld, under Turkish tax law generally will not be entitled to a foreign tax credit or deduction for the amount of any Turkish taxes withheld in excess of the maximum rate under the Double Tax Treaty or for those taxes that have been otherwise refunded to them under Turkish tax law. The rules relating to foreign tax credits or deducting foreign taxes are extremely complex, and US Holders are urged to consult their own tax advisors regarding the availability and advisability of claiming a foreign tax credit or a deduction with respect to any Turkish taxes withheld from payment.

Foreign Financial Asset Reporting

U.S. Holders are subject to reporting requirements on the holding of certain foreign financial assets, including debt of foreign entities, if the aggregate value of all of these assets exceeds USD 50,000 at the end of the taxable year or USD 75,000 at any time during the taxable year. The thresholds are higher for individuals living outside of the United States and married couples filing jointly. The Notes are expected to constitute foreign financial assets subject to these requirements unless the Notes are held in an account at a financial institution (in which case the account may be reportable if maintained by a foreign financial institution). U.S. Holders should consult their tax advisors regarding the application of this legislation.

Sale, exchange and redemption of Notes

Upon the sale, exchange, redemption, retirement at maturity or other taxable disposition of a Note, a US Holder generally will recognise taxable gain or loss equal to the difference between the amount realised (i.e., the amount of cash and the fair market value of any property) received on the disposition (except to the extent the cash or property received is attributable to accrued and unpaid interest which, to the extent not previously included in income, is treated like a payment of interest) and the US Holder's tax basis in the Note. A US Holder's adjusted tax basis in a Note generally will equal the amount paid for the Note. Gain or loss recognised by a US Holder on the sale, exchange or other disposition of a Note will be capital gain or loss and will be long-term capital gain or loss if the Note was held by the US Holder for more than one year. Gain or loss realised by a US Holder on the sale or retirement of a Note generally will be US source. The deductibility of capital losses is subject to significant limitations. US Holders should consult their own advisors about the availability of US foreign tax credits or deductions with respect to any Turkish taxes imposed upon a disposition of Notes.

Substitution of the Issuer

The terms of the Notes provide that, in certain circumstances, the obligations of the Issuer under the Notes may be assumed by another entity. Any such assumption might be treated for US federal income tax purposes as a deemed disposition of Notes by a US Holder in exchange for new notes issued by the new obligor. As a result of this deemed disposition, a US Holder could be required to recognise capital gain or loss for US federal income tax purposes equal to the difference, if any, between the fair market value at that time of the US Holder's Notes, and the US Holder's tax adjusted basis in those Notes. US Holders should consult their tax advisors concerning the US federal income tax consequences to them of a change in obligor with respect to the Notes.

Information reporting and backup withholding

Information returns may be filed with the US Internal Revenue Service ("**IRS**") (unless the US Holder establishes, if requested to do so, that it is an exempt recipient) in connection with payments on the Notes, and the proceeds from the sale, exchange or other disposition of Notes. If information reports are required to be made, a US Holder may be subject to US backup withholding if it fails to provide its taxpayer identification number, or to establish that it is exempt from backup withholding. Backup withholding is not an additional tax. The amount of any backup withholding imposed on a payment will be allowed as a credit against any US federal income tax liability of a US Holder and may entitle the US Holder to a refund, provided the required information is timely furnished to the IRS.

US holders should consult their own tax advisers regarding any filing and reporting obligations they may have as a result of their acquisition, ownership or disposition of Notes. Failure to comply with certain reporting obligations could result in the imposition of substantial penalties.

Certain Turkish Tax Considerations

The following discussion is a summary of certain Turkish tax considerations relating to an investment, by a person who is a non-resident of Turkey, in Notes of a Turkish company issued abroad. The discussion is based upon current law and is for general information only. The discussion below is not intended to constitute a complete analysis of all tax consequences relating to the acquisition, ownership or disposition of the Notes that may be relevant to a decision to make an investment in the Notes. Furthermore, the discussion only relates to the investment by a person where the Notes will

not be held in connection with the conduct of a trade or business through a permanent establishment in Turkey. Each investor should consult its own tax advisers concerning the tax considerations applicable to its particular situation. This discussion is based upon laws and relevant interpretations thereof in effect as of the date of this Offering Circular, all of which are subject to change, possibly with a retroactive effect. In addition, it does not describe any tax consequences: (a) arising under the laws of any taxing jurisdiction other than Turkey or (b) applicable to a resident of Turkey or a permanent establishment in Turkey that is constituted either by the existence of a fixed place of business or appointment of a permanent representative.

For Turkish tax purposes, a legal entity is a resident of Turkey if its corporate domicile is in Turkey or its effective place of management is in Turkey. A resident legal entity is subject to Turkish taxes on its worldwide income, whereas a non-resident legal entity is only liable to Turkish taxes for income sourced in Turkey. How the income is accepted as sourced in Turkey is determined by taking into account Individual Income Tax Law, Corporate Tax Law, Tax Procedural Law and relevant Double Tax Treaties.

An individual is a resident of Turkey if such individual has established domicile in Turkey or stays in Turkey for more than six months in a calendar year. On the other hand, foreign individuals who stay in Turkey for six months or more for a specific and temporary job or business or particular purposes that are specified in the Turkish Income Tax Law may not be treated as a resident of Turkey, depending on the characteristics of the stay. A resident individual is liable for Turkish taxes on his/her worldwide income, whereas a non-resident individual is liable for Turkish tax for the income sourced in Turkey.

Income from capital investment is sourced in Turkey when the principal is invested in Turkey. Capital gain derived from trading income is considered sourced in Turkey when the activity or transaction generating such income is performed or accounted for in Turkey. The term "accounted for" means that a payment is made in Turkey, or if the payment is made abroad, it is recorded in the books in Turkey or apportioned from the profits of the payer or the person on whose behalf the payment is made in Turkey.

Any withholding tax levied on income derived by a non-resident person is the final tax for the non-resident person and no further declaration is needed. Any other income of a non-resident person sourced in Turkey that has not been subject to withholding tax will be subject to taxation through declaration where exemptions are reserved.

Interest paid on notes (such as the Notes) issued abroad by Turkish corporates is subject to withholding tax. Through the Decrees, the withholding tax rates are set according to the original maturity of notes issued abroad as follows:

- 10 per cent. withholding tax for notes with an initial maturity of less than one year;
- 7 per cent. withholding tax for notes with an initial maturity of at least one year and less than three years;
- 3 per cent. withholding tax for notes with an initial maturity of at least three years and less than five years; and
- 0 per cent. withholding tax for notes with an initial maturity of five years or more.

Such withholding tax is the final tax for a non-resident person and no further declaration is required. In general, capital gains are not taxed through withholding tax and therefore any capital gain sourced in Turkey with respect to the Notes may be subject to declaration. However, pursuant to Provisional Article 67 of the Turkish Income Tax Law, as amended by the Law numbered 6111, special or separate tax returns will not be submitted for capital gains from the notes of a Turkish corporate issued abroad when the income is derived by a non-resident. Therefore, no tax is levied on the non-resident persons on capital gains from such Notes and no declaration is required.

