CONVENIENCE TRANSLATION OF CONSOLIDATED FINANCIAL STATEMENTS ORIGINALLY ISSUED IN TURKISH

TÜRKİYE PETROL RAFİNERİLERİ A.Ş.

1 JANUARY - 31 DECEMBER 2021 CONSOLIDATED FINANCIAL STATEMENTS

TÜRKİYE PETROL RAFİNERİLERİ A.Ş.

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CONSOLIDATED STATEMENTS OF FINANCIAL POSITION
AS AT 31 DECEMBER 2021

(Amounts expressed in thousands of Turkish Lira ("TRY") unless otherwise indicated.)

		Audited	Audited
ASSETS	**Notes**	**31 December 2021**	31 December 2020
Current Assets		**65,428,752**	**30,663,146**
Cash and cash equivalents	4	**20,400,235**	**19,825,292**
Trade receivables	6	**13,516,823**	**1,735,549**
Due from related parties	6, 27	**1,668,264**	**324,555**
Trade receivables from third parties		**11,848,559**	**1,410,994**
Other receivables	7	**20,541**	**18,690**
Other receivables from third parties		**20,541**	**18,690**
Derivative instruments	17	**3,817,972**	**380,129**
Inventories	8	**23,755,862**	**7,700,630**
Prepaid expenses	12	**186,381**	**233,614**
Other current assets	13	**3,730,938**	**769,242**
Non-Current Assets		**37,106,249**	**30,505,376**
Financial investments		**5,389**	**3,696**
Investments accounted for using the equity method	9	**2,150,156**	**1,326,490**
Property, plant and equipment	10	**26,288,463**	**21,875,889**
Right of use asset		**182,156**	**199,005**
Intangible assets	11	**66,801**	**62,369**
Other intangible assets		**66,801**	**62,369**
Derivative instruments	17	**44,213**	**87,883**
Prepaid expenses	12	**94,639**	**134,786**
Deferred tax assets	25	**6,377,848**	**5,002,427**
Other non-current assets	13	**1,896,584**	**1,812,831**
Total assets		**102,535,001**	**61,168,522**
LIABILITIES			
Current liabilities		**64,001,571**	**28,340,528**
Short-term financial liabilities	5	**563,221**	**2,097,808**
Current portion of long term financial liabilities	5	**10,835,745**	**6,403,937**
Trade payables	6	**43,704,239**	**14,137,468**
Due to related parties	6, 27	**165,021**	**218,486**
Trade payables, third parties		**43,539,218**	**13,918,982**
Liabilities for employee benefits	15	**134,471**	**151,927**
Other payables	16	**90,127**	**64,113**
Due to related parties	16, 27	**43,328**	**30,763**
Other payables to third parties		**46,799**	**33,350**
Derivative instruments	17	**3,302,177**	**762,828**
Deferred income		**32,315**	**129,254**
Current income tax liabilities	25	**38,393**	**2,459**
Short-term provisions	14	**200,116**	**142,088**
Short-term provisions for employee benefits		**19,387**	**24,572**
Other provisions		**180,729**	**117,516**
Other current liabilities	13	**5,100,767**	**4,448,646**
Non-current liabilities		**20,705,913**	**21,155,469**
Long-term financial liabilities	5	**20,218,575**	**20,743,323**
Long-term provisions	14	**447,560**	**356,405**
Long-term provisions for employee benefits		**447,560**	**356,405**
Deferred income		**9,987**	**9,504**
Derivative Instruments	17	**29,117**	**45,490**
Other non-current liabilities		**674**	**747**
Total liabilities		**84,707,484**	**49,495,997**
Equity		**17,827,517**	**11,672,525**
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		**11,033,759**	**7,487,238**
Gains/ losses on revaluation and remeasurement		**10,944,761**	**7,439,187**
Gain on revaluation of properties		**10,957,223**	**7,447,028**
Actuarial gain/(loss) arising from defined benefit plans		**(12,462)**	**(7,841)**
Share of other comprehensive income of investments accounted for using equity method that will not be reclassified to profit or loss		**88,998**	**48,051**
Accumulated other comprehensive income/(expense) to be reclassified to profit or loss		**(2,678,176)**	**(1,923,330)**
Currency translation differences		**297,679**	**(9,822)**
Hedging gains/(losses)		**(3,575,726)**	**(2,243,649)**
Cash flow hedge gains/(losses)		**(3,575,726)**	**(2,243,649)**
Share of other comprehensive income of investments accounted for using equity method that will be reclassified to profit or loss		**599,871**	**330,141**
Restricted reserves	19	**503,343**	**503,343**
Retained earnings		**3,784,488**	**6,277,999**
Net income		**3,319,134**	**(2,493,511)**
Total equity attributable to equity holders of the parent		**17,557,210**	**11,446,401**
Non-controlling interests		**270,307**	**226,124**
Total equity and liabilities		**102,535,001**	**61,168,522**

These consolidated financial statements as of and for the year ended 31 December 2021 has been approved for issue by the Board of Directors ("BOD") on 16 February 2022. 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.

TÜRKİYE PETROL RAFİNERİLERİ A.Ş.

CONSOLIDATED STATEMENTS OF PROFİT OR LOSS AND OTHER COMPREHENSIVE INCOME FOR THE YEAR ENDED 31 DECEMBER 2021

(Amounts expressed in thousands of Turkish Lira (“TRY”) unless otherwise indicated.)

	Notes	**Audited** **1 January -** **31 December 2021**	Audited 1 January - 31 December 2020
Revenue	20	**150,971,584**	**63,243,815**
Cost of sales	20	**(135,520,941)**	**(61,479,585)**
Gross profit (loss)		**15,450,643**	**1,764,230**
General administrative expenses	21	**(1,793,787)**	**(1,344,225)**
Marketing expenses	21	**(1,409,076)**	**(633,052)**
Research and development expenses	21	**(38,966)**	**(34,972)**
Other operating income	22	**1,222,382**	**616,900**
Other operating expenses	22	**(12,966,605)**	**(987,908)**
Operating profit (loss)		**464,591**	**(619,027)**
Income from investment activities	23	**107,950**	**1,805**
Income (loss) from investments accounted by equity method	9	**592,989**	**(29,615)**
Operating profit before financial income (expense)		**1,165,530**	**(646,837)**
Financial income	24	**12,559,211**	**3,213,676**
Financial expense	24	**(11,563,562)**	**(6,362,233)**
Profit (loss) before tax from continued operations		**2,161,179**	**(3,795,394)**
Tax income (expense)		**1,274,996**	**1,372,469**
Taxes on income		**(62,734)**	**(13,310)**
Deferred tax income (expense)	25	**1,337,730**	**1,385,779**
Net income (loss) from continued operations		**3,436,175**	**(2,422,925)**
Other comprehensive income:			
Items not to be reclassified to profit or loss		**3,546,483**	**1,050,095**
Revaluation gain (loss) on property	10	**3,853,192**	**1,134,711**
Actuarial gain (loss) arising from defined benefit plans		**(5,779)**	**(818)**
Share of other comprehensive income accounted for investment using equity method that will be not reclassified to profit or loss		**40,947**	**29,806**
Actuarial gain (loss) arising from defined benefit plans accounted for investment using equity method	9	**(447)**	**(406)**
Revaluation gain (loss) on property of investments accounted with using equity method	9	**41,394**	**30,212**
Tax effect of other comprehensive income (loss) not to be reclassified to profit or loss		**(341,877)**	**(113,604)**
Deferred tax income (expense)		**(331,296)**	**(113,604)**
Current income tax income (expense)		**(10.581)**	**-**
Items to be reclassified to profit or loss		**(807,646)**	**(85,579)**
Currency translation differences		**307,501**	**(13,014)**
Share of other comprehensive income accounted for investment using equity method that will be reclassified to profit or loss		**269,730**	**83,522**
Actuarial gain (loss) of revaluation or classification of investments using equity method	9	**176,688**	**43,261**
Gain (loss) from translation of foreign currency of investments using equity method		**93,042**	**40,261**
Income (expense) relating to avoidance of risk of cash flow	9	**(1,753,865)**	**(118,837)**
Income (loss) of avoidance of risk cash flow		**(1,753,865)**	**(118,837)**
Tax effect of other comprehensive income (loss) to be reclassified to profit or loss		**368,988**	**(37,250)**
Deferred tax income (expense)	25	**368,988**	**(37,250)**
Other comprehensive income (expense)		**2,738,837**	**964,516**
Total comprehensive income (expense)		**6,175,012**	**(1,458,409)**
Distribution of income for the period:			
Non-controlling interests		**117,041**	**70,586**
Attributable to equity holders of the parent		**3,319,134**	**(2,493,511)**
Distribution of total comprehensive income			
Non-controlling interests		**64,203**	**58,025**
Attributable to equity holders of the parent		**6,110,809**	**(1,516,434)**
Earnings (loss) per share from continued operations			
Earnings per share with nominal value Kr1 each (Kr)	26	**13.25**	**(9.96)**

