

A close-up photograph of a green leaf, showing a network of veins and a single water droplet resting on the surface. The lighting is bright, creating a high-contrast image with vibrant green tones.

**WE KNOW
THE VALUE OF LIFE**

CONTENTS

10 Tüpraş At A Glance

12 Key Indicators

GENERAL ASSEMBLY

14 General Assembly Agenda

15 Independent Auditor's Report

15 On the Annual Report

16 Message From The Chairman

20 Independent Auditor's Report (Opinion)

21 Consolidated Balance Sheet/Consolidated Income Statement

22 Board Of Directors

28 Profit Distribution Policy

28 Profit Distribution Proposal

29 Profit Distribution Proposal

30 Amendments to the Articles Of Association

34 2021 Board Of Directors Candidates

35 Remuneration Policy

TÜPRAŞ IN BRIEF

36 Message From the General Manager

40 Senior Management

42 Milestones In Tüpraş's History

46 Actions Taken By Tüpraş In the Pandemic Period

48 2020 Developments

52 Strategy

55 Achievements And Awards

56 Investor Relations

60 Human Resources

2020 PERFORMANCE

70 The Sector

72 Production and Sales

78 Refineries

86 Tüpraş Trading Ltd

88 Distribution - OPET

90 Marine Transportation

96 Körfez Ulaştırma A.Ş.

SUSTAINABILITY

98 Sustainability At Tüpraş

102 Investments

106 R&D

112 Innovation

118 Digital Technologies, Robotics And Cyber Security

120 Health And Safety Practices

123 Quality Management Systems

124 Environmental Management

128 Energy Efficiency

130 Performance Indicators

134 Social Responsibility

CORPORATE GOVERNANCE

141 Legal Disclosures

143 Information About Corporate Governance

150 Structure Of Board Of Directors

151 Tüpraş Organizational Structure

152 Statement Of Compliance With Sustainability Principles

154 Risk Management and Activities Of the Risk Management Committee

165 English Translation Of Independent Auditor's Early Risk Detection System and Committee Report

166 Evaluation Of Operating Principles And Effectiveness Of Board Committees

172 Audit Committee Report (Related To Financial Statements)

173 Statement Of Responsibility (Related to Approval Of Financial Statements)

174 Audit Committee Report (Related To Annual Report)

175 Statement Of Responsibility (Related to Approval Of Annual Report)

FINANCIAL STATEMENTS

176 1 January - 31 December 2020 Consolidated Financial Statements Together with The Independent Auditor's Report

OTHER INFORMATION

256 Declaration For Independency

260 Corporate Governance Compliance Report

270 Corporate Governance Information Form (CGIF)

278 Index Of Explanations Regarding Sustainability Principles

284 Glossary

288 Contact



You can access Tüpraş's 2020 and previous years annual reports from the link below:

<https://www.tupras.com.tr/en/overview>

TÜPRAŞ IN 2020

THE LARGEST INDUSTRIAL COMPANY IN
TURKEY ON THE BASIS OF ADDED VALUE AND
TURNOVER

AS TURKEY'S LARGEST REFINERY AND EUROPE'S 7TH
LARGEST REFINERY IN TERMS OF ITS TURNOVER AND
THE ADDED VALUE IT CREATES, TÜPRAŞ IS ONE OF
THE FEW REFINERIES WITH A HIGH COMPLEXITY INDEX
IN THE MEDITERRANEAN, WITH AN AVERAGE NELSON
COMPLEXITY INDEX OF 9.5.

With the corporate and management culture of the Koç Group behind us and our expert team mates next to us, with the responsibility and pride of knowing we are the largest energy producer and industrial company in Turkey on our shoulders, we continued production in our refineries with a safe production certificate in the Covid-19 process to meet the country's energy needs when the cities were silenced.

Although we use technology in every field, we have once again seen that the most important factor in the fight against Covid-19 is human resources. On this occasion, we drew upon the visionary identity of our founder, the late Vehbi Koç, and the principle of "My primary capital is my human resources".

Tüpraş, which is an integrated oil company with its crude oil processing capacity of 30 million tons, its market and corporate reliability and its production complexes and partnerships, closely monitors potential business and investment opportunities in the domestic and international fields. In line with its strategy to diversify its business, Tüpraş unwaveringly carried out its sustainability studies during the pandemic, aiming to invest in sectoral integration, alternative energy resources and start-ups, digitalization, energy efficiency projects, meeting the energy needs of its refineries, expanding its logistics infrastructure, reducing energy costs and reducing its carbon footprint.

WE KNOW THE VALUE OF LIFE

We Contribute to the Economy
We Make the Wheels Turn
We Work Responsibly



WE KNOW THE VALUE OF LIFE

We Don't Waste Our Energy
We Know the Value of Water
We Believe in Transformation in Production



WE KNOW THE VALUE OF LIFE

We Build Our Digital Strategy on
“Commitment”

We Are Preparing an Analytical Tüpraş
Spreading Our Innovation Culture



WE KNOW THE VALUE OF LIFE

We Put People First

We Protect and Develop Our Employees

We Aim for Inclusion in Social Benefit



TÜPRAŞ AT A GLANCE

Securing the increasing energy needs of developing and growing Turkey and establishing the infrastructure for sustainable growth are among the priority targets of Tüpraş management.



1

İZMİT REFINERY

Capacity: 11.3 million tons/year
Nelson Complexity: 14.5
Storage Capacity: 3.0 million m³

KÖRFEZ OPET TERMINAL

Storage Capacity: 45,450 m³

DİTAŞ

3 Crude Oil Tankers:

479,765 DWT

1 Crude Oil/Product Tanker:

51,532 DWT

10 Product Tankers:

171,453 DWT

3 Product Tankers under

Bareboat Lease Contract:

46,031 DWT

13 Tugboats,

6 Mooring Boats

3 Service Boats

1 Pilot Boat

KÖRFEZ ULAŞTIRMA A.Ş.

465 Wagons (Owned)

100-150 Wagons (TCDD rental)

5 Locomotives (TCDD rental)

5 Locomotives (Owned)

MARMARA OPET TERMINAL

Storage Capacity:

735,933 m³

3

ANTALYA OPET TERMINAL

Storage Capacity: 19,442 m³

4

MERSİN OPET TERMINAL

Storage Capacity: 240,000 m³

5

KIRIKKALE REFINERY

Capacity: 5.4 milyon tons/year

Nelson Complexity: 6.32

Storage Capacity: 1.3 million m³

6

GİRESUN OPET TERMINAL

Storage Capacity: 43,130 m³

7

BATMAN REFINERY

Kapasite: 1.4 million tons/year

Nelson Kompleksite: 1.83

Storage Capacity: 299 thousand m³

2

İZMİR REFINERY

Capacity: 11.9 million tons/year

Nelson Complexity: 7.66

Storage Capacity: 2.5 million m³

PETROLEUM PRODUCTS MARKET

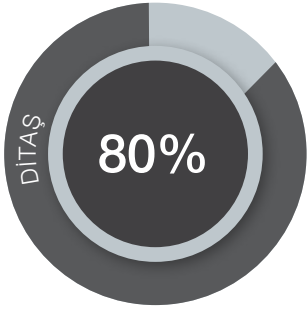
%51

Tüpraş has 51 % share in Turkey's total petroleum products market consisting of gasoline, diesel, fuel oil and jet fuel.

REFINING CAPACITY

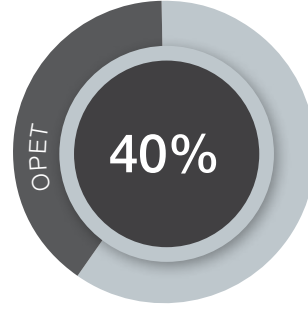
%75

Tüpraş accounts for 75% of Turkey's current refining capacity.



Tüpraş holds 79.98% of Ditaş's shares.

With a total of 14 tankers and about 749 thousand DWT carriage capacity Ditaş has Turkey's largest fleet of fuel products and provides significant operational and cost advantages to Tüpraş.



Tüpraş holds 40% of Opet's shares.

With its 1,766 stations and storage capacity of 1.1 million m³, Opet operates a wide service area in Turkey with five terminals, and provides superior products and services to customers



Tüpraş holds 100% of Körfez Ulaştırma A.Ş.'s shares.

Körfez Ulaştırma A.Ş., whose all shares belong to Tüpraş, is the first private railway operator in Turkey.



Tüpraş holds 100% of Tüpraş Trading Ltd's shares.

Tupras Trading Ltd closely follows up international market opportunities through its activities, thus supporting Tüpraş's existing foreign trade operations. It also creates additional added value from the supply and sales chain.

KEY INDICATORS

The margins decreasing at historical levels and the costs increasing due to the limited supply of heavy crude oil negatively affected the profitability of the refining sector. The depreciation of TL and increasing interests caused Tüpraş to have a pre-tax loss of TL 3.8 billion.

Financial Indicators (TL million)

	2016	2017	2018	2019	2020
Net Sales	34,855	53,948	88,552	89,601	63,244
Operating Profit	2,357	4,857	5,736	2,230	-619
Profit Before Tax	1,944	4,474	3,724	-311	-3,795
Profit After Tax*	1,793	3,812	3,713	526	-2,494
EBITDA	3,396	5,882	8,908	4,039	545
Net Debt	6,084	6,249	11,967	8,424	9,420
Return on Equity (ROE) %	21.9	41.3	36.8	4.6	-20.4
Debt Leverage Ratio %	1.8	1.1	1.3	2.1	17.3
Net Working Capital	1,427	2,966	7,029	-1,501	-598
Investment Expenditures (USD million)**	213	184	138	157	113

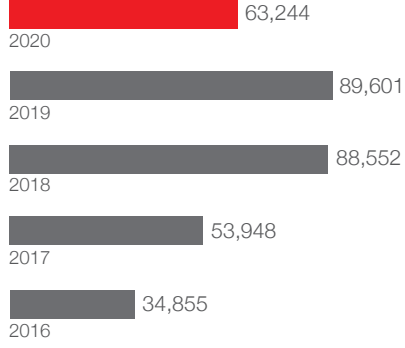
* Net profit attributable to the equity holders of the parent

** Tüpraş unconsolidated

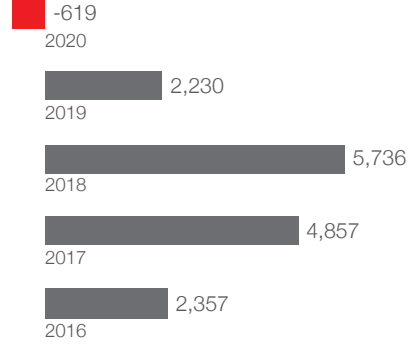
Operational Indicators – Refining (thousand tons)

	2016	2017	2018	2019	2020
Processed Crude Oil	28,348	28,502	24,540	27,238	22,583
Production	27,928	28,883	25,695	28,112	23,389
Domestic Sales	30,255	31,493	29,830	29,197	24,504
Product Exports	5,491	5,804	4,191	6,807	4,356
Transit Sales					316
Product Imports	3,749	4,388	6,252	2,827	2,927
Share of White Products in Production (%)	76.6	76.3	77.4	79.0	81.5
Crude Oil Capacity Utilization Rate (%)	100.9	101.4	87.3	90.8	75.3
Capacity Utilization Rate Including Semi-Finished Products (%)	105.3	108.1	95.9	97.8	81.8

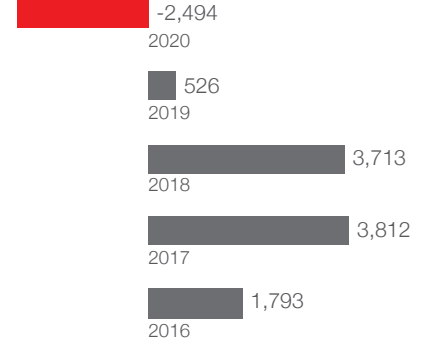
Net Sales (TL million)



Operating Profit (TL million)

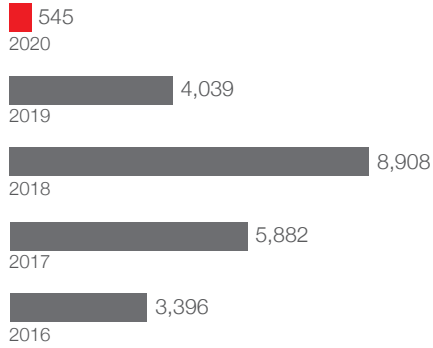


Profit After Tax (TL million)*

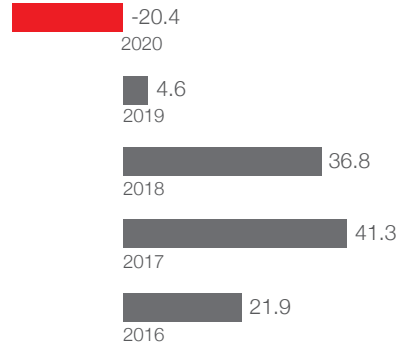


* Net profit attributable to the equity holders of the parent

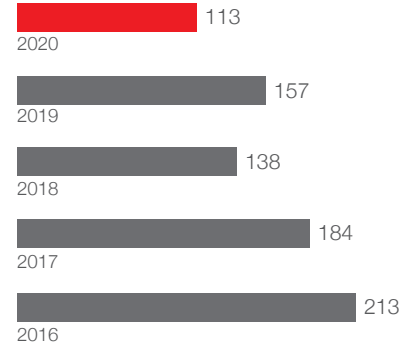
EBITDA (TL million)



Return on Equity (ROE %)



Investment Expenditures (USD million)**



** Tüpraş unconsolidated

GENERAL ASSEMBLY AGENDA

AGENDA FOR ORDINARY GENERAL ASSEMBLY MEETING OF TURKISH PETROL REFINERIES CORPORATION TO BE HELD ON 31 MARCH 2021

1. Opening and Election of the Chairing Committee,
2. Review, discussion and approval of the Annual Report of the Company for the fiscal year 2020 as prepared by the Board of Directors,
3. Presentation of the summary of the Independent Audit Report for the year 2020,
4. Review, discussion and approval of the 2020 Financial Statements,
5. Release of the members of the Board of Directors from liability for the affairs of the Company for the year 2020,
6. Within the framework of the Company's dividend policy; approval, amendment or disapproval of the Board of Directors' proposal on profit distribution of year 2020 and the date of dividend distribution,
7. Approval, amendment and approval or disapproval of the Board of Directors' proposal on the amendment of articles 4 titled "Headquarters and Branches of the Company", 6 titled "Capital" and article 14 titled "General Assembly" of the Company's Articles of Association, provided that the approvals of the Capital Markets Board and the Ministry of Trade are obtained
8. Determination of the number of Board Members, their term of office, election of members in accordance with the number determined and election of independent board members,
9. In accordance with the Corporate Governance Principles, presentation to shareholders and approval by the General Assembly of the "Remuneration Policy" for the members of the Board of Directors and the Senior Executives and the payments made on that basis,
10. Resolution of annual gross salaries of the Members of the Board of Directors,
11. Approval of the Independent Audit Firm as selected by the Board of Directors, in accordance with the provisions of the Turkish Commercial Code and the Capital Markets Board regulations,
12. Approval of Donation and Sponsorship Policy, presentation to shareholders of the donations made by the Company in 2020 and resolution of an upper limit for donations to be made for 2021,
13. In accordance with the Capital Markets Board regulations, presentation to shareholders of the securities, pledges and mortgages granted in favour of the third parties in the year 2020 and of any benefits or income thereof,
14. Authorization of the shareholders with management control, the members of the Board of Directors, the senior executives and their spouses and relatives related by blood or affinity up to the second degree as per the provisions of Articles 395 and 396 of the Turkish Commercial Code and presentation to shareholders, of the transactions carried out thereof in the year 2020 pursuant to the Corporate Governance Communique of the Capital Markets Board,
15. Wishes and opinions.

INDEPENDENT AUDITOR'S REPORT ON THE ANNUAL REPORT

To the General Assembly of Türkiye Petrol Rafinerileri A.Ş.

1. Opinion

We have audited the annual report of Türkiye Petrol Rafinerileri A.Ş. (the "Company") and its subsidiaries (collectively referred to as the "Group") for the 1 January - 31 December 2020 period.

In our opinion, the financial information and the analysis made by the Board of Directors by using the information included in the audited financial statements regarding the Group's position in the Board of Directors' Annual Report are consistent and presented fairly, in all material respects, with the audited full set consolidated financial statements and with the information obtained in the course of independent audit.

2. Basis for Opinion

Our independent audit was conducted in accordance with the Independent Standards on Auditing that are part of the Turkish Standards on Auditing (the "TSA") issued by the Public Oversight Accounting and Auditing Standards Authority ("POA"). Our responsibilities under those standards are further described in the Auditor's Responsibilities in the Audit of the Board of Directors' Annual Report section of our report. We hereby declare that we are independent of the Group in accordance with the Ethical Rules for Independent Auditors (the "Ethical Rules") and the ethical requirements regarding independent audit in regulations issued by POA that are relevant to our audit of the financial statements. We have also fulfilled our other ethical responsibilities in accordance with the Ethical Rules and regulations. We believe that the audit evidence we have obtained during the independent audit provides a sufficient and appropriate basis for our opinion.

3. Our Audit Opinion on the Full Set Consolidated Financial Statements

We expressed an unqualified opinion in the auditor's report dated 11 February 2021 on the full set consolidated financial statements for the 1 January - 31 December 2020 period.

4. Board of Director's Responsibility for the Annual Report

Group management's responsibilities related to the annual report according to Articles 514 and 516 of Turkish Commercial Code ("TCC") No. 6102 and Capital Markets Board's ("CMB") Communiqué Serial II, No:14.1, "Principles of Financial Reporting in Capital Markets" (the "Communiqué") are as follows:

- a) to prepare the annual report within the first three months following the balance sheet date and present it to the general assembly;
- b) to prepare the annual report to reflect the Group's operations in that year and the financial position in a true, complete, straightforward, fair and proper manner in all respects. In this report financial position is assessed in accordance with the financial statements. Also in the report, developments and possible risks which the Group may encounter are clearly indicated. The assessments of the Board of Directors in regards to these matters are also included in the report.
- c) to include the matters below in the annual report:
 - events of particular importance that occurred in the Company after the operating year,
 - the Group's research and development activities,
 - financial benefits such as salaries, bonuses, premiums and allowances, travel, accommodation and representation expenses, benefits in cash and in kind, insurance and similar guarantees paid to members of the Board of Directors and senior management.

When preparing the annual report, the Board of Directors considers secondary legislation arrangements enacted by the Ministry of Trade and other relevant institutions.

5. Independent Auditor's Responsibility in the Audit of the Annual Report

Our aim is to express an opinion and issue a report comprising our opinion within the framework of TCC and Communiqué provisions regarding whether or not the financial information and the analysis made by the Board of Directors by using the information included in the audited financial statements in the annual report are consistent and presented fairly with the audited consolidated financial statements of the Group and with the information we obtained in the course of independent audit.

Our audit was conducted in accordance with the TSAs. These standards require that ethical requirements are complied with and that the independent audit is planned and performed in a way to obtain reasonable assurance of whether or not the financial information and the analysis made by the Board of Directors by using the information included in the audited financial statements in the annual report are consistent and presented fairly with the audited[consolidated] financial statements and with the information obtained in the course of audit.

PwC Bağımsız Denetim ve
Serbest Muhasebeci Mali Müşavirlik A.Ş.

Ediz Günsel, SMMM
Partner

Istanbul, 9 March 2021

MESSAGE FROM THE CHAIRMAN



Despite the difficulties, Tüpraş continued to create economic added value by unwaveringly meeting our country's energy needs in 2020.

ÖMER M. KOÇ
Chairman

Esteemed shareholders,

At a time when the global economic system was struggling to find solutions to economic and social problems, the COVID-19 pandemic affected the whole world and would go on to make 2020 go down in history as one of the most infamous years of our era. Although the successful conclusion of vaccination studies and the start of the vaccination rollout is a promising development, the pandemic has hit our businesses and social life, and especially our health. As you will be aware, countries announced a raft of measures aimed at overcoming the damage caused by the efforts to tackle the pandemic. Despite this, the massive monetary expansion and stimulus packages announced by major central banks in an attempt to prevent economies from collapse have only had limited success in improving global economic conditions.

Despite the recovery in the second half of the year, the pandemic precipitated the deepest contraction since the Great Depression, and in parallel with this, there was a decline in demand for all types of energy. Demand for petroleum products took the biggest hit because of the social restrictions and travel bans. According to data released by the International Energy Agency, demand for petroleum products decreased by 8.8 million barrels / day (a fall of 8.8%) in 2020, to below its 2013 level.

In Turkey, despite the fund inflows in the last quarter of 2020, portfolio investments decreased throughout the year as a whole. In such an environment, the significant depreciation of the Turkish Lira during the year was partially offset by a shift in economic policy in the final quarter of 2020. The contribution of the weak TL to Turkey's competitiveness and decline in the current account deficit remained more limited in 2020, in contrast with 2019, and the exports coverage ratio decreased amid a shrinking foreign market.

Before the pandemic struck, Turkey's economy had rebounded in the wake of the contraction in the second half of 2019, with growth of 4.5% realized in the first quarter of 2020 with the support of the base effect. However, in the second quarter, when the pandemic wrought its devastating effect, a 9.9% contraction was recorded although even this performance was considerably better than in many international economies. The economy bounced back in the 3rd and 4th quarters with the economic stimulus extended and the easing of lockdown measures, and closed the whole year with 1.8% growth.

Benchmark crude oil prices, which started 2020 at USD 66.1/barrel, entered a downward trend after China reported the outbreak to the World Health Organization in January. A dispute between OPEC+ members Russia and Saudi Arabia, at a time when the global demand suffered its steepest loss with the United States and Europe being the epicenter of the outbreak, led to a simultaneous demand and supply shock for the first time in the market, and Brent crude prices fell to as low USD 13.2/barrel. In April and May, when the slump in demand extended to as much as 20 million barrels per day, the OPEC+ grouping announced an agreement to cut production by 9.7 million barrels per day, more than double the cut implemented in the 2008 crisis, in order to stave off a collapse in oil prices. Crude oil prices, which rebounded from an 18-year low as demand began to climb as restrictions eased in the summer, closed 2020 at USD 50.5/barrel, also influenced by news of vaccination breakthroughs in November. Brent crude prices, which averaged USD 41.8/barrel, were USD 22.4/barrel (35%) lower than their 2019 level.

41.8

USD/BARREL

Brent crude prices, which averaged USD 41.8/barrel, were USD 22.4/barrel (35%) lower than their 2019 level.

MESSAGE FROM THE CHAIRMAN

In 2020, we maintained our strong balance sheet structure and managed our financial resources efficiently, sustainably expanding our cash generation capabilities.

Seeking to continue their operations under these difficult market conditions, many refineries struggled with low capacity utilization rates, high inventories and, as a result, low crack margins throughout the year. In addition, with a glut of supply caused by the commissioning of new refineries, work on which had started many years previously, refineries with capacities of over 2 million barrels/day, most of which are in the OECD region, announced their final decision to close. Analysts expect the closure of a further 2 million barrels/day in refining capacity over the next two years as more refining capacity continues to come on stream up until 2025, as well as the slow recovery in demand.

During this period, when global demand recorded a sharp slump, Turkey stood out as one of the few markets to decouple positively, with demand for petroleum products declining by a mere 1% in 2020 according to EMRA figures. In this decline, demand for jet fuel declined by about 54%, while demand for gasoline declined by 2.5%. On the other hand, with the support of increased commercial activity and heavy goods transportation, diesel demand managed to close the year with growth of 1%.

Tüpraş, which received COVID-19 TSE Safe Production Certification for all of its refineries, maintained its production during this period and continued to meet its responsibility to supply Turkey's need for fuel without interruption. With our company prioritizing optimization in order to achieve the most efficient use its resources in these difficult periods, despite the difficulty in supplying cost-effective crude oil amid the global and local developments, 18 types of crude oil from 11 countries

were purchased to form the most optimal charging composition with the support of our capability to process different types of heavy and high sulfur crudes and a constantly expanding pool of crude oil supply.

Due to challenging market conditions, Tüpraş operated at an 82% capacity utilization in 2020, and even though this was below the average of previous years, Tüpraş achieved a total sales volume of 24.5 million tons, with production of 23.4 million tons and domestic sales of 19.8 million tons, recording turnover of TL 63.2 billion.

Despite the difficulties, Tüpraş continued to create economic added value by unwaveringly meeting our country's energy needs in 2020 and continued to carry out social activities in the fields of culture, the arts, education and sports, which our country needs. As a supporter of the HeForShe movement for the empowerment of women under the leadership of our Group, Tüpraş also continues to contribute to the development of society through its sponsorship in education, sports, and culture and arts, especially Arter.

Our top priority, which lies at the heart of the success we have achieved and from which will not waiver, will remain occupational safety and technical safety, in the words of the late Vehbi Koç, the founder of the Koç Group, "Our most important capital is our human resources". I would like to emphasize that our main responsibility is to constantly review our processes with this awareness and to ensure our working principles become safer and more secure every day.

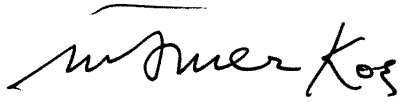
Esteemed stakeholders,

Although we fell short of our financial targets in 2020, with profitability turning negative, we rounded off this period when refineries with 2 million barrels/day of capacity were forced to close still very much in the game, thanks to our effective risk management policies and the preventive financing actions we had implemented which will meet the needs of the period in a timely manner. Thanks to these actions, we were able to maintain our strong balance sheet structure and managed our financial resources efficiently, sustainably expanding our cash generation capabilities and raising our cash level by TL 9 billion to TL 19.8 billion by the end of the year.

The worst is now behind us with the global pandemic, but despite the progress made in the vaccination program, we are still not yet out of the woods. I hope that 2021, which begins with some a chance to recoup our losses, will mark a period when the return to normal begins with an increasing number of vaccinations.

I am confident that thanks to our operational efficiency and strong financial structure, as Tüpraş, we will achieve much more successful business results in the new era, despite all the challenges.

I would like to take this opportunity to thank all our stakeholders, especially our employees, suppliers and business partners, for their valuable contributions and the trust and commitment they have placed in Tüpraş.



Ömer M. Koç
Chairman

I am confident that thanks to our operational efficiency and strong financial structure, as Tüpraş, we will achieve much more successful business results in the new era, despite all the challenges.

INDEPENDENT AUDITOR’S REPORT (OPINION)

We have audited the accompanying consolidated financial statements of Türkiye Petrol Rafinerileri A.Ş. (the “Company”) and its subsidiaries (collectively referred to as the “Group”) which comprise the consolidated statement of financial position as at 31 December 2020, the consolidated statement of profit or loss and other comprehensive income, the consolidated statement of changes in equity and the consolidated statement of cash flows for the year then ended and notes to the consolidated financial statements comprising a summary of significant accounting policies.

In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Group as at 31 December 2020, and its financial performance and its cash flows for the year then ended in accordance with Turkish Financial Reporting Standards (“TFRS”).

* For the full Independent Auditor’s Report, go to page 177-180.

CONSOLIDATED BALANCE SHEET/ CONSOLIDATED INCOME STATEMENT

Consolidated Balance Sheet

(TL thousand)	2020	2019
Total Current Assets	30,663,146	27,918,955
Total Non-Current Assets	30,505,376	27,592,603
Total Assets	61,168,522	55,511,558
Total Short Term Liabilities	28,340,528	28,120,266
Total Long Term Liabilities	21,155,469	14,254,752
Total Liabilities	49,495,997	42,375,018
Total Equity	11,672,525	13,136,540

Consolidated Income Statement

(TL thousand)	2020	2019
Revenues	63,243,815	89,600,776
Costs of Goods Sold	-61,479,585	-84,716,489
Gross Profit	1,764,230	4,884,287
Operating Profit	-619,027	2,230,137
Profit Before Tax	-3,795,394	-311,348
Taxes	1,372,469	896,678
Net Profit for the Period	-2,422,925	585,330
Equity Holders of the Parent	-2,493,511	525,837
Earnings per Share (TL)	-9.96	2.10

BOARD OF DIRECTORS



Ömer M. Koç
Chairman



Ali Y. Koç
Vice Chairman



Rahmi M. Koç
Member



Semahat S. Arsel
Member



Levent Çakıroğlu
Member



Erol Memioğlu
Member



Yağız Eyüboğlu
Member



Zafer Sönmez
Independent Member and Privatization
Administration Representative



Ayşe Canan Ediboğlu
Independent Member



Muharrem Hilmi Kayhan
Independent Member



Kamil Ömer Bozer
Independent Member

BOARD OF DIRECTORS

Ömer M. Koç **Chairman**

He received his B.A. degree from Columbia University in 1985. He worked at Kofisa Trading for one year and completed his MBA at Columbia University in 1989. After working at Ramerica International Inc., he joined the Koç Group in 1990. He held various senior positions at Koç Holding including Finance Coordinator, Vice President and President of the Energy Group. He became Member of the Board of Directors in 2004 and Vice Chairman in May 2008. In February 2016, he was appointed as the Chairman of the Board of Directors of Koç Holding. He serves as the Vice President of TÜSİAD High Advisory Council, Chairman of Tofaş, Tüpraş and Yapı Kredi Kültür Sanat Yayıncılık Board of Directors and Member of the Board of Directors at other Koç Group companies. He is also the Chairman of Turkish Educational Foundation Board of Trustees and Chairman of the Board of Directors of Geyre Foundation.

Ömer M. Koç has been serving as the Chairman of Tüpraş Board of Directors since 2008.

Ali Y. Koç **Vice Chairman**

He received his bachelor's degree from the Management Faculty of Rice University and MBA from Harvard Business School. He started his career at American Express Bank as a Management Trainee and continued as an Investment Analyst at Morgan Stanley Investment Bank. Ali Y. Koç joined Koç Holding in 1997 and held senior-level positions until 2010 including new business development and information Technologies as well as President of Corporate Communications and IT Group. After serving as Member of the Board of Directors at Koç Holding for over 8 years, he was elected as Vice Chairman in February 2016. Since April 2016, Ali Y. Koç also serves as Chairman of the Board of Directors of Koç Financial Services, Yapı Kredi Bank, Ford Otosan, Otokar as well as several other Koç Group companies. In addition to being Chairman and Vice Chairman at Turkey's largest companies and financial institutions, Ali Y. Koç also contributes to the country's social and economic development and currently is the President of Fenerbahçe Sports Club and Member of the Board of Directors of the National Competition Research Association (URAK) and Endeavor Turkey. He is also a Member of the Global Advisory Council of Harvard University,

Bank of America and Council on Foreign Relations and a Member of the Panel of Senior Advisers at Chatham House. He represents Turkey at the CBI - Confederation of British Industry.

Appointed in 2008 as a member of Tüpraş Board of Directors, Ali Y. Koç has been serving as the Vice Chairman of the Company since April 2016.

Rahmi M. Koç **Member**

A graduate of Johns Hopkins University in Business Administration, he joined the Koç Group in 1958 at Otokoç Ankara. He became Chairman of the Management Committee in 1980 and was named Chairman of the Board of Directors of Koç Holding in 1984, a post he held until 2003 when he became the Honorary Chairman. Apart from Koç Holding, he also serves as a Member / Chairman of the Board of Directors of other Koç Group companies. In addition, Rahmi M. Koç is or has been affiliated with social and professional organizations including:

- The Metropolitan Museum of Art, New York City, Honorary Trustee
- Co-Chairman of the Business Advisory Council for South East Europe (BAC SEE)
- Vice Chairman of the Board of Trustees of Vehbi Koç Foundation
- Honorary Chairman of the Board of Trustees of Koç University
- Founder and Chairman of the Board of Directors of the Rahmi M. Koç Museum and Cultural Foundation
- Chairman of the Board of Directors of the Vehbi Koç Foundation American Hospital
- Honorary Chairman and Founding Member of TURMEPA, The Turkish Marine and Environment Protection Association
- Honorary Chairman of the Advisory Board of the Turkish Industrial and Business Association (TÜSAD)
- Member of the Advisory Board of the Turkish Employers Association
- Founding Chairman of the Global Relations Forum
- Former President of the International Chamber of Commerce (1.1.1995-31.12.1996)
- Former President of the Turkish Greek Business Council (1992-1999)

- Former Member of the Allianz Aktiengesellschaft International Advisory Board
- Former Member of the JP Morgan International Council
- Former Member of the International Advisory Board of the US Council on Foreign Relations

Rahmi M. Koç has been awarded with the following merits and degrees:

- “Honorary Doctorate” degrees by Johns Hopkins University (Baltimore-Maryland), Eskişehir Anadolu University, İzmir Ege University, Ankara Bilkent University, Ovidius University of Constanza and Aydın Adnan Menderes University
- “Outstanding Service Award” by the President of the Turkish Republic
- German Government’s “Grosses Verdienst Kreutz”
- “Order of High Merit of the Italian Republic”
- “Order of Merit of the Austrian Government”
- “(Honorary) Commander of the Most Excellent Order of the British Empire (CBE)”
- “Officier dans l’Ordre National de la Légion d’Honneur”, the highest medal awarded by the French government
- “Responsible Capitalism Lifetime Achievement Award” from FIRST, a leading multidisciplinary international affairs organization
- The medal of Foreign Policy Association (FPA), globally recognized think-tank with its 100-year history
- “Hadrian Award” by the World Monuments Fund to the Koç Family
- “Carnegie Medal of Philanthropy” (New York) to the Koç Family
- “BNP Paribas Philanthropy Award” (Paris) to the Koç Family
- “Iris Foundation Award” from BARD Graduate Center to the Koç Family (April 2012)

Rahmi M. Koç has been serving as a Member of the Board of Directors of Tüpraş since 2008.

Semahat S. Arsel **Member**

She began her career in 1964 as a Member of the Board of Directors of Koç Holding, a position she continues to hold. In addition, she is Chairman of the Board of Directors of Vehbi Koç Foundation and the Divan Group, President of the Semahat S. Arsel Nursing Education and Research Center and Founder of the Koç University School of Nursing. She also serves as Member of the Board of Directors of other Koç Group companies as well as Member of the Board of Trustees of the Educational Volunteers Foundation of Turkey (TEGV). Semahat Arsel has received an “Honorary Doctorate” degree from Istanbul University.

Semahat S. Arsel has been a member of Tüpraş Board of Directors since 2009.

Levent Çakıroğlu **Member**

Levent Çakıroğlu graduated from Ankara University Faculty of Political Sciences, Business Administration Department and received his master’s degree from University of Illinois. He started his career as an Assistant Auditor at the Ministry of Finance in 1988, where he worked as a Senior Auditor between 1991 and 1997. He was appointed as Assistant Manager of Financial Crimes Investigation Board between 1997 and 1998, meanwhile he taught as a Part Time Instructor at Bilkent University. Çakıroğlu, joined Koç Group in 1998 as Koç Holding Financial Group Coordinator. He was the General Manager of Koçtaş between 2002 and 2007 and the CEO of Migros between 2007 and 2008. He was assigned as the CEO of Arçelik in 2008 and also became President of the Durable Goods Group of Koç Holding in April 2010. Çakıroğlu has been appointed as the CEO of Koç Holding in April 2015. He currently serves as the CEO and has also been Member of the Board of Directors of Koç Holding since April 2016. Levent Çakıroğlu is also Chairman of the Board of Directors of Arçelik- LG and TürkTraktör, the Vice Chairman of Yapı Kredi Bank and Otokar and Member of the Board of Directors at various Koç Holding companies.

Levent Çakıroğlu has been a member of Tüpraş Board of Directors since 30 March 2015.

BOARD OF DIRECTORS

Erol Memioğlu **Member**

Erol Memioğlu is a graduate of the Middle East 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 at the Koç Holding A.Ş. Energy Group in 1999, later served as an Executive Board Member at Koç Holding Energy Group from 2003 to 2004; he has served as President of the same Group between May 2004 and April 2016.

Erol Memioğlu has been a member of Tüpraş Board of Directors since 2006.

Yağız Eyüboğlu **Member**

Yağız Eyüboğlu graduated from Boğaziçi University with a BA degree in Economics in 1991. He went on to earn an MBA from Koç University in 1996. Mr. Eyüboğlu began his professional career as a Management Trainee at Arçelik in 1991. Starting in 1993, he worked at Koç Holding for more than 10 years, as Auditor, Senior Internal Auditor, Assistant Financial Coordinator and Financial Coordinator, respectively. Between 2004 and 2009, he served as CFO of Arçelik; CEO and Board Member of Beko Elektronik; Assistant to the President of the Foreign Trade and Tourism Group at Koç Holding; and Human Resources Director at Koç Holding. From 2009 to October 2015, he was the General Manager of Aygaz. In October 2015, he was appointed Deputy President of the Energy Group at Koç Holding and since April 2016 he has been serving as the President of Energy Group. Mr. Eyüboğlu currently serves as a Board Member both in several Koç Holding companies and non-governmental organizations.

Yağız Eyüboğlu has been a member of Tüpraş Board of Directors since 4 April 2016.

Zafer Sönmez **Independent Member and Privatization Administration Representative**

Zafer Sönmez graduated from Istanbul University, Department of Business Administration. In 1997, Sönmez began his professional career at Interbank in the Audit Department. Between 2000 and 2003, he worked at Dışbank and he served at MNG Bank in 2004. Between 2010 and 2011, Sönmez served as Corporate Banking Director at the Istanbul Branch of Royal Bank of Scotland. Between 2005 and 2010, he held management roles in the Portfolio Management and Corporate Banking Departments. Between 2012 and 2013, he served as the Senior Manager of the Middle East and Central Asia of Khazanah Nasional Berhad in Turkey. In October 2013, he took part in the establishment of Khazanah Turkey Regional Office. Between 2017 and 2018 he was responsible for Khazanah Turkey Regional Office's investments in the Middle East, Central Asia, Eastern Europe and North Africa and led the Khazanah Africa team. He also served as a member of the Board of Directors of Acıbadem Sigorta between 2013 and 2018, Acıbadem Health Group between 2017 and 2018 and Sabiha Gökçen International Airport between 2016 and 2018. Zafer Sönmez, who was assigned as Board member and CEO of Türkiye Varlık Fonu A.Ş. in September 2018, is also the Deputy Chairman of Board of Directors in PTT and Borsa İstanbul.

Zafer Sönmez has been an Independent Member of Tüpraş Board of Directors since March 2019.

Ayşe Canan Ediboğlu **Independent Member**

After completing her high school education at Ancaster House School, she got her bachelor's degree in economics and her master's degree in financial management and control from the University of Southampton, U.K. After working as a research assistant at the same University, she continued her career as a Planning Manager at Shell in 1980. She held various positions at Shell Turkey, before being appointed as its General Manager in 2002 and Shell Turkey National Manager in 2006. She sat as a member on the Board of Directors of Shell-Turcas Petrol A.Ş. Ayşe Canan Ediboğlu served as an Independent Member of Aygaz Board of Directors between 2012-2018. Additionally, she is an Independent Member of ING Bank Turkey Board of Directors since 2010.

Ayşe Canan Edipoğlu has been an Independent Member of Tüpraş Board of Directors since March 2018.

Muharrem Hilmi Kayhan
Independent Member

Muharrem Kayhan received education at St. Joseph French School and Robert College of İstanbul. He got his Engineering Degree in Textiles in 1976 from the University of Manchester in England. He received his MBA from Cornell University in 1978. Muharrem Kayhan is presently Vice Chairman of the boards of Söktaş and its subsidiaries. He has represented the interests of the Turkish textile industry in various European Union platforms while serving on the boards of the Aegean Chamber of Industry, the Exporters' Union, and the Turkish Textile Employers' Union. He served as the Chairman of TÛSİAD between 1997 and 1999, and is now an Honorary Chairman. Muharrem Kayhan serves on the Board of Trustees of Robert College the İzmir Culture, Art and Education Foundation, and Bizim Okul Foundation. He has represented Spain as Honorary Consul in İzmir since 2003. He is the recipient of the Turkish National Assembly Distinguished Service Award (2009).

Muharrem Hilmi Kayhan has been an Independent Member of Tüpraş Board of Directors since March 2018.

Kamil Ömer Bozer
Independent Member

After receiving his degree in business administration from the Middle East Technical University, Kamil Ömer Bozer completed a master's degree at Georgia State University in U.S.A. He began his career as a management trainee at Koç Holding A.Ş. in 1983. After serving as Deputy Chief Executive of Maret A.Ş. from 1990 and as General Manager of Düzey A.Ş. from 1995, he became General Manager of Migros Türk T.A.Ş. in 2002. He was appointed President of Food, Retailing and Tourism Group in 2005. He served as President of Food and Retailing Group between 2006 and 2008, and once again as President of Tourism, Food and Retailing Group from 2009 to April 2011. Kamil Ömer Bozer currently serves as a Board Member at Coca Cola İçecek, Adel Kalemcilik Ticaret ve Sanayi A.Ş., Kamil Yazıcı Yönetim ve Danışma A.Ş., Anadolu Isuzu and the Boyner Group, as the Advisor to the Board of Directors of Anadolu Etap, and as an Independent Board Member at Söktaş Tekstil A.Ş. and Arçelik A.Ş.

Kamil Ömer Bozer, has been an Independent Member of Tüpraş Board of Directors since March 2018.

PROFIT DISTRIBUTION POLICY

Our Company distributes dividends in compliance with the Provisions of Turkish Commercial Code, the Capital Markets Regulations, the Tax Regulations and other related regulations and the related provisions of our Company's Articles of Association regarding dividend distribution.

In the dividend distribution, in compliance with the Corporate Governance Principles, a balanced and consistent policy is pursued between the shareholders and the Company benefits. In principle; as far as the related regulations, investment needs and financial situation allow, the entire amount of the "net distributable profit for the period", calculated within the frame of the Capital Markets Regulations, is distributed in cash - taking into consideration the market expectations, long term company strategies, investment and financing policies, profitability and cash position - as long as it is covered from the existing resources in our legal records.

The General Assembly or the Board of Directors, if authorized, may decide to distribute dividends with installments in compliance with the regulations of the Capital Markets. There is no privilege in the Articles of Association regarding the participation to dividend distribution.

The aim is to make the dividend distribution within one month at the latest after the General Assembly meeting. Dividend distribution date is decided by the General Assembly. As per the Company's Articles of Association; in compliance with the Regulations of the Capital Markets, the Board of Directors may distribute advance dividend provided that the authorization is granted by the General Assembly. Profit distribution policy and profit distribution proposal are included in the annual report and presented to the approval of shareholders at the General Assembly.

PROFIT DISTRIBUTION PROPOSAL

Financial statements for the accounting period 1 January - 31 December 2020, in compliance with the TFRS, prepared by the management of Turkish Petroleum Refineries Corporation, and audited by PwC Bağımsız Denetim ve Serbest Muhasebeci Mali Müşavirlik A.Ş. have been reviewed and approved to be presented to the General Assembly.

Upon review of the aforementioned financial statements and the records of Turkish Petroleum Refineries Corporation in accordance with Tax Procedural Law, net loss of TL 2,493,511,000.00 per the financial statements prepared in accordance with TFRS and net losses of TL 3,070,277,889.10 as per the records in accordance with the Tax Procedural Law have been noted and profit distribution proposal is prepared accordingly as explained below;

In accordance with the Capital Market Board Regulations, Article 18 of the Company's Articles of Association and within the framework of the Dividend Distribution Policy approved by the

shareholders at the General Assembly, dated 31 March 2014; No dividends to be distributed due to recognized loss from the activities, according to the financial statements prepared with both Tax Procedure Law and TFRS,

In the Financial Statements prepared in accordance with the Tax Procedural Law records; due to a loss of TL 3,070,277,889.10 in the current year result, in the financial statements prepared in accordance with the Tax Procedural Law is to be transferred to the retained losses,

Transferring the Net Period Loss Attributable to Equity Holders of the Parent of TL 2,493,511,000.00 which is formed according to the financial statements prepared in line with TFRS, to the retained losses in the related financial statements,

These matters above are to be subject to approval of our shareholders at the Ordinary General Meeting of the Company which will be held in March 2021.

PROFIT DISTRIBUTION PROPOSAL

TÜRKİYE PETROL RAFİNERİLERİ A.Ş. DIVIDEND DISTRIBUTION TABLE (TL)

1. Paid in Capital/Issued Capital	250,419,200.00	
2. Total Legal Reserves (According to Statutory Income Statements)	503,342,592.00	
Information on privileges in profit distribution if any in the Articles of Association		
	According to CMB	According to Statutory Records
3. Current Period Profit/Loss (=)	-3,865,980,000.00	-3,070,277,889.10
4. Taxes Payable (-)	1,372,469,000.00	0.00
5. Net Profit (=)	-2,493,511,000.00	-3,070,277,889.10
6. Previous Years Losses (-)	0.00	0.00
7. General Legal Reserves (-)		
8. DISTRIBUTABLE NET PROFIT FOR THE PERIOD (=)	-2,493,511,000.00	0.00
9. Donations Made during the Year (+)	22,656,546.48	
10. Net Distributable Profit Added Donations	-2,470,854,453.52	
11. First Dividend to Shareholders		
- Cash	0.00	0.00
- Bonus		
- Total	0.00	0.00
12. Dividend to Privileged Shareholders		
13. Distributed Other Dividend	0.00	0,00
- Dividend to the Board Members		
- Dividend to the Employees		
- Other		
14. Dividend to redeemed shareholders		
15. Secondary Dividends to Shareholders		0.00
16. General legal Reserves	0.00	0.00
17. Statutory Reserves		
18. Special Reserves		
19. EXTRAORDINARY RESERVES	-2,493,511,000.00	0,00
20. Other Resources to Be Distributed	0.00	0,00
- Previous Years Profit		
- Extraordinary Reserves		
- Other Distributable Reserves as per the Law and the Articles of Association	0.00	0.00
21. Allocated Legal Reserves To Be Distributed From Other Sources	0.00	0.00

DIVIDEND RATIO TABLE

GROUP	TOTAL AMOUNT OF DIVIDEND DISTRIBUTED		TOTAL DISTRIBUTED DIVIDEND/NET DISTRIBUTED PROFIT	DIVIDEND PER SHARE WITH NOMINAL VALUE OF TL 1	
	TUTARI (TL)	BEDELSİZ (TL)	ORAN (%)	TUTARI (TL)	ORAN (%)
A	0.00		0.00	0.0000	0.00
NET C	0.00		0.00	0.0000	0.00
TOTAL	0.00	0.00	0.00		

AMENDMENTS TO THE ARTICLES OF ASSOCIATION

OLD TEXT	NEW TEXT
ARTICLE 4: HEAD OFFICE AND BRANCH OFFICES OF THE COMPANY <p>The head office of the Company is located in Körfez/ KOCAELİ. The address of the Company is Güney Mahallesi Petrol Caddesi No:25 41790 Korfez, KOCAELİ. In case of an address change, the new address is registered at the Trade Registry and announced in the Turkish Trade Registry Journal. The notices served to the registered and announced address are considered as delivered to the company. If a company does not register its new address after vacating its registered and announced address within the prescribed period, it may constitute a reason for the termination of the company. If the company opens any branch offices, the said branch offices shall be registered at the trade registry and announced in the Turkish Trade Registry Journal.</p>	ARTICLE 4: HEAD OFFICE AND BRANCH OFFICES OF THE COMPANY <p>The head office of the Company is located in Şişli/İSTANBUL. The address of the Company is Güllübahar Mahallesi Büyükdere Caddesi No 101A 34394 Şişli, İSTANBUL. In case of an address change, the new address is registered at the Trade Registry and announced in the Turkish Trade Registry Journal. The notices served to the registered and announced address are considered as delivered to the company. If a company does not register its new address after vacating its registered and announced address within the prescribed period, it may constitute a reason for the termination of the company. If the company opens any branch offices, the said branch offices shall be registered at the trade registry and announced in the Turkish Trade Registry Journal.</p>
ARTICLE 6: CAPITAL <p>The company has adopted the registered capital system according to the Law No. 6362 and implemented this system upon the approval of the Capital Market Board dated 22.11.1990 and no. 886.</p>	ARTICLE 6: CAPITAL <p>The company has adopted the registered capital system according to the Law No. 6362 and implemented this system upon the approval of the Capital Market Board dated 22.11.1990 and no. 886.</p>
a) Registered capital : <p>The registered capital of the company is TL 500,000,000.00 (five hundred million Turkish Liras), which is divided in to 50,000,000,000(fifty billion) shares each with a nominal value of 1 Kuruş (Turkish Cent).</p> <p>The registered capital ceiling permit issued by the Capital Market Board is valid for the years 2017-2021 (5 years). Even if the registered capital ceiling limit allowed may not be reached by the end of 2021, the Board of Directors has to obtain the permission of the General Assembly after obtaining the approval of the Capital Market Board for obtaining a new period not exceeding 5 years regarding the previous ceiling or a new ceiling value in order to adopt a resolution for a capital increase. If the said permission is not obtained, the company shall be considered as having abandoned the registered capital system.</p>	a) Registered capital : <p>The registered capital of the company is TL 500,000,000.00 (five hundred million Turkish Liras), which is divided in to 50,000,000,000(fifty billion) shares each with a nominal value of 1 Kuruş (Turkish Cent).</p> <p>The registered capital ceiling permit issued by the Capital Market Board is valid for the years 2021-2025 (5 years). Even if the registered capital ceiling limit allowed may not be reached by the end of 2025, the Board of Directors has to obtain the permission of the General Assembly after obtaining the approval of the Capital Market Board for obtaining a new period not exceeding 5 years regarding the previous ceiling or a new ceiling value in order to adopt a resolution for a capital increase. If the said permission is not obtained, the company shall be considered as having abandoned the registered capital system.</p>

OLD TEXT

b) Issued Capital and Shares :

The issued capital of the company is TL 250,419,200.00, (two hundred and fifty million four hundred and nineteen thousand, two hundred Turkish Liras, which is fully paid free of any collusion.

The issued capital is divided in to two groups as (A) and (C) as shown below and all of the shares are registered shares.

GROUP	SHAREHOLDER'S NAME	CAPITAL (TL)	TYPE	NUMBER OF SHARES
A	Enerji Yatırımları A.Ş.	127,713,792.22	Registered	12,771,379,222
A	Other	122,705,407.77	Registered	12,270,540,777
C	OIB	0.01	Registered	1
Total		250,419,200.00		25,041,920,000

The Group C share shall remain in existence until terminated by a decision of the Privatization Supreme Board (or a decision of the relevant authority at that time). In the event a decision might be made for terminating the rights vested in the Group C share, this share shall be converted in to a Group A share.

The shares making up the capital are monitored on the records within the framework of the recording rules.

The capital of the company may be increased or decreased as necessary within the framework of the provisions of the Turkish Commercial Code and Capital Market legislation. The amendments concerning the reduction of the amount of capital on the articles of association which is required to take approval by T.R Energy Market Regulatory Authority.

The Board of Directors is authorized to increase the issued capital by issuing new shares up to the ceiling value of the registered capital as deemed necessary in compliance with the provisions of the Capital Market Law as well as restricting the rights of the owners of the privileged shares and limiting the right of the shareholders to buy new shares. The power of restricting the right of buying new shares may not be used in a manner that might create inequality between the shareholders.

In all cases, the Board of Directors shall issue new group A shares in proportion with the shares owned by the Group A shareholders in the Company in case of a capital increase. In case of a capital increase, the shareholders partake by buying the shares to be issued in the same group as they belong. However, the Group C share shall not partake in the capital increase and remain to be a single share.

The Capital Market Board regulations and the provisions of these Articles of Association shall apply for the used or un-used pre-emptive rights.

The share representing the company's capital is monitored within the framework of the dematerialization basis.

NEW TEXT

b) Issued Capital and Shares :

The issued capital of the company is TL 250,419,200.00, (two hundred and fifty million four hundred and nineteen thousand, two hundred Turkish Liras, which is fully paid free of any collusion.

The issued capital is divided in to two groups as (A) and (C) as shown below and all of the shares are registered shares.

GROUP	SHAREHOLDER'S NAME	CAPITAL (TL)	TYPE	NUMBER OF SHARES
A	Enerji Yatırımları A.Ş.	127,713,792.22	Registered	12,771,379,222
A	Other	122,705,407.77	Registered	12,270,540,777
C	OIB	0.01	Registered	1
Total		250,419,200.00		25,041,920,000

The Group C share shall remain in existence until terminated by a decision of the Privatization Supreme Board (or a decision of the relevant authority at that time). In the event a decision might be made for terminating the rights vested in the Group C share, this share shall be converted in to a Group A share.

The shares making up the capital are monitored on the records within the framework of the recording rules.

The capital of the company may be increased or decreased as necessary within the framework of the provisions of the Turkish Commercial Code and Capital Market legislation. The amendments concerning the reduction of the amount of capital on the articles of association which is required to take approval by T.R Energy Market Regulatory Authority.

The Board of Directors is authorized to increase the issued capital by issuing new shares up to the ceiling value of the registered capital as deemed necessary in compliance with the provisions of the Capital Market Law as well as restricting the rights of the owners of the privileged shares and limiting the right of the shareholders to buy new shares. The power of restricting the right of buying new shares may not be used in a manner that might create inequality between the shareholders.

In all cases, the Board of Directors shall issue new group A shares in proportion with the shares owned by the Group A shareholders in the Company in case of a capital increase. In case of a capital increase, the shareholders partake by buying the shares to be issued in the same group as they belong. However, the Group C share shall not partake in the capital increase and remain to be a single share.

The Capital Market Board regulations and the provisions of these Articles of Association shall apply for the used or un-used pre-emptive rights.

The share representing the company's capital is monitored within the framework of the dematerialization basis.

AMENDMENTS TO THE ARTICLES OF ASSOCIATION

OLD TEXT	NEW TEXT
ARTICLE 14: GENERAL ASSEMBLY	ARTICLE 14: GENERAL ASSEMBLY
<p>The following principles shall be applied in meetings of the General Assembly of Shareholders:</p> <p>a) Type of Calls; The General Assembly of Shareholders meets for ordinary or extraordinary meetings. Calls for these meetings shall be governed by the provisions of the Turkish Commercial Code and the regulations of the Capital Markets Board. Meetings of the General Assembly of Shareholders are open to public, including stakeholders and media, who will have no right to speak therein.</p> <p>b) Meeting Time; Ordinary meetings of the General Assembly of Shareholders are to be held at least once a year within three months following the end of each accounting period of the Company. The agenda topics are discussed and decided in these meetings. Extraordinary meetings of the General Assembly of Shareholders are held to take necessary decisions in any case and at any time required in the course of business of the Company in accordance with the provisions of the Turkish Commercial Code, the regulations of the Capital Markets Board, and this Articles of Association.</p> <p>c) Right to Vote; The shareholders attending the ordinary and extraordinary General Assembly meetings use their votes pro rata with the nominal value of their shares. The votes are cast open in the General Assembly meetings. However, secret voting may also be used upon the request of the shareholders that own at least one twentieth of the shares represented in the meeting.</p> <p>d) Representation; Subject to compliance with the regulations of the Capital Markets Board pertaining to representation by proxy, in the meetings of the General Assembly of Shareholders, the shareholders may be represented by a proxy to be appointed from among other shareholders or from outside. A proxy who himself is a shareholder of the Company is entitled to use not only his own votes, but also votes of shareholders he represents in the meeting. Without prejudice to appointment of proxy via Electronic General Assembly System, the power of attorney to be granted thereinfor is required to be in writing.</p> <p>e) Place of meeting; The General Assembly convenes at the company's head office essentially, but may also convene at any convenient place in the vicinity of the head office upon the resolution of the Board of Directors or at any convenient place in Istanbul, Ankara or Izmir as seen fit by the Board of Directors,</p>	<p>The following principles shall be applied in meetings of the General Assembly of Shareholders:</p> <p>a) Type of Calls; The General Assembly of Shareholders meets for ordinary or extraordinary meetings. Calls for these meetings shall be governed by the provisions of the Turkish Commercial Code and the regulations of the Capital Markets Board. Meetings of the General Assembly of Shareholders are open to public, including stakeholders and media, who will have no right to speak therein.</p> <p>b) Meeting Time; Ordinary meetings of the General Assembly of Shareholders are to be held at least once a year within three months following the end of each accounting period of the Company. The agenda topics are discussed and decided in these meetings. Extraordinary meetings of the General Assembly of Shareholders are held to take necessary decisions in any case and at any time required in the course of business of the Company in accordance with the provisions of the Turkish Commercial Code, the regulations of the Capital Markets Board, and this Articles of Association.</p> <p>c) Right to Vote; The shareholders attending the ordinary and extraordinary General Assembly meetings use their votes pro rata with the nominal value of their shares. The votes are cast open in the General Assembly meetings. However, secret voting may also be used upon the request of the shareholders that own at least one twentieth of the shares represented in the meeting.</p> <p>d) Representation; Subject to compliance with the regulations of the Capital Markets Board pertaining to representation by proxy, in the meetings of the General Assembly of Shareholders, the shareholders may be represented by a proxy to be appointed from among other shareholders or from outside. A proxy who himself is a shareholder of the Company is entitled to use not only his own votes, but also votes of shareholders he represents in the meeting. Without prejudice to appointment of proxy via Electronic General Assembly System, the power of attorney to be granted thereinfor is required to be in writing.</p> <p>e) Place of meeting; The General Assembly convenes at the company's head office essentially, but may also convene at any convenient place in the vicinity of the head office upon the resolution of the Board of Directors or at any convenient place in Kocaeli, Ankara or Izmir as seen fit by the Board of Directors,</p>

OLD TEXT	NEW TEXT
ARTICLE 14: GENERAL ASSEMBLY	ARTICLE 14: GENERAL ASSEMBLY
<p>f) Attendees to the meeting; Executive directors and at least one member of the Board of Directors, internal auditor, at least one of the officers in charge of preparation of financial statements, and at least one officer knowledgeable on the specific issues included in the meeting agenda are required to be present in meetings of the General Assembly of Shareholders. If any person, other than those who are legally required to attend the General Assembly meetings, is not present in the meeting, the reasons of his non-participation are presented by the meeting chairman to the General Assembly of Shareholders for information purposes.</p> <p>g) Meeting Chairmanship; Meeting Chairman entitled to manage the discussions in the General Assembly of Shareholders is appointed from among shareholders, and at least 1 (one) vote-collector and Meeting Secretary are appointed from among shareholders or from outside.</p> <p>h) Meeting and Resolution Quorum; Without prejudice to the quorum provisions of the Capital Market Board regulations, the Meeting and Resolution Quorum for all the General Assembly meetings of the company is the absolute majority of the capital. However, adopting resolutions on the issues that are subject to the approval of the Board of Directors Member representing the Group C share mentioned in the article 10 of the Articles of Association depends on the affirmative vote of the Group C Shareholder.</p> <p>i) Internal Guideline; The Board of Directors prepares the “General Assembly Internal Guidelines” containing the rules for the operating rules and procedure for the General Assembly in conformity with the provisions of the Turkish Commercial Code and the regulations and communiqués issued under this Law and submits the same to the approval of the General Assembly. The Internal Regulation approved by the General Assembly is Registered and announced with the Trade Registry.</p> <p>i) Attending the General Assembly Meeting in the electronic medium; The shareholders entitled to attend the General Assembly Meetings of the company may participate in the electronic medium as well as per the article 1527 of the Turkish Commercial Code. The company may establish an electronic general assembly system that allows the stakeholders to attend the meetings in the electronic medium as per the provisions of the Regulation on the General Assembly Meetings to be Held in the Electronic Medium in the Common Stock Companies or may purchase the services of existing systems established for such purposes. In all the General Assembly Meetings to be convened, the stakeholders and their representatives are enabled to exercise their rights set out in the provisions of the said Regulation over the system established under the this provision of the Articles of Association.</p>	<p>f) Attendees to the meeting; Executive directors and at least one member of the Board of Directors, internal auditor, at least one of the officers in charge of preparation of financial statements, and at least one officer knowledgeable on the specific issues included in the meeting agenda are required to be present in meetings of the General Assembly of Shareholders. If any person, other than those who are legally required to attend the General Assembly meetings, is not present in the meeting, the reasons of his non-participation are presented by the meeting chairman to the General Assembly of Shareholders for information purposes.</p> <p>g) Meeting Chairmanship; Meeting Chairman entitled to manage the discussions in the General Assembly of Shareholders is appointed from among shareholders, and at least 1 (one) vote-collector and Meeting Secretary are appointed from among shareholders or from outside.</p> <p>h) Meeting and Resolution Quorum; Without prejudice to the quorum provisions of the Capital Market Board regulations, the Meeting and Resolution Quorum for all the General Assembly meetings of the company is the absolute majority of the capital. However, adopting resolutions on the issues that are subject to the approval of the Board of Directors Member representing the Group C share mentioned in the article 10 of the Articles of Association depends on the affirmative vote of the Group C Shareholder.</p> <p>i) Internal Guideline; The Board of Directors prepares the “General Assembly Internal Guidelines” containing the rules for the operating rules and procedure for the General Assembly in conformity with the provisions of the Turkish Commercial Code and the regulations and communiqués issued under this Law and submits the same to the approval of the General Assembly. The Internal Regulation approved by the General Assembly is Registered and announced with the Trade Registry.</p> <p>i) Attending the General Assembly Meeting in the electronic medium; The shareholders entitled to attend the General Assembly Meetings of the company may participate in the electronic medium as well as per the article 1527 of the Turkish Commercial Code. The company may establish an electronic general assembly system that allows the stakeholders to attend the meetings in the electronic medium as per the provisions of the Regulation on the General Assembly Meetings to be Held in the Electronic Medium in the Common Stock Companies or may purchase the services of existing systems established for such purposes. In all the General Assembly Meetings to be convened, the stakeholders and their representatives are enabled to exercise their rights set out in the provisions of the said Regulation over the system established under the this provision of the Articles of Association.</p>

2021 BOARD OF DIRECTORS CANDIDATES

Ömer M. Koç

Ali Y. Koç

Rahmi M. Koç

Semahat Sevim Arsel

Levent Çakıroğlu

Yağız Eyüboğlu

Erol Memioğlu

Muharrem Hilmi Kayhan (Independent)

Ayşe Canan Ediboğlu (Independent)

Kamil Ömer Bozer (Independent)

Tufan Erginbilgiç (Independent)

Tufan Erginbilgiç

Tufan Erginbilgiç holds a BSc in engineering, an MBA and an MA in Economics. Mr. Erginbilgiç held leadership positions at BP in several different businesses, including his roles as the CEO of BP Retail Europe, and the global CEO of BP Lubricants Division, which he made into an industry leader while quadrupling its profits. From 2007 to 2009, he was Chief of Staff to a Group CEO, playing a key role in the transformational program that increased revenues and delivered cost efficiencies. Mr. Erginbilgiç was appointed Chief Operating Officer in 2009 and then CEO of BP Downstream business in 2014, which includes global fuels, lubricants and petrochemicals businesses. During his tenure, global downstream was transformed and achieved record profitability and delivered a record-setting safety performance.

He served on the Board of GKN plc as a non-executive director between 2011 and 2018. Mr. Erginbilgiç joined Global Infrastructure Partners (GIP) in 2020 as a Partner. Based in London, he focuses on the energy sector and global operations.

Tufan Erginbilgiç also serves as a director of DCC plc (a member of the FTSE 100) and CNH Industrial (listed on the NYSE). He also holds a seat on the Strategic Advisory Board of the University of Surrey since May 2017.

* As of the date this report is published, no assignment has been made for the C group share representative by the Privatization Administration.

** For the CVs of the other members of the Board of Directors, see pages 24-27.

REMUNERATION POLICY

This policy determines the remuneration system for the Board of Directors and senior executives within the scope of the definition of persons discharging managerial responsibilities under Capital Markets Board regulations.

A fixed remuneration is determined for all members of the Board at the annual general meeting of the Company.

Additional payment is made to the executive members of the Board in accordance with the policy established for senior executives.

To the Chairman and members of the Executive Committee of the Board which supports the Board in the proper management of the Company in all respects, additional compensation determined by the Board of Directors in consultation with the Nomination and Remuneration Committee by taking into account such Committee Members' contributions, attendance at the meetings, functions, etc. can be granted. Payments made thereof to Executive Committee members within the year are to be deducted from the amount determined at the end of the year.

In respect of remuneration of the independent members of the Board of Directors, a payment plan based on the performance of the Company may not be used.

Pro rata payment is made to the members of the Board of Directors by taking into account the time they carried out their duty between the date of appointment and the date of resignation. Expenses incurred by the members of the Board of Directors on account of making contributions to the company (such as transportation, telephone, insurance, etc.) can be paid by the Company.

The remuneration of senior executives is to consist of two components, which are fixed and performance based.

Fixed salaries of senior executives are determined in accordance with international standards and legal obligations by taking into account the prevailing macroeconomic data in the market, the salary policies prevailing in the market, the size and long-term targets of the Company and the positions of the persons.

Bonuses for senior executives are calculated according to the bonus base, the performance of the Company and the individual performance. A summary of the criteria is as follows:

- **Bonus Base:** Bonus bases are updated at the beginning of each year. They vary depending on the work volume of the executives' positions. When updating the bonus bases, senior executive bonus policies in the market are taken into account.
- **Company Performance:** The performance of the Company is determined at the end of the year by measuring the financial and operational targets (market share, exports, overseas operations, productivity, etc.) assigned to the Company at the beginning of each year. In determination of the Company's targets, the sustainability of success and the degree to which it incorporates improvements over previous years are the principles taken into account.
- **Individual Performance:** Definition of individual performance is based on individual and collective objectives and key results determined by Top Level Managers together with their teams and managers. In measurement of individual performance, long term sustainable improvement in non-financial area is a significant principle

Severance payments may be granted to the senior executives by taking into account total term of service, term of service as an executive, as well as contributions made to the Company, the recent bonus base, and the salaries and bonuses paid in the last year of service.

Total amounts determined by the above principles and paid to the members of the Board of Directors during the year are submitted for shareholder approval at the next general meeting.

MESSAGE FROM THE GENERAL MANAGER



As a company which meets a significant part of our country's fuel needs, we realize all our investments and activities in a strategically important sector with an awareness of national responsibility.

İBRAHİM YELMENOĞLU

General Manager

Dear Stakeholders,

The COVID-19 pandemic, which emerged during a period of mounting global economic vulnerability, precipitated a major contraction in the world economy. It also sparked a slump in demand in the oil sector which exceeded even the most pessimistic predictions. At a stroke, demand for petroleum products lost the cumulative growth it had built up over the last 8 years and regressed to its 2013 levels. Gasoline demand declined to levels not seen for 10 years and jet fuel demand fell to lows not seen for 32 years.

2020 has indeed been an unprecedented year, in which all components affecting complex refinery profitability all struck together, with a simultaneous double whammy of supply and demand shocks.

According to the International Energy Agency, despite a decline of 8.8 million barrels / day in average crude oil demand for the whole year, the decline in supply remained at just 6.6 million barrels / day, leaving the industry reeling with glut of crude oil stocks, which reached record high levels throughout the year. On the product side, although refineries responded to the decrease in demand by reducing the production by 7.2 million barrels / day with measures such as maintenance and economic shutdowns, global product

stocks also surged rapidly.

More than 90% of the demand loss was caused by a slump in demand in for gasoline, diesel and jet fuel – the products most important in the profitability of advanced refineries. This led to a significant increase in inventories of the key petroleum products on a global basis, while product profitability also languished at historic lows. Thus, the benchmark Mediterranean refinery margin was significantly lower even than the USD 1.7 / barrel seen in 2019, itself approximately 60% lower than 2015-2019 average; indeed, the margin closed 2020 with an average margin of USD -0.2 / barrel – the first time on record that a negative margin was recorded.

On the other hand, medium and heavy crudes accounted for most of the fall in crude oil supply. This further disrupted the oil supply balance between heavy and light crudes, which had been disrupted by the sanctions imposed against Iran and Venezuela. In particular, complex refineries, which had started to benefit from relatively cheap heavy crude oil thanks to their investments, were negatively affected by this. Heavy crude oils even occasionally traded at higher prices than Brent crude oil, and were priced well above their 2020 averages throughout the year, trading at levels close to the benchmark Brent crude oil price, especially in the last 7 months of the year.

Consolidation in the refining industry

Given the unprecedented difficulty in the commercial environment, refineries faced a significant glut of supply with the commissioning of new refineries, almost all in Asia and the Middle East, for which investment had previously started. As a result, refineries, mostly in the OECD region, announced a move to lower capacity by over 2 million barrels / day. Reports prepared by industry specialists have warned that with more new refineries coming on stream until 2025, along with what is expected to be a slow recovery in demand, around 2 million barrels / day of capacity is expected to remain closed until 2023.

A positive differentiation for the Turkish market

In this period, when global demand recorded a fall exactly 10 times worse than that seen in the 2009 crisis, Turkey was one of the very few markets to differentiate positively from the global backdrop. According to the figures published by EMRA, demand for oil products, which had increased by 2.2% in 2019, decreased by 1% in 2020. A 54% slump in demand for jet fuel was the main factor behind this decrease, while demand for gasoline fell by 2.5%. On the other hand, with the support of increasing commercial activity and heavy goods transportation, demand for diesel closed the year with growth of 1%.

Tüpraş procured a total of 21.5 million tons of crude oil of 18 different types from 11 countries, including Turkey

Tüpraş purchased a total of 21.5 million tons of crude oil of 18 different types from 11 countries, including domestic crude oil, in 2020, when the Iranian sanctions continued and crude oil supply balances were completely disrupted with the OPEC+ cut decisions. Tüpraş procured the different kinds of crude oil in a manner to form the charge composition at the most affordable cost.

An 82% capacity utilization rate with optimal production

Tüpraş suspended production at the Izmir Refinery in May and June in order to minimize the negative effects of the decrease in demand occurred due to the COVID-19 pandemic. In this period, jet fuel production was reduced to a minimum within the scope of production optimization, especially as a result of jet fuel demand being affected relatively severely. Production was subsequently increased in order to meet the increase in demand which accompanied the normalization process. As a result, an average capacity utilization rate of 82% was achieved with an optimum production of 24.5 million tons, including crude oil and semi-finished products. In 2020, 23.4 million tons of products were produced, with a yield of high value-added white products standing at 81.5%, 2.5 percentage points higher than its previous year's level, with the effective use of conversion units.

Our company successfully fulfilled its responsibilities to its domestic customers with its wide fleet and alternating production and supply solutions. The company met the majority of the country's demand with 19.8 million tons of domestic sales, and achieved a total sales volume of 24.5 million tons, including export and transit sales.

MESSAGE FROM THE GENERAL MANAGER

The supply of all petroleum products, especially jet fuel, exceeded the demand throughout the year due to the pandemic. This kept refining margins under pressure throughout the year, and Tüpraş's net refinery margin post operating expenses stood at USD 1.3 / barrel in 2020.

With our sense of responsibility, we successfully fulfilled our duty to seamlessly meet Turkey's fuel needs

Tüpraş continues its activities in line with the words "I exist if my country exists", as spoken by the late Vehbi Koç, the founder of our Group. As a company which meets a significant part of our country's fuel needs, we realize all our investments and activities in a strategically important sector with an awareness of national responsibility. We worked with the awareness of delivering energy, the main input in tackling all kinds of problems, by continuing production without interruptions under the pandemic conditions, and we continue our unwavering work.

We took an agile approach during the pandemic process

Tüpraş took the necessary precautions in line with the current guidance and directives set out by all relevant authorities, especially the World Health Organization and the Ministry of Health of the Republic of Turkey, as well as the guidance published by the Koç Holding Crisis Center. Tüpraş has maintained the priority of safe production by obtaining the COVID-19 TSI Safe Production Certificate at all its refineries. The shift and working system was brought to a position where they were best able to tackle the pandemic, and the HES (Hayat Eve Siğar - Life Fits at Home) code application started to be rolled out for all of our employees.

During the pandemic period, Tüpraş focused on digital customer solutions in order to meet the demands and expectations of customers at the highest level as rapidly as possible, and adopted agile approaches to minimize the risk of contamination through field arrangements.

By maintaining priority on cyber security risks, which has increased with the pandemic, the concept of "working together", which was set out at the beginning of 2020 to support the agile transformation, evolved into "working together from a distance" to ensure that the company was ready for the change brought about by the pandemic and would adapt quickly. Turning the disadvantages of the pandemic and distance working into an advantage brought the opportunity to connect with specialists from all over the world and hear their opinions, regardless of the place and time. The digitalization roadmap and the company processes were updated accordingly.

We will continue to carry our competitive clout to the highest levels by designing the Tüpraş of the future from today.

Making a difference with our financial management

The extraordinary economic and financial conditions experienced due to the COVID-19 outbreak during 2020 revealed the advantage for our Company of maintaining a high level of financial resistance against all kinds of shocks at all times. Thanks to effective risk management policies, we implemented additional preventive actions to meet the needs of this difficult period in a timely manner and efficiently managed our financial resources, expanded our cash generation capabilities sustainably and increased our cash balance by TL 9 billion to TL 19.8 billion.

Our investments are the key to our sustainable high growth and competitiveness

In line with our goal of becoming one of the world's most competitive refiners, we pressed ahead with our investments in 2020 at a time when investment conditions had become more challenging than ever. We undertook USD 113 million of investment solely for our refining activities. Our consolidated investment total for all of our activities amounted to USD 153 million.

Acting with our identity of being responsible producer, Tüpraş achieved 713,000 GCal in energy savings through 30 energy efficiency projects carried out in 2020, and has reduced its CO₂ emissions by 433,000 tons with 108 projects in the last 5 years.

Our subsidiary, DİTAŞ, which continues to operate 17 tankers including 14 tankers in its ownership and 3 tankers leased under bareboat charter with a carrying capacity of approximately 749,000 DWT, installed scrubbers on four tankers with a total carrying capacity of 346,000 DWT, in order to comply with the regulations set out by the International Maritime Organization.

In addition, Körfez Ulaştırma, which is wholly owned by Tüpraş and is Turkey's first private rail operator, began operations in 2018. It further developed its activities by purchasing five new locomotives and investments in wagons. In 2020, Körfez Ulaştırma transported a total of 1.55 million tons of products, 77% of which were transported using its own wagons. In addition, within the scope of the ongoing investments, Körfez Ulaştırma signed an agreement for the purchase of 7 high-tech dual-fuel locomotives, which are to be delivered in 2021. The locomotives, which are to be used in freight transportation services by combining both electric and diesel operating modes of operation on lines with high inclines where strong traction power is needed, will also be Turkey's first hybrid locomotives.

Our London Office successfully continues its activities

Within the scope of our business diversification strategies in the sector set out in 2018, Tüpraş took concrete strategic steps by closely monitoring possible investment opportunities in the domestic and international areas. Our London Office, which had been operating as a branch since 2018, was transformed into a subsidiary 100% owned by Tüpraş in 2020 and continued its activities. In this difficult period, with the measures taken through Tüpraş Trading Ltd., the risks and negative effects of the pandemic on Tüpraş's commercial operations were minimized through land and sea storage operations and trading opportunities with third parties. In 2020, a total of 2.3 million tons of exports and 1.8 million tons of imports were carried out by Tüpraş Trading Ltd. to meet the refineries' needs for fuel and intermediate product needs.

A member of the TURQUALITY® Support Program

Tüpraş joined the TURQUALITY® program, where work serving the objective of Turkey's branding abroad is supported, in what is known as Turkey's "branding project". We aim to further strengthen our international branding efforts with the support we receive in this area.

Zero Waste Certificate at all refineries

Tüpraş was awarded the Basic Level Zero Waste Certificate, valid for 5 years, at the İzmit, Kırıkkale, Batman and İzmir refineries.

Acting with the priority of "My Future is My Safety" in all our work processes.

By defining the risks in all our operations, we continue our activities in line with the objective of eliminating risks and reducing them to an acceptable level within the framework of national and international standards. We expect all employees and solution partners to comply uncompromisingly with our "Health, Safety, Environment (HSE) and Process Safety Standards", which were set out in this context. Our goal is to achieve even better results

in our safe working indicators, where we achieved significant improvements in the past period, and to reach a position which is exemplary in our industry all over the world.

Looking ahead...

We will continue to carry our competitive clout to the highest levels by designing the Tüpraş of the future from today. We will continue to produce the highest added value for our country, our employees, our business partners, our shareholders and all of our stakeholders with the same determination as we go into the future.

I would like to thank my colleagues, who have contributed so much to our company with their safe and devoted work despite the extraordinarily difficult conditions in 2020, and to all our stakeholders, who give us strength with their support.

Yours sincerely,



İbrahim Yelmenoğlu
CEO

SENIOR MANAGEMENT



İbrahim Yelmenoğlu
General Manager

İbrahim Yelmenoğlu graduated from the Faculty of Political Sciences at Ankara University in 1991 and received his MA from the University of Illinois in 2003.

Starting his career in 1987 at the Ministry of Finance, he worked on the Board of Public Auditors in 1992. In 2004, he started work at the Koç Holding Auditors Group and served as Koç Holding A.Ş. Auditors Group Coordinator until 2006. Following the transfer of 51% of Tüpraş's shares to Koç Holding on 27 January 2006, İbrahim Yelmenoğlu was assigned as Assistant General Manager for Financial Affairs. He was appointed as General Manager as of 1 January 2016.



Doğan Korkmaz
Assistant General Manager
(Financial)

He started his professional life with Koç Holding MT program in 1996 and started working in Arçelik A.Ş. Investment Finance department at the same time. He held Corporate Finance and Financial Markets Strategist positions in Arçelik until 2007. In 2007, he became Treasury and Capital Markets Manager of Arçelik. In 2009, he became Finance Director at Beko plc, Arçelik's UK subsidiary. In 2012, he became the Finance Director of Arçelik. Doğan Korkmaz graduated from Department of Business Administration at DEU in 1996. He has also completed his MBA program in Koç University in 2007 and Diploma in Global Business at Oxford University in 2013. As of 1 January 2016, Doğan Korkmaz was appointed as Chief Financial Officer of Tüpraş.



Levent Zağra
Assistant General Manager
(Investments & Planning)

Levent Zağra graduated from Worcester Polytechnic Institute, Department of Mechanical Engineering, and earned his MBA and MS in Manufacturing Systems Engineering from Cornell University.

He began his professional career at Koç Holding in the Strategic Planning Department in 1996. In 2002, he was appointed as General Manager of Promena Electronic Commerce. Between 2009 and 2016, he served as the Energy Group Coordinator at Koç Holding. Levent Zağra was appointed as Assistant General Manager for Investments and Planning at Tüpraş in April 2016.



Özgür Kahramanzade

Assistant General Manager
(Sales & Marketing)

Özgür Kahramanzade holds a Bachelor's degree in Mechanical Engineering from Boğaziçi University. He received his Master's degree in Management from Purdue University, Krannert Business School.

Özgür Kahramanzade began his professional career as a Management Trainee at Beko Elektronik in 1994; in 1997, he began working as a Project Engineer at Koç Holding. He joined Zinerji A.Ş. as Project Officer in 2000; in 2001, he started work as a Project Manager at Koç Holding. In 2005, he was appointed as Director of Marketing, Investments and Group Companies at Opet Petrolcülük, and later as Supply and Technical Assistant General Manager at the same company in 2006. Between December 2010 and April 2016, he served as General Manager of Entek Elektrik Üretim A.Ş. In April 2016, Özgür Kahramanzade was appointed as Assistant General Manager responsible for Sales and Marketing at Tüpraş.



İhsan Serdar Kemaloğlu

Assistant General Manager
(Technical)

Serdar Kemaloğlu graduated from Middle East Technical University, Department of Chemical Engineering in 1991.

He began his professional career in 1993 as Plant Engineer at Tüpraş İzmit Refinery, where he assumed various roles including Supervisor and Chief Engineer at the Refinery's FCC, Crude Oil, Vacuum, Desulphurization and Hydrocracker Units. Serdar Kemaloğlu participated in efforts to commission the Isomerization Unit in 2002. As the Chief Process Control Engineer at İzmit Refinery, he was actively involved in the implementation of Advanced Process Controls (APC), launched in 2008. After serving as Production Manager at İzmit Refinery, he was appointed as Batman Refinery Manager in June 2013; and between October 2015 and February 2017, he served as Kırıkkale Refinery Manager. Serdar Kemaloğlu was appointed as Technical Assistant General Manager on 1 February 2017.



Atilla Uluşu

Assistant General Manager
(Crude Oil Supply & Foreign Trade)

Atilla Uluşu graduated from Lycée Saint Joseph İstanbul in 1994 and then Bilkent University Political Science and Public Administration in 1999.

He started his professional life in 2000 as Ram Algeria Regional Sales Representative and he became Regional Director in the same country as of 2002. In 2003, he was appointed as LPG Trading & Planning Responsible in Aygaz A.Ş. Following this position, he became Overseas LPG Sales Responsible mainly for LPG exports to Iraq and other East Mediterranean Countries. He became Crude Oil Supply Coordinator in Tüpraş in 2017; Crude Oil Supply Manager in 2013 and Crude Oil Supply and Production Planning Director in 2015. As of 5 May 2017, Atilla Uluşu was appointed as Assistant General Manager responsible for Crude Oil Supply and Foreign Trade.