A non-resident holder will not be liable for Turkish estate, inheritance or similar tax with respect to its investment in the Notes, nor will it be liable for any Turkish stamp issue, registration or similar tax or duty relating thereto.

Reduced Withholding Tax Rates

Under current Turkish laws and regulations, interest payments on notes by an issuer to a non-resident holder will be subject to a withholding tax at a rate between 10 per cent. and 0 per cent. in Turkey, as detailed above.

If a double taxation treaty is in effect between Turkey and the resident country of the holder of the notes (in some cases, for example, pursuant to the treaties with the United Kingdom and the United States, the term "beneficial owner" is used), which provides for the application of a lower withholding tax rate than the local rate to be applied by the corporation, then the lower rate may be applicable. For the application of withholding at a reduced rate that benefits from the provisions of a double tax treaty concluded between Turkey and the Relevant Jurisdiction where the investor is a

resident, an original copy of the certificate of residence signed by the competent authority referred to in Article 3 of the Treaty is required for each calendar year, together with a translated copy translated by a translation office, to verify that the investor is subject to taxation over its worldwide gains in the relevant jurisdiction on the basis of resident taxpayer status, as a resident of the relevant jurisdiction to the person responsible for withholding tax prior to the application of withholding. In the event the certificate of residence is not delivered prior to the application of withholding tax, then upon the subsequent delivery of the certificate of residence, refunding of the excess tax shall be granted pursuant to the provisions of the relevant double taxation treaty and the Turkish tax legislation.

PLAN OF DISTRIBUTION

The Issuer intends to offer the Notes through the Joint Bookrunners and their broker-dealer affiliates, as applicable, named below. Subject to the terms and conditions stated in a subscription agreement dated 16 October 2017 among the Joint Bookrunners and the Issuer (the "**Subscription Agreement**"), each of the Joint Bookrunners has severally agreed to purchase, and the Issuer has agreed to sell to each of the Joint Bookrunners, the principal amount of the Notes set forth opposite each Joint Bookrunner's name below.

	Principal Amount of Notes
Joint Bookrunners	
Citigroup Global Markets Limited	175,000,000
HSBC Bank plc	175,000,000
J.P. Morgan Securities plc	175,000,000
Standard Chartered Bank	175,000,000
TOTAL	700,000,000

The Subscription Agreement provides that the obligations of the Joint Bookrunners to purchase the Notes are subject to approval of legal matters by counsel and to other conditions. The Subscription Agreement includes customary representations, warranties and other undertakings for the benefit of the Joint Bookrunners. In addition, the Subscription Agreement provides that the Issuer will maintain one or more segregated US Dollar accounts to deposit the net proceeds of the Notes and will use such net proceeds solely to redeem or pay interest on the Issuer's USD 700,000,000 aggregate principal amount of 4.125 per cent. notes due 2 May 2018. The offering of the Notes by the Joint Bookrunners is subject to receipt and acceptance and subject to the Joint Bookrunners' right to reject any order in whole or in part.

The Issuer has been informed that the Joint Bookrunners propose to resell beneficial interests in the Notes, at the offering price set forth on the cover page of this Offering Circular, within the United States to persons reasonably believed to be QIBs in reliance upon Rule 144A, and to non-US persons (as defined in Regulation S) outside the United States in reliance upon Regulation S. See "*Transfer Restrictions*". The prices at which beneficial interests in the Notes are offered may be changed at any time without notice.

Offers and sales of the Notes in the United States will be made by those Joint Bookrunners or their affiliates that are registered broker-dealers under the Exchange Act, or in accordance with Rule 15a-6 thereunder.

The Notes have not been registered under the Securities Act or any state securities laws and may not be offered or sold within the United States or to, or for the account or benefit of, US persons (as defined in Regulation S) except in transactions exempt from, or not subject to, the registration requirements of the Securities Act. See "*Transfer Restrictions*".

Accordingly, until 40 days after the closing date of this Offering (the "**Distribution Compliance Period**"), an offer or sale of Notes (or beneficial interests therein) within the United States by a dealer that is not participating in this Offering may violate the registration requirements of the Securities Act if that offer or sale is made otherwise than in accordance with Rule 144A.

The Notes will constitute a new class of securities of the Issuer with no established trading market. The Issuer cannot provide any assurances to investors that the prices at which the Notes (or beneficial interests therein) will sell in the market after this Offering will not be lower than the initial offering price or that an active trading market for the Notes will develop and continue after this Offering. The Joint Bookrunners have advised the Issuer that they currently intend to make a market in the Notes. However, they are not obligated to do so, and they may discontinue any market-making activities with respect to the Notes at any time without notice. An application has been made to the UK Listing Authority for the Notes to be admitted to the Official List, and to the London Stock Exchange for such Notes to be admitted to trading on the London Stock Exchange's Regulated Market; however, no assurance can be given that such applications will be accepted. Accordingly, the Issuer cannot provide any assurances to investors as to the liquidity of or the trading market for the Notes.

In connection with the Offering, one or more Joint Bookrunner(s) may purchase and sell Notes (or beneficial interests therein) in the open market. These transactions may include over-allotment, syndicate-covering transactions and stabilising transactions. Over-allotment involves the sale of Notes (or beneficial interests therein) in excess of the principal amount of Notes to be purchased by the Joint Bookrunners in this Offering, which creates a short position for the Joint Bookrunners. Covering transactions involve the purchase of the Notes (or beneficial interests therein) in the

open market after the distribution has been completed in order to cover short positions. Stabilising transactions consist of certain bids or purchases of Notes (or beneficial interests therein) made for the purpose of preventing or retarding a decline in the market price of the Notes (or beneficial interests therein) while the offering is in progress. Any of these activities may have the effect of preventing or retarding a decline in the market price of the Notes (or beneficial interests therein). They may also cause the price of the Notes (or beneficial interests therein) to be higher than the price that otherwise would exist in the open market in the absence of these transactions. The Joint Bookrunners may conduct these transactions in the over-the-counter market or otherwise. If the Joint Bookrunners commence any of these transactions, they may discontinue them at any time.

The Joint Bookrunners and their respective affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory services investment management, principal investment, hedging, financing and brokerage activities. The Joint Bookrunners or their respective affiliates may have performed investment banking and advisory services for the Issuer and its affiliates, from time to time, for which they may have received fees, expenses, reimbursements and/or other compensation. The Joint Bookrunners or their respective affiliates may, from time to time, engage in transactions with and perform advisory and other services for the Issuer and its affiliates in the ordinary course of their business. Certain of the Joint Bookrunners and/or their respective affiliates have acted and expect in the future to act as a lender to the Issuer and/or other members of the Group and/or otherwise participate in transactions with the Group.