The accompanying notes form an integral part of these consolidated financial statements.

TÜRKİYE PETROL RAFİNERİLERİ A.Ş.

CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY
FOR THE YEAR ENDED 31 DECEMBER 2021

(Amounts expressed in thousands of Turkish Lira ("TRY"), unless otherwise indicated)

			Accumulated other comprehensive income/(expense) not to be reclassified to profit or loss			Accumulated other comprehensive income/(expense) that will be reclassified to profit or loss				Total retained earnings				
			Gains/(losses) on valuation and remeasurement				Hedge gains/ (losses)							
	Share capital	Adjustment to share capital	Gain on revaluation of properties	Actuarial gains/(losses) arising from defined benefit plans	Share of other comprehensive income of investments accounted for using equity method that will be not reclassified to profit or loss	Currency translation differences	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
Audited														
1 January 2020	250,419	1,344,243	6,425,788	(6,897)	18,245	3,192	(2,100,116)	246,619	503,343	5,752,162	525,837	12,962,835	173,705	13,136,540
Transfers	-	-	-	-	-	-	-	-	-	525,837	(525,837)	-	-	-
Dividends paid	-	-	-	-	-	-	-	-	-	-	-	-	(5,606)	(5,606)
- Net profit for the period	-	-	-	-	-	-	-	-	-	-	(2,493,511)	(2,493,511)	70,586	(2,422,925)
- Other comprehensive income	-	-	1,021,240	(944)	29,806	(13,014)	(143,533)	83,522	-	-	-	977,077	(12,561)	964,516
Total comprehensive income	-	-	1,021,240	(944)	29,806	(13,014)	(143,533)	83,522	-	-	(2,493,511)	(1,516,434)	58,025	(1,458,409)
31 December 2020	250,419	1,344,243	7,447,028	(7,841)	48,051	(9,822)	(2,243,649)	330,141	503,343	6,277,999	(2,493,511)	11,446,401	226,124	11,672,525
Audited														
1 January 2021	**250,419**	**1,344,243**	**7,447,028**	**(7,841)**	**48,051**	**(9,822)**	**(2,243,649)**	**330,141**	**503,343**	**6,277,999**	**(2,493,511)**	**11,446,401**	**226,124**	**11,672,525**
Transfers	-	-	-	-	-	-	-	-	-	**(2,493,511)**	**2,493,511**	-	-	-
Dividends paid	-	-	-	-	-	-	-	-	-	-	-	-	**(20,020)**	**(20,020)**
- Net profit for the period	-	-	-	-	-	-	-	-	-	-	**3,319,134**	**3,319,134**	**117,041**	**3,436,175**
- Other comprehensive income	-	-	**3,510,195**	**(4,621)**	**40,947**	**307,501**	**(1,332,077)**	**269,730**	-	-	-	**2,791,675**	**(52,838)**	**2,738,837**
Total comprehensive income	-	-	**3,510,195**	**(4,621)**	**40,947**	**307,501**	**(1,332,077)**	**269,730**	-	-	**3,319,134**	**6,110,809**	**64,203**	**6,175,012**
31 December 2021	**250,419**	**1,344,243**	**10,957,223**	**(12,462)**	**88,998**	**297,679**	**(3,575,726)**	**599,871**	**503,343**	**3,784,488**	**3,319,134**	**17,557,210**	**270,307**	**17,827,517**

The accompanying notes form an integral part of these consolidated financial statements.

CONSOLIDATED STATEMENT OF CASH FLOW
FOR THE YEAR ENDED 31 DECEMBER 2021

(Amounts expressed in thousands of Turkish Lira ("TRY"), unless otherwise indicated.)

		Audited	
	Notes	1 January - 31 December 2021	1 January - 31 December 2020
Cash flows from operating activities		**593,625**	2,114,010
Profit/(loss) for the period		**3,436,175**	(2,422,925)
Adjustment for reconciliation of profit/(loss) for the period		**(517,072)**	1,920,295
Adjustment for depreciation and amortisation expense	10, 11	**787,470**	742,238
Adjustment for provisions	14	**295,924**	157,500
Adjustment for interest (income) and expense	24	**586,243**	1,174,768
Adjustment for unrealized foreign currency translation differences		**(10,617,898)**	(2,634,829)
Adjustment for fair value (gain) or loss		**2,104,974**	392,344
Adjustment for undistributed profit accounted by equity method	9	**(592,989)**	29,615
Adjustment for tax expenses(income)	25	(1,274,996)	(1,372,469)
Adjustment for (gain)/loss on sales of property, plant and equipment	23	**(107,950)**	(1,805)
Adjustment for other items related with cash flow of investment or financial activities	24	**7,939,717**	3,444,698
Other adjustments for reconciliation of profit/(loss)		**362,433**	(11,765)
Changes in working capital		**(2,167,429)**	2,728,593
Adjustment for decrease/(increase) in trade receivables		**(11,819,424)**	3,056,261
Adjustment for decrease/(increase) in other receivables related with operations		**(3,007,354)**	1,449,379
Adjustment for decrease/(increase) in derivative assets		**(3,394,173)**	(65,279)
Adjustment for decrease/(increase) in inventories		**(16,055,232)**	1,767,951
Adjustment for increase/(decrease) in trade payables		**29,569,424**	(3,707,698)
Adjustment for increase/(decrease) in other payables related with operations		**16,354**	(469,142)
Adjustment for decrease/(increase) in derivative liabilities		**2,522,976**	697,121
Cash flows from operating activities		**751,674**	2,225,963
Tax returns/(payments)		**(12,038)**	(13,256)
Other cash inflow/(outflow)		**(146,011)**	(98,697)
Cash flows from investing activities		**(1,076,856)**	(942,404)
Cash inflows from the sales of property, plant and equipment and intangible assets		**169,910**	24,188
Cash outflows from the purchase of property, plant and equipment and intangible assets		**(1,325,073)**	(1,082,896)
Dividends received	9	**80,000**	120,000
Cash outflows from the purchase of shares in other businesses or funds		**(1,693)**	(3,696)
Cash flows from financing activities		**(11,501,460)**	4,958,947
Cash inflows from financial liabilities	5	**13,910,108**	41,075,708
Cash outflows from financial liabilities	5	**(20,905,942)**	(34,590,312)
Cash inflows from derivative instruments		**896,087**	539,254
Cash outflows from derivative instruments		**(4,910,714)**	(880,836)
Cash outflows from payments of rent agreements	5	**(32,045)**	(62,208)
Dividends paid	19	**(20,020)**	(5,606)
Interest paid		**(2,482,361)**	(1,630,755)
Interest received		**2,043,427**	513,702
Net increase/(decrease) in cash and cash equivalents before the effect of foreign currency translation differences		**(11,984,691)**	6,130,553
Impact of foreign currency translation differences on cash and cash equivalents		**10,617,543**	2,634,829
Net increase/(decrease) in cash and cash equivalents		**(1,367,148)**	8,765,382
Cash and cash equivalents at the beginning of the period		**17,506,177**	8,740,795
Cash and cash equivalents at the end of the period	4	**16,139,029**	17,506,177

The accompanying notes form an integral part of these consolidated financial statements.