MILESTONES IN TÜPRAŞ'S HISTORY

Operating since 1955, Tüpraş is the largest industrial company in Turkey in terms of turnover and the added value which it creates.

1950s

1955

- Turkey's first oil refinery, Batman Refinery, is commissioned.

1960s

1961

- İzmit Refinery (İpraş), with a 1 million tons/year capacity, is commissioned.

1970s

1971

- The First Expansion Project of the İzmit Refinery is completed with its crude oil processing capacity reaching 5.5 million tons/year.

1972

- The İzmir Refinery, with a refining capacity of a 3 million tons/year, is commissioned.

1974

- Turkey's only lubricant production facility is commissioned as part of the İzmir Refinery.
- Deniz İşletmeciliği ve Tankerciliği A.Ş. (DİTAŞ) is established.

1980s

1982

- The Second Expansion Project at the İzmit Refinery is completed, with its crude oil processing capacity reaching 11.5 million tons/year.

1983

- İpraş and the three other refineries united under Tüpraş.
- İpraş's 29% stake in Ditaş is acquired by Tüpraş.

1986

- The Kırıkkale Refinery, with a capacity of 5 million tons/year, is commissioned.

1987

- The İzmir Refinery Expansion Project is completed, raising the refinery's refining capacity to 10 million tons/year.

1989-2003

- Long Term Investment Plan launched.

1990s

1990

- Tüpraş handed over to the Privatization Administration.
- Management planning embraces the simulation approach.
- Production planning starts to follow the optimization model.

1991

- Some 2.5% of Tüpraş shares were offered to the public and start trading on the ISE.

1993

- Hydrocracker Complex commissioned at the Kırıkkale Refinery.
- Hydrocracker Complex commissioned at the İzmir Refinery.

1997

- Hydrocracker and CCR complexes commissioned at the İzmit Refinery.

Tüpraş R&D Center was opened in 2010

1998

- Automatic Pricing Mechanism put in place.

1999

- Free float rises to 3.58%.

2000s**2000**

- Following the second international public offering, 34% of Tüpraş shares begin trading on the İstanbul and London Stock Exchanges.

2001

- Petkim Yarımcı Complex acquired by Tüpraş.
- İzmir Refinery's CCR Reformer and Isomerization units commissioned.

2002

- İzmit Refinery's Isomerization Unit commissioned.
- 79.98% of Ditaş shares purchased for USD 16.5 million.

2003

- Supply Option Study launched.

2004

- All refineries obtain quality and environment certifications.

2005

- Free float increases to 49%.
- The Koç-Shell Joint Venture Group wins tender for the block sale of 51% of the state-owned Tüpraş shares.
- Diesel Desulphurization Unit at İzmir Refinery commissioned.
- 100% import liberalization begins.
- Laboratory accreditation obtained.
- Refinery licenses renewed.
- Petroleum Market Law is enacted.

2006

- Shares were transferred to Koç Holding A.Ş.
- 40% of Opet's shares acquired from Aygaz A.Ş.
- Operational Excellence Program launched.
- New logo designed and corporate identity study concluded.

2007

- CCR Reformer and Diesel Desulphurization Unit at İzmit Refinery is commissioned.
- Intranet Portal launched.
- National Marker Application launched.
- RUP investment decision taken.
- SAP System was initiated. The Company releases its corporate

responsibility report (GRI) in compliance with international standards.

- Installation of flue gas measurement devices (CEMS) completed.
- Energy management units established.
- Tüpraş's Corporate Governance Rating set at 7.91.
- Transportation agreement signed with Turkish Railways (TCDD).
- Environmental, Health and Safety Policy released with management declaring its commitment to the new policy.
- Tüpraş Recognition, Appreciation and Award scheme launched.

2008

- Diesel Desulphurization and CCR Reformer units at the Kırıkkale Refinery commissioned.
- Gasoline Specifications Improvement Investment at the İzmir Refinery commissioned.
- All refineries prepared to sell diesel at Euro V standards.
- The tanker, T. Sevgi, joins the Ditaş fleet.
- Railway Transportation carried out.
- Production at Petrochemical Plant terminated and work on Residuum Upgrading Project initiated.
- Advanced Process Control applications are started.
- OSAR-Risk Assessment Table launched.

2009

- Gasoline Specifications Improvement Investment at İzmit Refinery is commissioned.
- The tanker, T. Gönül, joins the Ditaş fleet.
- All gasoline products marketed in Turkey is improved in line with Euro V specifications.
- Contractor management system is activated.
- Customer Relationship Management System launched.
- Winter diesel production initiated

2010

- R&D Center opened.
- Ethical values revised.
- Master's degree courses launched jointly with universities.
- Tüpraş registered to the REACH statute.
- CE Certification obtained for bitumen products.
- World's first Cracking Catalyst in the Desulphurization Unit's reactor implemented.
- Batman Refinery awarded first prize while İzmir refinery is awarded third prize in the Industrial Energy Efficiency Competition.
- Refineries launch the Waste Management Program via SAP.

MILESTONES IN TÜPRAŞ'S HISTORY

Izmit Refinery awarded in Waste Management category at the Sustainable Business Awards 2020 for its “Industrial Symbiosis Applications”.

2011

- Loan agreement signed for the Fuel Oil Residuum Upgrading Project.
- İzmir and İzmit kerosene sweetening units commissioned.
- İzmir and Batman Refineries awarded first prizes in Industrial Energy Efficiency Competition.
- Corporate Governance Rating updated to 8.62.

2012

- Tüpraş issues USD 700 million, 5.5-year maturity bond on the international market.
- İzmit Refinery commissions its C3/C4 Splitter and Selective Hydro generation units.
- The tanker, T. Suna, joins the fleet.
- The tanker, T. Leyla, begins transportation activities.
- Batman Refinery ranked first in Industrial Energy Efficiency Competition.
- Corporate Governance Rating upgraded to 9.10.
- İzmir Refinery commissions its Caustic Neutralization Unit.
- İzmir Refinery inaugurates U-920 Gas Turbine and Waste Heat Boiler.
- Kırıkkale Refinery and Batman Refinery commission new bitumen tanks.

2013

- Batman Refinery awarded first prize in Industrial Energy Efficiency Competition.
- Tüpraş's Corporate Governance Rating upgraded to 9.34.
- Tüpraş obtains ISO 50001:2011 Energy Management System Certification.
- Tüpraş obtains ISO/IEC 27001:2005 Information Security Management Systems Certification.
- New bitumen tanks commissioned at the İzmit and Batman refineries.
- Aegean Region Chamber of Industry hands “Environmental Best Practice Award” to İzmir Refinery for the Base Oil Complex Burner Modernization Project.
- Heat integration project commissioned in the CCR and Benfree Units at the Kırıkkale Refinery.

2014

- İzmit Refinery's RUP Facility completed.
- T. Esra, one of the world's two largest tankers of its kind and designed to carry heavy petroleum products such as bitumen, is launched and joins the fleet. Construction of the T. Aylin tanker reaches its final phase.
- The Batman Refinery wins first prize in the category of Energy Efficient Industrial Facility in the Industrial Energy Efficiency Competition.
- The simulation program, developed after the R&D project entitled “Monitoring, Modelling, Simulation and Optimum Maintenance Planning of Exchanger Pollution to Minimize Energy Waste at the Refinery”, is registered as a European Union Trademark (CTM) under the name “HexMon”.
- Following an assessment carried out in accordance with the new methodology issued by the Capital Markets Board in January 2014, Tüpraş's Corporate Governance Rating is graded as 9.31.
- Tüpraş ranked among the top 15 companies on the BIST Sustainability Index, which was launched on 4 November 2014.
- The R&D Center Campus, covering an area of 12,950 m2 and comprising a Design Building, a Laboratory Building and a Pilot Facility Testing Building, commences operations.

2015

- Tüpraş wins first prize under the European Business Awards for the Environment (EBAE)'s Turkish National Scheme for its project “Using Membrane Deaerated Cold Boiler Feed Water for Energy Recovery”.
- The T. Aylin tanker, launched on 24 June 2014, is put into service in February 2015 and completes its maiden voyage in March.
- Tüpraş's Corporate Governance Score rose to 9.44.
- Tüpraş ranked among the top 30 companies included in the Borsa İstanbul's Sustainability Index, when BIST-50 component companies are assessed in 2015, and also in the 2014 assessment of BIST-30 component companies.
- Tüpraş placed in the top three ranks in the Category-2 at the Industrial Energy Efficiency Competition, with the Kırıkkale Refinery being awarded first prize, the İzmit Refinery being awarded second prize and the İzmir Refinery awarded third prize. The Batman Refinery wins the Special Jury Prize in the Category-3 at the same competition.

- In response to the patent application for “Diesel Production Method and System”, the Turkish Patent Institute issues a patent with an examination to Tüpraş, providing protection for a 20-year period.
- Ground breaking ceremony held for the construction of a gas turbine in the first phase of the New Power Plant for the Kırıkkale Refinery.
- The HexMon brand receives design mark registration from the Turkish Patent Institute.

2016

- İzmit Refinery's PLT-62 Greywater Treatment Unit, which treats discharge water from the İSU Körfez Wastewater Treatment Plant for industrial reuse, commences operations.
- Construction of the Kırıkkale Refinery's Wagon Maintenance and Repair Workshop, the most comprehensive workshop of its kind in Turkey, is completed and enters operation after receiving Entity in Charge of Maintenance - ECM certification on 29 September 2016.
- The Eastern Marmara Regional Directorate of Customs and Trade grants Tüpraş first Authorized Economic Operator certificate to Tüpraş in Kocaeli.
- At the Industrial Energy Efficiency Project Competition, Batman Refinery won first prize in the Category-2; meanwhile, Kırıkkale and İzmit Refineries won second and third place prizes, respectively, in the Category-3.
- Tüpraş website renewed and the Tüpraş Supplier Portal was launched.
- Tüpraş's third project was accepted into Horizon2020 with a record high score.
- The Project for Method Development for Compatibility and Stability Measurements of Crude Oil was approved by TÜBİTAK-TEYDEB as a qualified R&D project.
- The European Bank for Reconstruction and Development (EBRD) extended a USD 150 million loan to Tüpraş to support the Company's energy and water efficiency efforts.
- Two new product tankers, T. Caroline and T. Nevbahar, were added to Ditaş's fleet.

2017

- With the establishment of Körfez Ulaştırma A.Ş., Tüpraş becomes Turkey's first private railway operator.
- Developed by R&D Directorate, field performance tests of high quality modified bitumen got underway.
- New F-1101 furnaces are commissioned at the Batman Refinery.
- Tüpraş R&D Center's First Catalyzer Pilot Plant was established.
- Two new product tankers, T. Semahat and T. Sadberk, were added to Ditaş's fleet.
- A USD 700 million, 7 year maturity Eurobond issue was carried out for foreign investors. The Eurobond, which carried a fixed coupon of 4.5%, was listed on the London Stock Exchange.

2018

- Completion of İzmit Refinery 7000 Unit modernization project.
- Kırıkkale Refinery New Power Plant is commissioned.
- London Trading Office opened.
- The Hydro Processing Pilot Plant is opened.
- Kırıkkale Refinery ranked first in the Category-3 at the Industrial Energy Efficiency Project Competition, with the İzmit Refinery ranked second. The Batman Refinery wins third prize in Category-2 at the same competition.
- R&D Center developed the HPNA Analysis Method.
- Corporate Governance Rating raised to 9.48.

2019

- Tüpraş awarded contract to sell 1.8 million tons of jet fuel annually to Istanbul Airport (İGA) for 5 years.
- Körfez Transportation receives five new locomotives from TÜLOMSAŞ
- Tüpraş becomes “Most Successful Turkish Industrial Organization” in Horizon2020, the EU's R&D and Innovation Program
- Three new product tankers, T. Adalyn, T. Elinor and T. Fatma join the Ditaş fleet
- İzmit Refinery awarded first prize in the Category-3 Increasing Energy Efficiency in Industry Projects Competition at the Industrial Energy Efficiency Project Competition, while the İzmit Refinery was awarded the Jury Special Prize.
- Tüpraş's Corporate Governance Rating raised to 9.50.

2020

- “Modiphal-T” project added to the product portfolio within the scope of the In-House Entrepreneurship Program.
- Long-term cooperation agreement signed with Emerald Industrial Innovation Fund, an international venture capital fund.
- London Trade Office converted into subsidiary, with the title of Tupras Trading Ltd.
- Basic Level Zero Waste Certification obtained for İzmit, İzmit, Kırıkkale and Batman refineries.
- Kırıkkale Refinery awarded second prize in the Category-3 Increasing Energy Efficiency in Industry Projects Competition at the Industrial Energy Efficiency Project Competition, while the İzmit Refinery was awarded the Jury Special Prize.
- Tüpraş's Corporate Governance Rating raised to 9.58.
- Tüpraş joins TURQUALITY® Support Program.
- İzmit Refinery awarded in Waste Management category at the Sustainable Business Awards 2020 for its “Industrial Symbiosis Applications”.
- Tüpraş Academy opened at the Kırıkkale Refinery.

ACTIONS TAKEN BY TÜPRAŞ IN THE PANDEMIC PERIOD

Social Support Projects during the Pandemic Period

- Tüpraş contributed TL 5 million to the National Solidarity Campaign initiated by the Presidency of the Republic of Turkey.
- The “Our energy to the future: I Code, I Model, I Produce” social responsibility project, implemented together with the Ministry of National Education, was transformed into the “Solidarity and Heart Bridge” in the pandemic period. In the early days of the pandemic, with the participation of 60 volunteer teachers, 10,000 shielded masks were produced for health workers with the 3D printers in the robotic coding classes, and these were delivered to the Provincial Health Directorates. In December 2020, this project was awarded the “Together Possible” award at the “A Common Future is Possible Together” Competition held by the TISK (Turkey Employers’ Unions Confederation).
- In addition to meeting the demand for masks and overalls from hospitals in the Kocaeli- Körfez, Izmir- Aliağa, Kırıkkale and Batman regions, where the refineries were located;
 - Tüpraş donated a PCR testing device to the Kocaeli Provincial Health Directorate
 - Tüpraş donated 500 overalls and 5,000 surgical masks to the Kocaeli University Hospital.
 - Tüpraş donated 500 overalls to the Ankara and Istanbul Metropolitan Municipalities
 - Tüpraş donated 500 bottles of sanitizer, each of 400 ml, to the Körfez Municipality
- Tüpraş signed a protocol with Kocaeli’s Körfez Municipality and Izmir’s Aliağa Municipality to provide food for the stray animals in the region. The shelters in the region have started to receive support with the leftover meals from the refineries’ dining halls provided to feed stray animals.

General:

- Office workers, especially those with young children and chronic conditions, switched to remote working models throughout the period.

- In order to ensure that shift workers who needed to continue their duties, in order to safeguard the continuity of production were least affected in a potential outbreak of the virus, a two-shift system was switched to, with 12-hour work patterns established.
- In the event of a possible quarantine in the refineries, one-person “temporary living cabins” were manufactured so production would be able continue without disruption.
- A 14-day quarantine rule has been applied to all employees coming from Turkey and abroad.
- The online survey application, where all employees evaluate their health status every morning, has been put into practice.
- The HES Code application was initiated for all employees.
- Meetings requiring large participation were held online and meeting rooms were organized such that it was possible to maintain social distancing and the number of people was restricted for meeting attendance. With the QR code application in such regions, the infrastructure for the contact and filiation (contact tracing) work was established in case of an outbreak of the virus.

Refineries:

- Temperature measurement was provided with thermal cameras at the refinery entrances.
- The COVID-19 TSE Safe Production Certificate was obtained to all refineries.
- The COVID-19 measures and application quality at all refineries were audited by TÜVSüd.
- Vehicles, working personnel transportation vehicles and living areas at refineries have been sterilized regularly.
- The occupancy of personnel transportation vehicles is monitored, with arrangements in place such that only one person can sit in each two seats.
- Spacing of chairs in cafeterias was increased and the durations of meal times were extended. With the QR code application, the infrastructure for the contact and filiation (contact tracing) work was established in case of an outbreak of the virus.

- At the Izmir, Kırıkkale and Batman refineries, where there is a cafeteria service, meals were only provided by take-away.
- Separators were placed on tables to eliminate contact in the dining halls.
- Sanitizer stations were installed in the refineries and offices.
- Tablets and temperature meters were placed on the turnstiles for mask control and temperature control in a digital environment.

Customers:

- Continuous rollout of disinfectant was provided in the waiting areas used by customers/drivers by working in cooperation with the relevant municipalities.
- Measures such as revising land filling working hours, field regulations, the distribution of masks and the measurement of drivers’ temperatures were put into operation.
- The Driver Tanker Queue Tracking Screen, which can be tracked online and over a smartphone, was put into use and with 2,000 daily visits reached by the end of the first week.
- The scope of the Tüpraş Customer Portal application and Tüpraş Solution Center (444 123 0) was expanded as part of a strategy to produce fast solutions.
- The new Tüpraş Customer Notification Management system, specially designed in line to meet the needs of customers, was put into operation.
- Text messages were sent each day to the drivers registered in the system to maintain levels of awareness.

Human Resources:

- Projects have been adapted to current conditions with more frequent communication established with employees. Online work, orientation, training and development activities have continued.
- Within the scope of the “Tüpraş Well Being” project, the concept of “We are Happy and Hopeful Together” was developed. Within this concept, psycho-social support was provided to employees under the headings of “having a healthy

mind”, “socializing” and “appreciating each other”.

- The online internship program was implemented.
- A “Safe Travel and Holiday Guide” was provided to employees at the beginning of holidays and leave periods.
- Through the digital communication platform in the March-December 2020 period;
 - A total of 715,586 voiced meetings,
 - A total of 392,366 video calls,
 - A total of 305,585 screen sharing events
 were realized.
- In order to seamlessly meet the country's energy needs, the following proportion of employees continued to work in the workplace, while other employees continued to work in rotation from their homes between March and December 2020.
 - 31% of office personnel
 - 44% of field personnel

Information Technologies:

1. As part of the online internship program, a “Remote Refinery Field Tour” and training were provided with a smart hard hat.
2. Thanks to the online image and voice transfer with the smart hard hat, remote operation training sessions were provided. Maintenance operations were planned by the company and Tüpraş specialists through document sharing. Remote refinery field tours and signal controls were carried out for the İzmit Refinery Wireless Communication Project.

3. Pilot work was carried out at the R&D Pilot Facility for simultaneous display of the DCS screens through tablets and the company's computers.
4. In the Terminal Automation Project, the Turkey Honeywell office, their China office and the Tüpraş İzmit Refinery simultaneously carried out virtual FAT (Factory Acceptance Test) activities remotely.

Communication:

- The Tüpraş pandemic commercial, “When you produce a country's energy, you do not have the luxury of stopping” was broadcast on TV and digital channels.
- Employees continued to be informed through all communication channels while normalization efforts progressed under the banner of “Together again in the new normal”.
- Announcements aimed at personal hygiene and raising awareness of the spread of the virus were shared on in-house screens and boards, as well as by e-mail.
- Informative meetings over the Teams application were held by the General Manager for all employees.
- A Mother and Child Foundation (AÇEV) coach was introduced to employees on an online platform in an interview entitled “Being a Parent in Corona Days”.

- Posters and images regarding the pandemic prepared by the Ministry of Health were periodically shared with employees through internal communication channels at the refineries.
- Within the scope of the “Our Energy Never Ends for Equality” project, messages of motivation sent by Fenerbahçe football players to Tüpraş employees were used in internal communication.
- Tüpraş employees who had survived COVID-19 took part in a video series describing the illness with all employees.
- Social Activity Clubs activities were moved to an online platform.
- Ideas specific to Coronavirus were collected at the Tüpraş Idea Unit.
- The webinar series, in which innovation ideas developed around the world, were shared with the employees under the special banner of Inowhatif Talks COVID-19.
- The “Car Boot Sale”, organized every year to support NGOs with the voluntary contribution of Tüpraş employees, has been turned into an online activity workshop.



Bir ülkenin enerjisini üretiyorsanız, durma lüksünüz yok. #EnerjimizBitmez #iyleseceğiz
<https://www.youtube.com/watch?v=fqT6sFBVEyc>

2020 DEVELOPMENTS

Tüpraş was awarded the Basic Level Zero Waste Certificate valid for 5 years at its İzmit, Kırıkkale, Batman and İzmir refineries.

“MOF4AIR” Environmental project within the scope of EU R&D and Innovation Program, Horizon 2020

The “MOF4AIR” R&D project, one of the two projects supported within the scope of the “Advanced Carbon Dioxide Capture Technologies” project as part of the Horizon2020 program, which Tüpraş is a partner of, was awarded 100% grant support.

With this project, Tüpraş aims to contribute to the environment by supporting the development of a technological method which will enable the efficient capture of carbon dioxide from industrial processes and reduce carbon dioxide emissions. Tüpraş will conduct studies for the capture of waste carbon dioxide in flue gases, with the opportunity to test the technology to be developed at the refinery site. The use of the technology and system developed within the scope of the project is aimed at being expanded into various energy and carbon dioxide intensive industries such as power plants, refineries, cement and iron and steel plants.

MOF4AIR (Metal Organic Frameworks for carbon dioxide Absorption processes In power production and energy Intensive industries) project is carried out in partnership with 14 organizations from Belgium, Norway, France, Italy, Greece, the United Kingdom, South Korea and Turkey. Within the scope of the MOF4AIR project, which has a total budget of EUR 11 million, a total of EUR 902,500 has been allocated to Tüpraş, which is 100% supported by the European Union.

“Modiphal-T” project, within the scope of the In-House Entrepreneurship Program

Tüpraş added a new product to its product portfolio with the “Modiphal-T” project initiated within the scope of the In-House Entrepreneurship Program, while the first sale of modified bitumen sale was realized within the scope of the project.

Tüpraş, which handles enterprise and innovation strategies with a holistic perspective, continues to strengthen its pioneering mission in the sector with the projects it has implemented. With the In-House Entrepreneurship Program, which was rolled out throughout the company in 2017 to use existing resources in different business areas, Tüpraş employees work like an entrepreneur on their own ideas, transforming their ideas into a sustainable and scalable business model, and putting these models into practice.

Projects are evaluated in terms of their level of innovation, revenue potential, company strategy, core competencies and compatibility with resources, commercial features, scaling and technical features at the preliminary evaluation stage. Where this evaluation finds projects which are sustainable, unique, can be developed rapidly and will create new growth areas, they are approved by the Tüpraş Innovation Committee.

The Modiphal-T project is one of the successful projects, having completed all stages of the In-House Entrepreneurship Program, and modified bitumen has been sold for the first time within the scope of this project. Thus, polymer modified bitumen, a higher performance bitumen product with improved properties, was added to Tüpraş's product portfolio. The Modiphal-T project will contribute to Tüpraş's enterprise transformation as well as expanding its product range and positioning in a new market.

Investing in new technology start-ups in cooperation with Emerald Technology Ventures

Active in open innovation in Turkey, Tüpraş signed a long-term cooperation agreement with the Emerald Industrial Innovation Fund, an international venture capital fund, to invest in new technology companies in the United States and Europe.

In 2020 Tüpraş participated in the TURQUALITY ® program, referred to as Turkey's “branding project”.



Tüpraş, which is included in the Emerald Industrial Innovation Fund as an investor with this agreement, aims to invest in new technology start-up companies in the USA and Europe in order to contribute to the energy transformation, to increase its competitiveness in its current activities and to closely follow the business of the future.

Operating in the fields of energy, water, advanced materials and industrial information technologies with offices in Zurich, Toronto and Singapore, Emerald has invested more than USD 660 million in asset management and more than 60 new technology companies to date.

With this investment, Tüpraş aims to strengthen its strategic foresight by becoming closely acquainted with new technologies.

Zero Waste Certificate in all refineries

Tüpraş has been awarded the Basic Level Zero Waste Certificate valid for 5 years at İzmit, Kırıkkale, Batman and İzmir refineries.

Within the scope of the “Zero Waste Regulation”, certification is carried out gradually for industrial facilities which establish and effectively implement a zero waste management structure. To obtain the Zero Waste Certificate, requirements such as the assignment of a team on the subject, the establishment of a multiple waste collection system, the creation of a storage area suitable for each type of waste and the provision of necessary equipment, training and awareness activities must be fulfilled.

The waste management processes established in the refineries and developed every year have been harmonized by adopting the “zero waste” approach. Within the scope of the certification process, after the inspections carried out by officials at the Provincial Directorate of Environment and Urbanization, the Zero Waste Management System and the studies carried out in each refinery were confirmed and the applications for Zero Waste Certification were approved.

Work in areas such as reducing the waste generated in refineries by at least 15%, ensuring the reuse of wastes, preventing unnecessary consumption of resources and awareness raising continue.

Tüpraş included in the TURQUALITY® Support Program

Tüpraş participated in the TURQUALITY® program, referred to as Turkey's “branding project”, which supports work which serves the goal of branding abroad. The Company, which opened its trade office in the UK in 2018, aims to further strengthen its branding efforts abroad with the support it receives.

Launched with the aim of supporting companies with international branding potential, TURQUALITY® support contributes to the management knowledge, institutionalization and development of companies to cover all processes from production to marketing, sales and after-sales services.

2020 DEVELOPMENTS

Energy savings equivalent to the annual electricity consumption of 73 thousand homes were achieved through the energy efficiency work carried out at İzmit and Kırıkkale refineries.

While financial contributions of up to 50% are provided to foreign branding investments, one of the most important support items included in the program is the Executive Development Program. The aim of the Program is to create a common language between the middle and senior management of the companies covered by the support, to increase professionalism and effectiveness and to create a network of positive relations in the communication environment which is established.

Two awards for Tüpraş energy saving projects

Tüpraş won two awards in the “Energy Efficiency in Industry SENVER-21 Project Competition” organized by the Ministry of Energy and Natural Resources for the 20th time in 2020, with its sustainable and environmentally friendly projects in the field of energy efficiency at the Kırıkkale and İzmit refineries.

Kırıkkale Refinery won second prize in the competition with its “Energy Optimization Works” project, which provides annual reductions of 112,930 MW in energy consumption while reducing CO₂ greenhouse gas emissions by 22,000 tons annually.

The İzmit Refinery received the Jury Special Award in recognition of its “Hydroprocessing Units Operational Energy Optimization” project, providing annual reductions of 92,330 MW in energy consumption while reducing CO₂ greenhouse gas emissions by 20,000 tons annually.

Thus, energy savings equivalent to the annual electricity consumption of 73,000 homes were achieved through the energy efficiency work carried out at İzmit and Kırıkkale refineries, which also cut annual CO₂ emissions by 42,000 tons. Tüpraş continues its activities with the aim of ensuring the most efficient use of energy in its production and reducing its carbon footprint, and continues to focus on the efficient use of resources in all business processes.

Tüpraş laboratories generating comprehensive solutions for the fuel sector

Offering solutions suitable for all fuel analysis needs in Turkey, Tüpraş meets the experimental analysis needs of the fuel oil, fuel and bitumen sectors in its laboratories equipped with the latest technology in its four refineries. Performing more

than 2,500 experiments in one day, the Company completed nearly one million experimental studies in 2020. More than 400 experiments conducted in the Tüpraş laboratories have been accredited by official institutions and organizations.

With a total of 184 employees, accredited laboratories can serve institutions and organizations from different sectors. The accuracy of the analysis conducted in the Tüpraş Laboratories is constantly monitored through programs offered by national and international comparison test regulators. Apart from the accreditations held by the Tüpraş laboratories, they also hold the CE certificate in accordance with the requirements of the Building Materials Regulation (305/2011 / EU). In addition, the bitumen and bituminous binders analysis performed in Tüpraş laboratories are audited by another impartial institution in addition to the Turkish Accreditation Agency.

Tüpraş, which carries out all of its activities within the framework of an integrated management system, holds the following certificates;

- ISO 9001 Quality Management System,
- ISO 14001 Environmental Management System,
- OHSAS 18001 Occupational Health and Safety Management System,
- ISO 50001 Energy Management System,
- ISO 17025 Laboratory Management System

Quality processes are developed through R&D and technology studies.

Tüpraş plans to maximize the data processing capacity of laboratory services, which stand out with their wide scope of analysis and technological equipment, with digitalization and modern chemistry algorithms. Companies from other sectors, especially the energy sector, seeking service from Tüpraş laboratories may access all steps of the process at <https://www.tupras.com.tr/laboratory>.

The renewed “Customer Notification Management System”

Tüpraş continues to improve its digital services with the new Customer Notification Management System which it launched to meet customer demands and expectations at the highest level as rapidly as possible. The new Customer Notification Management System is aimed at increasing customer satisfaction by establishing faster communication with customers.

With the renewed “Customer Notification Management” software, customers may convey their requests and complaints to Tüpraş more easily. For this purpose, new notification subjects were created to meet the demands of Tüpraş customers and detailed analysis of customer demands was made possible. Customer notifications are directed to the subject specialist at Tüpraş refineries and the customer is replied to within shortened standard periods. The renewed software includes 32 Customer Notification Points in 8 locations where customers can be reached. Thanks to integration into different communication channels such as Customer Portal (<https://musteriportal.tupras.com.tr>), the Customer Solution Center and the Customer Website (<https://www.tupras.com.tr/musteri-sitesi>) fast and easy access is provided to the customer under a single roof. With a system capable of operating on smartphones, the Customer Portal and the Customer website, developments regarding customer notifications and the live status of the notification can be checked constantly.

As a public company, Tüpraş conducts all of its activities, including production and distribution processes, with the highest levels of transparency, and acts with the goal of open communication. With the renewed Customer Portal application and various communication channels such as the Customer website, the Company have the ability to instantly follow the voice of the customer.

The scope of the Tüpraş Solution Center (444 123 0), which was established to provide a higher level of service to existing and potential customers, is constantly being enriched in line with the needs of customers.

Tüpraş Academy established in Kırıkkale Refinery

Tüpraş launched Tüpraş Academy in November 2020 to train Turkey's refiners. The Kırıkkale Refinery aims to bring a new breath of fresh air to Tüpraş and the sector in the field of training and development with its Tüpraş Academy, which includes workshops, a conference hall, library, agile working environment and social areas as well as classrooms. Another goal is to train employees as refiners who learn throughout life and constantly improve their competencies.



Under the newly designed internal training system, it is planned that experienced employees will effectively transfer their professional and technical knowledge within the institution and store it in the corporate memory. In the Academy's workshops, technical and vocational training given by internal trainers will be videotaped and made available to the employees in the digital environment.

The Tüpraş Academy is planned to contribute to the global recognition of the Tüpraş brand by opening a range of technical and vocational training in the field of refining to the world through an online platform in 2021.

The Academy also aims to provide technical training in workshops using AR / VR technologies, to increase the learning activity through learning by providing theoretical knowledge through workshops, to produce what would be costly spacers of 3D printers and critical equipment using appropriate materials, to conduct agile projects workshops, to organize summits where the technological developments in the energy sector are discussed, and to carry out joint studies with universities on technical issues.

STRATEGY

2020 was a year of sustainability and transformation in the refining sector.

Assessment of the Sector

Turkey, which commands a significant demographic advantage, has maintained its relatively strong economic foundations recently despite the volatility in global markets. Aware that demographic dynamism can only be turned into a real advantage by directing new generations to more productive and high value-added areas, Tüpraş aims to unwaveringly improve its efficiency and productivity. In this context, Tüpraş has determined its primary goal as the safe and uninterrupted provision of energy to meet the growing needs of a developing and growing Turkey by undertaking continuous improvements in areas such as effective use of natural resources, sustainability, the environment, community and governance.

2020 was a year of sustainability and transformation in the refining sector. In particular, the refinery supply / demand balance, which had remained in balance until 2018 and ensured relatively healthy levels of profitability, came under severe strain in 2020 after the deterioration in 2019. In the last two years, profitability in the sector has contracted significantly on the back of the addition of 3 million barrels / day of new capacity, especially in the Asia and Middle East regions. This situation forced the decision to shut down refinery capacity amounting to 2 million barrels / day in the OECD region, many of which were struggling to stay profitable. Given that investment decisions were taken some

considerable time ago and that investments in new facilities, for which construction has got underway, will continue rapidly until 2025, it is expected capacity of 2 million barrels/day of capacity will be closed in the next 2 years. Despite advances in vaccination, it is highly likely that international flights will not return to normal until after 2021. Given this situation, it is expected that 2021 will also be a period in which profitability remains below historical averages in the sector, with the sector only expected to see a rebalancing by 2023 with the return of demand.

Sustainability and Energy Efficiency

Without a doubt, one of the most fundamental risks we face in this century is climate change. The rise in consumption together with population growth and globalization, resulting in an increase in energy-sourced greenhouse gas emissions, has revealed the need for a transformation in many sectors to achieve a sustainable future. The concept of sustainability in our lives is a recent one; however, since the Paris Agreement in 2015 and the European Green Deal in 2019, its direct effects began to be felt, especially in the energy sector. This transformation movement, which has gained even more momentum with the pandemic, is expected to increasingly have an impact in the coming periods.

Tüpraş, one of the leading companies in following market trends in respect to compliance with legal regulations, energy efficiency and the use of digital technologies from the past to the present, aims to reinforce this position with its long-term goals and strategic actions to be put forward in the coming period.

Tüpraş continues to focus on energy efficiency, which is one of the most important pillars of this goal. Tüpraş has achieved an improvement of 20 points in its energy density index value since 2008, with 30 energy efficiency projects implemented in 2020, resulting in annual energy savings of 713,000 Gcal and a reduction of 39,608 tons in CO₂ emissions, with the total cut in emissions realized in similar projects carried out in the last 5 years reaching 433,000 tons of CO₂. Tüpraş will press ahead with its productivity efforts in the coming period.

**Tüpraş continues
to focus on energy
efficiency.**

Innovation and R&D

Activities centered on enterprise and innovation are carried out in Tüpraş in a manner which supports sustainable growth and continuity. The entrepreneurial potential within the organization is brought to life with a focus on enterprise and innovation, while opportunities are developed through external stakeholder collaborations. In this context, Tüpraş voluntarily participated in the Koç Innovation Program in 2017 and determined its innovation strategy. In addition, with the steps taken in 2020, through participation in the Emerald Industrial Innovation Fund, developments and opportunities in the sector have started to be followed more closely.

In parallel with the announcement of the strategy and processes throughout the company, communication and training activities were carried out within and outside the company to support cultural transformation and increase competence. The Idea Unit Portal, an in-house enterprise program that aims to spread the culture of innovation where employees who have innovative ideas can share their ideas, was commissioned in 2017 as “A Platform Converting Raw Ideas into Value”. Tüpraş continues its efforts to commercialize the creative and innovative ideas of its employees with its in-house enterprise program which carries out with start-up methodologies. In this context, the program produced its first graduates in 2020, and two different ideas were commercially implemented. At the same time, open innovation studies are actively carried out in order to add value both to Tüpraş and to entrepreneurs by being integrated into the enterprise ecosystem.

Since its establishment in 2010, the Tüpraş R&D Center has been one of the leading R&D centers both in the sector and in the country, with investments undertaken to establish its qualified staff and strong technical infrastructure. In the R&D Center, which continues its activities with an understanding

focused on sustainable growth and profitability, new product development projects are also carried out in addition to projects aimed at improving refinery processes and meeting technical needs. Tüpraş spent TL 43 million on R&D activities in 2020 with 39 projects. In addition, cooperation with various local and international organizations has continued, with support received from Horizon2020 and similar operations. A total of 27 project applications have been made for the calls filed in 2020 under the Horizon2020 program, and cooperation has been developed with more than 100 National/International Academic and industrial partners. In 2020, four new Horizon2020 projects (EBIO, ACHIEF, CORALIS, AquaSPICE) were accepted and launched. In addition, many projects have been being implemented to support Tüpraş's profitability, such as hydrocarbon characterization, material technologies, catalyst technologies, digital solutions, sensor and robotics technologies and advanced analysis methods. The R&D work on sustainability issues is focused on environmental triggers which will grow even more important going forward in line with Tüpraş's strategies. In this context, R&D studies on areas such as reducing carbon dioxide emissions, green hydrogen production from alternative sources, renewable fuel technologies and water and waste management are successfully carried out by making the best use of international R&D support programs.

Activities centered on enterprise and innovation are carried out in Tüpraş in a manner which supports sustainable growth and continuity.

STRATEGY

The phenomenon of “working together”, set out at the beginning of 2020 to support the agile transformation, allowed the Company to be ready and adapt quickly to the changes brought about by the pandemic

Digitalization

Tüpraş targeted connected data, departments, processes and platforms in 2020, and its projects during the year were carried out in this context. Within the scope of digitalization, almost 100 processes have been transferred to software robots with RPA applications since 2018. In addition, with the aim of more efficient use of data, integration efforts continue rapidly to create value, especially in operational and profitability-oriented decision processes, by using data analysis systems and big data infrastructure. In this context, analytical projects implemented in one refinery in previous years were expanded to other refineries and the benefit was maximized. Within the framework of the Tüpraş industry 4.0 principles, commissioned solutions which will provide added value by testing field applications of wearable technologies, wireless and mobile solutions which will support remote intervention in pandemic conditions and tracking systems using Internet of Things devices such as the “Steam Trap” and the “Equipment Health Monitoring System”.

The phenomenon of “working together”, set out at the beginning of 2020 to support the agile transformation, allowed the Company to be ready and adapt quickly to the changes brought about by the pandemic, and the process evolved into “working together remotely”. Thus, the disadvantages of the pandemic and remote working were turned into an advantage, and the

opportunity was gained to connect with experts from all over the world and get their opinions, regardless of location and time, and the digitalization roadmap and company processes were updated accordingly.

Affiliates

Opet, 40% owned by Tüpraş, carries out activities in fuel distribution sector in the fields of retail sales, commercial and industrial fuel sales, storage and international product trade. With more than 900 employees, 1,670 stations including the Sunpet brand and 1.1 million m³ storage capacity, Opet manages an extensive service network throughout Turkey with 5 terminals and provides high-quality products and services to its customers. As of the end of November 2020, Opet has a 19.6% market share in white products and 25.4% in black products.

Ditaş Deniz İşletmeciliği ve Tankerciliği A.Ş. (Ditaş), in which Tüpraş holds 79.98% of the shares, meets all Tüpraş's marine and terminal needs with its diverse marine vehicles portfolio and human resources, and contributes to supply security in line with Tüpraş's premise safety understanding. Ditaş's future goal is to include the company among the most preferred shipowners in international markets, to open up to foreign markets, and to ensure sustainable profitability with alternative customers and product groups as well as Tüpraş.

100% owned by Tüpraş, Körfez Ulaştırma is Turkey's first private railway operator. Körfez Ulaştırma, which started its transportation activities at the end of 2017, increased its share of railway transportation in land and rail denominator to 92% in 2020. Körfez Ulaştırma aims to become the largest railway fuel carrier in Turkey and thus to increase its contribution to the country's railway transport development goals.

London Trading Office, which started its operations as a branch in 2018, became a limited company owned 100% by Tüpraş in 2020 and became Tüpraş Trading Ltd. Tüpraş Trading Ltd, located in one of the most important centers of Europe's oil trade, continues to create additional added value from emerging market opportunities and carry Tüpraş's commercial competencies to a higher level.

In 2020, four new Horizon2020 projects were accepted and launched.

ACHIEVEMENTS AND AWARDS

Turkey's Largest Company

Ranked first in company size rankings in Turkey (ISO 500, Capital 500, Fortune 500)

Export Leader

Ranked first in the category of "Chemicals and Products Sector" and third in the overall ranking In the Turkey Exporters Assembly (TIM) survey

Sustainable Business Awards

The Izmit Refinery was ranked first in the "Waste Management" category with the "Industrial Symbiosis Applications" project

Pioneer in Digitalization Industry

Digitalization Award in the category of "Energy and Oil Sector" within the scope of the "digitalization" theme of the Platinum Global 100 Index

Energy Efficiency Success

In the Energy Efficiency in Industry (SENER) Project Competition, the Kırıkkale Refinery was ranked 2nd place with its "Energy Optimization Studies" project, with the work carried out in line with the energy efficiency strategy. The Izmit Refinery won the Jury Special Award with the "Hydro-process Units Operational Energy Optimization" Project.

A "Common Future is Possible Together" Awards

In the "A Common Future is Possible Together" competition held by the Turkey Employers' Unions Confederation (TİSK), the social responsibility Project, "Our Energy to the Future: I Code, Model, Produce" was transformed into a bridge of solidarity between teachers and healthcare heroes. The "Together Possible" award was given to the "Shielded Mask Production" and the Digitalization Award was given to the "Smart Hard Hat" project in the Project, in which teachers took part voluntarily.

The biggest company and export champion of Turkey, Tüpraş received awards in 2020 in the fields of sustainability, digitalization, energy efficiency and social responsibility.



INVESTOR RELATIONS

In the last quarter of 2020, the availability of COVID-19 vaccines and the mapping out of a timeline for vaccination have had a positive impact on the refining sector, creating an increase in mobility. Tüpraş has completed the year 2020 with a market value of TL 27 billion.

In line with the CMB's Principles on Corporate Governance, Tüpraş aims to provide timely, accurate, complete, clear and easily reachable information, provided that it does not include trade secrets. The Company ensures that the principles of equality, transparency, accountability and responsibility are respected when distributing such information.

Corporate information, reports, historical and related period financial statements and activities and material event disclosures required by investors can be accessed through the Investor Relations section of the Company's corporate website (www.tupras.com.tr).

Annual General Assembly Meeting

The Annual General Assembly Meeting of Tüpraş for the year 2020 will be held on Wednesday, 31 March 2021 at 10:00 am at the address of Güney Mahallesi, Petrol Caddesi No: 25 Körfez/Kocaeli.

The Annual General Assembly Meeting sets out the agenda; the presentation of financial statements for the year of 2020, the Independent Audit Report, the proposal for dividend distribution,

the Annual Report and its annex, the explanations on Compliance with the Principles of Corporate Governance and Sustainability and the Information Note containing necessary explanations regarding compliance with Capital Markets Board regulations. All documents will be made available three weeks prior to the meeting in line with statutory requirements, at the Company's headquarters, on the company's corporate website, www.tupras.com.tr, on the Public Disclosure Platform (PDP), on the company platform and the Electronic General Assembly System of the Central Registry Agency.

Providing Information

17 conferences and road shows have been attended in 2020, while nearly 600 one-to-one interviews were held with fund managers and analysts. In addition to the meetings, the questions, received from the local and international shareholders and analysts either in writing or verbally, were responded. Through the quarterly teleconferences organized with the participation of the CFO, the company ensured that investors were informed about Tüpraş and the sectoral developments. In 2020, all requests received from shareholders were responded to and necessary informative activities continued.

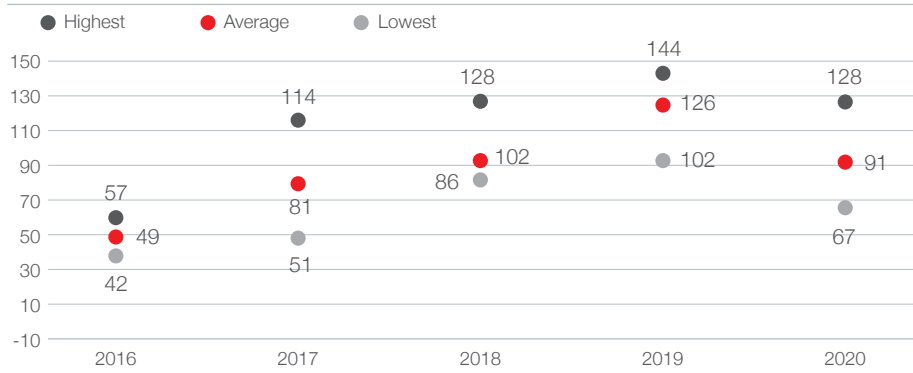
At the beginning of 2020, the main focus in the refining industry was on how the "IMO 2020" low sulfur bunker specification adaptation process would impact the markets, with all players having started to carry out preparations in the second half of 2019. However, the COVID-19 pandemic precipitated the deepest peacetime contraction since the Great Depression, overturning all agendas and expectations at the beginning of the year. According to data released from the World Tourism Organization, international tourist arrivals plunged by 74% worldwide in 2020. As millions of people continue to work from home, mobility has declined significantly around the globe as part of the pandemic measures. In the refining sector, the impact of the pandemic was especially felt with the decline in demand for petroleum products. According to figures released by the International Energy Agency data, demand fell by an average of 8.8 million barrels/day (-8.8%) in 2020, when compared to 2013 levels, while refinery production fell by an average of 7.2 million barrels/day.

In the last quarter of 2020, the availability of COVID-19 vaccines and the mapping out of a timeline for vaccination have had a positive impact on the refining sector, creating an increase in mobility.

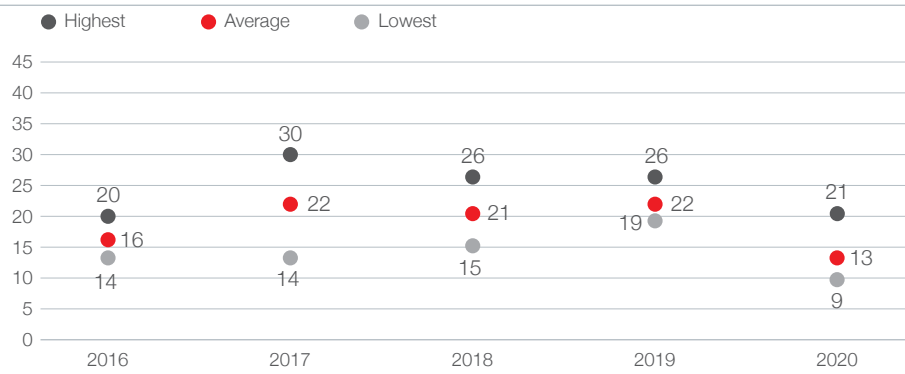
47.80%

The proportion of publicly traded shares held by international institutional investment banks, funds and foreign institutions stood at 47.80% as of the end of 2020.

Tüpraş Stock Price Trend (TL/Share)*



Tüpraş Stock Price Trend (USD/Share)*



*Excluding dividends

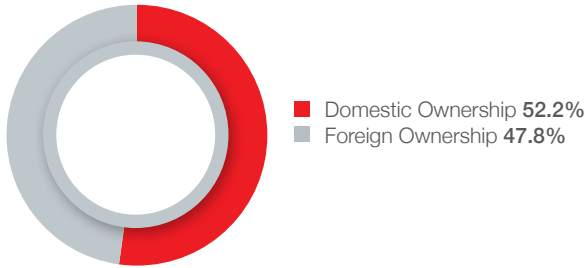
108

Tüpraş share was traded at a level of TL 108 as of the end of 2020.

INVESTOR RELATIONS

Tüpraş has been in the Borsa İstanbul Sustainability Index since the inception of the index in 2014.

Distribution of Domestic/Foreign Ownership of Tüpraş Shares



The Composition of the Investors in Tüpraş Shares

49% of Tüpraş's shares are traded on Borsa İstanbul (BIST). The diversity and richness of the investor portfolio is considered an important indicator of trust and stability from investors' perspective. As an indication of this, the proportion of publicly traded shares held by international institutional investment banks, funds and foreign institutions stood at 47.80% as of the end of 2020.

Share Price Performance

The impact of COVID-19 on mobility has also had an impact on share price performances in the refining sector throughout 2020. As a result, Tüpraş's share price underperformed the BIST 30 index.

Market Value Development

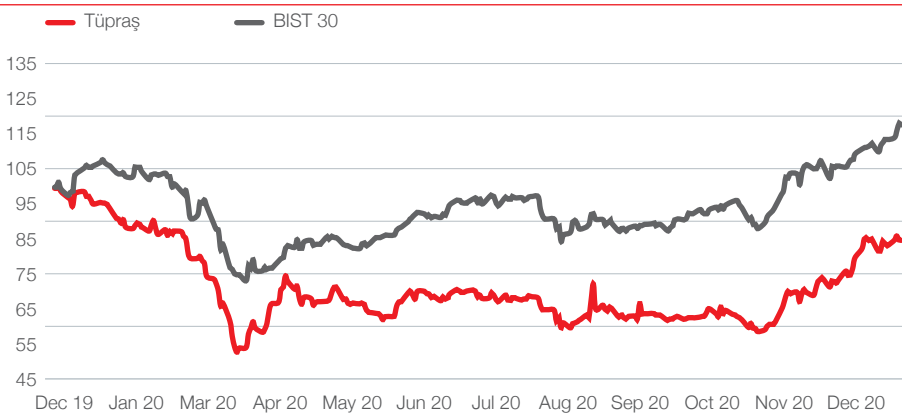
In 2020, the pandemic affected the performance of many sectors and companies. As a result of these developments, Tüpraş's market value decreased by 15% in TL terms compared to the end of 2019, from TL 31.8 billion to TL 27.0 billion.

Corporate Governance at Tüpraş

The Company's Corporate Governance Rating, which had been determined as 7.91 on October 8, 2007 in the Corporate Governance Index, which Tüpraş was included into in 2007, has improved over the years. The Corporate Governance Rating Score, which had risen to 9.5 in 2019, rose further to 9.58 in 2020.

According to the World Corporate Governance Index (WCGI), published by SAHA Kurumsal Yönetim ve Kredi Derecelendirme Hizmetleri A.Ş. (Corporate Governance and Credit Rating Services) on 8 October 2019, Tüpraş was placed in the first group.

Tüpraş and BIST-30 Relative Share Performance in 2020



This index ranks countries according to both their level of compliance with corporate governance principles and the level of development of their institutions with respect to corporate governance.

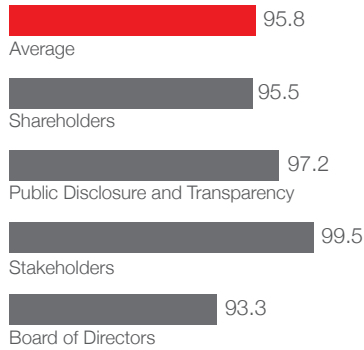
The BIST Sustainability Index

The BIST Sustainability Index (XUSR), which was created by Borsa İstanbul in November 2014 and which includes companies with a high level of corporate sustainability, provides companies

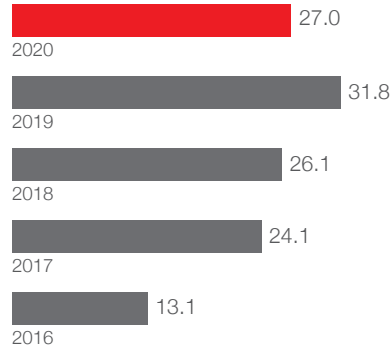
with the opportunity to improve their corporate transparency and accountability as well as their risk management skills with regard to sustainability issues, in addition to assessing the companies' economic, environmental and social performances.

Tüpraş was incorporated into the BIST Sustainability Index in 2014 when the index, which assesses BIST-listed companies on the basis of their compliance with international sustainability criteria, was created.

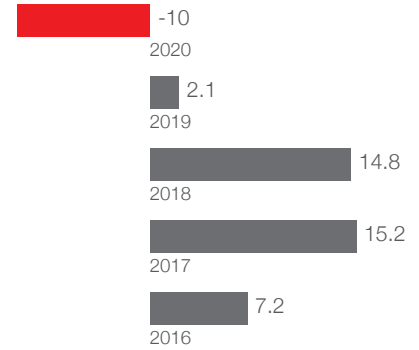
Corporate Governance Rating Composition (%)



Changes in Market Capitalization (TL billion)



Earnings per Share (TL)



HUMAN RESOURCES

Tüpraş has creative, dynamic, knowledgeable, highly motivated, effective and efficient human resources.

As a world-class refiner and the largest industrial company in Turkey, Tüpraş aims to maintain its place as a preferred workplace in the sector. The Company has creative, dynamic, knowledgeable, highly motivated, effective and efficient human resources and is becoming stronger with every passing day thanks to its development programs. As in other companies of the Koç Group, the philosophy of “Our Most Valuable Asset is Our Human Resources” constitutes the essence of Human Resources Policy also at Tüpraş. Tüpraş places priority on the issue of creating inclusive workplace conditions and offering equality of opportunity. In this context, practices which adopt equality of opportunity are implemented to prevent all kinds of discrimination in the workplace and to increase the employment of women at all levels. Declaring that “Our Energy For Equality”, Tüpraş has also been supporting the “HeForShe” movement of the UN Women, which since 2015 has been calling on men from all over the world to be the advocates of gender equality standing shoulder to shoulder with women. Tüpraş signed the United Nations Women’s Empowerment Principles (WEPs) in 2017 and announced its goal of being an inclusive and equitable workplace in the energy sector to its stakeholders, while developing in-house practices in this regard. The Company also carries out pioneering projects which will raise awareness in this field and trigger transformation in the community. With this approach, the Company aims to contribute to “Gender Equality”, which is the fifth pillar of the SDGs.

The outlines of its basic applications within the framework of the Tüpraş Human Resources Policy are summarized below:

- Recruitment criteria are determined and announced in writing, and these criteria are compiled within recruitment. Tüpraş aims to attract qualified candidates with high potential, who will take Tüpraş forward.
- Task definitions and distributions and performance criteria were determined by the company management and announced to the employees.
- In the training and in appointment and promotion decisions, attention is paid to the use of objective data.
- Great importance is attached on performing training for the development of the professional knowledge and skills of the employees and their personal skills.
- A safe working environment is provided for employees, and efforts are undertaken to ensure continuous improvement of the conditions.

- Decisions taken regarding employees or developments concerning them are announced to the employees.
- The employees are informed of the Company’s financial situation, wages, careers, education, health care and other matters that concern them.
- There are recognition and reward systems that support both the short and long-term success of all employees, and which provide awareness of performance and value created.
- There is no discrimination among employees; a fair, objective and transparent Human Resources Policy is ensured.
- Decisions that may affect employees are communicated to them and their representatives.
- The Company supports the freedom to establish an association and the effective recognition of the right to collective bargaining agreements.
- There is no application of assigning an indirect representative outside the Human Resources Department to carry out relationships with the employees.

Tüpraş set out its long-term human resources plans in line with the objectives of inclusion of employees who will best accomplish the Company’s goals, increasing their leadership capabilities, developing their scientific and operational competencies through continuous training, and making the right career plans. The human resources processes created within this scope are managed with great care in line with Tüpraş’s corporate goals and are structured in a way to be supported by technological infrastructure to strengthen the employee experience. Within the framework of the Human Resources Policy, the Human Resources Department ensures that candidates are selected in accordance with the qualifications of the position, consideration of employee competencies, that evaluations are performed with the appropriate evaluation tools without discrimination and that employees benefit from opportunities equally during their working lives after being recruited.

The criteria for the Tüpraş Recruitment Policy are determined in writing. Tüpraş uses contemporary, inter integrated systems that enable the production of business results in all human resources processes, from the recruitment process to the performance management system and the development, remuneration and termination processes.

Any rights and side benefits attached to the title or position are predefined and are uniform for everyone. Within the scope of market wage comparisons, wage structures and their position in the market are monitored by working with the internationally accepted surveyors. Wage management policies are monitored and kept up-to-date through the sectoral wage research carried out regularly. A transparent wage system is applied, in which the contribution to achieving the corporate goals is kept as a key component according to the levels of responsibility. This serves as a model of wages and side benefits based on the principle of equality and fairness, which is objective, transparent and which reflects the realities of the national and international business world, and which is based on the work carried out.

Continuous improvement and development is carried out in order to ensure a safe working environment and conditions for the employees. The Company aims to fully ensure occupational health and safety in the workplace and on the job in the refineries. To this end, employees are informed of the rules and instructions and act accordingly and take the necessary measures. The human resources management and the company management participate on a monthly basis in the platform, which is geared towards occupational health and safety, and topics such as occupational

health and safety are discussed, and suggestions are taken into consideration and necessary actions are taken. Necessary training is given to employees regularly in the workplaces, and the content of the training is reviewed according to practices and developments. In addition, at the refineries, risk assessments are completed in a timely manner in accordance with legal regulations. Work accidents are consolidated and monitored and reported every year.

An “open office” is implemented in order to support and improve the communication process between the management and the employees throughout the company. All kinds of complaints, opinions and suggestions are shared through the open office communication. At the same time, employees have been informed that they should contact the Human Resources Department when they experience any problems with the management.

Ethical Rules

The “Ethics Committee” mechanism, which is attended by the Risk Management and Audit, Law, Corporate Communication and Human Resources Departments, was established and operates actively. The Ethical Code of Conduct adopted by the Board of Directors was approved by the General Assembly in April 2011 and the commitment of all employees was obtained.

In the use of duties, authorities and responsibilities defined in the company, Tüpraş aims to act in accordance with the Company's Articles of Association, the Personnel Regulation, the Law of Obligations, the Tüpraş Values and Working Culture Principles and the Labor Law governing work life and the law order that is valid and in force on the national platform.



HUMAN RESOURCES



Ethical rules which employees must follow within the company and matters that they should take into consideration when communicating with each other were also set. These issues are set out in the “Tüpraş Ethical Code of Conduct and Principles of Application”, “Job Descriptions”, and “the Personnel Regulation”, which all employees are informed of.

Religion, language and race are not asked in job advertisements, job application forms and job interviews. In accordance with the principle of “The Right Person for the Right Job”, there is no discrimination in the recruitment of employees. Measures are taken to ensure that there is no racial, religious, language or gender based discrimination among employees, and to protect employees from any in-house physical, mental and emotional abuse. No complaints concerning discrimination have been conveyed to the Company. Employees are informed of these issues through the personal development and communication training sessions.

Tüpraş takes the Universal Declaration of Human Rights as a guide and adopts an understanding that respects human rights towards its stakeholders in the societies it operates in. Creating and maintaining a positive and professional working environment for its employees is the basic principle of Tüpraş. Tüpraş acts in accordance with global ethical principles on issues such as recruitment, promotion, career development, pay, benefits and diversity and respects the rights of its employees to form and participate in non-governmental organizations of their own choice. Under no circumstances does it tolerate forced labor, child labor or any forms of discrimination and harassment. The

Company clearly sets out its commitments in this area in its Human Rights Policy approved by the Board of directors, which is also published on its website since the beginning of 2021.

Tüpraş takes into consideration the following international standards and principles regarding human rights as a priority:

- The UN Guiding Principles on Business and Human Rights (2011),
- UN Global Compact (2000),
- ILO Declaration of Fundamental Principles and Rights at Work (1998),
- Women’s Empowerment Principles (2011),
- Worst Forms of Child Labor Convention (No. 182).
- The OECD Guidelines for Multinational Enterprises (2011)

Social Responsibility

Backed by its knowledge in the refinery sector and socially sensitive employees, Tüpraş creates projects which will contribute to social development in the fields of culture, the arts, education, the environment, sports and gender equality, and extends its support for such projects.

Tüpraş has been presenting its sustainability approach, which is integrated into the Company’s business strategies, along with its practices in the field of environment, social and governance to its stakeholders in the Sustainability Reports which it has been publishing since 2008. Tüpraş prepares its Sustainability Reports in accordance with the Global Reporting Initiative (GRI) Standards “Basic Level”.

Talent Management

The talent management process ensures that human resources are evaluated as efficiently as possible and that developmental needs are identified correctly. The data obtained during the talent management process is reviewed in annual Strategic Human Resources Meetings. Within the scope of these meetings, performance evaluations of employees who are paid on a monthly basis are carried out and backup plans are created for executive positions. Within the scope of back-up planning, leadership competencies are measured by applying Tüpraş Leadership Competency Sets through mid-level assessment center and top-level assessment center applications, and managers are directed to development programs. With the internal backup system, critical positions and backup plans are created, while the potential talent pool is also determined. The talent pools designed for different levels are aimed at identifying talented employees in Tüpraş.

The two-level talent program, which was launched in 2019 to be developed into first-level and mid-level managerial roles, continued in 2020.

Leadership schools specially designed for Tüpraş leaders were commissioned in 2020 and 84 candidate leaders were included in the program. In addition to leadership schools, 90 different leaders have been included in different leadership programs and Koç Group leadership programs in order to improve their leadership competencies.

Development is Our Passion at Tüpraş!

With its talent management approach Tüpraş provides;

- Discovering talent which will support the achievement of future strategy and goals,
- Providing solutions in accordance with the expectations and needs of different talent profiles,
- Sustainable institutional and individual development with interdisciplinary learning opportunities.

With its integrated Human Resources systems, Tüpraş provides talented individuals with a focused and original employee experience where they can showcase their potential. Tüpraş is prepared for the future with the talent strategy created in line with business strategies with the following targets;

- Attracting talented individuals who are compatible with the values and competencies of the institution,
- Determining the competencies which will be needed going forward and discovering and developing potential leaders with these competences,

- Rotation of talent in line with backup plans and thus creating interdisciplinary learning opportunities for leaders to be equipped, achieving high performance and supporting a culture of cooperation,
- Determining critical roles and developing backup plans to create a sustainable and effective organization,
- Sustainable development and performance are achieved with an integrated system focused on corporate and individual benefits and customized metrics.

Online Internship Program

Tüpraş contributes to the strengthening of vocational education with the projects it carries out for its business partner employees and high school and university students. In 2020, a total of 430 students were provided with internship opportunities in the Tüpraş refineries.

Tüpraş continued its work on its online platforms to support the development of university students during the pandemic in 2020. The internship program, which is mainly attended by students in their final two years at university within the scope of compulsory university internship each year, was transferred to a digital environment in 2020 within the scope of the COVID-19 measures. A total of 210 students who successfully completed the evaluation steps, from a pool of 5,660 applications, completed their internships in August and September.

In the program, which is almost entirely managed with internal resources, more than 60 Tüpraş employees have devoted nearly 400 hours to the development of students by providing one-to-one training, departmental presentations, guidance and mentoring support. In addition, students who met Tüpraş employees in their career and development conversations asked about issues of interest to them regarding their career path.

In the experience surveys, it was determined that 97% of the students had a high level of satisfaction with the program.

Nextremers Program

The long-term Nextremers Project Student Program, which was launched in 2019 and aims to contribute to the professional and personal development of university students, continued to reach young talented individuals in 2020. Nextremers students, who joined Tüpraş in July 2019 and February 2020, worked remotely throughout the pandemic. On the one hand, they continued to develop in their business life by contributing to the project outputs of the teams they were involved in with the responsibilities and

HUMAN RESOURCES

The “Tüpraş Development Dialogue” tool was brought into use in 2020 in order to establish an open dialogue between managers and their employees for the development of employees in line with Human Resources targets.

initiatives they took on, while on the other, they participated in development programs specially designed for them.

The Nextremers Project Student Program, whose re-application process started in February-March 2020, attracted a great deal of attention from university students. More than 4,500 students seeking to take the first step in their careers at Tüpraş applied to join the program.

Development at Tüpraş

Within its focus on the improvement and structural change activities in human resources,, Tüpraş has attached tremendous importance to training and development activities aimed at the development of both the professional knowledge and skills and the behavioral capabilities of its employees, while attracting a qualified workforce and deploying them in the most efficient and productive manner. In this context a training center which includes workshops, training classes, a conference hall and library has been established at the Kinkkale Refinery

The orientation program is carried out to ensure that all new employees who begin working at Tüpraş get to know the company culture and the business processes of the departments, and to speed up the adaptation process.

Incentive programs carried out at Tüpraş aimed at helping employees participate in graduate programs to develop their knowledge and skills, to increase their competency and to enrich their sectoral studies with academic knowledge.

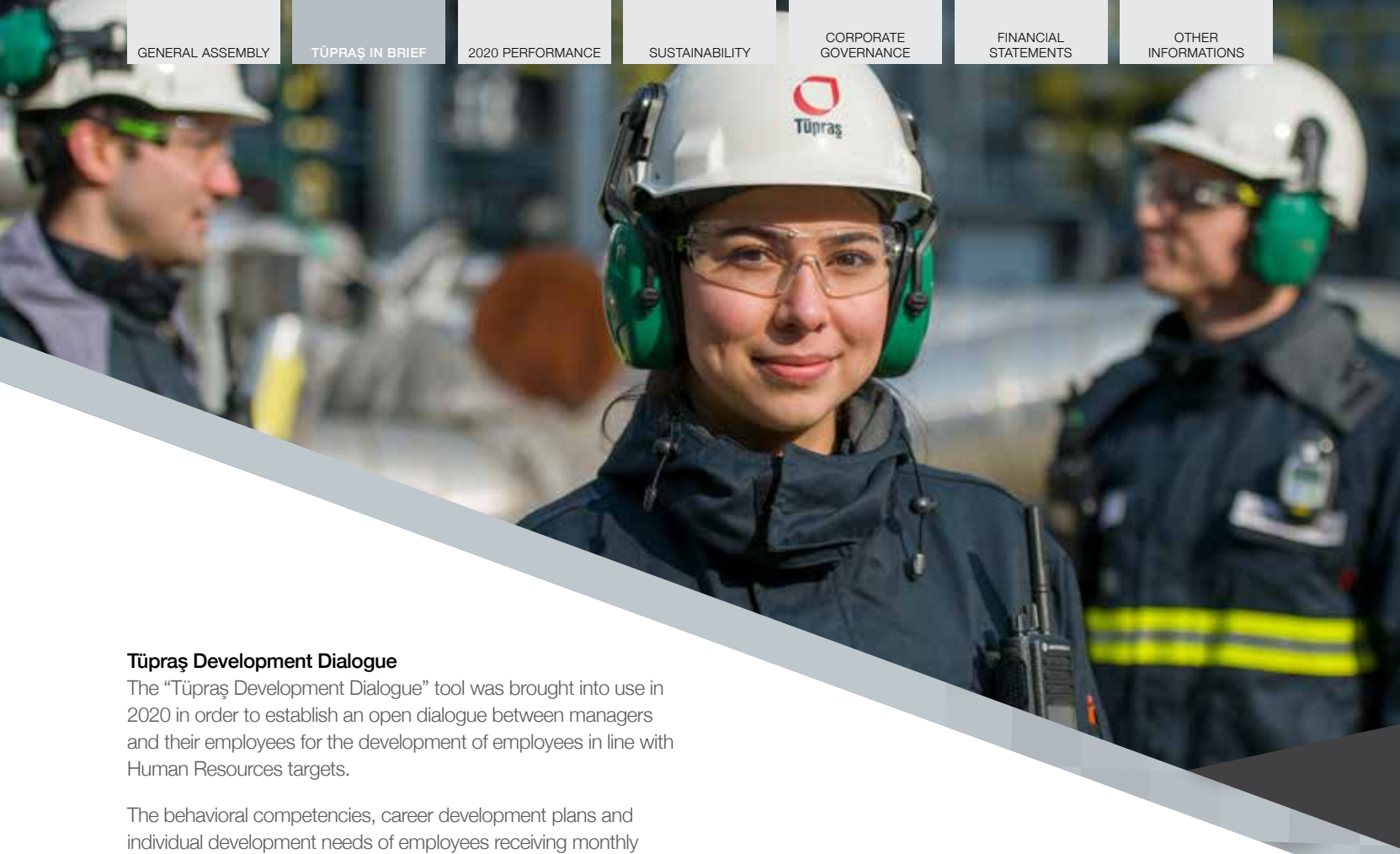
Within the scope of the professional development of employees paid on an hourly basis, an application was made to the Vocational Qualification Authority with the National Professional Standard and National Qualification Preparation form, and the National Vocational Standard was drafted.

Within the scope of talent management, it is aimed that the talented individuals who will carry Tüpraş into the future are brought into the organization, with the development of leadership and technical competencies through the training and development programs designed specifically for Tüpraş, along with support in making the right career planning.

In this direction, the leadership development of the employees is supported through the training and development activities, project work and on-the-job learning/rotation processes, which are designed by the leading business schools and university collaborations for the development of professional knowledge and skills and personal talents of the employees. Within the scope of the development programs aimed at improving the leadership competencies of the employees, development programs which include effective communication, coaching and development, cooperation development and future-oriented development are designed. The talent management process, which enables effective guidance of human resources and identifying development needs, serves as a guide in promotions and appointments.

Within the scope of talent management, it is aimed that the talented individuals who will carry Tüpraş into the future are brought into the organization.

	Number of Employees	Total Hours of Training	Average Training Hours
Monthly Paid	1,277	54,171	42.4
Hourly Paid	4,077	39,073	9.6
Total	5,354	93,244	17.4



Tüpraş Development Dialogue

The “Tüpraş Development Dialogue” tool was brought into use in 2020 in order to establish an open dialogue between managers and their employees for the development of employees in line with Human Resources targets.

The behavioral competencies, career development plans and individual development needs of employees receiving monthly salaries are evaluated in an environment where the employee and the manager come together and establish a dialogue with the “Tüpraş Development Dialogue” tool. The “I Work with a Safe and Agile Mind” program, which was created together with employees for the first time in Tüpraş, consists of three sections which aim to develop competence by evaluating employee competencies, to help them gain a perspective on career development, assess their openness to rotation and their mobility status, to plan possible career paths within Tüpraş, and to determine individual development needs in both behavioral and professional areas.

The Tüpraş Development Dialogue tool was implemented in 2020 with the participation of 1,091 employees (86% participation rate), with the focus on developing a perspective which will foster dialogue, feedback, rotation, development and looking at the future differently within the Company. All employees carried out their training and development plans in the Tüpraş Development Dialogue using the Training and Development Catalog, which was specially designed to support their behavioral competencies and career development plans. Simultaneously, they created their professional / technical development plans using the Qualification Matrix specially prepared for positions to support their technical and professional development. Throughout the year, they followed the Tüpraş Development Dialogue forms and the training programs they selected on the digital HR portal, Energetik.

In line with the plans set out to focus on development, 27 different behavioral competencies, with the participation of 405 employees, and 20 vocational and technical training programs with the

participation of 759 employees, were carried out in the training development catalog and professional development activities provided by the Human Resources department in 2020.

Performance Management

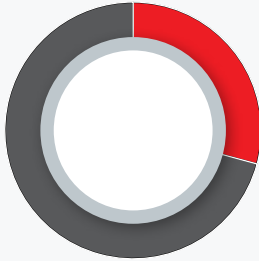
A well-structured performance and career management system constitutes a cornerstone of employee development. The scorecard system is used in the performance evaluation of office employees. Employees are provided with feedback on their performance through annual performance evaluation meetings. On the other hand, field employees receive feedback from the senior management in regard to the period results and target expectations.

The total pay for all employees who are paid on a monthly basis consists of a basic salary, variable pay (premium) and fringe benefits. Pay is updated every year in line with the country's economic indicators, market data on pay and company data. Performance management for employees paid on a monthly basis is carried out under the “Koç Dialogue” system, the integration of which started in 2020 and which will be implemented in 2021. Koç Dialogue is a transparent and dynamic performance system that can be updated throughout the year, where inspiring goals and success criteria are determined with the OKR (Objectives and Key Results) method, designed with multi-dimensional structured and instant exchange mechanisms, both between managers and employees.

HUMAN RESOURCES

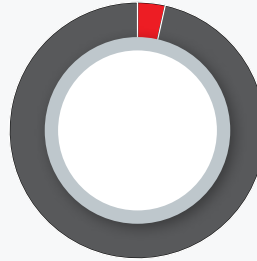
Human Resources Indicators

Ratio of Female-Male Employees
Monthly Waged (%)



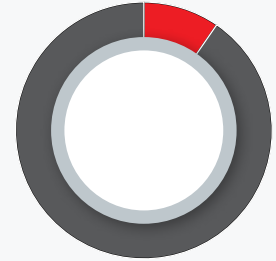
■ Female 29%
■ Male 71%

Ratio of Female - Male Employees
Hourly Waged (%)



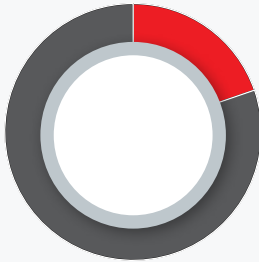
■ Female 3%
■ Male 97%

Ratio of Female-Male Employees
Total (%)



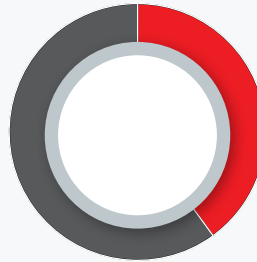
■ Female 10%
■ Male 90%

Ratio of Female Mid-Level
Managers (%)



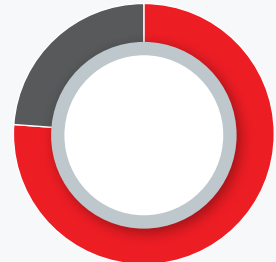
■ Female 20%
■ Male 80%

Breakdown of New
Hirings (%)



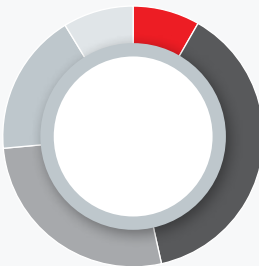
■ Female 40%
■ Male 60%

Breakdown of Employees by Hourly/
Monthly Wages (% - person)



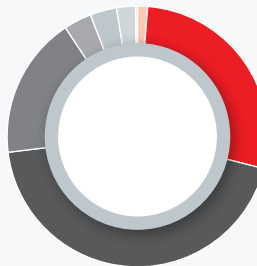
■ Hourly Waged 76% - 4.077
■ Monthly Waged 24% - 1.277

Breakdown of Employees by
Location (% - person)



■ Head Office 8% - 444
■ İzmit Refinery 38% - 2.046
■ İzmir Refinery 27% - 1.448
■ Kırıkkale Refinery 18% - 948
■ Batman Refinery 9% - 468

Breakdown of Monthly Waged Employees
by Education Level (% - person)



■ PdD 1% - 16
■ Masters 28% - 354
■ Graduate (Technical) 44% - 563
■ Graduate (Administrative) 18% - 225
■ Associate 4% - 44
■ Industrial Vocational High School 3% - 42
■ High School 2% - 30
■ Others 0.2% - 3

Employee Loyalty and the Employee Experience

According to the results of employee loyalty research, which has been repeated for many years by an independent organization, Tüpraş's overall loyalty score in 2020 rose to 61% with an increase of 25 points compared to the previous year. A 70% loyalty score was achieved for the employees paid on a monthly - 10-year high - while the loyalty score for employees paid on an hourly basis increased by 28 points compared to the previous year to reach 57%.

In 2021, studies into the employee loyalty survey results will be carried out under the Employee Experience (EX) approach initiated under Koç Holding's leadership. In order to integrate this approach more deeply into the processes, an experience model has been created which is unique to Tüpraş and which will be strengthened with the participation of employees.

This model aims to be a process in which the employees participate more, their experiences are listened to, their expectations are learned from and solutions are designed and implemented according to expectations, together with the broad participation which the Tüpraş Employee Experience teams create for these studies.

Improving the Employee experience is also among the Company's targets for 2021.

Employee Support Practices

Employee Support Program: The Employee Support Program is provided by a fully specialized professional team which serves the lifestyles and individual needs of Tüpraş employees and their families. The program offers financial, legal and psychological counseling and rapid solutions to meet special needs in daily life. The performance of the program, which provides service with a 24/7 support line, is measured in monthly service follow-up surveys.

Support Program at Work: The program, which was initiated in 2016 and includes screening, training and individual psychological support work carried out by industrial psychologists at all refineries, is ongoing.

Extended Health Insurance Program: All employees are covered by complementary health insurance, and may benefit from private health coverage at preferential rates for themselves and their families.

Flexible Working Hours: At Tüpraş, employees receiving a salary have the opportunity to organize the times they start and end their shifts on a daily and weekly basis in accordance with their personal needs and preferences, provided the management is aware and within certain limits.

Nursery Fringe Benefit Package: The Nursery Fringe Benefit Package supports the work-leisure balance in particular, and the career development of female employees.

Adaptation Process Guidance Program: To help newly recruited Tüpraş employees adapt to the corporate culture and ensure that they start work quickly, a "Guidance Support Program" practice is offered in the first 3 month orientation period.

Flextra Package: With this system, which is a flexible system of additional side benefits, each year employees may choose from a wide pool of side benefit such as life insurance, gifts and discount checks and individual pension programs, in addition to their existing side benefits, and have the option to change side right packages in accordance with their lifestyles and different individual needs. This is offered to employees every year with the company's contribution.

In 2020, the employee loyalty score was up by 25 points year-on-year.

HUMAN RESOURCES

The “Refined Suggestions” system is implemented in order to support and encourage employees to submit individual and original ideas.



Tüpraş respects the union rights of its employees and allows them to exercise these rights freely.

Recognition, Appreciation and Award Systems:

The recognition, appreciation and suggestion systems within the company are aimed to;

- increase the participation, motivation and loyalty of employees in a manner which supports the achievement of the Company's targets and strategies;
- ensure that employees receive appreciation for their success, behavior and efforts;
- increase employee participation, motivation and loyalty

Models which support the participation of Company employees in the company management are developed in a manner that does not hinder the Company's activities. The “Refined Suggestions” system is implemented in order to support and encourage employees to submit individual and original ideas on issues such as process improvement, energy savings, resource saving, productivity in production, environmental protection and occupational safety. With the Suggestion System, employees are given the opportunity to create added value with their work. Another practice regarding the participation of employees in decisions is that two representatives from the union have the right to speak in meetings of the disciplinary board for employees on paid on an hourly basis, as required by the collective bargaining agreement.

Collective Bargaining Agreement

Tüpraş respects the union rights of its employees and allows them to exercise these rights freely. Support is provided to employees seeking to become members of trade unions and non-governmental organizations, provided that they are organized within the framework of the law. The Company currently has a collective bargaining agreement in place. There are trade union workplace representatives at Tüpraş which are subjected to the Collective Bargaining Agreement and where the trade union is organized, with the number of representatives determined within the framework of legal regulations.

All employees at Tüpraş who are paid on an hourly basis work under the collective bargaining agreement. Tüpraş expects its suppliers and business partners to adopt its meticulous approach in protecting union rights, and partners are monitored to ensure that they fully implement such union rights in their operations.

The collective bargaining agreement process is carried out with Petrol-İş Union, which is repeated every 3 years, and 76% of the company employees are members. The current collective bargaining agreement is delivered to all union member employees in the form of a booklet and is kept up-to-date on the Company's intranet portal. Business processes are managed according to the provisions of the articles.

During the reporting period, 34 Tüpraş employees played an active role in the management of the unions they were members of. At the same time, 1,302 employees receiving monthly salaries took on the responsibility of being an employer's representative.

The Collective Bargaining Agreement includes subject titles such as;

- recruitment processes,
- Equality in recruitment (gender equality) and an approach of inclusion (avoiding discrimination on the basis of religion, language, race, disabled employee recruitment, etc.),
- determination of working conditions,
- possibilities for rotation,
- definition of remuneration and fringe benefits,
- social benefits (food, marriage, childbirth, kindergarten, etc.),
- use of leave,
- occupational health and safety practices,
- educational and research activities provided,
- protection of employee rights,
- sensitivity to environmental protection

The opinions of the employees are received through one-to-one interviews, survey practices and workshops and brought to the agenda of the collective bargaining agreement.



THE SECTOR

While many sectors were affected by worldwide shutdowns and restrictions, total energy demand, especially from transport, fell drastically.

At the beginning of 2020, all attention in the refining industry was focused on how the “IMO 2020” low sulfur bunker specification adaptation process would impact the markets, and all sector players had started to carry out preparations in the second half of 2019. However, as the COVID-19 outbreak morphed into a global pandemic, the deepest recession in peacetime history since the Great Depression was experienced, and the agendas and expectations at the beginning of the year suddenly had to change completely.

While many sectors were affected by worldwide shutdowns and restrictions, a large decline was recorded in total energy demand, especially from transportation. In parallel with this, the petroleum sector - the main source of energy in transportation, underwent a year which was totally unprecedented. The most striking of these were the negative levels of WTI crude oil prices, while jet fuel - normally the most profitable product - was sold at lower prices than crude oil on a 10-month average excluding January and February, the OPEC+ group announced its biggest production cut in history, while prices of heavy crudes, normally cheaper, were actually higher than light crude oil types for much of the year.

The benchmark Brent crude oil prices started 2020 at USD 66.1 / barrel. However, after China's notification to the World Health Organization of the outbreak in January, oil prices entered a downward trend with spread of the pandemic, which became the main item on the global agenda. With the US and Europe being the epicenter of the pandemic, the dispute between OPEC+ member countries Russia and Saudi Arabia at the time of the sharpest slump in global demand precipitated a combination of demand and supply shocks to the market simultaneously for the first time in history, and the price of Brent oil declined to the USD 13.2/barrel. As a result, in the April-May period, when the slump in demand had extended to 20 million barrels / day, the OPEC+ grouping reached an agreement for a production cut more double that agreed during the 2008 crisis, in a bid to eliminate empty warehouse capacity and stem the collapse in prices. Following this action, crude oil prices, which recovered from 18-year lows in the summer months as demand returned on the back of an easing in restrictions, closed 2020 at USD 50.5 / barrel. The price of crude oil, fluctuating between USD 13-70 /barrel throughout the year, averaged USD 41.8 / barrel during the year, some USD 22.4 /barrel (35%) lower than in 2019.