In the ordinary course of their various business activities, the Joint Bookrunners 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 and may at any time hold long and short positions in such securities and instruments. Such investment and securities activities may involve securities and/or instruments of the Issuer or the Issuer's affiliates. In addition, certain of the Joint Bookrunners and/or their respective affiliates hedge their credit exposure to the Issuer pursuant to their customary risk management policies. These hedging activities could have an adverse effect on the future trading prices of the Notes offered hereby. The Joint Bookrunners 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.

The Issuer has agreed to indemnify each Joint Bookrunner against certain liabilities, including liabilities under the Securities Act, or to contribute to payments that the Joint Bookrunners may be required to make because of those liabilities.

SELLING RESTRICTIONS

General

No action has been taken by the Issuer or any of the Joint Bookrunners that would, or is intended to, permit a public offer of the Notes, or possession or distribution of this Offering Circular or any other offering or publicity material relating to the Notes in any country or jurisdiction where any such action for that purpose is required. Accordingly, each Joint Bookrunner has undertaken that it will not, directly or indirectly, offer or sell any Notes, or have in its possession or distribute or publish any offering circular, prospectus, form of application, advertisement or other document or information in any country or jurisdiction except under circumstances that will, to the best of its knowledge and belief, result in compliance with any applicable laws and regulations, and all offers and sales of Notes by it will be made on the same terms.

United States

The Issuer has not registered the Notes under the Securities Act or the laws of any state securities commission and, therefore, the Notes may not be offered or sold within the United States or to, or for the account or benefit of, US persons (as defined in Regulation S under the Securities Act) except to QIBs in reliance on Rule 144A under the Securities Act or pursuant to another exemption from, or in a transaction not subject to, the registration requirements of the Securities Act. See "*Transfer Restrictions*".

Turkey

THE ISSUER HAS OBTAINED APPROVALS FROM THE CMB AND THE EMRA REQUIRED FOR THE ISSUANCE OF THE NOTES. THE OFFERING OF THE NOTES HAS BEEN AUTHORISED BY THE CMB ONLY FOR THE PURPOSE OF THE SALE OF THE NOTES OUTSIDE OF TURKEY IN ACCORDANCE WITH ARTICLE 15(B) OF DECREE 32, CAPITAL MARKETS LAW AND THE COMMUNIQUÉ. THE NOTES (OR BENEFICIAL INTERESTS THEREIN) HAVE TO BE OFFERED OR SOLD OUTSIDE OF TURKEY AND THE CMB HAS AUTHORISED THE OFFERING OF THE NOTES; PROVIDED THAT, FOLLOWING THE PRIMARY SALE OF THE NOTES, NO TRANSACTION THAT MAY BE DEEMED AS A SALE OF THE NOTES (OR BENEFICIAL INTERESTS THEREIN) IN TURKEY BY WAY OF PRIVATE PLACEMENT OR PUBLIC OFFERING MAY BE ENGAGED IN. PURSUANT TO ARTICLE 15(D)(II) OF DECREE 32, THERE IS NO RESTRICTION ON THE PURCHASE OR SALE OF THE NOTES (OR BENEFICIAL INTERESTS THEREIN) BY RESIDENTS OF TURKEY; PROVIDED THAT THEY PURCHASE OR SELL SUCH NOTES (OR BENEFICIAL INTERESTS) IN THE FINANCIAL MARKETS OUTSIDE OF TURKEY AND SUCH SALE AND PURCHASE IS MADE THROUGH BANKS AND/OR LICENSED BROKERAGE INSTITUTIONS AUTHORISED PURSUANT TO CMB REGULATIONS AND THE PURCHASE PRICE IS TRANSFERRED THROUGH TURKISH BANKS. AS SUCH, TURKISH RESIDENTS SHOULD USE BANKS OR LICENSED BROKERAGE INSTITUTIONS WHEN PURCHASING NOTES (OR BENEFICIAL INTERESTS THEREIN) AND TRANSFER THE PURCHASE PRICE THROUGH TURKISH BANKS.

THE JOINT BOOKRUNNERS HAVE AGREED THAT NEITHER THEY, NOR ANY OF THEIR RESPECTIVE AFFILIATES, NOR ANY PERSON ACTING ON BEHALF OF ANY OF THE JOINT BOOKRUNNERS OR ANY OF THEIR RESPECTIVE AFFILIATES, HAVE ENGAGED OR WILL ENGAGE IN ANY DIRECTED SELLING EFFORTS WITHIN TURKEY IN CONNECTION WITH THE NOTES. THE JOINT BOOKRUNNERS HAVE FURTHER AGREED THAT NEITHER THEY NOR ANY OF THEIR RESPECTIVE AFFILIATES, NOR ANY PERSON ACTING ON BEHALF OF ANY OF THE JOINT BOOKRUNNERS OR ANY OF THEIR RESPECTIVE AFFILIATES (I) HAVE ENGAGED OR WILL ENGAGE IN ANY FORM OF GENERAL SOLICITATION OR GENERAL ADVERTISING IN CONNECTION WITH ANY OFFER AND SALE OF THE NOTES IN TURKEY OR (II) WILL MAKE ANY DISCLOSURE IN TURKEY IN RELATION TO THE ISSUER, THE NOTES OR THE OFFERING CIRCULAR WITHOUT THE PRIOR CONSENT OF THE ISSUER, SAVE AS MAY BE REQUIRED BY APPLICABLE LAW, COURT ORDER OR REGULATION.

United Kingdom

In the United Kingdom, this Offering Circular is being distributed only to and is directed only at: (a) persons who have professional experience in matters relating to investments falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005; (b) high net worth bodies corporate falling within Article 49(2) of the Order; and (c) any other persons to whom it may otherwise lawfully be communicated (all such persons together being referred to as "**relevant persons**"). Each Joint Bookrunner has represented, warranted and agreed that: (i) 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 Financial Services and Markets Act 2000 (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; and (ii) it has complied and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to the Notes in, from or otherwise involving the United Kingdom.

TRANSFER RESTRICTIONS

Because the following restrictions will apply with respect to the Notes, investors in the Notes are advised to consult legal counsel prior to making an offer, resale, pledge or transfer of any of the Notes. References to Notes in this section should, as appropriate, be deemed to refer to the Notes themselves and/or beneficial interests therein.

According to Article 15d(ii) of Decree 32 regarding the Protection of the Value of the Turkish Currency, residents of Turkey will be free to purchase and sell securities and other capital market instruments (or beneficial interests therein) traded on financial markets outside of Turkey, provided that such sale and purchase is made through banks and/or licensed brokerage institutions authorised pursuant to CMB regulations and the purchase price is transferred through banks. As such, Turkish residents should use banks or licensed brokerage institutions when purchasing Notes (or beneficial interests therein) and transfer the purchase price through banks. However, the Notes cannot be offered or sold in Turkey as the issuance is approved by the CMB with the condition that the Notes are offered and sold outside Turkey and, following the primary sale of the Notes, no transaction that may be deemed as a sale of the Notes (or beneficial interests therein) in Turkey by way of private placement or public offering may be engaged in.