(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 2021, the shares quoted on the BIST are 49% of the total shares. As of 31 December 2021, 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.

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.

The average number of employees of the Group as at 31 December 2021 is 5,923 (31 December 2020 - 6,129).

The address of the registered office of the Company is as follows:

Türkiye Petrol Rafinerileri A.Ş.
Gülbahar Mahallesi
Büyükdere Caddesi No:101A
Şişli, İstanbul

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 Communique, 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 2021 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 2021. The effects of these standards and interpretations on the Group's financial position and performance have been disclosed in the related paragraphs.

a) Standards, amendments and interpretations applicable as at 31 December 2021:

- **Amendments to 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 Phase 2 amendments provide additional temporary reliefs from applying specific TAS 39 and TFRS 9 hedge accounting requirements to hedging relationships directly affected by IBOR reform.

- **Amendments to TFRS 4 Insurance Contracts – deferral of TFRS 9;** effective from annual periods beginning on or after 1 January 2023. 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.

  The mentioned amendments does not have a significant impact on the financial position and performance of the Group.

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 2021:

- **Amendment to TFRS 16, 'Leases' – Covid-19 related rent concessions Extension of the Practical expedient;** as of March 2021, this amendment extended till June 2022 and effective from 1 April 2021.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.

- **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.

- **Amendments to TAS 1, Presentation of financial statements' on classification of liabilities;** effective date deferred until accounting periods starting not earlier than 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.

- **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.

  - **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'.

- **Narrow scope amendments to TAS 1, Practice statement 2 and TAS 8;** effective from annual periods beginning on or after 1 January 2023. The amendments aim to improve accounting policy disclosures and to help users of the financial statements to distinguish between changes in accounting estimates and changes in accounting policies.

(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)

- **Amendment to TAS 12 – Deferred tax related to assets and liabilities arising from a single transaction;** from annual periods beginning on or after 1 January 2023. These amendments require companies to recognise deferred tax on transactions that, on initial recognition give rise to equal amounts of taxable and deductible temporary differences.

  The mentioned amendments does not have a significant impact on the financial position and performance of the Group.

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

a) The consolidated financial statements for the year ended 31 December 2021 have been prepared in accordance with principles stated on the consolidated financial statements for the year ended 31 December 2020 and include financial statements of Tüpraş, and its Subsidiaries.

b) At 31 December 2021, there are no changes in voting rights or proportion of effective interest on subsidiaries and joint ventures that are subject to consolidation from the information stated on consolidated financial statements for the year ended 31 December 2020.

	31 December 2021		31 December 2020	
	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**	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.

(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)

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 2021 and 31 December 2020:

	31 December 2021		31 December 2020	
	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
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.

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.

2.2. 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 2021 comparatively with the consolidated statement of financial position as of 31 December 2020. 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 2021 are presented comparatively with the consolidated financial statements for the year ended 31 December 2020.

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. Basis of presentation of consolidated financial statements (Continued)

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.

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 assests 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).

2. Basis of presentation of consolidated financial statements (Continued)

2.3. Summary of significant accounting policies (Continued)

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.

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.

2. Basis of presentation of consolidated financial statements (Continued)

2.3. Summary of significant accounting policies (Continued)

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).

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
Special costs	5 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.

2. Basis of presentation of consolidated financial statements (Continued)

2.3. Summary of significant accounting policies (Continued)

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 on prolonged decline.

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.

2. Basis of presentation of consolidated financial statements (Continued)

2.3. Summary of significant accounting policies (Continued)

The Group - as a lessee (Continued)

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.

Right of use asset

The right of use asset is initially recognized at cost comprising of:

a) Amount of the initial measurement of the lease liability;
b) Any lease payments made at or before the commencement date, less any lease incentives received;
c) Any initial direct costs incurred by the Group; and
d) 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:

a) After netting-off depreciation and reducing impairment losses from right of use asset,
b) Adjusted for certain re-measurements of the lease liability recognized at the present value

The Group applies TAS 16, "Property, Plant and Equipment" to amortize the right of use asset and to asses 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.

2. Basis of presentation of consolidated financial statements (Continued)

2.3. Summary of significant accounting policies (Continued)

The Group - as a lessee (Continued)

Lease payments included in the measurement of the lease liability comprise the following:

a) Fixed payments, including in-substance fixed payments;
b) Variable lease payments that depend on an index or a rate, initially measured using the index or rate as the commencement date,
c) 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:

a) Increasing the carrying amount to reflect interest on lease liability
b) Reducing the carrying amount to reflect the lease payments made and
c) 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.

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 enforcable 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.

2. Basis of presentation of consolidated financial statements (Continued)

2.3. Summary of significant accounting policies (Continued)

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).

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.

2. Basis of presentation of consolidated financial statements (Continued)

2.3. Summary of significant accounting policies (Continued)

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 seperate performance obligations in the contract
- Determine the transaction price in contract
- Allocate the transaction price to the performance obligations in the contract
- Recognise revenue

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.

2. Basis of presentation of consolidated financial statements (Continued)

2.3. Summary of significant accounting policies (Continued)

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.

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.

2. Basis of presentation of consolidated financial statements (Continued)

2.3. Summary of significant accounting policies (Continued)

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.

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. Basis of presentation of consolidated financial statements (Continued)

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:

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 USD387,878 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 sensivitiy 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.

As the details are explained in Note 2.6, the Company Management reviewed the useful lives of the machinery, plant and equipment used and subjected its assets to impairment tests. within the framework of the strategic transformation plan and has determined that there is no need for any significant changes.

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 (Note 10).

(Amounts expressed in thousands of Turkish Lira ("TRY"), unless otherwise indicated.)

2. Basis of presentation of consolidated financial statements (Continued)

2.6. Significant accounting evaluations, assumptions and estimates

The strategic transformation plan was accepted by the Company's Board of Directors on 24 November 2021. Within the scope of the relevant strategic transformation plan, there are strategic actions to be taken by the Group in the short and long term. The Group has reviewed its forecasts and assumptions and revised its long-term business plan, taking into account the new investments it has planned within the framework of strategic actions and the financial performance it aims to achieve. While preparing its consolidated financial statements as of 31 December 2021, the Group evaluated the possible effects of the change in long-term business plans on the consolidated financial statements, reviewed the useful lives of the machinery, plant and equipment used and subjected its assets to impairment tests. No material impact has been identified.

3. Business combinations

No business combinations occurred during the period 31 December 2021.

4. Cash and cash equivalents

	31 December 2021	31 December 2020
Cash at banks		
Demand deposits	**466,143**	141,440
Time deposits	**15,672,886**	17,354,252
Demand deposits (blocked)	**1,527,549**	10,485
Revenue share (blocked)	**2,720,305**	2,204,004
Time deposit interest accruals	**13,352**	115,111
Total	**20,400,235**	19,825,292

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 2021 and 2020 (Note 13). In addition, demand blocked deposits amounting to TRY1,527,549 thousand are available for derivative transactions carried out in foreign exchanges. (31 December 2020 -TRY10,485).