According to International Energy Agency data, demand fell by an average of 8.8 million barrels per day (by 8.8%) in 2020 when compared to 2013 levels, while refinery production fell by an average of 7.2 million barrels/day. While this situation caused a serious increase in stocks of petroleum products on a global basis, product profitability also slumped to historic lows. Thus, the benchmark Mediterranean refinery margin closed the year 2020 at an average of USD -0.2 / barrel, significantly behind the 2019 average of USD 1.7 / barrel.

Considering demand on a product-by-product basis, more than 90% of the fall in demand came from gasoline and jet fuel, while the fall in demand for jet fuel, which was the product to suffer the severest drop in demand, was 40%. These serious asymmetrical declines in demand forced all refineries to push

Globally, product profitability has reached historic lows.



through significant changes in their production composition, with the share of gasoline and diesel increasing while the proportion of jet share produced decreased. In addition, another factor suppressing the profitability of complex refineries was the disappearance of crude oil price advantage seen in previous years as a result of the reduced medium-heavy crude oil production due to the production cuts by OPEC+ members.

In terms of product profitability, average crack margins for gasoline, diesel and jet fuel, the main products, were 43%, 57% and 89% below their 2019 levels, respectively. In the gasoline product, naphtha sales remained alive thanks to the strong demand for petrochemicals throughout the year, with crack margins propped up by the impact of individual vehicle use which was supported by the pandemic. Despite being the product to see the mildest decrease in demand, diesel crack margins were weaker due to increased jet fuel blending. Jet fuel cracks, on the other hand, clocked up negative averages on a monthly basis for the first time in history in March, remaining negative until the last three months of 2020. In contrast to these developments, fuel oil cracks enjoyed strong averages because of declining supplies due to declining heavy crude oil processing during the year, but margins are expected to fall far behind their historical averages this year due to the IMO requirements.

Seeking to continue their operations under difficult market conditions, many refineries languished amid low capacity utilization rates, high stocks and associated low crack margins throughout the year. On top of this, with a wave of new refineries, the investments of which began many years ago,

reaching completion and being commissioned, refineries with more than 2 million barrels per day of refining capacity, most of which was in the OECD region, announced their decision to close. Experts expect the closure of more than 2 million barrels per day of refining capacity in the next 2 years due to new refineries coming on stream and a slow recovery in demand, a situation expected to continue until 2025.

During this period, when global demand recorded a sharp slump, Turkey stood out as one of the few markets to decouple positively, with demand for petroleum products, which had increased by 2.2% in 2019, declining by a mere 1% in 2020 according to EMRA figures. In this decline, demand for jet fuel declined by about 54%, while demand for gasoline declined by 2.5%. On the other hand, with the support of increased commercial activity and heavy goods transportation, diesel demand managed to close the year with growth of 1%.

PRODUCTION AND SALES

Fulfilling its duty to meet Turkey's fuel needs without allowing any interruptions, Tüpraş has maintained its safe production priority by obtaining COVID-19 TSE Safe Production Certification for all of its refineries.

Tüpraş's main activity is the supply and refining of crude oil necessary to meet the country's need for petroleum products and the domestic and international sales and distribution of the petroleum products which it produces. As a result of its crude oil refining activities, the refiner produces petroleum products such as LPG, gasoline and naphtha, jet fuel, kerosene, diesel, fuel oil, bitumen and machine oils.

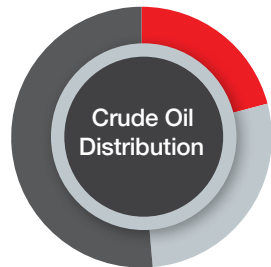
Tüpraş optimizes and diversifies resources in crude oil purchasing operations in order to distribute risk in the supply chain and to provide price and freight advantages. A significant proportion of crude oil purchases are carried out through annual agreements entered into with national oil companies. In addition, purchases are carried out to provide flexibility for the supply of crude oil types with the characteristics required by product demands and to increase additional options.

18 different types of crude oil purchased from 11 countries

In 2020, Tüpraş purchased 18 different types of crude oil from 11 countries, including Turkey, in gravities ranging from 20 to 47 API. Imports of crude oil, product and semi-finished product stood at USD 7.2 billion. A USD 6.3 billion portion these imports amounting were realized for 21.5 million tons of crude oil supplied during the year.

In 2020, Tüpraş imported a total of 2.9 million tons of semi-finished and final products, including 909 thousand tons of final products and 2.0 million tons of semi-finished products for charging to meet the country's demand.

Breakdown of Crude Oil Procured



- Low-Sulphure Crude Oil 20.9%
- Medium-Sulphure Crude Oil 27.8%
- High-Sulphure Crude Oil 51.4%

82% capacity utilization with optimum charging

Since the first days of the pandemic, Tüpraş has successfully fulfilled its duty to meet Turkey's fuel needs without allowing any interruptions. Tüpraş has taken into account the necessary measures and the guidance of the Koç Holding Crisis Center in accordance with the current recommendations and directives of all authorized authorities, notably the World Health Organization and the Ministry of Health of the Republic of Turkey. Tüpraş has maintained its safe production priority by obtaining COVID-19 TSE Safe Production Certification for all of its refineries.

Tüpraş suspended production at the Izmir Refinery in May and June in order to minimize the negative effects of the decrease in demand occurring as a result of the COVID-19 pandemic. Production subsequently increased to meet the increasing demand in parallel with the normalization process and an 82% capacity utilization rate was reached with a total optimum charge of 24.5 million tons, including crude oil and semi-finished products. This was due to product margins following a weak trend in the global sector because of high stocks.

In 2020, 23.4 million tons of products were produced and with the effective use of conversion units, the white product yield of added value products stood at 81.5%, exceeding last year's white product yield by 2.5 percentage points. During this period, jet fuel production has been reduced to a minimum within the scope of production optimization, especially due to the fact that jet fuel demand was more affected.

The operational profitability of refineries is indicated by the gross refinery margin, which is defined as the difference between the cost of crude oil determined in international markets and the revenue of products produced from this crude oil. Due to the pandemic, the supply of all petroleum products, especially jet fuel, exceeded demand throughout the year, keeping refinery margins under pressure throughout the year. In 2020, when the Mediterranean margin stood at -0.2 USD/barrel, Tüpraş's net refinery margin stood at 1.3 USD/barrel.

Competitive advantages that come with structural advantages

Tüpraş enjoys a competitive advantage with its four refineries and their existing warehouses and terminals, which being located close to the large centers of consumption throughout Turkey allow production and sales optimization. The company provides an uninterrupted supply through Körfez Ulaştırma A.Ş., a railway transportation company carrying out fuel oil transportation between the refineries, and Ditaş, a subsidiary of Tüpraş carrying



out transportation of crude oil and petroleum products to meet Tüpraş's needs. The positive contribution of Tüpraş Trading Ltd, which was founded in London, to the fuel trade activities, especially exports, reinforces this advantage.

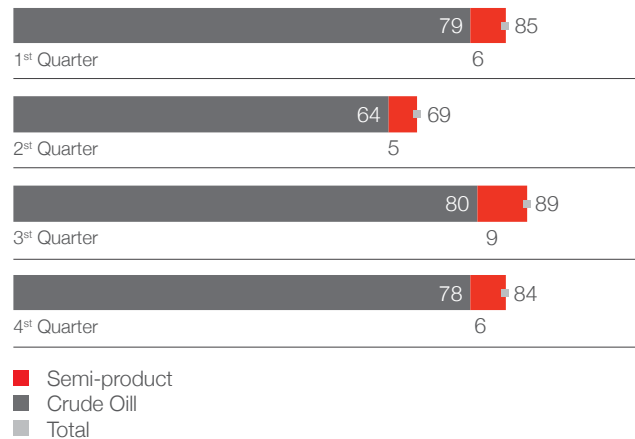
Tüpraş's refineries offer structural benefits when compared to the other regional refineries:

- High refinery complexity
- A wide range of crude oil processing capacity
- Close proximity to oil producers in the Middle East
- Strong logistics advantage with the sea and rail transport fleet
- Additional added value in the supply and sales chain with its overseas sales subsidiary
- High storage capacity
- A widespread LPG and fuel distribution network
- Strong brand value
- High and sustainable customer satisfaction
- Good practices in environmental and energy issues
- Adaptation to the pandemic process and flexible production capability

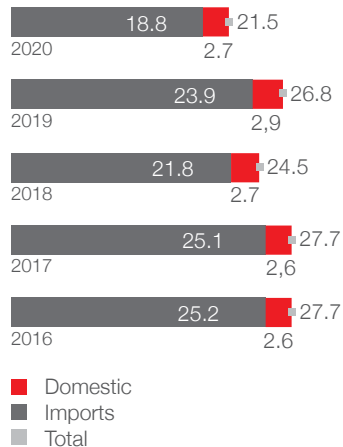
Tüpraş Refining Production (thousand tons)

Products	2019	2020	Change %
LPG	975	740	-24.1
Gasoline/Naphtha	5,944	4,959	-16.6
Jet Fuel/Kerosene	4,817	2,666	-44.7
Diesel	10,108	10,468	3.6
Fuel Oils	2,552	522	-79.5
Bitumen	2,248	2,765	23.0
Base Oils	135	65	-52.0
Coke	762	720	-5.4
Others	570	485	-15.0
Total	28,112	23,389	-16.8

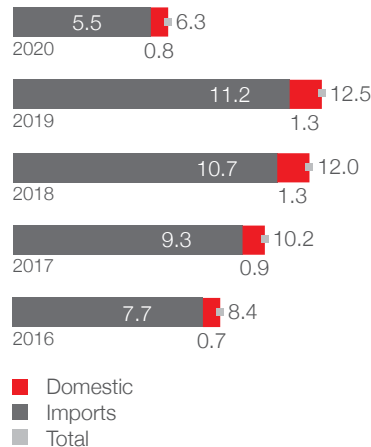
2020 Capacity Utilization (%)



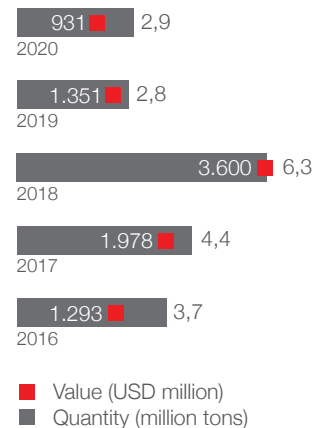
Crude Oil Supply (million tons)



Crude Oil Supply (USD billion)

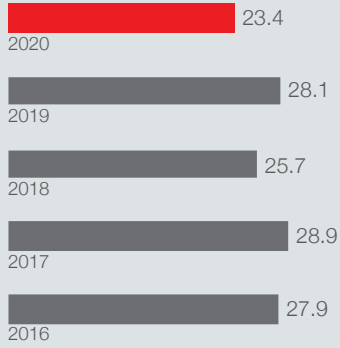


Product Import



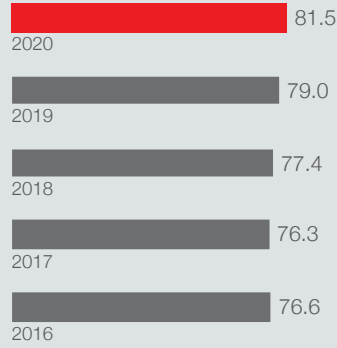
PRODUCTION AND SALES

Total Production (million tons)



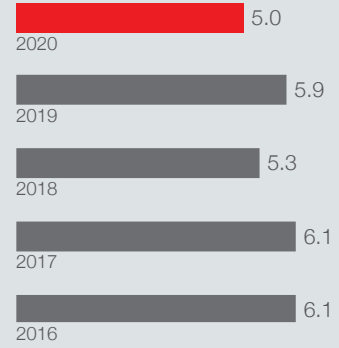
Total production was kept at 23.4 million tons in order to minimize the negative effects of the decrease in demand.

White Product Yields (%)



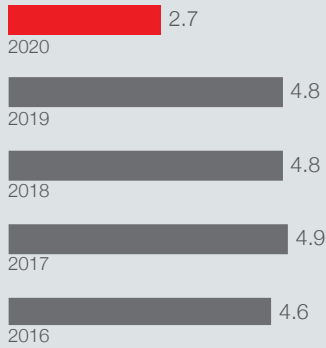
The white product yield, which reached 81.5%, increased by 2.5 points.

Gasoline and Naphtha (million tons)



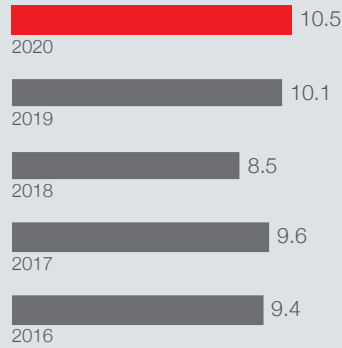
5.0 million tons of production was realized due to the decrease in gasoline demand.

Jet Fuel (million tons)



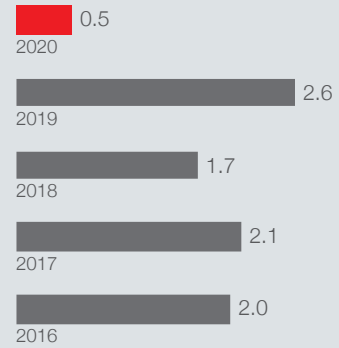
Jet fuel production was reduced to a minimum within the scope of production optimization.

Diesel (million tons)



Diesel production, which was relatively less affected by the decrease in demand, was increased by 4%.

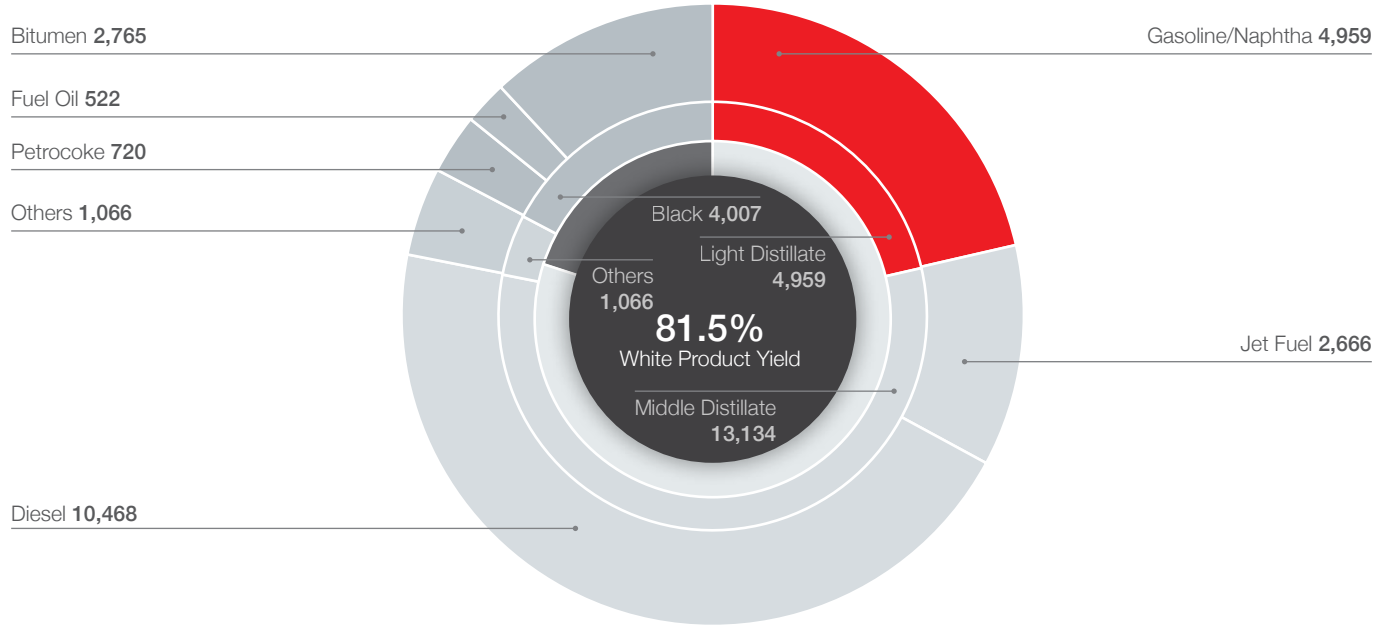
Fuel Oil (million tons)



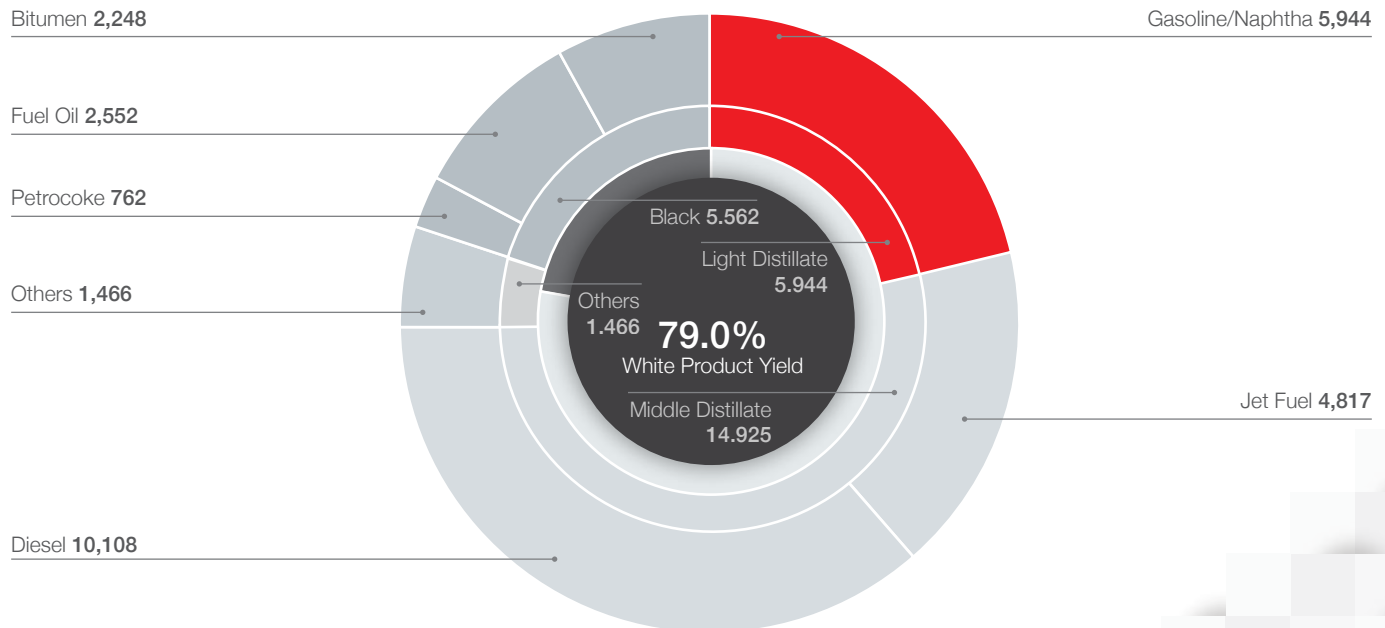
During the year, 522 thousand tons of fuel oil was produced as a result of fuel minimization.

PRODUCT YIELDS

2020



2019



PRODUCTION AND SALES

Tüpraş has successfully fulfilled its responsibilities to meet the demands of domestic customers with its large fleet and production and supply solutions with various alternatives.

Turkey's first and largest refiner - meeting a significant proportion of Turkey's energy needs

Tüpraş, as Turkey's largest refiner, was also its first. It supplies 53 types of petroleum products through four refineries utilizing leased terminals throughout Turkey and meets a significant proportion of the country's energy needs.

Tüpraş conducts direct wholesale of products to companies distributing fuel oil, LPG, bunker fuel, jet fuel and mineral oil, which are licensed by the Energy Market Regulatory Authority (EMRA), as well as industrial, petrochemical and paint companies which intensively use petroleum products in industry, along with the General Directorate of Highways, Municipalities, other official institutions and the contractors approved by these institutions, private construction and contracting companies, cement manufacturers, trading companies and the Ministry of National Defence on behalf of the Turkish Armed Forces.

A year in which Tüpraş successfully fulfilled its responsibilities in meeting the demand of its domestic customers, despite the negative impact of the pandemic

Tüpraş continuously reviews all sales, delivery, after-sales service and marketing processes in order to improve customer-oriented sales approaches in rapidly changing market conditions, and meets customer demands and expectations as quickly as possible and at the highest level.

During the pandemic period, the focus was on digital customer solutions to best meet customers' demands and expectations quickly. Agile approaches were taken to keep the risk of contamination to a minimum through field events. The "Driver Tanker Queue Tracking Screen", which is designed to display the screens/ boards which drivers will monitor on the web and via smartphones before filling at refineries, is now available for use. However, the scope of the Tüpraş Customer Portal application and the Tüpraş Solution Center (444 123 0) has been expanded with the strategy of generating rapid solutions. The new Customer Notification Management System, which was designed specially to meet customers' needs of, was brought into operation.

On a product-by-product basis, first looking at jet fuel, the production surpluses in jet fuel caused by the sudden slump in demand losses resulting from the restrictions on air traffic as part of the pandemic measures were kept under control by utilizing physical stock opportunities in nearby storage areas, optimizing

production prescriptions in line with the current situation and effective use of foreign trade channels. For diesel and gasoline, efforts were taken to anticipate market demand as accurately as possible by establishing close contact with customers. Thus, refinery production was anticipated correctly and with time provided for foreign trade connections. Again in these periods, the commercial advantage of possessing physical stock were realized rapidly in line with market structure and storage capacities. The relaxation of measures paved the way for a sharp increase in demand during the summer; this demand was met successfully thanks to timely evaluations. Demand for Bitumen, which followed a strong trend despite the pandemic conditions, was met successfully.

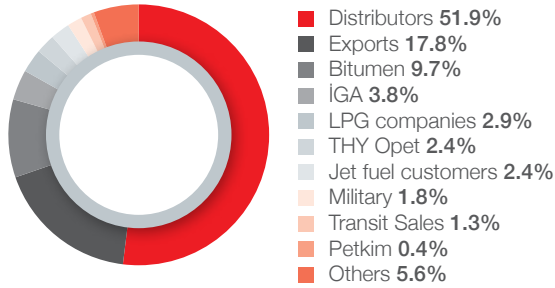
Tüpraş has successfully fulfilled its responsibilities to meet the demands of domestic customers with its large fleet and production and supply solutions with various alternatives. While meeting the bulk of national demand with 19.8 million tons of domestic sales, Tüpraş achieved a total sales volume of 24.5 million tons, including exports and transit sales.

4.4 million tons exported

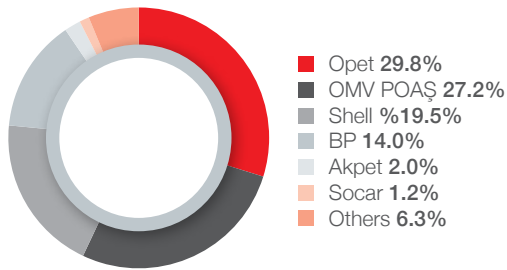
The measures taken to tackle COVID-19 brought life to a standstill all over the world, and as a result of the developments, there was a significant decline in the demand for petroleum products, especially in the first half of the year. The aviation industry was hit hardest, with a decline in demand for all petroleum products, especially jet fuel.

The active integration of Tupras Trading Ltd, which was established as a London Trade Office in March 2019, into the system marked a transition in Tüpraş's business approach. In the process, that started with the principle of selling and purchasing refinery products with the best added value, the transition was made to different commercial dimensions and business models. In 2020, Tüpraş responded to the broader range of difficulties experienced with creative commercial solutions which were applied for the first time. In 2020, Tüpraş exported 4.4 million tons of products with a total value of USD 1.5 billion. The exports consisted of 1.9 million tons of gasoline, 574 thousand tons of reformate, 539 thousand tons of jet fuel, 445 thousand tons of diesel, 342 thousand tons of bitumen, 325 thousand tons of vacuum, 128 thousand tons of fuel oil and 135 thousand tons of other products

Breakdown of Sales



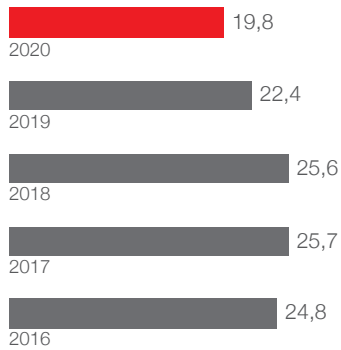
Breakdown of Sales to Distributors



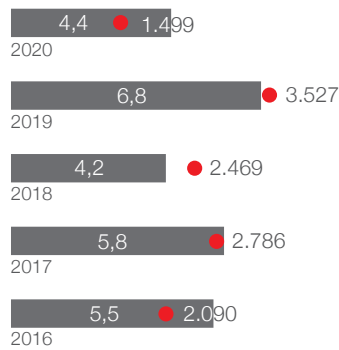
Total Sales of Tüpraş Refineries (thousand tons)

Products	2019	2020	Change %
LPG	996	717	-28.0
Naphta	290	100	-65.4
Gasoline	2,325	2,298	-1.2
Jet Fuel/Kerosene	4,266	2,215	-48.1
Diesel	10,430	10,560	1.2
Fuel Oils	1,051	404	-61.6
Bitumen	1,769	2,372	34.1
Base Oils	121	73	-39.5
Coke	812	782	-3.6
Others	330	310	-6.1
Total Domestic Sales	22,391	19,832	-11.4
Exports	6,807	4,356	-36.0
Transit Sales	-	316	-
Total Sales	29,197	24,504	-16.1

Domestic Sales (million tons)



Exports



● Value (USD million)
■ Quantity (million tons)

İZMİT REFINERY

The İzmit Refinery began production in 1961 with a capacity to process 1 million tons of crude oil per year. As a result of significant capacity increases and the investments in the conversion unit over the years, the Refinery's design capacity was registered at 11.3 million tons/year by the end of 2019.

Producing to Euro V standards, the İzmit Refinery is truly located in the heart of Turkey when in terms of the consumption of petroleum products.

The RUP Facility located within the İzmit Refinery was mechanically completed at the end of 2014. The unit converts 4.2 million tons of black products into approximately 3.5 million tons of high-value, environmentally friendly white products which meet EU standards - mostly diesel, gasoline and LPG. After the Fuel Oil Conversion Facility was commissioned, the İzmit Refinery reached one of the highest conversion rates in the world, with a Nelson Complexity value of 14.5.

A total of 12.2 million tons of material, including 10.5 million tons of crude oil and 1.7 million tons of semi-finished products, were processed at the İzmit Refinery in 2020. As of the end of 2020, the Refinery's total product sales amounted to 13.4 million tons, of which 10.7 million tons were domestic sales.

A number of studies have been carried out at the İzmit Refinery, such as reducing resource consumption and emissions with work to raise energy efficiency using urban and industrial wastewater as process water following treatment with advanced treatment methods, and sustainable management of operational wastes. In this context, with the industrial symbiosis applications, 990 tons of sandblasting waste, 210 tons of refractory brick waste, 200 tons of alumina-containing catalyst, 150 tons of heavy hydrocarbon waste, 250 tons of activated carbon and 150 tons of chemical waste were reintroduced into the economy instead of being sent to disposal. In recognition of the successful work carried at in the field of waste management, the İzmit Refinery won the Waste Management Award at the "Sustainable Business Awards" in 2020.

The highest conversion rate in Turkey

REFINERY CAPACITY

11.3 million tons

NELSON COMPLEXITY

14.5

NUMBER OF EMPLOYEES (YEAR-END)

2,046

STORAGE CAPACITY

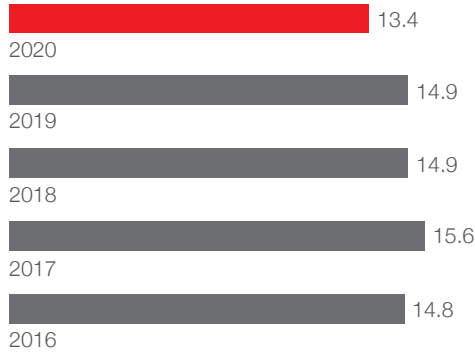
3.0 million m³

In the efficient use of energy, the EII (Energy Intensity Index) value, which is the basic parameter used in comparing the energy performance of global refineries in the analytical EII study, is instantly monitored by all users in the İzmit Refinery and necessary actions are taken when the EII deviates from its optimum point. In the İzmit refinery, which consumes about 2% of Turkey's natural gas, energy efficiency remains the first and foremost priority with improvement work implemented using engineering power. The İzmit refinery received a Special Jury Award for its "Operational Energy Optimization of Hydroprocess Units" project within the scope of the work carried out in line with the energy efficiency strategy in the Energy Efficiency in Industry (SENER) Project Competition. In the refinery, energy savings amounting to 135,000 GJ were achieved with 16 energy efficiency projects in 2020, while CO2 emissions were reduced by 8,000 tons.

Major projects completed during the year

- Installing HPNA system on the RUP Hydrocracker units
- Construction of a new temporary landfill for waste
- Revision and landscaping of Zone B entrance single-storey and weighbridge buildings
- Building of a sulfur storage area in the Phase-3 berth
- Installing a wagon filling system in the zone B wagon area
- Obtaining "Basic Level Zero Waste Certificate" and TSE COVID-19 Safe Production Certificate by fulfilling the requirements within the scope of Zero Waste Regulation.

Sales (million tons)



The İzmit Refinery won the waste management award in the "sustainable business awards" in 2020.

İZMİR REFINERY

With the aim of meeting Turkey's growing requirement for petroleum products, the İzmir Refinery was brought into operation in 1972. The refinery, which started production with an annual crude oil processing capacity of 3 million tons, is now registered as having an annual refining capacity of 11.9 million tons following significant capacity increases and unit modernizations carried out over the years.

The İzmir refinery, which has a Nelson Complexity Index of 7.66, is the only refinery in Turkey to have a machine oil production complex, with a 400,000 tons/year capacity.

Due to the negative impact of the COVID-19 pandemic, production was halted for two months during the year at the İzmir Refinery due to the disruption of general commercial activities in domestic and foreign markets and the resulting decrease in demand. A 57% capacity utilization rate was achieved with a total charge of 6.8 million tons, including crude oil and semi-finished products.

A total of 6.0 million tons of products were sold from the İzmir Refinery in 2020, with 4.4 million tons of this amount sold domestically.

The only refinery with a lubricants production complex in Turkey

REFINERY CAPACITY

11.9 million tons

NELSON COMPLEXITY

7.66

NUMBER OF EMPLOYEES (YEAR-END)

1.448

STORAGE CAPACITY

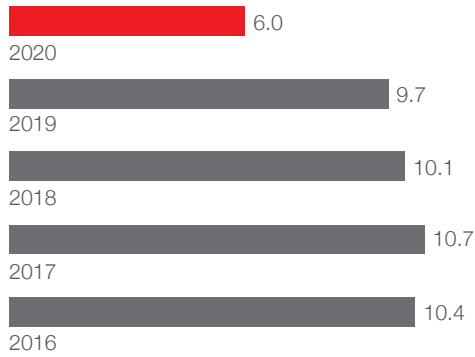
2.5 million m³

In accordance with the Zero Waste Regulation, the “Basic Level Zero Waste Certificate” has been obtained within the scope of the certification process for industrial facilities which establish and effectively implement a zero-waste management structure.

Major projects completed during the year

- Improvements in the U-100 Crude Oil Unit through desalter modernization, burner modernization in furnaces, cleaning and renovation work in the heat exchanger and connected lines, achieving 36,636 Gcal / year in energy savings and a reduction of 8,609 tons / year in CO₂ emissions
- Burner modernization in fuel oil production unit furnaces
- Electricity Generation-Distribution Units gas turbine evaporative cooler integration
- Fleyr modernization of fuel oil units
- New tanker filling islands project and new pump stations in the Land Filling Unit
- Refinery electricity supply and reliability enhancing projects
 - Renovation of the TEIAS 154kV substation
 - Power Distribution Center busbar and relay modernization
 - Modernization of the decoupling system
- Water road map created by identifying alternative water resources and potential water saving projects
- Renewal of “Coastal Facilities Operation Permit” and increasing the size of the largest tankers able to berth at the Crude Oil Pier to 300,000 DWT and the largest tanker load resistance that can berth at the LPG Pier to 60,000 DWT
- Obtaining the “Basic Level Zero Waste Certificate” and TSE COVID-19 Safe Production Certificate by fulfilling the requirements within the scope of Zero Waste Regulation

Sales (million tons)



The “Basic Level Zero Waste Certificate” was obtained within the scope of the certification process for industrial facilities that establish and effectively implement a zero waste management structure.

KIRIKKALE REFINERY

The Kırıkkale Refinery was established in 1986 to meet the demand for petroleum products in the Central Anatolia, Eastern Mediterranean and Eastern Black Sea regions, specifically Ankara.

Over the years, the Refinery has developed the configuration offering a mid-level complexity by Mediterranean standards with the addition of a hydrocracker, isomerization, diesel desulphurization and CCR reformer units. With a Nelson complexity of 6.32, Kırıkkale Refinery has Turkey's largest road tanker filling capacity.

The crude oil supply of the Refinery, which has a nameplate annual crude oil processing capacity of 5.4 million tons, is provided from the Botaş Ceyhan Terminal, using the Ceyhan-Kırıkkale pipeline.

Once production got underway at the İzmit Refinery Fuel Oil Conversion Facility, it was ensured that the Kırıkkale Refinery - which sends semi-finished products to this unit to be fed to the charger - achieved its targeted operational performance. In 2020, the Refinery processed a total of 4.6 million tons, including semi-finished products, and 85% capacity utilization was achieved.

In 2020, 4.4 million tons of petroleum products were produced at the refinery without interruption, with LPG, gasoline, jet fuel, kerosene, diesel fuel, fuel oil, bitumen and products which will be used as charge for the Fuel Oil conversion project being the main products from the refinery, which received the Covid-19 TSE safe Production Certificate. The total product sales made to meet the consumption needs of Central Anatolia stood at 4.0 million tons as of the end of the year.

The most comprehensive wagon maintenance and repair workshop located in the Kırıkkale Refinery and meeting ECM standards in Turkey has started to serve the wagons of other companies in 2020. In addition, investments in the Kırıkkale Refinery to carry out the maintenance activities of locomotives owned by the Company and to develop material storage facilities are continuing rapidly.

Tüpraş launched the Tüpraş Academy at the Kırıkkale Refinery in November 2020 with the aim of training Turkey's refining personnel. The Kırıkkale Refinery Tüpraş Academy, which covers classrooms, workshops, a conference hall, a library, an agile working environment and social areas, is expected to breathe new life into Tüpraş and the sector in the field of education and development.

Turkey's largest road tanker filling capacity

REFINERY CAPACITY

5.4 million tons

NELSON COMPLEXITY

6.32

NUMBER OF EMPLOYEES (YEAR-END)

948

STORAGE CAPACITY

1.3 million m³

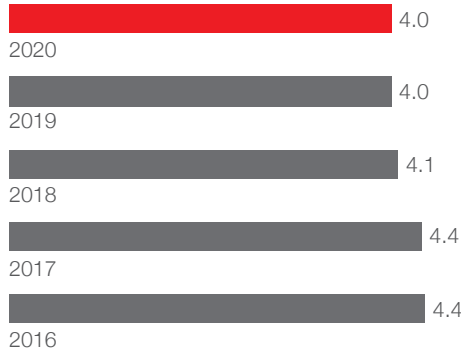
In the Industrial Energy Efficiency Project Competition organized by the Ministry of Energy and Natural Resources, the Kırıkkale Refinery won the second prize with its “Energy Optimization Studies” project, which provides 112,930 MW of savings in annual energy consumption while reducing greenhouse gas emissions by 22,000 tons of CO₂ annually.

Within the scope of customer satisfaction studies, in Phase-1 of the Traffic Safety project, the traffic flow of tankers and small vehicles was rearranged and new intersections were created, and the missing plate and floor disorders were eliminated, contributing to an increase in customer satisfaction. There was a 42% reduction in customer complaints received when compared to the previous year, while the amount of feedback indicating satisfaction increased.

Major projects completed during the year

- Renewal of K-1452 compressor exciter system
- Refurbishment of 2520-2521 and CWTP switch stations
- Establishment of wagon filling island bioethanol injection system
- Establishment of mass flow meter in LPG tanker filling station
- Refurbishment of the cooling tower injection system
- Establishment of VESDA fire detection system within the scope of the MYGAS projects
- Obtaining “Basic Level Zero Waste Certificate” and TSE COVID-19 Safe Production Certificate by fulfilling the requirements within the scope of the Zero Waste Regulation

Sales (million tons)



At the Kırıkkale Refinery a total of 4.0 million tons of products were sold during the year.

BATMAN REFINERY

The first refinery in Turkey

REFINERY CAPACITY

1.4 milyon ton

NELSON COMPLEXITY

1.83

NUMBER OF EMPLOYEES (YEAR-END)

468

STORAGE CAPACITY

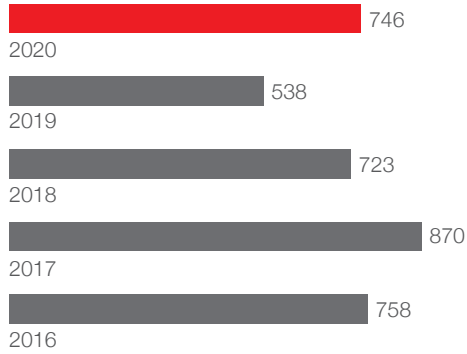
299 thousand m³

Commissioned in 1955 with a crude oil processing capacity of 330,000 tons, the Batman Refinery was the first refinery to be founded in Turkey. The annual refining capacity of the Batman Refinery, which reached 1.1 million tons after the commissioning of the second crude oil processing unit in 1972, was registered as 1.4 million tons in 2019 after the investments of new F-1101 furnace and the E-1114 and E-1115 exchangers.

With the advantage of its geographical proximity to Turkey's own domestic heavy crude oil resources, Batman Refinery is structured in a simple configuration to process this crude oil. The Refinery has a Nelson Complexity Index of 1.83. In 2020, the Batman Refinery processed 942 thousand tons of crude oil in the bitumen mode and sold 746 thousand tons of product.

Semi-finished products produced in Batman Refinery and the diesel and gasoline products from the Kırıkkale and İzmir refineries are transported by railway.

Sales (thousand tons)



At the Batman Refinery, the sale of 746 thousand tons of products, which met EU specifications, was carried out with products transported from Kırıkkale and İzmir refineries.

TUPRAS TRADING LTD



The London Trade Office, which started its operations as a branch in 2018, became a limited company 100% owned by Tüpraş at the end of 2020, with the title of Tupras Trading Ltd.

The main objective of Tupras Trading Ltd is to create additional added value from the market opportunities which come with staking a presence in one of the most important Centers in Europe's oil trade, and to raise Tüpraş's commercial competencies to a higher level.

Tupras Trading Ltd started its commercial activities in 2019 by exporting gasoline and fuel oil products on behalf of Tüpraş. The first fuel oil trade was realized in March 2019 and the first gasoline trade was realized in June 2019. As the company became active, a one-to-one negotiation method started to be applied, in addition to the tender method. Additional benefits were provided from the supply chain with freight optimization and commercial optionality by changing imports to a predominantly FOB basis, with exports predominantly taking place on a CIF basis.

The most notable development of 2020 in the trade of petroleum products was the collapse of the demand for oil and petroleum products caused by the COVID-19 crisis, especially in April and May, and the domino effect caused by this collapse on financial markets and physical supply chains. The restrictions imposed on airline transportation to curtail the spread of the pandemic have primarily had a negative impact on demand for jet fuel. However, the restrictions on mobility also started to affect road transportation, thus putting pressure on demand for gasoline and diesel. These factors, leading a collapse in

demand, started to stretch the physical limits of global storage capacity of oil stocks in the runup to May 2020. As a result of these developments, the May-delivered U.S. crude oil (WTI Futures) futures contract price closed at USD -37.63 /barrel on 20 April 2020, with prices in negative territory for the first time. During this challenging period, the risks and negative effects of the pandemic, which have impacted Tüpraş's commercial operations, were minimized by the land and sea storage operations and third-party trade with the measures taken through Tupras Trading Ltd.

In 2020, Tupras Trading Ltd. exported a total of 64 cargoes and 2.3 million tonnes of fuel oil and gasoline/reformate, and realized a total of 56 cargoes and 1.8 million tonnes of imports in order to meet the fuel and intermediate product needs of the Tüpraş refineries.

Effective management of market risks and operational risks, which are a natural part of Tupras Trading Ltd.'s business model, is crucial in ensuring sustainable profitability. The monitoring, management and reporting of these risks is carried out within the scope of the relevant risk policies. Identification of the risks which the Company may be exposed to, taking additional measures deemed necessary and developing policies are carried out by the Risk Management Committee.

The main objective of Tupras Trading Ltd is to create additional added value from the market opportunities which come with staking a presence in one of the most important centers in Europe's oil trade, and to raise Tüpraş's commercial competencies to a higher level.

DISTRIBUTION - OPET

Established by the Öztürk Family in 1992, Opet has been jointly managed by the Öztürk Group and the Koç Group since 2002. The Company operates in the fuel distribution sector via retail sales, commercial and industrial fuel sales, storage and international product trade. With more than 900 employees, 1,766 stations including the Sunpet brand and 1.1 million m³ of storage capacity, Opet manages an extensive service network throughout Turkey with 5 terminals and provides high-quality products and services to its customers.

Opet manufactures and markets mineral oil through its subsidiary Opet-Fuchs, a 50-50% partnership with the German mineral oil company, Fuchs. It also supplies and sells jet fuel via THY-Opet, a 50-50% partnership with Turkish Airlines.

Opet maintained its number 2 position in 2020.

Opet achieved sales growth in line with the market during 2020 thanks to its well-established dealer network. The Company ranks second with a 19.4% market share in white products and 26.27% in black products. The Company became the market leader in the retail sector on a monthly basis in July and October.

Opet's subsidiary THY-Opet, which serves a number of domestic and international airlines in all airports throughout Turkey, reached jet fuel sales of 794,000 m³ in 2020.

Opet implements numerous new projects in many fields aligned with its aim of being the first choice of customers with its "Perfect Service Understanding".

White products
2nd with 19.43% market share
Black products
2nd with 26.27% market share

STORAGE CAPACITY

1.1 million m³

STATIONS (INCLUDING SUNPET)

1.766

TOTAL REVENUES

TL 38,623 million

Leading the way with its social awareness projects

Since its establishment, Opet has made a name for itself with the social awareness projects it has developed for the benefit of society outside its field of activity. These social responsibility projects, which respond to social problems and needs, are implemented in a manner focused on change and which is sustainable and result-oriented. In the “Clean Toilet Campaign”, which has been ongoing since 2000, awareness of hygiene and cleanliness - the importance of which has become better understood better during the pandemic period - was raised throughout across Turkey. In the “Green Road Project”, initiated in 2004, work was carried to bring greenery to petrol stations and their surroundings, and in areas without trees as determined by the municipalities and in line with the climatic conditions. The “Exemplary Village Project” was initiated in 2005 with the aim of helping villages become self-sufficient and to make use of their historical, geographical and cultural potential. The next project was the “Respect for History Project” which was implemented in 2006 to give the historic Gallipoli Peninsula a contemporary appearance by preserving its natural texture. Among the projects to mark 2018, the Year of Troy, the “Archeo-village Tevfikiye” and “Ethno-village Naked” projects were carried out as a result of the renovation work in the villages around the ancient city of Troy. The “Traffic Detectives Project”, which aims to transform learner drivers into competent drivers who thoroughly know the rules of the road, started in 2013. The “Power of Women Project”, developed to increase women’s employment in Opet stations, has been generating a social impact in terms of social gender equality and employment since 2018.

Awards and Achievements

The “Most Technological Brand

The “Most Technological Brand” in the “Fuel Sector” category at the Tech Brands Turkey awards

The Most Valuable and Powerful Brand

Selected as “Turkey’s Most Valuable and Powerful Brand” in the “Fuel Sector” category in the Brand Finance survey, and ranked at the 4th among the most powerful brands

The Most Reputed Brand

Recognized as The Most Reputed Brand in the “Fuel Sector” category in the Turkey Reputation Index

Human Resources Awards

Winner of the “Silver Award” in the “Success in Human Resources Management” category at the Stevie International Business Awards, in recognition of its “Employee Loyalty” program. Also winner of the “Turkey’s Best Workplace” award in the Kincentric survey.

The Most Reputable Business Partner

Winner of the “Turkey’s Most Reputable Business Partner” award in the “Fuel Sector” category at the B2B Excellence Awards

“Champions of the Digital Arena” in the Digital Transformation Awards

Second place award with the “Customer Verification System” in the “Digital Disrupter” category and with the “Digital Education Platform” in the “Talent Accelerator” category of the IDC DX Summit. Third place in the “DX Gamechanger” category with the “Market Automation-Technopod Project”.

Forward-looking expectations

Opet’s main priority is to maintain customer satisfaction while growing above the sector without compromising profitability. 2021 is expected to be a year of investments in line with these objectives.

In line with this strategy, the company will continue to expand across the country in the Ultramarket project, which is one of the non-fuel development areas that the company initiated in 2019. However, it will also be a pioneer of innovation in different non-fuel channels.

Opet aims to be ahead of its competitors in its sector in this field by continuing to take decisive steps within the scope of the digital transformation.

Recognized as The Most Reputed Brand in the “Fuel Sector” category in the Turkey Reputation Index

MARINE TRANSPORTATION-DİTAŞ

The Ditaş Marine Operations and Tanker Management Co. ("Ditaş") was founded on 16 March 1974 by the Turkish Petroleum Corporation ("TPAO"), İpraş, and the Turkish Naval Foundation to purchase, build or charter marine tankers and use them for the marine transportation of crude oil and petroleum products.

A 29% stake in Ditaş, held by İpraş, was transferred to Tüpraş in 1983, the year the Company was established. In October 2002, Tüpraş purchased 50.98% of the shares in Ditaş held by the Directorate of Privatization Administration, after which it held a total of 79.98% of the shares in Ditaş.

Ditaş entered a process of restructuring and growth after 2006. Within the framework of this process, 15 companies were established, with 100% of the capital belonging to Ditaş.

The Company provides shipping line operations, brokerage/ ship leasing, guidance, tug operations, inspection and agency services. Ditaş carries out crude oil transportation in line with the needs of Tüpraş, and carries out the transportation of petroleum products by taking the needs of Tüpraş and other suppliers into consideration. Ditaş carries out these services with its own tankers as well as tankers leased on a time and expedition basis.

Providing operational and cost advantages to Tüpraş with more than 45 years of experience, Ditaş transported 9.3 million tons of crude oil and 5.9 million tons of petroleum products in 2020, with 91.0% of crude oil shipments and 69.6% of petroleum product shipments during the year carried out to meet the needs of Tüpraş refineries. In 2020, Ditaş also provided product transportation services for THY Opet (8.4% of all operations) and other distribution companies (22.0% of all operations).



Port and marine agency services

Ditaş charts domestic and foreign tankers to intermediate between ship owners and the exporters and importers of crude oil and petroleum products. Ditaş also provides agency services in ports and straits.

Ditaş operates three 479,765 DWT crude oil tankers, one 51,532 DWT crude oil/product tanker and ten product carriers with a combined capacity of 171,453 DWT, 13 tugs, six mooring vessels, three service vessel and one pilot vessel.

In line with the Bareboat lease contract signed with Kuzey Tankercilik (Tanker Transportation) and Güney Tankercilik, which were both established by THY Opet, in 2020 THY Opet continued to carry out its transportation operations with three 46,031 DWT product carriers (Elif Tuba, Kaya Tuna and Kuzey Ekim), which are owned by these companies.

In order to comply with IMO regulations, scrubbers were installed on the T. Sadberk, T. Semahat, T. Adalyn and T. Elinor tankers in 2020.

Work to expand the fleet

Two tugs powered by 2x70 BHP engines joined the fleet in January and March 2020.

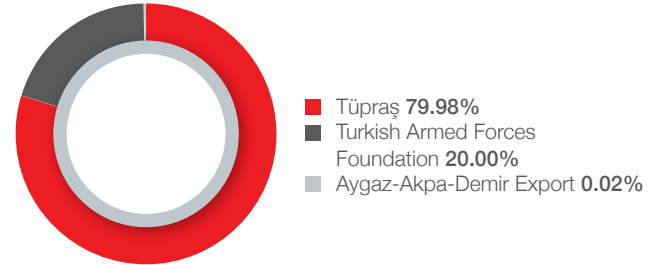
The first company to hold ISPO certification in Turkey

Ditaş was granted the International Safety Management (ISM) Code, the ISPS Code (International Ship and Port Facility Security Code), and the MLC (Maritime Labor Convention) compliance certifications for its vessels.

In addition, the company holds the ISO 9001: 2015 Quality Management System and ISO 14001: 2015 Environmental Management System certificates for the company's offices, ships and terminals.

The Company was awarded the ISPO (International Standard for Pilot Organizations) certification for pilotage, mooring and tug services in the İzmir Terminal; Ditaş was the first company in Turkey and the 11th company in the world to hold this coveted designation.

Shareholder Structure



Efforts are underway to comply with the Tanker Management and Self-Assessment Scheme (TMSA), a major credential for tanker management operations which petroleum companies are expected to implement. The vessels operated by Ditaş comply with the OCIMF SIRE (Ship Inspection Report Program), and are regularly inspected by OCIMF members. Embracing its responsibilities as a good corporate citizen, Ditaş is also a member of KalDer (the Turkish Quality Association) and TURMEPA (the Turkish Marine Environment Protection Association).

Targeting full regulatory compliance

Ditaş closely follows all applicable domestic and international laws, rules and regulations, and fulfills all compliance requirements in a timely manner in order to deliver high quality, safe and eco-friendly services. Additionally, the Company provides all training programs required by Law No: 6331 on Occupational Health and Safety and applicable regulations. The Company's occupational safety specialist and on-site physicians fulfill legal requirements such as risk assessment, emergency action plans and periodic health checks.

In 2020, an online training platform was commissioned to raise awareness of information security. The Corporate Cyber Incident Response Team (CIRT) continued its activities in accordance with national legislation, since the maritime sector was designated a critical sector in terms of cybersecurity. Digital transformation activities were carried out in the field of Enterprise Resource Planning by determining the areas of authorization and responsibility. Electronic documentation

With the ISPO awarded for the İzmir Terminal, Ditaş was the first company in Turkey and the 11th company in the world to hold this coveted designation.

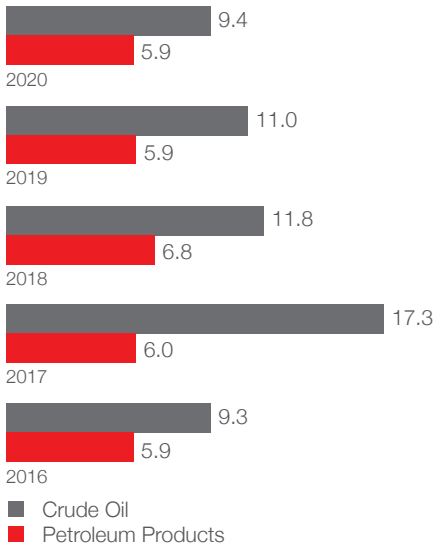
MARINE TRANSPORTATION

Ditaş inspected 71 ships and provided loading master services to 234 vessels at the İzmit and İzmir terminals in 2020.

started to be used for all publications, with the exception of those for which paper was required, in ships within the scope of digitalization activities and the Company's environmental policy. Document tracking started to be carried out through an online program. In order to improve the professional competency and safety culture among ships' crew, an agreement was reached with an industry leading international company in digital training geared towards shipping and studies started to be carried out together with this company.

Since 2009, Ditaş has provided loading master services to ships arriving in Tüpraş's marine terminals in order to increase safety. In 2010, Ditaş also started to check and report on the compliance of incoming ships with domestic and international regulations, as well as with Tüpraş's standards. Ditaş inspected 71 ships and provided loading master services to 234 vessels at the İzmit and İzmir terminals in 2020.

Crude Oil and Petroleum Products Transported (million tons)



The Affiliates of Ditaş Deniz İşletmeciliği ve Tankerciliği A.Ş.

Company	Vessel Owned
Üsküdar Tankercilik A.Ş.	T. Sevgi Tanker
Kadıköy Tankercilik A.Ş.	T. Gönül Tanker
Beykoz Tankercilik A.Ş.	T. Cumhuriyet ve T. Sadberk
T. Damla Denizcilik A.Ş.	Römorkörler ve Palamar Botları
Sarıyer Tankercilik A.Ş.	T. Suna Tanker
Karşıyaka Tankercilik A.Ş.	T. Leyla Tanker
Kartal Tankercilik A.Ş.	T. Esra Tanker
Maltepe Tankercilik A.Ş.	T. Aylin Tanker
Karaköy Tankercilik A.Ş.	T. Caroline Tanker
Çengelköy Tankercilik A.Ş.	T. Nevbahar Tanker
Bakırköy Tankercilik A.Ş.	T. Semahat Tanker
Pendik Tankercilik A.Ş.	T. Adalyn Tanker
Tuzla Tankercilik A.Ş.	T. Elinor Tanker
Göztepe Tankercilik A.Ş.	T. Fatma Tanker

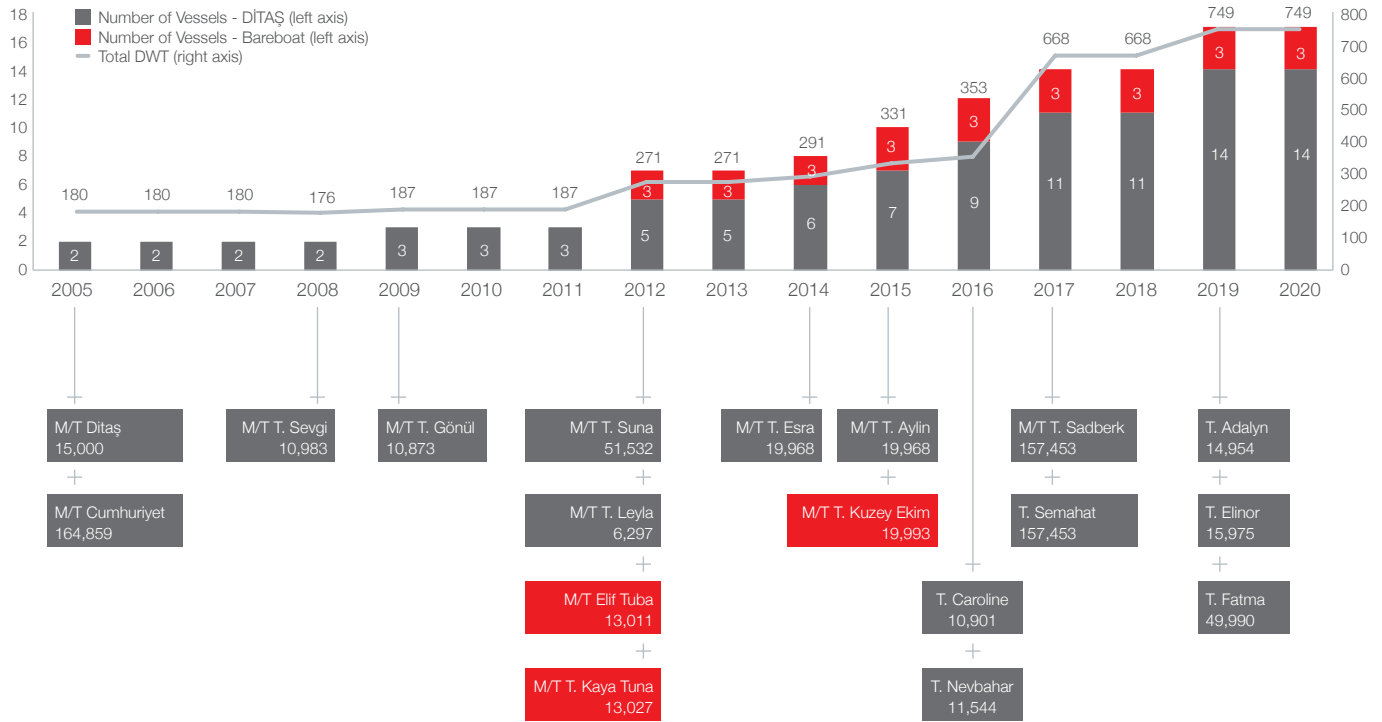
Company	Charter Vessels
	Elif Tuba Tanker
Salacak Tankercilik A.Ş. ^(*)	Kaya Tuna Tanker
	Kuzey Ekim Tanker

(*) The transportation operations of the tankers that are the assets of Kuzey Tankercilik A.Ş. and Güney Tankercilik A.Ş. established by THY Opet are conducted by Salacak Tankercilik A.Ş. under a bareboat lease contract.

Financial Indicators (USD million)

	2016	2017	2018	2019	2020
Net Sales	151.3	254.3	213.5	213.2	199.1
Operating Profit	40.7	49.4	69.1	70.8	80.4
Net Profit	32.0	39.7	49.6	52.2	59.3

Number of Vessels and Carriage Capacity



MARINE TRANSPORTATION

Ditaş-Owned Tankers



M/T Cumhuriyet

Tanker Type	Crude Oil
Built in	2001
DWT	164,859 tons
Length	274.18 m



M/T T. Sevgi

Tanker Type	Oil Product/Chemical
Built in	2008
DWT	10,983 tons
Length	131.85 m



M/T T. Gönül

Tanker Type	Oil Product/Chemical
Built in	2009
DWT	10,873 tons
Uzunluk	131.85 m



M/T T. Caroline

Tanker Type	Oil Product/Chemical
Built in	2009
DWT	10,901 tons
Length	131.85 m



M/T T. Nevbahar

Tanker Type	Oil Product/Chemical
Built in	2009
DWT	11,544 tons
Length	130.12 m



M/T T. Leyla

Tanker Type	Oil Product/Chemical
Built in	2011
DWT	6,297 tons
Length	121.62 m



M/T T. Suna

Tanker Type	Oil/Chemical
Built in	2012
DWT	51,532 tons
Length	183.31 m



M/T T. Esra

Tanker Type	Asphalt/Chemical
Built in	2014
DWT	19,968 tons
Length	156.50 m



M/T T. Fatma

Tanker Type	Asphalt/Chemical
Built in	2014
DWT	49,990 tons
Length	183.11 m

**M/T T. Aylin**

Tanker Type	Asphalt/Chemical
Built in	2015
DWT	19,968 tons
Length	156.50 m

**M/T T. Sadberk**

Tanker Type	Crude Oil
Built in	2017
DWT	157,453 tons
Length	277.17 m

**M/T T. Semahat**

Tanker Type	Crude Oil
Built in	2017
DWT	157,453 tons
Length	277.17 m

**M/T Adalyn**

Tanker Type	Asphalt/Chemical
Built in	2019
DWT	14,954 tons
Length	153.9 m

**M/T Elinor**

Tanker Type	Oil Product/Chemical
Built in	2019
DWT	15,975 tons
Length	153.63 m

Ditaş-Operated Bareboat Charter Tankers

**M/T Elif Tuba**

Tanker Type	Oil Product/Chemical
Built in	2007
DWT	13,011 tons
Length	128.6 m

**M/T Kaya Tuna**

Tanker Type	Oil Product/Chemical
Built in	2007
DWT	13,027 tons
Length	128.6 m

**M/T Kuzey Ekim**

Tanker Type	Oil Product/Chemical
Built in	2009
DWT	19,993 tons
Length	149.6 m

KÖRFEZ ULAŖTIRMA A.Ŗ.



Providing flexibility and convenience to Tüpraş with its growing fleet, Körfez Ulaştırma is Turkey's first private railway operator.

Wholly owned by Tüpraş, Körfez Ulaştırma A.Ş. was established in 2009.

As a rail operator (RTO), Körfez Ulaştırma carried out fuel transportation between the Kırıkkale and İzmit refineries with one train from each refinery on a daily basis with a total of five locomotives which it leased from the TCDD (Turkish State Railways) between 2017 and July 2019. With the addition of five new diesel locomotives to the fleet, Körfez Ulaştırma started to transport fuel between the Kırıkkale and İzmit refineries from July 2019 with two daily trains from each refinery. In 2020, the company raised the number of delivery runs on the Kırıkkale-Batman and the Kırıkkale-Mersin lines, where it carried out trial runs in 2019.

In addition to its Railway Train Operator (DTİ) activities, the company also carried out other transportation on the İzmit-Kırıkkale line, the transportation of fuel on the Kırıkkale-Mersin-Batman line and the transportation of iron ore, which started in June 2020, on the Sivas-İskenderun line with its organiser certificate and capacity, and using TCDD (Turkish State Railway) locomotives.

Körfez Ulaştırma, which carried 1.5 million tons of fuel products and intermediate products in 2020, carried 77% of this cargo using its own trains. Körfez Ulaştırma also played an organiser role in the transportation of 170,000 tons of iron ore transportation.

In 2020, Körfez Ulaştırma used 439 rail wagons, which were purchased from Tüpraş in 2019, and 26 rail wagons, which were purchased from Opet in 2020, as well as rail wagons with tanks ranging in number from 100-150, which it rented from TCDD under a long-term agreement.

At the end of 2020, 71 train drivers were working on the Körfez Ulaştırma trains. The Company employed 23 personnel on a salary in the Istanbul and Ankara offices and the Kırıkkale Locomotive and Rail Wagon Maintenance Workshops at the end of 2020.

Turkey's most comprehensive wagon maintenance and repair workshop meeting ECM standards

The most comprehensive rail wagon maintenance and repair workshop at the Kırıkkale Refinery, which meets ECM standards in Turkey, started to service rail wagons of other companies in 2020. In addition, investments for the maintenance activities for locomotives under the ownership of the Company and the development of material storage facilities continue rapidly within the Kırıkkale Refinery.

Record fall in road transportation

On the back of Körfez Ulaştırma's performance in 2020, the share of highway transportation in total highway and rail transportation was reduced by up to 8%, having stood at 38% in 2017. In addition to the economic benefit provided, through the reduction of fuel tanker traffic on the highways also brought environmental and social benefits.

Additional investments in locomotives and wagons

Production of 7 hibrid locomotives, capable of working in diesel or electric modes, ordered by Körfez Ulaştırma from the Swiss company Stadler in 2019, continues in Spain with the locomotives expected to be delivered in 2021.

35 platform wagons, which were ordered in 2020, are planned to be delivered in the first quarter of 2021, and 75 fuel wagons are planned to be delivered between the end of 2021 and the first quarter of 2022.

Körfez Ulaştırma aims to complete the aforementioned locomotive and carriage investments targets the following.

- In addition to Tüpraş's total land transportation of 2.3 million tons per year, increasing railway transportation by diversifying third party transportation on different routes,
- To single-handedly perform 10% of the railway freight transportation in Turkey in the near future,
- To strengthen its position as the largest carrier of railway fuel in Turkey, and as such, increase its contribution to the country's goal of developing railway transportation

On the back of Körfez Ulaştırma's performance in 2020, the share of highway transportation in total highway and rail transportation was reduced by up to 8%, having stood at 38% in 2017.

SUSTAINABILITY AT TÜPRAŞ

In order to create an effective sustainability management model, Tüpraş acts with the awareness of its economic, social and environmental impacts in the regions it operates in.

Sustainability Understanding and 2020 Studies at Tüpraş

While producing Turkey's energy, Tüpraş adopts a sustainability-based production approach with an awareness of its responsibility to society and the environment, and guides the United Nations 2030 Sustainable Development Goals (SDGs) in the applications it develops.

Acting as a responsible manufacturer, Tüpraş has saved 712,000 GJ of energy with 30 energy efficiency projects in 2020, and has reduced CO2 emissions by 433,000 tons with 108 projects in the last five years. The energy density index value used to measure the energy efficiency performance of refineries around the world was reduced to 99.1 in 2020, an improvement of 20 points since 2008.

By focusing on water efficiency, Tüpraş has recovered and reused 102 million cubic meters of waste water in the last five years. Thus, crude water consumption unit of per crude oil processed has been reduced by 23%. With wastewater recovery and water efficiency studies, savings equivalent to the annual water consumption of a city with a population of 2.5 million inhabitants have been achieved in the last five years.

While producing Turkey's energy, Tüpraş adopts a sustainability-based production approach with an awareness of its responsibility to society and the environment

Digital transformation, R&D, in-house enterprise and open innovation strategies are managed in a holistic manner and global trends and sectoral developments are followed closely. In this context, we continue to make a difference by focusing on developing new environmentally friendly products and production technologies.

Tüpraş continues unwaveringly to develop a safe working environment and to train the qualified workforce of the future.

Having signed the UN WEPs United Nations Women's Empowerment Principles in 2017, Tüpraş acts with the goal of being an inclusive and equitable workplace with a different perspective from the energy sector, and works to promote the equal representation of women in the fields. With this approach, it has recruited women to work as field operators and technicians. In the 2020-21 period, we continued to support the HeForShe Movement, initiated between 2018 and 2019 in cooperation with the Fenerbahçe Sports Club and the United Nations Women's Unit, with the aim of raising public awareness of gender equality in society.

Tüpraş also works to improve the environmental and social impacts of supply chain and logistics operations, which are an important component of the value chain. In accordance with the International Maritime Organization's (IMO) rule that the sulfur content in marine fuels should be less than 0.5%, the Company has installed scrubbers on four tankers, while Turkey's first hybrid locomotives, which the company ordered in 2019 and are still in the process of being manufactured, are expected to be delivered in 2021.

Tüpraş continues to contribute to social development with the projects it carries out in the fields of education, the environment, culture and the arts and gender equality.

Sustainability Management

In order to create an effective sustainability management model, Tüpraş acts with an awareness of its economic, social and environmental impacts in its regions of operation. While managing these effects, it strives to follow its adopted principle of "creating value".

In addition to responding to changing stakeholder expectations and global trends, Tüpraş regularly reviews its priority issues within the scope of its strategies in order to identify risks and opportunities regarding environmental, social and corporate management.

Tüpraş conducted a prioritization analysis in 2016. Studies on the partnership strategy will be carried out in the coming years in parallel with the determination of priority issues. Tüpraş follows the United Nations 2030 Sustainable Development Goals stated in the table below in the priority issues it has determined.

	Priority Issues	Sustainable Development Goals						
Sustainability Priorities of Tüpraş	Occupational Health and Safety							
	Innovation, R&D and Digitalization							
	Social Gender Equality							
	Environment, Climate and Energy							
Corporate Principles	Customer Satisfaction							
	Asset Management and Availability							
	Legal Compliance							

SUSTAINABILITY AT TÜPRAŞ

Within the framework of the management approach based on stakeholder participation, Tüpraş encourages various forms of stakeholder participation in decision and implementation processes.

Tüpraş included information on the contribution of its sustainability practices to the United Nations Sustainable Development Goals in its 2019 Sustainability Report. The Company's environmental, social and governance (ESG) policies were approved by the Board of Directors and put into effect and publicly disclosed on the website. Business procedures are in place to monitor the effective implementation of these policies. Tüpraş's environmental, social and governance-related basic indicators are regularly monitored and shared with the public.

Decisions regarding the disclosures prepared within the scope of the sustainability principles were taken by the Corporate Governance Committee and reported to the Board of Directors within the periods specified for the public disclosure of the annual activity reports as set out in the relevant Capital Markets Board regulations.

Tüpraş, which closely follows global developments and energy transformation, takes part in the Green Deal Task Force established within TÜSIAD within the scope of the European Union Green Deal. Tüpraş was also included in the MSCI ESG, FTSE4Good, Sustainalytics, Vigeo-Eiris and BIST Sustainability indices, and works to consolidate its position and continuously improve its performance.

Communication with Stakeholders

Within the framework of the management approach based on stakeholder participation, Tüpraş encourages various forms of stakeholder participation in decision and implementation processes. Various stakeholder communication mechanisms have been established to enable stakeholders to convey their opinions and suggestions.

The frequency of stakeholder communication is determined in accordance with the quality, expectations and needs of the target audience. In this regard, the issues, communication methods and frequency of contact with key stakeholders will vary and are included in the sustainability report.

While the communication methods determined specifically for the stakeholder group serve to inform stakeholders of the activities carried out by Tüpraş and the impacts arising from the activities, they also contribute to the enrichment of decisions and practices in line with stakeholder views.

The current version of the Tüpraş Information Policy, which sets out Tüpraş's communication practices with stakeholders, especially investors, can be accessed on the website.

The Company has taken the necessary measures to comply with the principles regarding stakeholders and to strengthen the communication with the stakeholders as specified in the Corporate Governance Principles.

In this context;

Employee engagement surveys are used to receive employee evaluations regarding applications and measure their loyalty and satisfaction.

The Tüpraş Customer Relations Policy, which covers the management and resolution of customer complaints, has been disclosed to the public. Under the policy, the main activities of Customer Relationship Management and other marketing functions are managed, customer satisfaction is measured and disclosed to the public in order to increase customer satisfaction, improve customer relations, meet customer demands and expectations to the highest level and as rapidly as possible, and necessary work is carried out in areas requiring improvement. Customer Notification Management and the Tüpraş Solution Center were brought into use. Tüpraş holds the ISO 10002-2014 Customer Satisfaction and Complaint Management Certificate.

Within the framework of Supplier Management Policy, the Supplier Code of Conduct was published and the Tüpraş Supplier Portal was brought into use.

In addition, sustainability priority topics and projects are measured in a reputation survey held every two years for all internal and external stakeholders, especially employees, customers, suppliers, business partners, wider society, NGOs, public institutions and organizations, as well as investor institutions.

Employee loyalty, customer satisfaction, supplier satisfaction and contractor satisfaction and reputation surveys are measured and improvement targets are determined in view of their results.

Universities, public institutions, NGOs and international organizations are among the stakeholders which have developed subject-oriented business associations in the management of Tüpraş's sustainability priorities. Within the scope of cooperation, regular communication with institutions is facilitated and joint solutions and projects are developed for sustainability issues. Senior executives at Tüpraş take part in the work of business organizations both on a sectoral and issue-oriented basis, and offer their opinions.

Detailed information on the cooperation with different stakeholders can be found in the sustainability report and the Tüpraş website under the heading "Communication with Stakeholders" under the Sustainability tab.

Tüpraş has adopted the principles of the UN Global Compact, of which Koç Holding is a signatory.

Supporting the work carried out by Tüpraş's parent, Koç Holding, Tüpraş signed the United Nations Women's Unit, the Women's Empowerment Principles (UN WEPs) in 2017 with its commitment to be an inclusive and equitable workplace. Tüpraş supports the HeForShe Global Movement initiated by the Fenerbahçe Sports Club and the UN Women with the theme "Our Energy for Equality" in order to raise awareness in society in the field of gender equality in 2018.

The Company also supports the IPG-Business World Plastics Initiative, of which Koç Holding is a signatory, and takes part in the sub-working groups of the World Economic Forum (WEF), which Koç Holding is a member of.

Taking part in the TÜSİAD Green Deal Task Force led by the Koç Group, Tüpraş contributed to the preparation of the "New Climate Regime Report Through the Lens of Economic Indicators". The report highlights the possible effects of the Green Deal on sectors exporting from Turkey to the EU, as well as its repercussions on the Turkish economy.

In March 2020, a working group was established within the Koç Group Environment Board, including Tüpraş, in order to follow the developments within the scope of the Green Deal and to examine

the action plans and planned mechanisms and to evaluate the potential impact areas on the Group from an environmental point of view. Tüpraş contributed to the preparation of the Koç Group evaluation note within the framework of the EU Carbon Border Adjustment Mechanism (CBAM) public consultation process, which was one of the most important developments of 2020 within the scope of the Green Deal, and was shared with the Koç Group through the related organizations.

Tüpraş also leads the Carbon Pricing Sub-Working Group established within the TÜSİAD Environment and Climate Change Working Group.

Sustainability Reporting

Tüpraş shares its practices in the field of sustainability with the public through annual reports, as well as the sustainability reports prepared in accordance with Global Reporting Initiative (GRI) Standards under the "Basic" option. The priority issues that form the basis of the content of the sustainability report have been obtained as a result of the processes carried out in accordance with the reporting principles specified in the GRI Standards. In addition, leading global sustainability reporting standards, policies and principles and investment indices are also followed, and within this scope, indicators monitored and disclosed to the public by Tüpraş are regularly revised to the extent allowed by the existing database and disclosure methods.

The shared sustainability performance chart data covers refining activities carried out by Tüpraş in Turkey between January 1st, 2020 and December 31st, 2020. In accordance with the financial reporting principles followed, the financial data of subsidiaries are included in the Tüpraş performance figures.

Under the CMB Sustainability Principles Compliance Framework published in 2020, the basic principles which are expected to be explained by public companies while conducting environmental, social and corporate governance activities are shared. Attaching importance to transparent, balanced and holistic reporting, Tüpraş sets out its approach and practices in respect of these principles through its Sustainability Reports and website content, which is published publicly. Moreover, the content of the 2020 Annual Report have been expanded in this direction, with efforts continuing to fully comply with the principles. Studies conducted within the scope of the principles are shared in the relevant sections of the report.

In this section, areas found to be in compliance with the principles in the CMB Sustainability Principles Compliance Framework prepared under the "comply" or "explain" approach are set out in detail, and evaluations regarding the principles where full compliance has not yet been reached are included in the Sustainability Principles Compliance Statement in the Corporate Governance section.

INVESTMENTS

Besides key investments for new units and process improvements, Tüpraş also carries out investments focusing on operational excellence, efficiency, environmental impacts and workplace safety.

Continuing to undertake investments in line with advances in technology, industry developments and changes in demand, in 2020 Tüpraş, Turkey's leading industrial company, undertook USD 113 million of investment spending in refining and a total of USD 153 million including its subsidiaries, Ditaş and Körfez Ulaştırma.

Along with the primary investments intended to improve product quality, which began after the acquisition of Tüpraş by the Koç Group, the company also took a number of strategic investment decisions focusing on improving, changing and transforming its

technological capabilities in the areas of operational excellence and efficiency, the environment, the regulatory framework and workplace safety. Tüpraş's investments during the last fifteen years have exceeded USD 6,9 billion, of which USD 6.3 billion was spent for refining.

The total amount of Regional and Large Scale incentive certificates obtained for various projects which are ongoing at the refineries is TL 4 billion.

The main areas of the 129 new and 169 ongoing investment projects in 2020, which are being undertaken to contribute to Tüpraş's operations, productivity, and profitability, are presented below:



İzmit, İzmir and Kırıkkale Refineries

Off-gas recovery projects at vacuum units of refineries

The aim of these projects is to remove hydrogen sulfide from gases emitted from the vacuum columns at the İzmit, İzmir, and Kırıkkale refineries by means of amine-scrubbing and to inject the treated gas into refineries' furnace burner systems as fuel. Work in the detailed engineering phase continued within the scope of the energy saving project, which will have a cost of approximately USD 51.8 million.

Establishment of New Sulfur Units

With the commissioning of the Fuel Oil Residuum Upgrading Facility at the İzmit, İzmir and Kırıkkale refineries, the crude oil unit charges of the İzmit, İzmir and Kırıkkale refineries have reached their maximum levels. As a result of processing alternative crudes containing high sulfur content, a need for new capacity emerged at the sulfur units. To meet this need, the decision was taken to establish new sulfur units. This project is planned to establish ARU and SWS units at İzmit Refinery. In 2020, a project with a value of approximately USD 400 million for three refineries was tendered as an EPC (Engineering, Purchasing, Construction) project. The evaluation processes of the bids received from the companies are ongoing.

İzmit Refinery

Revamp of the FCC unit, flue gas treatment and energy recovery

Detailed engineering studies and equipment orders were completed in the project carried out within the scope of the energy recovery and reactor efficiency improvement work at the İzmit Refinery FCC Unit in 2020. The contract for the tender for the construction and installation of the unit was signed and construction and installation work on the site continued in 2020. The installation work in the USD 67.2 million project is planned to continue in 2020 with the work planned to be completed after the unit's downtime.

Modernization of the PLT-7 LPG Merox Unit

In order to lower the total sulfur content of Autogas LPG from 50 ppm to 30 ppm, which will be realized within the scope of legal requirements and compliance with regulations, the Plt-7 LPG-1 and LPG-2 Merox units will be modernized within the scope of the project. Detailed engineering, equipment procurement and field installation work continued in the USD 7.15 million project in 2020. The LPG-2 unit was commissioned and the LPG-1 unit is planned to be commissioned in 2021.

INVESTMENTS

In 2020 Tüpraş undertook USD 113 million of investment spending in refining and a total of USD 153 million including its subsidiaries, Ditaş and Körfez Ulaştırma A.Ş.

Installation of the HPNA System in the RUP Hydrocracker Units at the Izmit Refinery

The design of the Plt-147 RUP Hydrocracker Unit does not have an HPNA (Heavy Polynuclear Aromatics) system allowing heavy polynuclear aromatics to be separated from recycling fuel. The installation of the system is aimed at increasing the conversion value of the unit from 98% to 99.5%. The equipment supply and field assembly of the USD 5.2 million project were completed and the system was commissioned in 2020.

Renovation of Tank Field Switch Systems

Work continued in 2020 on the Equipment supply and field assembly in the USD 4.2 million project, which is aimed at renewing the switch systems, transformers and cables of the switch rooms which feed the refinery tank field. The project is planned to be completed in 2021.

LPG Railway Transportation Operations Facility

The aim of the project is to optimize the LPG loads of the Izmit, Izmir and Kırkkale refineries, to sell LPG by rail from the Izmit Refinery and to maintain LPG stocks at balanced levels. In 2020, detail engineering studies got underway in the project, which has a value of approximately USD 9.5 million.

Izmir Refinery

Capacity increase in CCR platforming unit

The aim of this project is to raise the capacity of the U-9200 platforming unit from 160 m³/hour to 225 m³/hour so all heavy straight-run naphtha can be processed in order to increase product yields of platformate, hydrogen, and similar high-added-value products. Following the completion of preliminary engineering studies, detailed engineering and equipment procurement studies continued in 2020 in the USD 26.3 million project. Additionally, the tender for the construction installation work was completed. After the completion of the construction installation work, the unit is planned to be commissioned in line with the 2021 downtime schedule.

FCC unit revamp, flue gas treatment, and energy recovery

This project sets out improvements to the energy-recovery and reactor efficiency at the refinery's FCC unit. After preliminary engineering studies were completed in the USD 64.3 million project, detailed engineering and equipment procurement studies continued in 2020. Following the completion of the detailed engineering studies, the unit is planned to be commissioned in line with the stoppage program following the completion of the construction and installation work.

Construction of New Flue for the U-7000 Crude Oil Unit

The U-7000 Crude Oil Unit, which was commissioned in 1978, has 90m high concrete flue. It was determined that the reliability of the segment of between 60-80m of the concrete flue was low and the decision was taken to build a new flue at a height suitable for flue emission values. In 2020, detail engineering works continued in the USD 7 million project.



The Kırıkkale Refinery

Establishing a New SWS (Sour Water Stripping) Unit

With the project, all dirty water flows in the refinery will be directed to the SWS units by separate lines. This is aimed at ensuring the correct control of unit discharges, treatment of all existing dirty water flows at the desired level and the prevention of undesirable or emergency situations which may occur due to dirty water flow that cannot be treated by the SWS units backing each other, where necessary. Detailed engineering work in the USD 12.4 million project continued in 2020.

Building the TÜPRAŞ Training Center

The training center building at Tüpraş was built to provide training to adapt human resources, the most important factor in Tüpraş achieving its goals by supporting the company strategy, more quickly and with the required qualifications to changing situations. The USD 3.2 million project was completed in 2020 and the Tüpraş Training Center was opened for use.

LPG Railway Transportation Operations Facility

The project is aimed at optimizing the LPG loads of the Izmit, Izmir and Kırıkkale refineries. Detailed engineering works got underway in the USD 7.7 million project in 2020.

The Batman Refinery

Renovation of the C-1201 Naphtha Splitter Column

The decision was taken to renew the column, which has been operating for about 55 years, in order to prevent process safety risks which could arise from the decrease in the column thickness to below the minimum acceptable level as a result of corrosion. The purchase tender of the USD 310,000 project, was realized in 2020 and the equipment will be installed and commissioned after it arrives at the refinery.

Solar Power Plant (SPP) Installation

The Batman Refinery is fed from the TEİAŞ (Turkey Electricity Transmission Corporation) Batman 2 transformer center. The refinery obtains energy through an overhead line from the TM-1 transformer center. The Batman Refinery is an organization with a production license, which uses a distribution system. The installation of the SPP is aimed at switching to clean energy and achieving profitability.