The Issuer has not registered the Notes under the Securities Act or the laws of any state securities commission and, therefore, the Notes may not be offered or sold within the United States or to, or for the account or benefit of, US persons (as defined in Regulation S under the Securities Act) except to QIBs in reliance on Rule 144A under the Securities Act or pursuant to another exemption from, or in a transaction not subject to, the registration requirements of the Securities Act. Accordingly, the Notes are being offered and sold only: (a) to persons reasonably believed to be QIBs in reliance upon Rule 144A under the Securities Act; and (b) to non-US persons outside the United States in reliance upon Regulation S under the Securities Act.

If an investor invests in the Notes, then such investor will be deemed to have acknowledged, represented and agreed with the Joint Bookrunners and the Issuer as follows:

(a) Such investor understands and acknowledges that the Notes have not been registered under the Securities Act or any other applicable securities law and that the Notes are being offered for resale in transactions not requiring registration under the Securities Act or any other securities law, including sales pursuant to Rule 144A under the Securities Act, and, unless so registered, may not be offered, sold or otherwise transferred except in compliance with the registration requirements of the Securities Act or any other applicable securities law, or pursuant to an exemption therefrom or in a transaction not subject thereto, and in each case in compliance with the conditions for transfer set forth in paragraph (d) below;

(b) Such investor is not an "**affiliate**" (as defined in Rule 144 under the Securities Act) of the Issuer and is not acting on the Issuer's or any such affiliate's behalf and such investor is either: (i) a QIB and is aware that any sale of Notes to it will be made in reliance upon Rule 144A and such acquisition will be for its own account or for the account of another QIB; or (ii) not a "**US person**" (as defined in Regulation S under the Securities Act) or purchasing for the account or benefit of a US person (other than a distributor) and is purchasing Notes in an offshore transaction in accordance with Regulation S under the Securities Act;

(c) Such investor acknowledges that none of the Issuer or the Joint Bookrunners, or any person representing the Issuer or the Joint Bookrunners, has made any representation to it with respect to the Issuer or the offer or sale of any of the Notes, other than the information contained in this Offering Circular, which has been delivered to the investor and upon which such investor is relying in making its investment decision with respect to the Notes. Such investor acknowledges that the Joint Bookrunners make no representation or warranty as to the accuracy or completeness of this Offering Circular. Such investor has had access to such financial and other information concerning the Issuer and the Notes as it has deemed necessary in connection with its decision to purchase the Notes, including an opportunity to ask questions of and request information from the Issuer and the Joint Bookrunners;

(d) Such investor is purchasing the Notes for its own account, or for one or more investor accounts for which such investor is acting as a fiduciary or agent, in each case for investment, and not with a view to, or for offer or sale in connection with, any distribution thereof in violation of the Securities Act or any other law. Such investor agrees (or will be deemed to agree), on its own behalf and on behalf of any investor account for which it is purchasing Notes, and each subsequent holder of the Notes by its acceptance thereof will agree, to offer, sell or otherwise transfer such Notes prior to: (i) the date that is one year (or such shorter period of time as permitted by Rule 144 under the Securities Act or any successor provision thereunder) after the later of the Issue Date and the last date on which the Issuer or any affiliate of the Issuer was the owner of such Notes (or any predecessor thereto); or (ii) such later date, if any, as may be required by applicable law (the "**Resale Restriction**

Termination Date"), only: (A) to the Issuer; (B) pursuant to a registration statement that has been declared effective under the Securities Act; (C) for so long as the Notes are eligible for resale pursuant to Rule 144A, to a person reasonably believed to be a QIB that purchases for its own account or for the account of another QIB to whom such investor gives notice that the transfer is being made in reliance upon Rule 144A; (D) in an offshore transaction complying with Rule 903 or 904 of Regulation S under the Securities Act; or (E) pursuant to any other available exemption from the registration requirements of the Securities Act, subject, in each of the foregoing cases, to compliance with any applicable state securities laws. The foregoing restrictions on resale will not apply subsequent to the Resale Restriction Termination Date; however, any resale of the Notes thereafter will continue to need to comply with all applicable laws. Such investor acknowledges that the Issuer reserves the right prior to any offer, sale or other transfer of the Notes pursuant to clause (D) or (E) above to require the delivery of an opinion of counsel, certifications and/or other information satisfactory to the Issuer;

With respect to the Regulation S Notes, each investor therein agrees (or will be deemed to agree), on its own behalf and on behalf of any investor account for which it is purchasing a Regulation S Note, that no offer, sale, pledge or other transfer made during the Distribution Compliance Period (i.e., prior to the date 40 days after the closing date of this Offering) will be made to a US person or for the account or benefit of a US person (other than a distributor);

(e) Each Rule 144A Note will contain a legend substantially in the following form:

THIS NOTE HAS NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "**SECURITIES ACT**"), OR OTHER SECURITIES LAWS OF ANY STATE OR OTHER JURISDICTION OF THE UNITED STATES. NEITHER THIS NOTE NOR ANY INTEREST OR PARTICIPATION HEREIN MAY BE OFFERED, SOLD, ASSIGNED, TRANSFERRED, PLEDGED, ENCUMBERED OR OTHERWISE DISPOSED OF IN THE ABSENCE OF SUCH REGISTRATION UNLESS THE TRANSACTION IS EXEMPT FROM, OR NOT SUBJECT TO, THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT. THE HOLDER OF THIS NOTE (OR OF A BENEFICIAL INTEREST HEREIN) BY ITS ACCEPTANCE HEREOF (OR OF A BENEFICIAL INTEREST HEREIN): (a) REPRESENTS THAT IT IS A "**QUALIFIED INSTITUTIONAL BUYER**" (AS DEFINED IN RULE 144A UNDER THE SECURITIES ACT); (b) AGREES ON ITS OWN BEHALF AND ON BEHALF OF ANY INVESTOR ACCOUNT FOR WHICH IT HAS PURCHASED THIS NOTE (OR A BENEFICIAL INTEREST HEREIN) THAT IT WILL NOT, PRIOR TO: (i) THE DATE THAT IS ONE YEAR (OR SUCH SHORTER PERIOD OF TIME AS PERMITTED BY RULE 144 UNDER THE SECURITIES ACT OR ANY SUCCESSOR PROVISION THEREUNDER) AFTER THE LATER OF THE ISSUE DATE OR THE LAST DAY ON WHICH THE ISSUER OR ANY AFFILIATE (AS DEFINED IN RULE 144) OF THE ISSUER WAS THE OWNER OF THIS NOTE (OR ANY PREDECESSOR OF THIS NOTE); OR (ii) SUCH LATER DATE, IF ANY, AS MAY BE REQUIRED BY APPLICABLE LAW (THE "**RESALE RESTRICTION TERMINATION DATE**"), OFFER, SELL OR OTHERWISE TRANSFER THIS NOTE (OR A BENEFICIAL INTEREST HEREIN) EXCEPT: (A) TO THE ISSUER; (B) PURSUANT TO A REGISTRATION STATEMENT THAT HAS BEEN DECLARED EFFECTIVE UNDER THE SECURITIES ACT; (C) FOR SO LONG AS THIS NOTE IS ELIGIBLE FOR RESALE PURSUANT TO RULE 144A UNDER THE SECURITIES ACT, TO A PERSON IT REASONABLY BELIEVES IS A QUALIFIED INSTITUTIONAL BUYER (AS DEFINED IN RULE 144A UNDER THE SECURITIES ACT) THAT PURCHASES FOR ITS OWN ACCOUNT OR FOR THE ACCOUNT OF ANOTHER QUALIFIED INSTITUTIONAL BUYER TO WHOM NOTICE IS GIVEN THAT THE TRANSFER IS BEING MADE IN RELIANCE UPON RULE 144A UNDER THE SECURITIES ACT; (D) IN AN OFFSHORE TRANSACTION COMPLYING WITH RULE 903 OR 904 OF REGULATION S UNDER THE SECURITIES ACT; OR (E) PURSUANT TO ANY OTHER AVAILABLE EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT AND, IN EACH CASE, IN COMPLIANCE WITH THE RELEVANT SECURITIES LAWS OF ANY OTHER JURISDICTION; AND (c) AGREES THAT IT WILL GIVE TO EACH PERSON TO WHOM THIS NOTE (OR A BENEFICIAL INTEREST HEREIN) IS TRANSFERRED A NOTICE SUBSTANTIALLY TO THE EFFECT OF THIS LEGEND; PROVIDED THAT THE ISSUER SHALL HAVE THE RIGHT PRIOR TO ANY SUCH OFFER, SALE OR TRANSFER PURSUANT TO CLAUSE (D) OR (E) ABOVE TO REQUIRE THE DELIVERY OF AN OPINION OF COUNSEL, CERTIFICATIONS AND/OR OTHER INFORMATION REASONABLY SATISFACTORY TO THE ISSUER. THIS LEGEND WILL BE REMOVED UPON THE REQUEST OF THE HOLDER HEREOF AFTER THE RESALE RESTRICTION TERMINATION DATE. AS USED HEREIN, THE TERMS "**OFFSHORE TRANSACTION**", "**UNITED STATES**" AND "**US PERSON**" HAVE THE MEANINGS GIVEN TO THEM BY REGULATION S UNDER THE SECURITIES ACT.

Each Regulation S Note will contain a legend substantially in the following form:

THIS NOTE HAS NOT BEEN AND WILL NOT BE REGISTERED UNDER THE US SECURITIES ACT OF 1933, AS AMENDED (THE "**SECURITIES ACT**"), OR OTHER SECURITIES LAWS OF ANY STATE OR OTHER JURISDICTION. NEITHER THIS NOTE NOR ANY INTEREST OR PARTICIPATION HEREIN MAY BE OFFERED, SOLD, ASSIGNED, TRANSFERRED, PLEDGED, ENCUMBERED OR OTHERWISE DISPOSED OF IN THE ABSENCE OF SUCH REGISTRATION UNLESS THE TRANSACTION IS EXEMPT FROM, OR NOT SUBJECT TO, THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT;

(f) If such investor is a purchaser in a sale that occurs outside the United States within the meaning of Regulation S, such investor acknowledges that until the expiration of the "40-day distribution compliance period" within the meaning of Rule 903 of Regulation S, any offer or sale of the Notes will not be made by such investor to a US person or for the account or benefit of a US person within the meaning of Rule 902 under the Securities Act;

(g) Such investor acknowledges that the Registrar will not be required to accept for registration of transfer any Notes acquired by it except upon presentation of evidence satisfactory to the Issuer and the Registrar that the restrictions set forth herein have been complied with;

(h) Such investor acknowledges that:

(i) the Issuer, the Joint Bookrunners and others will rely upon the truth and accuracy of such investor's acknowledgements, representations and agreements set forth herein and such investor agrees (or will be deemed to agree) that if any of its acknowledgements, representations or agreements herein cease to be accurate and complete, such investor will notify the Issuer and the Joint Bookrunners promptly in writing; and

(ii) if such investor is acquiring any Notes as fiduciary or agent for one or more investor accounts, such investor represents with respect to each such account that:

(A) it has sole investment discretion; and

(B) it has full power to make the foregoing acknowledgements, representations and agreements on behalf of each such account and that each such investment account is eligible to purchase the Notes;

(i) Such investor agrees that it will give to each person to whom it transfers a Note notice of any restrictions on the transfer of such Note; and

(j) Such investor understands that no action has been taken in any jurisdiction (including the United States) by the Issuer or the Joint Bookrunners that would permit a public offering of the Notes or the possession, circulation or distribution of this Offering Circular or any other material relating to the Issuer or the Notes in any jurisdiction where action for that purpose is required. Consequently, any transfer of the Notes will be subject to the selling restrictions set forth under this "*Transfer Restrictions*" section and "*Selling Restrictions*".

ENFORCEMENT OF JUDGMENTS AND SERVICE OF PROCESS

The Issuer is a public joint stock company organised under the laws of Turkey. Certain of the directors and officers of the Issuer named herein reside within Turkey and all or a significant portion of the assets of such persons may be, and substantially all of the assets of the Issuer are, located in Turkey. As a result, it may not be possible for investors to effect service of process upon such persons outside Turkey or to enforce against them in the courts of jurisdictions other than Turkey any judgments obtained in such courts that are predicated upon the laws of such other jurisdictions. In order to enforce such judgments in Turkey, investors should initiate enforcement lawsuits before the competent Turkish courts. In accordance with Articles 50-59 of Turkey's International Private and Procedure Law (Law No. 5718), the courts of Turkey will not enforce any judgment obtained in a court established in a country other than Turkey unless:

(a) there is in effect a treaty between such country and Turkey providing for reciprocal enforcement of court judgments;

(b) there is de facto enforcement in such country of judgments rendered by Turkish courts; or

(c) there is a provision in the laws of such country that provides for the enforcement of judgments of Turkish courts.

There is no treaty between Turkey and either the United States or the United Kingdom providing for reciprocal enforcement of judgments. There is no de facto reciprocity between Turkey and the United States. Turkish courts have rendered at least one judgment confirming de facto reciprocity between Turkey and the United Kingdom; however, since de facto reciprocity is decided by the relevant court on a case-by-case basis, there is uncertainty as to the enforceability of court judgments obtained in the United States or the United Kingdom by Turkish courts. Moreover, there is uncertainty as to the ability of an investor to bring an original action in Turkey based upon the US federal or any other non-Turkish securities laws.