Time deposits and other cash and cash equivalents

As at 31 December 2021 and 31 December 2020, the maturity and the currency information of the time deposits, is as follows:

31 December 2021

	Effective rate of interest (%)	**Less than 1 month**	**1 - 3 months**	**Total**
TRY	**28.53**	**6,255,080**	**46,909**	**6,301,989**
USD	**1.16**	**8,687,202**	**673,878**	**9,361,080**
EUR	**0.03**	**7,742**	**-**	**7,742**
GBP	**0.05**	**2,075**	**-**	**2,075**
Time deposit		**14,952,099**	**720,787**	**15,672,886**

(Amounts expressed in thousands of Turkish Lira ("TRY"), unless otherwise indicated.)

4. Cash and cash equivalents (Continued)

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

Cash and cash equivalents included in the consolidated statements of cash flows for the periods ended 31 December 2021 and 31 December 2020 are as follows:

	31 December 2021	31 December 2020
Cash and cash equivalents	**20,400,235**	19,825,292
Less: Blocked deposits (Revenue share)	**(2,720,305)**	(2,204,004)
Less: Blocked deposits (Revenue share)	**(1,527,549)**	-
Less: Time deposit interest accruals	**(13,352)**	(115,111)
Cash and cash equivalents	**16,139,029**	17,506,177

5. Financial liabilities

	31 December 2021	31 December 2020
Short-term borrowings:		
Short-term bank borrowings	**563,221**	2,084,018
Interest accruals of bank borrowings	**-**	13,790
Total	**563,221**	2,097,808
Short-term portion of long-term borrowings:		
Short-term portion of long-term bank borrowings	**9,918,217**	5,423,700
Bonds issued	**500,000**	650,000
Interest accruals of bank borrowings	**251,163**	227,494
Interest accruals of bonds issued	**131,944**	72,909
Lease liabilities	**34,421**	29,834
Total	**10,835,745**	6,403,937
Long-term borrowings:		
Bonds issued	**10,720,300**	5,638,350
Long-term bank borrowings	**9,269,544**	14,882,553
Interest accruals of bank borrowings	**-**	23,364
Lease liabilities	**228,731**	199,056
Total	**20,218,575**	20,743,323
Total borrowings	**31,617,541**	29,245,068

(Amounts expressed in thousands of Turkish Lira ("TRY"), unless otherwise indicated.)

5. Financial liabilities (Continued)

Tüpraş has issued a bond on 3 February 2021 with a nominal value of TRY1,100 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. Tüpraş has issued a bond on 21 January 2021 with a nominal value of TRY290 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. 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.

Tüpraş has issued a bond on 12 October 2017 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.

In 2011, Tüpraş has signed three loan agreements in order to finance Residuum 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 2021 the outstanding amount of the loans is USD385 million (31 December 2020 – USD576 million).

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. The bond was paid and redeemed on 5 February 2021.

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. The bond was paid and redeemed on 22 January 2021.

Tüpraş has fulfilled its financial commitments arising from its borrowings as of 31 December 2021.

Foreign currency balances and effective interest rates for the short and long-term financial liabilities as at 31 December 2021 and 31 December 2020 are as follows:

			31 December 2021
	Effective interest rate (%)	**Original currency**	**Thousand TRY**
Short-term borrowings:			
TRY bank borrowings (*)	**-**	**30,060,564**	**30,061**
USD bank borrowing	**2.77**	**40,000,000**	**533,160**
Total short-term financial liabilities			**563,221**
Short-term portion of long-term borrowings:			
TRY borrowings	**12.63**	**6,384,319,000**	**6,384,319**
TRY bonds issued	**18.49**	**500,000,000**	**500,000**
USD bank borrowings	**2.28**	**265,128,551**	**3,533,898**
TRY lease liabilities	**18.75**	**23,635,846**	**23,636**
EUR lease liabilities	**2.98**	**354,087**	**5,342**
GBP lease liabilities	**4.16**	**302,963**	**5,443**
			10,452,638
Interest accruals			**383,107**
Total short-term portion of long-term borrowings			**10,835,745**
Long-term borrowings:			
TRY borrowings	**17.16**	**4,140,927,053**	**4,140,927**
TRY bonds issued	**18.35**	**1,390,000,000**	**1,390,000**
USD borrowings	**2.47**	**384,771,311**	**5,128,617**
USD bonds issued	**4.50**	**700,000,000**	**9,330,300**
TRY lease liabilities	**21.08**	**123,799,862**	**123,799**
EUR lease liabilities	**3.23**	**6,585,668**	**99,356**
GBP lease liabilities	**4.20**	**310,352**	**5,576**
Total long-term borrowings			**20,218,575**

(*) Banks provide interest-free loans to the Group for the payment of SCT, Customs and Social Security debts amounting to TRY30,061 thousand as of 31 December 2021 (31 December 2020 – TRY17,839 thousand).

(Amounts expressed in thousands of Turkish Lira ("TRY"), unless otherwise indicated.)

5. Financial liabilities (Continued)

			31 December 2020
	Effective interest rate (%)	Original currency	Thousand TRY
Short-term borrowings:			
TRY bank borrowings (*)	8.79	1,217,838,682	1,217,839
USD bank borrowing	0.65	118,000,000	866,179
			2,084,018
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
EUR lease liabilities	3.27	473,363	4,264
GBP lease liabilities	4.16	290,824	2,892
			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
TRY bonds issued	18.07	500,000,000	500,000
USD borrowings	2.34	951,359,581	6,983,455
USD bonds issued	4.50	700,000,000	5,138,350
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

As at 31 December 2021 and 31 December 2020, the redemption schedule of long-term bank borrowings is as follows:

	31 December 2021	31 December 2020
1-2 years	**9,067,558**	12,424,887
2-3 years	**10,385,532**	2,247,467
3-4 years	**203,188**	5,714,105
4-5 years	**35,866**	100,516
Over 5 years	**526,431**	256,348
Total	**20,218,575**	20,743,323

(Amounts expressed in thousands of Turkish Lira ("TRY"), unless otherwise indicated.)

5. Financial liabilities (Continued)

The movement of borrowings as of 31 December 2021 and 2020 is as follows:

	2021	2020
1 January	**29,245,068**	19,075,794
New financial borrowings	**13,910,108**	41,075,708
Principal payments	**(20,905,942)**	(34,590,312)
Increase due to lease liabilities	**20,420**	32,770
Decrease due to payment of lease liabilities	**(32.045)**	(62,208)
Changes in interest accruals	**45,550**	122,860
Changes in foreign exchange rates	**9,334,382**	3,590,456
31 December	**31,617,541**	29,245,068

The interest sensitivity breakdown regarding the remaining time of borrowing to repricing is as follows:

	31 December 2021	31 December 2020
1-90 days	**10,955,949**	10,287,907
91-365 days	**4,851,737**	4,208,994
1-5 years	**15,282,668**	14,574,067
Over 5 years	**527,187**	174,100
Total	**31,617,541**	29,245,068

6. Trade receivables and payables

Short-term trade receivables:

	31 December 2021	31 December 2020
Trade receivables	**11,896,404**	1,421,103
Due from related parties (Note 27)	**1,668,264**	324,555
Doubtful trade receivables	**5,528**	5,264
Other trade receivables	**29**	7
Less: Unearned credit finance income	**(47,874)**	(10,116)
Less: Provision for doubtful receivables	**(5,528)**	(5,264)
Total short-term trade receivables (net)	**13,516,823**	1,735,549

Tüpraş discounts the domestic receivables by using domestic government bonds and foreign receivables by using monthly libor rates.