The plant with an installed capacity of 2,000 kW is expected to generate 3.64 million kWh of electricity per year, with the result that 22.5% of the Batman Refinery's electricity consumption will be met with renewable resources. Preliminary engineering works and permit processes in the USD 1.5 million project were conducted in 2020. The SPP is planned to be installed and commissioned in 2021.



The Tüpraş R&D Center celebrates its Tenth Year

Since its establishment in 2010, the Tüpraş R&D Center has taken pride of place as one of the leading R&D Centers in the country and sector with its qualified staff and the investments undertaken to establish its strong technical infrastructure. The R&D Center shapes its project portfolio in line with the future of the sector through its collaborations with universities, research institutions and companies at a national and international level.

The Tüpraş R&D Center continues its work with an approach focused on sustainable growth and profitability. New product development projects are conducted at the R&D Center, in addition to projects aimed at improving refinery processes and meeting technical needs.

Tüpraş's extensive know-how and experience in the sector and the qualified and innovative R&D work carried out pave the way savings and profitability in operational processes. Numerous projects are implemented to support Tüpraş's profitability such as hydrocarbon characterization, material technologies, catalyst technologies, digital solutions, sensor and robotic technologies and advanced analysis methods.

Environmental factors, which will become more important going forward in line with Tüpraş's strategies, are the focus of its R&D efforts in the area of sustainability. In this context, R&D work on issues such as reducing carbon dioxide emissions, green hydrogen production from alternative resources, renewable fuel technologies and water and waste management are successfully carried out by ensuring the most appropriate benefit from international R&D support programs.

Tüpraş allocated TL 43.4 million to R&D activities in 2020. The Tüpraş R&D Center employs 52 researchers and 15 laboratory technicians, including 23 personnel holding a postgraduate degree and 12 who have a PhD. 12 researchers are continuing their doctoral studies and 7 researchers are continuing their studies for a master's degree. The R&D Center consists of 11 teams which work with the refinery teams in a manner compatible with the common goals. The R&D Center continues to work with more than 150 devices in an area of 12,950 m² over three buildings, including an office, a laboratory and a pilot facility.



Tüpraş's R&D Journey

https://www.youtube.com/watch?v=_RL2X2xeThU&feature=youtu.be



2013

The first projects “Asphaltgen” and “Heroes” were implemented within the scope of the international R&D support program, “EUREKA”.

2014

A new R&D Center campus consisting of a design building, laboratory building and pilot plant Building was opened.

2015

In the European Union Horizon2020 program, Tüpraş’s first projects “SafeAST” and “Indus3Es” began.

Horizon2020 success stories

In addition to its projects implemented with its own equity, The Tüpraş R&D Center also adds value to Tüpraş with its projects funded within the scope of international support programs. It has therefore expanded its cooperation network and attracted significant funding to our country. Tüpraş became the most successful Turkish industrial organization by obtaining EUR 7.4 million in grant support, with a total of 16 projects which have either been completed or for which work is ongoing within the scope of Horizon2020, one of the European Union Framework Programs.

Within the scope of the Horizon2020 program, which is the EU’s most comprehensive research and innovation program, a total of 27 project applications were made for the calls opened in 2020. Cooperation has been developed with more than 100 national/ international academic and industrial partners. In 2020, four new Horizon2020 projects (EBIO, ACHIEF, CORALIS, AquaSPICE) were accepted and launched.

The EBIO project is aimed at improving the technical characteristics of fuels to be obtained from biomass. Tüpraş will carry out the evaluation studies for the use of the fuel, which will be developed in the Project, as an intermediate product in the refinery.

Within the scope of the ACHIEF project, highly alloyed new generation materials that are resistant to harsh conditions will be developed and the performance of these materials will be tested at the Tüpraş refinery site. The project will ultimately serve to increase the reliability and working life of the equipment and parts which are exposed to corrosion in refineries, and to reduce downtime frequency.

The project work at the Tüpraş R&D Center, which has intensified in the areas of water and waste management in recent years, and which is of tremendous importance in the area of sustainability, was officially recognised with acceptance of AquaSPICE and CORALIS projects. Innovative wastewater recovery Technologies, which will be developed in the AquaSPICE Project, will first be implemented and tested at the refinery site. The CORALIS Project is aimed at the use of refinery waste caustic solution in a different industry by focusing on a cyclical economy.



2016

SPIRE (Sustainable Process Industry Through Resource and Energy Efficiency) platform membership was realized.

2017

A trial process started with high-quality modified bitumen developed by the R&D department

2018

In the EU Horizon2020 Program, Tüpraş was awarded with the highest amount of incentive received by any Turkish industrial company with a single project with the BAMBOO project.

Horizon2020 Projects

Completed	Ongoing
1. SafeAST (2015-2017)	1. FUDIPO (2016-2020)
2. iPerm (2016-2018)	2. BAMBOO (2018-2022)
3. INTEGROIL (2016-2019)	3. BiZeolCat (2019-2023)
4. Indus3Es (2015-2020)	4. COZMOS (2019-2023)
	5. MOF4AIR (2019-2023)
	6. FACTLOG (2019-2023)
	7. MACBETH (2019-2024)
	8. HYDROPTICS (2019-2023)
	9. ACHIEF (2020-2024)
	10. CORALIS (2020-2024)
	11. AquaSPICE (2020-2024)
	12. EBIO (2020-2024)

R&D Projects Which Add Value to Tüpraş

The MACBETH (Membranes and Catalysts Economic Beyond and Technological Hurdles) project brings together 24 organizations from 10 different countries, with Tüpraş among its partners. One of the objectives of the MACBETH project are related to the transformation of propane, which is the main component of LPG, into propylene, which is the critical petrochemical raw material for our country. The MACBETH project aims to reduce greenhouse gas emissions and increase resource and energy efficiency by adapting hydrogen separation technology with membrane into the processes to be developed. In the project, Tüpraş is undertaking the pilot scale production of the catalyst, which will be developed on a laboratory scale.

The HYDROPTICS (Photonics sensing platform for process optimisation in the oil industry) project has 10 partner institutions/organizations from 5 countries. Tüpraş is included in the project as a scenario provider and an end user. The HYDROPTICS project will develop sensor technologies, with which oil/hydrocarbon analysis in water, determination of corrosion inhibitor amounts and suspended solid matter measurement with oil droplets in water can be carried out. The monitoring and decision-support systems, which will



2019

It ranked first in the list of the most successful Turkish industrial organizations in the EU Horizon2020 Program.

be designed to be integrated into the sensors which will be tested at the refinery site, will be able to detect any leaks or errors in the unit. It will therefore be possible to maintain the process under optimal conditions. Tüpraş will play a guiding role in creating innovative technologies in its sector with the project, while also having the privilege of testing the developed technology first hand.

The FACTLOG (Energy-aware Factory Analytics for Process Industries) project brings together 20 partner organizations from 12 different countries, with Tüpraş among its partners. The FACTLOG project is aimed at developing an advanced digital twin platform which will optimise mixed industrial production process, and to understand and control production process behaviours by processing observations, knowledge and experiences in real time. Tüpraş will provide contributions to enable the use of the platform, which will be developed within the scope of the project, in the refinery industry. Tüpraş will accordingly gain a platform which is able to optimize production and energy efficiency decision processes – a crucial process in a integrated and cognitive refinery. The product and energy efficiency of the refineries is expected to increase by deploying the forecasts obtained as a result of advanced data analysis for production and energy optimization.

2020

The commercialization studies of two new products developed in R&D have been successfully completed.

Real-Time Monitoring and Optimization of Heat Exchanger Networks

One refinery operation where the efficient energy use is crucial is the best operation of thermal integration in heat exchanger networks. In this project, a control system, which reduces furnace loads by increasing heat exchange in the heat exchanger networks, thereby providing reduction of fuel consumption and carbon emissions, was developed. Work to roll out the project, which exhibited successful results in the Izmit Refinery Vacuum Distillation Unit, continues in the refineries.

Turning oxide-based materials in refinery waste into raw materials for the refractory sector

Within the scope of the Koç Holding and Tüpraş's "zero waste" strategy, the R&D project for taking ceramic materials which have completed their working life after use in the refinery and which have been largely consigned to disposal as waste, and directing them to the refractory sector was successfully implemented. The project prevented the need for regular storage of the refinery waste oxide-based materials, while minimising disposal and transportation costs. Furthermore, additional revenues were obtained by using the materials as secondary raw materials. The project, which provides an important opportunity for industrial symbiosis, has paved the way for the recycling of approximately 1,000 tons of oxide-based material waste per year, thus contributing to the sustainable environment and circular economy.

Indus3Es

The Indus3Es (Industrial Energy and Environment Efficiency) project was successfully completed in partnership with ten organizations from eight countries. The Indus3Es project was aimed at the development of an innovative and compact Absorption Heat Transformer (AHT) system for energy recovery from waste heat arising from industrial processes. The field installation and commissioning of the AHT system, which was developed to meet the conditions and needs of Tüpraş, which is included in the project as the end user and evaluator of the technology, was successfully carried out in the Steam Production Unit at the Tüpraş Izmit Refinery. The system recovers 150 kWh of energy by recycling the spent steam, which had previously been released into the atmosphere and is described as a waste heat resource. Tüpraş's first-hand trial of the AHT technology in such a manner, which has been designed according to its needs and conditions, is one of the key achievements of the project.

The total number of patent applications submitted by the R&D Center since it commenced operations reached 98, of which 70 were national and 28 were international applications.

Collaboration between Industry and Academia

One of the most important factors behind the success of the Tüpraş R&D Center is the collaborations which it has developed with many universities both in Turkey and abroad. The Koç University - Tüpraş Energy Center (KÜTEM) is the first energy Center established with the support of Tüpraş and set up with the participation of the private sector in Turkey. KÜTEM realizes important projects thanks to its academic experience and competent staff of researchers in line with the priority areas which Tüpraş needs in the industry. The second year of the protocol for the refinery-oriented computational work, which was initiated with KÜTEM in 2018 and planned to last for 4 years, was successfully completed. The work involved the development of new sensors, high-performance programming, definition of failure scenarios and estimation studies.

Another ongoing study continuing in cooperation with KÜTEM covers the design of innovative catalyst, synthesis and laboratory-scale synthesis in line with the goal of reducing refinery carbon dioxide emissions and development of its conversion to valuable fuels and chemicals.

The other R&D project, the second phase of which was launched in cooperation with KÜTEM, is being carried out in order to decompose hydrogen sulphide gas into hydrogen gas and elemental sulphur through electrochemical and photo-electrochemical methods. The two-phase redox hydrogen sulphide decomposition system, which is an innovative approach developed in the first phase of the project, adopts the use of renewable energy as opposed to traditional methods. The Patent application for the developed method was submitted and efforts are underway to increase the TRL (Technology Readiness Level) of the technology.

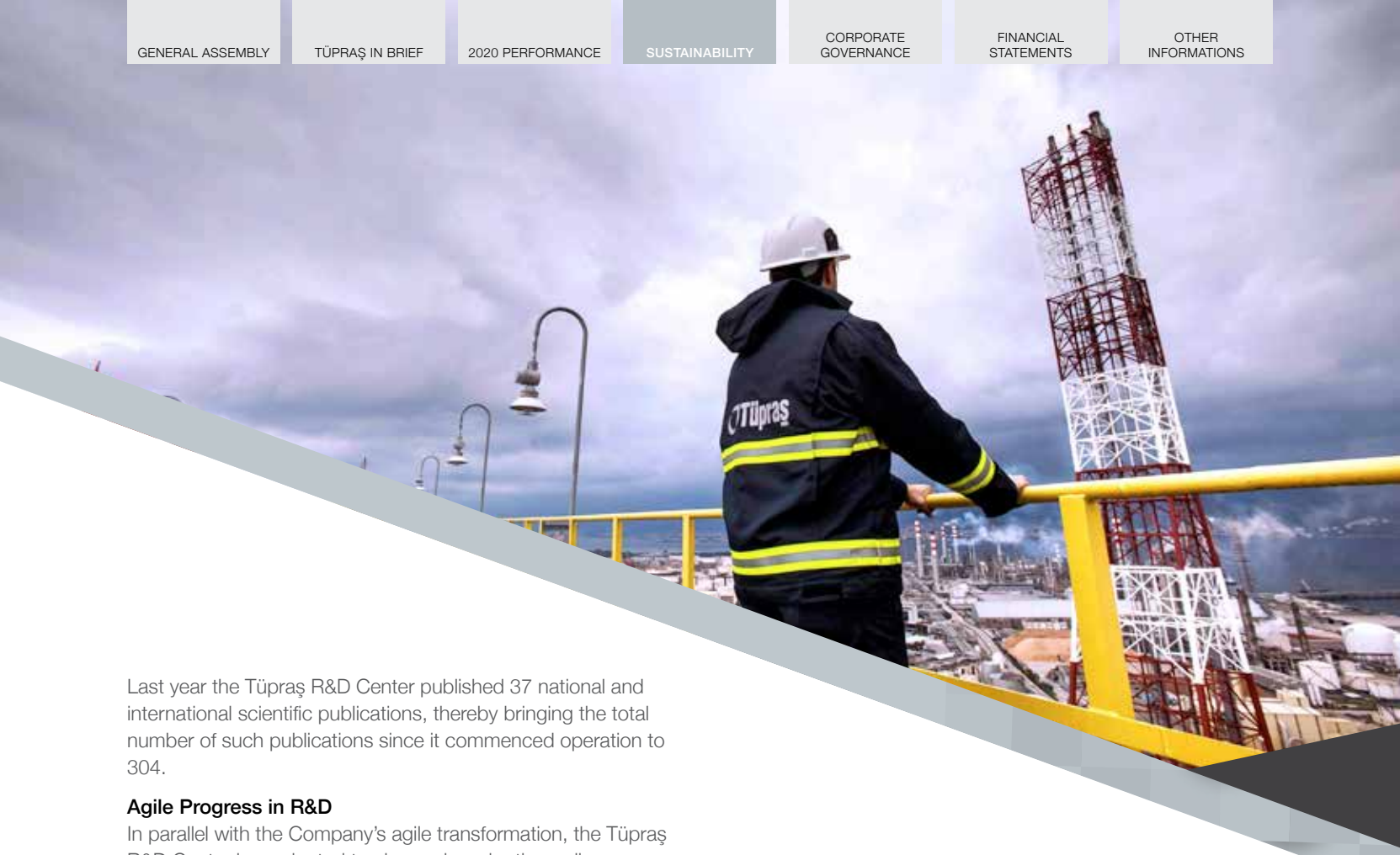
Within the scope of collaboration between industry and academia, two projects which applied with the Koç University and the Eskişehir Technical University for the TÜBİTAK 2244-Industry PhD program were accepted. The project, entitled “Developing Technologies for a Low Carbon Footprint in Refinery Integration of Biofuels” will be carried out with Koç University, while the project entitled “Production of Catalyst/ Adsorbent Support Materials for Use in Refinery Applications” will be carried out with Eskişehir Technical University. Accordingly, three PhD students will be supported for each project in the defined working areas in line with Tüpraş’s needs and sector developments, thus serving the goal of training qualified personnel for the sector and our country.

In the MIKRO-JET project, which was supported within the scope of the TÜBİTAK ARDEB 1003 Program, Tüpraş worked with important organizations such as Boğaziçi University, Koç University, Turkish Airlines, THY Technic and THY Opet. The project, which showcases the importance of collaboration between industry and academia, is aimed at obtaining sustainable and economical bio-jet fuel with highly efficient fuel synthesis catalysts by using microalgae biomass in accordance with Turkey’s geographical production conditions.

Patents and scientific publications

In keeping with its ongoing efforts to protect its intellectual property rights, Tüpraş filed two patent applications in 2020. These filings bring the total number of such applications submitted by the center since it commenced operations to 98, of which 70 were national and 28 were international applications.





Last year the Tüpraş R&D Center published 37 national and international scientific publications, thereby bringing the total number of such publications since it commenced operation to 304.

Agile Progress in R&D

In parallel with the Company's agile transformation, the Tüpraş R&D Center has adapted to change by adopting agile progress principles to ensure its work is more efficient. The Tüpraş Agile Coaches team, which includes five employees from the R&D Center, is leading Tüpraş's agile progress by taking on the role of agile coaching in projects, following an intensive training program which they received regarding agile approaches. As part of the goal of a productive and agile R&D Center, which develops itself and others, agile coaches extend support to the agile projects and initiatives which are ongoing within the R&D Center. In addition, they provide the necessary support for address new projects and studies to be launched with agile approaches. In this context, some of the projects ongoing at the R&D Center are carried out in an agile framework.

Efforts to improve R&D processes, which started in 2019, were reviewed with agile approaches in 2020. Another agile application has been the redesigning of the project management system with the R&D Center in a manner focused on cooperation and transparent communication. Accordingly, it became possible to monitor the work-time calendar and resource management of the projects more effectively and regularly, and to actively participate and inform all stakeholders in the project application processes.

TL **43.4** million

Tüpraş allocated TL 43.4 million to R&D activities in 2020.

INNOVATION

While the entrepreneurial potential within the organization is mobilized with a focus of enterprise and innovation, opportunities are developed through collaborations with external stakeholders.

Tüpraş carries out entrepreneurship and innovation for current work and the work of the future in support of sustainable growth and continuity. While the entrepreneurial potential within the organization is mobilized with a focus of enterprise and innovation, opportunities are developed through collaborations with external stakeholders.

Tüpraş was voluntarily included in the Koç Innovation Program in 2017. The process started with the determination of the innovation strategy. In parallel with the announcement of the strategy and processes throughout the whole company, internal and external communication and training activities were carried out to support the cultural transformation and increase competence. The Idea Unit portal, an in-house entrepreneurial project in which the employees with innovative ideas may share their ideas and which serves as a vehicle to spread the innovation culture within the company, was commissioned under the banner of “A platform where Raw Ideas become Value” in 2017.

Tüpraş maintains its efforts to commercialize the creative and innovative ideas of its employees with its in-house enterprise program carried out with start-up methodologies. At the same time, open innovation studies are actively carried out in order to bring value to both Tüpraş and the entrepreneurs through integration into the enterprise ecosystem.

In-house Entrepreneurial Projects

With an entrepreneur-based approach within the company, support is provided to projects which will create new growth areas and new markets. Tüpraş continues its in-house enterprise efforts to develop business ideas generated as a result of trends and changes within the scope of its strategy and focus areas, and which it can turn into opportunities on the back of its competencies and infrastructure. In light of the innovative business development tools which entrepreneurship teams have learned during the program process, enterprise teams create business models and value proposals with similar methods to the working methods of start-ups. In the program, which adopts the Lean Enterprise methodology, the culture of measuring, learning lessons and pivoting is imparted with the Establish-Measure-Learn cycle. Value propositions are confirmed through customer interviews and are matured by conducting basic financial analysis as well as market and competition surveys. In the process, the teams which confirm their ideas through customer interviews shape their demo applications and sales and business models in view of the customer feedback. With the “think big, start small, test fast” method, many different ideas are quickly tested and the results are placed into the corporate memory.

Even if entrepreneurs do not continue with the process, they reflect the agile approaches that they experience in their current work, which is the indirect contribution of the innovation studies to the overall efficiency of the Company. As much as the successes, failures brought about by uncertainty are part of the innovation process. Consequently, the “What Have We Learned?” session is held during the camp periods of the in-house enterprise program with the participation of entrepreneurs from outside the company and in-house entrepreneurs from the previous period.

In the program, which was held for a total of four terms in 2020, 120 in-house entrepreneurs have so far had the opportunity to work with 32 new ideas with methods similar to the working methods of start-ups. The in-house entrepreneurs involved in the program receive support through training which is mainly focused on enterprise methodologies, and enterprise mentoring. At the same time, enterprise projects are closely monitored and sponsorship support is provided by the senior and middle management as the projects mature.

120 in-house entrepreneurs have so far had the opportunity to work with 32 new ideas with methods similar to the working methods of start-ups.



2020 In-House Enterprise Program

The in-House Enterprise Program was carried out in 2020 under the title of “New Business Models After COVID-19”, influenced by the global and national developments. The aim of the program was to include the innovative ideas presented by the employees, to meet needs which had either newly arose or where had not been fulfilled during the pandemic period, and which could be associated with Tüpraş’s competencies and infrastructure. By rapidly adapting to the requirements of the new normal, all work continued online during the program and campaign period. During the campaign period, online activities and idea gathering workshops were held with dissemination provided. The enterprise teams were trained online and received enterprise mentoring on innovation, lean enterprise and business models within the scope of the acceleration program provided online. Within the scope of the program activities, the teams presented their work to the Innovation Committee on the online “Acceleration Program Demo Day” event. The designated projects continue their work by deploying enterprise methodologies.

Commercialized In-House Enterprise Projects

In 2020, the Modiphal-T and Spectraf projects reached the commercialization stage and their first sales were carried out. The goal for these two projects will be to expand to domestic markets first, before turning to foreign markets.

Modiphal-T

The Modiphal-T (Modified Bitumen) project aims to position Tüpraş in the modified bitumen market by adding new products to the Tüpraş product range and to deploy the flexible production model. Polymer Modified Bitumen, which is a bitumen product whose properties were improved in order to prevent deterioration in the road superstructure and that provides high performance, was added to the Tüpraş products and its sale has begun. The in-house enterprise work, which started on innovative business models pertaining to asphalt, was evolved to cover the introduction of modified bitumen products to the market through what had been garnered from the enterprise methods. The Modiphal-T team designed a business model by using the Tüpraş infrastructure

INNOVATION

In 2020, the Modiphal-T and Spectraf projects reached the commercialization stage and their first sales were carried out.

and competencies by understanding the problems faced by contractors, public institutions and all other stakeholders/ customers during the project. The CE-certified modified bitumen products, which can be inspected and are of a sustainable quality, have started to be offered together with reliable laboratory analytical services. This project not only contributed to Tüpraş's entrepreneurial transformation, but also helped it expand its product range and position in a new market. More than 30 employees from 8 different units supported the commercialization of the project.



<https://www.tupras.com.tr/musteri-sitesi/modiphal-t>

Spectraf

The Spectraf project is aimed at ensuring a sustainable supply of special fuels that are not currently produced domestically and which are not sold at the pump. The formulations of reference niche fuels with special specifications are created in the R&D center. All issues necessary for the business model are dealt with separately for each fuel in the In-House Enterprise Program. In 2020, pilot sales got underway for many special fuel types. Work is ongoing for large-scale production. More than 40 employees from ten different units have been supporting the work.

Examples of In-House Enterprise Projects

Multidisciplinary teams continue to create new growth areas and new markets for Tüpraş within the framework of an enterprise-based approach with the In-House Enterprise Program.

Secure Logictis

The Secure Logistics project develops solutions which provide security at every stage from filling to discharge while sharing instant location information, for logistics companies carrying out transportation of valuable liquids.

The project is aimed at preventing unintended losses, leaks, and providing tracking opportunity in transportation. Work got underway within the scope of the Tüpraş In-House Enterprise Program in 2018. In 2020, a patent application was submitted and pilot trials are ongoing on the wagon which was developed through the project. The project is targeted for commercialization at the beginning of 2021.

StopStock

By using 3D printing technology, a key technology of the future, the Project is aimed at producing spare parts which are frequently used in the refineries and supplied with long leads, or which require improvement, and bringing the 3D printing technology competency to Tüpraş and developing business models. In this context, workshops held at the refineries were completed at the beginning of 2020. With the project, field applications took place in different material groups, including metals, at the refineries for the first time in 2020.

Internal Mentoring Program

As of 2019, employees designated from among the in-house entrepreneurs were included in the special training and development program, so they could support the projects as internal mentors. In 2020, the internal mentor team was expanded and actively served as mentors in the in-house enterprise projects. The entrepreneurs involved in the program participate in the ecosystem activities, in addition to participating in the in-house activities, idea generation workshops and all processes of the in-house enterprise program. They also participate in these events as panellists or speakers.



Inowhatif Talks Event Series

Innovation and enterprise news from around the world and our country, innovative applications, the Tüpraş innovation studies and the in-house enterprise project studies are regularly shared through the Inowhatif E-Bulletin and Enterprise News Bulletins prepared within the company. In addition, a number of activities are prepared to sustain an in-house climate of enterprise. One of the highlights of these activities was the series of “Inowhatif Talks”, which was organized with speakers which include company employees with inspiring content related to innovation, technology and new business models. The event also offers employees a chance to share their knowledge and experience in the subjects specified, regardless of their expertise within the company. This series of events, which started in 2020, continued with the online version during the pandemic period. The first online event was held with the subject of “The Leverage Effect of Creative Thinking and Innovation in the Coronavirus and Post Trends” topic. The “Coronavirus and Digital Transformation” event was then organized, where

Industry 4.0, IoT solutions and digital transformation trends, the studies carried out in these fields in the COVID-19 period and the developments expected post COVID were covered.

The Innovation Volunteers Team

The “Innovation Volunteers” teams, consisting of employees at various levels who provide support for innovative ideas to be part of the corporate culture and to promote the perspective of in-house enterprise across the Company continued to carry out activities in 2020. Special training on innovation, open innovation and institutional enterprise are provided for these teams and work programs are organized in this context. All employees who wish to support the studies on open innovation and to take part in the in-house entrepreneurial project teams may become an Innovation Volunteer through the Idea Unit portal.

Multidisciplinary teams continue to create new growth areas and new markets for Tüpraş within the framework of an enterprise-based approach with the In-House Enterprise Program.

INNOVATION

Within the framework of the strategy in the fields of open innovation, active communication has been provided with more than 150 start-ups both in Turkey and abroad.

Open Innovation Studies

The open innovation strategy determined by workshops is aimed at finding innovative solutions which will meet the Company's needs and to seek new growth areas by following up game disrupting technologies. The areas of focus include digital technologies which improve work processes and field operations, energy efficiency/storage and management solutions, and waste and wastewater solutions. Within the scope of efforts of the current work, the Innovation unit gather together the needs of all work units, and their solutions from the domestic/international start-up ecosystem are brought together with the relevant units of the Company. In this context, the areas of focus include digital technologies which improve work processes and field operations, advanced materials, energy efficiency/storage and management solutions and waste and wastewater solutions.

As part of the work being undertaken to meet the needs of the future, new technologies and business models which may either offer opportunities or pose threats to the company are monitored through start-ups in all channels at home and

abroad. This business intelligence is presented to the company as a strategic input, with the Company then supporting strategic plans.

Promotion and Cooperation Development Work

Within the scope of integration efforts taken with the entrepreneurial ecosystem, Tüpraş takes part in a wide range of activities aimed at early and advanced stage start-ups and entrepreneurial candidates, organizes programs and provides mentoring support to entrepreneurs. More than 2,000 students and entrepreneurs have been reached by attending the activities of the universities and the students' clubs of universities as panelists or speakers. In these events information about entrepreneurship, innovation and the Tüpraş innovation studies were shared. Tüpraş provides mentoring support in acceleration programs, competitions and other enterprise activities and is actively involved as a jury member. Thousands of individuals have been reached through innovation sharing and entrepreneurial work through social media accounts.

Start-up Collaborations and PoC (Proof of Concept) Work

Within the framework of the strategy in the fields of open innovation, active communication has been provided with more than 150 start-ups both in Turkey and abroad. The Company is a customer of the ventures through buying products and services. In addition, demo studies and collaborations in the PoC (Proof of Concept), which is how start-ups demonstrate to corporations that their technology is financially viable, are actively ongoing to support their development. In 2020, the PoC was carried out 12 ventures, both from Turkey and abroad, which had reached the PoC agreement stage, together with related work units in different fields ranging from innovative valve design to digital twinning, NLP, the remote equipment monitoring platform and robotic solutions.

VivekaGrowth Collaboration

Within the VivekaGrowth accelerator program, those ventures where there is an agreement for cooperation receive support and orientation training from mentors selected from among Tüpraş specialists. The designated ventures are supported by



mentoring sessions and by providing the PoC opportunities. A start-up private company collaboration model, which was designed to access new distribution channels and new customers, and expand into the international market, has been adopted for high-tech start-ups. The Tüpraş in-house mentors are also included in the program, which offers access to start-ups for the innovation focus areas.

Emerald Technology Ventures Collaboration

A long-term cooperation agreement was signed with the Emerald Industrial Innovation Fund, an international venture capital fund, in order to invest in new technology companies in the USA and Europe. Tüpraş, which actively continues its open innovation efforts in Turkey, aims to reach new technology companies operating abroad in cooperation with the Emerald Industrial Innovation Fund. The Company plans to collaborate with new technology start-up companies in the USA and Europe in order to contribute to energy transformation, increase its competitive clout in existing operations and closely monitor the businesses of the future by participating in the fund as an investor.

The TÜSİAD Entrepreneurial Ecosystem Working Group:

Tüpraş takes part in the TÜSİAD Entrepreneurial Ecosystem Working Group, which was established with the aim of developing the entrepreneurial ecosystem in Turkey.

The Entrepreneurial Institutions Platform Turkey:

Tüpraş was included in the Entrepreneurial Institutions Platform Turkey which was established with the aim of developing learning between institutions, raising awareness over best practices and spreading the systematic applications of in-house enterprise.

A long-term cooperation agreement was signed with the Emerald Industrial Innovation Fund, an international venture capital fund, in order to invest in new technology companies in the USA and Europe.

DIGITAL TECHNOLOGIES, ROBOTICS AND CYBER SECURITY

By adhering to a strategy and roadmap structured around the concept of “Connected” in the previous year, 2020 was a year in which opportunity could be found among the challenges brought about the pandemic. With this key concept of being

“connected”, we developed a digital strategy which turned the wheels of a whole operation as “Connected Data, Connected Departments, Connected Processes and Connected Platforms” - not merely being “connected to the internet”. The projects in 2020 were carried out in this context.

Within the scope of digitalization work, nearly 100 processes have already been transferred to software robots with RPA applications since 2018. The workforce gained by this transfer has been directed to value-added projects. As well as virtual robots, physical robots also took pride of place in the Tüpraş digitalization roadmap during 2020, and the Tüpraş 5-year strategy was set out. The robotic technologies previously used in individual projects within the scope of the Tüpraş Robotic Strategies, which are created both to support the circular economy and to ensure efficiency in operations and maximize work safety, are aimed at adapting to production and maintenance processes on a specific roadmap.

With its pioneering approach, Tüpraş quickly realized that it could make a difference by using big data infrastructure and data analysis systems and built on its performance of creating value from data in 2020. In this context, analytical projects implemented in one refinery in previous years have been rolled out to other refineries, maximizing the benefits provided. In the meantime, the two biggest expenses borne by Tüpraş, which is constantly developing new projects, are energy and human resources expenses. With the EII (Energy Intensity Index) Project carried out in 2020, the Company aimed to estimate and optimize energy expenses with artificial intelligence models, and the project was commissioned in certain phases.

The “Analytical Tüpraş” model, which completed its pilot process in 2020, allows data to be transferred to the heart of decision-making mechanisms within the framework of the “Connected” strategy. It is not only a training program, but also includes the realization of active projects. Tüpraş aims to liberalize the data with its employees included in the program and raise data citizens in all of its departments. The Company is on the way to becoming an “analytical competitor” by rolling out its analytical strength and culture across all of its departments.

**Tüpraş continued
to increase its
performance in
creating value from
data in 2020 as well.**



Veri Merkezi

Within the framework of Industry 4.0 principles, Tüpraş has implemented tracking systems where IoT devices such as Steam Trap and the Equipment Health Monitoring System are used, along with wearable Technologies which will support remote intervention conditions in pandemic conditions, and solutions which will generate added value by testing field applications of wireless and mobile solutions. In this context, the “Smart Hard Hat” project won top prize in the digitalization category in various competitions such as the Platin Global 100, the TISK “A Common Future Is Possible Together” Awards.

The concept of “working together”, which was set out at the beginning of 2020 in order to support the agile transformation process, has prepared the Company for the change brought about by the pandemic and enabled it to adapt quickly, and was evolved into “working together remotely”. In this process, more than 100 workshops were organized in the first half of the year, where companies which support digital transformation and which are producers in the world, and all units can discuss their own processes. Thus, the challenges brought about by the pandemic and remote working were turned into an advantage, presenting an opportunity to connect with experts around the world, regardless of location and time, and to obtain the opinions. The digitalization roadmap and the Company processes were updated accordingly.

The Digital and Analytical Projects committees, which also include the senior management, are held every month. In the Digital and Analytical Projects committees, Tüpraş evaluates the opportunities and the problems discovered and delivers them to related teams for resolution, closely following them and often celebrating the results, which are reflected both on the field and in the financial statements. Tüpraş continued its governance in the Digital and Analytical Projects committees in 2020. Additionally, during the year, Tüpraş determined its Data Governance strategy, with which it aims to own its data on an enterprise basis.

Tüpraş, which continues to invest in emerging technologies in the field of cybersecurity, including cybersecurity risks which have increased with the pandemic, updated its Cyber Security Strategy, which will cover both Information Technologies (IT) and Operational Technologies (OT), and also the 5-year Roadmap in 2020. Tüpraş implements technologies and processes with both international and local audits and evaluations and continuously follows up and develops its competencies in this field.

Tüpraş implements technologies and processes with both international and local audits and evaluations and continuously follows up and develops its competencies in this field.

HEALTH AND SAFETY PRACTICES

Tüpraş expects all of its solution partners as well as its employees to unwaveringly comply with the health, safety, environment (HSE) standards.

Tüpraş identifies risks stemming from its operations and aims to eliminate or reduce risks to locally and internationally accepted standards. To this end, all employees of the Company as well as solution partners are expected to strictly adhere to Health, Safety and Environment (HSE) and Process Safety standards. In this context, all contractors are provided with Occupational Health and safety training prior to the start of the work process.

16 Process Safety preliminary and after-basic performance indicators, which are prepared in accordance with international standards and applications (API754, CCPS etc.), are monitored on a monthly basis. The aim is to take measures before accidents occur, and to prevent a repeat of accidents by learning lessons from the accidents that have happened.

In Tüpraş's Refineries, the Process Safety Management System consisting of 14 main titles aimed at Operational Discipline and Operational Excellence is implemented on the basis of management leadership and ownership with the CCPS and OSHA reference. With the Process Safety Management System,

all areas such as maintenance and control activities, operating procedures, change management, process hazard analysis, training and competence, and contractor management that may lead to process safety accidents are evaluated together within the scope of Tüpraş's safety requirements.

Risks arising from operations are monitored under HAZOP (Hazard and Operability) studies, which are reviewed every 2 years and renewed every 4 years. The aim of these studies is to reduce the incidence of major accidents to a level of 1×10^{-6} . Considering the developing and changing processes and potential threats in the world, in our country and in the refineries, Cyber Security Risk Assessment studies were added to these studies in 2020.

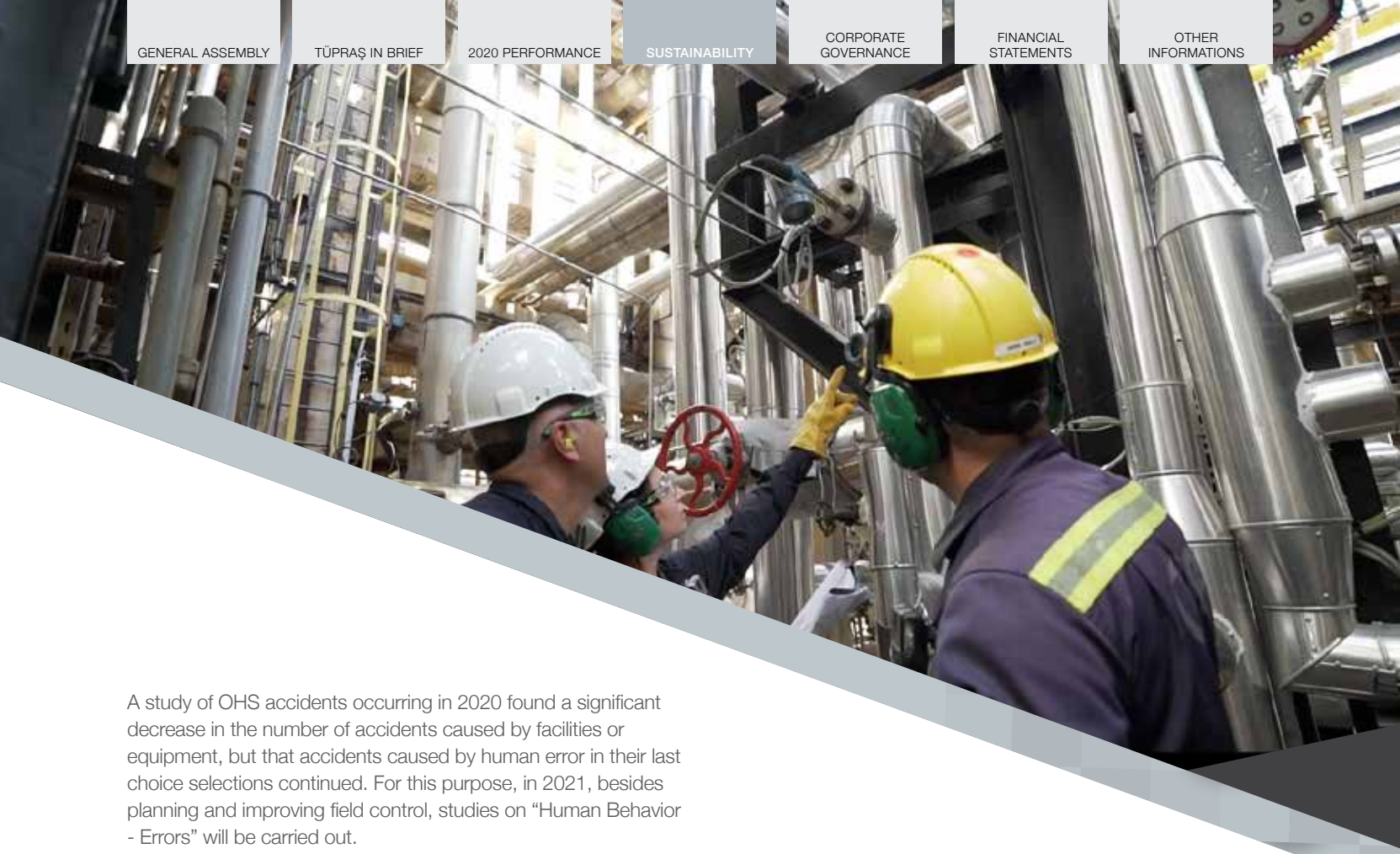
In the process hazard analysis conducted under the change management system, the effects and hazards of newly added equipment, facilities and processes on existing systems are evaluated and managed.

In 2020, internal trainings, including major accident scenarios, began to be implemented both in-class and online, in order to raise awareness among employees and improve their competencies, especially in process safety. Along with the digitalization studies, the management of process safety risks and the online monitoring of the effectiveness of barriers and projects on actions (alarm management, barrier tracking-Safepool, digitalization of SU / SD procedures, etc.) are carried out.

Tüpraş's Occupational Health and Safety (OHS) mission is to ensure employees return home, healthy, at the end of each working day, while its vision is to ensure employees return home in an even healthier manner with more awareness. In line with this mission and vision, it incorporates all kinds of applications and technologies so that each individual considers the safety first and foremost of themselves and then of the others and the facilities around them, and takes the necessary actions, in terms of both health and OHS.

At Tüpraş, it is accepted that the concept of safety is not the duty of a certain group, but an obligation that everyone must comply with. Therefore, "safety" is a value, not a priority. It is expected that there should be no activities which would go against the safety culture.

Tüpraş expects all of its solution partners as well as its employees to unwaveringly comply with the health, safety, environment (HSE) standards.



A study of OHS accidents occurring in 2020 found a significant decrease in the number of accidents caused by facilities or equipment, but that accidents caused by human error in their last choice selections continued. For this purpose, in 2021, besides planning and improving field control, studies on “Human Behavior - Errors” will be carried out.

With the goal of improving general OHS data, creating a safer working area, and for healthier and more aware employees; the following plans have been set out for 2021;

- To extend the contractor management system (Single OSGB) to all refineries, to move on to the next phase on the basis of refineries,
- Within the scope of Business Control with the aim of the Lean Work Permit Standard;
 - Completing actions resulting from the review of the Work Permit Standard with the agile method, reorganizing the forms and certificates,
 - Creating a workflow that controls each other,
 - Creating a clearer business plan by increasing communication between units,
 - Continuing the work of the electronic work permit system,
- Completing the psycho-social risk assessments,
- Conducting individual and team development studies in order to raise awareness among employees within the scope of safety culture studies.

Health Risk Assessment (HRA) studies are carried out in all of the refineries. As part of the HRA studies, all area-specific (units, workshops, laboratories, warehouses) risk factors, including

chemical, physical, biological, ergonomic and psychological, are evaluated in detail. Technical and administrative measures are taken to eliminate employees' exposure to these factors or to reduce their exposure to within acceptable limits. The results obtained are monitored through periodic controls.

OHS issues are also considered and evaluated for new projects and operations or changes planned. While determining new sources of danger that may affect employees, the measures to be taken are put into the program and followed while still in the design and manufacturing phase.

Tüpraş responds to emergencies with high capacity modern equipment and competent personnel. National and international relevant standards are taken as a basis in training for the modernization of emergency protection and response systems, continuous improvement, and increasing the competence of the teams. High-level urgency, fire, hydrocarbon cloud/toxic gas emission and environmental spill drills are carried out at all refineries in order to minimize the risks that may occur in emergency situations and to respond with methods that will reach the target. Competent teams equipped with specialized equipment and materials are available to tackle marine and railway-related spills, and we work together with authorized

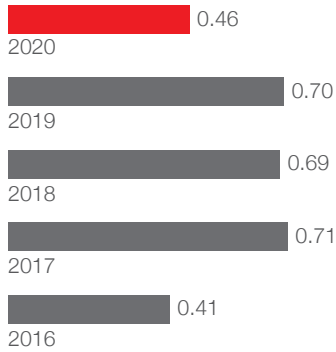
Tüpraş's Occupational Health and Safety (OHS) mission is to ensure employees return home, healthy, at the end of each working day, while its vision is to ensure employees return home in an even healthier manner with more awareness.

HEALTH AND SAFETY PRACTICES

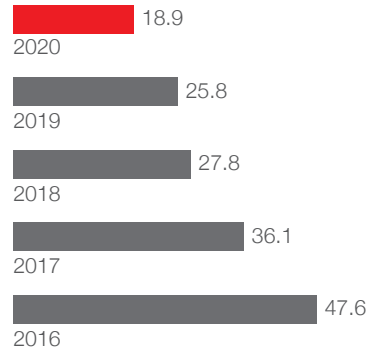
intervention solution partners. Neighboring facilities, together with public institutions and organizations, participated in these drills as stakeholders with their teams and equipment.

Tüpraş shares its gains, experience and best practices in the fields of OHS, process safety and emergency response in congresses and symposiums with its reliable and leading corporate identity in the energy industry.

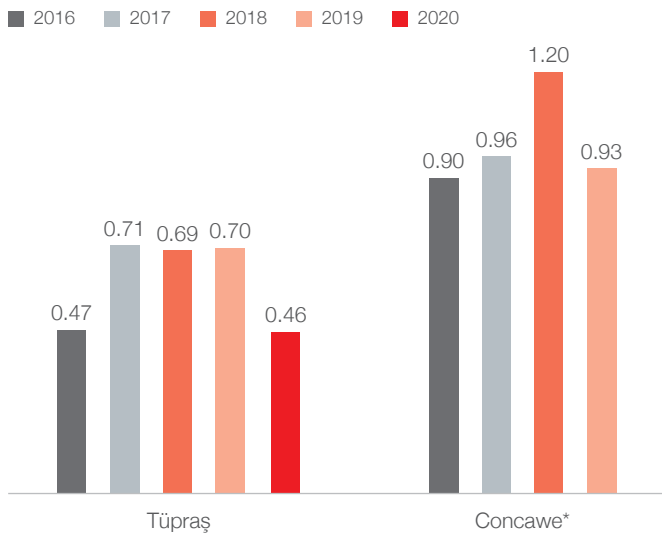
LTI Frequency - OSHA (LTI Number of Accident* 1 million / working day)



LTI Severity - OSHA (LTI Lost Working Day* 1 million /working day)



LTI Benchmark



*40 companies operating oil refineries in the European Economic Area

QUALITY MANAGEMENT SYSTEMS

Tüpraş carries out all of its activities within the framework of the Integrated Management System.

Tüpraş carries out all of its activities within the framework of the Integrated Management System, consisting of

- the ISO 9001 Quality Management System,
- the ISO 14001 Environmental Management System,
- the OHSAS 18001 Occupational Health and Safety Management System and
- the ISO 50001 Energy Management System.

In 2020, Internal Audits of the Integrated Management System at the Head Office and refineries were carried out remotely.

External audits of the Integrated Management System were conducted at the Head Office, İzmit Refinery and Batman Refinery between October 5 - November 11, 2020. No major findings were reported during the audits. New certification has been obtained for ISO 45001: 2018 and ISO 50001: 2018 standards.

The ISO 27001 external audit was carried out between 30 November - 1 December 2020 and the validity of the document was extended until December 14, 2021.

In 2020, Tüpraş's İzmit, İzmir, Kırıkkale and Batman Refinery Laboratories successfully passed the TS EN IEC/ISO 17025 audit, the internationally recognized quality management system standard for laboratory accreditation.

CE certification external audits of EN 12591 (Coating Class) and EN 15322 (Lay-burner) bitumen were carried out at the Batman Refinery on January 16, 2020, and at the İzmir Refinery on January 28, 2020, with a 1 year validity for the certificates.

In June, the polymer modified bitumen EN 14023 certification audit was carried out at the İzmit Refinery and CE certification was obtained.

The ISO 10002 Customer Satisfaction Management System certification audit was carried out between 16-18 December 2020 and ISO 10002: 2018 certification was obtained.

Scan the QR codes to access the management system documentation:



ISO 9001
Quality Management System



ISO 14001
Environmental Management System



OHSAS 18001
Occupational Health and Safety Management System



ISO 50001
Energy Management System



All processes at Tüpraş have been analyzed on the basis of level 3 processes, taking into account the Petroleum Downstream v7.2.1 version published by the American Productivity and Quality Center. Input-output, customer-supplier, risk-opportunity and performance indicators were defined for each level 3 process and mapped out on the M-Files Process Map program.

EFQM during COVID-19

Tüpraş has undergone external evaluation several times in past years and maintained its understanding of continuous improvement by focusing on the opportunities for improvement identified in the feedback reports. Following the external evaluation received at the end of 2019, the work continued in 2020, taking into account the improvements implemented and the level of maturity achieved.

In 2020, the EFQM model was updated by taking into account global trends, the United Nations Sustainable Development Goals and the concept of the ecosystem and focusing on transformation.

In the first half of March, when the first COVID-19 cases were officially announced across the country, the new version of the EFQM Model started to be used in Tüpraş. As the first company to implement this new version of the EFQM model in Turkey, Tüpraş's goal is to advance towards a sustainable performance in a changing world order by disseminating the culture of continuous improvement and the approaches contained in the model.

ENVIRONMENTAL MANAGEMENT

Thanks to the wastewater recovery investments and water efficiency studies, savings equivalent to the annual water consumption of a city with a population of 2.5 million have been achieved in the last five years.

Thanks to the investments undertaken in units which can carry out production with reduced environmental impacts through highly advanced technologies, Tüpraş offers environment friendly products that are in compliance with EU specifications to the market. Carrying out all its production and services with the principle of sensitivity to the environment, Tüpraş continues its activities with an approach that places human health, occupational safety, protection of the environment and the benefit of society at the heart of what it does at all times.

Tüpraş aims to minimize the environmental impact of its operations and avoid causing harm to its employees, contractors, clients, the wider society, and anyone affected by its business activities. Operating at world standards of environmental protection, Tüpraş recognizes the importance of improving the natural habitat as well as preserving it. The Company continues to develop and support various projects to this end. The Company's all of the suppliers are given information about the Environmental Management System before starting work and are required to undertake their commitment to comply with the principles set out in the Environmental Management System. All of Tüpraş's activities are implemented with processes which comply with the ISO 14001 Environmental Management System Standard. Environmental management activities are supervised throughout the Company's operations and the performance obtained is constantly monitored.

All of Tüpraş's activities are implemented with processes which comply with the ISO 14001 Environmental Management System Standard.

In addition to fulfilling the requirements of national environmental legislation, Tüpraş also monitors and implements international environmental regulations which concern the sector, and manages environmental risks by evaluating the environmental impact of investments.

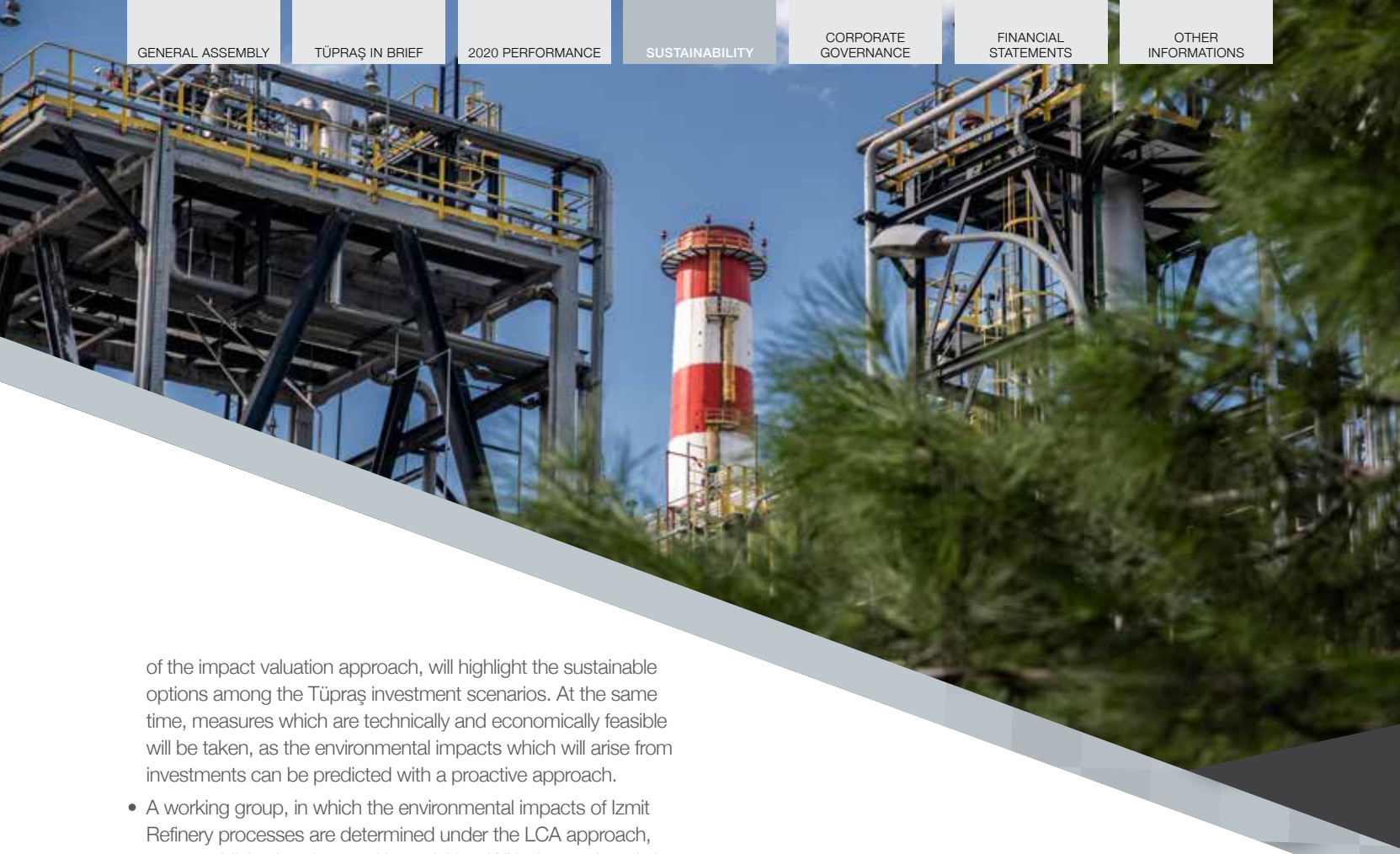
The "Corrective and Remedial Action" form is filled in for findings obtained from environmental audits and the process is improved, with the form presented to the senior management through "Management Review Meetings", but it is not shared with the public. In the annual Management Review Meetings, work carried out during the year and the work targets for the following year are shared with the senior management.

Studies within the Scope of Emissions and Life Cycle

Flue gas emissions from 31 chimneys in the refineries are monitored online by the Ministry of Environment and Urbanization, and all national legislative requirements have been met. Work is being carried out to harmonize flue gas emissions with the European Union legislation. In line with Sustainable Development Goals, efforts to manage environmental impacts arising from operations and planned investments have got underway with a holistic approach through Sustainability and Life Cycle Analysis (LCA) studies.

The efforts carried out in this context are summarized below:

- The environmental impacts of the emissions generated by the different fuel scenarios used in production, taking into account the operational conditions, were reported using LCA.
- The innovative catalyst developed within the scope of the "CO2-to-fuels" R&D project for the production of methanol and dimethyl ether (DME) from carbon dioxide has been modeled with the amount of utility and catalyst that will be needed in the field application, and the impact of all inputs and outputs on climate change was calculated and reported from a life cycle perspective.
- In addition, a roadmap has been created to evaluate the LCA results of important projects within the scope of the investment program, together with the economic indicators generated from feasibility studies. The Environmental Sustainable Investment Support Mechanism study aimed to use various environmental impact measurement methods (LCA, input / output analysis, etc.) for the projects in the investment program and to identify the environmental impacts which will arise, and to integrate them with economic indicators. This project, which forms the basis



of the impact valuation approach, will highlight the sustainable options among the Tüpraş investment scenarios. At the same time, measures which are technically and economically feasible will be taken, as the environmental impacts which will arise from investments can be predicted with a proactive approach.

- A working group, in which the environmental impacts of Izmit Refinery processes are determined under the LCA approach, was established and started its activities. With the study, existing environmental impacts and categories will be identified and points that requiring improvement will be identified.

Activities Within the Scope of Waste Management

Basic Level Zero Waste Certificates were granted to the The Izmit Refinery on April 16, 2020, the Kırıkkale Refinery on June 8, 2020, the Batman Refinery on July 14, 2020, and the İzmir Refinery on September 10, 2020. The application for certification for the General Directorate will be submitted after the transfer to Istanbul has been completed.

In the Izmit Refinery, "Industrial symbiosis", including the recycling of activated carbon with sending it to regeneration facilities abroad, and sending oil spillage waste to insulation and bitumen materials production facilities, has been established. The Izmit Refinery received recognition Sustainable Business Awards in the "Waste Management" category with an award for its "Industrial Symbiosis Applications" project. Studies have been initiated to extend these practices to other refineries.

Tüpraş provided NEBOSH training to its environmental employees. About 250 students received an information presentation on "zero waste".

Activities Within the Context of Climate Change

The company adopts a high level commitment to the principle of "being aware of the negative effects of climate change and contributing to the process" in its Environmental Management Policy.

Tüpraş has been an active participant in the UN Conference of the Parties on Climate Change since 2015. In these conferences, the development of international climate policies, how national developments will be shaped and sectoral expectations are followed and Tüpraş's experiences are conveyed to international participants on appropriate platforms. COP26 could not be realized in 2020 due to the pandemic.

At Tüpraş, briefing meetings are held regularly with members of the senior management regarding global and national developments. Energy efficiency projects are among the priority projects, with the lowering of the energy density index also among the targets. Studies are also being carried out to include renewable energy in the energy mix.

The World Bank has implemented the Partnership of Market Readiness (PMR), a new technical support program, in order to ensure the capacity development necessary for developing countries and emerging economies to benefit effectively from market-based flexibility mechanisms within the scope of the new climate change regime. Six main components which constitute the second Implementation Phase under the PMR Turkey project are being carried out by the Ministry of Environment and Urban Planning:

- Establishing the legal and institutional infrastructure of the Climate Change Law and Emission Trading System (ETS) regulations
- Establishing cap and allocation plans for the pilot ETS
- ETS simulation application development

ENVIRONMENTAL MANAGEMENT

Tüpraş considers internal carbon pricing as a parameter in its feasibility studies while evaluating its investment projects.

- Development of recording system software infrastructure for ETS
- Evaluation of Article 6 of the Paris Agreement from the Turkey perspective
- Creating the communication strategy of the PMR project.

Tüpraş contributes to all of the above components.

In addition, PMR Turkey studies carried out by Environment and Climate Change Working Group within TÜSIAD have been conducted under the leadership of Tüpraş. The Company plays an active role in policy and policy proposal making processes in organizations such as the Ministry of Environment and Urbanization and TÜSIAD.

Within the scope of the “Regulation on Monitoring of Greenhouse Gas Emissions”, the annual greenhouse gas emission reports of all refineries since 2015 have been verified by the relevant institutions authorized by the Ministry of Environment and Urbanization and by independent third parties within the scope of ISO 14064-1, which the company voluntarily prepares and are forwarded to the Ministry of Environment and Urbanization, but are not made public.

Tüpraş also leads the Climate Change Working Group on the Koç Group Environmental Board. While the Working Group leads the preparation of greenhouse gas standards specific to Koç Group, it also works on evaluating and sharing national and international

developments, preparing the greenhouse gas document with good and bad case scenarios and updating the document on an annual basis.

There is no legally established carbon pricing mechanism in our country and the Company is not included in this scope since there is no operational activity on the international platform. However, Tüpraş considers internal carbon pricing as a parameter in its feasibility studies while evaluating its investment projects. In this context, carbon-priced and carbon-free evaluations of investment projects are carried out using the shadow price approach. The carbon price is revised periodically, taking into account the carbon price forecasting studies of research companies, international carbon prices and country expectations. Tüpraş places priority on projects which reduce emission in its investment evaluations, while carbon capture, storage and utilization (CCS / CCUS) projects are prioritized within the scope of R&D activities.

The reductions in greenhouse gas emissions achieved by a number of the projects selected from energy efficiency projects carried out in refineries since 2018 have been certified under ISO 14064-2 since 2018.

In 2020, the greenhouse gas emissions of refineries for 2019 were calculated within the scope of ISO 14064-1 and verified by an independent auditor. Electricity consumption is reported to the Turkish Electricity Transmission Corp (TEIAS).

Green Deal Developments published by the EU Commission in 2019 are closely monitored, with the “Carbon Border Adjustment Mechanism” (CBAM), which is considered to have a commercial impact on sectors in the first instance, being examined and followed in detail. Tüpraş is also a member of the Green Deal Task Force within TÜSIAD.

Activities Carried Out Within the Scope of R&D Studies

The Izmit Refinery, within the scope of Horizon2020 projects supported by European Union fund, carries out the following;

- **MACBETH** (Membranes and Catalysts Beyond Economic and Technological Hurdles) project aims to reduce greenhouse gas emissions and increase resource and energy efficiency by adapting membrane and hydrogen separation technology to the processes which will be developed.



- **With the Indus3Es** (Industrial Energy and Environment Efficiency) project, the field installation and commissioning of an innovative and compact Absorption Heat Transformer (AHT) system aimed at energy recovery from waste heat generated in industrial processes was successfully carried out at the Tüpraş İzmit Refinery Steam Generation Unit.

With the Real-Time Monitoring and Optimization Project of Heat Exchanger Networks, a control system has been developed to increase the amount of heat exchange in the heat exchanger networks, thus reducing the furnace load and reducing fuel consumption and carbon emissions.

The Project of Using Refinery Waste Oxide Based Materials as Raw Materials in the Refractory Sector presented an important opportunity for industrial symbiosis. The project ensured that approximately 1,000 tons of oxide-based material waste can be reused annually, thus contributing to a sustainable environment and circular economy.

Activities within the scope of Water Management and Wastewater Recovery

With the New Wastewater Recovery/Water Treatment Unit commissioned in 2016 at the İzmir Refinery with the aim of reducing the use of raw water, reducing consumption of natural resources, promoting sustainable use of natural resources, conserving biological diversity and obtaining economic benefits, a 73% recovery in the refinery wastewater was achieved in 2019.

With the İzmit Refinery Municipal Urban Wastewater Recovery Project, recovered water met 97% of the İzmit Refinery's water needs, excluding utility water, in 2020.

Within the scope of the Integrated Environmental Permit, priority was given to improvement areas identified in the environmental Best Available Technology (BAT) compliance assessment study of all refinery processes, and BAT compliance work steps were planned for the refinery.

Within the scope of the "Determination of Water Risks" study, a risk-based assessment was carried out for the basins where the İzmir and Kırıkkale refineries are located using the internationally recognized WRI Aqueduct method, and the results obtained were evaluated together with the reports prepared on the subject at a national level.

Tüpraş is leading the Water and Wastewater Management Working Group within the Koç Group Environmental Board. The Working Group prepared the Koç Group Water and Wastewater Management Standard in 2020 in order to establish integrated water and wastewater management principles, increase the sustainability performance and address environmental responsibilities with a more systematic approach.

Achievements

Tüpraş ranked first in the "Waste Management" category in the 2020 Sustainable Business Awards with its "İzmit Refinery Industrial Symbiosis Applications" project.

Two other Tüpraş projects were among the finalists of the competition:

- The "İzmit Refinery Energy Roadmap" project in the category of "Energy Management",
- The "Our Energy is for the Future, I Code, I Model, I Produce" social responsibility project in the "Social Impact" category

ENERGY EFFICIENCY

With 30 energy efficiency projects implemented in 2020, savings equivalent to the annual electricity consumption of 71 thousand households were achieved, preventing 39,608 tons of CO₂ emissions.

The Energy Density Index

As a result of the energy saving projects and modernization work carried out at the refineries, the value of the Energy Density Index used to measure the energy efficiency performance of Tüpraş, was realized as 99.1 in 2020. The Energy Density Index value has improved by 20 points since 2008.

Benefits of energy efficiency studies

A total of 30 energy efficiency projects were carried out in 2020 within the scope of energy efficiency activities at the four refineries within Tüpraş. In 2020, a total of TL 30.5 million of financial gains were achieved from these projects. These projects, which provide increased energy efficiency, paved the way for annual energy savings of 170,318 Gcal and a reduction of 39,608 tons in CO₂ emissions.

Highlights from 2020 energy efficiency projects;

Reducing KBS Inlet Temperature in Izmit Refinery Plt-36 and Plt-63 Platformer Units

Steam is produced from waste heat in the convection zone of the Plt-36 and Plt-63 furnaces. Refinery gas is burned in these furnaces. After the dewpoint calculation is made in this context, the temperature of the boiler feed water entering the economizer zone of the furnace was gradually reduced and the flue gas waste heat was used. With this project, 1.94 Gcal/Hour of energy gain was achieved.

Planned Maintenance of U-100 Unit at the Izmir Refinery

During the U-100 planned halt, which took place in 2020, heat exchangers were cleaned, oven burners were renovated and new technology insulation material was used. With this study, an energy gain of approximately 2.7 Gcal/Hour was achieved.

Installation of “Evaporative Cooling System” In Izmir Refinery Gas Turbine

With the evaporative cooling system installed at the Gas Turbine-1 Inlet, the combustion air temperature entering the gas turbine is reduced and the density of the air entering it is increased. Thus, with the introduction of more air into the system, the amount of electricity generation in the gas turbine was increased. In parallel with the increase in gas turbine electricity generation, the amount of electricity generated from the condensed steam turbine decreased. With this study, an energy gain of approximately 1.9 Gcal/Hour was achieved.



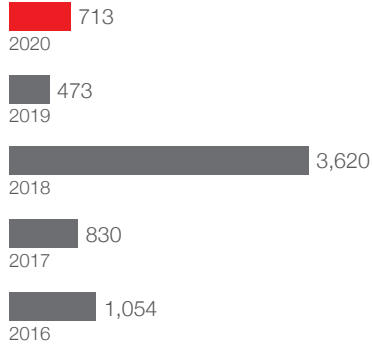
Cleaning of the Crude Oil Unit Heat Exchanger in the Kırıkkale Refinery

Due to the pollution observed in the heat exchangers in the crude oil preheating system, the heat transfer efficiency decreased, leading to an increase in the fuel consumed in the oven. With short unit halts, the heat exchangers were disabled and cleaned before being re-activated. Accordingly, a total energy saving of 10.7 Gcal/hour was achieved and the project work was completed to be applied at the next halt in order to clean the heat exchanger without the need for unit halt. In the Industry Energy Efficiency (SENER) Project competition

in 2020, Tüpraş won the following awards with the work carried out in line with its energy efficiency strategy,

- The Kırıkkale Refinery achieved 2nd place with “Energy Optimization Studies” project,
- The İzmit Refinery won the Special Jury Award with “Operational Energy Optimization of Hydroprocessing Units” project.

Energy Savings (TJ)



Energy and CO2 Savings of the Energy Efficiency Projects in 2020

	Number of Projects	Energy Gcal/year	CO ₂ tons	TL million
İzmit	16	32,305	7,508	5.6
İzmir	4	25,220	5,884	4.6
Kırıkkale	10	112,793	26,215	20.2
Batman	0	0	0	0.0
Total	30	170,318	39,608	30.5

PERFORMANCE INDICATORS

Economic and Administrative Performance

	2016	2017	2018	2019	2020
Net Sales (USD million)	11,547	14,801	18,349	15,804	9,034
Operating Profit (USD million)	781	1,333	1,189	393	-88
Profit Before Tax (USD million)	644	1,227	772	-55	-542
Profit After Tax (USD million)*	594	1,046	769	93	-356
EBITDA (USD million)	1,125	1,614	1,846	712	78
Net Debt (Cash) (USD million)	1,729	1,657	2,275	1,418	1,283
Return on Equity (ROE) (%)	21.9	41.3	36.8	4.6	-20.4
Debt Leverage Ratio (%)	1.8	1.1	1.3	2.1	17.3
Net Working Capital (USD million)	405	786	1,336	-253	-81
Investment Expenditures (USD million)	213	184	138	157	113
Earnings per Share (TL)	7.16	15.22	14.83	2.10	-9.96
Gross Dividend per Share (TL)	6.22	13.60	15.15	-	-
Net Dividend per Share (TL)	5.29	11.56	12.88	-	-
Taxes and Other Liabilities (TL million)	37,548	42,430	31,590	31,262	35,673
Corporate Governance Rating Note	9.42	9.47	9.48	9.50	9.58
Fitch Ratings Long-term Foreign Currency Rating Note	BBB- (negative)	BBB- (stable)	BB+ (negative)	BB- (stable)	B+ (negative)
Fitch Ratings Long-term Local Currency (TL) Note	Ba1 (stable)	Ba1 (positive)	Ba2 (negative)	B1 (negative)	B2 (negative)
Supply Operations (TL million)	1,921	1,692	1,911	2,017	2,024
Domestic	1,200	1,217	1,164	1,608	1,791
Custom Manufacturing	5	4	13	14	10
Foreign	716	471	734	395	224
Local Procurement Ratio (%)	62.72	72.16	61.60	80.43	88.90
Total Number of Suppliers	2,266	2,120	2,164	2,060	1,920
Ar-Ge Harcamaları (milyon TL)	40,7	33,7	37,8	43,5	43,4

Operational Performance

	2016	2017	2018	2019	2020
Processed Crude Oil (thousand tons)	28,348	28,502	24,540	27,238	22,583
Refining Production (thousand tons)	27,928	28,883	25,695	28,112	23,389
Sales (thousand tons)	30,255	31,493	29,830	29,197	24,504
Export of Products (thousand tons)	5,491	5,804	4,191	6,807	4,356
Transit Sales (thousand tons)					316
Import of Products (thousand tons)	3,749	4,388	6,252	2,827	2,927
Total White Product Ratio (%)	76.6	76.3	77.4	79.0	81.5
Capacity Utilization Rate of Crude Oil (%)	100.9	101.4	87.3	90.8	75.3
Capacity Utilization Rate Including Semi Product (%)	105.3	108.1	95.9	97.8	81.8

Tüpraş places emphasis on efforts targeting the elimination of social, economic and environmental problems that may arise due to its activities, which are aimed at contributing to the economic and socio-cultural development of the geographical region in which it operates.

PERFORMANCE INDICATORS

Environmental Performance

	2016	2017	2018	2019	2020
Direct Energy Consumption (TJ)	101,639	104,749	91,752	96,528	86,613
Natural Gas	39,085	47,306	45,342	51,039	43,842
Fuel Oil	15,487	8,581	3,481	2,292	3,433
Fuel Gas	44,265	46,164	40,562	41,028	37,808
Coke	2,802	2,698	2,367	2,169	1,530
Indirect Energy Consumption - Electricity (TJ)	518	315	172	32	-179
Total Energy Consumption (TJ)	102,156	105,064	91,924	96,560	86,434
Change in Energy Consumption (%)	12.51	2.85	-12.51	5.04	-10.49
Energy Consumption Per Crude Oil (GJ/Ton)	3.60	3.69	3.75	3.55	3.83
Solomon Energy Intensity Index, EII	103.40	102.22	99.10	98.44	99.10
Number of Energy Efficiency Projects	18	15	21	24	30
Total Energy Efficiency Savings (TJ)	1,054	830	3,620	473	713
Total Energy Efficiency Savings (USD million)	9.1	4.9	36.0	3.8	4.3
Greenhouse Gas Emissions Reductions through Energy Efficiency Projects (tons CO2e)	77,666	45,945	243,666	26,292	39,608
Total Grey Water Consumption (million m3)	17.5	15.7	18.2	18.0	18.6
Total Water Consumption (million m3)	31.2	31.4	29.9	29.6	23.8
Surface Water Sources	16.3	14.4	17.2	17.2	17.8
Public water	1.2	1.2	1.1	0.8	0.7
Treated Wastewater from Körfez Municipality	13.8	15.7	11.7	11.6	5.2
Change in Grey Water Consumption to Total Water Consumption (%)	-10.1	-5.7	8.2	-0.9	3.4
Water Consumption per Product (m3/ton)	0.6	0.5	0.7	0.6	0.8
Total Recovered Water (million m3)	20.0	25.7	20.8	20.6	15.1
Total Recovered Water to Total Consumption Ratio (%)	39.1	45.0	41.0	41.0	38.3
Total Recovered Water to Total Water Consumption Ratio (%)	64.1	81.9	69.5	69.6	62.0
Total Waste Water Discharge (million m3)	17.1	14.9	14.3	15.5	11.0
Total Amount of Solid Waste (tons)	41,506	31,392	32,646	34,433	20,372
Hazardous Wastes (tons)	30,971	17,811	23,617	22,144	17,224
Non-Hazardous Wastes (tons)	10,534	13,581	9,029	12,290	3,148
Solid Wastes According to Disposal Method					
Recycling (tons)	27,746	22,618	28,934	23,947	11,978
Disposal (tons)	13,759	8,774	3,712	10,486	8,394
Solid Waste Recovery Rate (%)	66.8	72.1	88.6	69.5	58.8
Saplings Planted in Afforestation Works (pieces)	600	400	920	200	46
Amount of CO2 Emission Eliminated by Afforestation Works (ton CO2e)	200	165	380	83	19
Total Spending on Environmental Investments and Operating Expenses (TL million)	346	390	150	268	238
Environmental Training (people x hours)	17,331	16,012	10,391	14,127	7,020
Tüpraş Employees	4,310	4,010	4,168	4,200	2,502
Contractors' Employees	13,021	11,971	6,223	9,927	4,518
Community	-	31	-	-	-

Social Performance

	2016	2017	2018	2019	2020
Total Amount of Training (people x hours)	284,878	233,034	384,405	238,168	93,244
Female	21,827	35,601	34,968	40,919	19,017
Male	263,051	197,434	349,437	197,249	74,227
Monthly Waged	68,836	103,864	103,165	125,107	54,171
Hourly Waged	216,042	129,170	281,241	113,061	39,073
Total Amount of Training (average hours of training per employee)	59	45	70	44	17
Female	55	79	70	80	36
Male	59	42	71	40	15
Monthly Waged	65	91	82	98	42
Hourly Waged	57	32	67	27	10
Total Hours of OHS Training (people x hours)	135,951	141,729	165,038	201,813	194,671
Tüpraş Employees	85,609	83,381	87,805	108,026	125,855
Employees of Business Partners	50,342	58,348	77,233	93,787	68,816
Accident Frequency Rate (number of accidents x 1,000,000/people x hours) - 2 days	2.9	3.7	4.8	4.2	3.5
Accident Severity Rate (work days lost x 1,000,000/people x hours) - 2 days	365.0	1,135.0	300.0	56.8	328.0
LTI Frequency Rates - OSHA (LTI Frequency Rate= LTI number of incidents x 1,000,000/people x hours)	0.47	0.71	0.69	0.70	0.46
LTI Severity Rate - OSHA (LTI Severity Rate = LTI work days lost x 1,000,000/people x hours)	47.6	36.1	27.8	25.8	18.9
Number of Fatal Accidents	1	1	1	0	1
Employee Satisfaction (%)	53.0	61.0	57.2	35.8	61.0
Customer Satisfaction (%)	89.0	88.2	88.8	88.0	87.0
Supplier Satisfaction (%)	88.8	86.9	88.1	86.5	84.7
Contractor Satisfaction (%)	84.8	78.1	80.6	79.2	83.7
Pension Fund Liabilities (TL million)	77.4	89.0	103.9	122.0	136.6
Donations and Sponsorships (TL million)	24.4	30.0	40.1	3.6	22.7
Total Number of Trainees	935	1,063	1,020	724	430
Minimum Starting Salary to Minimum Wage Ratio					
Monthly Waged	2.0	2.2	2.2	1.9	1.9
Hourly Waged	3.3	3.3	3.2	3.0	3.0

SOCIAL RESPONSIBILITY

Tüpraş supports the voluntary involvement of its employees in the corporate social responsibility projects which it carries out in the light of its corporate culture and values, while working with the goal of becoming a responsible producer.

In addition to its responsibility in meeting Turkey's energy needs, Tüpraş is devoted in its multi-directional contributions to social development with the awareness of being a good corporate citizen. Power, leadership and energy in the industry adding by transferring to projects that will support social development create value.

Tüpraş and Volunteering

Tüpraş supports the voluntary involvement of its employees in the corporate social responsibility projects which it carries out in the light of its corporate culture and values, while working with the goal of becoming a responsible producer.

Volunteers, including employees and their families, are also involved in the projects carried out by local and national non-governmental organizations and contribute invaluable to such projects with their experience. In 2020, the company carried out numerous social responsibility projects with the voluntary participation of its employees.

In 2020, the “Our energy for the future: I Code, Model, I Produce” project was rapidly transformed into a special work of “Solidarity and Heart Bridge” during the pandemic period.

Education

The “Our Energy for the Future; I Code, I Model, I Produce” Project

Robotic coding training introduces digital technologies to children, allowing them to develop skills such as problem solving, cause and effect relationships, critical thinking-questioning, self-expression and the development of psycho-motor behaviour.

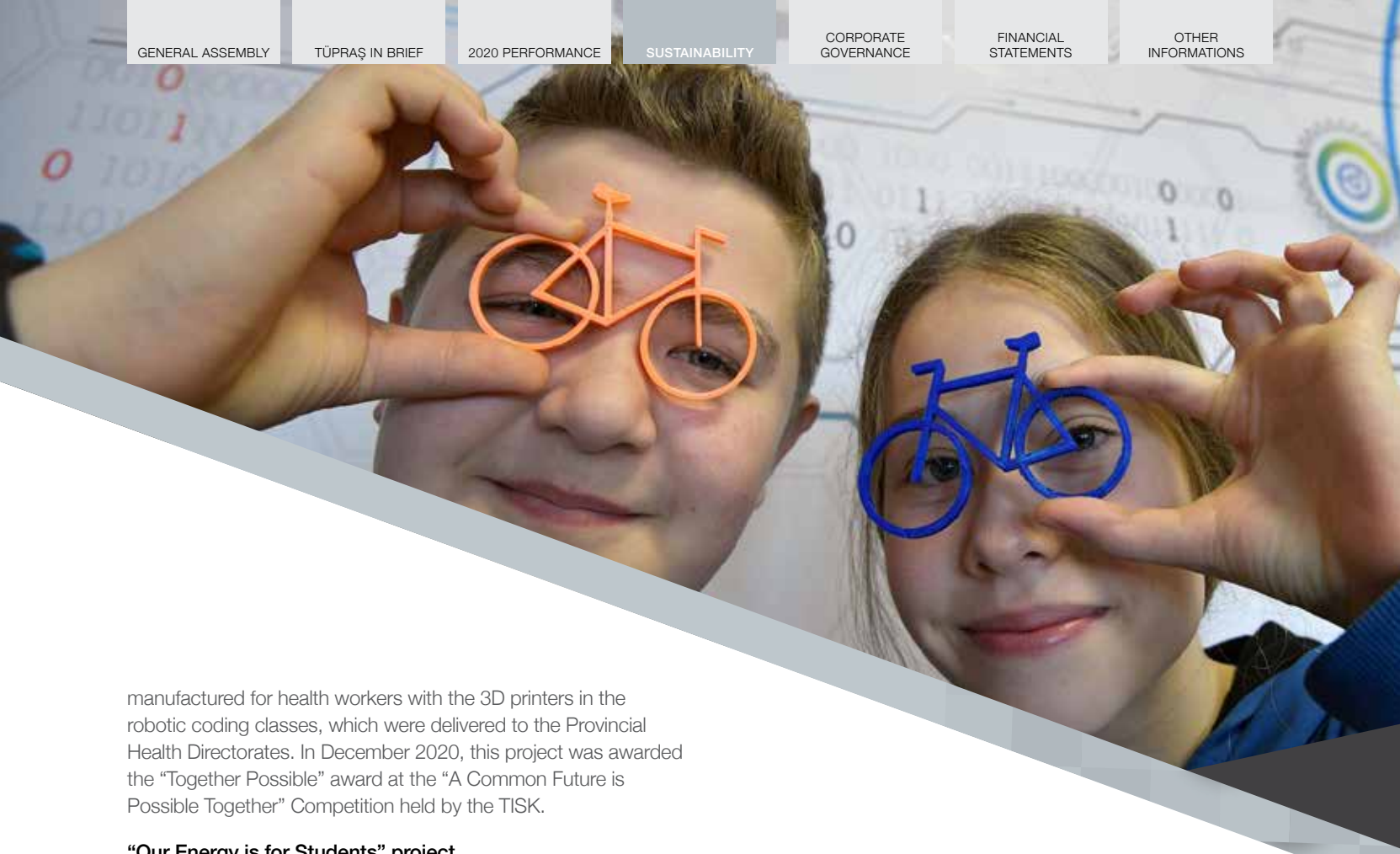
With this training, children have the power to understand, interpret and guide the technological world. Tüpraş views the UN Sustainable Development Goals as an important guide in producing creative solutions for global problems. In the light of these goals and in cooperation with the Ministry of National Education and the General Directorate of Basic Education, Tüpraş developed the “Our Energy is to the Future: I Code, Model, Produce” social responsibility Project with the goal of contributing to the “Quality Education” objective.

The press launch of the “Our Energy to the Future: I Code, Model, Produce “ Project was carried out in February 2020, and the promotional film for the project was shared with the public on social media channels. Within the scope of the project, robotic coding, three-dimensional modelling and production skill lessons were prepared for school pupils in the 7th and 8th grades at 30 secondary schools in the Batman, Kırkkale, Izmir and Izmit provinces which are home to the Tüpraş refineries. The project is aimed at raising new generations who research, think innovatively and have the problem solving and producing skills by increasing children's access to technology and digital education at an early age. The project's measurement report was prepared by the Faculty of Education at Boğaziçi University.

• Our Energy for the Future: I Code, Model, Produce – the COVID-19: Solidarity and Heart Bridge

In March 2020, the “Our energy for the future: I Code, Model, I Produce” project was rapidly transformed into a special work of “Solidarity and Heart Bridge” and was implemented at the beginning of the pandemic period.

In the first days of the pandemic, 60 volunteer teachers were quickly coordinated and 10,000 shielded masks were



manufactured for health workers with the 3D printers in the robotic coding classes, which were delivered to the Provincial Health Directorates. In December 2020, this project was awarded the “Together Possible” award at the “A Common Future is Possible Together” Competition held by the TISK.

“Our Energy is for Students” project

Tüpraş has been rolling out the “Our Energy is for Students” project in primary and secondary schools in cooperation with the Ministry of National Education. The project aims to encourage school pupils in the 5th, 6th, 7th and 8th grades to become the scientists of the future by instilling them with a love of science. Pupils learn that science has a place in all aspects of life, with the importance of men and women working together and working safely impressed upon them, especially in the world of science.

With an instructor and practitioner, the project includes a group of 25 volunteers consisting of employees of the Tüpraş R&D Center. In the classrooms, a laboratory environment is created by the volunteer employees of the Tüpraş R&D Center and experiments are carried out with materials which are easy to supply. The measurement and evaluation model was developed with the support of academic advisors from the Faculty of Education at Boğaziçi University for the evaluation of the project results. The project, which was initiated in the second half of the 2018-2019 academic year, has primarily been carried out in six schools in the Kocaeli province, and has reached nearly 3,000 school pupils to date.