In addition, the courts of Turkey will not enforce any judgment obtained in a court established in a country other than Turkey if:

(i) the court rendering the judgment did not have jurisdiction to render such judgment;

(ii) the defendant was not duly summoned or represented or the defendant's fundamental procedural rights were not observed and the defendant brought an objection before Turkish courts against the request for enforcement on any of these grounds;

(iii) the judgment in question was rendered with respect to a matter within the exclusive jurisdiction of the courts of Turkey;

(iv) the judgment is incompatible with a judgment of a court in Turkey between the same parties and relating to the same issues or, as the case may be, with an earlier foreign judgment on the same issue and enforceable in Turkey;

(v) the judgment is not of a civil nature;

(vi) the judgment is clearly against the public policy rules of Turkey;

(vii) the judgment is not final and binding with no further recourse for appeal under the laws of the country where the judgment has been rendered; or

(viii) the judgment was rendered by a foreign court that has deemed itself competent even though it has no actual relationship with the parties or the subject matter at hand and the defendant brought an objection before Turkish courts against the request for enforcement on this ground.

As a result, it may not be possible to:

(a) effect service of process within the United States upon the Issuer or any of the directors and executive officers named in this Offering Circular; or

(b) enforce, in the Republic of Turkey, court judgments obtained in courts of the United States against the Issuer or any of the directors and executive officers named in this Offering Circular in any action, including actions under the civil liability provisions of federal securities laws of the United States.

In addition, it may be difficult to enforce, in original actions brought in courts in jurisdictions located outside the United States, liabilities predicated upon US securities laws.

In any suit or action against the Issuer in the Turkish courts, a foreign plaintiff may be required to deposit security for court costs (*cautio judicatum solvi*), provided however that the court may in its discretion waive such requirement for security in the event that the plaintiff is considered to be (A) a national of one of the contracting states of the Convention Relating to Civil Procedures signed at The Hague on 1 March 1954 (ratified by Turkey by Law No. 1574); save for legal entities incorporated under the laws of such contracting states or (B) a national of a state that has signed a bilateral treaty with Turkey which is duly ratified and contains, *inter alia*, a waiver of the *cautio judicatum solvi* requirement on a reciprocal basis.

In connection with the issuance of the Notes, service of process may be made upon the Issuer at Beko Plc., Beko House, 1 Greenhill Crescent, Watford, Hertfordshire, WD18 8QU with respect to any proceedings in England.

LEGAL MATTERS

Certain matters as to English and United States law will be passed upon for the Issuer by Herbert Smith Freehills LLP and certain matters as to Turkish law will be passed upon for the Issuer by Taboğlu & Demirhan. Certain matters as to English and United States law will be passed upon for the Joint Bookrunners by Allen & Overy LLP and certain matters as to Turkish law will be passed upon for the Joint Bookrunners by Gedik & Eraksoy.

OTHER GENERAL INFORMATION

Authorisation

The issuance and sale of the Notes by the Issuer and the execution and delivery by the Issuer of the transaction documents have been authorised by a resolution of its Board of Directors dated 17 July 2017 No.: 2017/15.

Listing and Trading

It is expected that the Notes will be admitted to the Official List of the UK Listing Authority and to trading on the London Stock Exchange's Regulated Market on or about 18 October 2017 (subject only to issue) and that such admission will become effective, and that dealings in the Notes on the London Stock Exchange will commence, on 19 October 2017.

The Issuer estimates that the expenses related to the admission of trading of the Notes to trading will be approximately GBP 4,000.

Clearing Systems

The Unrestricted Global Certificate has been accepted for clearance through Euroclear and Clearstream, Luxembourg (ISIN XS1686704948 and Common Code 168670494). Application has been made for acceptance of the Restricted Global Certificate into DTC's book-entry settlement system (ISIN US90015MAB19, Common Code 169614903 and CUSIP 90015M AB1).

No Significant or Material Adverse Change

There has been no significant change in the financial or trading position of either the Group or the Issuer since 30 June 2017, being the end of the last financial period for which the Group's financial statements have been published and no material adverse change in the financial position or prospects of either the Group or the Issuer since 31 December 2016.

Legal and Arbitration Proceedings

Except as disclosed under "*Business – Litigation*" on page 86, neither the Group nor the Issuer is presently involved, nor has, in a period covering at least the previous 12 months, been involved, in any governmental, legal or arbitration proceedings (including any such proceedings which are pending or threatened and of which the Group or the Issuer is aware) that may have, or have had in the recent past, significant effects on the Group or the Issuer's financial position or profitability.

Interests of Natural and Legal Persons Involved in the Issue

So far as the Issuer is aware, no person involved in the offer of the Notes has an interest material to the offer.

Independent Auditors

The annual consolidated financial statements of Türkiye Petrol Rafinerileri A.Ş. as of and for the years ended 31 December 2016, 2015 and 2014 prepared in Turkish have been audited by Güney Bağımsız Denetim ve Serbest Muhasebeci Mali Müşavirlik A.S. (a member firm of Ernst & Young Global Limited), independent auditors, as stated in the auditor's reports thereon.

The reviewed (unaudited) interim consolidated financial statements for the six months ended 30 June 2017, prepared in accordance with TAS 34 in Turkish, have been reviewed by PwC Turkey, a member firm of PricewaterhouseCoopers International Limited. PwC Turkey's review was conducted in accordance with the Standard on Review Engagements 2410, "Review of Interim Financial Information Performed by the Independent Auditor of the Entity" as issued by the POA. A review of financial information consists of making inquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A review is substantially less in scope than an audit conducted in accordance with the Standards on Auditing and the objective of which is to express an opinion on the financial statements. Consequently, a review of financial information does not provide assurance that the audit firm will be aware of all significant matters which would have been identified in an audit.

Pursuant to the Turkish Commercial Code, independent auditors can be appointed for up to a total term of seven years (either consecutive or separately) within a 10-year period. Following the expiration of the seven-year term, the same independent auditor cannot be appointed for the same company for at least three years. Accordingly, following the expiration of the seven-year term of EY, the Issuer has appointed PwC Turkey as its independent auditor, effective as of 1 January 2017, for a term of three years.

EY and PwC Turkey are authorised by the CMB, BRSA, Turkish Treasury, EMRA and Public Oversight Accounting and Auditing Standards Authority Board to conduct independent audits in Turkey.

Certain Information about the Issuer

Turkiye Petrol Rafinerileri AŞ is an operating company that was incorporated in Körfez, Kocaeli, Turkey, on 16 November 1983, under registration number 408. The Issuer operates under the Turkish Commercial Code. The Issuer's principal office is at Güney Mahallesi, Petrol Caddesi No:25 41790, Körfez, Kocaeli, Turkey and its telephone number is +90(216) 316 3000.