As at 31 December 2021, Tüpraş has offsetted TRY642,051 thousand (31 December 2020 - TRY2,976,335 thousand) from trade receivables that are collected from factoring companies as part of the irrevocable factoring and TRY353,725 thousand (31 December 2020 - TRY1,127,270 thousand) deducted supplier financing transaction from trade receivables.

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(Amounts expressed in thousands of Turkish Lira ("TRY"), unless otherwise indicated.)

6. Trade receivables and payables (Continued)

Movement of the provision for doubtful receivables for the years ended 31 December 2021 and 2020 is as follows:

	2021	2020
1 January	**5,264**	5,243
Charge for the period	**392**	280
Payments during the period	**(128)**	(259)
31 December	**5,528**	5,264

Short-term trade payables:

	31 December 2021	31 December 2020
Trade payables	**43,547,471**	13,924,582
Due to related parties (Note 27)	**165,021**	218,486
Less: Unrealised credit finance charges trade payables	**(8,253)**	(5,600)
Total short-term trade receivables (net)	**43,704,239**	14,137,468

Tüpraş discounts short-term trade payables by using monthly libor rates.

7. Other receivables and payables

Other short-term receivables:

	31 December 2021	31 December 2020
Receivable from personnel	**15,880**	14,284
Deposits and guarantees given	**4,556**	3,404
Other doubtful receivables	**2,612**	1,389
Receivable from insurance recoveries	**105**	1,002
Less: Provision for other doubtful receivables	**(2,612)**	(1,389)
Total	**20,541**	18,690

8. Inventories

	31 December 2021	31 December 2020
Raw materials and supplies	**2,859,390**	969,551
Work-in-progress	**4,416,821**	1,706,414
Finished goods	**5,844,006**	2,468,321
Trade goods	**156,062**	75,071
Goods in transit	**10,376,546**	2,414,477
Other inventories	**103,037**	66,796
Total	**23,755,862**	7,700,630

(Amounts expressed in thousands of Turkish Lira ("TRY"), unless otherwise indicated.)

8. Inventories (Continued)

Movement of the provision for inventories for the years ended 31 December 2021 and 2020 is as follows:

	2021	2020
1 January	-	-
Charge for the period	-	1,034,554
Provisions no longer required	-	(1,034,554)
31 December	-	-

The sudden drop in crude oil prices with the pandemic in 2020 caused stock sales prices to remain below costs; however, due to the realizations in the following year and the increase in value as a result of the reflection of the increasing crude oil prices on the product prices, the provision for inventory impairment has been canceled as of 31 December 2020.

9. Investments accounted for using the equity method

	31 December 2021		31 December 2020	
	Participation share (%)	**Amount**	Participation share (%)	Amount
OPET Petrolcülük A.Ş.	**40.00**	**2,150,156**	40.00	1,326,490
		2,150,156		1,326,490

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 2021 and 2020 is as follows:

	2021	2020
1 January	**1,326,490**	1,362,777
Investments accounted for using the equity method;		
Shares in current year profit	**592,989**	(29,615)
Dividend payment	**(80,000)**	(120,000)
Gain on revaluation of property	**41,394**	30,212
Actuarial gain/(loss) arising from defined benefit plans	**(447)**	(406)
Gain/(loss) on revaluation and remeasurement	**176.688**	43,261
Currency translation differences	**93,042**	40,261
31 December	**2,150,156**	1,326,490

(Amounts expressed in thousands of Turkish Lira ("TRY"), unless otherwise indicated.)

9. Investments accounted for using the equity method (Continued)

Consolidated summary financial statements of investments accounted for using the equity method (before Group's effective interest) are as follows:

	31 December 2021	31 December 2020
Current assets	**10,019,411**	5,059,935
Non-current assets	**4,632,856**	3,701,575
Total assets	**14,652,267**	8,761,510
Short term liabilities	**5,805,510**	2,829,607
Long term liabilities	**3,944,050**	3,088,361
Equity	**4,902,707**	2,843,542
Total liabilities	**14,652,267**	8,761,510

	1 January - 31 December 2021	1 January - 31 December 2020
Sales (net)	**56,007,462**	38,623,156
Gross profit	**3,441,883**	1,788,120
Operating profit	**2,104,478**	805,434
Net (loss)/income for the period	**1,482,472**	(74,038)

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 2021, fair value of Opet is above 86% of the value carried in including goodwill.

Other key assumptions used in the fair value calculation model are stated below:

Gross margin	2.7% - 5.2%
Discount rate	22.4%

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 10% lower and 11% higher, respectively as at 31 December 2021.

As a result of the tests performed by using the assumptions above, no impairment on goodwill has been identified as at 31 December 2021. 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.

(Amounts expressed in thousands of Turkish Lira ("TRY"), unless otherwise indicated.)

9. Investments accounted for using the equity method (Continued)

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. A lawsuit was filed by Opet for the annulment of the aforementioned decision, and a stay of execution decision was made in the aforementioned case. As a result of the trial, the Court decided to cancel the administrative fine and return it to Opet together with its legal interest. In September 2021, a penalty of TRY325,450 and legal interest of TRY 22,550 were withdrawn. The Competition Authority has applied to the court of appeal for the annulment of the annulment decision of the first instance court, and the trial is still ongoing.The related amount is recorded as income by Opet in the current period, and included in the income statement under "income from investments accounted under equity method" line.

10. Property, Plant and Equipment

The movements of property, plant and equipment and related accumulated amortisation for the period ended 31 December 2021 and 2020 is as follows:

	1 January 2021	Gain on Revaluation of property	Currency translation differences	Additions	Transfers	Disposals	31 December 2021
Cost:							
Lands	8,341,191	3,853,192	-	-	-	-	12,194,383
Land improvements	3,903,485	-	-	154,719	-	(819)	4,057,385
Buildings	903,443	-	-	121,292	-	(1,639)	1,023,096
Machinery and equipment	13,273,886	-	3,957	617,619	1,536	(1,946)	13,895,052
Motor vehicles	2,093,006	-	-	245,530	-	(87,536)	2,251,000
Furniture and fixtures	166,378	-	-	49,106	-	(5,493)	209,991
Construction in progress	1,050,655	-	-	83,695	-	-	1,134,350
Special costs	3,730	-	-	60,115	-	-	63,845
Other tangible assets	2,835	-	-	11,228	-	-	14,063
	29,738,609	3,853,192	3,957	1,343,304	1,536	(97,433)	34,843,165
Accumulated depreciation:							
Land improvements	(1,745,480)	-	-	(158,172)	-	772	(1,902,880)
Buildings	(244,257)	-	-	(19,566)	-	1,357	(262,466)
Machinery and equipment	(5,435,214)	-	(489)	(428,240)	(333)	1,380	(5,862,896)
Motor vehicles	(339,551)	-	-	(83,935)	-	28,931	(394,555)
Furniture and fixtures	(95,267)	-	-	(25,901)	-	3,042	(118,126)
Special costs	(672)	-	-	(10,557)	-	-	(11,229)
Other tangible assets	(2,279)	-	-	(271)	-	-	(2,550)
	(7,862,720)	-	(489)	(726,642)	(333)	35,482	(8,554,702)
Net book value	21,875,889						26,288,463

(Amounts expressed in thousands of Turkish Lira ("TRY"), unless otherwise indicated.)

10. Property, Plant and Equipment (Continued)

	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	(244,257)
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

Total depreciation expense amounting to TRY726,642 thousand (31 December 2020 - TRY685,951 thousand) related to tangible fixed assets in the comprehensive consolidated income statement for the period ended as of 31 December 2021 has been allocated to cost of goods sold amounting to TRY569,171 thousand (31 December 2020 - TRY550,394 thousand), to marketing, amounting to TRY92,887 thousand (31 December 2020 - TRY90,369 thousand), to general administration expenses amounting to TRY50,004 thousand (31 December 2020 – TRY32,062 thousand), to research and devolopment expenses amounting to TRY14,580 thousand (31 December 2020 - TRY13,123).