Tüpraş has sought to transform the project into digital platform applications during the pandemic period and increase the student

access numbers with the cooperation of Ministry of Education in 2021.

“For My Country, I Design the Future”

The Koç Group, which Tüpraş is a part of, carries out its work under an approach which views economic and social development as a whole and focuses on creating added value in both areas. Tüpraş continues to contribute to the “For My Country” project, which was implemented in 2006, to expand this approach to all Group employees, the dealers and suppliers network and to benefit from the total impact and access power.

The “For My Country” project, which focuses on the fundamental issues facing our country, worked with the theme of “Digital Transformation” this year. The project emerged from a desire to not merely keep up with change, but to direct change in our world, which has been reshaped by rapidly evolving technologies. Within the framework of this theme, Tüpraş has implemented its social investments and aims to help strengthen all individuals with technology to the greatest extent possible.

In 2020, “I Design the Future for My Country” meetings were prepared specifically for the conditions of the COVID-19 pandemic. The first such meeting was held at Tüpraş where 145 people from Tüpraş participated in the meeting, which took place via digital media.

SOCIAL RESPONSIBILITY

Tüpraş continues its work in line with its goal of becoming an inclusive workplace, which it announced by signing the Women's Empowerment Principles of the United Nations, (UN WEPs) in 2017.

The “Our Energy Never Ends for Equality” Scholarship Fund provided by TEV (the Turkish Education Foundation)

In 2016, Tüpraş established the Scholarship Fund for the “Our Energy Never Ends for Equality” under the roof of the Turkish Education Foundation in order to provide equal opportunities for girls in education. A total of 28 girls received scholarships fund support in the 2019-2020 academic year.

The Koç University Anatolian Scholarship Students Program

Tüpraş continues to support the Anatolian Scholarship Students Program, which was launched by Koç University in 2011 with the aim of providing equal opportunities in education for successful young people and those in need. A total number of 18 students have received scholarship support to date with the participation of two scholarship students, who were included in the scope of the program this year.

We Support Social Gender Equality

Our Energy Never Ends for Equality

Tüpraş continues its work in line with its goal of becoming an inclusive workplace, which it announced by signing the Women's Empowerment Principles of the United Nations, (UN WEPs) in 2017. With this approach, Tüpraş also aims to contribute to the fifth of the Sustainable Development Goals, which is “Social Gender Equality.

In 2018, Tüpraş begun global cooperation with the Fenerbahçe Sports Club and the UN Women's Unit HeForShe Movement in order to raise awareness of social gender equality. This collaboration has been the only large-scale commitment to social gender equality in the field of sports to date.

Within the scope of this awareness movement, which was carried out under the banner of “We Are Equal Together” and “Our Energy Never Ends for Equality”, the “Fenerbahçe Sports Club and the Affiliates Gender Analysis” was carried out by the UN Women's Unit in 2019.

The dissemination of the project started from the Fenerbahçe Sports Club. Social gender equality awareness training was provided to 1,186 people, including athletes and employees, through the volunteer instructors trained in cooperation with AÇEV (Mother Child Education Foundation). In 2020, three “Athlete Workshops” were held along with one “Leaders of Change” training event.

Every year, the UN organizes the “16 Days of Activism - End Violence Against Women Campaign”, starting with “International Day to Stamp out Violence Against Women” on 25th November continues until the Human Rights Day on 10th December. With the strength derived from the cooperation with the HeForShe movement organised by the UN Women's unit and the Fenerbahçe football club, Tüpraş has supported the campaigns organized by the Turkey office of the UN Women's Unit within the framework of the “16 Days of Activism” since 2012 in order to prevent cyber violence which women and girls are exposed to through the voluntary participation of its employees.

Within the scope of the project, the “Equality throughout Generations: Empowerment of Women and Girls through Sport and in Sport” event was held with the UN Women's Unit and Fenerbahçe on 8 March 2020, World Women's Day. At the event, important names who contributed to the empowerment of women and girls in sport and who have inspired many with their stories, came together and shared their contributions in this field.



Tüpraş organized the “Being a Parent in Coronavirus Days” seminar in order to address the changes in the lives of adults and children within the scope of social gender equality that have taken place during the pandemic period in cooperation with AÇEV. The Tüpraş volunteers shared messages through the Koç Hub, the Koç online communication platform, to raise awareness regarding “equal distribution of responsibilities at home and in child care” during the pandemic period.

Culture and the Arts

“Our Energy is for Art” sponsorship for Arter

Tüpraş has undertaken the corporate sponsorship of Arter, which was opened as the Vehbi Koç Foundation in 2010 and that was moved to its new building in Dolapdere in September 2019, for a period of 5 years. In this context, Tüpraş helps create an environment where young people and children freely become acquainted with contemporary art, while also allowing young people under the age of 24 to visit Arter exhibitions free of charge.

Arter aims to be a vibrant and sustainable cultural and life platform which is accessible for all with its program to cover all disciplines of art.

Young Musicians on World Stages

The “Young Musicians on the World Stage” project, supported by Tüpraş since 2013, was implemented in 2010 with the aim of imparting the 50 years of experience and vision of our world-renowned pianists, Güher and Süher Pekinel, to young people. The gifted youngsters from the ages of 12 to 23 continue their development and education in some of the world’s most prestigious musical schools with the finest musical instruments provided under the scholarship as accompanied by expert instructors in their fields. So far, 23 gifted students have been provided with the opportunity to study Music and 11 students are currently taking part in the “Young Musicians on World Stage” program.

Tolga Atalay Ün, one of the talented scholarship students taking part in the “Young Musicians on World Stages” project performed a live concert over the digital platform during the pandemic period.



SOCIAL RESPONSIBILITY

Tüpraş continued to carry out its social responsibility projects with its volunteer employees during the coronavirus pandemic.

Anatolian Civilizations

Since 2011, Tüpraş carried the world of ancient civilizations that have left their mark on the ancient lands of Anatolia to future generations through an epic series of books on Anatolian Civilizations. So far, with the collaboration of Yapı Kredi Culture and Art Publishing, the following publications were introduced to readers: “Urartu, Change in the East”, “Phrygians: In Midas’s Land, In the Shadow of Monuments”, “Hittites - An Anatolian Empire”, “Pergamon, A Hellenistic Capital in Anatolia”, “From Lukka to Lycia: Sarpedon and the Land of St. Nicholas”, “Persians, the Power and Glory in Anatolia”, “Assyrians, from the Tigris to Taurus: The Kingdom of God Assur” and “Anatolia in Hellenistic and Roman Times: Kings, Emperors, City States”.

The ninth book of the series, “The Carians – From Seafarers to City Builders”, published in 2020, tells the archaeological and historical story of the Carians, one of the sea peoples.

The 24th Istanbul Theatre Festival

The Istanbul Theatre Festival has been organized by İKSV for 16 years under the sponsorship of the Koç Holding Energy Group companies.

In 2020, the 24th Istanbul Theatre Festival was held for lovers of theatre between 14th November and 28th December, 14 physical and 11 online productions were staged as part of the festival.

The physical plays in the festival reached around 2,500 people in 2020, and over 13,000 people were reached with the online plays.

Environment

DTO FETHİYE Waste Collection Boat visits Göcek Bay

The Deniz Temiz (Clean Sea) Association / (TURMEPA), which provides mobile services in the bays frequented by yachts and pleasure craft through waste collection boats under the banner of sustainable sea tourism, helps to reduce the environmental footprint of marine tourism by collecting thousands of tons of liquid waste.

The DTO FETHİYE liquid waste collection vessel, which has been sponsored by Tüpraş since 2016, collected 755,971 litres of waste water from 1,306 vessels in the Gulf of Göcek during the 2020 summer season. The amount of the waste water collected is equivalent to the waste water produced by 4,000 people daily. The waste water collections ensured that 6 million liters of sea water were kept clean.

Sports

Tüpraş Batman Disabled Sports Club

Since the 2007-2008 season, Tüpraş has been supporting The Batman Disabled Sports Club Association. The club competes in the Wheelchair Basketball 1st League since the 2019-2020 season.

The club, which has 46 basketball players, carries out its activities with 21 competing athletes. For 13 years, the club has provided the opportunity for hundreds of young people with disabilities to participate in sport.

Batman Tüpraşspor Football Club bringing young people into sport

Established in 1995, Tüpraşspor Football Club offers a platform for talented young people living near the Batman Refinery to enjoy sport with an awareness, in a healthy environment, thus giving them the chance to succeed. Managed by the Tüpraş volunteers in cooperation with the Provincial Directorate of Youth and Sport, Batman Amateur Sports Clubs Federation, Turkey Football Federation and other clubs, Tüpraşspor Football Club has a total of 97 players, 65 of whom are licensed and 32 of whom are unlicensed, between the ages of 13 and 19.





Volunteering and Social Support Projects during the Pandemic Period

Tüpraş, which fulfils its corporate responsibilities by developing projects aimed at improving the quality of life for society in the regions where it operates, and by supporting existing initiatives, continued to carry out its social responsibility projects with its volunteer employees during the coronavirus pandemic.

Social Support Work in the Pandemic

The company contributed TL 5 million to the National Solidarity Campaign initiated by the the Turkish Presidency with the pandemic.

The PCR testing device was purchased for the Kocaeli Provincial Health Directorate to contribute to the support process for tackling the pandemic. Tüpraş donated 500 overalls and 5,000 surgical masks to the Kocaeli University Hospital. The requests for masks and overalls from the hospitals in Körfez in Kocaeli, Aliağa in Izmir, Kırıkkale and Batman, where the facilities are located, were fulfilled. 500 overalls were donated to the Ankara and Istanbul Metropolitan Municipalities and 500 bottles of sanitiser, each of 400 ml, were donated to the Körfez Municipality.

The Tüpraş Search and Rescue Teams

When the Izmir earthquake struck in October 2020, the Tüpraş Izmir Refinery Search and Rescue (RSR) Team rapidly engaged, continuing its work without interruption in rotating shifts for two days at the Barış Housing Complex in Bayraklı, where it was responsible in the earthquake zone. Tüpraş has served as an ambassador of hope with its altruistic work in Izmir, one of the beating hearts of Turkey, which is in the earthquake zone.

Support for Stray Animals

Tüpraş has not forgotten the plight of the strays which have struggled to find food during the coronavirus pandemic, and signed a protocol with Kocaeli's Körfez Municipality and Izmir's Aliağa Municipality to provide food for stray animals. The shelters in the region started to receive support with leftover meals from the refineries' dining halls being provided to stray animals, who have an increased need for food and water. This work is planned to be rolled out to the other refineries in 2021.

CORPORATE GOVERNANCE

Legal Disclosures

Information About Corporate Governance

Risk Management and Activities Of the Risk Management Committee

English Translation of Independent Auditor's Early Risk Detection System and Committee Report

Evaluation Of Operating Principles and Effectiveness Of Board Committees

Audit Committee Report (Related to Financial Statements)

Statement Of Responsibility (Related To Approval Of Financial Statements)

Audit Committee Report (Related to Annual Report)

Statement Of Responsibility (Related To Approval Of Annual Report)

Declaration For Independency

LEGAL DISCLOSURES

Capital Structure

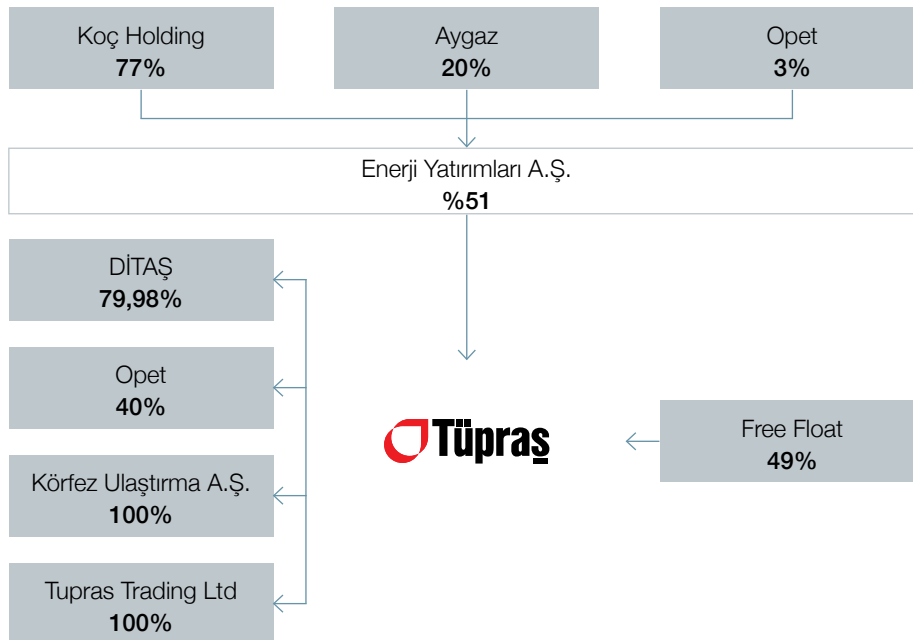
The Company's shares are divided into two groups, A and C, all of which are registered shares. The Company's issued capital is TL 250,419,200, and is fully paid-up free from any collusion.

Shareholders attending Ordinary and Extraordinary General Assembly meetings exercise their voting rights pro rata the nominal value of total shares they hold.

Group	Shareholder	Share Amount (TL)	Type	Number of Shares
A	Enerji Yatırımları A.Ş.	127,713,792.22	Registered	12,771,379,222
A	Others (Free Float)	122,705,407.77	Registered	12,270,540,777
C	Privatization Administration	0.01	Registered	1
Total		250,419,200.00		25,041,920,000

Shareholder Structure

The Company is registered with the Capital Markets Board ("CMB") of Turkey and its shares are quoted on Borsa İstanbul A.Ş. ("BİST") since 1991. The Company's shares quoted on the BİST constitute 49% of the total shares. The Company's shareholders and shareholding rates, and the subsidiaries, in which the Company holds shares, and shareholding rates therein are as follows:



Voting Rights

As stipulated in the Articles of Association, material decisions concerning spin-offs or sales, acquisitions or lease of assets with significant value can only be taken with the positive vote of Group C (preferential) shares, represented by the Privatization Administration. In this context, at the General Assembly Meeting for deciding on issues that might restrict or hinder the supply of petroleum to the Turkish Armed Forces, such as closure or sale of one of the refineries, limitation of activities through establishment of restraint or any reduction corresponding to more than 10% of the capacity, or spin-off or merger and/or liquidation of the Company a positive voters needed. Class C shares do not hold any other privileges concerning voting rights, apart from those indicated above.

LEGAL DISCLOSURES

Information about significant changes in Tüpraş's ownership of financial assets held in 2020

No changes that reach or fall below the limits set by the Turkish Commercial Code occurred in 2020 in the ownership of financial assets that Tüpraş directly participates in.

Extraordinary General Assembly Meeting held during the year, if any

None.

Organizational changes within the year

None.

Associated Company Report

Pursuant to Article 199 of the Turkish Commercial Code No. 6102, which came into effect on 1 July 2012, the Board of Directors of Türkiye Petrol Rafinerileri A.Ş. is obliged to prepare, within the first three months of the operating year, a report on the Company's relations with its controlling shareholder, ultimate controlling shareholder and their associated companies for the previous operating year, and to include the conclusion section of this report in the annual report. Descriptions of the transactions Türkiye Petrol Rafinerileri A.Ş. carried out with related parties and the grounds therefor are provided in the financial report note 27.

Türkiye Petrol Rafinerileri A.Ş. Board of Directors report of 2 March 2021 reads as follows: "It has been concluded that in all the transactions Türkiye Petrol Rafinerileri A.Ş. conducted in 2020 with its controlling shareholder, ultimate controlling shareholder and their associated companies, according to the circumstances and events known to us, an appropriate counter-performance has been provided in each transaction at the time the transaction/action was conducted/taken or avoided and that there were no actions taken or avoided that caused loss to the Company, and accordingly, that there were no transactions or actions requiring equalization."

Information about changes to the legislation that might materially impact the Company's activities

None.

Lawsuits against Tüpraş and any probable outcomes that could impact the Company's financial situation and operations

There were no lawsuits initiated or concluded in 2020 against the Company significant enough to have a material impact on its financial situation or operations.

Lawsuits initiated and/or concluded against the Company in relation to environmental, social and governance matters

There were no lawsuits initiated or concluded against our Company in relation to environmental, social and governance matters in 2020.

Information about administrative or judicial sanctions imposed on the Company and its management due to practices in violation of regulations

There were no administrative or judicial sanctions imposed on the Company or the members of its management due to regulatory violations in 2020.

Information about conflicts of interest between the Company and its service providers such as investment advisory and rating and measures taken to preclude the same

There are no such conflicts of interest.

Information about changes to the Articles of Association during the reporting period

No changes were made to the Articles of Association during 2020.

INFORMATION ABOUT CORPORATE GOVERNANCE

DECLARATION OF COMPLIANCE WITH CORPORATE GOVERNANCE PRINCIPLES

Our Company embraces the “Corporate Governance Principles” first released in July 2003 by the Capital Markets Board of Turkey (“CMB”) and implements them to a great extent. In 2020, full compliance was achieved with the compulsory principles stipulated in the Corporate Governance Communiqué no. II-17.1 (the Communiqué) in force, while compliance was also achieved with most of the non-compulsory principles. Although the aim is to fully comply also with the non-compulsory Corporate Governance Principles and best efforts are being spent to this end, full compliance has not yet been achieved due to various reasons such as the difficulties in implementation of some of the principles, ongoing discussions regarding compliance with some of the principles both in our country and on international platforms, and incompatibility of some of the principles with the current structure of the market and the Company. Work is ongoing regarding the principles that are not yet put into practice and their implementation will be considered upon reviewing the administrative, legal and technical infrastructure procedures in a manner that will contribute to effective management of our Company.

The corporate governance rating of 9.50 (95.03%) assigned to Tüpraş on a scale of 10 as the result of the assessment made on 3 October 2019 by SAHA Kurumsal Yönetim ve Derecelendirme Hizmetleri A.Ş., an international rating agency licensed to conduct rating in accordance with the CMB’s Corporate Governance Principles, was revised as 9.58 (95.78%) on 2 October 2020. The breakdown of the corporate governance rating in terms of main headings is presented below:

Heading	2019 Rating	2020 Rating
Shareholders	95,53	95,53
Public Disclosure and Transparency	95,30	97,24
Stakeholders	99,51	99,51
Board of Directors	92,55	93,32
Average	95,03	95,78

The Corporate Governance Rating Report can be found on the Company website at www.tupras.com.tr.

In 2020, activities related to Corporate Governance were carried out in accordance with the Capital Market Law covering the CMB’s requirements about Corporate Governance Principles and the communiqués issued based thereupon. At the Ordinary General Assembly Meeting convened in 2020, our Board of Directors was formed in line with the requirements set out in the Communiqué. Prior to the General Assembly Meeting, independent member nominees were identified and publicly disclosed, and the election was brought to completion in accordance with the regulations. Pursuant to legal obligations and Article 10 of our Articles of Association, one member of our Board of Directors is elected from amongst individuals nominated by the Privatization Administration, our Group C Shareholder. Under the authority covered in Article 6 (2) of the Communiqué, principle no. 4.3.7 does not apply to the said Board of Directors Member nominated by the Privatization Administration of our Company, whose principal field of activity consists of the utilization of a license or privilege granted by public agencies or institutions for a definite period of time or indefinitely to offer public service or in which public agencies or institutions hold preference shares. With the general assembly information document prepared, our investors were informed about information on general assembly such as privileged shares, voting rights and organizational changes that must be disclosed as per the principles; resumés of board member nominees, remuneration policy for the board of directors and senior executives and other information that need to be disclosed, three weeks in advance of the general assembly meeting date. The committees set up under the Board of Directors pursue their activities effectively. Furthermore, our Company’s website and annual report were reviewed, and revised as necessary for full alignment with the principles. Necessary steps will be taken also in the coming period in view of the regulatory developments and practices for compliance with the principles. In addition, Tüpraş Board of Directors Diversity Policy was approved at the beginning of 2021, and the target of have 25% female members in the board of directors within 5 years was adopted.

INFORMATION ABOUT CORPORATE GOVERNANCE

In the upcoming period, necessary studies will be carried out by taking into account the developments and practices in the regulations for compliance with the principles.

While our Company achieved full compliance with the compulsory principles in the operating period from 1 January 2020 to 31 December 2020, the major non-compulsory principles under the Regulation that our Company has not yet achieved full compliance with are stated below. Relevant additional explanations are also provided in the related sections of the annual report. Our Company was not exposed to any conflicts of interest by reason of not achieving full compliance with non-compulsory principles.

- Regarding principle n. 1.3.10, a dedicated agenda item is included in the General Assembly Meeting agenda for the donations made, and the General Assembly Information Document provides the details of the donations with the highest amounts. The balance not detailed in the Information Document consists of various donations to various institutions and organizations, each in an amount less than TL 150 thousand and which do not constitute material information for the investors. Donations below the said amount are not followed up by our investors, and it is intended to make disclosures in line with this materiality limit also in the future.
- Regarding principle n. 1.4.2, the privilege enjoyed by the Privatization Administration is stipulated in our Articles of Association as addressed in the “Legal Disclosures” section of the Annual Report. The shares of Tüpraş are classified in two groups: Group A and C. Group C shareholder is the Privatization Administration. Shareholders present in Ordinary and Extraordinary General Assembly Meetings exercise their voting rights pro rata the nominal value of their total shares. No changes are envisaged in the structure described above, given the fact that the said privilege exists since the privatization stage of the Company; that it is not possible to pass decisions solely with the privileged shares, and it is not a privilege capable of making a difference with respect to representation of the holders of publicly-floated shares in the management. Hence, as per our Articles of Association, Group C share will remain in existence, unless and until the rights conferred upon it are terminated by a decision of the Supreme Board of Privatization.
- Regarding principle n. 1.5.2, the Articles of Association do not grant minority rights to those who hold less than one twentieth of the capital, and rights are granted to the minority within the general legislative framework in parallel with the common practices. No requests in this respect were received from the investors, either; related general best practices are being followed up. It is not foreseen that there will be a change in this matter in the near future.
- Regarding principle n. 1.7.1, Article 7 of our Articles of Association set out the principles for transfer of shares; while the said article imposes a restriction regarding the transfer of the privileged Group C share held by the Privatization Administration, there are no practices complicating transfer of shares freely by the holders of Group A shares that are traded on the stock exchange nor are there any provisions. Group C share can be transferred to another Turkish public agency that possesses basically the same powers that the Law no. 4046 confers upon the T.R. Prime Ministry Privatization Administration. Group C share will remain in existence, unless and until the rights conferred upon this share are terminated by a decision of the Supreme Board of Privatization (or the decision of the competent authority on that date). In the event it is decided to terminate the rights granted to Group C share, this share will be converted into Group A share.
- Regarding principle n. 4.4.1, no physical meetings were held during 2020 due to the Covid-19 pandemic; the Board of Directors members were regularly informed about the Company’s performance and developments. However, all of the decisions were adopted through circulation method.
- Regarding principle n. 4.4.2; a minimum period of time is not defined for sending the information and documents about the topics covered in the agenda to all Board members prior to the meeting, and the timing of delivery of the information to the Board members is determined in view of the matter and process covered in the Board of Directors agenda, and the members are informed reasonably in advance. While the Company sees no urgent need for defining such a period of time in view of the efficiency of the activities of the Board of Directors, it is targeted to revisit the matter in the future.

- Regarding principle n. 4.4.5; the Company has in place long-standing and consistently implemented processes related to how the Board of Directors meetings will be held; however, there is no internal written regulation specific to this matter. While the Company sees no urgent need for an internal arrangement regarding this matter in view of the efficiency of the activities of the Board of Directors, it is targeted to revisit the matter in the future.
- Regarding principle n. 4.4.7, due to the significant contribution of the experience of the Board of Directors members, there are no restrictions regarding outside positions held by the Board members. Résumés of our Board members are included in our Annual Report. No changes are envisaged in the existing practice in the short term, since the Company considers that no adversities arise with respect to corporate governance in view of the efficiency of the activities of the Board of Directors.
- Regarding principle n. 4.5.5; the knowledge and experiences of the members of our Board of Directors are taken into consideration when appointing members to the committees in line with the relevant regulations. Some of the Board members can be assigned to more than one committee. However, members who assume duties in more than one committee enable communication among the committees that carry out activities in connected subjects and increase the opportunity of collaboration. In view of the productive activities that are contributed to by the knowledge and experiences of Board members, the existing committee organizations are deemed to be efficient, and no need for changes are envisaged in the near future.
- Regarding principle n. 4.6.5: remuneration of the members of the Board of Directors and managers who have administrative responsibilities is disclosed collectively in parallel with the common practice in the footnotes of our financial statements and at the Ordinary General Assembly meetings. Market practices are closely monitored with respect to this topic that is deemed important in terms of privacy of personal data, and it is planned to act in parallel with the common practice.

2020 Corporate Governance Compliance Report (CRF) and Corporate Governance Information Form (CGIF) of our Company, which has been drawn up pursuant to the CMB decision n. 2/49 dated 10 January 2019 and which has been approved by the Company's Board of Directors, is presented in attachment to the Annual Report (pages 260-277), and the related documents are also accessible on our Company's corporate governance page on the Public Disclosure Platform (KAP).

SHAREHOLDER RELATIONS

All relations between Tüpraş and shareholders are handled under the responsibility of the "Investor Relations Department". The Investor Relations Department is in charge of informing shareholders and potential investors about the Company's activities, financial position and strategies, save for trade secrets and confidential information, by obtaining other units' inputs as and when necessary and in a manner that will not lead to information asymmetry. The Department also manages the bi-directional communication between shareholders and Company executives.

The Investor Relations Unit and the Financial Planning and Reporting Division are responsible for ensuring that General Assembly Meetings are convened in accordance with the regulations in force, the Articles of Association and internal guidelines; for the preparation of the Annual Report and other documents that will be useful for shareholders at the General Assembly Meetings; for handling various regulatory obligations such as financial reporting, and regulatory public disclosure obligations such as material event disclosures.

Investor Relations Department presents a report to the Corporate Governance Committee at least once a year - to be submitted to the Board of Directors - about its activities. The report regarding 2019 activities was submitted to the Corporate Governance Committee for being presented to the Board of Directors on 20 February 2020, whereas the report regarding 2020 activities was assessed by the Corporate Governance Committee on 5 March 2021 and presented to the Board of Directors.

INFORMATION ABOUT CORPORATE GOVERNANCE

Investor Relations Contacts:

CFO: Doğan Korkmaz

Investor Relations Manager: Levent Bayar

Investor Relations Manager: Aslı Kondu

Investor Relations Supervisor: Anıl Can

Corporate Governance Coordinator: Fettane Sayın

Board of Directors and Board Committees' Activities

The main qualifications that the Company seeks in the selection of Board members are in compliance with those outlined in the CMB's Corporate Governance Principles. The positions of the Chairman of the Board of Directors and the General Manager are held by different individuals. Due to the significant contribution of Board members' experience in business and industry to the Board of Directors, there are no restrictions regarding outside positions held by the Board members. Prior to the General Assembly meetings, positions held outside the Company by a Board member are submitted for the information of the shareholders together with the résumé of such member

The functions of the Nomination Committee are performed by the Corporate Governance Committee. Pursuant to legal obligations and Article 10 of our Articles of Association, one member of the Board of Directors is elected from amongst individuals nominated by the Privatization Administration, our Group C Shareholder. Currently, all four independent members serving on the Board of Directors satisfy the independence criteria stipulated by the Communiqué. During 2020 operating period, no events took place that would prejudice the independence of independent Board members.

The table below provides brief information about the members of the Board of Directors, who are all non-executive in accordance with the definition stipulated in the CMB's Corporate Governance Principles and who were elected at the Company's General Assembly held on 01 April 2020 to serve a one-year term of office until the General Assembly meeting where 2020 activities will be discussed, while their résumés are available on the website and in the Annual Report.

Members of the Board of Directors

Name/Surname	Position	Outside Positions Held	Independent/ Non-Independent	Committees and Duties Therein
Ömer M. Koç	Chairman	Member on the Boards of Directors of Koç Holding Companies	Non-Independent	Member of Executive Committee
Ali Y. Koç	Vice Chairman	Member on the Boards of Directors of Koç Holding Companies	Non-Independent	Member of Executive Committee
Rahmi M. Koç	Member	Member on the Boards of Directors of Koç Holding Companies	Non-Independent	Member of Executive Committee
Semahat S. Arsel	Member	Member on the Boards of Directors of Koç Holding Companies	Non-Independent	Member of Executive Committee
Levent Çakıroğlu	Member	Member on the Boards of Directors of Koç Holding Companies Koç Holding CEO	Non-Independent	
Erol Memioğlu	Member	Member on the Boards of Directors of Koç Holding Companies	Non-Independent	Member of Risk Management Committee
Yağız Eyüboğlu	Member	Member on the Boards of Directors of Koç Holding Companies President of Energy Group	Non-Independent	Member of Corporate Governance Committee
Zafer Sönmez	Independent Member (PA Representative)	Board Member and CEO of Türkiye Varlık Fonu A.Ş.	Independent	
Muharrem Hilmi Kayhan	Independent Member	Vice Chairman and Member of the Board of Directors of Söktaş A.Ş.	Independent	Chairman of Corporate Governance Committee, Chairman of Audit Committee
Ayşe Canan Ediboğlu	Independent Member	Independent Board Member at ING Bank	Independent	Chairman of Risk Management Committee
Kamil Ömer Bozer	Independent Member	Board of Members at; Coca Cola İçecek, Adel Kalemcilik Ticaret ve Sanayi A.Ş., Kamil Yazıcı Yönetim ve Danışma A.Ş., Anadolu Isuzu, Boyner Grup, Anadolu Etap, Kamil Yazıcı Yönetim ve Danışma A.Ş., Söktaş A.Ş. and Arçelik A.Ş.	Independent	Member of the Audit Committee

INFORMATION ABOUT CORPORATE GOVERNANCE

The Board of Directors convenes as and when necessitated by the Company's business affairs. The Board of Directors must convene upon demand by the Chairman or two of its members. The meetings can be held in the Company's headquarters or any other location as determined by a majority of the Board members. In addition to its regular meetings, the Board of Directors can be convened by an absolute majority of its members to pass decisions on specific matters deemed necessary; the Board may also pass decisions without actually convening, as per Article 390/4 of the Turkish Commercial Code.

The Company complies with the provisions of the Turkish Commercial Code and CMB regulations in meeting procedures, meeting quorum, decision quorum, voting procedures, duties and powers of the Board of Directors.

The agenda of Board of Directors meetings is prepared by the secretariat of the Board of Directors in view of the decisions previously passed or the matters that need to be decided. The agenda of other meetings is determined by issues that need to be decided as per legal obligations. The Assistant General Manager responsible for Financial Affairs (CFO) fulfills the secretariat function for the Board of Directors.

No physical meetings were held during 2020 due to the Covid-19 pandemic; the Board of Directors members were regularly informed about the Company's performance and developments. All decisions were adopted through circulation method. In 2020, a total of 26 decisions were passed. All independent members were present at the time the decisions were made. Without prejudice to the right of the member representing Group C share in relation to the matters mentioned in Article 10 of the Articles of Association, each member has one vote in Board meetings, and dissenting opinions and grounds of dissenting votes along with the specific questions asked by the Board members are recorded in the decision minutes. In Board of Directors meetings held in 2020, no such opposition or no opposing opinions were put forth. None of the related party transactions or material transactions that were put to the vote of independent Board members were laid down for the approval of the General Assembly on account of having been rejected at the Board of Directors.

The Board of Directors governs and represents the Board of Directors based on a rational and prudent risk management understanding and looking out for first and foremost the Company's long-term interests, by optimally maintaining the Company's risk, growth and return balance on the basis. The Board of Directors defines the Company's strategic goals, determines the human and financial resources needed, and oversees the management's performance. While the Board of Directors monitor's the Company's quarterly financial performance in comparison with the budget in the physical meetings held four times a year, it also follows up the developments regarding strategic issues, and develops new strategies and makes investment decisions by taking the Company management's recommendations. During the year-end performance evaluation process, the extent at which the objectives related to the realization of the Company's strategies is measured, as well as financial and operational indicators, and they are used as input for the performance and rewarding system.

The Company has a Directors' and Officers' liability insurance (in excess of 25% of the Company's capital) for indemnification of losses against the liabilities that the directors and the members of the Board of Directors can be personally held responsible within the scope of their duties.

The Company's "Remuneration Policy for the Members of the Board of Directors and Executive Management", which covers all kinds of rights, benefits and compensation provided to the Board of Directors members and senior executives, the criteria employed for determining them and remuneration principles are posted on the Company website and included in the annual report. There are no material transactions that might lead to a conflict of interest, such as lending money, extending credit, furnishing guarantee in favor of the Board members or executives by the Company. While overseeing the Company's operations, the Board of Directors evaluates whether conflicts of interest may arise, and the consequences of such conflict of interest (if any) for the Company. The Board of Directors makes necessary decisions in the best interests of the Company. Furthermore, in addition to observing regulatory compliance in related party transactions, the Board of Directors also considers potential misconduct risks and addresses related party transactions meticulously.

Committees Set Up under the Board of Directors

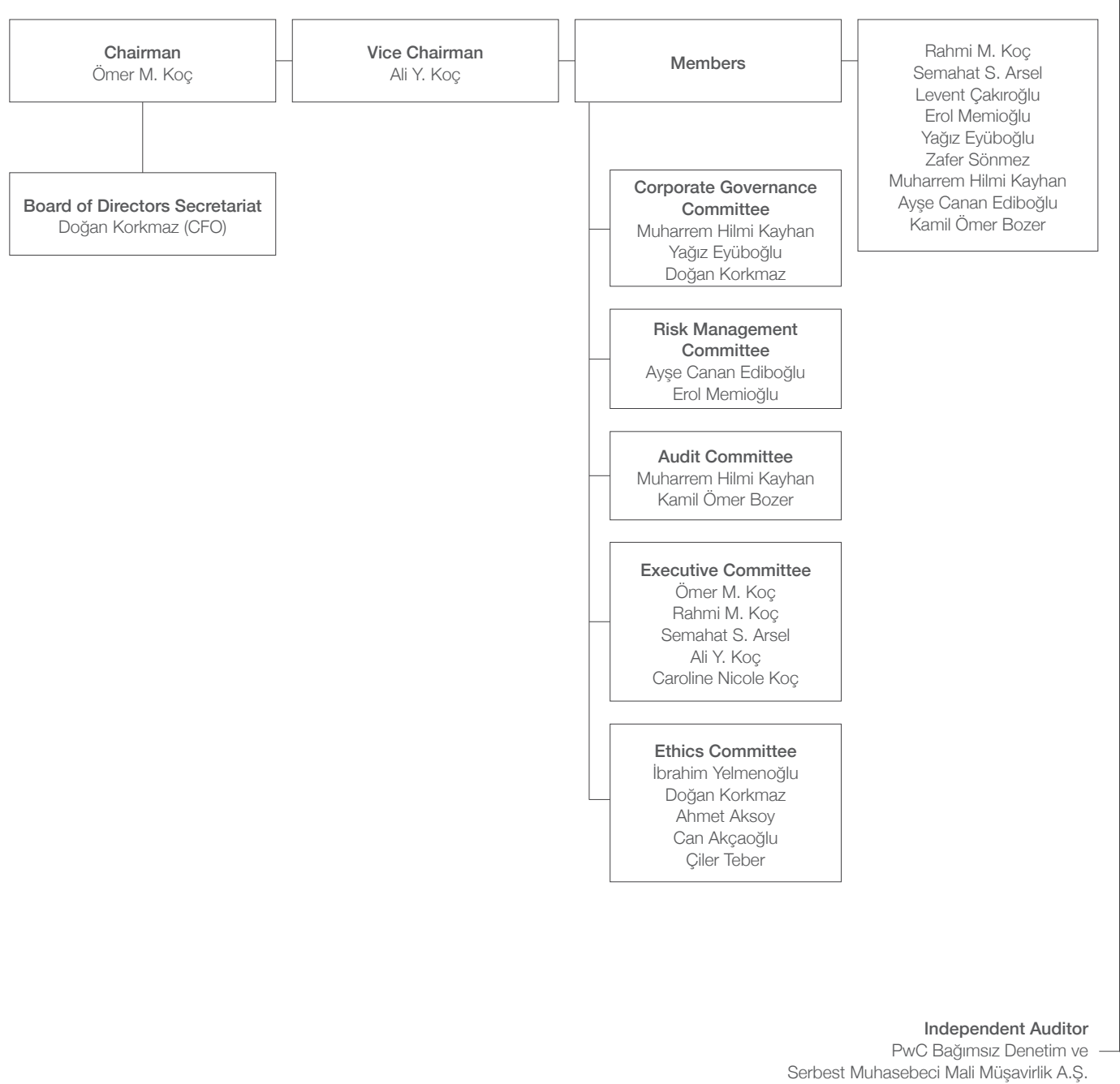
According to the Articles of Association, the Board of Directors may set up committees or sub-committees for performing advisory, coordination, audit and similar functions from amongst its members and/or non-members, which will work on topics that the Board deems appropriate, provided that the provisions of applicable legislation are conformed to.

Following the Ordinary General Assembly meeting held on 1 April 2020, election of members to the committees that have been set up has been completed within the frame of the provisions set out in Article 4.5 of the CMB's Corporate Governance Principles as per the Board of Directors decision dated 2 April 2020.

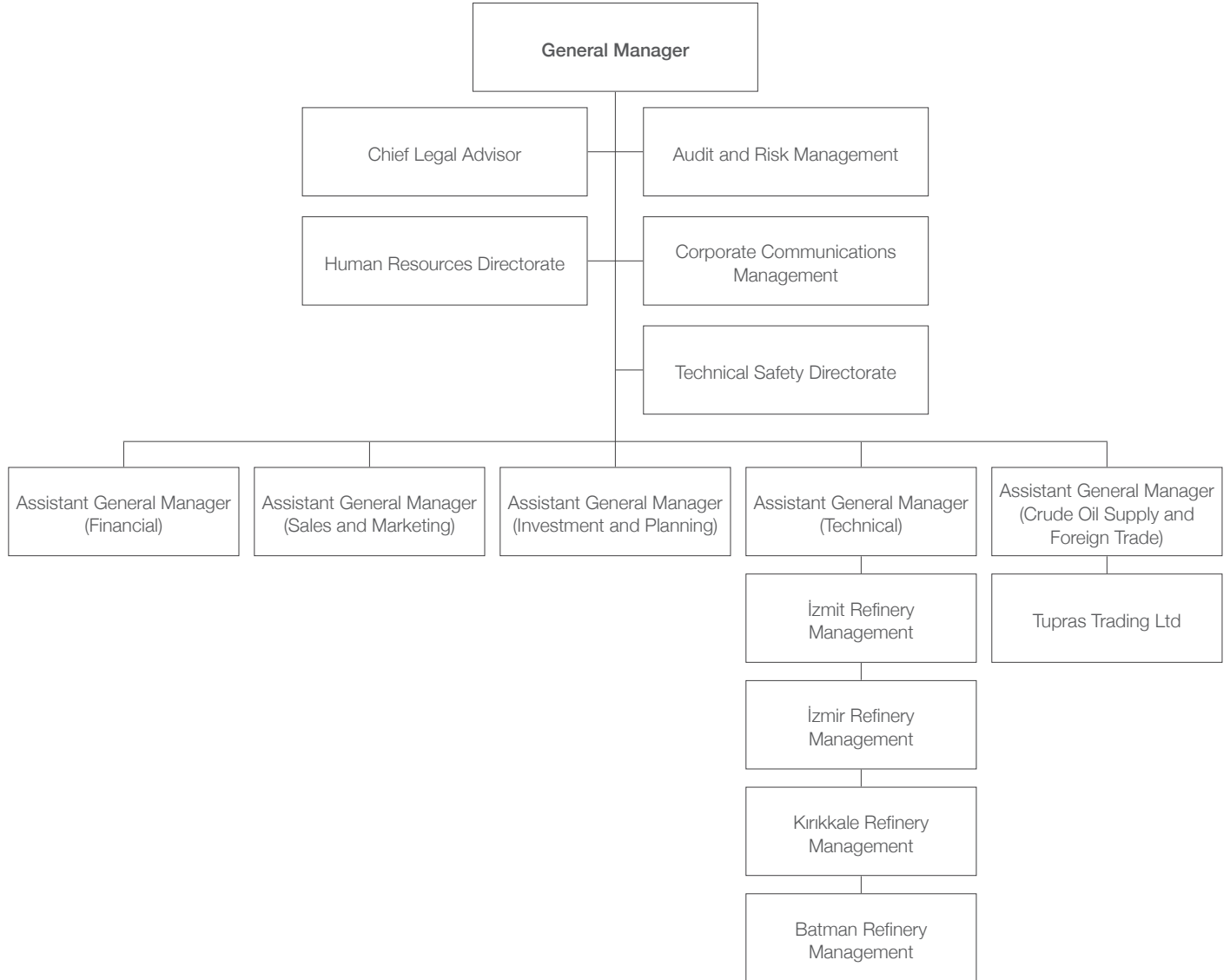
During 2020, all the Board of Directors Committees fulfilled their duties and responsibilities in accordance with the Corporate Governance Principles and their respective working principles, and met in accordance with their working plans. During the activities of the committees, opinions of Company executives and the independent auditor were sought as necessary. Reports covering information about the committees' activities and the results of the meetings held during the reporting period were presented to the Board of Directors. The Board of Directors is of the opinion that the activities of the Board of Directors Committees have generated the expected benefits.

The working principles and 2020 activities of the Corporate Governance Committee, Risk Management Committee, Audit Committee and Executive Committee are addressed under the heading Evaluation of Operating Principles of the Board of Directors and Effectiveness of its Activities in the Corporate Governance section of the Annual Report.

STRUCTURE OF BOARD OF DIRECTORS



TÜPRAŞ ORGANIZATIONAL STRUCTURE



STATEMENT OF COMPLIANCE WITH SUSTAINABILITY PRINCIPLES

Tüpraş closely monitors best practices in relation to sustainability, including those specified in the Sustainability Principles Compliance Framework of the Capital Markets Board of Turkey (CMB), and carries out its activities with the target of achieving maximum alignment possible with the generally-accepted best practices in this area. Many of the matters Tüpraş tackles within the scope of its sustainability strategy overlap with the principles stated in the “Sustainability Principles Compliance Framework” introduced by the CMB in 2020. In this context, Tüpraş achieved compliance with the majority of the principles covered in the non-compulsory “Sustainability Principles Compliance Framework” developed by the CMB with the “comply or explain” approach. Full compliance could not be achieved with some of the principles yet due to various reasons such as the difficulties in implementation, uncertainties in national and international arena, incompatibility of certain principles with the Company’s existing structure, and the fact that the compliance principles will be determined according to findings from studies that are currently in progress. It is aimed to implement the principles, with which full compliance has yet to be achieved, so as to contribute to the sustainable value creation goal of our Company.

The sustainability practices of Tüpraş that overlap with the principles covered in the CMB’s Sustainability Principles Compliance Framework are detailed principally in the Sustainability section of the Annual Report; and also in the Human Resources Section, as well as under the heading Environmental Management, Energy Efficiency, Health and Safety Implementations and Social Responsibility. Our explanations in relation to major principles, with which full compliance could not be achieved yet, are presented below. Our Company monitors the impacts resulting in environmental and social risk management by reason of not having achieved full compliance with the non-compulsory principles, and addresses the same within the scope of sustainability activities.

- Tüpraş ESG policies have been prepared, and enforced upon being approved by the Board of Directors. A new sustainability materiality analysis conducted within the scope of the Company’s strategy-related efforts, and work is underway to identify the material issues that are prioritized with respect to the Company’s success and to stakeholders’ expectations. Sustainability Agile Team was set up, which brings together expertise from different units in order to set the targets and devise action plans for material issues. The next steps will cover target setting and creation of action plans.
- Key Performance Indicators for ESG were determined, and verifiable and verified ones are disclosed in the Company’s Annual Report and Sustainability Report in comparison to previous years. However, there are no local or international comparative verifiable sectoral data with respect to disclosed indicators shared with the public.

- From amongst environmental indicators, GHG emissions are verified by verifiers authorized by the Ministry of Environment and Urbanization under the Monitoring, Reporting and Verification (MRV) Regulation, and by an independent third party within the scope of ISO 14064-1 standard that the Company voluntarily; however, verified data are not publicly disclosed. GHG reduction amounts secured through selected energy efficiency projects are verified by an independent third party within the scope of ISO 14064-2 standard and the verified data are publicly disclosed.
- As detailed in the Sustainability Section of Tüpraş Annual Report, low carbon transition and climate risks are among the Company's top priorities in terms of environmental issues. Based on these priorities, actions are being taken to formulate a strategy which will allow management of risks at the highest level paying regard to national and international developments, and will enable target setting in line with the said strategy. On the other hand, Scope 1 and Scope 2 emissions are regularly calculated as part of sustainability activities, and verified by an independent third party pursuant to ISO 14064-1 standard. Similarly, indicators for energy consumption data are also monitored. From amongst environmental indicators, GHG emissions are verified by verifiers authorized by the Ministry of Environment and Urbanization under the Monitoring, Reporting and Verification (MRV) Regulation, and by an independent third party within the scope of ISO 14064-1 standard that the Company voluntarily; however, the verified data are not publicly disclosed. GHG reduction amounts secured through selected energy efficiency projects are verified by an independent third party organization within the scope of ISO 14064-2 standard and the verified data are publicly disclosed. However, following completion of strategy development, the Company will consider disclosing undisclosed data and the standards, protocols and methodology in relation to the data. Currently, Scope 3 emissions are not being monitored.
- There is not a legally established carbon pricing mechanism in our country. Since the Company is not pursuing operations in the international arena, it is not included in the scope. However, the Company applies internal carbon pricing on project-basis and evaluates how projects are affected by the carbon price.

RISK MANAGEMENT AND ACTIVITIES OF THE RISK MANAGEMENT COMMITTEE

A. CORPORATE RISK MANAGEMENT PROCESS

Corporate Risk Management process has been developed to ensure the communication of the risks defined in all functions in accordance with the risk appetite assessed to be acceptable by the Management between the units and processes, while safeguarding the Company's existing values and creating new ones for the stakeholders.

Tüpraş monitors its corporate risks via the Risk Management and Audit Department that reports directly to the General Manager. The risk inventory is updated based on the outcomes from the workshops held with the units that are directly responsible for risk, and also based on impact and frequency analyses. The risks that are monitored on an ongoing basis through the risk management software are prioritized by the Risk Monitoring Committee, and the actions taken in relation to risks and the risk trend are reported to the Risk Monitoring Committee periodically.

Planning is in progress for offering corporate risk management training to employees with the aim of consolidating the risk culture and awareness across the organization.

Tüpraş has formulated its policies within the framework of Corporate Governance Principles and is introducing its governance practices with a view to strengthening its corporate culture. Along this line, the Company considers national and international standards and particularly ISO 31000 Risk Management Standard in its risk management process.

Tüpraş is on Borsa Istanbul Corporate Governance Index since 2007 and its score evaluated by independent rating institutions for 2020 was 9.58.

B. EARLY DETECTION OF RISK COMMITTEE

In order to; i) comply with the 378th Article of the Turkish Code of Commerce n. 6102 that entered into force on 1 July 2012, and the Capital Markets Board's Corporate Governance Communiqué, ii) make sure that the committees under the Board of Directors function effectively, decision was taken at Tüpraş's Board of Directors meeting held on 28 July 2010, and Early Detection of Risk Committee was established with the aim of early detecting the risks that can endanger the Company's existence, development and continuity, implementing the necessary measures related to the identified risks, and performing tasks to manage the risks.

Committee chairwoman is the Independent Member of the Board of Directors Ms. Ayşe Canan Ediboğlu, who does not hold an executive position. Other member of the Committee is the Member of the Board of Directors Mr. Erol Memioğlu, who does not hold an executive position. Having held 6 meetings in 2020, the Committee evaluates Türkiye Petrol Rafinerileri A.Ş. Risk Management System and Risk Reporting principles, reviews the Risk Reports issued periodically within this scope, and presents its opinions. Reporting activities and committee decisions based on the Committee's evaluations are submitted to the Board of Directors' information.

C. RISK MONITORING COMMITTEE

Risk Monitoring Committee, which monitors the Corporate Risk Management practices, functions under the General Manager. Committee members are the General Manager, Assistant General Managers, Risk Management and Audit Manager. The aims of the Committee are; early detection of all risks that can endanger the Company's existence and sustainability, taking necessary measures regarding the identified risks, developing policies and practices necessary to effectively carry out corporate risk management processes, and monitoring risk-related action plans and risk trends periodically via key risk indicators.

D. INFORMATION SECURITY COMMITTEE

Tüpraş promises to safeguard the confidentiality, integrity and availability of all physical and electronic information of the Company, and to protect its commercial and corporate image maintaining regulatory compliance.

In order to practice information safety properly and to increase information safety awareness, the Information Safety Committee was established as per the Article n.5.3. "Corporate Roles, Responsibilities and Powers" of the ISO 27001 Standard. The Head of the Committee is the Assistant General Manager in charge of Financial Affairs (CFO), and Committee Executive is the Information Technologies Director. The Information Security Management System (ISMS) officer is the Cyber Security and Risk Manager, whereas committee members consist of Directorates and relevant Departments.

When necessary, the Committee meets every 6 months as long as there is an agenda, with absolute majority of the attending persons or their authorized representatives. Frequency and conditions of the meetings is determined by the Head of the Committee.

Cyber Security and Risk Management is responsible for all coordination activities including monitoring the outputs of the committee activities, management at the field, setting the new agenda, and presentation. Cyber Security and Risk Management was established in March 2019 by the approval of Tüpraş Senior Management as a result of the increase in significance of preventing cyber threats and risks brought by developing technologies and the need to manage these technologies by a separate and dedicated team. Decisions passed by the Committee are carefully followed up and outputs from the activities are included at the top of the agenda of the next committee meeting. The Committee's activities during 2020 also covered announcement of Tüpraş Information Security Policy approved by the Board of Directors within the scope of the obligations imposed for the publicly-held companies by the CMB's Information Systems Communiqué (n. VII -128.9) to the employees, its implementation and supervision, and establishment of effective and adequate controls on information systems.

E. OPERATIONAL TECHNOLOGIES CYBER SECURITY COMMITTEE

Operational Technologies Cyber Security Committee targets to develop the necessary procedures and processes for managing the increased cyber security risks targeted at control systems tools and applications, upgrading technological security structure, implementing technology within operation, maintenance, project and supplier management processes, and ensuring uninterrupted process. Operational Technologies Cyber Security Committee consists of industrial information services, data center and infrastructure services, operation, electricity/equipment maintenance, process control, process security, project and investments, and refinery information technologies teams. The Committee held four meetings during 2020. Sub-committees were formed in all refineries for dissemination of decisions taken by the Operational Technologies Cyber Security Committee and for healthy circulation of feedbacks therefor. Until 2021, 45 decisions were put into life within the scope of the Committee's activities, which continue in a planned fashion.

F. TUPRAŞ RISK INVENTORY

As a result of risk assessments, Tüpraş categorized its risks under 7 main topics:

- 1-Technical Safety and Environmental Risks
- 2-Financial Risks
- 3-Commercial Risks
- 4-Operational Risks
- 5-Strategic Risks
- 6-Compliance and Legal Risks
- 7-Reputational Risk

RISK MANAGEMENT AND ACTIVITIES OF THE RISK MANAGEMENT COMMITTEE

1- Technical Safety and Environmental Risks

1.a – Technical Safety Risks

Tüpraş continues its development in line with its goals of defining and eliminating risks and reducing them to acceptable levels within the frame of national and international norms in all its operational activities. In this context, Process Safety leading and lagging Key Performance Indicators (KPIs) are being monitored on a monthly basis in accordance with international standards and practices (e.g. API754, CCPS).

Process Safety Management System is being adopted at refineries with CCPS and OSHA references which targets Organizational Excellence with Operational Discipline based on leadership and ownership of management.

Operational risks are controlled on the basis of HAZOP activities, which are reviewed every 2 years and renewed every 4 years. It is targeted to decrease the occurrence frequency of major accident probabilities to the level of 1×10^{-6} . In view of the processes and potential threats evolving and emerging in the world, in our country and in our refineries, Cyber Security Risk Assessment studies were also added to these activities during 2020.

In process hazard analyses conducted with the change management system, the impacts of the equipment, facilities and processes established upon existing systems and their hazards are evaluated and managed.

During 2020, internal training programs addressing Process Security Management System and major accident scenarios began to be given in classroom environment and online, with the aim of raising employees' awareness of process security, in particular, and for building on competencies.

In connection with digitalization initiatives, projects are being carried out in relation to management of process security risks and continuous online monitoring of barriers' effectiveness and actions (digitalization of alarm management, barrier monitoring-Safepool, SU/SD procedures etc.).

Operation, Maintenance and OHS teams worked in collaboration and introduced the identification and control systems with the aim of more effective use of the Control of Work system.

In order to increase the effectiveness of the Work Authorization System, reviews were made together with system users, and changes and innovations began to be implemented.

Employees were included in international certification programs, internal training and implementation programs.

Single Common Health and Safety Unit (OSGB) was introduced as Phase 1 at Batman and Kırıkkale refineries to let contractors benefit from OHS services more effectively and properly. Phase 2 of the project is planned to be started during 2021. Phase 1 activities are in progress at İzmir and İzmit Refineries.

Upon assignment of more experienced and institutionalized solution partners as Overall Maintenance Contractors at refineries, noticeable improvements were secured in OHS statistics. Besides enhanced quality of overall occupational safety, meaningful decreases were recorded in the number of contractor workplace accidents.

Area-specific chemical, physical, biological, ergonomical and psychological factors are being reviewed in detail at Health-Risk Assessments in all of the refineries.

Due to the Covid-19 outbreak, the Corporate Pandemic Plan was activated in order to protect the health of employees and their families, and to ensure production continuity; some employees were moved to teleworking model within the frame of the thinning out strategy. The HES code (a personal identification code for tracking sick individuals and contacts) checking system, body temperature checks using thermal cameras and daily health questionnaires began to be used in order to prevent the entry and contact of sick and risky employees and other people to working areas.

Based on an audit conducted by the Turkish Standards Institution (TSE), TSE Covid-19 Safe Production Certificate has been obtained. To ensure extended validity of the certificate, the continuity of the measures in place are regularly monitored by way of internal audits. In addition, our workplaces have been certified with respect to the implementation of minimum measures upon the audit conducted by TÜV SÜD.

Tüpraş responds to emergency situations with high capacity modern equipment and expert personnel. Related national and international standards are used as basis for modernization of emergency protection and response systems, their continuous improvement, and trainings to build on the competencies of teams.

Comprehensive emergency, fire, disaster recovery, hydrocarbon vapor/toxic gas dispersion, environmental spillage drills are being carried out at all refineries with the aim of minimizing the potential risks that may result from an emergency, and responding with target-oriented methods.

In order to deal with marine and railway spillages, teams that are equipped with the necessary response equipment, materials and competent personnel remain on standby, and collaboration is established with authorized response solution partners. The neighboring facilities, along with public institutions and organizations, take part with their teams and equipment as stakeholders in these drills.

1.b – Environmental Risks

In addition to meeting the requirements of national environmental regulations, Tüpraş monitors and adopts international environmental legislation relevant to its industry and proactively prepares as necessary for compliance. Environmental Risks are managed in view of the sustainability of the Company, its medium- and long-term plans, and environmental impact of its investments.

Actions taken with respect to major risk elements based on a proactive vision are as follows:

Environmental Authorizations required for operation of all refineries are being updated.

GHG emissions resulting from production are calculated, and verified by independent organizations, under the Communiqué on GHG Emissions Monitoring and Reporting and also ISO 14064-1. Data verified within the scope of the Communiqué are submitted to the Ministry of Environment and Urbanization. Amounts of GHG reduction secured on selected energy efficiency projects are verified within the scope of ISO 14064-2 and by independent third parties.

Recognizing that climate change comes at the top of global perils, internal carbon pricing systematic is being applied in order to assess the impact of carbon pricing upon projects. Under this implementation, feasibility studies of investment projects including and excluding carbon price are compared.

Waste water discharge and flue gas analyzers are being continuously monitored by legal authorities and Tüpraş. Data transmission realization values are tracked by relevant teams at the refineries. Early warning systems are established for these indicators which are being monitored systematically at the field.

Acting with the vision of contributing to the United Nations Sustainable Development Goals (SDGs), maximum care is taken to consumption of water which is vital for life. Focusing on water efficiency and recovery of wastewater at our refineries, water is recovered and reused. In all our refineries combined, 102 million cubic meters of wastewater was recovered and reused over the last five years. As of year-end 2020, 97% of the water needed for production at İzmit Refinery was supplied from recovered wastewater, whereas this ratio was 73% at İzmir Refinery.

RISK MANAGEMENT AND ACTIVITIES OF THE RISK MANAGEMENT COMMITTEE

Pursing its operations with an awareness of its environmental and social responsibilities, Tüpraş exercises utmost diligence in the protection of the natural balance of the world, the environment and humans, also with its innovative projects in waste management. The Company contributes to cyclical economy through waste reduction, sorting at source, and symbiosis. These activities result in 59% of the waste generated to be recovered for the economy.

2- FINANCIAL RISKS

Tüpraş establishes, implements and updates the Financial Policies necessary for ensuring operation continuity. Continuous monitoring and improvement of processes to reach financial targets are priorities of the Financial Directorate. Financial resources and risks are being managed proactively within existing policies.

Foreign Exchange (FX) Risks

FX risk may arise due to financial liabilities in foreign currency, and investment goods and raw material imports. In tackling with the FX risk, foreign currency position limits are identified and derivative instruments are used when necessary. Accordingly, “zero F/X position” is targeted. On the other hand, FX changes are embedded in product sales prices thus FX risk is being limited and a natural hedge is created. At the same time, the Company implements cash flow hedge accounting by balancing the investment loans available to it with the potential future exportations.

Liquidity Risk

Liquidity is daily managed through effective cash planning and asset-liability management. Cash reserves are being strengthened based on stress tests and scenario analyses as a response to risk of not being able to pay for liabilities at maturity. Objective of liquidity management is to maintain risk at minimum by meeting targets for financial ratios such as current ratio and long-term credit ratio.

Interest Rate Risk

An upturn in interest rates bears the risk of increasing interest costs in the event that the Company borrows with variable rate products. Therefore, the Company borrows at fixed-rates or part of the interest rate risks entailed in products such as variable rate loans and bonds are fixed through derivatives.

3- COMMERCIAL RISKS

Commodity Price Risk

Tüpraş holds a significant quantity of crude oil, mid-product and product inventory as required by its operations. There is a risk of impairment in value of inventory due to reduction of crude oil and product prices. Within the frame of hedging policies for impairment of inventory value, inventory amount which is subject to price risk is being reduced, the remaining amount begins to be hedged through various derivative instruments at the beginning of the year, and hedge levels are increased through ongoing transactions.

Using various derivative instruments product profit margins (crack) for future periods are fixed within the frame of risk management policies, to eliminate the impacts of fluctuations in product profit margins. Hedge transactions are realized taking minimum hedge ratio into account calculated by comparing prices for the following 4 quarters and historical average profit margins for those quarters. Thus, the amount of hedging transactions to be realized is determined as 0% to 50% based on budgeted production by sales volume considering crack margins with past and future maturities.

Counterparty Risk

While receivables from public corporations do not carry the risk of collection, a significant portion of the receivables from sales made to private sector customers are managed by obtaining guarantees for eliminating the collection risk.

Trade receivables or all other risks inherent in fuel oil, LPG, bunker fuel and non-fuel products are kept under control by making cash sales or credit sales, and products are delivered to customers within certain credit lines defined against letters of guarantee and/or under Direct Debiting System. In order to create business volume beyond the existing guarantees and to prevent possible future risks, the “Credit Insurance” solution is also made use of. On the other hand, risk analysis reports are prepared automatically in daily, weekly and monthly periods for trade receivables while action plans/measures are put into practice as a result of the rating reports issued for the customers based on a proactive approach, thus precluding any financial loss.

In addition to this, counterparty risk is managed by the counterparty compliance policy which includes equal and objective criteria for all banks. Our deposit is kept, within certain limits, by banks that comply with rating, capital and similar criteria determined at the Company’s policies. Furthermore, counter-party risk management is significantly provided as our collections are directed to the banks.

4- OPERATIONAL RISKS

Operational risk is defined as the possibility of loss or damage that may arise from the failure of the company management and/or personnel to act in accordance with the time and circumstances; from faults and hitches in day-to-day operations and governance systems, and from disasters such as earthquake, fire, flood etc.

Supply/Transportation Risks

The supply process in Tüpraş consists of crude oil, semi-product, final product and material supply operations. As being used for production of other products; crude oil is the major supply item. Continuity of the production is maintained partially by using domestically supplied and predominantly imported raw materials. Purchase operations of raw materials have been optimized; in order to diversify supply sources, distribute risk in supply chain, provide advantage in price and freight costs; and to increase operational capability of the Company.

One of the most critical phases of such operations is the physical supply. There are many items among the supplied products, which may be harmful to environment and human health due to problems, which may possibly occur during their transportation. In order to eliminate such risks during transportation of these products; it is expected that measures and working conditions specifically determined for related products to be completely provided by suppliers.

Therefore; to ensure supply safety, suppliers are expected to maintain specific standards to be used for transportation. Especially for imports of crude oil, suppliers have to 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; so that the risks that may occur during transportation can be eliminated. In addition; required equipment (emergency response equipment) is kept ready for use and regular exercises are done to fight against any kinds of accidents or leakage incidents, which may occur despite all aforementioned measures. With all such measures taken; safety, environment and human health threatening risks are minimized.

To ensure safety of product supply between refineries and to customers; transportation is diversified among delivery via sea-land-railways and pipelines. In this way, it is ensured that the risk is distributed in transportation operations and the operational capability is increased at the same time.

Financial risks that may occur during crude oil and product transportation between refineries are being transferred to third parties through commercial contracts and insurance policies.

RISK MANAGEMENT AND ACTIVITIES OF THE RISK MANAGEMENT COMMITTEE

Each party of product goes through various tests in laboratories in the Company and other institutions. Purchase of products which fail in any of these tests is aborted.

Besides raw material and products; material procurement operations are also carried out at Tüpraş. All these operations are conducted according to specifications prepared by expert personnel. It is strongly expected that suppliers perform in accordance with the minimum standards required for the production and delivery of the demanded product and with the explicit conditions set out in the purchasing specifications. Tüpraş Code of Conduct for Suppliers, which has been prepared in accordance with the fundamental conventions of the International Labor Organization (ILO) and which respects human rights set out in the United Nations Universal Declaration of Human Rights, under the guidance of the Supplier Management Policy, define the minimum rules, which are incontestable and undebatable, that we urge our suppliers and their sub-suppliers to abide by in their commercial dealings with Tüpraş. The standards stipulated in the code spell out the expectations of Tüpraş from its suppliers that it commercially deals with, including all their employees, sub-suppliers and other persons they engage in commercial activities with, as well as supplier's parent company, subsidiaries and affiliates.

Product Analyses in Production and Sales Processes Risks

Laboratories accredited by the Turkish Accreditation Agency carry out activities in Tüpraş refineries. The scope of the accreditation covers all analyses included in the specifications of the products for sale.

These laboratories make the necessary measurements in each phase of production and sales, and eliminate the risk of producing and selling defective products.

Information Technologies Risks

Practices regarding the management of possible risks that may arise in the field of Information Technologies are defined in the Standard for Information Assets and IT Risk Management. Information Technologies risks include the risks of Tüpraş regarding both Information Technologies and Operational Technologies. Information Technology (IT) tier and Operational Technology (OT) tier are isolated from one another using advanced security tools in order to minimize all outside threats and risks.

New threats and attacks taking place at any moment around the world are monitored on the basis of instant intelligence received from global networks, required updates are made in line with operational processes, and necessary actions and countermeasures are incorporated in the systems immediately. In addition, all tiers are monitored 24/7 by a centralized and specialized security team, and necessary actions are taken in case of unexpected actions or activities.

In addition to the technical measures taken, business units included in the Information Security Management System (BGYS) and current risks are regularly reviewed and updated every year. In the light of Corporate Risk Management methodology, the effectiveness of existing controls on risks that exceed the Company risk acceptance criteria are evaluated within the scope of Information Security Management Review System and appropriate risk-management methods are processed.

Thus; additional controls are designed for the risks that will be reduced and continuous improvements are made regarding such risks. Moreover, suggestions and findings from annual IT audits of Koç Holding, ISO 27001 external BGYS audits, audits performed by independent audit firms, online and/or onsite audits conducted by institutions such as the Energy Market Regulatory Authority (EPDK), Information and Communication Technologies Authority (BTK), actions required for compliance with regulations such as KVKK and periodic tests and examinations that use automatic tools and manual methods also contribute to identification of IT risks. On the other hand, IT business continuity activities are carried out on the basis of departments, and routine internal audit activities were also performed for successful identification, analysis and monitoring of risks.

Today, businesses are exposed to threats caused by cyber security risks that grow at an ever-increasing pace in Turkey, as is the case in other parts of the world. Hence, in order to protect against cyber risks at Tüpraş, a “Cyber Risk Policy” which offers optimum coverage structure is purchased.

Increased compliance requirements, operational technologies cyber security transformation project, data security strategy, cyber crisis management and drill process, critical application log management projects, major projects such as implementing cyber intelligence and security needs resulting from digital transformation projects are among other operations which are monitored.

Project and Investment Risks

International quality and safety standards are pursued in short-term construction projects in order to ensure operation sustainability. Framework agreements are concluded with construction firms satisfying the required standards, and necessary projects are realized quickly. Hence, effective measures are adopted against the risks of delay, operational loss, quality and safety that may be encountered in engineering, supply and construction processes.

In order to select the right projects that will deliver sustainable profitability in the medium- and long-term, ideas are supported and matured with engineering studies. Investment decisions are made after detailed feasibility reports are created based on the outputs of the studies. Hence, investments are made in the right projects that are aligned with the Company's strategies, and effective risk management is ensured against possible losses.

Operations are carried out in accordance with the legislation and national and international standards. Changes in the legislation are followed up and investments that will ensure the operation of our facilities in alignment with these changes are planned and realized.

Human Resources Risks

In 2020, possible risks in relation to human resources are addressed with a focus on “Talent Retention”; accordingly, various parameters were monitored throughout the year, which included employees' career moves, undesired resignations, filling vacant positions with internal candidates, personal and career developments backed with rotation, etc.

As part of the human resources risk management, activities were carried out to disseminate the new career paths designed to increase career moves across the organization and to raise awareness.

Through the Tüpraş Development Dialogue, it was ensured that all office employees' preferences within these career paths were shared. New communication initiatives were planned to heighten awareness of this topic, and its future monitoring will be carried on using the Tüpraş Development Dialogue process.

In an effort to reduce the rate of undesired resignations, an employee's end-to-end experience within Tüpraş is reviewed, and improvements are planned, with the employee experience approach initiated in 2020, which will be integrated in a structured manner during 2021. This approach is intended to serve to increased employee engagement.

As part of the commitment to fill vacant positions within Tüpraş with internal candidates, the internal announcement platform “Kariyerine Enerji Kat”(Energize your Career) was launched, whereby Tüpraş employees continued to be offered career move possibilities at equal opportunities and based on a transparent evaluation for vacant positions.

For increasing the internal rotation moves, experience sharing environments are increased, and communication initiatives are carried out to support rotation and experience diversity.

RISK MANAGEMENT AND ACTIVITIES OF THE RISK MANAGEMENT COMMITTEE

Availability Risks

In order to have an operational availability score ranked in the top quarter among worldwide refineries, Tüpraş manages its operational, reliability, integrity, maintenance and scheduled downtime activities in line with risk-based assessments. In order to minimize the availability risks;

- Proactive steps are identified and implemented for increasing the reliability and integrity of equipment according to the outcomes of Reliability-Oriented Maintenance, Risk-Based Technical Control and Protective Instrumentation Functioning Analyses.
- Investigation teams are set up for all incidents with a high-risk potential, root cause analyses are performed in relation to incidents, corrective/preventive actions are determined and implemented.
- Through the threat management system, mitigating measures are taken and monitored until high-risk reliability and integrity threats and root causes are eliminated.
- Under the problematic equipment management process; equipment failing frequently and causing high costs are analyzed, improvement and preventive solution actions are taken.
- Maintenance activities are prioritized according to risk assessment analyses and implemented. Thus, potential operational risks are predicted and minimized.
- Under the scheduled downtime management system, optimum scope of scheduled downtime is determined, and the resources and preparations necessary for safe completion of the downtimes within the planned timeline are made available.
- Through reliability and integrity audits performed every two years, refinery processes are evaluated comprehensively, performance deviations are identified, upon which corrective actions are taken and followed up.
- Operating parameters deviating from the Integrity Operating Window are digitally monitored on real-time basis, and actions are taken to bring the said parameters back within the defined limits as soon as possible. Thus, risks to process safety are minimized.
- For instant detection of dilution loss in lines and equipment resulting from corrosion, online thickness measurement sensors are installed in critical lines according to annual plans.
- With the integration of Instant Status Monitoring and Predictive Maintenance hardware and software systems on critical equipment, these critical equipment are detected before breaking down and can be subjected to maintenance on a case-by-case basis.
- With the recently launched pilot, operational site controls, maintenance monitoring and technical control activities began to be performed using mobile devices. This allows uninterrupted information flow, and risks in relation to all our operational processes are followed up and their productivity is increased.
- Our employees are equipped with the necessary competencies by driving the constant development of our human resource, processes, assets and production systems with an operational excellence point of view, and investments are made into digital Technologies that will support reliability and integrity.

5- STRATEGIC RISKS

Tüpraş takes potential short-, medium- and long-term risks into consideration when determining its strategic goal and the actions to be taken for achieving its goals along that line.

The Company considers that potential short- and medium-term risks could include various sanctions imposed against the countries, OPEC decisions, resource(energy, water, etc.) consumption restrictions in connection with sustainability, sensitivity against fossil fuels (ESG, Green Deal, the Paris Agreement), sustainability perception by investors and in financing, changes to regulatory framework (GHG Emissions limits and carbon tax, intra-city diesel vehicle restrictions, etc.) and the acceleration of climate-driven developments in the aftermath of the pandemic.

The Company considers that long-term risks could include the rise in the consumption of environment-friendly (renewable, sustainable jet, biodiesel), developments related to alternative fuels (hydrogen, electricity, etc.), increased efficiency of internal combustion engines, increased manufacturing of electric vehicles and increased electrification, lower emissions limits and higher carbon cost, support to decarbonization and stricter regulations, and renewable energy resources and storage.

Tüpraş carries on with its investments in order to achieve compliance with the specifications introduced by international standards and to produce more environment-friendly fuel oil. The new fuel regulation standard (IMO 2020) that entered into force in the whole world in 2020 in order to reduce emissions in the maritime industry sets an example of this. In line with long-term strategic goals targeted at the risks specified within the scope of sustainability, the Company targets to create the necessary resource firstly by focusing on increasing the competitiveness and sustainability of existing assets and thus investing in new areas that will serve to sustainability in the long-run; thus, achieving increased flexibility against climate impacts. In this sense, for the purpose of monitoring global and sector trends more closely, promoting awareness within the organization and cooperation among units, and taking action swiftly, Tüpraş Sustainability Agile Project Team was set up, which actively began working in 2020.

6- COMPLIANCE AND LEGAL RISKS

The possibility of rights to be lower than expected and liabilities to be higher than expected as a consequence of risks created by a regulation change that has a negative impact on activities, misinterpretation of regulations and insufficient or incorrect documentation.

Changes in the legislation are being followed to keep track of legal risks and relevant departments are informed.

In 2020, within the framework of the Competition Law compliance program, pre-assessments of new applications, projects and contracts were performed, action plans and strategies were developed about the measures that can be taken in order to eliminate potential risks. Moreover, Competition Law training was given.

The data processing inventory created within the frame of the efforts to achieve compliance with the Personal Data Protection Law was updated and transferred to the digital environment. Demands received from data subjects are handled and responded to. Information and consent texts for processing of personal data and agreement/letter of undertaking provisions were prepared or updated, as necessary. Actions were taken to ensure legitimacy of the new personal data processing steps that emerged in connection with the Covid-19 pandemic.

Within the frame of the efforts to comply with the Regulation on Commercial Communications and Commercial Electronic Messages drafted based on the Electronic Commerce Law, we have registered with the Commercial Electronic Message Management System that allows commercial electronic message opt-in, opt-out and complaints. In order to fulfill our obligations under the said Regulation, our work is in progress for uploading the contact information of recipients to whom we are sending commercial electronic messages.

In order to ensure continued existence of our Company and business continuity, to safeguard our reputation and manage compliance risks, Tüpraş Anti-Corruption Policy prepared in accordance with Tüpraş Code of Ethics and Business Conduct and its Implementation Principles, and its annexes "Anti-Corruption Guidelines" and "Foreign Trade Control Implementation Guidelines" are in place. All employees, Tüpraş subsidiaries and third parties doing business on behalf of Tüpraş are liable to read and understand this policy and act in accordance therewith. It should be noted that this policy is implemented to cover all Company employees and managers, regardless of their position in the Company hierarchy.

RISK MANAGEMENT AND ACTIVITIES OF THE RISK MANAGEMENT COMMITTEE

Online software programs are used to identify compliance risks, specifically to detect third parties who are subject to international sanctions. In case of a change in status of a sanctioned person, these online software programs send alerts to the Company and accordingly status of all parties in terms of sanction legislation are monitored for as long as business relations continue

It is the common responsibility of us all to know our Code of Ethics, to espouse and carefully implement it, and to make sure that ethical values of our Company are safeguarded. In this context, it is planned to offer training on Code of Ethics and compliance to all employees of the Company.

7- REPUTATIONAL RISKS

Reputational risk can be defined as the potential negative reputation about the business practices of corporations.

Reputational damage may result in the loss of respect for the Company in the eyes of the society, declined demand for products and services, and negatively impacted competitive strength.

All political, geopolitical, economic, geographical, social, governance and environmental development that might damage the respectability, in other words, the reputation of the brand need to be monitored carefully, and crises in connection with those developments need to be managed.

Tüpraş established corporate policies and procedures in order to keep its reputation intact at all times, and is executing its crisis management processes within this framework.

G. INTERNAL CONTROL SYSTEM AND INTERNAL AUDIT

The internal control system at Tüpraş consists of standards within work flows, job descriptions, authorization system, policies and documented procedures. Tüpraş Risk Management and Audit Department oversees the internal control system in line with risk-based audit plans, adopting a proactive method.

Through audit activities carried out at Tüpraş and its Subsidiaries, it is intended to provide reasonable assurance within the frame of compliance with financial, operational, legal and ethical rules. Special reviews are also conducted in addition to regular audits based on process reviews and audit findings or notifications.

Audit findings are shared with the Company Management and the responsible individuals, and it is made sure that necessary corrective actions are taken. Audit findings for which actions will be taken are entered in the Tüpraş Risk and Actions Portal, and the actions necessary to be taken are followed up systematically in line with the severity of the finding.

The Audit Committee is formed of the Independent Members of the Board of Directors. Muharrem Hilmi Kayhan is the head of the Committee and Kamil Ömer Bozer is the member. The Audit Committee meets at least 4 times a year, and more frequently as and when necessary. During 2020, the Committee held 6 meetings. The Audit Committee is periodically informed about the audits conducted.

ENGLISH TRANSLATION OF INDEPENDENT AUDITOR'S EARLY RISK DETECTION SYSTEM AND COMMITTEE REPORT



To the Board of Directors of Türkiye Petrol Rafinerileri A.Ş.

1. We have audited the early risk identification system and committee established by Türkiye Petrol Rafinerileri A.Ş. (the "Company").

Board of Directors' Responsibility

2. Pursuant to subparagraph 1 of Article 378 of Turkish Commercial Code ("TCC") No. 6102; Board of Directors is required to form an expert committee, and to run and to develop the necessary system for the purposes of early identification of causes that jeopardize the existence, development and continuity of the company; applying the necessary measures and remedies in this regard; and managing the related risks.

Auditor's responsibility

3. Our responsibility is to reach a conclusion on the early risk identification system and committee based on our audit. Our audit was conducted in accordance with TCC and "Principles on Independent Auditor's Report on the Early Risk Identification System and Committee" issued by the Public Oversight Accounting and Auditing Standards Authority. Those principles require us to identify whether the Company established the early risk identification system and committee or not and, if established requires us to assess whether the system and committee is operating or not within the framework of Article 378 of TCC. Our audit does not include evaluating the adequacy of the operations carried out by the management of the Company in order to manage these risks.

Information on the Early Risk Identification System and Committee

4. The Company established the early risk identification system and committee and it is comprised of 2 members. The Committee has submitted the relevant reports for the period 1 January - 31 December 2020 to the Board of Directors that had been prepared for the purpose of early identification of risks that jeopardize the existence of the Company and its development, applying necessary measures and remedies in this regard, and managing the risks.

Conclusion

5. Based on our audit, it has been concluded that Türkiye Petrol Rafinerileri A.Ş.'s early risk identification system and committee is sufficient, in all material respects, in accordance with Article 378 of TCC.

PwC Bağımsız Denetim ve
Serbest Muhasebeci Mali Müşavirlik A.Ş.

Ediz Günsel, SMMM
Partner

Istanbul, 11 February 2021

EVALUATION OF OPERATING PRINCIPLES AND EFFECTIVENESS OF BOARD COMMITTEES

Based on the provisions stipulated in the Capital Markets Board of Turkey (CMB) Corporate Governance Communiqué no. II-17.1 ("the Communiqué"), by its decision no. 2020/12 dated 2 April 2020, the Board of Directors resolved to:

- Structure the Audit Committee with 2 members and appoint Mr. Muharrem Hilmi Kayhan as the Committee Chairman, and Mr. Kamil Ömer Bozer as a Member;
- Structure the Corporate Governance Committee with 3 members and appoint Mr. Muharrem Hilmi Kayhan as the Committee Chairman, and Mr. Yağiz Eyüboğlu and Mr. Doğan Korkmaz as members, and; authorize the Corporate Governance Committee to carry out the tasks of the Nomination Committee and Remuneration Committee in accordance with the Communiqué,
- Structure the Risk Management Committee with 2 members and appoint Ms. Ayşe Canan Ediboğlu as the Committee Chairman, and Mr. Erol Memioğlu as a member,
- Structure the Executive Committee with 6 members, and appoint Mr. Ömer Mehmet Koç as the Committee Chairman, and Mr. Yıldırım Ali Koç, Mr. Mustafa Rahmi Koç, Ms. Semahat Sevim Arsel, and Ms. Caroline Nicole Koç as members,
- Structure the Ethics Committee with 5 members, and appoint Mr. İbrahim Yelmenoğlu, the Company General Manager, as its Chairman, and Mr. Doğan Korkmaz, Assistant General Manager (CFO), Mr. Ahmet Aksoy, HR Director, Can Akçaoğlu, Chief Legal Officer, and Ms. Çiler Teber, Corporate Communications Manager, as members.

The Corporate Governance Principles mandate the Investor Relations Department to report directly to the General Manager or Assistant General Manager, who must be a member of the Corporate Governance Committee. Along this line, in the Board of Directors meeting held on 30 December 2015, it has been decided that the duties stipulated in Article 11 of the CMB's Corporate Governance Communiqué no. II-17.1 be carried out under the management of Mr. Doğan Korkmaz, the Chief Financial Officer, and that he be assigned as a member of the Corporate Governance Committee.

In 2020, all Board Committees fulfilled their duties and responsibilities in accordance with the Corporate Governance Principles and their working principles. The Committees convened according to the annual meeting program, as follows:

- The Audit Committee held a total of six meetings with the participation of both members on 25 January 2020, 12 February 2020, 4 March 2020, 21 May 2020, 12 August 2020 and 3 November 2020.
- The Corporate Governance Committee held a total of five meetings five times with full participation of members on 9 January 2020, 20 February 2020, 1 April 2020, 5 October and 31 December 2020.
- The Risk Committee held a total of six meetings five times with full participation of members on 14 February 2020, 17 April 2020, 1 June 2020, 23 July 2020, 10 November 2020 and 23 December 2020.
- The Executive Committee held a total of twelve meetings five times with full participation of members on 24 January 2020, 25 February 2020, 26 March 2020, 22 April 2020, 20 May 2020, 30 June 2020, 16 July 2020, 25 August 2020, 23 September 2020, 28 October 2020, 25 November 2020 and 30 December 2020.

The Board of Directors is of the opinion that the activities of the Board of Directors Committees have generated the expected benefits. Full attendance was achieved by committee members in all meetings.

The Board of Directors is of the opinion that the activities of the Board of Directors Committees have generated the expected benefits.