Documents

The Issuer produces audited consolidated annual and reviewed (unaudited) consolidated quarterly and semi-annual interim financial statements. Copies (with English translations where the documents at issue are not in English) of the Issuer's articles of association, audited financial statements as of and for the years ended 31 December 2016 and 2015, reviewed (unaudited) interim consolidated financial statements for the six months ended 30 June 2017 and copies of the transaction documents referred to herein (including the forms of the Notes) will be available for inspection in physical form at the offices of the Issuer and the Fiscal Agent.

As long as the Notes are outstanding, copies of this Offering Circular, the constitutional documents of the Issuer and (after the Issue Date) the Deed of Covenant, Deed Poll and the Fiscal Agency Agreement will be available for inspection in physical form at the offices of the Issuer and the Fiscal Agent.

Material Contracts

Except as disclosed in this Offering Circular under "*Management's Discussion and Analysis of Financial Condition and Results of Operations*" and "*Business*", the Issuer has not entered into any material contract outside the ordinary course of its business that could result in the Issuer being under an obligation or entitlement that is material to its ability to meet its obligations in respect of the Notes.

Language

The language of this Offering Circular is English. Certain legislative references and technical terms have been cited in their original language in order that the correct technical meaning may be ascribed to them under applicable law.

GLOSSARY OF TECHNICAL AND CERTAIN INDUSTRY TERMS

The following explanations are not intended as technical definitions but rather are intended to assist the understanding of certain terms used in this Offering Circular.

"°C"	Degrees Centigrade.
"ASRFO"	Atmospheric Straight Run Fuel Oil.
"Barrel"	Volumetric unit of measurement in the oil industry equal to 42 US gallons equivalent to $0.159m^3$.
"Bitumen"	Heaviest petroleum derivative. A solid product at room temperature, which liquefies on heating, used principally for road making. Also known as asphalt.
"black products"	Any refined product having less economic value than crude oil, namely fuel oil and asphalt and any components of fuel oil.
"BOTAŞ"	Boru Hatlan ile Petrol Tasima Anonim Şirketi.
"Catalyst"	A substance which promotes a desired chemical reaction and emerges almost unaltered by the process.
"CCR Reformer"	Continuous Catalytic Regeneration.
"Chemical feedstock"	A chemical which is used as the starting point for manufacturing other substances, e.g. ethene is used in the manufacture of polythene.
"CIF"	CIF prices include the cost of insurance and freight charges.
"CIF MED"	Mediterranean prices including cost of insurance and freight charges as stipulated by Platts.
"CMB"	Turkish Capital Markets Board.
"Cracking"	The thermal or catalytic conversion of heavier and more complex hydro-carbons into lighter products and coke thus increasing the yield of lighter products from crude oil.
"degrees API"	An imperial measure for density of liquids, calculated from degrees $API - \frac{141.5}{\text{specific gravity}} - 131.5$
"Design capacity"	This is the throughput at which a process unit is intended to operate when processing the intended feedstock. The design capacity can be measured in mass or volumetric terms over a specific period of operation.
"Diesel"	Middle distillate fuel for diesel engines. Also referred to as gas oil in Europe or in the UK.
"Diesel oil"	Heavy distillate fuel for heavy marine engines.
"Distillate"	A material condensed from the vapours after boiling in a distillation process as compared with the residue which remains. Usually a "clean" oil. Heating oil is typically a heavy distillate; gas oil (diesel) is a middle distillate; kerosene and aviation fuel are medium-light distillates; and gasoline is a light distillate.
"Distillation"	Method of fractionation. Distillation is based on the difference in boiling point of the liquids in the mixture to be separated. Successive vaporisation and condensation of crude oil in a fractionating column will separate out the lighter

fractions, leaving a residue.

"Downstream"	Generic term applied to the activity of the oil industry onwards from the production and dispatch of crude oil, as compared with "Upstream" which describes exploration and production.
"EII"	Energy Intensity Index.
"EMRA"	Energy Market Regulatory Authority.
"EU"	European Union.
"EURO IV"	Euro Emission Standard (Max Sulphur 50 ppm).
"EURO V"	Euro Emission Standard (Max Sulphur 10 ppm).
"FCC (fluid catalytic cracking)"	Process that utilises a fluidised bed with continuous catalytic regeneration. Refer to catalytic cracking/cracker for process details.
"Feedstock"	Any material (raw or intermediate product) used as feed for a processing unit.
"FOB"	Free on Board. FOB prices for crude oil, feedstocks and finished products do not include the cost of insurance and freight charges.
"Fuel oil"	Any oil intended to be burned under boilers. Normally heavy residual oil, but a wide variety of qualities can be used, including some blends with distillate materials such as gas oil.
"Gas oil"	Middle distillate fuel for diesel engines. Within Europe, it has poorer qualities than diesel e.g. higher sulphur content.
"Gasoline"	A light distillate product used for spark-ignited internal combustion engines either in cars or aircraft. Also known as motor/aviation spirit. In refineries, the term is usually restricted to a lighter distillate cut.
"HVGO"	Heavy Vacuum Gas Oil. Gas oil produced from a vacuum distillation column with a boiling range of typically 450°C to 560°C.
"Hydrocarbons"	Organic compounds made up of carbon and hydrogen (e.g., pentane, hexane and propane). Crude oil and natural gas are mixtures of hydrocarbons.
"Hydrocracking"	Catalytic cracking of hydrocarbon feedstocks in the presence of hydrogen. The products are primarily high-quality middle distillates.
"Hydrodesulphurisation (HDS)"	The process of converting any type of organic sulphur compound into hydrogen sulphide and hydrocarbons in order to reduce the sulphur content of petroleum products. Most commonly used to reduce the sulphur of gas oil and kerosene components.
"Isomerisation"	The rearrangement of the molecular structure of hydrocarbons without adding or removing anything from the original material. Isomerisation is used in a refinery to manipulate physical quantities of a substance, e.g. light naphtha isomerisation is a refinery process used to increase the octane number of naphtha (typically the light naphtha fraction).
"Kerosene"	A medium-light distillate in between gas oil and gasoline; used for lighting, heating and as fuel for jet and turbo-propeller aircraft engines.
"km"	Kilometre.
"Light naphtha"	Light naphtha produced directly from crude oil by distillation with no chemical change to its molecular structure. It is a feedstock for petrochemicals (ethylene) isomerisation, which is subsequently used in the production of unleaded

gasoline.

"LPG (liquefied petroleum gas)" LPG consists of propane and butane which may be wholly or partially liquefied under pressure in order to facilitate transport and storage. LPG can be used for cooking or healing or as an automotive fuel.

"Lubricant base stocks" A feedstock for lubricant blenders produced by refineries with appropriate upgrading facilities.

"m^2" Square metre.

"m^3" Cubic metre.

"MTBE" Methyl tertiary butyl ether is a high octane gasoline blending component usually associated with reformulated gasoline (or unleaded gasoline).

"MT" Metric Tonne.

"MW" Megawatt.

"Naphtha" A range of distillates lighter then kerosene; used as feedstock for production of both gasoline and many petrochemicals such as ethylene and solvents.