The depreciation expense related to right-of-use assets in the consolidated statement of comprehensive income for the period ended as of 31 December 2021 at TRY37,269 thousand (31 December 2020 - TRY34,466 thousand), is classified to general administrative expenses amounting to TRY25,372 thousand (31 December 2020 – TRY25,026 thousand), to marketing, amounting to TRY6,691 thousand (31 December 2020 TRY5,490), and to cost of goods sold amounting to TRY5,206 thousand (31 December 2020 – TRY3,950).

As of 31 December 2021, there are no mortgage on property, plant and equipment (31 December 2020 : 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 2021 and included the revaluation increase amounting to TRY12,127,601 thousand in consolidated financial statements (31 December 2020: TRY8,274,409 thousand).

The revaluation assessment of lands of Tüpraş has been carried by namely Açı 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 2021	**Level 1**	**Level 2**	**Level 3**
Lands	12,194,383	-	12,194,383	-

		Fair value level as of reporting date		
	31 December 2020	**Level 1**	**Level 2**	**Level 3**
Lands	8,341,191	-	8,341,191	-

(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 2021 and 2020 are as follows:

	1 January 2021	**Additions**	**Transfers**	**Disposals**	**31 December 2021**
Cost:					
Rights and software	**109,460**	**18,259**	**-**	**(54)**	**127,665**
Development expenses	**115,194**	**10,944**	**(1,536)**	**-**	**124,602**
	224,654	**29,203**	**(1,536)**	**(54)**	**252,267**
Accumulated amortisation:					
Rights and software	**(79,919)**	**(12,842)**	**-**	**45**	**(92,716)**
Development expenses	**(82,366)**	**(10,717)**	**333**	**-**	**(92,750)**
	(162,285)	**(23,559)**	**333**	**45**	**(185,466)**
Net book value	**62,369**				**66,801**

	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

Total amortisation expenses amounting to TRY23,559 thousand (31 December 2020: TRY21,821 thousand) in the consolidated statement of comprehensive income for the period ended 31 December 2021 have been allocated to the general administration expenses amounting to TRY23,495 thousand (31 December 2020: TRY21,816 thousand) and the cost of sales amounting to TRY64 thousand (31 December 2020: TRY5 thousand).

12. Prepaid expenses

Short term prepaid expenses

	31 December 2021	31 December 2020
Insurance and other expenses	**154,876**	132,483
Advances given	**31,505**	101,131
Total	**186,381**	233,614

(Amounts expressed in thousands of Turkish Lira ("TRY"), unless otherwise indicated.)

12. Prepaid expenses (Continued)

Long term prepaid expenses:

	31 December 2021	31 December 2020
Advances given to third parties for property, plant and equipment	**79,670**	130,621
Prepaid other expenses	**9,326**	2,039
Advances given to related parties for property, plant and equipment (Note 27)	**5,643**	2,126
Total	**94,639**	134,786

13. Other assets and liabilities

	31 December 2021	31 December 2020
Deferred VAT	**2,686,223**	41,516
Deferred Value Added Tax ("VAT")	**533,242**	382,032
Deferred Special Consumption Tax ("SCT")	**239,502**	123,601
Taxes and funds to be offsetted	**99,073**	74,547
Income accruals	**81,537**	16,793
Spare parts and material stocks	**60,131**	89,655
Income accruals from commodity hedge (*)	**-**	22,746
Other current assets	**31,230**	18,352
Total	**3,730,938**	769,242

(*) As of 31 December 2020, income accruals of derivatives transactions consist of swap transactions for inventory of Tüpraş which are exposed to commodity price risk and zero cost corridor transaction expense accruals. The income accruals recognition made as of 31 December 2020 is recognized under cost of goods sold and collected as of 8 January 2021.

Other non-current assets:

	31 December 2021	31 December 2020
Spare parts and material stocks	**1,877,979**	1,763,686
Other	**18,605**	49,145
Total	**1,896,584**	1,812,831

Other short-term liabilities:

	31 December 2021	31 December 2020
Revenue share	**2,730,078**	2,210,451
SCT payable	**794,803**	1,090,914
Deferred Value Added Tax ("VAT")	**533,243**	382,032
Expense accruals from commodity hedge (*)	**528,339**	247,432
Deferred Special Consumption Tax ("SCT")	**239,502**	123,601
Other taxes and liabilities	**116,201**	79,550
VAT payable	**65,872**	269,314
Other	**92,729**	45,352
Total	**5,100,767**	4,448,646

(*) As of 31 December 2021, expense accruals consist of commodity derivatives transactions for inventory of Tüpraş which are exposed to commodity price risk. The expense accruals recognition made as of 31 December 2021 is recognized under cost of goods sold and collected as of 7 January 2021.

(Amounts expressed in thousands of Turkish Lira ("TRY"), unless otherwise indicated.)

13. Other assets and liabilities (Continued)

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.

As a result of these regulations, the revenue share amounting to TRY2,730,078 thousand accumulated as at 31 December 2021 (31 December 2020: TRY2,210,451 thousand) which is not recognized in the comprehensive income statement, has been classified as "Revenue Share" within "Other short-term liabilities". TRY2,720,305 thousand is (31 December 2020: TRY2,204,004 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 2021	31 December 2020
Seniority incentive bonus provision	**12,829**	11,505
Personnel bonus accruals	**6,558**	13,067
Total	**19,387**	24,572

Long-term employee benefits:

	31 December 2021	31 December 2020
Provision for employment termination benefits	**364,287**	271,661
Provision for unused vacation	**68,208**	72,866
Seniority incentive bonus provision	**15,065**	11,878
Total	**447,560**	356,405

(Amounts expressed in thousands of Turkish Lira ("TRY"), unless otherwise indicated.)

14. Provisions (Continued)

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, 100 days of salary for 30 years of seniority level, 105 days of salary for 35 years of seniority level and 110 days of salary for 40 years of seniority level, paid once for each seniority level.

The movements in the provision for seniority incentive bonus during the period are as follows:

	2021	2020
1 January	**23,383**	20,600
Charge for the period	**19,642**	13,045
Payments during the period	**(15,131)**	(10,262)
31 December	**27,894**	23,383

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 2021	31 December 2020
Discount rate (%)	**4.45%**	4.63%
Turnover rate to estimate probability of retirement (%)	**99.30%**	99.38%

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 TRY10,848.59 which is effective as at 1 January 2022 (31 December 2020: TRY7,638.96).

(Amounts expressed in thousands of Turkish Lira ("TRY"), unless otherwise indicated.)

14. Provisions (Continued)

Provision for employment termination benefits (Continued):

The movement in the provision for employment termination benefits during the period is as follows:

	2021	2020
1 January	**271,661**	232,075
Interest expense	**18,149**	27,985
Actuarial (gain)/loss	**5,779**	818
Increase during the period	**109,403**	32,739
Payments during the period	**(40,705)**	(21,956)
31 December	**364,287**	271,661

	31 December 2021		31 December 2020	
	Net discount rate		Net discount rate	
Sensitivity analysis	**100 Base Increase**	**100 Base Decrease**	100 Base Increase	100 Base Decrease
Ratio	**5.45%**	**3.45%**	5.63%	3.63%
Provision for employee termination benefit adjustment	29,503	(36,726)	34,586	(8,243)

Provision for unused vacation:

The movement in the provision for unused vacation during the period is as follows:

	2021	2020
1 January	**72,866**	71,754
Increase during the period	**3,002**	7,272
Payments during the period	**(7,660)**	(6,160)
31 December	**68,208**	72,866

Other short term provisions:

	31 December 2021	31 December 2020
EMRA participation share (*)	**78,170**	41,458
Provision for demurrage	**72,961**	48,820
Provisions for pending claims and law suits	**20,087**	21,981
Provisions for cost	**1,827**	1,135
Other	**7,684**	4,122
Total	**180,729**	117,516

(*) 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.