Operating Principles and Activities of the Audit Committee

The Audit Committee was set up based on the Board of Directors decision dated 26 December 2003 to oversee the operation of the Company's accounting and reporting systems under the applicable laws and regulations, public disclosure of financial information, and the operation and effectiveness of independent audit and internal control system.

Basically, the Board of Directors monitors financial control and audit activities via the Audit Committee. While fulfilling this function, the Audit Committee analyzes and assesses the reports from the Risk Management and Audit Department established to review, audit and report on the efficiency of Company processes from a financial perspective. The Audit Committee then gives the necessary instructions to the Company management and when deemed necessary, submits these for the attention and approval of the Board of Directors. Decisions made by the Committee are of a recommendation nature and the Board of Directors is the ultimate decision-making authority in related matters. The chairman and member of the Audit Committee are members of the Board of Directors with independent experience in audit, accounting and finance. The committee has convened six times in 2020 with the participation of both members.

Duties, Responsibilities and Operating Principles of the Audit Committee:

The Committee's duties are as follows:

- Designate the independent audit firm, determine the scope of services to be procured therefrom, initiate the independent audit process upon preparation of independent audit engagement agreements, and oversee the work of the independent auditor at every stage,
- Evaluate the independent auditor's qualifications in terms of the independence criteria, the declaration of independence, and additional services that can be procured from the independent auditor,
- Assess the findings derived from the independent audit communicated by the independent auditor to the Committee, important considerations related to the Company's accounting policy and practices; alternative practice and public disclosure options within the frame of the CMB's accounting standards and accounting principles which were previously communicated by the independent auditor to the Company management; their possible outcomes and suggested implementation, and the important correspondences with the Company management,
- Review and finalize the complaints the Company receives about the Company's accounting, reporting and internal control systems and independent audit processes; establish the methods and criteria that will be applied for handling Company employees' notifications about accounting, reporting, internal control and independent audit within the frame of confidentiality principle,
- Obtain the opinions of the Company's responsible executives and independent auditors in relation to the accuracy and fairness of the annual and interim financial statements to be disclosed, as well as their conformity to the accounting principles followed by the Company, and report them in writing to the Board of Directors together with the Committee's own assessments,
- Carry out the duties that are/will be incumbent upon the Committee by the CMB's regulations and the Turkish Commercial Code.



<https://tprstaticfilessa.blob.core.windows.net/assets/uploads/kurumsalyonetim/Audit-Committee.pdf>

During 2020, the Audit Committee:

- Obtained the opinions of the Company's responsible executives and independent auditors in relation to the accuracy and fairness of the annual and interim financial statements to be disclosed, as well as their conformity to the accounting principles followed by the Company, and reported them in writing to the Board of Directors together with the Committee's own assessments,
- Oversaw the work of the independent auditor upon designation of the independent audit firm, determination of the scope of services to be procured therefrom, preparation of independent audit engagement agreements and initiation of the independent audit process,
- Reviewed the independent auditor's work schedule, the outcomes obtained and recommendations,
- Monitored the effectiveness of the internal control system, and studied the audit department's program, business results and recommendations, as well as related practices and results,
- Established the methods and criteria that will be applied for reviewing and finalizing the complaints the Company receives about the Company's accounting, reporting and internal control systems and independent audit processes; and for handling Company employees' notifications about accounting, reporting, internal control and independent audit within the frame of confidentiality principle.

Operating Principles and Activities of the Corporate Governance Committee

Established with the Board of Directors' resolution dated 20 November 2007 to oversee and improve the Company's compliance with Corporate Governance Principles and make recommendations to the Board of Directors on further improving the corporate governance practices, the Corporate Governance Committee establishes whether the Company achieves full compliance with the Corporate Governance Principles, determines the reasons for noncompliance, if applicable, and the conflicts of interest arising from failure to achieve full compliance. In addition, the Committee presents recommended improvements to the Board of Directors.

EVALUATION OF OPERATING PRINCIPLES AND EFFECTIVENESS OF BOARD COMMITTEES

Under the provisions of the Corporate Governance Principles published by the Capital Markets Board of Turkey, the Corporate Governance Committee also fulfills the functions of nominating members to the Board of Directors, developing corporate governance practices in relation to the remuneration of the Board of Directors members and senior executives, and presenting suggestions and recommendations to the Board of Directors regarding the same. The Committee meets at the frequency required by the duties incumbent upon it.

Duties, Responsibilities and Operating Principles of the Corporate Governance Committee:

The Committee's duties are as follows:

- Establish whether corporate governance principles are being implemented, grounds for non-implementation (if applicable) and conflicts of interest arising from failure to achieve total alignment with these principles; recommend improvements to corporate governance practices to the Board of Directors,
- Oversee the activities of the Investor Relations Department,
- Review the Corporate Governance Principles Compliance Report that will be publicly disclosed, and verify the accuracy and consistency of the information therein against the information available to the Committee,
- Ensure the development, adoption and implementation of Corporate Governance Principles within the Company, work on topics where the principles are not implemented, and make recommendations to the Board of Directors for improving the extent of compliance,
- Follow up the Corporate Governance Principles across the world, and make recommendations to the Board of Directors for the implementation of necessary components at the Company.

The functions of nomination and remuneration committee stipulated in the CMB regulations are fulfilled by the Company's Corporate Governance Committee. The duties of the Committee in this respect are as follows:

- Create a transparent system for the identification, assessment and training of candidates fit for serving on the Board of Directors and in managerial positions with administrative responsibility; work on the development of related policies and strategies,
- Evaluate nominations for independent member seats, including those nominated by the management and investors, taking into consideration whether the candidate(s) possess(es) the independence criteria, and present its evaluation of this matter for the approval of the Board of Directors,
- In case of any vacancies on the Board of Directors seats, make assessments for electing independent members to the vacated seats who will serve until the next general assembly meeting so as to ensure that the minimum number of independent members is re-established, and present the conclusion in writing to the Board of Directors,
- Make regular assessments about the structure and efficiency of the Board of Directors, and present its recommendations about possible changes in these matters to the Board of Directors,
- Establish and monitor the approach, principles and practices in relation to performance appraisal and career planning of Board of Directors members and senior executives,
- Determine its suggestions associated with the remuneration principles of the Board of Directors members and senior executives, taking into consideration the Company's long-term targets, and oversee the same,
- Set the remuneration criteria, linking them to the performance of the Company and the Board member,
- Present its suggestions regarding the remuneration to be paid to the Board of Directors members and senior executives taking into consideration the degree at which the criteria are attained.

The operating principles of the Corporate Governance Committee are posted on the Company website.



<https://tprstaticfilessa.blob.core.windows.net/assets/uploads/kurumsalyonetim/Corporate-Governance.pdf>

During 2020, the Corporate Governance Committee:

- Reviewed the Corporate Governance Principles Compliance Report that will be publicly disclosed, and verified the accuracy and consistency of the information therein against the information available to the Committee,
- Oversaw the activities of the Investor Relations Department, and presented information about the Department's activities to the Board of Directors,
- Obtained a written declaration of independence from the candidate standing for independent member's seat on the Board of Directors within the frame of the required criteria under the applicable regulation and the Company's Articles of Association as of his/her nomination to the Committee,
- Evaluated all nominations for independent member's seat, including those nominated by the management and investors, taking into consideration whether the candidate(s) possess(es) the independence criteria, and presented its evaluation of this matter for the approval of the Board of Directors,
- Ensured the public disclosure of the final list of independent member nominees together with the General Assembly meeting announcement,
- Evaluated the system implemented for the identification, assessment and training of candidates fit for serving on the Board of Directors and in managerial positions with administrative responsibility,
- Evaluated the composition and efficiency of the Board of Directors,
- Evaluated the principles, criteria and practices to be employed in the remuneration of Board members and managers with administrative responsibility in view of the Company's long-term targets,
- Worked in relation to the benefits provided to the Board of Directors members and senior executives.

Operating Principles and Activities of the Risk Management Committee

The Risk Management Committee was set up based on the Board of Directors decision dated 28 July 2010 to early detect and assess all kinds of strategic, operational, financial, legal and other risks that may endanger the Company's existence, development and continuation, to estimate the impacts and probabilities of these risks, and to manage these risks in accordance with the Company's risk taking profile.

Duties, Responsibilities and Operating Principles of the Risk Management Committee:

The Committee's duties are as follows:

- Define, assess, and monitor existing and potential risk elements that may impact the achievement of the Company's goals under the Enterprise Risk Management systematic, establish the principles for managing the related risks in accordance with the Company's risk taking profile, and ensure their use in decision-making mechanisms,
- Identify the risks that will be kept and managed, shared or totally eliminated in the Company according to probability and impact estimations,
- Ensure integration of risk management and internal control systems within the Company's corporate structure,
- Review risk management systems at least annually and oversee that the implementations in relevant departments undertaking the responsibility of risk management are in accordance with the Committee's decisions,
- Early diagnose technical bankruptcy and warn the Board of Directors in this respect, recommend precautions,
- Carry out the duties that are/will be incumbent upon the Committee by the CMB's regulations and the Turkish Commercial Code.

Operating principles of the Risk Management Committee are posted on the company website.



<https://tprstaticfilessa.blob.core.windows.net/assets/uploads/kurumsalyonetim/Risk-Management-Committee.pdf>

EVALUATION OF OPERATING PRINCIPLES AND EFFECTIVENESS OF BOARD COMMITTEES

During 2020, the Risk Management Committee:

- Reviewed the existing and potential risk elements within the frame of the operation of the Enterprise Risk Management function and made recommendations for further improvement,
- Identified the risks that will be kept and managed, shared or totally eliminated in the Company,
- Ensured the performance of the necessary work for identifying the opportunities that will increase the Company's profitability and effectiveness of its operations, as well as for identified opportunities, and supported the Board of Directors in accurately setting the Company strategy in view of potential risks and opportunities,
- Evaluated the company activities regarding the Company's information systems practices within the context of the obligations imposed on publicly-held companies by the CMB Communiqué numbered VII-128.9,
- Oversaw the reviewing of risk management systems at least annually and verified that the execution of the implementations by departments undertaking the responsibility of risk management are in accordance with the Committee's decisions.
- Evaluated the actions taken by the Company in response to COVID-19.

The report dated 11 February 2021 prepared by PwC Bağımsız Denetim ve Serbest Muhasebeci Mali Müşavirlik concluded that the early detection of risk system in place at Türkiye Petrol Rafinerileri A.Ş. and the Risk Management Committee are adequate in all material respects under Article 378 of the TCC.

Executive Committee and its Operating Principles

The Executive Committee is set up based on the Board of Directors' decision dated 4 May 2012 to advise and make suggestions to the Board of Directors for increasing the efficiency of the Board of Directors and securing improvement in the fields of investment and business development in areas aligned with its strategic goals, by providing the coordination between the Board of Directors and the administrative structure. The rate of female members in the Executive Committee, which consists of five members, is 40%.

Duties, Responsibilities and Operating Principles of the Executive Committee:

The duties of the Committee are as follows:

- Ensure that necessary preparations and analyses have been completed for important matters that will be decided by the Board of Directors before they are submitted for the approval of all members, and make sure that they have been assessed with respect to various aspects such as their impact on operations, financial aspects, legal status and alignment with strategic priorities,
- Ensure that the matters that are required to be decided by the General Assembly or the Board of Directors are communicated to the Company management and deployed under specific guidelines and policies,
- Verify that the Company's activities are carried out in accordance with the Board of Directors decisions and annual business plans,
- Follow up the economic, social and political developments concerning the sector in which the Company is engaged, assess their effects and establish the strategies that will increase its competitive strength,
- Monitor the sector's dynamics and identify the probable opportunities in line with the set strategies,
- Monitor the Company's strengths and weaknesses through internal analyses to be conducted, and opportunities and threats through external analyses,
- Explore internal and external growth opportunities that will help the Company achieve its strategic goals,
- Supervise the functionality of the system that will ensure the Company's business programs are created, revised as necessary according to external developments, and used as a performance benchmark,
- Follow up the management of strategies and projects accepted by the Board of Directors,
- Consider important developments in the regulatory environment with a potential impact on the activities and their impact.

Operating principles of the Executive Committee are posted on the Company website.



https://tprstaticfilessa.blob.core.windows.net/assets/uploads/kurumsalyonetim/Tupras_executive_committee.pdf

During 2020, the Executive Committee:

- Verified that the Company's activities were carried out in accordance with the Board of Directors decisions and business plans, and regularly monitored the alignment of the Company management with the business plans and any deviations during the pandemic,
- Followed up the economic, social and political developments concerning the sector in which the Company is engaged, assessed their effects, set the strategies, and offered guidance to the Company management for potential threats and opportunities, by monitoring the sector's dynamics,
- Pursued growth opportunities that will help the Company achieve its strategic goals,
- Supervised the functionality of the system that ensures the Company's business programs are created, revised as necessary according to external developments and used as a performance benchmark,
- Oversaw the activities for diversifying the Company's financing means,
- Followed up the management of the strategies and projects accepted by the Board of Directors.

Ethics Committee

Code of Ethics and Business Conduct cover the Company's fundamental principles of conduct. For the purpose of alignment with the Global Compact criteria, of which Koç Holding is a signatory, as well as changes in regulatory, social and economic circumstances, Tüpraş Code of Ethics and Business Conduct was approved by the General Assembly in April 2011. In the performance of their duties, the Company personnel must abide by the "Tüpraş Code of Ethics and Business Conduct and its Implementation Principles" and "Koç Group's Shared Values". Realizing that work procedures, standards, laws and regulations might not be able to provide guidance for all kinds of attitudes and behaviors, the Code of Ethics and Business Conduct built upon the Company values is implemented.

Within the scope of the activities for combating corruption at the Company, no incident of non-conformity took place or no employee was given a disciplinary punishment or was removed from office by reason of non-compliance with the anti-corruption policy during 2020. In addition, there were no administrative or judicial sanctions or fines imposed by public authorities against the Company and/or members of the governing body on account of any practice associated with corruption.

AUDIT COMMITTEE REPORT (RELATED TO FINANCIAL STATEMENTS)

TÜRKİYE PETROL RAFİNERİLERİ A.Ş. AUDIT COMMITTEE REPORT RELATED TO FINANCIAL STATEMENTS

Decision Date : 11.02.2021
Decision No : 2021/2
Subject : Consolidated Financial Statements dated 31.12.2020

To the Board of Directors of Tüpraş

We convene to review and give our opinion on the financial statements of Türkiye Petrol Rafinerileri A.Ş. for the period of 1 January- 31 December 2020 and also to review the independent audit report of PwC Bağımsız Denetim ve Serbest Muhasebeci Mali Müşavirlik A.Ş. The consolidated financial statements of Türkiye Petrol Rafinerileri A.Ş. have been prepared by the company management in accordance with the CMB Financial Reporting Communiqué numbered as II.14.1. According to the related Communiqué, entities shall prepare their financial statements in accordance with Turkish Financial Reporting Standards ("TFRS") and in line with the recommended formats of the CMB.

During this review, the fair presentation and accuracy of the financial statements referred to above in conformity with the accounting policies of the company have been elaborated. Independent auditors' and company management's opinions were requested as deemed necessary.

After the review and evaluations we made based on the information provided to us; we have concluded that the consolidated financial statements referred to above are fairly and accurately presented and are in line with the accounting policies of the company. Therefore, we would like to submit the aforementioned financial statements to the approval of the Board of Directors.

Sincerely,

[Signature]

Muharrem Hilmi Kayhan
Chairman of the Audit Committee

[Signature]

Kamil Ömer Bozer
Member of the Audit Committee

STATEMENT OF RESPONSIBILITY (RELATED TO APPROVAL OF FINANCIAL STATEMENTS)

STATEMENT OF RESPONSIBILITY PREPARED IN ACCORDANCE WITH ARTICLE 9 OF THE II-14.1 PRINCIPLES OF FINANCIAL REPORTING IN CAPITAL MARKETS COMMUNIQUE BY THE CAPITAL MARKETS BOARD

REGARDING THE APPROVAL OF FINANCIAL STATEMENTS BY THE BOARD OF DIRECTORS

Decision Date : 11.02.2021

Resolution No : 2021/05

Under the Capital Markets Board Regulations, within the framework of the information provided to us in relation to our tasks and responsibilities related to the Company, we hereby announce and declare that: the consolidated Balance Sheet, Statement of Income, Statement of Other Comprehensive Income, Statement of Cash Flow, Statement of Changes in Equity along with the related Notes prepared by the Company and audited by the independent auditor PwC Bağımsız Denetim ve Serbest Muhasebeci Mali Müşavirlik A.Ş. for the period of 01.01.2020 – 31.12.2020 under the CMB Financial Reporting Communiqué numbered as II.14.1. in accordance with Turkish Financial Reporting Standards (TFRS) and in line with the compulsory formats determined by the CMB;

- have been reviewed by us;
- do not contain any inaccuracy in all material respects and are free of omissions that may be regarded as misleading as of the issue date;
- The financial statements prepared in line with the Communiqué present fairly the assets, liabilities, financial position and the results of operations of the Company as well as of the companies included in the scope of consolidation.

Regards,

[Signature]

Muharrem Hilmi Kayhan
Chairman of Audit Committee

[Signature]

Kamil Ömer Bozer
Member of Audit Committee

[Signature]

Doğan Korkmaz
Assistant General Manager
Financial Affairs (CFO)

AUDIT COMMITTEE REPORT (RELATED TO ANNUAL REPORT)

TÜRKİYE PETROL RAFİNERİLERİ A.Ş. AUDIT COMMITTEE REPORT

Decision Date : 09.03.2021
Decision No : 2021/4
Subject : Annual Report dated 31.12.2020

To the Board of Directors of Tüpraş

We have convened to review and give our opinion on the 2020 Annual Report, which has been prepared by our Company in accordance with the Turkish Commercial Code and the Capital Markets Board of Turkey Communiqué no. II.14.1 on Financial Reporting Principles in the Capital Market and Communiqué no. II.17.1 on Corporate Governance, and which has been independently audited by PwC Bağımsız Denetim ve Serbest Muhasebeci Mali Müşavirlik A.Ş.

We have reviewed the Annual Report prepared by our Company to the extent of the information available to us by virtue of our position and responsibility in the Company. During our review, opinions of the auditor of the independent audit firm and the responsible executives of the Company have been sought as needed.

As a result of our review and assessment based on the information provided to us; we have concluded that the disclosures in the Annual Report provide a true and fair view and are adequate, and that the report fairly represents the development and performance of the Company, together with those subject to consolidation, and includes the major risks and uncertainties that the Company is exposed to. Now therefore, we hereby submit the Annual Report for the approval of the Board of Directors.

Sincerely,

[Signature]

Muharrem Hilmi Kayhan
Chairman of Audit Committee

[Signature]

Kamil Ömer Bozer
Chairman of Audit Committee

STATEMENT OF RESPONSIBILITY (RELATED TO APPROVAL OF ANNUAL REPORT)

STATEMENT OF RESPONSIBILITY PREPARED IN ACCORDANCE WITH ARTICLE 9 OF THE II- 14.1. PRINCIPLES OF FINANCIAL REPORTING IN CAPITAL MARKETS COMMUNIQUÉ BY THE CAPITAL MARKETS BOARD

REGARDING THE APPROVAL OF ANNUAL REPORT BY THE BOARD OF DIRECTORS

Decision Date : 09.03.2021

Resolution No : 2021/14

Under the Capital Markets Board Regulations, within the framework of the information provided to us in relation to our tasks and responsibilities related to the Company, we hereby announce and declare that the attached Annual Report, which includes the Corporate Governance Compliance Report and Corporate Governance Information Form, for the year of 2020 prepared by the Company in accordance with Turkish Commercial Code and CMB Financial Reporting Communiqué numbered as II.14.1. and audited by PwC Bağımsız Denetim ve Serbest Muhasebeci Mali Müşavirlik A.Ş., according to Capital Markets Board Regulations;

- has been reviewed by us,
- does not contain any inaccuracy in all material respects and is free of omissions that may be regarded as misleading as of the issue date
- presents fairly the progress and the performance of the business, the financial position of the Company and the companies included in the scope of consolidation together with the material risks and uncertainties.

Regards

[Signature]

Muharrem Hilmi Kayhan
Chairman of Audit Committee

[Signature]

Kamil Ömer Bozer
Member of Audit Committee

[Signature]

Doğan Korkmaz
Assistant General Manager
Financial Affairs (CFO)

Türkiye Petrol Rafinerileri A.Ş.

1 January - 31 December 2020

Consolidated Financial Statements

(Convenience Translation of Consolidated Financial Statements Originally Issued in Turkish)

INDEPENDENT AUDITOR'S REPORT



To the General Assembly of Türkiye Petrol Rafinerileri A.Ş.

A. Audit of the consolidated financial statements

1. Our opinion

We have audited the accompanying consolidated financial statements of Türkiye Petrol Rafinerileri A.Ş. (the "Company") and its subsidiaries (collectively referred to as the "Group") which comprise the consolidated statement of financial position as at 31 December 2020, the consolidated statement of profit or loss and other comprehensive income, the consolidated statement of changes in equity and the consolidated statement of cash flows for the year then ended and notes to the consolidated financial statements comprising a summary of significant accounting policies.

In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Group as at 31 December 2020, and its financial performance and its cash flows for the year then ended in accordance with Turkish Financial Reporting Standards ("TFRS").

2. Basis for opinion

Our audit was conducted in accordance with the Standards on Independent Auditing (the "SIA") that are part of Turkish Standards on Auditing issued by the Public Oversight Accounting and Auditing Standards Authority (the "POA"). Our responsibilities under these standards are further described in the "Auditor's Responsibilities for the Audit of the Consolidated Financial Statements" section of our report. We hereby declare that we are independent of the Group in accordance with the Ethical Rules for Independent Auditors (the "Ethical Rules") and the ethical requirements regarding independent audit in regulations issued by POA that are relevant to our audit of the financial statements. We have also fulfilled our other ethical responsibilities in accordance with the Ethical Rules and regulations. We believe that the audit evidence we have obtained during the independent audit provides a sufficient and appropriate basis for our opinion.

3. Key audit matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. Key audit matters were addressed in the context of our independent audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

INDEPENDENT AUDITOR'S REPORT

Key Audit Matters	How the key audit matter was addressed in the audit
<p><i>Fair value of lands recognised using the revaluation method</i></p> <p>As further explained in Note 2.3, the Group started to account its lands, that are classified under property, plant and equipment, through revaluation method commencing from 31 March 2019. The total fair value of lands as of 31 December 2020 amounts to TRY8,341,191 thousand, representing a fair value increase of TRY 7,447,028 thousand (net of deferred taxes) that is recognized under equity.</p> <p>As further described in Note 2.3, the accounting policy of lands, that are classified under property, plant and equipment, is 'revaluation method'. The fair values of these assets are being determined by an independent valuation institution, that are accredited by the Capital Markets Board ("CMB") and are recognized in the consolidated financial statements following the Group management's assessment. Fair value of lands depends on the valuation methods used as well as the input and assumptions used in the valuation model. Fair values are directly affected by factors such as market conditions, specifications of each land, their physical conditions and geographic locations.</p> <p>Since the value of lands are material to the consolidated financial statements and in the determination of land fair values certain assumptions, such as the benchmarking analysis approach (market), cost approach and income approach, are being used which include variables that can lead to changes in the fair values of the lands, 'fair value of lands recognized using the revaluation method' is identified as a key audit matter.</p>	<p>The audit procedures we performed on the accounting for lands under revaluation method are as follows:</p> <p>The capability, competency and objectivity of the independent property valuation institution appointed by the Group is assessed in accordance with SIA 500.</p> <p>The completeness of the lands subject to revaluation is checked by comparing accounting records to valuation reports.</p> <p>The deeds and ownership ratios of lands were tested through the sampling method.</p> <p>Besides, we appointed another independent property valuation institution, that is also accredited by the CMB and holds a license, as an "auditor's expert" to support the related audit process.</p> <p>The following audit procedures were performed based on the sampling method with the support of the auditor's expert:</p> <ul style="list-style-type: none"> - Comparison of the location, tenant and square meter information for the lands included in reports with the land registers, - Evaluation of the nature of the lands, - Evaluation of the appropriateness of the benchmarking analysis method used in revaluation of the relevant lands, - Determination of whether the lands that were the subject of calculations using the benchmark comparison method have features similar to the Group's lands or not, - Checking whether or not the valuation reports were prepared in line with the main principles. <p>Fair values in the valuation reports were compared with the notes to assess, whether the amounts in notes and in the consolidated financial statements are consistent with the valuation reports or not. In addition, the sufficiency of the note explanations under the TFRS were evaluated.</p> <p>We have no material findings as a result of the above audit procedures we performed in connection with the fair value of the lands recognized using the revaluation method.</p>

Key Audit Matters	How the key audit matter was addressed in the audit
<p><i>Impairment tests of machinery, plant and equipment</i></p> <p>As of 31 December 2020, the machinery, plant and equipment amount recognized in the consolidated financial statements of the Group is TRY 7,838,672 thousand, which represents 13% of its total assets.</p> <p>Accounting policies and details regarding Group's machinery, plant and equipment are explained in Note 2.3 and Note 11 of the consolidated financial statements.</p> <p>Since demand significantly decreased due to Covid-19 pandemic measures in 2020, which are explained in Note 2.1.5 of the consolidated financial statements, and crude oil and product prices fluctuated to a great extent, the revenue and gross profit in the Group's consolidated financial statements decreased and an operating loss amounts to TRY 619,027 thousand incurred for the year ended 31 December 2020. Therefore, the Group Management performed the impairment tests on the machinery, plant and equipment in accordance with TAS 16, "Property, Plant and Equipment" standard.</p> <p>Impairment tests of machinery, plant and equipment were identified as a key audit matter since; significant management estimations and assumptions were used in impairment work; these estimations and assumptions may be affected by developments in the industry, economy and the course of the pandemic; and impairments in machinery, plant and equipment may significantly affect the Group's consolidated financial statements.</p>	<p>In our audit we performed the following audit procedures regarding the impairment tests of machinery, plant and equipment:</p> <ul style="list-style-type: none"> - We discussed the future plans and explanations of the Group and appraised them within the framework of macroeconomic data. - We compared cash flow estimations prepared for the relevant cash generating unit with previous financial performance results considering the impact of Covid-19 pandemic and assessed if these estimations are reasonable. - With the assistance of our valuations experts, we compared the significant estimations, such as long-term growth and discounted cash flow rates which are used in calculation of value in use amount, with market data and assessed whether they are appropriate. - We checked the structure and mathematical accuracy of the discounted cash flow calculation model. - We compared assumptions and estimations such as weighted average cost of capital, long-term growth rates and risk premiums with market data to determine if they are appropriate. - We checked management's analyses regarding how sensitive weighted average cost of capital rate (discount rate) is to market conditions. - We reviewed the explanations in the consolidated financial statement notes regarding impairment tests and results and evaluated the sufficiency of this information in terms of TFRS. <p>No significant findings resulted from our work related to the audit of impairment tests of machinery, plant and equipment.</p>

4. Responsibilities of management and those charged with governance for the consolidated financial statements

The Group management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with TFRS, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Group's financial reporting process.

5. Auditor's responsibilities for the audit of the consolidated financial statements

Responsibilities of independent auditors in an independent audit are as follows:

Our aim is to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an independent auditor's report that includes our opinion. Reasonable assurance expressed as a result of an independent audit conducted in accordance with SIA is a high level of assurance but does not guarantee that a material misstatement will always be detected. Misstatements can arise from fraud or error. Misstatements are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

INDEPENDENT AUDITOR'S REPORT

As part of an independent audit conducted in accordance with SIA, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement in the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Assess the internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our independent auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the Group audit. We remain solely responsible for our audit opinion

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence. We also communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

B. Other responsibilities arising from regulatory requirements

1. No matter has come to our attention that is significant according to subparagraph 4 of Article 402 of Turkish Commercial Code ("TCC") No. 6102 and that causes us to believe that the Company's bookkeeping activities concerning the period from 1 January to 31 December 2020 period are not in compliance with the TCC and provisions of the Company's articles of association related to financial reporting.
2. In accordance with subparagraph 4 of Article 402 of the TCC, the Board of Directors submitted the necessary explanations to us and provided the documents required within the context of our audit.
3. In accordance with subparagraph 4 of Article 398 of the TCC, the auditor's report on the early risk identification system and committee was submitted to the Company's Board of Directors on 11 February 2021.

Ediz Günsel, SMMM
Partner

Istanbul, 11 February 2021

TABLE OF CONTENTS

	PAGE
CONSOLIDATED STATEMENTS OF FINANCIAL POSITION	182
CONSOLIDATED STATEMENTS OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME	184
CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY	186
CONSOLIDATED STATEMENTS OF CASH FLOWS	188
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS	189-255
NOTE 1 ORGANIZATION AND NATURE OF OPERATIONS OF THE GROUP	189
NOTE 2 BASIS OF PRESENTATION OF CONSOLIDATED FINANCIAL STATEMENTS	191
NOTE 3 BUSINESS COMBINATIONS	207
NOTE 4 CASH AND CASH EQUIVALENTS	208
NOTE 5 FINANCIAL LIABILITIES	209
NOTE 6 TRADE RECEIVABLES AND PAYABLES	214
NOTE 7 OTHER RECEIVABLES AND PAYABLES	215
NOTE 8 INVENTORIES	215
NOTE 9 INVESTMENTS ACCOUNTED FOR USING THE EQUITY METHOD	216
NOTE 10 PROPERTY, PLANT AND EQUIPMENT	218
NOTE 11 INTANGIBLE ASSETS	221
NOTE 12 PREPAID EXPENSES	222
NOTE 13 OTHER ASSETS AND LIABILITIES	222
NOTE 14 PROVISIONS	224
NOTE 15 LIABILITIES FOR EMPLOYEE BENEFITS	227
NOTE 16 OTHER PAYABLES	227
NOTE 17 DERIVATIVE INSTRUMENTS	228
NOTE 18 COMMITMENTS AND CONTINGENT ASSETS AND LIABILITIES	229
NOTE 19 EQUITY	231
NOTE 20 REVENUE AND COST OF SALES	232
NOTE 21 GENERAL ADMINISTRATIVE EXPENSES, MARKETING EXPENSES AND RESEARCH AND DEVELOPMENT EXPENSES	233
NOTE 22 OTHER OPERATING INCOME/(EXPENSES)	234
NOTE 23 INCOME/(EXPENSE) FROM INVESTMENT ACTIVITIES	235
NOTE 24 FINANCIAL INCOME/(EXPENSES)	235
NOTE 25 TAX ASSETS AND LIABILITIES	236
NOTE 26 EARNINGS PER SHARE	238
NOTE 27 RELATED PARTY TRANSACTIONS	239
NOTE 28 FINANCIAL INSTRUMENTS AND FINANCIAL RISK MANAGEMENT	243
NOTE 29 GOVERNMENT GRANTS	255
NOTE 30 SUBSEQUENT EVENTS	255

Consolidated Statements Of Financial Position As At 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

		Audited	Audited
ASSETS	Notes	31 December 2020	31 December 2019
Current Assets		30,663,146	27,918,955
Cash and cash equivalents	4	19,825,292	10,652,009
Trade receivables	6	1,735,549	4,787,906
Due from related parties	6, 27	324,555	995,837
Trade receivables from third parties		1,410,994	3,792,069
Other receivables	7	18,690	45,617
Other receivables from third parties		18,690	45,617
Derivative instruments	17	380,129	303,992
Inventories	8	7,700,630	9,468,581
Prepaid expenses	12	233,614	236,762
Other current assets	13	769,242	2,424,088
Non-Current Assets		30,505,376	27,592,603
Financial investments		3,696	-
Investments accounted for using the equity method	9	1,326,490	1,362,777
Property, plant and equipment	10	21,875,889	20,334,715
Right of use asset		199,005	200,701
Intangible assets	11	62,369	51,744
Other intangible assets		62,369	51,744
Derivative instruments	17	87,883	98,741
Prepaid expenses	12	134,786	198,879
Deferred tax assets	25	5,002,427	3,767,503
Other non-current assets	13	1,812,831	1,577,543
Total assets		61,168,522	55,511,558

The accompanying notes form an integral part of these consolidated financial statements.

Türkiye Petrol Rafinerileri A.Ş.

Consolidated Statements Of Financial Position As At 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

		Audited	Audited
ASSETS	Notes	31 December 2020	31 December 2019
LIABILITIES			
Current liabilities		28,340,528	28,120,266
Short-term financial liabilities	5	2,097,808	1,798,683
Current portion of long term financial liabilities	5	6,403,937	3,379,019
Trade payables	6	14,137,468	17,816,174
Due to related parties	6, 27	218,486	226,072
Trade payables, third parties		13,918,982	17,590,102
Liabilities for employee benefits	15	151,927	147,409
Other payables	16	64,113	55,409
Due to related parties	16, 27	30,763	28,297
Other payables to third parties		33,350	27,112
Derivative instruments	17	762,828	79,247
Deferred income		129,254	20,813
Current income tax liabilities	25	2,459	2,405
Short-term provisions	14	142,088	117,152
Short-term provisions for employee benefits		24,572	15,777
Other provisions		117,516	101,375
Other current liabilities	13	4,448,646	4,703,955
Non-current liabilities		21,155,469	14,254,752
Long-term financial liabilities	5	20,743,323	13,898,092
Long-term provisions	14	356,405	316,052
Long-term provisions for employee benefits		356,405	316,052
Deferred income		9,504	7,820
Derivative Instruments	17	45,490	31,950
Other non-current liabilities		747	838
Non-current liabilities		49,495,997	42,375,018
Equity		11,672,525	13,136,540
Share capital	19	250,419	250,419
Adjustment to share capital	19	1,344,243	1,344,243
Accumulated other comprehensive income/(expense) not to be reclassified to profit or loss		7,487,238	6,437,136
Gains/losses on revaluation and remeasurement		7,439,187	6,418,891
Gain on revaluation of properties		7,447,028	6,425,788
Actuarial gain/(loss) arising from defined benefit plans		(7,841)	(6,897)
Share of other comprehensive income of investments accounted for using equity method that will not be reclassified to profit or loss		48,051	18,245
Accumulated other comprehensive income/(expense) to be reclassified to profit or loss		(1,923,330)	(1,850,305)
Currency translation differences		(9,822)	3,192
Hedging gains/(losses)		(2,243,649)	(2,100,116)
Cash flow hedge gains/(losses)		(2,243,649)	(2,100,116)
Share of other comprehensive income of investments accounted for using equity method that will be reclassified to profit or loss		330,141	246,619
Restricted reserves	19	503,343	503,343
Retained earnings		6,277,999	5,752,162
Net income		(2,493,511)	525,837
Total equity attributable to equity holders of the parent		11,446,401	12,962,835
Non-controlling interests		226,124	173,705
Total equity and liabilities		61,168,522	55,511,558

These consolidated financial statements as of and for the year ended 31 December 2020 has been approved for issue by the Board of Directors ("BOD") on 11 February 2021. These consolidated financial statements will be finalised following their approval in the General Assembly

The accompanying notes form an integral part of these consolidated financial statements.

Consolidated Statements Of Comprehensive Income For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

		Audited 1 January - 31 December 2020	Audited 1 January - 31 December 2019
	Notes		
Revenue	20	63,243,815	89,600,776
Cost of sales	20	(61,479,585)	(84,716,489)
Gross profit (loss)		1,764,230	4,884,287
General administrative expenses	21	(1,344,225)	(1,277,213)
Marketing expenses	21	(633,052)	(482,074)
Research and development expenses	21	(34,972)	(24,073)
Other operating income	22	616,900	838,573
Other operating expenses	22	(987,908)	(1,709,363)
Operating profit (loss)		(619,027)	2,230,137
Income from investment activities	23	1,805	(152)
Income (loss) from investments accounted by equity method	9	(29,615)	197,393
Operating profit before financial income (expense)		(646,837)	2,427,378
Financial income	24	3,213,676	1,522,758
Financial expense	24	(6,362,233)	(4,261,484)
Profit (loss) before tax from continued operations		(3,795,394)	(311,348)
Tax income (expense)		1,372,469	896,678
Taxes on income		(13,310)	(9,471)
Deferred tax income (expense)	25	1,385,779	906,149
Net income (loss) from continued operations		(2,422,925)	585,330
Other comprehensive income:			
Items not to be reclassified to profit or loss		1,050,095	6,433,511
Revaluation gain (loss) on property	10	1,134,711	7,139,764
Actuarial gain (loss) arising from defined benefit plans		(818)	(15,270)
Share of other comprehensive income accounted for investment using equity method that will be not reclassified to profit or loss		29,806	19,788
Actuarial gain (loss) arising from defined benefit plans accounted for investment using equity method	9	(406)	(1,043)
Revaluation gain (loss) on property of investments accounted with using equity method	9	30,212	20,831

The accompanying notes form an integral part of these consolidated financial statements.

Türkiye Petrol Rafinerileri A.Ş.

Consolidated Statements Of Comprehensive Income For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

		Audited	Audited
	Notes	1 January - 31 December 2020	1 January - 31 December 2019
Tax effect of other comprehensive income (loss) not to be reclassified to profit or loss		(113,604)	(710,771)
Deferred tax income (expense)		(113,604)	(710,771)
Items to be reclassified to profit or loss		(85,579)	(34,279)
Currency translation differences		(13,014)	3,192
Share of other comprehensive income accounted for investment using equity method that will be reclassified to profit or loss		83,522	(24,738)
Actuarial gain (loss) of revaluation or classification of investments using equity method	9	43,261	(34,666)
Gain (loss) from translation of foreign currency of investments using equity method	9	40,261	9,928
Income (expense) relating to avoidance of risk of cash flow		(118,837)	(18,726)
Income (loss) of avoidance of risk cash flow		(118,837)	(18,726)
Tax effect of other comprehensive income (loss) to be reclassified to profit or loss		(37,250)	5,993
Deferred tax income (expense)		(37,250)	5,993
Other comprehensive income (expense)		964,516	6,399,232
Total comprehensive income (expense)		(1,458,409)	6,984,562
Distribution of income for the period:			
Non-controlling interests		70,586	59,493
Attributable to equity holders of the parent		(2,493,511)	525,837
Distribution of total comprehensive income			
Non-controlling interests		58,025	52,505
Attributable to equity holders of the parent		(1,516,434)	6,932,057
Earnings (loss) per share from continued operations			
Earnings per share with nominal value Kr1 each (Kr)	26	(9.96)	2.10

The accompanying notes form an integral part of these consolidated financial statements.

Consolidated Statements Of Changes In Equity For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

			Accumulated other comprehensive income/(expense) not to be reclassified to profit or loss			
			Gains/(losses) on valuation and remeasurement		Share of other comprehensive income of investments accounted for using equity method that will be not reclassified to profit or loss	Currency translation differences
	Share capital	Adjustment to share capital	Gain on revaluation of properties	Actuarial gains/ (losses) arising from defined benefit plans		
Audited						
1 January 2019	250,419	1,344,243	-	5,021	(1,543)	-
Transfers	-	-	-	-	-	-
Dividends paid	-	-	-	-	-	-
- Net profit for the period	-	-	-	-	-	-
- Other comprehensive income	-	-	6,425,788	(11,918)	19,788	3,192
Total comprehensive income	-	-	6,425,788	(11,918)	19,788	3,192
31 December 2019	250,419	1,344,243	6,425,788	(6,897)	18,245	3,192
Audited						
1 January 2020	250,419	1,344,243	6,425,788	(6,897)	18,245	3,192
Transfers	-	-	-	-	-	-
Dividends paid	-	-	-	-	-	-
- Net profit for the period	-	-	-	-	-	-
- Other comprehensive income	-	-	1,021,240	(944)	29,806	(13,014)
Total comprehensive income	-	-	1,021,240	(944)	29,806	(13,014)
31 December 2020	250,419	1,344,243	7,447,028	(7,841)	48,051	(9,822)

The accompanying notes form an integral part of these consolidated financial statements.

Accumulated other comprehensive
income/(expense) that will be reclassified
to profit or loss

Hedge
gains/
(losses)

Total retained earnings

Cash flow hedge gains/ (losses)	Share of other comprehensive income of investments accounted for using equity method that will be reclassified to profit or loss	Restricted reserves	Retained earnings	Net income/ (expense)	Equity holders of parent	Non controlling interest	Total equity
(2,094,224)	271,357	597,086	5,739,481	3,712,789	9,824,629	121,200	9,945,829
-	-	-	3,712,789	(3,712,789)	-	-	-
-	-	(93,743)	(3,700,108)	-	(3,793,851)	-	(3,793,851)
-	-	-	-	525,837	525,837	59,493	585,330
(5,892)	(24,738)	-	-	-	6,406,220	(6,988)	6,399,232
(5,892)	(24,738)	-	-	525,837	6,932,057	52,505	6,984,562
(2,100,116)	246,619	503,343	5,752,162	525,837	12,962,835	173,705	13,136,540
(2,100,116)	246,619	503,343	5,752,162	525,837	12,962,835	173,705	13,136,540
-	-	-	525,837	(525,837)	-	-	-
-	-	-	-	-	-	(5,606)	(5,606)
-	-	-	-	(2,493,511)	(2,493,511)	70,586	(2,422,925)
(143,533)	83,522	-	-	-	977,077	(12,561)	964,516
(143,533)	83,522	-	-	(2,493,511)	(1,516,434)	58,025	(1,458,409)
(2,243,649)	330,141	503,343	6,277,999	(2,493,511)	11,446,401	226,124	11,672,525

Consolidated Statement Of Cash Flow For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

	Notes	Audited	
		1 January - 31 December 2020	1 January - 31 December 2019
Cash flows from operating activities		2,114,010	11,334,588
Profit/(loss) for the period		(2,422,925)	585,330
Adjustment for reconciliation of profit/(loss) for the period		1,920,295	2,574,177
Adjustment for depreciation and amortisation expense	10, 11	742,238	706,116
Adjustments for impairment (cancellation)		-	(87,855)
Adjustments for inventory impairment	8	-	(87,855)
Adjustment for provisions	14	157,500	151,777
Adjustment for interest (income) and expense	24	1,174,768	1,371,357
Adjustment for unrealized foreign currency translation differences		(2,634,829)	(883,805)
Adjustment for fair value (gain) or loss		392,344	537,019
Adjustment for undistributed profit accounted by equity method	9	29,615	(197,393)
Adjustment for tax expenses(income)	25	(1,372,469)	(896,678)
Adjustment for (gain)/loss on sales of property, plant and equipment	23	(1,805)	152
Adjustment for other items related with cash flow of investment or financial activities	24	3,444,698	1,916,881
Other adjustments for reconciliation of profit/(loss)		(11,765)	(43,394)
Changes in working capital		2,728,593	8,354,542
Adjustment for decrease/(increase) in trade receivables		3,056,261	656,894
Adjustment for decrease/(increase) in other receivables related with operations		1,449,379	(381,602)
Adjustment for decrease/(increase) in derivative assets		(65,279)	(58,935)
Adjustment for decrease/(increase) in inventories		1,767,951	(2,615,981)
Adjustment for increase/(decrease) in trade payables		(3,707,698)	10,348,504
Adjustment for increase/(decrease) in other payables related with operations		(469,142)	572,752
Adjustment for decrease/(increase) in derivative liabilities		697,121	(167,090)
Cash flows from operating activities		2,225,963	11,514,049
Tax returns/(payments)		(13,256)	(105,823)
Other cash inflow/(outflow)		(98,697)	(73,638)
Cash flows from investing activities		(942,404)	(1,240,172)
Cash inflows from the sales of property, plant and equipment and intangible assets		24,188	1,195
Cash outflows from the purchase of property, plant and equipment and intangible assets		(1,082,896)	(1,337,367)
Dividends received	9	120,000	96,000
Cash outflows from the purchase of shares in other businesses or funds		(3,696)	-
Cash flows from financing activities		4,958,947	(6,790,553)
Cash inflows from financial liabilities	5	41,075,708	49,759,252
Cash outflows from financial liabilities	5	(34,590,312)	(50,788,791)
Cash inflows from derivative instruments		539,254	84,997
Cash outflows from derivative instruments		(880,836)	(649,449)
Cash outflows from payments of rent agreements	5	(62,208)	(34,535)
Dividends paid	19	(5,606)	(3,793,851)
Interest paid		(1,630,755)	(1,961,722)
Interest received		513,702	593,546
Net increase/(decrease) in cash and cash equivalents before the effect of foreign currency translation differences		6,130,553	3,303,863
Impact of foreign currency translation differences on cash and cash equivalents		2,634,829	883,852
Net increase/(decrease) in cash and cash equivalents		8,765,382	4,187,715
Cash and cash equivalents at the beginning of the period		8,740,795	4,553,080
Cash and cash equivalents at the end of the period	4	17,506,177	8,740,795

The accompanying notes form an integral part of these consolidated financial statements.

Türkiye Petrol Rafinerileri A.Ş.

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

1. Organization and nature of operations of the Group

Türkiye Petrol Rafinerileri A.Ş. ("Tüpraş" or the "Company") was established on 16 November 1983. The Company is mainly engaged in the following fields:

- To provide and refine all kinds of crude oil, petroleum and chemical products, to sustain all kinds of commercial operations of produced and imported crude oil, petroleum and chemical products including export along with the storage and transportation activities during production and selling stages and to establish and operate domestic and foreign refineries for this purpose.
- To establish and operate factories and facilities in petrochemical and other related industries,
- To provide the necessary raw and supplementary materials and process, produce or trade these materials in order to obtain petrochemical and other related products,
- To package the products produced during various phases of production and to establish a packaging industry for this purpose, to evaluate and/or to sell waste, by products and substandard products, to establish and operate the necessary facilities for the destruction of the waste products,
- To establish and operate facilities and plants related with all kinds of energy and energy related industries within the framework of the laws and regulations. To obtain, use and trade all kinds of equipment, materials and chemical substances for this purpose,
- To purchase, sell, import, export, store, market all kinds of petroleum products, LPG and natural gas, to establish marketing and distributing companies or similar partnerships with legal entities or real persons or to acquire, transfer or sell the shares of partnerships, when necessary.

The main operations of Tüpraş and its subsidiaries (collectively referred as "the Group") are in Turkey and the Group's business segment has been identified as refining.

The Company is registered at the Capital Markets Board ("CMB") of Turkey and its shares have been quoted at Borsa İstanbul A.Ş. ("BIST") since 1991. As at 31 December 2020, the shares quoted on the BIST are 49% of the total shares. As of 31 December 2020, the principal shareholders and their respective shareholdings in the Company are as follow (Note 19):

	(%)
Enerji Yatırımları A.Ş.	51.00
Publicly held	49.00
	100.00

Enerji Yatırımları A.Ş., the parent of the Company is controlled by Koç Holding A.Ş., Koç Family and the companies owned by Koç Family.

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

1. Organization and nature of operations of the Group (Continued)

The nature of the business of the subsidiaries and joint ventures of the Group is as follows:

Subsidiaries	Country of incorporation	Nature of business
Ditaş Deniz İşletmeciliği ve Tankerciliği A.Ş. ("Ditaş")	Turkey	Crude oil and petroleum products transportation
Üsküdar Tankercilik A.Ş. ("Üsküdar")	Turkey	Crude oil and petroleum products transportation
T Damla Denizcilik A.Ş. ("Damla")	Turkey	Mooring and tug service
Kadıköy Tankercilik A.Ş. ("Kadıköy")	Turkey	Crude oil and petroleum products transportation
Beykoz Tankercilik A.Ş. ("Beykoz")	Turkey	Crude oil and petroleum products transportation
Sarıyer Tankercilik A.Ş. ("Sarıyer")	Turkey	Crude oil and petroleum products transportation
Kartal Tankercilik A.Ş. ("Kartal")	Turkey	Crude oil and petroleum products transportation
Maltepe Tankercilik A.Ş. ("Maltepe")	Turkey	Crude oil and petroleum products transportation
Salacak Tankercilik A.Ş. ("Salacak")	Turkey	Crude oil and petroleum products transportation
Karşıyaka Tankercilik A.Ş. ("Karşıyaka")	Turkey	Crude oil and petroleum products transportation
Bakırköy Tankercilik A.Ş. ("Bakırköy")	Turkey	Crude oil and petroleum products transportation
Karaköy Tankercilik A.Ş. ("Karaköy")	Turkey	Crude oil and petroleum products transportation
Çengelköy Tankercilik A.Ş. ("Çengelköy")	Turkey	Crude oil and petroleum products transportation
Pendik Tankercilik A.Ş. ("Pendik")	Turkey	Crude oil and petroleum products transportation
Tuzla Tankercilik A.Ş. ("Tuzla")	Turkey	Crude oil and petroleum products transportation
Göztepe Tankercilik A.Ş. ("Göztepe")	Turkey	Crude oil and petroleum products transportation
Körfez Ulaştırma A.Ş. ("Körfez")	Turkey	Air carriage and transportation
Tupras Trading Ltd. ("Tupras Trading") ^(*)	England	Crude oil and petroleum products trade
Joint ventures	Country of Incorporation	Nature of business
OPET Petrolcülük A.Ş. ("Opet")	Turkey	Petroleum products retail distribution
THY Opet Havacılık Yakıtları A.Ş.	Turkey	Jet fuel supply services
Opet International Limited	England	Petroleum products trading
Opet Trade B.V.	The Netherlands	Petroleum products trading
Opet Trade Singapore (In liquidation) ^(*)	Singapore	Petroleum products trading
Opet Market ve Akaryakıt İstasyon İşletmeciliği A.Ş.	Turkey	Petroleum products trading
Opet Fuchs Madeni Yağ San. ve Tic. A.Ş.	Turkey	Lube oil trading
Op Ay Akaryakıt Ticaret Ltd. Şti.	Turkey	Petroleum products trading
Akdeniz Akaryakıt Depolama Nakliyat ve Tic. A.Ş.	Turkey	Petroleum products trading
Opet Aygaz Gayrimenkul A.Ş.	Turkey	Real estate

^(*) Ceased its activities since 15 July 2015.^(*) Tupras Trading Ltd. has been established in 2020 in scope of transformation of Tupras Trading branch into a company

Türkiye Petrol Rafinerileri A.Ş.

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

1. Organization and nature of operations of the Group (Continued)

The average number of employees of the Group as at 31 December 2020 is 6,129 (31 December 2019 - 6,098).

The address of the registered office of the Company is as follows:

Türkiye Petrol Rafinerileri A.Ş.

Güney Mahallesi

Petrol Caddesi No: 25 41790

Körfez, Kocaeli

2. Basis of presentation of consolidated financial statements

2.1. Basis of presentation

2.1.1 Financial reporting standards

The consolidated financial statements and disclosures have been prepared in accordance with the communiqué numbered II-14,1 "Communiqué on the Principles of Financial Reporting in Capital Markets" (the Communiqué) announced by the Capital Markets Board ("CMB") on 13 June 2013 which is published on Official Gazette numbered 28676. In accordance with article 5th of the Communiqué, companies should apply Turkish Financial Reporting Standards ("TFRS") and interpretations regarding these standards as published by the Public Oversight Accounting and Auditing Standards Authority of Turkey ("POA").

The consolidated financial statements are presented in accordance with the formats specified in the "Announcement on TMS Taxonomy" published by the POA on 15 April 2019 and the Financial Table Examples and User Guide published by the CMB.

The Group and the group companies established in Turkey maintain their books of account and prepare their statutory financial statements ("Statutory Financial Statements") in accordance with rules and principles published by POA, the Turkish Commercial Code ("TCC"), tax legislation and the Uniform Chart of Accounts issued by the Ministry of Finance. These consolidated financial statements have been prepared under the historical cost convention except for derivative instruments that are carried at fair value. These consolidated financial statements are based on the statutory records with the required adjustments and reclassifications reflected for the purpose of fair presentation in accordance with the Turkish Financial Reporting Standards.

Functional and presentation currency

Items included in the financial statements of each of the Group's entities are measured using the currency of the primary economic environment in which the entity operates ('the functional currency'). The consolidated financial statements are presented in TRY, which is the functional currency of Tüpraş and the presentation currency of the Group.

2.1.2 Amendments in Turkish Financial Reporting Standards (TFRS)

The new standards, amendments and interpretations

The accounting policies adopted in preparation of the consolidated financial statements as at 31 December 2020 are consistent with those of the previous financial year, except for the adoption of new and amended TFRS and IFRIC interpretations effective as of 1 January 2020. The effects of these standards and interpretations on the Group's financial position and performance have been disclosed in the related paragraphs.

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

2. Basis of presentation of consolidated financial statements (Continued)

2.1. Basis of presentation (Continued)

2.1.2 Amendments in Turkish Financial Reporting Standards (TFRS) (Continued)

a) Standards, amendments and interpretations applicable as at 31 December 2020:

- **Amendments to TAS 1 and TAS 8 on the definition of material;** effective from Annual periods beginning on or after 1 January 2020. These amendments to TAS 1, "Presentation of financial statements" and TAS 8, "Accounting policies, changes in accounting estimates and errors", and consequential amendments to other TFRSs:
 - i) use a consistent definition of materiality throughout TFRSs and the Conceptual Framework for Financial Reporting;
 - ii) clarify the explanation of the definition of material; and
 - iii) incorporate some of the guidance in TAS 1 about immaterial information.

It is not expected to have a material impact on the financial position and performance of the Group.

- **Amendments to TFRS 3 - definition of a business;** effective from Annual periods beginning on or after 1 January 2020. This amendment revises the definition of a business. According to feedback received by the TASB, application of the current guidance is commonly thought to be too complex, and it results in too many transactions qualifying as business combinations. It is not expected to have a material impact on the financial position and performance of the Group.
- **Amendments to TFRS 9, TAS 39 and TFRS 7 - Interest rate benchmark reform;** effective from Annual periods beginning on or after 1 January 2020. These amendments provide certain reliefs in connection with interest rate benchmark reform. The reliefs relate to hedge accounting and have the effect that IBOR reform should not generally cause hedge accounting to terminate. However, any hedge ineffectiveness should continue to be recorded in the income statement. Given the pervasive nature of hedges involving IBOR-based contracts, the reliefs will affect companies in all industries. The effect of this amendment on the financial position and performance of the Group is being assessed.
- **Amendment to TFRS 16, "Leases" - Covid-19 related rent concessions;** effective from Annual periods beginning on or after 1 June 2020. As a result of the coronavirus (COVID-19) pandemic, rent concessions have been granted to lessees. Such concessions might take a variety of forms, including payment holidays and deferral of lease payments. On 28 May 2020, the TASB published an amendment to TFRS 16 that provides an optional practical expedient for lessees from assessing whether a rent concession related to COVID-19 is a lease modification. Lessees can elect to account for such rent concessions in the same way as they would if they were not lease modifications. In many cases, this will result in accounting for the concession as variable lease payments in the period(s) in which the event or condition that triggers the reduced payment occurs. It is not expected to have a material impact on the financial position and performance of the Group.

b) Standards, amendments and interpretations that are issued but not effective as at 31 December 2020:

- **TFRS 17, 'Insurance contracts';** effective from annual periods beginning on or after 1 January 2023. This standard replaces TFRS 4, which currently permits a wide variety of practices in accounting for insurance contracts. TFRS 17 will fundamentally change the accounting by all entities that issue insurance contracts and investment contracts with discretionary participation features. It is not expected to have a material impact on the financial position and performance of the Group.
- **Amendments to TAS 1, 'Presentation of financial statements' on classification of liabilities;** effective from 1 January 2022. These narrow-scope amendments to TAS 1, 'Presentation of financial statements', clarify that liabilities are classified as either current or non-current, depending on the rights that exist at the end of the reporting period. Classification is unaffected by the expectations of the entity or events after the reporting date (for example, the receipt of a waiver or a breach of covenant). The amendment also clarifies what TAS 1 means when it refers to the 'settlement' of a liability. The effect of this amendment on the financial position and performance of the Group is being assessed.
- **A number of narrow-scope amendments to TFRS 3, TAS 16, TAS 37 and some annual improvements on TFRS 1, TFRS 9, TAS 41 and TFRS 16;** effective from Annual periods beginning on or after 1 January 2022.
 - **Amendments to TFRS 3, 'Business combinations'** update a reference in TFRS 3 to the Conceptual Framework for Financial Reporting without changing the accounting requirements for business combinations.

Türkiye Petrol Rafinerileri A.Ş.

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

2. Basis of presentation of consolidated financial statements (Continued)

2.1. Basis of presentation (Continued)

2.1.2 Amendments in Turkish Financial Reporting Standards (TFRS) (Continued)

b) Standards, amendments and interpretations that are issued but not effective as at 31 December 2020 (Continued):

- **Amendments to TAS 16**, "Property, plant and equipment" prohibit a company from deducting from the cost of property, plant and equipment amounts received from selling items produced while the company is preparing the asset for its intended use. Instead, a company will recognise such sales proceeds and related cost in profit or loss.
- **Amendments to TAS 37**, "Provisions, contingent liabilities and contingent assets" specify which costs a company includes when assessing whether a contract will be loss-making.

Annual improvements make minor amendments to TFRS 1, "First-time Adoption of TFRS", TFRS 9, "Financial instruments", TAS 41, "Agriculture" and the Illustrative Examples accompanying TFRS 16, "Leases".

The effect of these amendments on the financial position and performance of the Group is being assessed.

- **Amendments to TFRS 9, TAS 39, TFRS 7, TFRS 4 and TFRS 16 Interest Rate Benchmark Reform Phase 2**; effective from annual periods beginning on or after 1 January 2021. The Phase 2 amendments address issues that arise from the implementation of the reforms, including the replacement of one benchmark with an alternative one. The effect of this amendment on the financial position and performance of the Group is being assessed.
- **Amendments to TFRS 17 and TFRS 4, "Insurance contracts", deferral of TFRS 9**; effective from annual periods beginning on or after 1 January 2021. These amendments defer the date of application of TFRS 17 by two years to 1 January 2023 and change the fixed date of the temporary exemption in TFRS 4 from applying TFRS 9, Financial Instrument until 1 January 2023. The effect of this amendment on the financial position and performance of the Group is being assessed.

2.1.3 Financial statements of joint ventures operating in foreign countries

Financial statements of joint ventures operating in foreign countries are prepared according to the legislation of the country in which they operate, and adjusted to the Turkish Financial Reporting Standards to reflect the proper presentation and content. Foreign joint ventures' assets and liabilities are translated into TRY with the foreign exchange rate at the balance sheet date. Exchange differences arising from the retranslation of the opening net assets of foreign undertakings and differences between the average and balance sheet date rates are included in the statements of other comprehensive income and shareholders' equity.

2.1.4 Principles of consolidation

- The consolidated financial statements for the year ended 31 December 2020 have been prepared in accordance with principles stated on the consolidated financial statements for the year ended 31 December 2019 and include financial statements of Tüpraş, and its Subsidiaries.
- At 31 December 2020, there are no changes in voting rights or proportion of effective interest on subsidiaries and joint ventures that are subject to consolidation, except new established Tüpraş Trading, from the information stated on consolidated financial statements for the year ended 31 December 2019.

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

2. Basis of presentation of consolidated financial statements (Continued)

2.1. Basis of presentation (Continued)

2.1.4. Principles of consolidation (Continued)

	31 December 2020		31 December 2019	
	Direct and indirect voting right possessed by the company (%)	Proportion of effective interest (%)	Direct and indirect voting right possessed by the company (%)	Proportion of effective interest (%)
Subsidiary				
Ditaş	79.98	79.98	79.98	79.98
Üsküdar	79.98	79.98	79.98	79.98
Damla	79.98	79.98	79.98	79.98
Beykoz	79.98	79.98	79.98	79.98
Kadıköy	79.98	79.98	79.98	79.98
Sarıyer	79.98	79.98	79.98	79.98
Kartal	79.98	79.98	79.98	79.98
Maltepe	79.98	79.98	79.98	79.98
Salacak	79.98	79.98	79.98	79.98
Karşıyaka	79.98	79.98	79.98	79.98
Bakırköy	79.98	79.98	79.98	79.98
Karaköy	79.98	79.98	79.98	79.98
Çengelköy	79.98	79.98	79.98	79.98
Pendik	79.98	79.98	79.98	79.98
Tuzla	79.98	79.98	79.98	79.98
Göztepe	79.98	79.98	79.98	79.98
Körfez	100.00	100.00	100.00	100.00
Tupras Trading	100.00	100.00	-	-

The statement of financial position and statement of comprehensive income of the subsidiaries are consolidated on a line-by-line basis and the carrying value of the investment held by the Company is eliminated against the related equity. Intercompany transactions and balances between the Company and its subsidiary are eliminated on consolidation. The cost of and the dividends arising from, shares held by the Company in its subsidiary are eliminated from equity and income for the year, respectively.

c) Joint ventures are companies in which the Group has joint control. Joint control is the contractually agreed sharing of control. The control, exists only when decisions about the relevant activities require the unanimous consent of the parties sharing control. The Group's interest in joint ventures is accounted for with equity method. Investments accounted by equity method are presented in consolidated statement of financial position with additions or deductions of changes on share of the Group on net assets of the affiliate and with deduction of provisions for the decline in the value.

The table below shows the total interest of the Group in its joint ventures accounted by using the equity method as at 31 December 2020 and 31 December 2019:

Türkiye Petrol Rafinerileri A.Ş.

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

2. Basis of presentation of consolidated financial statements (Continued)

2.1. Basis of presentation (Continued)

2.1.4. Principles of consolidation (Continued)

	31 December 2020		31 December 2019	
	Direct and indirect voting right possessed by the company (%)	Proportion of effective interest (%)	Direct and indirect voting right possessed by the company (%)	Proportion of effective interest (%)
Joint ventures accounted by equity method				
Opet	50.00	40.00	50.00	40.00
Opet International Limited ^(*)	50.00	40.00	50.00	40.00
Opet Trade B.V. ^(*)	50.00	40.00	50.00	40.00
Opet Trade Singapore (In liquidation) ^(*) ^(**)	50.00	40.00	50.00	40.00
Opet Market ve Akaryakıt İstasyon İşletmeciliği A.Ş. ^(*)	50.00	40.00	50.00	40.00
THY Opet Havacılık Yakıtları A.Ş. ^(*)	25.00	20.00	25.00	20.00
Opet Fuchs Madeni Yağ San. ve Tic. A.Ş. ^(*)	25.00	20.00	25.00	20.00
Op Ay Akaryakıt Ticaret Ltd. Şti. ^(*)	25.00	20.00	25.00	20.00
Akdeniz Akaryakıt Depolama Nakliyat ve Tic. A.Ş. ^(*)	16.65	13.32	16.65	13.32
Nemrut Liman ve Boru İşl. Nak. İç ve Dış Tic. Ltd. Şti. ^(***)	-	-	12.50	10.00
Opet Aygaz Gayrimenkul A.Ş. ^(*)	25.00	20.00	25.00	20.00

^(*) Related companies are consolidated or accounted by equity method in Opet's financial statements.

^(**) Ceased its activities since 15 July 2015.

^(***) All shares of Nemrut Port and Pipe İşl. Nak. İç ve Dış Tic. Ltd. Şti. were sold and excluded from the scope of consolidation as of 2020.

d) The non-controlling shareholders' share of the net assets and results for the period for the subsidiaries are classified separately in the consolidated statement of financial position and statements of comprehensive income as non-controlling interest.

2.1.5. Other principles regarding presentation

The possible impacts of COVID 19 on the Group financials are closely monitored from all perspectives, and the Group has taken the necessary actions rapidly in order to minimize the possible outcomes of the pandemic. Several actions have been taken to minimize the operational expenses and a dynamic cash management strategy has been implemented to strengthen the liquidity position. The Group suspended production of the İzmir Refinery as of 5 May 2020 to minimize the adverse effects of contracting demand due to the COVID-19 outbreak and the production at the İzmir Refinery has started gradually as of 1 July 2020, with signs of recovery in demand. Although the situation of the pandemic is not clear yet, the Group continues to rigorously implement the liquidity and operational actions taken. The Group has evaluated the possible effects of the COVID-19 outbreak while preparing its consolidated financial statements as of 31 December 2020 and has reviewed the estimations and assumptions used in the preparation of the consolidated financial statements. In this context, possible impairment in the consolidated financial statements as of 31 December 2020 has been evaluated and no material impact has been identified.

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

2. Basis of presentation of consolidated financial statements (Continued)

2.2. Changes in accounting policies

2.2.1 Comparative information

In order to allow for the determination of the financial situation and performance trends, the Group's consolidated financial statements have been presented comparatively with the previous year.

The Group presented the consolidated statement of financial position as of 31 December 2020 comparatively with the consolidated statement of financial position as of 31 December 2019. Also the consolidated statement of profit or loss and other comprehensive income, consolidated statement of cash flows and consolidated statement of changes in equity for the year ended 31 December 2020 are presented comparatively with the consolidated financial statements for the year ended 31 December 2019.

2.2.2 Offsetting

Financial assets and liabilities are offset and the net amount is reported in the balance sheet when there is a legally enforceable right to offset the recognised amounts and there is an intention to settle on a net basis or realise the asset and settle the liability simultaneously.

2.3. Summary of significant accounting policies

The significant accounting policies followed in the preparation of the consolidated financial statements are summarized below:

Cash and cash equivalents

Cash and cash equivalents consist of cash on hand, deposits at banks, highly liquid investments with maturity periods of three months or less and the revenue share collected is held at banks by the Petroleum Market Licence Regulation (Note 4). Cash and cash equivalents used in consolidated cash flow statement comprise cash and cash equivalents with short term maturities of less than 3 months, excluding accrued interest income and blocked deposits (Revenue share). The Group's cash and cash equivalents are evaluated within credit risk model, since there is no credit risk expected, they are carried at cost in the consolidated balance sheet.

Trade receivables

Trade receivables that are created by the Group by way of providing goods or services directly to a debtor are carried at amortised cost. A credit risk provision for trade receivables is established when there is objective evidence that the Group is not able to collect all amounts due. The amount of the provision is the difference between the carrying amount and the recoverable amount, being the present value of all cash flows, including amounts recoverable from guarantees and collateral, discounted based on the original effective interest rate of the originated receivables at inception. If the amount of the impairment subsequently decreases due to an event occurring after the write-down, the release of the provision is credited to other income (Note 6).

The Group has chosen "simplified approach" explained in TFRS 9 for the calculation of impairment of trade receivables (with maturities less than one year) that do contain a significant financing component and accounted at amortised cost. In accordance with the simplified approach, Group measures the loss allowances regarding its trade receivables at an amount equal to "lifetime expected credit losses" except incurred credit losses in which trade receivables are already impaired for a specific reason date. The Group uses a provision matrix in the calculation of expected credit losses. Provision rate is calculated based on the overdue days of trade receivables and the rates are revised each reporting period if necessary. Since the change in expected credit loss provisions is not material, it is not accounted in consolidated income statement. For each reporting period, the recalculation is made and revaluated.

The Group collects some of its receivables via factoring. The receivables subject to factoring transaction which risk of collection is undertaken by factoring company are deducted from the related receivable accounts. Since the time between the factoring dates and maturities of trade receivables subject to factoring transactions is not significant, the business model of the Group related with trade receivables has not been changed and has been accounted at the amortized cost.

Türkiye Petrol Rafinerileri A.Ş.

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

2. Basis of presentation of consolidated financial statements (Continued)

2.3. Summary of significant accounting policies (Continued)

Trade payables

Trade payables are recognized initially at fair value and subsequently measured at amortized cost using the effective interest method.

Financial assets and liabilities at fair value through profit or loss

The financial assets of the Group which are carried at fair value include derivative instruments that are not subject to hedge accounting. Derivative financial instruments are initially recognised at the acquisition cost reflecting the fair value on the date on which a derivative contract is entered into and are subsequently remeasured at fair value. Gains or losses arising from the valuation of these kinds of assets are recognized in the consolidated statement of income. Derivative instruments which are carried at fair value through profit or loss include forward foreign exchange and commodity purchase and sale transactions. Derivative instruments are recognized as asset when the fair value of the instrument is positive, as liability when the fair value of the instrument is negative (Note 17).

Financial assets and liabilities at fair value through other comprehensive income

The financial assets of the Group which are carried at fair value include derivative instruments that are subject to hedge accounting. Derivative financial instruments are initially recognised at the acquisition cost reflecting the fair value on the date on which a derivative contract is entered into and are subsequently remeasured at fair value. Gains and losses arising from the valuation of these kinds of assets are accounted as other comprehensive income/expense in the consolidated statement of comprehensive income related to cash flow hedge. Derivative instruments which are accounted in other comprehensive income include commodity purchase and sales transactions, interest rate swap transactions and cross currency swap transactions. Derivative instruments are recognized as asset when the fair value of the instrument is positive, as liability when the fair value of the instrument is negative (Note 17).

Cash flow hedge

Hedges of exposures to variability in cash flows that are attributable to a particular risk associated with a recognised asset or liability or a highly probable forecast transaction and could affect profit and loss are designated as cash flow hedges by the Group.

Changes in the fair value of derivatives, designated as cash flow hedges and qualified as effective, are recognised in equity as "hedge reserves". Where the forecasted transaction or firm commitment results in the recognition of an asset or of a liability, the gains and losses previously recognised under equity are transferred from equity and included in the initial measurement of the cost of the asset or liability. Otherwise, amounts recognised under equity are transferred to the consolidated income statement in the period in which the hedged firm commitment or forecasted transaction affects the consolidated income statement.

If the forecast transaction or firm commitment is no longer expected to occur, the cumulative gain or losses previously recognised in equity are transferred to the income statement. If the hedging instrument expires or is sold, terminated or exercised without replacement or rollover, or if its designation as a hedge is revoked, any cumulative gain or loss previously recognised in other comprehensive income remains in other comprehensive income until the forecast transaction or firm commitment affects profit or loss.

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

2. Basis of presentation of consolidated financial statements (Continued)

2.3. Summary of significant accounting policies (Continued)

Recognition and de-recognition of financial instruments

All purchases and sales of financial assets are recognized on the trade date i.e. the date that the Group commits to purchase or to sell the asset. These purchases or sales are purchases or sales generally require delivery of assets within the time frame generally established by regulation or convention in the market place. A financial asset (or, where applicable a part of a financial asset or part of a group of similar financial assets) is derecognized where:

- the rights to receive cash flows from the asset have expired
- the Group retains the right to receive cash flows from the asset, but has assumed an obligation to pay them in full without material delay to a third party under a "pass-through" arrangement; or
- the Group has transferred its rights to receive cash flows from the asset and either (a) has transferred substantially all the risks and rewards of the asset, or (b) has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the assets.

Where the Group has transferred its rights to receive cash flows from an asset and has neither transferred nor retained substantially all the risks and rewards of the asset nor transferred control of the asset, the asset is recognized to the extent of the Group's continuing involvement in the consolidated financial statements.

A financial liability is derecognized when the obligation under the liability is discharged or cancelled or expired.

Related parties

For the purpose of these consolidated financial statements, shareholders, key management personnel, Board of Directors members and Koç Group companies including their family members and companies controlled by or affiliated with them are considered and referred to as related parties (Note 27).

Inventories

Inventories are valued at the lower of acquisition cost or net realisable value. The cost components of inventories include materials, conversion costs and other costs that are necessary to bring the inventories to their present location and condition. The cost of inventories is determined on the weighted average cost basis. As during the production process more than one product is produced from single raw material inputted, the costs of conversion of each product are not separately identifiable. In order to allocate the costs of conversion between the products on a rational and consistent basis, the approach used by the Company for the allocation is based on the relative sales prices of each product. Net realisable value is the estimated selling price in the ordinary course of business, less the costs of completion and selling expenses (Note 8).

Spare parts and material stocks

Spare parts and material stocks are valued at the lower of cost or net realisable value. The cost elements of spare parts and material stocks include materials and other costs that are necessary to bring them to their present location and condition. The cost of spare parts and material stocks is determined on the weighted average cost basis. The Group has provided provision for the slow-moving spare parts

Property, plant and equipment

Property, plant and equipment are carried at cost less accumulated depreciation. Historical costs include the costs directly related to the acquisition of property plant and equipment. Costs incurred after the acquisition can be added to the net book value of the assets or can be booked as another asset if and only if it is probable that the future economic benefits will flow to the Group and cost of the asset can be measured reliably. All other repair and maintenance costs are expensed in the consolidated statement of comprehensive income for the period. Depreciation is provided using the straight line method based on the estimated useful lives of gross book value of assets (Note 10).

Türkiye Petrol Rafinerileri A.Ş.

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

2. Basis of presentation of consolidated financial statements (Continued)

2.3. Summary of significant accounting policies (Continued)

Property, plant and equipment (Continued)

The depreciation periods for property, plant and equipment, which approximate the economic useful lives of such assets, are as follows:

	Useful life
Land improvements	3-50 years
Buildings	5-50 years
Machinery and equipment	3-35 years
Motor vehicles	4-20 years
Furniture and fixtures	2-50 years

Land is not depreciated as it is deemed to have an indefinite useful life.

Where the carrying amount of an asset is greater than its estimated recoverable amount, it is written down immediately to its recoverable amount. Recoverable amount is the higher of asset net selling price or value in use. Net selling price is calculated by deducting the selling costs from the fair value of the asset. Value in use is calculated as the discounted value of the estimated future cash flows the entity expects to derive from the asset. An impairment loss is recognised for the amount by which the carrying amount of the asset exceeds its recoverable amount. Gains or losses on disposals of property, plant and equipment are determined by comparing proceeds with their restated carrying amounts and are included in the related income and expense accounts, as appropriate. Market Approach has been used in determining the fair value of the lands owned by the Group. The fair value increases from revaluation of tangible assets are recognized in gain on revaluation of properties account which is under equity, after the netting of the deferred tax effect. Lands are not subject to depreciation since their useful lives are considered as indefinite.

Intangible assets

Intangible assets include rights and software and development costs (Note 11).

a) Rights and software

Rights and software are carried at cost less accumulated amortisation. Amortisation is calculated using the straight-line method over the estimated useful lives of such assets not exceeding 5 years.

b) Development costs

The accounting policy of development costs are explained in Research and Development Expenses.

Impairment of assets

The Group reviews all tangible and intangible assets except goodwill for indicators of impairment at every balance sheet date. If any indication of impairment exists, carrying value of the asset is compared with its recoverable amount which is the higher of value in use or fair value less costs to sell. Impairment exists when carrying value of the asset or cash generating unit that the asset belongs to is higher than the recoverable amount. An impairment loss is recognised immediately in the consolidated statement of comprehensive income.

An impairment loss recognised in prior periods for an asset is reversed if the subsequent increase in the asset's recoverable amount is caused by a specific event since the last impairment loss was recognised. Such a reversal amount cannot be higher than the previously recognised impairment and is recognized as income in the consolidated financial statements. The reversal of the impairment is recognized in the comprehensive income statement. Net book value of goodwill is evaluated annually and impairment is recorded when necessary considering a significant or prolonged decline.

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

2. Basis of presentation of consolidated financial statements (Continued)

2.3. Summary of significant accounting policies (Continued)

Borrowing costs

Borrowings are recognised initially at the proceeds received, net of transaction costs incurred. In subsequent periods, borrowings are stated at amortised cost using the effective yield method; any difference between proceeds (net of transaction costs) and the redemption value is recognised in the consolidated statement of comprehensive income over the period of the borrowings.

Borrowing costs, which can be related to its purchase, construction or production when it comes to assets requiring a significant period of time to be ready for use and sales, are included in cost of asset until the related asset is made available for use or sales.

Other borrowing costs are charged to the consolidated statement of comprehensive income when they are incurred

TFRS 16 Leases

The Group - as a lessee

At inception of a contract, the Group assesses whether a contract is, or contains a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

To assess whether a contract conveys the right to control the use of an identified asset, The Group assess whether:

- The contract involved the use of an identified asset – this may be specified explicitly or implicitly.
- The asset should be physically distinct or represent substantially all of the capacity of a physically distinct asset. If the supplier has a substantive substitution right, the asset is not identified.
- The Group has the right to obtain substantially all of the economic benefits from the use of an asset throughout the period of use; and
- The Group has the right to direct use of the asset.
 - a) The Group concludes to have the right of use, when it is predetermined how and for what purpose the Group will use the asset.
 - b) The Group has the right to direct use of asset if either:
 - i. The Group has the right to operate (or to have the right to direct others to operate) the asset over its useful life and the lessor does not have the rights to change the terms to operate or;
 - ii. The Group designed the asset (or the specific features) in a way that predetermines how and for what purpose it is used

At inception or on reassessment of a contract that contains a lease component, the Group allocates the consideration in the contract to each lease component on the basis of their relative stand-alone prices.

Türkiye Petrol Rafinerileri A.Ş.

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

2. Basis of presentation of consolidated financial statements (Continued)

2.3. Summary of significant accounting policies (Continued)

Right of use asset

The right of use asset is initially recognized at cost comprising of:

- Amount of the initial measurement of the lease liability;
- Any lease payments made at or before the commencement date, less any lease incentives received;
- Any initial direct costs incurred by the Group; and
- An estimate of costs to be incurred by the lessee for restoring the underlying asset to the condition required by the terms and conditions of the lease (unless those costs are incurred to produce inventories)

The Group re-measure the right of use asset:

- After netting-off depreciation and reducing impairment losses from right of use asset,
- Adjusted for certain re-measurements of the lease liability recognized at the present value

The Group applies TMS16, "Property, Plant and Equipment" to amortize the right of use asset and to assess for any impairment.

TAS 36, "Impairment of Assets" is applied to determine whether an asset is impaired and to recognize any impairment loss.

Lease Liability

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date.

Lease liabilities are discounted to present value by using the interest rate implicit in the lease if readily determined or with the Group's incremental borrowing rate. Incremental borrowing rate is defined as borrowing rates of the Group companies at the date of contracts.

Lease payments included in the measurement of the lease liability comprise the following:

- Fixed payments, including in-substance fixed payments;
- Variable lease payments that depend on an index or a rate, initially measured using the index or rate as the commencement date,
- The exercise price under a purchase option that the Group is reasonably certain to exercise, lease payments in an optional renewable period if the Group is reasonably certain to exercise an extension option, and penalties for early termination of a lease unless the Group is reasonably certain to terminate early.

After initial recognition, the lease liability is measured:

- Increasing the carrying amount to reflect interest on lease liability
- Reducing the carrying amount to reflect the lease payments made and
- Remeasuring the carrying amount to reflect any reassessment or lease modifications. Group reflects the remeasurement amounts as an adjustment on right of use asset, in the statement of financial position.

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

2. Basis of presentation of consolidated financial statements (Continued)

2.3. Summary of significant accounting policies (Continued)

Extension and termination options

In determining the lease liability, the Group considers the extension and termination options. The majority of extension and termination options held are exercisable both by the group and by the respective lessor. Extension and termination options are included in the lease term if the lease is reasonably certain to be extended and the options are enforceable by groups initiative in the contract. The group remeasures the lease term, if a significant event or a significant change in circumstances occurs which affects the initial assessment. As result of the evaluations performed in the current period, there is no lease obligation or right of use assets arising from the inclusion of extension and early termination options in the lease period.

Variable lease payments

Group's lease contracts also include variable lease payments. The variable lease payments are recognised in profit or loss in the related period according to TFRS 16.

Exemptions and simplifications

Short-term lease payments and payments for leases of low-value assets like IT equipments (mainly printers, laptops and mobile phones etc.) are not included in the measurement of the lease liabilities in the scope of TFRS 16. Lease payments of these contracts are continued to be recognised in profit or loss in the related period. The Group applied a single discount rate to a portfolio of leases which have similar characteristics (asset classes which have similar remaining rent periods in a similar economic environment)

The Group - as a lessor

The Group as a lessor is composed of operating leases. In operating leases, leased assets are classified in the consolidated balance sheet under investment property, tangible fixed assets or other current assets and the rent income obtained is reflected to the consolidated income statement in equal amounts during the leasing period. Rental income is recognized on a straight-line basis over the period of the lease in consolidated income statement.

Deferred taxes

Deferred income tax is provided in full, using the liability method, on all temporary differences arising between the tax bases of assets and liabilities and their carrying values in the consolidated financial statements. Deferred tax is calculated at the tax rates that are expected to apply in the period when the liability is settled or the asset realized, based on tax rates (and tax laws) that have been enacted or substantively enacted by the balance sheet date. Deferred tax is charged or credited to consolidated statement of income, except when it relates to items charged or credited directly to the equity in which case the deferred tax is also dealt within the equity.

Deferred tax liabilities are recognised for all taxable temporary differences, where deferred tax assets resulting from deductible temporary differences are recognised to the extent that it is probable that future taxable profit will be available against which the deductible temporary difference can be utilised.

Government incentives enabling reduced corporate tax payments are considered within the scope TAS-12 "Income Taxes" and the deferred tax asset is recognized at the rate of the earned tax benefit under the condition that benefitting from this advantage by earning taxable income in the future is highly probable.