"Nelson Complexity Index" A cost index that provides a relative measure of the construction costs of a refinery based on its crude and upgrading capacity.

"No." Number.

"Opet" Opet Petrolcülük Anonim Şirketi.

"Petder" Petroleum Industry Association.

"PETKIM" Petrokimya Holding Anonim Şirketi.

"Platts" Company specialising in the process of pricing information.

"ppm" parts per million.

"RUP" The RUP, as described in more detail under *"Business—Residuum Upgrading Project"*.

"Semi-finished products" Feedstocks which will be further processed and products used for blending to produce finished products.

"TL" Turkish Lira.

"Turcas" TURCAS Petrolcülük Anonim Şirketi.

"UOP" Universal Oil Products.

"Vacuum distillation" Distillation under reduced pressure (less than atmospheric) which lowers the boiling points of the liquid mixture being distilled. This technique limits thermal decomposition of the very heavy hydrocarbon stream and allows increased recovery of distillate components.

"white products" Any refined product having greater economic value than crude oil, namely LPG, naphtha, gasoline, diesel and jet fuel, any component of such products, feedstock for conversion units and any industrial products including lubricating base oil.

"yr" Year.

ANNEX A: SUMMARY OF SIGNIFICANT DIFFERENCES BETWEEN IFRS AND TFRS

The Consolidated Financial Statements in this Offering Circular have been prepared in accordance with TFRS, which differ from International Financial Reporting Standards ("**IFRS**") as described below.

Both the IASB and the CMB required companies operating in relevant jurisdictions including Turkey to apply International Accounting Standards (IAS) 29 Financial Reporting in Hyperinflationary Economies ("**IAS 29**") for the year ended 31 December 2004. Based on IASB guidelines, Turkey would have been a jurisdiction that was required to apply IAS 29 for the year ended 31 December 2005 as well. However, the CMB did not require the same for companies listed on the Borsa İstanbul.

Application of IAS 29 requires the restatement of non-monetary items and equity items in the balance sheet. As a result of the non-application by the Group of IAS 29 for the year ended 31 December 2005 a permanent difference has emerged between IFRS and TFRS.

Because of the changes in the general purchasing power of the currency of a hyperinflationary economy as of 31 December 2004 (including Turkey), IAS 29 requires that financial statements prepared in the currency of a hyperinflationary economy be stated in terms of the measuring unit current at the balance sheet date and the corresponding figures for previous periods also to be restated in terms of the measuring unit current at the balance sheet date. Index and conversion factors applied to the Turkish Lira as of 31 December 2004 for the previous three years are as follows:

	Index	**Conversion Factor**
31 December 2002	6,478.8	1.29712
31 December 2003	7,382.1	1.13840
31 December 2004	8,403.8	1.00000

The main guidelines for the restatement of the Company's prior consolidated financial statements in accordance with IAS 29 are as follows:

The consolidated financial statements as of 31 December 2004 were restated with the purchasing power of the relevant currency at 31 December 2004.

Non-monetary assets and liabilities which were not carried at amounts in terms of the measuring unit current at the balance sheet date and the components of shareholders' equity including the adjustment to share capital in the consolidated balance sheet as at 31 December 2004 were restated by applying the relevant conversion factors at current amounts prevailing as of 31 December 2004.

The effect of inflation on the net monetary position of a Company was included in the income statement for the year ended 31 December 2004 as a monetary gain or loss.

The restatement of non-monetary items and equity items in the balance sheet in terms of the measuring unit current at the balance sheet date was terminated with effect from 1 January 2005. Non-monetary assets and liabilities and the components of shareholders' equity including the adjustment to share capital in the consolidated balance sheet were presented with the additions until 31 December 2004 expressed in terms of the purchasing power of the relevant currency at 31 December 2004 and the additions after 31 December 2004 at the carrying nominal value.

Depreciation and amortisation charges, and gain and losses on disposal of these assets were calculated based on the total of restated gross book value of property, plant and equipment and intangible assets expressed in terms of the purchasing power as of 31 December 2004 and nominal value of additions after 1 January 2005.

Conversion of prior years' balance sheet and income statement accounts to current values by multiplying with price index and related coefficients does not mean that a company could convert these assets and liabilities to cash. Similarly, this situation does not mean that the increase in the capital can be distributed to shareholders.

PRINCIPAL OFFICE OF THE ISSUER

Türkiye Petrol Rafinerileri A.Ş.
Güney Mahallesi
Petrol Caddesi No:25 41790
Körfez, Kocaeli
Turkey

JOINT BOOKRUNNERS

Citigroup Global Markets Limited
Citigroup Centre
33 Canada Square, Canary Wharf
London E14 5LB
United Kingdom

HSBC Bank plc
8 Canada Square
London E14 5HQ
United Kingdom

J.P. Morgan Securities plc
25 Bank Street
Canary Wharf
London E14 5JP
United Kingdom

Standard Chartered Bank
1 Basinghall Avenue
London EC2V 5DD
United Kingdom

FISCAL AGENT, PAYING AGENT AND TRANSFER AGENT

Citibank, N.A., London Branch
Citigroup Centre
25 Canada Square
London E14 5LB
United Kingdom

REGISTRAR

Citigroup Global Markets Deutschland AG
Reuterweg 16
60323 Frankfurt am Main
Germany

LEGAL COUNSEL TO THE JOINT BOOKRUNNERS
As to English and United States Law

Allen & Overy LLP
One Bishops Square
London E1 6AD
United Kingdom

LEGAL COUNSEL TO THE JOINT BOOKRUNNERS
As to Turkish Law and Turkish Tax Counsel

Gedik & Eraksoy
River Plaza, Floor 17
Büyükdere Caddesi, Bahar Sokak No. 13
TR-34394
Levent, İstanbul
Turkey

LEGAL COUNSEL TO THE ISSUER
As to English and United States Law

Herbert Smith Freehills LLP
Exchange House, Primrose Street
London EC2A 2EG
United Kingdom

LEGAL COUNSEL TO THE ISSUER
As to Turkish Law

Taboğlu & Demirhan
Levent Mahallesi, Levent Cad. No:9
Beşiktaş, Istanbul, 34330
Turkey

INDEPENDENT AUDITORS OF THE ISSUER

In relation to the 2015 and 2016 Financial Statements

Güney Bağımsız Denetim ve Serbest Muhasebeci Mali Müşavirlik A.Ş.
(a member firm of Ernst & Young Global Limited)
Maslak Mahallesi Eski Büyükdere Cad. Orjin Maslak Plaza No: 27
Kat: 2-3-4 Daire: 54-57-59
Sarıyer 34485
İstanbul
Turkey

In relation to the 2017 Financial Statements

PwC Bağımsız Denetim ve Serbest Muhasebeci Mali Müşavirlik A.Ş.
Süleyman Seba Cad. BJK Plaza No:48
B Blok, Kat 9 Akaretler
34357 Beşiktaş İstanbul
Turkey