(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 2021 and 2020 are as follow:

	Provision for pending claims and lawsuits	**EMRA participation share**	**Provision for demurrage**	**Provision for cost**	**Other**	**Total**
1 January 2021	**21,981**	**41,458**	**48,820**	**1,135**	**4,122**	**117,516**
Changes for the period, net	**(904)**	**78,171**	**64,207**	**692**	**3,562**	**145,728**
Payments during the period, net	**(990)**	**(41,459)**	**(40,066)**	**-**	**-**	**(82,515)**
31 December 2021	**20,087**	**78,170**	**72,961**	**1,827**	**7,684**	**180,729**
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

15. Liabilities for employee benefits

	31 December 2021	31 December 2020
Due to the personnel	**89,007**	113,713
Social security withholdings payment	**45,464**	38,214
Total	**134,471**	151,927

16. Other payables

	31 December 2021	31 December 2020
Deposits and guarantees received	**46,799**	33,350
Other payables to related parties (Note 27)	**43,328**	30,763
Total	**90,127**	64,113

(Amounts expressed in thousands of Turkish Lira ("TRY"), unless otherwise indicated.)

17. Derivative instruments

	31 December 2021				31 December 2020			
			Fair values				Fair values	
	Purchase contract amount	Sales contract amount	Assets	Liabilities	Purchase contract amount	Sales contract amount	Assets	Liabilities
Cash flow hedge								
Interest rate swap	2,729,767	2,729,767	73,916	74,244	729,500	729,500	-	46,563
Cross currency swap	157,006	27,328	229,912	-	885,015	613,238	318,377	18,222
Commodity derivative	15,667,877	15,667,877	2,472,790	2,925,262	51,016	51,016	20,939	32,067
Derivatives held for trading								
Currency forwards	17,935,101	17,291,627	1,041,354	232,454	15,125,099	16,070,341	40,366	665,976
Commodity derivative	10,100,317	10,100,317	-	70,217	-	-	-	-
Interest rate swap	-	-	-	-	-	-	447	-
Short term derivative financial instruments			**3,817,972**	**3,302,177**			380,129	762,828
Cash flow hedge								
Interest rate swap	1,690,745	1,690,745	-	29,117	2,126,201	2,126,201	-	45,490
Cross currency swap	157,003	27,327	44,213	-	172,928	54,654	87,313	-
Derivatives held for trading								
Interest rate swap	-	-	-	-	750,000	750,000	570	-
Long term derivative financial instruments			**44,213**	**29,117**			87,883	45,490
Total			**3,862,185**	**3,331,294**			468,012	808,318

As of 31 December 2021, forward foreign exchange transactions consist of forward and currency swap transactions which generate a sales obligation of TRY17,291,627 thousand in exchange of USD1,345,570 thousand which will expire in 2021. (As of 31 December 2020, forward,swap, futures and options market transactions consist of forward transactions which generate a sales obligation of TRY16,070,341 thousand in exchange of USD2,060,500 thousand which has expired on in January 2021)

As of 31 December 2021, interest rate swap consists of exchange of floating rate instalment payments of long term borrowings and bonds amounting to USD201,104 thousand (31 December 2020: USD289,615 thousand) and TRY1,740,000 (31 December 2020: TRY1,400,000 thousand) thousand with fixed rate instalment payments for cash flow hedging. There are no EUR denominated interest rate swap transactions as of 31 December 2021 (31 December 2020: EUR8,857 thousand).

17. Derivative instruments (Continued)

As of 31 December 2021, cross currency swap transactions consist of swaps with fixed interest rate transaction of foreign currency indexed floating interest rate USD23,558 thousand and fixed interest rate long-term borrowings amounting to TRY54,655 thousand.

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 and fixed interest rate long-term borrowings amounting to TRY253,690 thousand and indexed to Turkish Lira, swap of foreign currency indexed floating interest long-term borrowing of EUR52,300 thousand and fixed interest rate long-term borrowings amounting to TRY326,483 thousand and indexed to Turkish Lira, foreign currency indexed interet rate swap transactions EUR4,429 thousand with Turkish Lira indexed long term borrowings and fixed interest payments amounting to TRY16,429 thousand, and fixed interest payments amounting to TRY16,429 thousand with fixed interest payments with total of USD4,668 thousand, and swap transaction of EUR4,429 thousand foreign currency indexed fixed interest rate of long-term borrowing and USD5,043 thousand USD indexed fixed interest payments.

Commodity future purchase and sales transactions consist of transactions of product crack margin fixing as of 31 December 2021. As of 31 December 2021, 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 551 thousand barrels, jet fuel stocks of 214 thousand barrels, diesel stocks of 1,061 thousand barrels and fuel oil stocks of 214 thousand barrels for first quarter of 2022. (As of 31 December 2020 there is no future sales product crack margin fixing transactions). Commodity derivative consist of cruide oil sales transactions amounting to 10,865 thousand barrels.

There is no ineffective portion of these derivative instrument transactions.

18. Commitments and contingent assets and liabilities

	31 December 2021		31 December 2020	
Guarantees received:	**Original currency(*):**	**TRY amount:**	**Original currency:**	**TRY amount:**
Letter of guarantees received		**1,900,224**		1,329,871
- Letter of guarantees in TRY	***782,663***	***782,663***	*658,781*	*658,781*
- Letter of guarantees in USD	***21,763***	***290,084***	*36,186*	*265,624*
- Letter of guarantees in EUR	***54,712***	***825,429***	*44,517*	*401,005*
- Letter of guarantees in other currencies	***-***	***2,048***	*-*	*4,461*
Guarantee notes received		**733**		679
- Guarantee notes in TRY	***733***	***733***	*679*	*679*
Guarantee letters received		**727,787**		417,926
- Guarantee letters received in TRY	***50,000***	***50,000***	*50,000*	*50,000*
- Guarantee letters received in USD	***50,851***	***677,787***	*50,000*	*367,025*
- Guarantee letters received in EUR	***-***	***-***	*100*	*901*
Guarantee letters of credit		***119,507***		*205,520*
- Letters of credit in USD	***8,966***	***119,507***	*27,998*	*205,520*
Direct debiting limits		**610,515**		407,475
- TRY direct debiting limits	***610,515***	***610,515***	*407,475*	*407,475*
Total guarantees received		**3,358,766**		2,361,471
Guarantees given:				
Letter of credits given		**15,973,754**		3,953,337
- Letter of credits in USD	***1,196,876***	***15,953,154***	*535,781*	*3,932,903*
- Letter of credits in EUR	***1,011***	***15,256***	*2,268*	*20,434*
- Letter of credits in other currencies	***-***	***5,344***	*-*	*-*
Letter of guarantees given		**2,656,844**		1,423,999
- Letter of guarantees in TRY	***2,642,862***	***2,642,862***	*1,271,955*	*1,264,460*
- Letter of guarantees in USD	***200***	***2,667***	*20,200*	*148,279*
- Letter of guarantees in EUR	***750***	***11,315***	*1,250*	*11,260*
Letters of guarantee given to customs offices		**800,740**		897,796
- Letter of guarantees in TRY	***710,220***	***710,220***	*843,749*	*843,749*
- Letter of guarantees in EUR	***6,000***	***90,520***	*6,000*	54,047
Letters of guarantee given to banks		***860,398***		*753,762*
- Letter of guarantees in USD	***64,551***	***860,398***	*89,322*	*655,667*
- Letter of guarantees in EUR	***-***	***-***	*10,890*	*98,095*
Guarantess	**104,000**	**1,386,216**	-	-
Total guarantees given		**21,677,952**		7,028,894

(*) Original balance amounts are expressed in thousands of currencies

As at 31 December 2021 and 31 December 2020, 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 2021, letters of guarantee given to banks are given for loans which were used by Companies within scope of consolidation amounting to TRY809,367 thousand (31 December 2020: TRY92,365 thousand) and for derivative financial instruments amounting to TRY51,031 thousand (31 December 2020: TRY7,847 thousand).