Provided that deferred tax assets and deferred tax liabilities relate to income taxes levied by the same taxation authority and it is legally eligible, they may be offset against one another. Deferred tax assets and liabilities are classified as noncurrent assets and liabilities in the consolidated financial statements (Note 25).

Türkiye Petrol Rafinerileri A.Ş.

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

2. Basis of presentation of consolidated financial statements (Continued)

2.3. Summary of significant accounting policies (Continued)

Provision for employment termination benefits:

Employment termination benefits

a) Provision for employment termination benefits:

The provision for employment termination benefits, as required by Turkish Labour Law represents the present value of the future probable obligation of the Group arising from the retirement of its employees based on the actuarial projections.

TAS 19, "Employee Benefits" requires actuarial assumptions (net discount rate, turnover rate to estimate the probability of retirement etc.) to estimate the entity's obligation for employment termination benefits. The effects of differences between the actuarial assumptions and the actual outcome together with the effects of changes in actuarial assumptions compose the actuarial gains/losses.

In accordance with TAS 19, "Employee Benefits" effective before 1 January 2013, the actuarial gains/losses were recognised in the statement of income whereas the amendment, effective as of 1 January 2013, requires the actuarial gains/losses to be recognised under other comprehensive income.

b) Defined benefit plans

The Group has to pay contributions to the Social Security Institution on a mandatory basis. The Group has no further payment obligations once the contributions have been paid. These contributions are recognised as an employee benefit expense when they are accrued.

c) Unused vacation rights

Liabilities arising from unused vacations of the employees are accrued in the period when the unused vacations are qualified.

d) Seniority incentive bonus provision

The Group has an employee benefit plan called "Seniority Incentive Bonus" ("Bonus") which is paid to employees with a certain level of seniority. Seniority incentive bonus provision represents the present value at the date of the consolidated balance sheet of the estimated total reserve of the probable future obligations (Note 14).

Transactions in foreign currency

Transactions in foreign currencies during the year have been translated at the exchange rates prevailing at the dates of the transactions. Monetary assets and liabilities denominated in foreign currencies are translated into Turkish Lira at the exchange rates prevailing at the balance sheet dates. Foreign exchange gains or losses arising from the settlement of such transactions and from the translation of monetary assets and liabilities are recognised in the consolidated statement of comprehensive income except the ones that are capitalized.

Revenue recognition

The Group adopted TFRS 15, "Revenue From Contracts with Customers" which proposes a five step model framework mentioned below for recognizing the revenue.

- Identify the contact with customers
- Identify separate performance obligations in the contract
- Determine the transaction price in contract
- Allocate the transaction price to the performance obligations in the contract
- Recognise revenue

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

2. Basis of presentation of consolidated financial statements (Continued)

2.3. Summary of significant accounting policies (Continued)

The Group assess the goods or services promised in a contract with a customer and identify as a performance obligation each promise to transfer to the customer.

For each performance obligation identified, the entity determine at contract inception whether it satisfies the performance obligation over time or satisfies the performance obligation at a point in time. If the Group transfers control of a good or service over time and therefore satisfies a performance obligation and recognises revenue over time.

The Group recognise revenue when the entity satisfies a performance obligation by transferring a promised good or service to the customer. An asset is transferred when the customer obtains control of that asset or service.

The Group considers the following in the assessment of transfer of control of goods sold and services,

- a) The entity has a right to payment for the goods or service,
- b) The customer has legal title to the goods or service,
- c) The entity has transferred physical possession of the asset,
- d) The customer has the significant risks and rewards related to the ownership of the goods or services,
- e) The customer has accepted the goods or services.

The Group does not adjust the promised amount of consideration for the effects of a significant financing component since the Group expects, at contract inception, that the period between when the entity transfers a promised good or service to a customer and when the customer pays for that good or service will be one year or less. If the financing component is significant in revenue, future collections are discounted by the interest rate in financing component. The difference is recognised as income from operating activities in current period.

Provisions

Provisions are recognised when the Group has a present legal or constructive obligation as a result of past events, when it is probable that an outflow of resources will be required to settle the obligation, and when a reliable estimate of the amount can be made. Provisions, as of the balance sheet date, are recorded with the best estimate of management in order to provide for the estimated obligation and are discounted, if they are material for the consolidated financial statements.

Commitments, contingent assets and liabilities

Possible assets or obligations that arise from past events and whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the Group are not included in the consolidated financial statements and are disclosed as contingent assets or liabilities (Note 18).

Dividends

Dividend income is recognised by the Group at the date the right to collect the dividend is realised. Dividend payables are recognised as liability in the consolidated financial statements in the period they are declared as a part of profit distribution.

Türkiye Petrol Rafinerileri A.Ş.

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

2. Basis of presentation of consolidated financial statements (Continued)

2.3. Summary of significant accounting policies (Continued)

Earnings per share

Earnings per share for each class of shares disclosed in the consolidated statement of comprehensive income is determined by dividing the consolidated net income for the year attributable to that class of shares by the weighted average number of shares of that class that have been outstanding during the year concerned.

In Turkey, companies can increase their share capital by making a pro-rata distribution of shares ("bonus shares") to existing shareholders from retained earnings and inflation adjustment to shareholders' equity. For the purpose of earnings per share computations, the weighted average number of shares outstanding during the period has been adjusted in respect of bonus shares issued without a corresponding change in resources by giving them retroactive effect for the period in which they were issued and for each earlier period.

Segment reporting

According to TFRS 11, "Joint Arrangements" standard, accounting for joint ventures in the consolidated financial statements by the equity method is mandatory. The amendment has been implemented retrospectively by the Group. Opet Petrolcülük A.Ş. is accounted by the equity method and petroleum distribution division is excluded from segment reporting scope. Since only refining segment remained within the consolidation scope, segment reporting is not presented effective 1 January 2013.

Statement of cash flow

Cash flows during the period are classified and reported by operating, investing and financing activities in the cash flow statements.

Cash flows from operating activities represent the cash flows generated from the Group's activities.

Cash flows related to investing activities represent the cash flows that are used in or provided from the investing activities of the Group (tangible and intangible assets and financial assets).

Cash flows arising from financing activities represent the cash proceeds from the financing activities of the Group and the repayments of these funds.

Research and development costs

Research expenditures are recognized as an expense when they are incurred.

Intangible assets arising from in-house development activities (or the improvement phase of an intergroup project) are recognized when all of the following conditions are met:

- existence of the technical feasibility of completing the intangible asset so that it will be available for use or sale,
- existence of the intention to complete the intangible asset and use or sell it,
- existence of the ability to use or sell the intangible asset,
- reliability of how the intangible asset will generate probable future economic benefits,
- the availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset,
- existence of the ability to measure reliably the expenditure attributable to the intangible asset during its development.

Other development expenditures are recognized as an expense as incurred. Development costs previously recognized as an expense are not capitalized as an asset in a subsequent period.

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

2. Basis of presentation of consolidated financial statements (Continued)

2.3. Summary of significant accounting policies (Continued)

Government grants

Government grants, Investment and research and development incentives are accounted at the fair values on accrual basis when the Group's incentive applications are approved by related authorities.

Government incentives enabling reduced corporate tax payments are considered within the scope TAS-12 "Income Taxes".

Business combinations and goodwill

Business combinations are accounted for using the acquisition method in accordance with TFRS 3. The cost of a business combination, before 1 January 2011, is allocated by recognising the acquiree's identifiable assets, liabilities and contingent liabilities at the date of acquisition. Any excess of the acquirer's interest over the net fair value of the acquiree's identifiable assets, liabilities and contingent liabilities over the business combination cost is accounted for as goodwill. In business combinations, the acquirer recognizes identifiable assets, intangible assets (such as trademarks) and/or contingent liabilities which are not included in the acquiree's financial statements and which can be separated from goodwill, at their fair values in the consolidated financial statements. Goodwill recognised in business combinations is tested for impairment annually or more often under when circumstances indicating impairment risk.

The excess of the Group's share in the net fair value of the identifiable assets, liabilities and contingent liabilities over the cost of the business combination is accounted for as income in the related period.

Revised TFRS 3 "Business Combinations" effective as at 1 January 2011 has been applied to business combinations occurring after 1 January 2011. The main difference of revised TFRS 3 is to account for transaction costs of a purchase in comprehensive income statement. There has been no business combination in 2018 which requires the application of revised TFRS 3.

For the purpose of impairment testing, goodwill acquired in a business combination shall, from the acquisition date, be allocated to each of the acquirer's cash-generating units, or groups of cash-generating units, that is expected to benefit from the synergies of combination. The Group considered the significant position of Opet in the domestic market and the synergy expected from its cooperation with Tüpraş as the main reason leading to generation of goodwill related to the Opet acquisition dated 28 December 2006. Therefore, the Group management evaluated Opet, its subsidiaries and its joint ventures as one cash-generating unit.

2.4. Changes in accounting policies, accounting estimates and errors

Significant changes in accounting policies based on new application of TAS/TFRS are applied retrospectively or prospectively based on the transition clauses. If there are no transition clauses, the changes in accounting policies, optional changes in accounting policies and correction of significant accounting errors are applied retrospectively and prior period financial statements are restated.

2.5. Significant accounting evaluations, assumptions and estimates

The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities are outlined below:

Türkiye Petrol Rafinerileri A.Ş.

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

2. Basis of presentation of consolidated financial statements (Continued)

2.5. Significant accounting evaluations, assumptions and estimates (Continued)

a) Deferred tax asset:

Deferred tax assets are recognized to the extent that it is probable that future taxable profit will be available. If it is probable that future taxable profit will be available, deferred tax assets are accounted for over the deductible temporary differences, financial losses and tax advantages resulted from investment incentives that enables the Company pay lower corporate tax.

The Group assess the recoverability of deferred tax assets based on business models that contain management estimations related to taxable profit for future periods. The models include key management estimations such as sales quantities, sales prices and foreign exchange rates. Based on the sensitivity analysis performed, it is concluded that 10% increase/decrease in related estimations does not have any effect on the assessment of recoverability of deferred tax assets (Note 25).

b) Cash flow hedge:

As explained in Note 28, the Group uses investment credit amounting to USD593,982 thousand as a hedging instrument against the USD spot exchange rate risk the Group is exposed to due to highly probable export sales income, and applies cash flow hedge accounting as a result of the effectiveness tests performed. The estimations in budgets for export income used for effectiveness test include estimations such as sales quantities and sales prices. Based on the sensitivity analysis performed for the estimations used in effectiveness tests, the Group concluded that 10% increase/decrease in estimations do not have any significant effect on the assessment of effectiveness tests.

c) Economic useful lives:

Tangible assets, investment property and intangible assets, except for goodwill, have been depreciated and amortized by using estimated useful lives. Estimated useful lives determined by management have been disclosed in Note 2.3.

d) Fair value of lands

The Group accounts its lands at fair value, the fair values of these assets are determined by the independent valuation firm authorized by the Capital Markets Board and are taken as the value carried in the statement of financial position. The assumptions such as valuation method, market conditions, unique properties of each plot and land, physical condition, geographical location and benchmark values are used in determining the fair values.

3. Business combinations

No business combinations occurred during the period 31 December 2020.

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

4. Cash and cash equivalents

	31 December 2020	31 December 2019
Cash at banks		
Demand deposits	141,440	7,955
Time deposits	17,354,252	8,732,840
Demand deposits (blocked)	10,485	-
Revenue share (blocked)	2,204,004	1,861,248
Time deposit interest accruals	115,111	49,966
Total	19,825,292	10,652,009

Revenue Share (blocked)

As required by the Petroleum Market License Regulation, the revenue share collected from the customers by the Group is held at banks and considered as blocked deposit in the Company's books. The revenue share was invested as demand deposits with government debt securities interest rate and overnight interest rate as at 31 December 2020 and 2019 (Note 13). There are blocked demand deposits of TRY10,485 thousand for additional banking transactions (31 December 2019 -None).

Time deposits and other cash and cash equivalents

As at 31 December 2020 and 31 December 2019, the maturity and the currency information of the time deposits, is as follows:

31 December 2020

	Effective rate of interest (%)	Less than 1 month	1 - 3 months	Total
TRY	17.78	13,287,465	3,393,695	16,681,160
USD	3.66	124,297	516,405	640,702
EUR	1.16	30,268	-	30,268
GBP	0.20	2,122	-	2,122
Time deposit		13,444,152	3,910,100	17,354,252

31 December 2019

	Effective rate of interest (%)	Less than 1 month	1 - 3 months	Total
TRY	11.28	7,482,221	50,000	7,532,221
USD	1.95	1,114,494	71,475	1,185,969
EUR	0.15	13,088	-	13,088
GBP	0.70	1,562	-	1,562
Time deposit		8,611,365	121,475	8,732,840

Türkiye Petrol Rafinerileri A.Ş.

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

4. Cash and cash equivalents (Continued)

Cash and cash equivalents included in the consolidated statements of cash flows for the periods ended 31 December 2020 and 31 December 2019 are as follows:

	31 December 2020	31 December 2019
Cash and cash equivalents	19,825,292	10,652,009
Less: Blocked deposits (Revenue share)	(2,204,004)	(1,861,248)
Less: Time deposit interest accruals	(115,111)	(49,966)
Cash and cash equivalents	17,506,177	8,740,795

5. Financial liabilities

	31 December 2020	31 December 2019
Short-term borrowings:		
Short-term bank borrowings	2,084,018	1,797,993
Interest accruals of bank borrowings	13,790	690
Total	2,097,808	1,798,683
Short-term portion of long-term borrowings:		
Short-term portion of long-term bank borrowings	5,423,700	3,108,084
Bonds issued	650,000	-
Interest accruals of bank borrowings	227,494	191,241
Interest accruals of bonds issued	72,909	53,995
Lease liabilities	29,834	25,699
Total	6,403,937	3,379,019
Long-term borrowings:		
Long-term bank borrowings	14,882,553	8,909,295
Bonds issued	5,638,350	4,808,140
Lease liabilities	199,056	180,657
Interest accruals of bank borrowings	23,364	-
Total	20,743,323	13,898,092
Total borrowings	29,245,068	19,075,794

Tüpraş has issued a bond on 30 November 2020 with a nominal value of TRY500 million, with a maturity of 728 days, coupon payment every 3 months and repayment of principal and coupon at maturity, with 140 bps additional yields on 3MTLREF reference rate.

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

5. Financial liabilities (Continued)

Tüpraş has issued a bond on 8 February 2019 with a nominal value of TRY400 million, with a maturity of 728 days, coupon payment every 3 months and repayment of principal and coupon at maturity, with 75 bps additional yields on 3MTRLIBOR reference rate.

Tüpraş has issued a bond on 25 January 2019 with a nominal value of TRY250 million, with a maturity of 728 days, coupon payment every 3 months and repayment of principal and coupon at maturity, with 75 bps additional yields on 3MTRLIBOR reference rate.

Tüpraş has issued a bond with a nominal value of USD700 million, with a maturity of 7 years, coupon payment every 6 months and repayment of principal and coupon at maturity, with an annual interest rate of 4.5%, on the London Stock Exchange on 12 October 2017.

In 2011, Tüpraş has signed three loan agreements in order to finance Residuuum Upgrading Project ("RUP") and further to the agreements the loans amounting to USD1,998 million were utilized between 2011 and 2015 for credit insurance payments and capital expenditures. According to financing package loan was insured by SACE and CESCE have 12 years to maturity also there will be no principal and interest payment in first 4 years. The third loan has 7 years to maturity and there will be no principal payment in the first four years. The repayment of the loans has started in 2015 and as at 31 December 2020 the outstanding amount of the loans is USD576 million (31 December 2019 – USD765 million).

The booked values of the bonds with a total nominal value of USD700 million and a nominal value of TRY650 million issued by Tüpraş to be traded in domestic and international markets are TRY10,000 thousand above their fair values based on the registered prices in active markets (Level 1) (2019: TRY48,000 thousand under).

Excluding the one-off effects caused by COVID-19, Tüpraş can fulfill its financial commitments arising from its borrowings as of 31.12.2020.

Türkiye Petrol Rafinerileri A.Ş.

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

5. Financial liabilities (Continued)

Foreign currency balances and effective interest rates for the short and long-term financial liabilities as at 31 December 2020 and 31 December 2019 are as follows:

	31 December 2020		
	Effective interest rate (%)	Original currency	Thousand TRY
Short-term borrowings:			
TRY bank borrowings ⁽¹⁾	8.79	1,217,838,682	1,217,839
USD bank borrowing	0.65	118,000,000	866,179
Interest accruals			13,790
Total short-term financial liabilities			2,097,808
Short-term portion of long-term borrowings:			
TRY borrowings	9.89	2,715,300,000	2,715,300
TRY bonds issued	16.57	650,000,000	650,000
USD bank borrowings	2.34	293,917,846	2,157,504
EUR bank borrowings	2.11	61,157,000	550,896
TRY lease liabilities	18.32	22,677,599	22,678
GBP lease liabilities	4.16	290,824	2,892
EUR lease liabilities	3.27	473,363	4,264
			6,103,534
Interest accruals			300,403
Total short-term portion of long-term borrowings			6,403,937
Long-term borrowings:			
TRY borrowings	12.31	7,899,098,000	7,899,098
USD borrowings	2.34	951,359,581	6,983,455
USD bonds issued	4.50	700,000,000	5,138,350
TRY bonds issued	18.07	500,000,000	500,000
TRY lease liabilities	20.92	130,433,740	130,434
EUR lease liabilities	3.23	6,941,129	62,524
GBP lease liabilities	4.20	613,248	6,098
			20,719,959
Interest accruals			23,364
Total long-term borrowings			20,743,323

⁽¹⁾ Banks provide interest-free loans to the Group for the payment of SCT, Customs and Social Security debts amounting to TRY17,839 thousand as of 31 December 2020 (31 December 2019 - TRY210,178 thousand).

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

5. Financial liabilities (Continued)

	31 December 2019		
	Effective interest rate (%)	Original currency	Thousand TRY
Short-term financial liabilities:			
USD borrowings	2.23	267,300,000	1,587,815
TRY borrowings	-	210,177,843	210,178
Interest accruals			690
Total short-term financial liabilities			1,798,683
Short-term portion of long-term financial liabilities			
TRY borrowings	14.95	440,393,063	440,393
USD borrowings	3.91	322,136,658	1,913,556
EUR borrowings	2.02	113,393,640	754,135
TRY lease liabilities	21.64	17,986,921	17,987
GBP lease liabilities	4.16	279,174	2,171
EUR lease liabilities	2.95	833,008	5,541
			3,133,783
Interest accruals			245,236
Total short-term portion long-term financial liabilities			3,379,019
Long-term borrowings:			
TRY borrowings	16.72	3,104,285,714	3,104,286
USD borrowings	4.02	908,805,991	5,398,489
USD bonds issued	4.43	700,000,000	4,158,140
TRY bonds issued	15.47	650,000,000	650,000
TRY lease liabilities	22.57	124,300,668	124,301
EUR borrowings	2.11	61,125,320	406,520
EUR lease liabilities	3.20	7,416,683	49,325
GBP lease liabilities	4.16	904,130	7,031
			13,898,092
Interest accruals			-
Total long-term financial liabilities			13,898,092

Türkiye Petrol Rafinerileri A.Ş.

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

5. Financial liabilities (Continued)

As at 31 December 2020 and 31 December 2019, the redemption schedule of long-term bank borrowings is as follows:

	31 December 2020	31 December 2019
1-2 years	12,424,887	5,960,596
2-3 years	2,247,467	1,588,261
3-4 years	5,714,105	1,555,875
4-5 years	100,516	4,576,765
Over 5 years	256,348	216,595
Total	20,743,323	13,898,092

The movement of borrowings as of 31 December 2020 and 2019 is as follows:

	2020	2019
1 January	19,075,794	17,949,540
New financial borrowings	41,075,708	49,759,252
Principal payments	(34,590,312)	(50,788,791)
Increase due to lease liabilities	32,770	235,666
Decrease due to payment of lease liabilities	(62,208)	(34,535)
Changes in interest accruals	122,860	48,541
Changes in foreign exchange rates	3,590,456	1,906,121
31 December	29,245,068	19,075,794

The interest sensitivity breakdown regarding the remaining time of borrowing to repricing is as follows:

	31 December 2020	31 December 2019
1-90 days	10,287,907	5,805,491
91-365 days	4,208,994	4,475,789
1-5 years	14,574,067	8,649,443
Over 5 years	174,100	145,071
Total	29,245,068	19,075,794

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

6. Trade receivables and payables

Short-term trade receivables:

	31 December 2020	31 December 2019
Trade receivables	1,421,103	3,806,348
Due from related parties (Note 27)	324,555	995,837
Doubtful trade receivables	5,264	5,243
Other trade receivables	7	21
Less: Unearned credit finance income	(10,116)	(14,300)
Less: Provision for doubtful receivables	(5,264)	(5,243)
Total short-term trade receivables (net)	1,735,549	4,787,906

Tüpraş discounts the domestic receivables by using domestic government bonds and foreign receivables by using monthly libor rates.

As at 31 December 2020, Tüpraş has offsetted TRY2,976,335 thousand (31 December 2019 - TRY2,059,000 thousand) from trade receivables that are collected from factoring companies as part of the irrevocable factoring and TRY1,127,270 thousand (31 December 2019 - None) deducted supplier financing transaction from trade receivables.

Movement of the provision for doubtful receivables for the years ended 31 December 2020 and 2019 is as follows:

	2020	2019
1 January	5,243	4,740
Charge for the period	280	803
Payments during the period	(259)	(300)
31 December	5,264	5,243

Short-term trade payables:

	31 December 2020	31 December 2019
Trade payables	13,924,582	17,624,694
Due to related parties (Note 27)	218,486	226,072
Less: Unrealised credit finance charges trade payables	(5,600)	(34,592)
Total short-term trade receivables (net)	14,137,468	17,816,174

Tüpraş discounts short-term trade payables by using monthly libor rates.

Türkiye Petrol Rafinerileri A.Ş.

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

7. Other receivables and payables

Other short-term receivables:

	31 December 2020	31 December 2019
Receivable from personnel	14,284	12,403
Deposits and guarantees given	3,404	5,130
Other doubtful receivables	1,389	1,526
Receivable from insurance recoveries	1,002	28,084
Less: Provision for other doubtful receivables	(1,389)	(1,526)
Total	18,690	45,617

8. Inventories

	31 December 2020	31 December 2019
Raw materials and supplies	969,551	1,348,822
Work-in-progress	1,706,414	1,612,901
Finished goods	2,468,321	2,169,793
Trade goods	75,071	53,644
Goods in transit	2,414,477	4,201,510
Other inventories	66,796	81,911
Total	7,700,630	9,468,581

Movement of the provision for inventories for the years ended 31 December 2020 and 2019 is as follows:

	2020	2019
1 January	-	87,855
Charge for the period	1,034,554	-
Provisions no longer required	(1,034,554)	(87,855)
31 December	-	-

The sudden drop in crude oil price between January 1 and March 31, 2020 caused inventory sales prices to remain below unit cost; However, after March 31, 2020, as a result of the increase in crude oil prices reflected on product prices, the provision for inventories was either canceled or realized.

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

9. Investments accounted for using the equity method

		31 December 2020		31 December 2019	
	Participation share (%)	Amount	Participation share (%)	Amount	
OPET Petrolcülük A.Ş.	40.00	1,326,490	40.00	1,362,777	
		1,326,490		1,362,777	

The goodwill amounting to TRY189,073 thousand arising from the purchase of Opet shares on 28 December 2006 were classified on the investments accounted for using the equity method in the financial statements.

The movement in the investments accounted for using the equity method during the period ended 31 December 2020 and 2019 is as follows:

	2020	2019
1 January	1,362,777	1,266,334
Investments accounted for using the equity method;		
Shares in current year profit	(29,615)	197,393
Dividend payment	(120,000)	(96,000)
Gain on revaluation of property	30,212	20,831
Actuarial gain/(loss) arising from defined benefit plans	(406)	(1,043)
Gain/(loss) on revaluation and remeasurement	43,261	(34,666)
Currency translation differences	40,261	9,928
31 December	1,326,490	1,362,777

Consolidated summary financial statements of investments accounted for using the equity method (before Group's effective interest) are as follows:

	31 December 2020	31 December 2019
Current assets	5,059,935	5,416,089
Non-current assets	3,701,575	3,319,884
Total assets	8,761,510	8,735,973
Short term liabilities	2,829,607	3,498,612
Long term liabilities	3,088,361	2,303,102
Equity	2,843,542	2,934,259
Total liabilities	8,761,510	8,735,973

Türkiye Petrol Rafinerileri A.Ş.

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

9. Investments accounted for using the equity method (Continued)

	1 January - 31 December 2020	1 January - 31 December 2019
Sales (net)	38,623,156	46,380,766
Gross profit	1,788,120	1,852,142
Operating profit	805,434	877,570
Net (loss)/income for the period	(74,038)	493,482

Goodwill impairment test

The Group considers the significant position of Opet in the domestic market and the synergy expected from its cooperation with Tüpraş and Opet as the main source of generation of goodwill. Therefore, the Group management evaluated Opet, its subsidiaries and its joint ventures as a single cash generating unit and goodwill is allocated on Opet.

The cash-generating unit's fair value calculations include post-tax cash flow projections, which are based on TRY and are based on ten-year plans approved by Opet management. The Group considers analysis covering a period longer than five years is more appropriate as to evaluation of operating results and prospective assumptions in the sector and therefore impairment test is based on ten years budget. As of 31 December 2020, fair value of Opet is above 71% of the value carried in including goodwill.

Other key assumptions used in the fair value calculation model are stated below:

Gross margin	4.0% - 4.8%
Discount rate	16.8%

The budgeted gross margin has been determined by Opet management based on past performance of the company and expected market growth rate. The discount rate used is the post-tax discount rate and includes company specific risks. An increase/decrease of 1% on the post-tax discount rate used in the discounted cash flow calculations, Opet's fair value of goodwill would be 13% lower and 16% higher, respectively as at 31 December 2020.

As a result of the tests performed by using the assumptions above, no impairment on goodwill has been identified as at 31 December 2020. Since the asset's fair value less cost to sell is higher than its carrying amount, the Group management did not calculate the asset's value-in-use.

Competition Authority investigation:

With the decision of the Competition Board dated 27 August 2018; By determining the resale price of its dealers, an investigation was initiated against Opet to determine whether Article 4 of the Law on the Protection of Competition numbered 4054 was violated, and as a result of the investigation, the Authority sentenced Opet to a fine of TRY433,932. TRY 325.450, which is three-fourths of the administrative fine calculated within the framework of article 17 of the Misdemeanor Law No.5326, was paid by Opet to the Large Taxpayers Tax Office, without prejudice to all legal rights regarding the relevant decision and penalty. A lawsuit has been filed by Opet with the request for annulment of the aforementioned decision, and a stay of execution decision has been made in the lawsuit and the trial is still ongoing.

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

10. Property, Plant and Equipment

The movements of property, plant and equipment and related accumulated amortisation for the period ended 31 December 2020 and 2019 is as follows:

	1 January 2020	Gain on revaluation of property	Currency translation differences	Additions	Transfers	Disposals	31 December 2020
Cost:							
Lands	7,206,553	1,134,711	-	-	-	(73)	8,341,191
Land improvements	3,793,487	-	-	130,462	1,201	(21,665)	3,903,485
Buildings	839,908	-	-	65,266	-	(1,731)	903,443
Machinery and equipment	12,936,688	-	-	352,349	(1,201)	(13,950)	13,273,886
Motor vehicles	1,993,137	-	-	132,209	-	(32,340)	2,093,006
Furniture and fixtures	135,217	-	-	35,137	-	(3,976)	166,378
Construction in progress	651,346	-	-	399,309	-	-	1,050,655
Special costs	4,131	-	-	-	-	(401)	3,730
Other tangible assets	2,794	-	-	42	-	(1)	2,835
	27,563,261	1,134,711	-	1,114,774	-	(74,137)	29,738,609
Accumulated depreciation:							
Land improvements	(1,612,017)	-	-	(155,119)	-	21,656	(1,745,480)
Buildings	(227,940)	-	-	(17,876)	-	1,559	(257,598)
Machinery and equipment	(5,025,154)	-	-	(421,395)	-	11,335	(5,435,214)
Motor vehicles	(281,918)	-	-	(71,143)	-	13,510	(339,551)
Furniture and fixtures	(78,701)	-	-	(19,921)	-	3,355	(95,267)
Special costs	(818)	-	-	(215)	-	361	(672)
Other tangible assets	(1,998)	-	-	(282)	-	1	(2,279)
	(7,228,546)	-	-	(685,951)	-	51,777	(7,862,720)
Net book value	20,334,715						21,875,889

Türkiye Petrol Rafinerileri A.Ş.

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

10. Property, Plant and Equipment (Continued)

	1 January 2019	Gain on revaluation of property	Currency translation differences	Additions	Transfers	Disposals	31 December 2019
Cost:							
Land	62,161	7,139,764	-	-	4,628	-	7,206,553
Land improvements	3,721,772	-	-	-	71,891	(176)	3,793,487
Buildings	789,073	-	-	-	50,851	(16)	839,908
Machinery and equipment	12,657,231	-	-	1,134	278,927	(604)	12,936,688
Motor vehicles	1,249,363	-	-	762,086	12,978	(60)	2,024,367
Furniture and fixtures	128,559	-	-	4,939	4,373	(2,654)	135,217
Construction in progress	339,919	-	-	730,454	(419,027)	-	651,346
Special costs	1,070	-	-	3,061	-	-	4,131
Other tangible assets	4,057	-	-	23	-	(1,286)	2,794
	18,953,205	7,139,764	-	1,501,697	4,621	(4,796)	27,594,491
Accumulated depreciation:							
Land improvements	(1,456,256)	-	-	(153,706)	(2,231)	176	(1,612,017)
Buildings	(210,688)	-	-	(17,258)	(8)	14	(227,940)
Machinery and equipment	(4,611,075)	-	-	(401,204)	(13,462)	587	(5,025,154)
Motor vehicles	(252,335)	-	(39)	(60,834)	-	60	(313,148)
Furniture and fixtures	(81,852)	-	-	(15,001)	15,701	2,451	(78,701)
Special costs	(44)	-	-	(774)	-	-	(818)
Other tangible assets	(1,788)	-	-	(371)	-	161	(1,998)
	(6,614,038)	-	(39)	(649,148)	-	3,449	(7,259,776)
Net book value	12,339,167						20,334,715

Total depreciation expense amounting to TRY685,951 thousand (31 December 2019 - TRY649,148 thousand) related to tangible fixed assets in the comprehensive consolidated income statement for the period ended as of 31 December 2020 has been allocated to cost of goods sold amounting to TRY550,394 thousand (31 December 2019 - TRY621,457 thousand), to marketing, amounting to TRY, 90,369 thousand (31 December 2019 - TRY7 thousand), to general administration expenses amounting to TRY 32,065 thousand (31 December 2019 - TRY27,684 thousand), to research and development expenses amounting to TRY13,123 thousand (31 December 2019 - None).

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

10. Property, Plant and Equipment (Continued)

The depreciation expense related to right-of-use assets in the consolidated statement of comprehensive income for the period ended as of 31 December 2020 at TRY34,466 thousand (31 December 2019 - TRY34,965 thousand), is classified to general administrative expenses amounting to TRY25,026 thousand (31 December 2019 - TRY34,965 thousand), to marketing, amounting to TRY, 5,490 thousand (31 December 2019 - None), and to cost of goods sold amounting to TRY, 3,950 thousand (31 December 2019 - None).

As of 31 December 2020, there are no mortgage on property, plant and equipment (31 December 2019 : None). The Group has revaluated all of the lands to their fair values which assets' cost value is amounting to TRY66,782 thousand in accordance with TAS 16, Property, Plant and Equipment as of 31 December 2020 and included the revaluation increase amounting to TRY8,274,409 thousand in consolidated financial statements (31 December 2019: TRY7,139,764 thousand).

The revaluation assessment of lands of Tüpraş has been carried by namely Açık Kurumsal Gayrimenkul Değerleme ve Danışmanlık A.Ş. which is accredited by the CMB; the valuation of lands of OPET and its subsidiaries, which is consolidated according to equity method, is carried by TSKB Gayrimenkul Değerleme A.Ş. which is accredited by the CMB.

Fair value level as of reporting date				
	31 December 2020	Level 1	Level 2	Level 3
Lands	8,341,191	-	8,341,191	-
	31 December 2019	Level 1	Level 2	Level 3
Lands	7,206,553	-	7,206,553	-

Türkiye Petrol Rafinerileri A.Ş.

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

11. Intangible assets

Other intangible assets:

The movements of intangible assets and related accumulated amortisation for the period ended 31 December 2020 and 2019 are as follows:

	1 January 2020	Additions	Transfers	Disposals	31 December 2020
Cost:					
Rights and software	99,713	9,773	-	(26)	109,460
Development expenses	92,498	22,696	-	-	115,194
	192,211	32,469	-	(26)	224,654
Accumulated amortisation:					
Rights and software	(67,510)	(12,412)	-	3	(79,919)
Development expenses	(72,957)	(9,409)	-	-	(82,366)
	(140,467)	(21,821)	-	3	(162,285)
Net book value	51,744				62,369
	1 January 2019	Additions	Transfers	Disposals	30 June 2019
Cost:					
Rights and software	91,242	8,471	-	-	99,713
Development expenses	85,407	7,091	-	-	92,498
	176,649	15,562	-	-	192,211
Accumulated amortisation:					
Rights and software	(54,295)	(13,215)	-	-	(67,510)
Development expenses	(64,169)	(8,788)	-	-	(72,957)
	(118,464)	(22,003)	-	-	(140,467)
Net book value	58,185				51,744

Total amortisation expenses amounting to TRY21,821 thousand (31 December 2019: TRY22,003 thousand) in the consolidated statement of comprehensive income for the period ended 31 December 2020 have been allocated to the general administration expenses amounting to TRY21,816 thousand and the cost of sales amounting to TRY5 thousand.

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

12. Prepaid expenses

Short term prepaid expenses

	31 December 2020	31 December 2019
Insurance and other expenses	132,483	117,991
Advances given	101,131	118,771
Total	233,614	236,762

Long term prepaid expenses:

	31 December 2020	31 December 2019
Advances given to third parties for property, plant and equipment	130,621	142,369
Advances given to related parties for property, plant and equipment (Note 27)	2,126	54,725
Prepaid other expenses	2,039	1,785
Total	134,786	198,879

13. Other assets and liabilities

Other current assets:

	31 December 2020	31 December 2019
Deferred Value Added Tax ("VAT")	382,032	1,265,764
Deferred Special Consumption Tax ("SCT")	123,601	75,472
Spare parts and material stocks	89,655	93,795
Taxes and funds to be offsetted	74,547	101,440
Deferred VAT	41,516	40,692
Income accruals from commodity hedge	22,746	90,007
Income accruals	16,793	19,747
VAT Receivable	-	729,357
Other current assets	18,352	7,814
Total	769,242	2,424,088

As of 31 December 2020, income accruals consist of commodity derivatives transactions for inventory of Tüpraş which are exposed to commodity price risk. The income accruals recognition made as of 31 December 2020 is recognized under cost of goods sold and collected as of 8 January 2021.

As of 31 December 2019, income accruals consist of commodity derivatives transactions for inventory of Tüpraş which are exposed to commodity price risk. The income accruals recognition made as of 31 December 2019 is recognized under cost of goods sold and collected as of 8 January 2020.

Türkiye Petrol Rafinerileri A.Ş.

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

13. Other assets and liabilities (Continued)

Other non-current assets:

	31 December 2020	31 December 2019
Spare parts and material stocks	1,763,686	1,569,443
Other	49,145	8,100
Total	1,812,831	1,577,543

Other short-term liabilities:

	31 December 2020	31 December 2019
Revenue share	2,210,451	1,866,833
SCT payable	1,090,914	1,175,211
Deferred VAT	382,032	1,265,764
VAT payable	269,314	12,669
Expense accruals from commodity hedge	247,432	200,167
Deferred SCT	123,601	75,472
Other taxes and liabilities	79,550	74,146
Other	45,352	33,693
Total	4,448,646	4,703,955

As of 31 December 2020, expense accruals consist of swap and zero cost corridor transactions for inventory of Tüpraş which are exposed to commodity price risk. The expense accruals recognition made as of 31 December 2020 is recognized under cost of goods sold and paid as of 8 January 2021.

Deferred VAT and SCT include VAT and SCT amounts related to export committed sales and are classified within "Other current assets" under assets and within "Other current liabilities" under liabilities. Such SCT and VAT amounts are offset when the export transaction is certified and the related taxes are cancelled by the tax office.

According to the Petroleum Market Law, financing needs of refinery owners to maintain the National Petroleum Stock are supplied by the revenue share, which is a surplus added to the sales price, limited to a ceiling of USD 10/ton as determined by Energy Market Regulatory Authority ("EMRA"). In the case of importation of petroleum products, the revenue share is to be paid to the refinery owner by the importer.

The Group has been collecting the revenue share over the sales of petroleum products and non-refinery imports of petroleum products since 1 January 2005, the date the relevant article of the regulation came into force.

The Group has been collecting revenue share for LPG sales since 16 September 2005 in addition to the revenue share collected for petroleum products, in accordance with the Liquefied Petroleum Gas ("LPG") Market Regulation.

It has been decided by the National Petroleum Reserves Commission that the investment management of the revenue share collected will be conducted by the General Directorate of Tüpraş, and the collected amount will be invested in overnight reverse repurchase agreements.

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

13. Other assets and liabilities (Continued)

Other short-term liabilities: (Continued)

As a result of these regulations, the revenue share amounting to TRY2,210,451 thousand accumulated as at 31 December 2020 (31 December 2019: TRY1,866,833 thousand) which is not recognized in the comprehensive income statement, has been classified as "Revenue Share" within "Other short-term liabilities".

TRY2,204,004 thousand is (31 December 2019: TRY1,861,248 thousand) blocked in banks as demand deposits with government debt securities interest rate and overnight interest rate related to the calculated revenue share has been classified as Revenue share "Blocked" within "Cash and cash equivalents"(Note 4).

14. Provisions

Provision for employee benefits:

Short-term provision for employee benefits:

	31 December 2020	31 December 2019
Personnel bonus accruals	13,067	7,400
Seniority incentive bonus provision	11,505	8,377
Total	24,572	15,777

Long-term employee benefits:

	31 December 2020	31 December 2019
Provision for employment termination benefits	271,661	232,075
Provision for unused vacation	72,866	71,754
Seniority incentive bonus provision	11,878	12,223
Total	356,405	316,052

Seniority incentive bonus provision:

The Group has an employee benefit plan called "Seniority Incentive Bonus", which is paid to the employees with a certain level of seniority.

Seniority incentive bonus is paid to personnel together with their monthly salary when certain seniority levels are reached. The bonus amounts to 45 days of salary for 5 years of seniority level, 55 days of salary for 10 years of seniority level, 70 days of salary for 15 years of seniority level, 80 days of salary for 20 years of seniority level, 90 days of salary for 25 years of seniority level and 100 days of salary for 30 years of seniority level, paid once for each seniority level.

Türkiye Petrol Rafinerileri A.Ş.

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

14. Provisions (Continued)

Seniority incentive bonus provision: (Continued)

The movements in the provision for seniority incentive bonus during the period are as follows:

	2020	2019
1 January	20,600	14,601
Charge for the period	13,045	10,998
Payments during the period	(10,262)	(4,999)
31 December	23,383	20,600

Provision for employment termination benefits:

Under the Labour Law, the Group is required to pay termination benefits to each employee who has completed one year of service and whose employment is terminated without due cause, is called up for military service, dies or who retires after completing 25 years of service (20 years for women) and achieves the retirement age (58 for women and 60 for men). Since the legislation was changed on 23 May 2002, there are certain transitional provisions relating to length of service prior to retirement.

The liability is not funded, as there is no funding requirement.

The provision has been calculated by estimating the present value of the future probable obligation of the Company arising from the retirement of the employees.

TAS 19 requires that actuarial valuation methods to be developed to estimate the Group's employment termination benefit provision. The following actuarial assumptions have been used in the calculation of the total provision:

	31 December 2020	31 December 2019
Discount rate (%)	4.63%	4.67%
Turnover rate to estimate probability of retirement (%)	99.38%	99.36%

The principal assumption is that maximum liability of employment termination benefits for each year of service will increase in line with inflation. Thus, the discount rate applied represents the expected real rate after adjusting for the anticipated effects of future inflation. Employment termination benefits of the joint ventures of the Group, which are registered in Turkey are calculated from the maximum amount of TRY7,638.96 which is effective as at 1 January 2021 (31 December 2019: TRY6,730.15).

The movement in the provision for employment termination benefits during the period is as follows:

	2020	2019
1 January	232,075	186,525
Interest expense	27,985	30,894
Actuarial (gain)/loss	818	15,270
Increase during the period	32,739	27,725
Payments during the period	(21,956)	(28,339)
31 December	271,661	232,075

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

14. Provisions (Continued)

Provision for employment termination benefits: (Continued)

	31 December 2020 Net discount rate		31 December 2019 Net discount rate	
	100 Base Increase	100 Base Decrease	100 Base Increase	100 Base Decrease
Sensitivity analysis				
Ratio	5.63%	3.63%	5.67%	3.67%
Provision for employee termination benefit adjustment	34,586	(8,243)	15,546	(18,957)

Provision for unused vacation:

The movement in the provision for unused vacation during the period is as follows:

	2020	2019
1 January	71,754	59,787
Increase during the period	7,272	18,462
Payments during the period	(6,160)	(6,495)
31 December	72,866	71,754

Other short term provisions:

	31 December 2020	31 December 2019
Provision for demurrage	48,820	41,924
EMRA participation share ⁽¹⁾	41,458	37,054
Provisions for pending claims and law suits	21,981	21,195
Provisions for cost	1,135	1,010
Other	4,122	192
Total	117,516	101,375

⁽¹⁾ EMRA participation share is the participation fee that is paid by the refinery license owners in accordance with the Petroleum Market License Regulation, calculated by multiplying net sales with the participation share rate determined by EMRA.

Türkiye Petrol Rafinerileri A.Ş.

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

14. Provisions (Continued)

Other short term provisions (Continued)

Movement of the short-term provisions for the period ended 31 December 2020 and 2019 are as follow:

	Provision for pending claims and lawsuits	EMRA participation share	Provision for demurrage	Provision for cost	Other	Total
1 January 2020	21,195	37,054	41,924	1,010	192	101,375
Changes for the period, net	1,648	41,459	29,297	125	3,930	76,459
Payments during the period, net	(862)	(37,055)	(22,401)	-	-	(60,318)
31 December 2020	21,981	41,458	48,820	1,135	4,122	117,516
1 January 2019	19,038	33,473	18,108	377	486	71,482
Changes for the period, net	2,489	37,054	23,816	633	(294)	63,698
Payments during the period, net	(332)	(33,473)	-	-	-	(33,805)
31 December 2019	21,195	37,054	41,924	1,010	192	101,375

15. Liabilities for employee benefits

	31 December 2020	31 December 2019
Due to the personnel	113,713	113,039
Social security withholdings payment	38,214	34,370
Total	151,927	147,409

16. Other payables

	31 December 2020	31 December 2019
Deposits and guarantees received	33,350	27,112
Other payables to related parties (Note 27)	30,763	28,297
Total	64,113	55,409

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

17. Derivative instruments

	31 December 2020				31 December 2019			
	Fair values				Fair values			
	Purchase contract amount	Sales contract amount	Assets	Liabilities	Purchase contract amount	Sales contract amount	Assets	Liabilities
<i>Cash flow hedge</i>								
Interest rate swap	729,500	729,500	-	46,563	584,678	584,678	-	51,176
Cross currency swap	885,015	613,238	318,377	18,222	1,215,184	1,097,828	119,942	20,707
Commodity derivative	51,016	51,016	20,939	32,067	102,213	102,212	13,702	-
<i>Derivatives held for trading</i>								
Currency forwards	15,125,099	16,070,341	40,366	665,976	9,559,306	9,679,259	163,578	695
Commodity derivative	-	-	-	-	404,147	404,147	6,770	6,669
Interest rate swap	-	-	447	-	-	-	-	-
Short term derivative financial instruments			380,129	762,828			303,992	79,247
<i>Cash flow hedge</i>								
Interest rate swap	2,126,201	2,126,201	-	45,490	2,429,277	2,429,277	-	24,187
Cross currency swap	172,928	54,654	87,313	-	820,186	654,292	98,741	7,763
<i>Derivatives held for trading</i>								
Interest rate swap	750,000	750,000	570	-	-	-	-	-
Long term derivative financial instruments			87,883	45,490			98,741	31,950
Total			468,012	808,318			402,733	111,197

As of 31 December 2020, forward foreign exchange transactions consist of forward and currency swap transactions which generate a sales obligation of TRY16,070,341 thousand in exchange of USD2,060,500 thousand which will expire in 2021. (As of 31 December 2019, forward, swap, futures and options market transactions consist of forward transactions which generate a sales obligation of TRY9,679,259 thousand in exchange of USD1,609,257 thousand which has expired on in 2020).

As of 31 December 2020, interest rate swap consists of exchange of floating rate instalment payments of long term borrowings and bonds amounting to USD289,615 thousand (31 December 2019: USD378,126 thousand), EUR8,857 thousand (31 December 2019: EUR17,714) and TRY1,400,000 thousand with fixed rate instalment payments for cash flow hedging.

Türkiye Petrol Rafinerileri A.Ş.

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

17. Derivative instruments (Continued)

As of 31 December 2020, cross currency swap transactions consist of swaps with fixed interest rate transaction of foreign currency indexed floating interest rate USD66,837 thousand (31 December 2019: USD141,616) and fixed interest rate long-term borrowings amounting to TRY253,690 thousand (31 December 2019: TRY624,434) and indexed to Turkish Lira, swap of foreign currency indexed floating interest long-term borrowing of EUR52,300 thousand (31 December 2019: EUR156,900 thousand) and fixed interest rate long-term borrowings amounting to TRY326,483 thousand (31 December 2019: 979,448) and indexed to Turkish Lira, foreign currency indexed interest rate swap transactions EUR4,429 thousand (31 December 2019: EUR8,857) with Turkish Lira indexed long term borrowings and fixed interest payments amounting to TRY16,429 thousand (31 December 2019: TRY32,859 thousand), and fixed interest payments amounting to TRY16,429 thousand (31 December 2019: TRY32,859 thousand) with fixed interest payments with total of USD4,668 thousand (31 December 2019: USD9,337 thousand), and swap transaction of EUR4,429 thousand (31 December 2019: EUR8,857) foreign currency indexed fixed interest rate of long-term borrowing and USD5,043 thousand (31 December 2019: USD10,086 thousand) USD indexed fixed interest payments.

Commodity future purchase and sales transactions consist of transactions of product crack margin fixing as of 31 December 2020 (As of 31 December 2019, commodity derivative transactions; consists of average refinery crack margin fixing transactions. Future sales product crack margin fixing transactions have been executed for, gasoline stocks of 374 thousand barrels, jet fuel stocks of 265 thousand barrels, diesel stocks of 749 thousand barrels and fuel oil stocks of 172 thousand barrels for first quarter of 2020. The weighted average fixed margin of the product crack margin fixing transactions are USD6.33 for gasoline, USD15.04 for jet fuel, USD17.87 for diesel and USD-14.76 for fuel oil per barrel.)

18. Commitments and contingent assets and liabilities

	31 December 2020		31 December 2019	
	Original currency:	TRY amount:	Original currency:	TRY amount:
Guarantees received:				
Letter of guarantees received		1,329,871		1,118,403
- Letter of guarantees in TRY	658,781	658,781	719,088	719,088
- Letter of guarantees in USD	36,186	265,624	32,249	191,566
- Letter of guarantees in EUR	44,517	401,005	30,088	200,104
- Letter of guarantees in other currencies	-	4,461	-	7,645
Guarantee notes received		679		679
- Guarantee notes in TRY	679	679	679	679
Guarantee letters received		417,926		347,675
- Guarantee letters received in TRY	50,000	50,000	50,000	50,000
- Guarantee letters received in USD	50,000	367,025	50,000	297,010
- Guarantee letters received in EUR	100	901	100	665
Guarantee letters of credit		205,520		500,212
- Letters of credit in USD	27,998	205,520	84,208	500,212
Direct debiting limits		407,475		506,841
- TRY direct debiting limits	407,475	407,475	506,841	506,841
Total guarantees received		2,361,471		2,473,810

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

18. Commitments and contingent assets and liabilities (Continued)

Guarantees given:	31 December 2020		31 December 2019	
	Original currency:	TRY amount:	Original currency:	TRY amount:
Letter of credits given		3,953,337		2,496,440
- Letter of credits in USD	535,781	3,932,903	416,672	2,475,117
- Letter of credits in EUR	2,268	20,434	2,749	18,283
- Letter of credits in other currencies	-	-	-	3,040
Letter of guarantees given		1,423,999		1,394,723
- Letter of guarantees in TRY	1,264,460	1,264,460	1,274,730	1,274,730
- Letter of guarantees in USD	20,200	148,279	20,200	119,993
- Letter of guarantees in EUR	1,250	11,260	-	-
Letters of guarantee given to customs offices		897,796		773,804
- Letter of guarantees in TRY	843,749	843,749	733,900	733,900
Letter of guarantees in USD	-	-	-	-
- Letter of guarantees in EUR	6,000	54,047	6,000	39,904
Letters of guarantee given to banks		753,762		980,238
- Letter of guarantees in USD	89,322	655,667	139,315	827,559
- Letter of guarantees in EUR	10,890	98,095	22,957	152,679
Total guarantees given		7,028,894		5,645,205

As at 31 December 2020 and 31 December 2019, letter of guarantees received are composed of guarantees from customers and suppliers. Guarantees given are mainly composed of guarantees given to government entities and customs offices. As at 31 December 2020, letters of guarantee given to banks are given for loans which were used by Companies within scope of consolidation amounting to TRY92,365 thousand (31 December 2019: TRY857,850 thousand) and for derivative financial instruments amounting to TRY7,847 thousand (31 December 2019: TRY122,388 thousand).

Collaterals, pledges, mortgages given by the Group as at 31 December 2020 and 31 December 2019 are as follows:

	31 December 2020	31 December 2019
A. CPMs given for companies in the name of its own legal personality	6,275,132	4,664,967
- TRY	2,108,209	2,008,630
- USD	4,081,182	2,595,110
- EUR	85,741	58,187
- Other	-	3,040
B. CPMs given on behalf of the fully consolidated companies	753,762	980,238
- USD	655,667	827,559
- EUR	98,095	152,679
C. CPMs given for continuation of its economic activities on behalf of third parties	-	-
D. Total amount of other CPMs	-	-
i) Total amount of CPMs given on behalf of the majority shareholder	-	-
ii) Total amount of CPMs given to on behalf of other Group companies which are not in scope of B and C.	-	-
iii) Total amount of CPMs given on behalf of third parties which are not in scope of C.	-	-
Total	7,028,894	5,645,205

A commission at an amount of TRY5,970 thousand is recognized as of 31 December 2020 related to letter of guarantees given in favor of partnerships included in full consolidation (31 December 2019 - TRY3,274 thousand).

Türkiye Petrol Rafinerileri A.Ş.

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

19. Equity

The Company's shareholders and their shareholding percentages as at 31 December 2020 and 31 December 2019 are as follows:

	31 December 2020	Share (%)	31 December 2019	Share (%)
Enerji Yatırımları A.Ş.	127,714	51	127,714	51
Publicly Owned	122,705	49	122,705	49
Total	250,419	100	250,419	100
Adjustment to share capital	1,344,243		1,344,243	
Total paid-in capital	1,594,662		1,594,662	

Adjustment to share capital represents the difference between the inflation adjusted amounts of cash and cash equivalents of the paid-in capital and the amounts before the inflation adjustment.

Registered capital of the Company is TRY500,000 thousand and is divided into 50,000,000,000 shares with a registered nominal value of 1 Kuruş ("Kr") (31 December 2019: 1Kr) each. The authorised and paid-in share capital of the Company comprises 25,041,919,999 Group A shares with a registered nominal value of 1Kr and one Group C share with privileges belonging to the Privatisation Administration.

As per the articles of association of the Company, one member of the Board of Directors should be nominated by the Group C shareholders. Board of Directors' decisions on the supply needs of petroleum products of the Turkish Military Forces requires the consent of the member representing the Group C shareholders.

Retained earnings, as per the statutory financial statements other than legal reserves, are available for distribution, subject to the legal reserve requirement referred to below.

Restricted reserves

The legal reserves consist of first and second reserves, appropriated in accordance with the Turkish Commercial Code ("TCC"). The TCC stipulates that the first legal reserve is appropriated out of statutory profits at the rate of 5% per annum until the total reserve reaches 20% of the Company's paid-in share capital. The second legal reserve is appropriated at the rate of 10% per annum of all cash distributions in excess of 5% of the paid-in share capital. Under the TCC, the legal reserves can only be used to offset loss and are not available for any other usage unless the reserve exceeds 50% of paid-in share capital.

In accordance with Turkish Financial Reporting Standards the aforementioned amounts should be classified under "Restricted Reserves". At 31 December 2020, the restricted reserves of the Company amount to TRY503,343 thousand (31 December 2019 - TRY503,343).

Dividend distribution

Listed companies distribute dividend in accordance with the Communiqué No. II-19.1 issued by the CMB which is effective from 1 February 2014.

Companies distribute dividends in accordance with their dividend payment policies settled and dividend payment decision taken in general assembly and also in conformity with relevant legislations. The communiqué does not constitute a minimum dividend rate. Companies distribute dividend in accordance with the method defined in their dividend policy or articles of incorporation. In addition, dividend can be distributed by fixed or variable instalments and advance dividend can be paid in accordance with profit on year end financial statements of the Company.

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

19. Equity (Continued)

Dividend distribution (Continued)

In accordance with the Turkish Commercial Code (TCC), unless the required reserves and the dividend for shareholders as determined in the article of association or in the dividend distribution policy of the company are set aside, no decision may be made to set aside other reserves, to transfer profits to the subsequent year or to distribute dividends to the holders of usufruct right certificates, to the members of the board of directors or to the employees; and no dividend can be distributed to these persons unless the determined dividend for shareholders is paid in cash.

At the Ordinary General Assembly Meeting dated 1 April 2020, in the financial statements prepared in accordance with the Tax Procedural Law records; due to loss of amounting TRY1,139,413 thousand in the current year result, it was decided to dividends will not be distributed and transfer the net period profit amounting to TRY525,837 thousand attributable to equity holders of the parent to the retained earnings in the related financial statements.

In the period ended as of 31 December 2019, the Group committed to make dividend payment in cash amounting to TRY3,793,851 thousand which is the total amount remained after first and second composition legal reserves deducted from 2018 distributable net profit of the period and a portion of second composition legal reserves. The Group paid a cash dividend at the rate of 1,515.0% which corresponds to TRY15.15 gross and TRY15.15 net cash dividend for the shares with a nominal value of TRY1.00 to institutional shareholders who are full taxpayers or limited liable taxpayers and obtain dividends through a business or permanent representative in Turkey. The Group paid also a cash dividend at the rate of 1,515.0%, which corresponds to TRY15.15 gross and TRY12,8775 net cash dividend for the shares with a nominal value of TRY1.00 to other shareholders.

20. Revenue and cost of sales

	1 January - 31 December 2020	1 January - 31 December 2019
Domestic revenue	51,044,765	70,538,290
Export revenue	13,222,620	20,144,188
Gross revenue	64,267,385	90,682,478
Less: Sales discounts	(801,256)	(922,258)
Less: Sales returns	(222,314)	(159,444)
Sales (net)	63,243,815	89,600,776
Cost of goods sold	(61,479,585)	(84,716,489)
Gross profit	1,764,230	4,884,287

Türkiye Petrol Rafinerileri A.Ş.

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

20. Revenue and cost of sales (Continued)

Cost of sales:

	1 January - 31 December 2020	1 January - 31 December 2019
Raw material, manufactured and consumable material	56,685,371	79,406,426
Energy expenses	2,094,408	2,589,357
Personnel expenses	963,730	873,662
Depreciation and amortization (Note 10-11)	554,349	621,457
Other production expenses	1,181,727	1,225,587
Cost of sales	61,479,585	84,716,489

21. General administrative expenses, marketing expenses and research and development expenses

General administrative expenses:

	1 January - 31 December 2020	1 January - 31 December 2019
Personnel expenses	533,872	532,773
Insurance expenses	204,802	161,175
Taxes and duties	152,836	142,029
Outsourced services	109,863	115,725
Depreciation and amortization (Note 10-11)	78,907	84,652
Office expenses	74,201	79,185
Subscription fees	47,638	43,993
Lawsuit and consultancy expenses	36,104	39,431
Donations	22,654	3,490
Transportation and travel expenses	3,911	6,125
Other	79,437	68,635
Total general administrative expenses	1,344,225	1,277,213

Marketing expenses:

	1 January - 31 December 2020	1 January - 31 December 2019
Transportation, storage and insurance expenses	253,727	189,129
Personnel expenses	157,443	150,965
Depreciation and amortization (Note 10)	95,859	7
Advertising expenses	29,909	23,977
Energy expenses	22,865	25,963
Outsourced services	9,440	10,929
Other	63,809	81,104
Total marketing expenses	633,052	482,074

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

21. General administrative expenses, marketing expenses and research and development expenses (Continued)

Research and development expenses:

	1 January - 31 December 2020	1 January - 31 December 2019
Depreciation and amortization (Note 10)	13,123	-
Personnel expenses	12,546	14,177
Licence expenses	4,394	3,893
Lawsuit and consultancy expenses	1,090	598
Outsourced services	988	1,080
Other	2,831	4,325
Total research and development expenses	34,972	24,073

Depreciation expenses, which have been recorded under cost of goods sold between 1 January to 31 December 2019, have been appropriately allocated to cost centers as of 31 December 2020.

22. Other operating income/(expenses)

	1 January - 31 December 2020	1 January - 31 December 2019
Other operating income		
Credit finance gains	424,235	729,393
Foreign exchange gain from trade receivables	55,562	25,644
Rent income	5,277	4,816
Provisions no longer required	178	136
Other	131,648	78,584
Total other operating income	616,900	838,573
Other operating expense:		
Foreign exchange loss from trade payables	(557,269)	(882,606)
Credit finance charges	(374,273)	(777,816)
Other	(56,366)	(48,941)
Total other operating expense	(987,908)	(1,709,363)

Türkiye Petrol Rafinerileri A.Ş.

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

23. Income/(expense) from investment activities

	1 January - 31 December 2020	1 January - 31 December 2019
Gain/(loss) on sales of property plant and equipment and intangible assets	1,805	(152)
Total income/(expense) from investment activities	1,805	(152)

24. Financial income/(expenses)

	1 January - 31 December 2020	1 January - 31 December 2019
Financial income:		
Foreign exchange gains on deposits	2,634,829	883,852
Interest income on deposits	578,847	638,906
Total financial income	3,213,676	1,522,758
Financial expense:		
Foreign exchange losses on borrowings	(3,444,698)	(1,916,881)
Interest expenses	(1,753,615)	(2,010,263)
Losses on derivative instruments	(1,112,680)	(320,860)
Other	(51,240)	(13,480)
Total financial expense	(6,362,233)	(4,261,484)

As of 31 December 2020, TRY31,236 thousand interest expense from leasing transactions is included in interest expenses and TRY20,525 thousand expense from leasing transactions is included in the foreign exchange losses (31 December 2019 – TRY5,225).

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

25. Tax assets and liabilities

	31 December 2020	31 December 2019
Current period corporate tax provision	13,310	9,479
Current year tax assets	(10,851)	(7,074)
Corporation tax provision	2,459	2,405

Turkish tax legislation does not permit a parent company, its subsidiaries and its joint ventures to file a consolidated tax return. Therefore, provisions for taxes, as reflected in these consolidated financial statements, have been calculated on an individual-entity basis.

The corporation tax rate for the fiscal year 2020 is 22% (2019: 22%). Corporation tax is payable on the total income of the companies after adjusting for certain disallowable expenses, corporate income tax exemptions (participation exemption, investment allowance, etc.) and allowances (as research and development expenditures deduction).

Reconciliation of the income before tax with the calculated corporate tax is as follows:

	2020	2019
Profit/(Loss) before taxation	(3,795,394)	(311,348)
Expected tax expense ⁽¹⁾	759,079	68,497
Investment incentive income	588,815	728,958
Deductions and exemptions	102,547	101,055
Changes in the tax rate ^(*)	(76,794)	-
Disallowable expenses and differences		
Not subject to taxation	(1,178)	(1,832)
Taxation on income	1,372,469	896,678

⁽¹⁾ Since the company will not pay taxes for the year 2020, the expected tax expense was calculated with a rate of 20% that will be valid in 2021 and further and the expected tax expense for the year 2019 was calculated at a rate of 22%.

Türkiye Petrol Rafinerileri A.Ş.

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

25. Tax assets and liabilities (Continued)

The analysis of cumulative temporary differences and the related deferred tax assets and liabilities in respect of items for which deferred income tax has been provided as at 31 December 2020 and 31 December 2019 using the enacted tax rates are as follows:

	Cumulative temporary differences		Deferred tax (liability)/asset	
	31 December 2020	31 December 2019	31 December 2020	31 December 2019
Gain on revaluation of property	8,274,475	7,139,764	(827,448)	(713,976)
Prepaid expenses	19,630	34,727	(3,926)	(7,640)
Provision lawsuits	(21,981)	(21,195)	4,396	4,663
Deferred financial income (expense), net	(22,500)	(20,292)	4,500	(4,464)
Provision for unused vacation liability	(62,013)	(61,369)	12,403	13,501
Inventories	(185,705)	(17,339)	37,141	3,815
Employment termination benefits	(268,153)	(243,951)	53,631	53,669
Fair value difference of derivative instruments	(313,375)	(365,686)	62,675	(80,451)
Difference between the carrying values and tax base of property, plant, equipment and intangible assets	(1,290,035)	(1,313,409)	258,007	288,950
Accumulated deductible financial losses ^(*)	(4,176,390)	(1,128,491)	835,278	248,268
Investment incentives ^(*)	(29,724,926)	(25,862,521)	4,546,105	3,957,291
Other	(98,325)	(17,629)	19,665	3,877
Deferred tax asset – net			5,002,427	3,767,503

^(*) In the first quarter of 2011, within the scope of the decree of the Council of Ministers dated 14 July 2009 and numbered 2009/15199, the Company was granted a Large-Scaled Investment Incentive Certificate for Residuum Upgrading Project (RUP). Investment expenditures made within the scope of this certificate are subject to 30% contribution from the government, where the contribution is provided as a reduction in corporate tax payable by 50%. As of 7 October 2013, Residuum Upgrading Project was granted Strategic Investment Incentive by Incentive Implementation and Foreign Investment Department of Ministry of Economy of Republic of Turkey which became applicable after 19 October 2012. Expenditures made within the scope of Strategic Investment Incentive Certificate are subject to 50% contribution from the government, where the contribution is provided as a reduction in corporate tax payable by 90%. The company has performed the revaluation of the unutilized investment incentives for both certificates by using the 9.11% revaluation rate, which was announced for the second provisional tax period of 2020 by the Ministry of Finance. In addition to the government contribution within the scope of Strategic Investment Incentive, the Company benefits from VAT exemption, VAT refund, customs duty exemption, incentive for employer share of insurance premium and interest incentive from this certificate.

^(*) Deferred tax assets amounting to TRY835,278 thousand which is to be used within 5 years consist of Group's financial losses amounting to TRY4,176,390 thousand.

The company has assessed that the necessary taxable profit will arise in the following periods, the deferred tax asset has been recognised in the current period.

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

25. Tax assets and liabilities (Continued)

The movement of deferred taxes is as follows:

	2020	2019
Deferred tax asset/(liability), net		
1 January	3,767,503	3,566,132
Charge for the period	1,385,779	906,149
Charge to equity:		
- Hedging cash flow gains/(losses)	(37,250)	5,993
- Actuarial gains/(losses) arising from defined benefit plans	(134)	3,205
- Revaluation of property gains/(losses)	(113,471)	(713,976)
31 December	5,002,427	3,767,503

The tax rate effect changes have been reflected to the related items.

26. Earnings per share

	1 January - 31 December 2020	1 January - 31 December 2019
(Loss) profit for the year attributable to shareholders of the Group	(2,493,511)	525,837
Weighted average number of Shares with nominal value of Kr1 each	25,041,920,000	25,041,920,000
Basic and diluted (loss) earnings per share in Kr	(9.96)	2.10

Türkiye Petrol Rafinerileri A.Ş.

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

27. Related party transactions

Related party transactions were classified according to the following groups and contain all descriptions in this footnote,

⁽¹⁾ Joint ventures

⁽²⁾ Koç Holding group companies

⁽³⁾ Parent, ultimate parent

a) Deposits:

	31 December 2020	31 December 2019
Yapı ve Kredi Bankası A.Ş. ⁽²⁾	6,253,361	2,031,019
Total	6,253,361	2,031,019

b) Due from related parties:

	31 December 2020	31 December 2019
Opet Petrolcülük A.Ş. ⁽¹⁾	226,065	835,956
THY OPET Havacılık Yakıtları A.Ş. ⁽¹⁾	51,113	67,283
Aygaz A.Ş. ⁽²⁾	24,516	85,399
Opet Fuchs Madeni Yağ San. ve Tic. A.Ş. ⁽¹⁾	19,093	6,104
Other ⁽²⁾	3,768	1,095
Total	324,555	995,837

As of 31 December 2020, Tüpraş has derecognized TRY250,000 thousand TL (31 December 2019: TRY373,000 thousand) which has been collected from factoring companies and TRY507,000 thousand which has been collected via supplier financing, from trade receivables from related parties.

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

27. Related party transactions (Continued)

c) Trade payables:

	31 December 2020	31 December 2019
Aygaz Doğalgaz Toptan Satış A.Ş. ⁽²⁾	75,733	113,585
Ark İnşaat A.Ş. ⁽²⁾	44,880	15,140
Koç Sistem Bilgi ve İletişim A.Ş. ⁽²⁾	22,479	14,183
Opet Petrolcülük A.Ş. ⁽¹⁾	16,910	17,634
Zer Merkezi Hizmetler ve Ticaret A.Ş. ⁽²⁾	16,368	23,228
RAM Sigorta Aracılık Hizmetleri A.Ş. ⁽²⁾	14,269	9,635
Aygaz A.Ş. ⁽²⁾	8,104	4,995
Otokoç Otomotiv Tic. ve San. A.Ş. ⁽²⁾	4,922	9,337
Setur Servis Turistik A.Ş. ⁽²⁾	2,996	2,131
THY OPET Havacılık Yakıtları A.Ş. ⁽¹⁾	1,137	5,429
RMK Marine Gemi Yapım Sanayii ve Deniz Taşımacılığı İşletmesi A.Ş. ⁽²⁾	189	5,645
Other ⁽²⁾	10,499	5,130
Total	218,486	226,072

d) Other payables:

	31 December 2020	31 December 2019
Koç Holding A.Ş. ⁽³⁾	30,763	28,297
Total	30,763	28,297

e) Advances given for property, plant and equipment

	31 December 2020	31 December 2019
Ark İnşaat A.Ş. ⁽²⁾	2,126	17,909
RMK Marine Gemi Yapım Sanayii ve Deniz Taşımacılığı İşl. A.Ş. ⁽²⁾	-	36,751
Other ⁽²⁾	-	65
Total	2,126	54,725

f) Bank loans:

	31 December 2020	31 December 2019
Yapı ve Kredi Bankası A.Ş. ⁽²⁾	821,310	111,131
Total	821,310	111,131

Türkiye Petrol Rafinerileri A.Ş.

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

27. Related party transactions (Continued)

g) Lease liabilities:

	31 December 2020	31 December 2019
Otokoç Otomotiv Tic. ve San. A.Ş. ⁽²⁾	63,286	55,806
Zer Merkezi Hizmetler ve Ticaret A.Ş. ⁽²⁾	22,477	22,658
Koç Ailesi ⁽³⁾	31	299
Total	85,794	78,763

h) Product and service sales:

	1 January - 31 December 2020	1 January - 31 December 2019
Opet Petrolcülük A.Ş. ⁽¹⁾	10,585,137	14,400,870
THY OPET Havacılık Yakıtları A.Ş. ⁽¹⁾	1,645,791	4,948,781
Aygaz A.Ş. ⁽²⁾	554,462	686,695
Opet Fuchs Madeni Yağ San. ve Tic. A.Ş. ⁽¹⁾	50,895	38,967
Other ⁽²⁾	38,307	1,618
Total	12,874,592	20,076,931

i) Product and service purchases:

	1 January - 31 December 2020	1 January - 31 December 2019
Aygaz Doğalgaz Toptan Satış A.Ş. ⁽²⁾	730,333	1,160,891
Opet Petrolcülük A.Ş. ⁽¹⁾	287,417	148,375
Ram Sigorta Aracılık Hizmetleri A.Ş. ^{(2) (*)}	230,035	167,652
Zer Merkezi Hizmetler ve Ticaret A.Ş. ⁽²⁾	101,762	103,662
Aygaz A.Ş. ⁽²⁾	91,691	167,805
Koç Holding A.Ş. ^{(3) (*)}	56,017	55,133
Koç Sistem Bilgi ve İletişim A.Ş. ⁽²⁾	54,793	45,358
Otokoç Otomotiv Tic. ve San. A.Ş. ⁽²⁾	25,169	22,237
THY OPET Havacılık Yakıtları A.Ş. ⁽¹⁾	11,433	39,898
Opet International Limited ⁽¹⁾	-	91,319
Other ⁽²⁾	63,494	97,135
Total	1,652,144	2,099,465

(1) Consists of the Group's share of invoices issued by Koç Holding, the ultimate parent of Tüpraş in accordance with the "11-Intra-group Services" of General Communique numbered 1 on Distribution of Hidden Income through Transfer Pricing which represents the services provided for financing, legal, tax and remuneration of senior management by the ultimate parent to its group companies.

(*) It includes the paid and accrued premium amounts within the scope of policies signed with insurance companies which are not related parties, via Ram Sigorta Aracılık Hizmetleri A.Ş. which operates as an insurance agency.

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

27. Related party transactions (Continued)

j) Fixed asset purchases:

	1 January - 31 December 2020	1 January - 31 December 2019
Ark İnşaat A.Ş. ⁽²⁾	158,238	78,639
RMK Marine Gemi Yapım Sanayii ve Deniz Taşımacılığı İşletmesi A.Ş. ⁽²⁾	103,680	132,775
Entek Elektrik Üretimi A.Ş. ⁽²⁾	-	46,100
Other ⁽²⁾	34,448	17,393
Total	296,366	274,907

k) Remuneration of board of directors and executive management:

The senior management of the Group is determined as members and chair of the Board of Directors and General Manager and General Manager Deputies, The total amount of benefits provided to senior management is TRY72,819 thousand as of period ending on 31 December 2020 (31 December 2019 – TRY88,560 thousand). All of this amount consists of short term benefits. (31 December 2019 -TRY6,700 of this amount is related to payments due to termination of employment and the remaining portion consists of short-term benefits.)

l) Financial expenses paid to related parties:

	1 January - 31 December 2020	1 January - 31 December 2019
Yapı ve Kredi Bankası A.Ş. ⁽²⁾	68,143	22,851
Yapı Kredi Faktoring A.Ş. ⁽²⁾	3,358	9,190
Yapı Kredi Bank Nederland N.V. ⁽²⁾	835	480
Total	72,336	32,521

m) Time deposit interest income:

	1 January - 31 December 2020	1 January - 31 December 2019
Yapı ve Kredi Bankası A.Ş. ⁽²⁾	192,615	99,462
Total	192,615	99,462

n) Donations:

As of 31 December 2020, total donation is amounting to TRY 15,338 thousand (31 December 2019 – TRY 286 thousand).

Türkiye Petrol Rafinerileri A.Ş.

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

28. Financial instruments and financial risk management

The Group's activities expose it to a variety of financial risks, including the effects of changes in debt and equity market prices, foreign currency exchange rates and interest rates. The Group's overall risk management program focuses on the unpredictability of financial markets and seeks to minimize potential adverse effects on the financial performance of the Group

Credit risk:

The ability to fund the existing and prospective debt requirements is managed by maintaining the availability of adequate fund providers from high quality lenders.

Prudent liquidity risk management comprises maintaining sufficient cash, the availability of funding through an adequate amount of committed credit facilities and the ability to close out open positions.

The table below demonstrates the Group's future cash outflows due to financial liabilities as at 31 December 2020 and 31 December 2019. The amounts demonstrated are undiscounted cash flows on agreements and the Group manages its liquidity risk by taking into account its expected undiscounted cash flows.

31 December 2020

Contractual maturities	Carrying value	Contractual cash outflows	Up to 3 months	3-12 months	1-5 years	More than 5 years
Total liabilities (non derivative)	43,446,649	46,154,382	17,193,885	7,102,970	21,529,628	327,899
Bank borrowings	22,654,919	24,192,831	2,280,370	6,696,450	15,216,011	-
Bonds and notes issued	6,361,259	7,278,922	698,060	296,884	6,283,978	-
Lease liabilities	228,890	475,448	8,274	109,636	29,639	327,899
Trade payables	14,137,468	14,143,068	14,143,068	-	-	-
Other liabilities	64,113	64,113	64,113	-	-	-

Contractual maturities	Carrying value	Contractual cash outflows	Up to 3 months	3-12 months	1-5 years	More than 5 years
Derivative instruments (net)	(340,306)	(657,543)	(738,939)	(15,384)	96,780	-
Derivative cash inflows	468,012	19,804,551	15,855,982	1,655,147	2,293,422	-
Derivative cash outflows	808,318	20,462,094	16,594,921	1,670,531	2,196,642	-

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

28. Financial instruments and financial risk management (Continued)

Credit risk: (Continued)

31 December 2019

Contractual maturities	Carrying value	Contractual cash outflows	Up to 3 months	3-12 months	1-5 years	More than 5 years
Total liabilities (non derivative)	36,947,377	40,964,423	18,192,261	579,809	17,064,913	5,127,440
Bank borrowings	14,007,303	17,100,274	285,660	361,259	16,226,349	227,006
Bonds & notes issued	4,862,135	5,467,954	-	187,116	748,465	4,532,373
Lease liabilities	206,356	490,020	426	31,434	90,099	368,061
Trade payables	17,816,174	17,850,766	17,850,766	-	-	-
Other liabilities	55,409	55,409	55,409	-	-	-

Contractual maturities	Carrying value	Contractual cash outflows	Up to 3 months	3-12 months	1-5 years	More than 5 years
Derivative instruments (net)	291,536	182,604	32,031	(63,732)	214,915	(610)
Derivative cash inflows	402,733	15,011,818	8,892,569	3,095,910	3,020,332	3,007
Derivative cash outflows	111,197	14,829,214	8,860,538	3,159,642	2,805,417	3,617

Cash outflows will be financed through cash inflows generated from sales or through funding.

Credit risk:

The Group is subject to credit risk arising from trade receivables related to credit sales, deposits at banks. These risks are managed by limiting the aggregate risk from any individual counterparty and obtaining sufficient collateral where necessary and making only cash based sales to customers considered as having a higher risk. Collectability of trade receivables are evaluated by management depending on their past experiences and current economic condition, and are presented in the consolidated financial statements net of adequate doubtful provision.

Major portion of Tüpraş's customers are composed of financially strong companies or government entities. As at 31 December 2020 and 2019, trade receivables from the top 5 customers of the Group constitute 57% and 55% of total receivables, respectively. When these factors are considered together with the insignificant historical default experience for the Group's receivables, the Group management considers the credit risk as low. The Group uses the same risk management principles for the management of financial assets. Investments are made to highly liquid instruments and the banks that the Group deposits its cash and cash equivalents in are selected among the financially strong institutions. As the Group did not have any uncollected, past due, impaired or renegotiated bank deposits, the Group believes that it does not have any impairment risk related to bank deposits.

Türkiye Petrol Rafinerileri A.Ş.

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

28. Financial instruments and financial risk management (Continued))

Credit risk: (Continued)

Credit risks of the Group for each financial instrument type as at 31 December 2020 and 2019 are as follows:

31 December 2020	Receivables				Bank deposits	Derivative instruments	Other
	Trade Receivables		Other Receivables				
	Related parties	Other parties	Related parties	Other parties			
Maximum exposed credit risk as of reporting date	324,555	1,410,994	-	18,690	19,825,292	468,012	-
- Secured portion of the maximum credit risk by guarantees, etc.	-	367,278	-	-	-	-	-
A. Net book value of financial asset either are not due or not impaired	324,555	1,221,413	-	18,690	19,825,292	468,012	-
B. Net book value of overdue but not impaired financial assets	-	189,581	-	-	-	-	-
C. Net book value of the impaired assets	-	-	-	-	-	-	-
- Overdue(gross book value)	-	5,264	-	1,389	-	-	-
- Impairment (-)	-	(5,264)	-	(1,389)	-	-	-
- Secured portion of the net value by guarantees, etc.	-	-	-	-	-	-	-
- Not due yet (gross book value)	-	-	-	-	-	-	-
- Impairment (-)	-	-	-	-	-	-	-
- Secured portion of the net value by guarantees, etc.	-	-	-	-	-	-	-
D. Components which are including credit risk except financial statement	-	-	-	-	-	-	-

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

28. Financial instruments and financial risk management (Continued))

Credit risk: (Continued)

31 December 2019	Receivables				Bank deposits	Derivative instruments	Other
	Trade Receivables		Other Receivables				
	Related parties	Other parties	Related parties	Other parties			
Maximum exposed credit risk as of reporting date	995,837	3,792,069	-	45,617	10,652,009	402,733	-
- Secured portion of the maximum credit risk by guarantees, etc.	-	568,028	-	-	-	-	-
A. Net book value of financial asset either are not due or not impaired	995,837	3,674,402	-	45,617	10,652,009	402,733	-
B. Net book value of overdue but not impaired financial assets	-	117,667	-	-	-	-	-
C. Net book value of the impaired assets	-	-	-	-	-	-	-
- Overdue(gross book value)	-	5,243	-	1,526	-	-	-
- Impairment (-)	-	(5,243)	-	(1,526)	-	-	-
- Secured portion of the net value by guarantees, etc.	-	-	-	-	-	-	-
- Not due yet (gross book value)	-	-	-	-	-	-	-
- Impairment (-)	-	-	-	-	-	-	-
- Secured portion of the net value by guarantees, etc.	-	-	-	-	-	-	-
D. Components which are including credit risk except financial statement	-	-	-	-	-	-	-

Türkiye Petrol Rafinerileri A.Ş.

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

28. Financial instruments and financial risk management (Continued))

Credit risk: (Continued)

31 December 2020	Receivables		Bank deposits	Derivative instruments	Other Trade receivables
	Trade receivables	Other Receivables			
Overdue (1-30 days)	150,374	-	-	-	-
Overdue (1-3 months)	22,675	-	-	-	-
Overdue (3-12 months)	11,475	-	-	-	-
Overdue (1-5 years)	5,057	-	-	-	-
Overdue (5+ years)	-	-	-	-	-

31 December 2019	Receivables		Bank deposits	Derivative instruments	Other Trade receivables
	Trade receivables	Other Receivables			
Overdue (1-30 days)	59,438	-	-	-	-
Overdue (1-3 months)	31,732	-	-	-	-
Overdue (3-12 months)	23,991	-	-	-	-
Overdue (1-5 years)	2,506	-	-	-	-
Overdue (5+ years)	-	-	-	-	-

During the impairment test of financial assets, the Group has considered the indicators regarding uncollectibility of receivables that are due. The Group has guarantees received amounting to TRY89,116 thousand (31 December 2019: TRY114,531 thousand) for trade receivables overdue but not impaired, Major part of receivables without guarantees are from government entities which regularly made sales, any collection risk is not projected.

The credit quality of trade receivables that are neither past due nor impaired

The Group categorizes the details of credit quality of trade receivables that are neither past due nor impaired or receivables whose conditions are examined under four groups. The details of credit quality of such trade receivables as at 31 December 2020 and 31 December 2019 are as follows:

	31 December 2020	31 December 2019
Group 1	-	241
Group 2	589,771	1,987,149
Group 3	779,043	2,453,724
Group 4	172,740	229,125
Total	1,541,554	4,670,239

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

28. Financial instruments and financial risk management (Continued))

Credit risk: (Continued)

Group 1 - New customers (less than three months)

Group 2 - State owned enterprises

Group 3 - Existing customers with no payment defaults in previous periods (have been customers by more than three months)

Group 4 - Customers with previous record of collection delays but from which all receivables due are collected (Excluding Group 1 and 2)

Market risk:

Tüpraş identifies commodity price, interest rate and currency risk as major components of market risk, Foreign exchange and interest risk are evaluated separately based on portfolio and product.

Commodity price risk

The Company is exposed to effects of fluctuation in oil prices related to its crude oil inventory held for production, For the elimination of commodity price risk, the management regularly reviews the amount of stocks.

Sales prices' of Tüpraş's products, are determined based on Mediterranean product prices, which is described as the "closest accessible free market formation in the world" by the Turkish Petroleum Market Law N, 5015, and USD selling rates. Within the framework of legal definitions, changes of prices in Mediterranean petroleum products market and changes in USD exchange rate are assessed daily by the management and the new selling price based on these two factors is updated when it differs significantly upwards or downwards from the current sales price.

Since instability in crude oil prices may cause unwanted and unexpected fluctuations in net profit and cash flows, the Company has constituted hedging policy in order to eliminate this risk, Within this framework, short and long term hedging transactions are made by using various derivative instruments (Note 17).

Product crack risk

Besides the fluctuations in crude oil prices, in order to eliminate fluctuation risk in product prices profit margins of the products (crack) can be fixed by using various derivative instruments (hedging). Therefore, a hedging policy has been created by comparing historical price levels and by hedging a certain percentage of the total sales volume at certain crack levels (Note 17).

Türkiye Petrol Rafinerileri A.Ş.

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

28. Financial instruments and financial risk management (Continued)

Interest rate risk

The Group is exposed to foreign exchange risk due to operations in foreign currency. These risks are managed by analysis of the foreign currency monetary assets and liabilities in the consolidated financial statements, by a comprehensive risk tracking system which includes natural hedging and similar practices..

The table below summarizes the net balance sheet foreign currency position risk and components that are managed within the risk tracking system of the Group as at 31 December 2020 and 31 December 2019:

	31 December 2020	31 December 2019
Financial instruments with fixed interest rate		
Financial assets		
Time deposits	19,673,367	10,644,054
Financial liabilities	20,003,939	11,162,541
Financial instruments with floating interest rate		
Financial liabilities ⁽¹⁾	9,241,129	7,913,253

⁽¹⁾ As of 31 December 2020, there is interest rate swap and cross currency interest rate swap transactions for loans with floating interest rate amounting to USD 365,647 thousand (31 December 2019: USD519,742 thousand) and EUR 61,157 thousand (31 December 2019: EUR174,614). (Note 17).

As at 31 December 2020, had the interest rate for borrowings denominated in USD strengthened by 100 base points (1%), with all other variables held constant, profit before tax would be TRY9,128 thousand lower/higher (31 December 2019: TRY8,731thousand). As at 31 December 2020, had the interest rate for borrowings denominated in EURO strengthened/weakened by 100 base points (1%), with all other variables held constant, profit before tax would not be changed (31 December 2019: TRY5 thousand). As at 31 December 2020, had the interest rate for borrowings denominated in TRY strengthened/weakened by 100 base points (1%), with all other variables held constant, profit before tax would be TRY1,344 thousand lower/higher (31 December 2019: None).

Expected repricing and maturity dates do not differ from the contract dates excluding borrowings; therefore no additional table is presented.

The maturity groupings of borrowings at 31 December 2020 and 2019 based on their contractual repricing dates are disclosed in Note 5.

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

28. Financial instruments and financial risk management (Continued)

Foreign exchange risk

The Group is exposed to foreign exchange risk due to operations in foreign currency. These risks are managed by analysis of the foreign currency monetary assets and liabilities in the consolidated financial statements, by a comprehensive risk tracking system which includes natural hedging and similar practices.

The table below summarizes the net balance sheet foreign currency position risk and components that are managed within the risk tracking system of the Group as at 31 December 2020 and 31 December 2019:

	31 December 2020		31 December 2019	
	TRY	USD ^(*)	TRY	USD ^(*)
Monetary assets	1,173,619	159,883	1,538,616	259,018
Monetary liabilities	(29,337,009)	(3,996,595)	(27,315,520)	(4,598,418)
Monetary assets/(liabilities)				
foreign currency position	(28,163,390)	(3,836,712)	(25,776,904)	(4,339,400)
Non-monetary assets	105,732	14,404	190,704	32,104
Net foreign currency position of derivative financial instruments	16,095,327	2,192,674	11,446,439	1,926,945
Net foreign currency asset/(liability) position	(11,962,331)	(1,629,634)	(14,139,761)	(2,380,351)
Cash flow hedging ^(**)	4,360,123	593,982	4,828,054	812,776
Net foreign currency position after cash flow hedging	(7,602,208)	(1,035,652)	(9,311,707)	(1,567,575)
Inventory in natural hedge scope ^(***)	7,220,776	983,690	9,129,592	1,536,917
Net foreign currency position after cash flow hedging and natural hedge	(381,432)	(51,962)	(182,115)	(30,658)

^(*) Dollar equivalent amounts are determined through dividing total TRY equivalent positions to exchange rate of dollar as at balance sheet date.

^(**) The Group uses investment loans amounting to USD593,982 thousand, which is equivalent to TRY4,360,123 thousand (USD812,776 thousand/TRY4,828,054 thousand in 31 December 2019) as prevention against USD/TRY spot foreign exchange risk of USD denominated export revenue, which is highly probable to be realized. Based on the outcome of effectiveness test performed on related process, the Group has considered that the process is fully effective and therefore applied cash flow hedge accounting. As of 31 December 2020, TRY2,736,854 thousand of (31 December 2019: TRY2,567,257) foreign exchange loss that arose from investment loans is classified under equity "Cash flow hedge gains (losses)" which has no effect on current year income statement. As of 31 December 2020, the foreign exchange loss amounting to TRY971,713 thousand corresponding to the export income of investment loans denominated in USD has been transferred to the foreign exchange loss in the income statement from "Cash flow hedge gains (losses)" account under equity. Moreover, as of 31 December 2020, foreign exchange loss of these loans in 2020 amounting to TRY1,141,310 were added to the "Cash flow hedge gains (losses)" account under equity.

^(***) The Group manages its foreign currency risk arising from foreign currency denominated financial liabilities and trade payables by regularly considering and reflecting the foreign exchange rate changes in the determination of petroleum product prices. As at 31 December 2020, the Group has crude oil and petroleum products inventories amounting to TRY7,220,776 thousand (31 December 2019: TRY9,129,592 thousand).

Türkiye Petrol Rafinerileri A.Ş.

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

28. Financial instruments and financial risk management (Continued)

Foreign exchange position table										
	TRY equivalent (In terms of functional currency)	31 December 2020				TRY equivalent (In terms of functional currency)	31 December 2019			
		USD	EUR	GBP	Other		USD	EUR	GBP	Other
Trade receivables	358,951	45,743	2,568	1	40	274,884	46,183	65	2	103
Monetary financial assets (including cash, banks)	814,668	105,636	3,962	357	-	1,256,253	205,064	4,950	671	-
Other	103,077	13,540	255	139	-	188,515	31,471	59	152	1
Current assets	1,276,696	164,919	6,785	497	40	1,719,652	282,718	5,073	824	104
Monetary financial assets	-	-	-	-	-	7,479	-	1,125	-	-
Other	2,655	-	-	267	-	2,189	-	-	282	-
Non-current assets	2,655	-	-	267	-	9,668	-	1,125	282	-
Total assets	1,279,351	164,919	6,785	764	40	1,729,320	282,718	6,197	1,106	104
Trade payables	13,026,055	1,759,069	12,127	74	3,642	12,590,524	2,103,634	12,966	13	8,185
Financial liabilities	3,676,865	424,446	61,982	291	-	4,384,159	608,682	115,222	279	-
Other monetary liabilities	379,918	50,265	36	1,068	-	297,645	48,523	85	1,137	-
Current liabilities	17,082,838	2,233,780	74,145	1,433	3,642	17,272,328	2,760,839	128,273	1,429	8,185
Financial liabilities	12,208,681	1,653,846	6,941	613	-	10,019,505	1,608,806	68,542	904	-
Other monetary liabilities	45,490	6,197	-	-	-	23,687	3,949	34	-	-
Non-current liabilities	12,254,171	1,660,043	6,941	613	-	10,043,192	1,612,755	68,576	904	-
Total liabilities	29,337,009	3,893,823	81,086	2,046	3,642	27,315,520	4,373,594	196,850	2,334	8,185
Net asset/(liability) position of off-balance sheet foreign currency derivatives	16,095,327	2,117,625	61,157	-	-	11,446,439	1,731,449	174,614	-	-
Total amount of off-balance sheet derivative financial assets	17,901,631	2,363,699	61,157	-	-	11,561,817	1,750,872	174,614	-	-
Total amount of off-balance sheet derivative financial liabilities	(1,806,304)	(246,074)	-	-	-	(115,378)	(19,423)	-	-	-
Net foreign currency asset/(liability) position	(11,962,331)	(1,611,279)	(13,144)	(1,282)	(3,602)	(14,139,761)	(2,359,427)	(16,039)	(1,228)	(8,081)
Cash flow hedging	4,360,123	593,982	-	-	-	4,828,054	812,776	-	-	-
Net foreign currency position after cash flow hedging	(7,602,208)	(1,017,297)	(13,144)	(1,282)	(3,602)	(9,311,707)	(1,546,651)	(16,039)	(1,228)	(8,081)
Net monetary foreign currency asset/(liability) position	(28,163,390)	(3,742,444)	(74,556)	(1,688)	(3,602)	(25,776,904)	(4,122,347)	(190,711)	(1,661)	(8,082)
Fair value of derivative instruments used for hedging	(238,142)	(32,442)	-	-	-	353,096	55,083	3,893	-	-

As at 31 December 2020, the Group has TRY381,432 thousand as net foreign currency deficit after natural hedging (31 December 2019: TRY182,115 thousand net foreign currency deficit).

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

28. Financial instruments and financial risk management (Continued)

The table below summarizes the effect of foreign currency rate changes on net balance sheet foreign currency position of the Group as at 31 December 2020 and 31 December 2019.

Statement of foreign currency risk sensitivity				
31 December 2020				
	Profit/Loss		Equity	
	Appreciation of foreign currency	Depreciation of foreign currency	Appreciation of foreign currency	Depreciation of foreign currency
10% change in USD rate:				
USD net assets/liabilities	(2,747,141)	2,747,141	(420,058)	420,058
Amount hedged for USD risk (-)	1,974,501	(1,974,501)	-	-
USD net effect	(772,640)	772,640	(420,058)	420,058
10% change in EUR rate				
Euro net assets/liabilities	(67,159)	67,159	-	-
Amount hedged for Euro risk (-)	55,090	(55,090)	-	-
EUR net effect	(12,069)	12,069	-	-
TOTAL	(784,709)	784,709	(420,058)	420,058

Türkiye Petrol Rafinerileri A.Ş.

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

28. Financial instruments and financial risk management (Continued)

31 December 2019				
	Profit/Loss		Equity	
	Appreciation of foreign currency	Depreciation of foreign currency	Appreciation of foreign currency	Depreciation of foreign currency
10% change in USD rate:				
USD net assets/liabilities	(2,448,756)	2,448,756	(461,711)	461,711
Amount hedged for USD risk (-)	1,496,218	(1,496,218)	-	-
USD net effect	(952,538)	952,538	(461,711)	461,711
10% change in EUR rate:				
Euro net assets/liabilities	(126,834)	126,834	-	-
Amount hedged for Euro risk (-)	116,129	(116,129)	-	-
EUR net effect	(10,705)	10,705	-	-
TOTAL	(963,243)	963,243	(461,711)	461,711

The Group accounted investment loans in scope of cash flow hedge accounting and foreign exchange income/expense arising from these loans are recognised in equity. 10% increase and decrease effect of foreign exchange rates are calculated with the same method and the calculated foreign exchange gains/losses are presented as hedged portion in the foreign exchange sensitivity table. Furthermore, the hedged portion of foreign exchange gains/losses via forwards and cross currency swap transactions is classified as the amount hedged against US dollar in the statement of exchange rate sensitivity analysis.

Export and import

	1 January - 31 December 2020	1 January - 31 December 2019
Export		
USD (equivalent of thousand TRY)	13,583,940	20,112,369
Total	13,583,940	20,112,369
Import		
USD (equivalent of thousand TRY)	47,661,580	70,681,358
Total	47,661,580	70,681,358

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

28. Financial instruments and financial risk management (Continued)

Capital risk management

The Group's objectives when managing capital are to safeguard the Group's ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders and to maintain an optimal capital structure to reduce the cost of capital.

In order to maintain or adjust the capital structure, the Group may adjust the amount of dividends paid to shareholders, issue new shares or sell assets to reduce debt. The gearing ratios as at 31 December 2020 and 31 December 2019 are as follows:

	31 December 2020	31 December 2019
Total financial liabilities (Note 5)	29,245,068	19,075,794
Less: Cash and cash equivalents (Note 4)	(17,621,288)	(8,790,761)
Net financial liabilities	11,623,780	10,285,033
Total shareholders' equity	11,672,525	13,136,540
Total capital invested	23,296,305	23,421,573
Gearing ratio	49.90%	43.91%

Fair value of financial instruments

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The estimated fair values of financial instruments have been determined by the Group, using available market information and appropriate valuation methodologies. However, judgment is necessarily required to interpret market data to estimate the fair value. Accordingly, the estimates presented herein are not necessarily indicative of the amounts the Group could realise in a current market exchange.

Financial liabilities

The fair values of short-term financial liabilities and other financial liabilities are estimated to be their fair values since they are short term. The fair values of long-term bank borrowings with variable interest are considered to approximate their respective carrying values, since the initial rates applied to bank borrowings are updated periodically by the lender to reflect active market price quotations.

Fair value hierarchy table:

The Group classifies the fair value measurement of each class of financial instruments according to the source, using the three-level hierarchy, as follows:

Level 1: Market price valuation techniques for the determined financial instruments traded in markets (unadjusted)

Level 2: Other valuation techniques includes direct or indirect observable inputs

Level 3: Valuation techniques does not contains observable market inputs

Türkiye Petrol Rafinerileri A.Ş.

Notes To The Consolidated Financial Statements For The Year Ended 31 December 2020

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

28. Financial instruments and financial risk management (Continued)

Fair value hierarchy table as at 31 December 2020 is as follows:

Financial assets at fair value in statement of financial position	Level 1	Level 2	Level 3
Derivative financial assets	-	468,012	.-
Financial liabilities at fair value in statement of financial position			
Derivative financial liabilities	-	808,318	-

Fair value hierarchy table as at 31 December 2019 is as follows:

Financial assets at fair value in statement of financial position	Level 1	Level 2	Level 3
Derivative financial assets	-	402,733	.-
Financial liabilities at fair value in statement of financial position			
Derivative financial liabilities	-	111,197	-

29. Government grants

Government incentives and aids that the Group has are as follows:

- 100% customs duty exemption for imported machinery and equipment,
- VAT exemption for investment goods procured domestically and abroad,
- Incentives in the scope of research and development law (100% Corporate Tax exemption, Social Security Institution incentives, Stamp tax incentive, etc.),
- Cash supports received from Teydeb in return for research and development expenses,
- Discounted corporate tax incentive,
- Insurance premium employer share support,
- Corporate tax incentive within the scope of investment allowance exemption,
- Insurance premium employer's share, employment agency, minimum wage and trainee education supports
- Real estate tax incentive
- Interest support.

30. Subsequent events

On 22 January 2020, Tüpraş issued bonds with a nominal value of TRY290 million, maturity of 728 days, coupon payments every 3 months, principal and coupon payments at the end of maturity and an additional return of 140 bps over the TLREF reference rate.

On 3 February 2020, Tüpraş issued bonds with a nominal value of 1,100 million TL, maturity of 728 days, coupon payments every 3 months, principal and coupon payments at the end of maturity, with an additional return of 140 bps over the TLREF reference rate.

DECLARATION FOR INDEPENDENCY

I hereby declare that I am candidate for independent board membership on the Board of Directors of Türkiye Petrol Rafinerileri A.Ş. ("Company") under related regulations, Articles of Association of the Company and the criteria stated in the Capital Markets Board's Communiqué on Corporate Governance. In that regard I also confirm that;

- a) In the last five years, I, my spouse or my up to the second degree blood or affinity relatives is not or has not been; employed by as a key management personnel; has not had shareholding exceeding 5% directly or indirectly; or has not been involved in any material business dealings with the Company, its subsidiaries and affiliates, or shareholders controlling the Company or having material effect over the Company and all entities controlled by those shareholders,
- b) In the last five years, I am not or have not been employed by as an executive having significant duties and responsibilities or have not been a member of the board or did not have shareholding exceeding 5% of an entity which has had a contractual relationship with the Company for a material business transaction including audit (including tax audit, legal audit, and internal audit) rating or consulting services during the terms in which the goods or services were provided,
- c) My CV indicates that I have skills, knowledge and expertise relevant to the Company's business and extensive experience to fulfill my duties as an independent board member,
- d) After my election I will not work full time in a Turkish governmental or public institution, except for the faculty membership under relevant regulations,
- e) I am deemed to be resident in Turkey according to Income Tax Law No. 193 dated 31.12.1960,
- f) I am capable to contribute positively to the operations of the Company, to maintain my objectivity in conflicts of interests between the Company and the shareholders, to have strong ethical standards, professional reputation and experience to freely take decisions by considering the rights of the stakeholders,
- g) I will dedicate enough time to follow up the activities of the Company and for the duly fulfillment of my responsibilities,
- h) I have not been on the board of the Company for more than six years within last ten years,
- i) I am not serving as an independent board member in neither more than 3 corporations controlled by the company or its controlling shareholders nor in total more than 5 corporations listed in Borsa İstanbul,
- j) I am not registered in the name of any legal entity elected as a board member.

[Signature]

Ayşe Canan Ediboğlu

DECLARATION FOR INDEPENDENCY

I hereby declare that I am candidate for independent board membership on the Board of Directors of Türkiye Petrol Rafinerileri A.Ş. ("Company") under related regulations, Articles of Association of the Company and the criteria stated in the Capital Markets Board's Communiqué on Corporate Governance. In that regard I also confirm that;

- a) In the last five years, I, my spouse or my up to the second degree blood or affinity relatives is not or has not been; employed by as a key management personnel; has not had shareholding exceeding 5% directly or indirectly; or has not been involved in any material business dealings with the Company, its subsidiaries and affiliates, or shareholders controlling the Company or having material effect over the Company and all entities controlled by those shareholders,
- b) In the last five years, I am not or have not been employed by as an executive having significant duties and responsibilities or have not been a member of the board or did not have shareholding exceeding 5% of an entity which has had a contractual relationship with the Company for a material business transaction including audit (including tax audit, legal audit, and internal audit) rating or consulting services during the terms in which the goods or services were provided,
- c) My CV indicates that I have skills, knowledge and expertise relevant to the Company's business and extensive experience to fulfill my duties as an independent board member,
- d) After my election I will not work full time in a Turkish governmental or public institution, except for the faculty membership under relevant regulations,

e) I am deemed to be resident in Turkey according to Income Tax Law No. 193 dated 31.12.1960,

f) I am capable to contribute positively to the operations of the Company, to maintain my objectivity in conflicts of interests between the Company and the shareholders, to have strong ethical standards, professional reputation and experience to freely take decisions by considering the rights of the stakeholders,

g) I will dedicate enough time to follow up the activities of the Company and for the duly fulfillment of my responsibilities,

h) I have not been on the board of the Company for more than six years within last ten years,

i) I am not serving as an independent board member in neither more than 3 corporations controlled by the company or its controlling shareholders nor in total more than 5 corporations listed in Borsa İstanbul,

j) I am not registered in the name of any legal entity elected as a board member.

[Signature]

Kamil Ömer Bozer

DECLARATION FOR INDEPENDENCY

I hereby declare that I am candidate for independent board membership on the Board of Directors of Türkiye Petrol Rafinerileri A.Ş. ("Company") under related regulations, Articles of Association of the Company and the criteria stated in the Capital Markets Board's Communiqué on Corporate Governance. In that regard I also confirm that;

- a) In the last five years, I, my spouse or my up to the second degree blood or affinity relatives is not or has not been; employed by as a key management personnel; has not had shareholding exceeding 5% directly or indirectly; or has not been involved in any material business dealings with the Company, its subsidiaries and affiliates, or shareholders controlling the Company or having material effect over the Company and all entities controlled by those shareholders,
- b) In the last five years, I am not or have not been employed by as an executive having significant duties and responsibilities or have not been a member of the board or did not have shareholding exceeding 5% of an entity which has had a contractual relationship with the Company for a material business transaction including audit (including tax audit, legal audit, and internal audit) rating or consulting services during the terms in which the goods or services were provided,
- c) My CV indicates that I have skills, knowledge and expertise relevant to the Company's business and extensive experience to fulfill my duties as an independent board member,
- d) After my election I will not work full time in a Turkish governmental or public institution, except for the faculty membership under relevant regulations,
- e) I am deemed to be resident in Turkey according to Income Tax Law No. 193 dated 31.12.1960,
- f) I am capable to contribute positively to the operations of the Company, to maintain my objectivity in conflicts of interests between the Company and the shareholders, to have strong ethical standards, professional reputation and experience to freely take decisions by considering the rights of the stakeholders,
- g) I will dedicate enough time to follow up the activities of the Company and for the duly fulfillment of my responsibilities,
- h) I have not been on the board of the Company for more than six years within last ten years,
- i) I am not serving as an independent board member in neither more than 3 corporations controlled by the company or its controlling shareholders nor in total more than 5 corporations listed in Borsa İstanbul,
- j) I am not registered in the name of any legal entity elected as a board member.

[Signature]

MUHARREM HILMI KAYHAN

DECLARATION FOR INDEPENDENCY

I hereby declare that I stand for serving as an “independent member” on the Board of Directors of Türkiye Petrol Rafinerileri A.Ş. (“the Company”) under the applicable legislation, Articles of Association of the Company and the criteria specified in the Corporate Governance Communiqué of the Capital Markets Board of Turkey, except for the criteria of “qualifying as a Turkish resident under the Income Tax Law”. In that regard I also declare as follows:

- a) In the last five years, I, my spouse or my up to the second degree blood or affinity relatives is not or has not been; employed by as a key management personnel; has not had shareholding exceeding 5% directly or indirectly; or has not been involved in any material business dealings with the Company, its subsidiaries and affiliates, or shareholders controlling the Company or having material effect over the Company and all entities controlled by those shareholders,
- b) In the last five years, I am not or have not been employed by as an executive having significant duties and responsibilities or have not been a member of the board or did not have shareholding exceeding 5% of an entity which has had a contractual relationship with the Company for a material business transaction including audit (including tax audit, legal audit, and internal audit) rating or consulting services during the terms in which the goods or services were provided,
- c) My CV indicates that I have skills, knowledge and expertise relevant to the Company's business and extensive experience to fulfill my duties as an independent board member,
- d) After my election I will not work full time in a Turkish governmental or public institution, except for the faculty membership under relevant regulations,
- e) I am capable to contribute positively to the operations of the Company, to maintain my objectivity in conflicts of interests between the Company and the shareholders, to have strong ethical standards, professional reputation and experience to freely take decisions by considering the rights of the stakeholders,
- f) I will dedicate enough time to follow up the activities of the Company and for the duly fulfillment of my responsibilities,
- g) I have not been on the board of the Company for more than six years within last ten years,
- h) I am not serving as an independent board member in neither more than 3 corporations controlled by the company or its controlling shareholders nor in total more than 5 corporations listed in Borsa İstanbul,
- i) I am not registered in the name of any legal entity elected as a board member.

[Signature]

TUFAN ERGINBILGİÇ

CORPORATE GOVERNANCE COMPLIANCE REPORT

CORPORATE GOVERNANCE COMPLIANCE REPORT

	Compliance Status					Explanation
	Yes	Partial	No	Exempted	Not Applicable	
1.1. FACILITATING THE EXERCISE OF SHAREHOLDER RIGHTS						
1.1.2- Up-to-date information and disclosures which may affect the exercise of shareholder rights are available to investors at the corporate website.	X					
1.2. RIGHT TO OBTAIN AND REVIEW INFORMATION	X					
1.2.1 - Management did not enter into any transaction that would complicate the conduct of special audit.	X					
1.3. GENERAL ASSEMBLY	X					
1.3.2 - The company ensures the clarity of the General Assembly agenda, and that an item on the agenda does not cover multiple topics.	X					
1.3.7- Insiders with privileged information have informed the board of directors about transactions conducted on their behalf within the scope of the company's activities in order for these transactions to be presented at the General Shareholders' Meeting.					X	There was no transaction notice in this manner.
1.3.8 - Members of the board of directors who are concerned with specific agenda items, auditors, and other related persons, as well as the officers who are responsible for the preparation of the financial statements were present at the General Shareholders' Meeting.	X					
1.3.10 - The agenda of the General Shareholders' Meeting included a separate item detailing the amounts and beneficiaries of all donations and contributions.		X				The agenda of the General Shareholders' Meeting included a separate item for the total amount of the donations and contributions made and major donations were explained in the general assembly information document. The balance not detailed in the information document consists of various donations to various institutions and organizations, each one in an amount below TL 150 thousand and not constituting material information for investors. Donations below the said amount are not followed up by our investors, and it is planned to continue to adhere to this materiality limit also in future disclosures.

	Compliance Status					Explanation
	Yes	Partial	No	Exempted	Not Applicable	
1.3.11 - The General Shareholders' Meeting was held open to the public, including the stakeholders, without having the right to speak.	X					
1.4. VOTING RIGHTS						
1.4.1 - There is no restriction preventing shareholders from exercising their shareholder rights.	X					
1.4.2 - The company does not have shares that carry privileged voting rights.			X			The issued capital of Tüpraş is divided in to two groups as (A) and (C); all of them being registered shares. The shareholders attending the ordinary and extraordinary General Assembly meetings use their votes pro rata with the nominal value of their shares. While electing the Board of Directors, one of the members has to be elected out of the nominees nominated by the Group C share. The issues specified in Article 10 of Company's Articles of Association depends on the affirmative vote of the Group C shareholder owned by the Privatization Administration in order to take Board of Directors and General Assembly decisions.
1.4.3-The company withholds from exercising its voting rights at the General Shareholders' Meeting of any company with which it has cross-ownership, in case such cross-ownership provides management control.					X	Tüpraş does not have a cross-ownership relationship that provides management control.
1.5. MINORITY RIGHTS						
1.5.1 - The company pays maximum diligence to the exercise of minority rights.	X					
1.5.2 - The Articles of Association extend the use of minority rights to those who own less than one twentieth of the outstanding shares, and expand the scope of the minority rights.			X			The Articles of Association do not grant minority rights to those who hold less than one twentieth of the capital, and in parallel to the common practices, rights are granted to the minority within the general legislative framework. There was no demand from investors regarding this issue. General best practices are monitored; no changes are planned in this regard in the near future.

CORPORATE GOVERNANCE COMPLIANCE REPORT

	Compliance Status					Explanation
	Yes	Partial	No	Exempted	Not Applicable	
1.6. DIVIDEND RIGHT						
1.6.1 - The dividend policy approved by the General Shareholders' Meeting is posted on the company website.	X					
1.6.2 - The dividend distribution policy comprises the minimum information to ensure that the shareholders can have an opinion on the procedure and principles of dividend distributions in the future.	X					
1.6.3 - The reasons for retaining earnings, and their allocations, are stated in the relevant agenda item.	X					An explanation regarding the non-profit distribution is given in the relevant agenda item.
1.6.4 - The board reviewed whether the dividend policy balances the benefits of the shareholders and those of the company.	X					
1.7. TRANSFER OF SHARES						
1.7.1 - There are no restrictions preventing shares from being transferred.		X				The Capital Market Board regulations shall be applied in connection with the transfer of the registered shares of the Company transacted in the stock exchange. The Group C share may be transferred to another Turkish public body having the same powers as the powers granted by the law no. 4046 to the Prime Ministry Privatization Administration Chairmanship.
2.1. CORPORATE WEBSITE						
2.1.1. - The company website includes all elements listed in Corporate Governance Principle 2.1.1.	X					
2.1.2 - The shareholding structure (names, privileges, number and ratio of shares, and beneficial owners of more than 5% of the issued share capital) is updated on the website at least every 6 months.	X					
2.1.4 - The company website is prepared in other selected foreign languages, in a way to present exactly the same information with the Turkish content.	X					

	Compliance Status					Explanation
	Yes	Partial	No	Exempted	Not Applicable	
2.2. ANNUAL REPORT						
2.2.1 - The board of directors ensures that the annual report represents a true and complete view of the company's activities.	X					
2.2.2 - The annual report includes all elements listed in Corporate Governance Principle 2.2.2.	X					The annual report does not contain any disclosures about this topic since there were no changes in the regulatory framework in the nature to materially affect the Company's operations, nor were there any conflicts of interest with service providers, such as rating companies.
3.1. CORPORATION'S POLICY ON STAKEHOLDERS						
3.1.1- The rights of the stakeholders are protected pursuant to the relevant regulations, contracts and within the framework of bona fides principles.	X					
3.1.3 - Policies or procedures addressing stakeholders' rights are published on the company's website.	X					
3.1.4 - A whistleblowing program is in place for reporting legal and ethical issues.	X					
3.1.5 - The company addresses conflicts of interest among stakeholders in a balanced manner.	X					
3.2. SUPPORTING THE PARTICIPATION OF THE STAKEHOLDERS IN THE CORPORATION'S MANAGEMENT						
3.2.1 - The Articles of Association, or the internal regulations (terms of reference/manuals), regulate the participation of employees in management.	X					
3.2.2 - Surveys/other research techniques, consultation, interviews, observation method etc. were conducted to obtain opinions from stakeholders on decisions that significantly affect them.	X					
3.3. HUMAN RESOURCES POLICY						
3.3.1 - The company has adopted an employment policy ensuring equal opportunities, and a succession plan for all key managerial positions.	X					
3.3.2 - Recruitment criteria are documented.	X					
3.3.3 - The company has a policy on human resources development, and organises trainings for employees.	X					

CORPORATE GOVERNANCE COMPLIANCE REPORT

	Compliance Status					Explanation
	Yes	Partial	No	Exempted	Not Applicable	
3.3.4 - Meetings have been organised to inform employees on the financial status of the company, remuneration, career planning, education and health.	X					
3.3.5 - Employees, or their representatives, were notified of decisions impacting them. The opinion of the related trade unions was also taken.	X					
3.3.6 - Job descriptions and performance criteria have been prepared for all employees, announced to them and taken into account to determine employee remuneration.	X					
3.3.7 - Measures (procedures, trainings, raising awareness, goals, monitoring, complaint mechanisms) have been taken to prevent discrimination, and to protect employees against any physical, mental, and emotional mistreatment.	X					
3.3.8 - The company ensures freedom of association and supports the right for collective bargaining.	X					
3.3.9 - A safe working environment for employees is maintained.	X					
3.4. RELATIONS WITH CUSTOMERS AND SUPPLIERS						
3.4.1 - The company measured its customer satisfaction, and operated to ensure full customer satisfaction.	X					
3.4.2 - Customers are notified of any delays in handling their requests.	X					
3.4.3 - The company complied with the quality standards with respect to its products and services.	X					
3.4.4 - The company has in place adequate controls to protect the confidentiality of sensitive information and business secrets of its customers and suppliers.	X					
3.5. ETHICAL RULES AND SOCIAL RESPONSIBILITY						
3.5.1 - The board of the corporation has adopted a code of ethics, disclosed on the corporate website.	X					

	Compliance Status					Explanation
	Yes	Partial	No	Exempted	Not Applicable	
3.5.2-The company has been mindful of its social responsibility and has adopted measures to prevent corruption and bribery.	X					
4.1. ROLE OF THE BOARD OF DIRECTORS						
4.1.1 - The board of directors has ensured strategy and risks do not threaten the long-term interests of the company, and that effective risk management is in place.	X					
4.1.2 - The agenda and minutes of board meetings indicate that the board of directors discussed and approved strategy, ensured resources were adequately allocated, and monitored company and management performance.	X					
4.2. ACTIVITIES OF THE BOARD OF DIRECTORS						
4.2.1-The board of directors documented its meetings and reported its activities to the shareholders.	X					
4.2.2 - Duties and authorities of the members of the board of directors are disclosed in the annual report.	X					
4.2.3-The board has ensured the company has an internal control framework adequate for its activities, size and complexity.	X					
4.2.4 - Information on the functioning and effectiveness of the internal control system is provided in the annual report.	X					
4.2.5 - The roles of the Chairman and Chief Executive Officer are separated and defined.	X					
4.2.7-The board of directors ensures that the Investor Relations department and the corporate governance committee work effectively. The board works closely with them when communicating and settling disputes with shareholders.	X					
4.2.8 - The company has subscribed to a Directors and Officers liability insurance covering more than 25% of the capital.	X					

CORPORATE GOVERNANCE COMPLIANCE REPORT

	Compliance Status					Explanation
	Yes	Partial	No	Exempted	Not Applicable	
4.3. STRUCTURE OF THE BOARD OF DIRECTORS						
4.3.9 - The board of directors has approved the policy on its own composition, setting a minimal target of 25% for female directors. The board annually evaluates its composition and nominates directors so as to be compliant with the policy.	X					
4.3.10 - At least one member of the audit committee has 5 years of experience in audit/ accounting and finance.	X					
4.4. BOARD MEETING PROCEDURES						
4.4.1-Each board member attended the majority of the board meetings in person.			X			During 2020, no physical meetings were held due to the Covid-19 pandemic; Board of Directors members were informed about the Company's performance and developments on a regular basis. However, all decisions were passed employing the circulation method.
4.4.2 - The board has formally approved a minimum time by which information and documents relevant to the agenda items should be supplied to all board members.			X			No such period of time has been defined; the time of information provision to board members is determined in view of the topics on the meeting agenda and also the process, and the members are informed reasonably in advance. While the Company sees no urgent need for defining such a period of time in view of the efficiency of the activities of the Board of Directors, it is targeted to consider the matter in the future.

	Compliance Status					Explanation
	Yes	Partial	No	Exempted	Not Applicable	
4.4.3 - The opinions of board members that could not attend the meeting, but did submit their opinion in written format, were presented to other members.					X	Although there is the possibility to present an opinion in such a case, there has not been any notification made by the BoD members who could not attend the meetings.
4.4.4 - Each member of the board has one vote.	X					<p>However, on the issues specified below depends on the affirmative vote of the Group C shareholder:</p> <p>a) Any changes to be made in the Company's Articles of Association that could affect the Board of Directors meetings and quorum and the rights related to the "Privileged Share" as well as the obligation of meeting the fuel requirements of the Turkish Armed Forces and the rights granted to the Privileged Share in connection with this obligation directly or indirectly.</p> <p>b) Since meeting the fuel requirements of the Turkish Armed Forces in the required quality, time and quantity with the established market prices and maintaining the capability of producing such fuels and providing and maintaining the transportation-related systems are of the essence; not meeting the fuel requirements of the Turkish Armed Forces in the required quality, time and quantity and above the established market prices.</p> <p>c) Any actions specified below that could restrict or obstruct the ability of meeting the fuel requirements of the Turkish Armed Forces:</p> <p>i) Closing or selling any of the refineries owned by the Company or restricting under any encumbrance or reducing its capacity by more than 10%, or</p> <p>ii) Division of the company or merger with another company.</p> <p>d) Resolutions related to the liquidation of the company</p>

CORPORATE GOVERNANCE COMPLIANCE REPORT

	Compliance Status					Explanation
	Yes	Partial	No	Exempted	Not Applicable	
4.4.5 - The board has a charter/written internal rules defining the meeting procedures of the board.			X			Although there have been consistently applied procedures in our Company for many years, there is no written internal regulations regarding the way Board of Directors Meetings are held.
4.4.6 - Board minutes document that all items on the agenda are discussed, and board resolutions include director's dissenting opinions if any.	X					
4.4.7-There are limits to external commitments of board members. Shareholders are informed of board members' external commitments at the General Shareholders' Meeting.		X				There are no restrictions for BoD Members on assuming other positions or duties outside the Company. Such a restriction is not deemed necessary as the business and sectoral experience of BoD Members makes a vital contribution to the BoD. CVs of the BoD Members are provided in the annual report.
4.5. BOARD COMMITTEES						
4.5.5 - Board members serve in only one of the Board's committees.			X			Members who serve on more than one committee facilitate communication and increase the opportunities for cooperation between committees handling related subjects. In view of the productive activities that are contributed to by the knowledge and experiences of Board members, the existing committee organizations are deemed to be efficient, and no need for changes are envisaged in the near future.
4.5.6 - Committees have invited persons to the meetings as deemed necessary to obtain their views.	X					
4.5.7 - If external consultancy services are used, the independence of the provider is stated in the annual report.					X	There was no consultancy service received for this purpose.

	Compliance Status					Explanation
	Yes	Partial	No	Exempted	Not Applicable	
4.5.8 - Minutes of all committee meetings are kept and reported to board members.	X					
4.6. FINANCIAL RIGHTS						
4.6.1-The board of directors has conducted a board performance evaluation to review whether it has discharged all its responsibilities effectively.	X					
4.6.4-The company did not extend any loans to its board directors or executives, nor extended their lending period or enhanced the amount of those loans, or improve conditions thereon, and did not extend loans under a personal credit title by third parties or provided guarantees such as surety in favour of them.	X					
4.6.5 - The individual remuneration of board members and executives is disclosed in the annual report.			X			Remuneration of the Members of the Board of Directors and managers who have administrative responsibilities is disclosed collectively in parallel to the common practice in the footnotes of our financial statements and at the General Assembly meetings. Market practices are closely monitored with respect to this topic that is deemed important in terms of privacy of personal data, and it is planned to act in parallel with the common practice.

CORPORATE GOVERNANCE INFORMATION FORM (CGIF)

1. SHAREHOLDERS	
1.1. Facilitating the Exercise of Shareholders Rights	
The number of investor meetings (conference, seminar/etc.) organised by the company during the year	17 Conferences and roadshows are attended. Meetings held with approximately 550 fund managers and analyst
1.2. Right to Obtain and Examine Information	
The number of special audit request(s)	-
The number of special audit requests that were accepted at the General Shareholders' Meeting	-
1.3. General Assembly	
Link to the PDP announcement that demonstrates the information requested by Principle 1.3.1. (a-d)	https://www.kap.org.tr/en/Bildirim/823498
Whether the company provides materials for the General Shareholders' Meeting in English and Turkish at the same time	Yes, English and Turkish materials are provided at the same time
The links to the PDP announcements associated with the transactions that are not approved by the majority of independent directors or by unanimous votes of present board members in the context of Principle 1.3.9	There are no such transactions
The links to the PDP announcements associated with related party transactions in the context of Article 9 of the Communique on Corporate Governance (II-17.1)	There are no such transactions
The links to the PDP announcements associated with common and continuous transactions in the context of Article 10 of the Communique on Corporate Governance (II-17.1)	https://www.kap.org.tr/en/Bildirim/821025
The name of the section on the corporate website that demonstrates the donation policy of the company	Investor Relations / Corporate Governance / Policies
The relevant link to the PDP with minute of the General Shareholders' Meeting where the donation policy has been approved	https://www.kap.org.tr/en/Bildirim/520114
The number of the provisions of the articles of association that discuss the participation of stakeholders to the General Shareholders' Meeting	Article 14 -a
Identified stakeholder groups that participated in the General Shareholders' Meeting, if any	The General Assembly meeting was held open to the public, including stakeholders and the media without seeking a requirement of the right to speak.
1.4. Voting Rights	
Whether the shares of the company have differential voting rights	Yes
In case that there are voting privileges, indicate the owner and percentage of the voting majority of shares.	The issued capital is divided in to two groups as (A) and (C) and all of the shares are registered shares. The shareholders attending the ordinary and extraordinary General Assembly meetings use their votes pro rata with the nominal value of their shares. While electing the Board of Directors, 1 of the members has to be elected out of the nominees nominated by the Group C share. The issues specified in Article 10 of Company's Articles of Association depends on the affirmative vote of the Group C shareholder owned by the Privatization Administration in order to take Board of Directors and General Assembly decisions. Current shareholder structure is available in the annual report.
The percentage of ownership of the largest shareholder	51%

1. SHAREHOLDERS**1.5. Minority Rights**

Whether the scope of minority rights enlarged (in terms of content or the ratio) in the articles of the association

No

If yes, specify the relevant provision of the articles of association.

-

1.6. Dividend Right

The name of the section on the corporate website that describes the dividend distribution policy

[Investor Relations / Corporate Governance /Policies](#)

Minutes of the relevant agenda item in case the board of directors proposed to the general assembly not to distribute dividends, the reason for such proposal and information as to use of the dividend.

Financial statements for the accounting period 1 January - 31 December 2019, in compliance with the TFRS, prepared by the management of Turkish Petroleum Refineries Corporation, and audited by PwC Bağımsız Denetim ve Serbest Muhasebeci Mali Müşavirlik A.Ş. have been reviewed and upon review of the aforementioned financial statements and the records of Turkish Petroleum Refineries Corporation in accordance with Tax Procedural Law, net profit of TL 525,837,000.00 per the financial statements prepared in accordance with TFRS and net losses of TL 1,139,412,897.98 as per the records in accordance with the Tax Procedural Law have been noted and profit distribution proposal is prepared accordingly as explained below:

In accordance with the Capital Market Board Regulations, Article 18 of the Company's Articles of Association and within the framework of the Dividend Distribution Policy approved by the shareholders at the General Assembly, dated 31 March 2014;

<https://www.kap.org.tr/tr/Bildirim/833993>

In the Financial Statements prepared in accordance with the Tax Procedural Law records; due to a loss of TL 1,139,412,897.98 in the current year result, Dividends will not be distributed for the year 2019, and the current year loss of TL 1,139,412,897.98 in the financial statements prepared in accordance with the Tax Procedural Law is to be transferred to the retained earnings.

Transferring the net period profit of TL 525,837,000.00 attributable to equity holders of the parent which is formed according to the financial statements prepared in line with TFRS, to the retained earnings in the related financial statements,

The dividend distribution proposal is submitted to shareholders' approval and has been approved by a majority vote as a result of affirmative votes for TL 194,866,233.221 paid-in share capital against dissenting votes for TL 1 paid-in share capital.

PDP link to the related general shareholder meeting minutes in case the board of directors proposed to the general assembly not to distribute dividends

<https://www.kap.org.tr/en/Bildirim/833993>

General Assembly Meetings

General Meeting Date

1 April 2020

The number of information requests received by the company regarding the clarification of the agenda of the General Shareholders' Meeting

-

Shareholder participation rate to the General Shareholders' Meeting

77,82%

Percentage of shares directly present at the GSM

-

Percentage of shares represented by proxy

77,8%

Specify the name of the page of the corporate website that contains the General Shareholders' Meeting minutes, and also indicates for each resolution the voting levels for or against

[Investor Relations /General Assembly /Minutes of AGM](#)

Specify the name of the page of the corporate website that contains all questions asked in the general assembly meeting and all responses to them

[Investor Relations /General Assembly /Minutes of AGM](#)

The number of the relevant item or paragraph of General Shareholders' Meeting minutes in relation to related party transactions

-

The number of declarations by insiders received by the board of directors

-

The link to the related PDP general shareholder meeting notification

<https://www.kap.org.tr/tr/Bildirim/833993>

CORPORATE GOVERNANCE INFORMATION FORM (CGIF)

2. DISCLOSURE AND TRANSPARENCY	
2.1. Corporate Website	
Specify the name of the sections of the website providing the information requested by the Principle 2.1.1.	Investor Relations/Corporate Governance/Trade Registry Information, Shareholder Structure, Articles of Association, Policies Investor Relations/Material Disclosures Investor Relations/Financial Reports Investor Relations/Overview Annual Report, General Meeting Documents, Teleconference and Investor Presentations
If applicable, specify the name of the sections of the website providing the list of shareholders (ultimate beneficiaries) who directly or indirectly own more than 5% of the shares.	Investor Relations / Corporate Governance /Shareholder Structure
List of languages for which the website is available	Turkish and English
2.2. Annual Report	
The page numbers and/or name of the sections in the Annual Report that demonstrate the information requested by principle 2.2.2.	
a) The page numbers and/or name of the sections in the Annual Report that demonstrate the information on the duties of the members of the board of directors and executives conducted out of the company and declarations on independence of board members	General Assembly/Board of Directors Resumes
Corporate Governance /Declaration for Independency	Kurumsal Yönetim / Yönetim Kurulu Komitelerinin Çalışma Esasları ve Etkinliğine İlişkin Yönetim Kurulu Değerlendirmesi
b) The page numbers and/or name of the sections in the Annual Report that demonstrate the information on committees formed within the board structure	Corporate Governance / Evaluation of Operating Principles and Effectiveness of Board of Committees
c) The page numbers and/or name of the sections in the Annual Report that demonstrate the information on the number of board meetings in a year and the attendance of the members to these meetings	Corporate Governance / Principles Compliance Report / Activities of the Board of Directors and Board of Directors Committees
c) The page numbers and/or name of the sections in the Annual Report that demonstrate the information on amendments in the legislation which may significantly affect the activities of the corporation	Legal Disclosures
d) The page numbers and/or name of the sections in the Annual Report that demonstrate the information on significant lawsuits filed against the corporation and the possible results thereof	Legal Disclosures
e) The page numbers and/or name of the sections in the Annual Report that demonstrate the information on the conflicts of interest of the corporation among the institutions that it purchases services on matters such as investment consulting and rating and the measures taken by the corporation in order to avoid from these conflicts of interest	Legal Disclosures
f) The page numbers and/or name of the sections in the Annual Report that demonstrate the information on the cross ownership subsidiaries that the direct contribution to the capital exceeds 5%	Legal Disclosures
g) The page numbers and/or name of the sections in the Annual Report that demonstrate the information on social rights and professional training of the employees and activities of corporate social responsibility in respect of the corporate activities that arises social and environmental results	Human Resources / Corporate Responsibility Projects

3. STAKEHOLDERS**3.1. Corporation's Policy on Stakeholders**

The name of the section on the corporate website that demonstrates the employee remedy or severance policy

[Investor Relations / Corporate Governance /Policies](#)

The number of definitive convictions the company was subject to in relation to breach of employee rights

18

The position of the person responsible for the alert mechanism (i.e. whistleblowing mechanism)

Risk Management and Internal Control Manager

The contact detail of the company alert mechanism

Notification mechanism It can be reached from the "Communication" section of the Tüpraş corporate website on the main page.
<https://piy.tupras.com.tr/BildirimKayit.aspx>

3.2. Supporting the Participation of the Stakeholders in the Corporation's Management

Name of the section on the corporate website that demonstrates the internal regulation addressing the participation of employees on management bodies

[Investor Relations/Overview/Annual Report Sustainability/Report/Sustainability Report](#)
Internal regulations are not publicly available or accessible.

Corporate bodies where employees are actually represented

Our employees both in our unionized and non-unionized in management and share their opinions through various methods. Our colleagues' opinions are obtained unanimously through surveys and open-ended questions with annual Employee Commitment Survey. Through various communication meetings in Tüpraş, information on the Company is shared with employees and other stakeholders. Their questions and comments are also obtained during these meetings.

3.3. Human Resources Policy

The role of the board on developing and ensuring that the company has a succession plan for the key management positions

A succession plan is created for all key management positions. This Succession Plan is finalized by submitting the approval of the Chairman of the Board of Directors following the approval of the CEO.

The name of the section on the corporate website that demonstrates the human resource policy covering equal opportunities and hiring principles. Also provide a summary of relevant parts of the human resource policy.

Tüpraş assumes the responsibility to adopt attitudes and behaviors in compliance with Tüpraş Code of Ethics which is described in detail below, in all its operations and relationships, before all individuals and organizations which it has business relations with in Turkey and abroad, the society it operates in, its customers, suppliers, shareholders and employees. Tüpraş also commits itself to comply with Global Compact criteria adopted by Koç Holding and expand the adoption of these criteria by other parties, particularly in its industry. Personnel Guide which includes personnel recruitment criteria is available for all employees and qualifications required for each position are included in job postings. Moreover, equal opportunity in recruitment is highlighted in Ethical Code of Conduct.
https://tprstaticfilessa.blob.core.windows.net/assets/uploads/Tupras_Etik_Davranis_Kurallari.pdf

Whether the company provides an employee stock ownership program

There is no an employee stock ownership program.

The name of the section on the corporate website that demonstrates the human resource policy covering discrimination and mistreatments and the measures to prevent them. Also provide a summary of relevant parts of the human resource policy.

Decision was taken to ensure employees can appeal to Human Resources Department in case of any problems regarding discrimination and misconduct and this has been communicated to all employees. Ethics Board mechanism was established with the participation of Risk Management and Audit, Legal, Corporate Communications and Human Resources Departments and it's being actively operated.
[Annual Report /Human Resources](#)

The number of definitive convictions the company is subject to in relation to health and safety measures

0

CORPORATE GOVERNANCE INFORMATION FORM (CGIF)

3.5. Ethical Rules and Social Responsibility	
The name of the section on the corporate website that demonstrates the code of ethics	Sustainability/Ethical Rules
The name of the section on the company website that demonstrates the corporate social responsibility report. If such a report does not exist, provide the information about any measures taken on environmental, social and corporate governance issues.	http://www.tupras.com.tr/cr-report
Any measures combating any kind of corruption including embezzlement and bribery	http://www.tupras.com.tr/anti-corruption-policy Relevant principles are included in other Code of Ethical Conduct.
4. BOARD OF DIRECTORS-I	
4.2. Activity of the Board of Directors	
Date of the last board evaluation conducted	31.12.2020
Whether the board evaluation was externally facilitated	No
Whether all board members released from their duties at the GSM	Yes
Name(s) of the board member(s) with specific delegated duties and authorities, and descriptions of such duties	No delegation was given among the board members
Number of reports presented by internal auditors to the audit committee or any relevant committee to the board	Audit Committee is being briefed quarterly about audit activities performed, significant issues and existing legal cases.
Specify the name of the section or page number of the annual report that provides the summary of the review of the effectiveness of internal controls	Risk Management and the Activities of the Risk Management Committee/ G. Internal Control System and Internal Audit
Name of the Chairman	Mehmet Ömer Koç
Name of the CEO	İbrahim Yelmenoğlu
If the CEO and Chair functions are combined: provide the link to the relevant PDP announcement providing the rationale for such combined roles	-
Link to the PDP notification stating that any damage that may be caused by the members of the board of directors during the discharge of their duties is insured for an amount exceeding 25% of the company's capital	-
The name of the section on the corporate website that demonstrates current diversity policy targeting women directors	Investor Relations / Corporate Governance / Board Diversity Policy
The number and ratio of female directors within the Board of Directors	2 (%18)

Composition of Board of Directors

Name, Surname of Board Member	Whether Executive Director Or Not	Whether Independent Director Or Not	The First Election Date To Board	Link To PDP Notification That Includes The Independency Declaration	Whether the Independent Director Considered By The Nomination Committee	Whether She/ He is the Director Who Ceased to Satisfy The Independence or Not	Whether The Director Has At Least 5 Years' Experience On Audit, Accounting And/Or Finance Or Not
Ömer M. Koç	Non- executive	Not Independent Director	26.01.2006		Not considered	No	Yes
Ali Y. Koç	Non- executive	Not Independent Director	27.03.2009		Not considered	No	Yes
Rahmi M. Koç	Non- executive	Not Independent Director	04.06.2008		Not considered	No	Yes
Semahat S. Arsl	Non- executive	Not Independent Director	27.03.2009		Not considered	No	Yes
Levent Çakıroğlu	Non- executive	Not Independent Director	30.03.2015		Not considered	No	Yes
Erol Memioğlu	Non- executive	Not Independent Director	26.01.2006		Not considered	No	Yes
Yağız Eyüboğlu	Non- executive	Not Independent Director	04.04.2016		Not considered	No	Yes
Zafer Sönmez	Non- executive	Independent Director	20.03.2019		Considered	No	Yes
Muharrem Hilmi Kayhan	Non- executive	Independent Director	21.03.2018	https://www.kap.org.tr/tr/Bildirim/823498	Considered	No	Yes
Ayşe Canan Ediboğlu	Non- executive	Independent Director	21.03.2018		Considered	No	Yes
Kamil Ömer Bozer	Non- executive	Independent Director	21.03.2018		Considered	No	Yes

CORPORATE GOVERNANCE INFORMATION FORM (CGIF)

4. BOARD OF DIRECTORS-II

4.4. Meeting Procedures of the Board of Directors

Number of physical board meetings in the reporting period (meetings in person)	In 2020, the Board of Directors has not meet physically due to the pandemic. Members of the board of directors were regularly informed about the company's performance and developments, but all of the decisions were passed by hand.
Director average attendance rate at board meetings	100%
Whether the board uses an electronic portal to support its work or not	No
Number of minimum days ahead of the board meeting to provide information to directors, as per the board charter	There is no determination
The name of the section on the corporate website that demonstrates information about the board charter	There is no determination
Number of maximum external commitments for board members as per the policy covering the number of external duties held by directors	There is no restriction

4.5. Board Committees

Page numbers or section names of the annual report where information about the board committees are presented	Corporate Governance / Evaluation of Operating Principles and Effectiveness of Board of Committees
Link(s) to the PDP announcement(s) with the board committee charters	https://www.kap.org.tr/en/Bildirim/749716

Composition of Board Committees - I

Names Of The Board Committees	Name Of Committees Defined As "Other" In The First Column	Name-Surname of Committee Members	Whether Committee Chair Or Not	Whether Board Member Or Not
Audit Committee	-	Muharrem Hilmi Kayhan	Yes	Board member
		Kamil Ömer Bozer	No	Board member
Corporate Governance Committee	-	Muharrem Hilmi Kayhan	Yes	Board member
		Yağız Eyüboğlu	No	Board member
		Doğan Korkmaz	No	Not board member
Committee of Early Detection of Risk	-	Ayşe Canan Ediboğlu	Yes	Board member
		Erol Memioğlu	No	Board member

4. BOARD OF DIRECTORS-III**4.5. Board Committees-II**

Specify where the activities of the audit committee are presented in your annual report or website (Page number or section name in the annual report/website)

Corporate Governance / Evaluation of Operating Principles and Effectiveness of Board of Committees

Specify where the activities of the corporate governance committee are presented in your annual report or website (Page number or section name in the annual report/website)

Corporate Governance / Evaluation of Operating Principles and Effectiveness of Board of Committees

Specify where the activities of the nomination committee are presented in your annual report or website (Page number or section name in the annual report/website)

Corporate Governance / Evaluation of Operating Principles and Effectiveness of Board of Committees

Specify where the activities of the early detection of risk committee are presented in your annual report or website (Page number or section name in the annual report/website)

Corporate Governance / Evaluation of Operating Principles and Effectiveness of Board of Committees

Specify where the activities of the remuneration committee are presented in your annual report or website (Page number or section name in the annual report/website)

Corporate Governance / Evaluation of Operating Principles and Effectiveness of Board of Committees

4.6. Financial Rights

Specify where the operational and financial targets and their achievement are presented in your annual report (Page number or section name in the annual report)

Message From The Chairman

Specify the section of website where remuneration policy for executive and non-executive directors are presented.

[Investor Relations /Corporate Governance /Remuneration Policy](#)

Specify where the individual remuneration for board members and senior executives are presented in your annual report (Page number or section name in the annual report)

Financial Report Notes 27

Composition of Board Committees-II

Names Of The Board Committees	Name of committees defined as "Other" in the first column	The Percentage Of Non-executive Directors	The Percentage Of Independent Directors In The Committee	The Number Of Meetings Held In Person	The Number Of Reports On Its Activities Submitted To The Board
Audit Committee	-	100%	100%	7	6
Corporate Governance Committee	-	67%	33%	7	5
Committee of Early Detection of Risk	-	100%	50%	6	6

INDEX OF EXPLANATIONS REGARDING SUSTAINABILITY PRINCIPLES

Explanation of Principle	Annual Report Section, Page Number
A. General	
A1. Strategy, Policy ve Targets	
The Board of Directors determines ESG material issues, risks and opportunities and puts forward ESG policies accordingly. As far as the effective implementation of these policies; In-partnership directives, business procedures etc. can be developed. The Board of Directors takes decisions regarding these policies and	Sustainability at Tüpraş Page 100 Statement of Compliance with Sustainability Principles Page 152 -153
Designates the Partnership Strategy, appropriate to the ESG policies, risks and opportunities. Sets and discloses short and long-term targets in line with the partnership strategy and ESG policies.	Performance Indicators Page 132 Statement of Compliance with Sustainability Principles Page 152-153
A2. Implementation / Monitoring	
Determines and publicly discloses the committees / units responsible for the execution of ESG policies. The committee / unit in charge reports the activities carried out with respect to the policies to the Board of Directors at least once a year and in any case within the maximum periods specified for the public disclosure of the annual activity reports in the relevant regulations of the Board.	Sustainability at Tüpraş Page 100
Creates and publicly discloses implementation and action plans in line with the short-and long-term targets set.	Statement of Compliance with Sustainability Principles Page 152 -153
Determines the Key Performance Indicators (KPI) of ESG and shares comparative data on a yearly basis. In the presence of verifiable qualified data, it presents KPIs with local and international industry comparisons.	Performance Indicators Page 132 Statement of Compliance with Sustainability Principles Page 152 -153
Discloses innovation activities that improve the sustainability performance for business processes or products and services.	Innovation and R&D Page 106-117
A3. Reporting	
Reports its sustainability performance, goals and actions at least once a year and shares with public. Explains the information regarding the sustainability activities within the annual report.	Performance Indicators Page 130-133 Statement of Compliance with Sustainability Principles Page 152 -153
It is essential to share information that is important for stakeholders in order to understand the position, performance and development of the partnership in a direct and concise manner. It can also explain comprehensive information and data on the corporate website, and arrange separate reports that directly meet the needs of other stakeholders.	Sustainability at Tüpraş Page 101 https://www.tupras.com.tr/sustainability-report
Takes maximum care in terms of transparency and reliability. Objectively explains all kinds of improvements on priority issues in the reports and disclosures on the basis of balanced approach.	Sustainability at Tüpraş Page 102
Provides information about which of the United Nations (UN) 2030 Sustainable Development Goals the activities are related to.	Sustainability at Tüpraş Page 99
Provides information regarding the lawsuits filed and / or concluded on environmental, social and corporate governance issues.	Corporate Governance / Legal Disclosures Page 141-142

Explanation of Principle	Annual Report Section, Page Number
A4. Verification	
If verified by independent third parties (independent assurance providers for sustainability), the sustainability performance measurements is shared with public and endeavors to increase the aforementioned verification processes.	Environmental Management Page 124-127 Statement of Compliance with Sustainability Principles, Page 152 -153
B. Environment	
Shares the policies and practices, action plans, environmental management systems (known by the ISO 14001 standard) and programs in the field of environmental management.	Environmental Management Page 124-127 Quality Management Systems Page 121
Complies with environmental laws and other relevant regulations and explains them.	Environmental Management Page 124-127 Statement of Compliance with Sustainability Principles, Page 152 -153
Explains the constraints regarding reporting period, reporting data, data collection period and reporting conditions of the environmental report to be prepared, under the Sustainability principles.	Sustainability Reporting Page 101
Explains the highest person responsible from the partnership regarding the environment and climate change issue, relevant committees and their duties.	Environmental Management Page 124-127 Statement of Compliance with Sustainability Principles Page 152 -153
Describes the incentives it offers for the management of environmental issues, including the achievement of targets	Performance Indicators Page 132
Explains how environmental challenges are integrated into business goals and strategies.	Environmental Management Page 124-127
Explains the sustainability performances for business processes or products and services and the activities to help improve this performance.	Environmental Management Page 124-127
Elucidates not just in terms of direct operations but also how environmental issues are managed along the value chain and how supplier and customers are integrated in its strategies.	Statement of Compliance with Sustainability Principles Page 152 -153
Explains whether it is involved in policy-making processes on environmental issues (sectoral, regional, national and international), explains the cooperation with the associations, related organizations and non-governmental organizations it is a member of on the subject of environment, and the duties it has taken, if any, and the activities it supports.	Statement of Compliance with Sustainability Principles Page 152 -153
Environmental indicators (Greenhouse gas emissions (Scope-1 (Direct), Scope-2 (Energy indirect), Scope-3 (Other indirect)), air quality.	Statement of Compliance with Sustainability Principles Page 152 -153
Gives a full environmental impact report regarding the effects of energy management, water and wastewater management, waste management, biodiversity impacts), periodically, in a comparable manner.	Environmental Management Page 124-127 Performance Indicators Page 133 Statement of Compliance with Sustainability Principles Page 152 -153
Discloses the details of the standards, protocols, methodology and base year it uses to collect and calculate its data.	Statement of Compliance with Sustainability Principles Page 152 -153
Explains the status of the environmental indicators (increase or decrease) for the year it has been reported in comparison with previous years.	Statement of Compliance with Sustainability Principles, Page 152 -153
Sets short- and longterm targets to reduce its environmental impact and discloses these targets It is recommended that these are Science-Based Targets as suggested in the United Nations Conference of the Parties on Climate Change. Provides information whether there is an actual progress in the reporting year according to the goals set before.	Environmental Management Page 124-127

INDEX OF EXPLANATIONS REGARDING SUSTAINABILITY PRINCIPLES

Explanation of Principle	Annual Report Section, Page Number
Explains the strategies and actions it takes against the climate crises.	Environmental Management Page 124-127
Describes the program or procedures to prevent or minimize the potential negative impact of the products and / or services it offers; explains the actions of third parties to reduce greenhouse gas emissions.	Statement of Compliance with Sustainability Principles, Page 152 -153
Explains the actions taken to reduce its environmental impacts, the total number of projects and enterprises carried out, and the environmental benefits/ gains and cost savings they provide.	Statement of Compliance with Sustainability Principles, Page 152 -153
Reports the data of total energy consumption (excluding raw materials) and explains the energy consumption as Scope-1 and Scope-2.	Performance Indicators Page 132
Provides information regarding the electricity, heat, steam and cooling which are generated and consumed during the reported year.	Environmental Management Page 124-127
Carries out and explain studies on increasing the use of renewable energy, transition to zero or low carbon electricity.	Environmental Management Page 124-127
Discloses renewable energy production and consumption data.	Environmental Management Page 124-127
Conducts energy efficiency projects and explains the amount of energy consumption and emission reduction with respect to these activities.	Performance Indicators Page-132 Energy Efficiency Page 128-129
Reports the amount of water withdrawn from surface and underground, water used, recycled and discharged, its sources and procedures (total withdrawal by source, water sources affected by water withdrawal; percentage and total volume of recycled and reused water, etc.).	Performance Indicators Page 132
Explains whether its operations and activities are included in any carbon pricing system (emission trading system, Cap & Trade or carbon tax).	Environmental Management Page 124-127, Statement of Compliance with Sustainability Principles, Page 152 -153
Explains information regarding the accumulated or purchased carbon credit during the reporting period.	Statement of Compliance with Sustainability Principles Page 152-153
Explains the details if carbon pricing is executed within the partnership.	Statement of Compliance with Sustainability Principles Page 152-153
Explains all compulsory and voluntary platforms where it discloses environmental information.	Environmental Management Page 124-127, Statement of Compliance with Sustainability Principles Page 152-153

Explanation of Principle	Annual Report Section, Page Number
C. Social	
C1. Human Rights and Employee Rights	
Formulates the corporate Human Rights and Employee Rights Policy, which is fully compliant with the Universal Declaration of Human Rights, the ILO Conventions that Turkey has confirmed, and the legal framework and regulations governing the human rights and working life in Turkey. Discloses the policy in question and the roles and responsibilities associated with its implementation.	Human Resources Page 60-69
Ensures equal rights regarding recruitment process. Taking the supply and value chain effects into account, it includes fair labor, improvement of labor standards, women's employment and inclusion issues (such as women, men, religious belief, language, race, ethnic origin, age, disability, refugee, etc.) in its policies.	Human Resources Page 60-69
Explains the measures taken along the value chain to protect the rights of groups sensitive to certain economic, environmental, social factors (low-income groups, women, etc.) or measures taken for minority rights / equal opportunity.	Human Resources Page 60-69
Reports developments on discrimination, inequality, human rights violations, and practices that prevent and correct forced labor. Explains the regulations which are against the employment child workers.	Human Resources Page 60-69
It determines the processes of conflict resolution by establishing mechanisms for employee investment (training, development policies), compensation, vested benefits, union rights, work / life balance solutions and talent management. Regularly explains the activities carried out to ensure employee satisfaction.	Human Resources Page 60-69
It develops occupational health and safety policies and makes them public. Explains the precautions taken for work accidents and health protection and accident statistics.	Health and Safety Practices Page 120-122-123
Establishes the protection of personal data and data security policies and makes them public.	Risk Management Page 163
Establishes a Code of Conduct (including work, work ethics, compliance processes, advertising and marketing ethics, open information, etc.) and shares them with the public.	Human Resources Page 61
Explains the works within the scope of social investment, social responsibility, financial inclusion and access to finance.	Social Responsibility Page 134
Organizes informative meetings and training programs for employees on ESG policies and practices.	Performance Indicators Page 133

INDEX OF EXPLANATIONS REGARDING SUSTAINABILITY PRINCIPLES

Explanation of Principle	Annual Report Section, Page Number
C2. Stakeholders, International Standards and Initiatives	
Conducts activities in the field of sustainability, taking into account the needs and priorities of all stakeholders (employees, customers, suppliers, and service providers, public institutions, shareholders, community and non-governmental organizations, etc.).	Sustainability at Tüpraş Page 100-101
Puts in order a customer satisfaction policy regarding the management and resolution of customer complaints and makes public disclosure.	Sustainability at Tüpraş Page 100-101
Conducts a continuous and transparent communication with stakeholders; It evaluates which stakeholders, their purpose, the issue and frequency of the communication, and the progresses in sustainability activities.	Sustainability at Tüpraş Page 100-101
Discloses the international reporting standards it has adopted (Carbon Disclosure Project (CDP), Global Reporting Initiative (GRI), International Integrated Reporting Council (IIRC), Sustainability Accounting Standards Board (SASB), The Task Force on ClimateRelated Financial Disclosures (TCFD), etc.) to the public.	Sustainability at Tüpraş Page 101
Whether one is a signatory or a member, it provides disclosure of the international organizations or principles (Equator Principles, United Nations Environment Programme - Finance Initiative (UNEP-FI), United Nations Global Compact (UNGC) Principles, United Nations Principles for Responsible Investment (UNPRI), etc.), and the international principles it has adopted (International Capital Market Association (ICMA) Green/Sustainable Bond Principles) to the public.	Sustainability at Tüpraş Page 98
Shows concrete efforts to incorporate with Borsa İstanbul Sustainability Index and international sustainability indices (Dow Jones Sustainability Index, FTSE4Good, MSCI ESG Indices, etc.).	Sustainability at Tüpraş Page 100

Explanation of Principle	Annual Report Section, Page Number
D. Corporate Governance	
Makes the maximum effort to comply with all Corporate Governance Principles as well as the Corporate Governance Principles that must be mandatorily applied according to the Capital Markets Board Corporate Governance Communiqué No II-17.1	Information about Corporate Governance Page 143
Takes the issue of sustainability, environmental impacts of its activities and principles in this regard into consideration while determining its corporate governance strategy.	Sustainability at Tüpraş Page 100-101
Takes the necessary measures to comply with the principles regarding the stakeholders and to strengthen the communication with the stakeholders, as stated in the Corporate Governance Principles. Consults to the opinions of stakeholders in determining measures and strategies in the field of sustainability.	Sustainability at Tüpraş Page 100-101
Operates on raising awareness on the issue of sustainability and its importance, through social responsibility projects, awareness activities and trainings.	Performance Indicators Page 132-133
Strives to become a member of international standards and initiatives on sustainability and show contribution to studies.	Sustainability at Tüpraş Page 100
Explains anti-bribery and corruption policies and programs in line with the principle of honesty in terms of tax.	Risk Management, Page 163

GLOSSARY

GLOSSARY OF TERMS

	TURKISH	ENGLISH
APC	İleri Proses Kontrolü	Advanced Process Control
API	Amerikan Petrol Enstitüsü (API) tarafından çıkarılan ve özgül ağırlığa bağlı API gravite tanımı, petrolün sınıflandırılması için kullanılır.	The American Petroleum Institute gravity, or API gravity, is a measure of how heavy or light petroleum liquid is compared to water.
ASRFO	Atmosferik Straight Run Fuel Oil	Atmospheric Straight Run Fuel Oil
ASTM	Uluslararası Standartlar	American Society for Testing and Materials
ARU	Amin Rejenerasyon Ünitesi	Amine Regeneration Unit
BAT	Mevcut teknoloji	Best Available Technology
CCR REFORMER	Katalist Rejenerasyonlu Reformer	Continuous Catalytic Regeneration Reformer
CDU	Ham Petrol	Distilasyon Ünitesi Crude Distillation Unit
CIF	İthalatta, mal fiyatının üzerine sigorta ve navlun giderlerinin de eklendiği bir alım-satım şekli	Cost, Insurance & Freight
ÇED	Çevresel Etki Değerlendirmesi	Environmental Impact Assessment
DCS	Kontrol Sistemi	Distributed Control System
DECOKER	Koklaştırma Ünitesi	Delayed Coker
DSS	Sürdürülebilir Çözümler	Dupont Sustainable Solutions
DWT	Uluslararası Denizcilik Ticaretinde ve Denizcilik Endüstrisinde kullanılan ağırlık birimi	Deadweight Tonnage
DYS	Değişiklik Yönetim Sistemi	Change Management System
EPC	Mühendislik, Satın Alma ve Devreye Alma Hizmeti	Engineering, Procurement and Construction
EBH	Kaynayan Yataklı Hydrocracker	Ebullated Bed Hydrocracker
EFQM	Avrupa Kalite Yönetimi Vakfı	European Foundation for Quality Management
EII	Enerji Yoğunluğu İndeksi	Energy Intensity Index
ENVER	Enerji Verimliliği	Energy Efficiency
EPDK	Enerji Piyasası Düzenleme Kurumu	Energy Market Regulatory Authority
ESD	Elektrostatik Deşarj	Electrostatic Discharge
EUREKA	Avrupa Araştırma Koordinasyon Ajansı	European Research Coordination Agency
EURO 3	Euro Emisyon Standardı (Maks. Kükürt 350 ppm)	Euro Emission Standard (Max. Sulphur 350 ppm)
EURO 4	Euro Emisyon Standardı (Maks. Kükürt 50 ppm)	Euro Emission Standard (Max. Sulphur 50 ppm)
EURO 5	Euro Emisyon Standardı (Maks. Kükürt 10 ppm)	Euro Emission Standard (Max. Sulphur 10 ppm)
FAVÖK	Faiz, Amortisman Vergi Öncesi Kâr	EBITDA
FCC	Ağır hidrokarbon petrol fraksiyonlarını benzin, kompenantlarına dönüştüren ünite	Fluid Catalytic Cracking Unit

	TURKISH	ENGLISH
Fed	ABD Merkez Bankası	Federal Reserve Bank
FOB	Tedarikçinin malzemeyi nakliye yapılacağı geminin güvertesine taşıyana kadar olan sorumluluğu olan mal teslim şekli	Free On Board
FP7	Avrupa Birliği'nde çok uluslu araştırma ve teknoloji geliştirme projelerinin desteklendiği başlıca Topluluk Programları'dır.	The Seventh Framework Program
GDR	Küresel Saklama Sertifikası	Global Depositary Receipt
GMB	Güvenlik Merkezli Bakım	Security Centered Maintenance
GTL/CTL	Gazdan Sıvı, Kömürden Sıvı	Gas to Liquid, Coal to Liquid
HAY	Hata Ayıklama Yöntemi	Debugging Method
HAZOP	Tehlike ve İşletilebilme Çalışması Metodu	Hazard and Operability Study
HDS	Kükürt Giderme	Hydro Desulphurisation
HORİZON	AB Araştırma ve Yenilikçi Çerçeve Programı	EU Research and Innovation Framework Program
HRSG	Isı recovery buhar jeneratörü	Heat Recovery Steam Generator
HSRN	Ağır Nafta	Heavy Straight-Run Naphtha
HVGO	Vakum distilasyon ünitesinden elde edilen HVGO, dönüşüm ünitelerinde daha değerli beyaz ürünlere çevrilir.	Heavy Vacuum Gas Oil
HYDROCRACKER	Rafineri Dönüşüm Ünitesi	Hydrocracker-Conversion Unit
IEA, UEA	Uluslararası Enerji Ajansı	International Energy Agency
IOPC	Uluslararası Petrol Kirliliği Tazminat Fonu	International Oil Pollution Compensation Funds
ISM	Uluslararası Emniyetli Yönetim	International Safety Management
ISPS	Uluslararası Gemi ve Liman Güvenlik Kuralları	International Ship and Port Security Rules
İTA	İş Tehlike Analizleri	Job Hazard Analysis
KBS	Kazan Besleme Suyu	Boiler Feed Water
KKO	Kapasite Kullanım Oranı	Capacity Utilization Rate
KOK	Kalıcı Organik Kirleticiler	Persistent Organic Pollutants
KPI	Temel Performans Göstergeleri	Key Performance Indicators
LCGO	Light Cycle Gas Oil	Light Cycle Gas Oil
LCGO/HCGO	Hafif/Ağır Dizel	Light/Heavy Gas Oil
LSRN	Hafif Nafta	Light Straight Run Naphtha
ME	Mekanik Emre Amadelik	Mechanical Availabilities
MTBE	Benzinin oktanını artırmak ve aromatik miktarını düşürmek amacıyla kullanılan yüksek oktanlı hidrokarbon	Methyl Tertiary-Butyl Ether
NELSON COMPLEXITY	Beyaz Ürün Üretebilme Kapasitesi	White Product Yield Ability
OCIMF	Petrol Şirketlerinin Uluslararası Denizcilik Forumu	The Oil Companies International Marine Forum
OEA	Operasyonel Emre Amadelik	Operational Availabilities

GLOSSARY

	TURKISH	ENGLISH
OSAR	Olay Sınıflandırma, Araştırma ve Raporlama	Event Classification, Research and Reporting
PCT	Uluslararası Patent Koruması	International Patent Protection
PETDER	Petrol Sanayi Derneği	Petroleum Industry Association
POX	Kısmi Oksidasyon Ünitesi	Partial Oxidation
PPM	Bir kilogram yakıtta mg cinsinden kükürt miktarını gösterir.	Parts Per Million
PT	Penetrant Test	Penetrant Test
QDMS	Tüpraş Kalite Yönetim ve Doküman Sistemi	Quality Documentation Management System
RAYEP	Rafinerici Yetiştirme Programı	Refining Training Program
RBI	Risk Tabanlı Teknik Kontrol	Technical Risk Control
RDT	Risk Değerlendirme Tablosu	Risk Evaluation Chart (REC)
RGY	Risk ve Güvenirlilik Yönetimi	Risk and Reliability Management
RON	Oktan sayısı, benzinin kalitesini gösteren parametre olup motordaki vuruntunun ölçümü	Research Octane Number
RTK	Risk Tabanlı Kontrol	Risk-Based Control
RUP	Fuel Oil Dönüşüm Ünitesi	Residuum Upgrading
SDA	Çözücü Yardımıyla Asfalt Ayırma Ünitesi	Solvent Deasphalting Unit
SEÇ	Sağlık, Emniyet ve Çevre	HSE
SEÇ-K	Sağlık, Emniyet, Çevre ve Kalite	Health, Safety, Environment and Quality
SEVESO-II	Büyük Endüstriyel Kazaların Önlenmesi ve Etkilerinin Azaltılması Hakkında Yönetmelik	Prevention of Major Industrial Accidents and Mitigation of Impacts on Regulation
SMR	Hidrojen Üretim Ünitesi	Stream Methane Reformer
SRD	Sağlık Risk Değerlendirmesi	Health Risk Assessment
SWS	Katı Suyu Sıyırma Ünitesi	Sour Water Stripping Unit
TAEK	Türkiye Atom Enerji Kurumu	Turkey Atomic Energy Agency
TEYDEB	Teknolojik ve Destek Programları Başkanlığı	Technological and Support Programs Department
TEYS	Tehlike ve etkilerin yönetim süreci	Management Process of the Dangers and Effects
TMSA 2	Petrol Tankeri Yönetimi ve Değerlendirmesi 2	Tanker Management Self Assessment 2
TPE	Ton Petrol Eşdeğeri	Tons Petroleum Equivalent
TPP	Termal Power Plant	Thermal Power Plant
TÜRKAK	Türk Akreditasyon Kurumu	Turkish Accreditation Agency
VAP	Verimlilik Artırıcı Proje	Efficiency Enhancement Project
VDU	Vakum Destilasyon Ünitesi	Vacuum Distillation Unit
VGO	Vakum Dizel	Vacuum Gasoil
VLCC	Çok Büyük Ham Petrol Gemisi	Very Large Crude Carrier
VOC	Uçucu Organik Bileşenler	Volatile Organic Compounds
WTI	Amerikan Referans Ham Petrolü	West Texas Intermediate

GLOSSARY OF UNITS

m ³	Metreküp	Cubic Meter
MW	Megavat	Megawatt
KG	Kilogram	Kilogram
GRT	Gros tonaj	Gross Tonnage
M/T	Milyon Tonaj	Million Tonnes
KW	Kilovat	Kilowatt
KWh	Kilovatsaat	Kilowatt Hour
m ²	Metrekare	Square Meter
CO ₂	Karbondioksit	Carbon Dioxide
GCAL	Giga kalori	Gcal
Ton CO ₂ e	Ton Karbondioksit Eşleniği	Ton Carbon Dioxide Equivalent
TJ	Terajoule	Terajoule
MJ	Megajoule	Megajoule
j	Joule	Joule
Mt	Milyon Ton	Million Ton
t	Ton	Ton
bpd	Bir Günde Üretilen Petrol Varil Sayısı	Barrel per Day
MtOE	Milyon Ton Petrol Eşdeğeri	Million Ton of Oil Equivalent
mmcf	Milyon Küp Feet	Milyon Cubic Feet
g/l	Gram/Litre	Gram/Litre
ppm	Milyon Başına Düşen Parça Sayısı	Number of Parts per Million
N	Newton	Newton

CONTACT

Trade Name	Turkish Petroleum Refinery Corp. (TÜPRAŞ)
Address	Güney Mah. Petrol Cad. No. 25 41790 Körfez/ KOCAELİ
Trade Registry and Number	Körfez Trade Registry / 408-14
Website Address	www.tupras.com.tr
Registered Capital Ceiling	500.000.000 TL
Paid-in Capital	250.419.200 TL

Stock Information

BIST Code	TUPRS
Reuters Code	TUPRS.IS
Bloomberg Code	TUPRS.TI
Date of initial public offering	1991

Disclaimer

Bu Faaliyet Raporu ("Rapor") içerisinde yer alan 2020 yılı faaliyet ve hesapları hakkında Yönetim Kurulu Raporu, Denetçi Raporu, Konsolide Mali Tablolar ve Bağımsız Denetim Raporu 31 Mart 2021 Çarşamba günü, saat 10:00'da Tüpraş, Güney Mah. Petrol Cad. No: 25 41790 Körfez/Kocaeli adresinde yapılacak Ortaklar Olağan Genel Kurulu'na sunulmak üzere, yasal mevzuata uygun olarak hazırlanmıştır.

Rapor, ortakları bilgilendirme amacıyla hazırlanmış olup, herhangi bir yatırım kararı için temel oluşturma amacı taşımaz.

Rapor'da yer alan ileriye dönük görüş ve tahmini rakamlar, Şirket yönetiminin gelecekteki duruma ilişkin görüşlerini yansıtmakta olup; gerçekleştirmeleri, ileriye dönük tahmini rakamları oluşturan

değişkenlere ve varsayımlara bağımlı olarak farklılık gösterebilir. Buna uygun

olarak, Tüpraş veya Yönetim Kurulu üyeleri, danışmanları veya çalışanları bu Rapor kapsamında iletilen herhangi bir bilgi veya iletişimden veya bu Rapor'da yer alan bilgilere dayanan veya yer almayan bir bilgi neticesinde bir kişinin doğrudan veya dolaylı olarak uğrayacağı kayıp ve zararından sorumlu değildir.

Bu Rapor'un hazırlanma zamanı itibarıyla, yer alan tüm bilgilerin doğru olduğuna inanılmakta olup, yazım ve basım aşamalarında oluşabilecek yanlışlıklar nedeniyle Tüpraş hiçbir sorumluluk kabul etmemektedir.

Tüpraş Communication

Telephone: (0262) 316 30 00
Fax : (0262) 316 30 10-11
E-mail : info@tupras.com.tr

Investor Relations

Levent Bayar, Yatırımcı İlişkileri Müdürü
E-mail : levent.bayar@tupras.com.tr
Telephone: (0262) 316 3088
Fax : (0262) 316 30 10-11

Corporate Communication

Çiler Teber, Kurumsal İletişim Müdürü
E-mail : ciler.teber@tupras.com.tr
Telephone: (0262) 316 3046
Fax : (0262) 316 30 10-11

Financial Planning and Reporting Group Management

Zeynep Keskin, Grup Müdürü
E-mail : zeynep.keskin@tupras.com.tr
Telephone: (0262) 316 3086
Fax : (0262) 316 30 10-11

tupras.com.tr