(Amounts expressed in thousands of Turkish Lira ("TRY"), unless otherwise indicated.)

18. Commitments and contingent assets and liabilities (Continued)

Collaterals, pledges, mortgages given by the Group as at 31 December 2021 and 31 December 2020 are as follows:

	31 December 2021	31 December 2020
A. CPMs given for companies in the name of its own legal personality	**18,673,584**	6,275,132
- TRY	***3,353,082***	*2,108,209*
- USD	***15,198,067***	*4,081,182*
- EUR	***117,091***	*85,741*
- Other	***5,344***	-
B. CPMs given on behalf of the fully consolidated companies	**3,004,368**	753,762
- USD	***3,004,368***	*655,667*
- EUR	**-**	*98,095*
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	**21,677,952**	7,028,894

A commission at an amount of TRY17,957 thousand is recognized as of 31 December 2021 related to letter of guarantees given in favor of partnerships included in full consolidation (31 December 2020 – TRY5,970 thousand).

19. Equity

The Company's shareholders and their shareholding percentages as at 31 December 2021 and 31 December 2020 are as follows:

	31 December 2021	**Share (%)**	31 December 2020	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 2020: 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.

(Amounts expressed in thousands of Turkish Lira ("TRY"), unless otherwise indicated.)

19. Equity (Continued)

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 2021, the restricted reserves of the Company amount to TRY503,343 thousand (31 December 2020 - 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.

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 31 March 2021, 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.

20. Revenue and cost of sales

	1 January - 31 December 2021	1 January - 31 December 2020
Domestic revenue	**118,500,409**	51,044,765
Export revenue	**34,450,224**	13,222,620
Gross revenue	**152,950,633**	64,267,385
Less: Sales discounts	**(1,883,693)**	(801,256)
Less: Sales returns	**(95,356)**	(222,314)
Sales (net)	**150,971,584**	63,243,815
Cost of goods sold	**(135,520,941)**	(61,479,585)
Gross profit	**15,450,643**	1,764,230

(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 2021	1 January - 31 December 2020
Raw material, manufactured and consumable material	**129,274,507**	56,685,371
Energy expenses	**3,194,608**	2,094,408
Personnel expenses	**1,148,446**	963,730
Depreciation and amortization (Note 10-11)	**574,441**	554,349
Other production expenses	**1,328,939**	1,181,727
Cost of sales	**135,520,941**	61,479,585

21. General administrative expenses, marketing expenses and research and development expenses

General administrative expenses:

	1 January - 31 December 2021	1 January - 31 December 2020
Personnel expenses	**702,719**	533,872
Insurance expenses	**265,202**	204,802
Taxes and duties	**211,584**	152,836
Outsourced services	**141,091**	109,863
Depreciation and amortization (Note 10-11)	**98,871**	78,907
Office expenses	**86,610**	74,201
Subscription fees	**86,370**	47,638
Lawsuit and consultancy expenses	**44,739**	36,104
Donations	**28,954**	22,654
Transportation and travel expenses	**5,845**	3,911
Other	**121,802**	79,437
Total general administrative expenses	**1,793,787**	1,344,225

Marketing expenses:

	1 January - 31 December 2021	1 January - 31 December 2020
Transportation, storage and insurance expenses	**900,964**	253,727
Personnel expenses	**191,290**	157,443
Depreciation and amortization (Note 10)	**99,578**	95,859
Outsourced services	**60,690**	9,440
Energy expenses	**32,634**	22,865
Advertising expenses	**30,671**	29,909
Other	**93,249**	63,809
Total marketing expenses	**1,409,076**	633,052

(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 2021	1 January - 31 December 2020
Personnel expenses	**15,810**	12,546
Depreciation and amortization (Note 10)	**14,580**	13,123
Lawsuit and consultancy expenses	**3,218**	1,090
Outsourced services	**1,114**	988
Licence expenses	**21**	4,394
Other	**4,223**	2,831
Total research and development expenses	**38,966**	34,972

Depreciation expenses, which have been recorded under cost of goods sold between 1 January to 31 December 2020, have been appropriately allocated to cost centers as of 31 December 2021.

Fees for Services Obtained from Independent Auditor/Independent Audit Firm

The Group's explanation regarding the fees for the services received from the independent audit firms, which is based on the letter of POA dated 19 August 2021, the preparation principles of which are based on the Board Decision published in the Official Gazette on 30 March 2021, are as follows:

	2021(*)	2020(*)
Audit and assurance fee	**2,490**	1,821
Tax consulting fee	**134**	99
Other assurance services fee	**18**	106
Other service fee apart from audit	**-**	28
	2,642	2,054

(*) The fees above have been determined through including the legal audit and other related service fees of all subsidiaries and joint ventures, and the foreign currency fees of foreign subsidiaries and affiliates have been converted into TL using the annual average rates of the relevant years.

22. Other operating income/(expenses)

Other operating income	**1 January - 31 December 2021**	1 January - 31 December 2020
Credit finance gains	**835,695**	424,235
Foreign exchange gain from trade receivables	**180,931**	55,562
Rent income	**7,696**	5,277
Provisions no longer required	**432**	178
Other	**197,628**	131,648
Total other operating income	**1,222,382**	616,900

Other operating expense:	**1 January - 31 December 2021**	1 January - 31 December 2020
Foreign exchange loss from trade payables	**(12,724,345)**	(557,269)
Credit finance charges	**(135,439)**	(374,273)
Other	**(106,821)**	(56,366)
Total other operating expense	**(12,966,605)**	(987,908)

(Amounts expressed in thousands of Turkish Lira ("TRY"), unless otherwise indicated.)

23. Income/(expense) from investment activities

	1 January - 31 December 2021	1 January - 31 December 2020
Gain/(loss) on sales of property plant and equipment and intangible assets	**107,950**	1,805
Total income/(expense) from investment activities	**107,950**	1,805

24. Financial income/(expenses)

	1 January - 31 December 2021	1 January - 31 December 2020
Financial income:		
Foreign exchange gains on deposits	**10,617,543**	2,634,829
Interest income on deposits	**1,941,668**	578,847
Total financial income	**12,559,211**	3,213,676
Financial expense:		
Foreign exchange losses on borrowings	**(7,939,717)**	(3,444,698)
Interest expenses	**(2,527,911)**	(1,753,615)
Losses on derivative instruments	**(1,089,057)**	(1,112,680)
Other	**(6,877)**	(51,240)
Total financial expense	**(11,563,562)**	(6,362,233)

As of 31 December 2021, TRY30,382 thousand interest expense from leasing transactions is included in interest expenses and TRY47,798 thousand expense from leasing transactions is included in the foreign exchange losses (31 December 2020 – TRY20,525).

25. Tax assets and liabilities

	31 December 2021	31 December 2020
Current period corporate tax provision	**47,972**	13,310
Current year tax assets	**(9,579)**	(10,851)
Corporation tax provision	**38,393**	2,459

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 2021 is 25% (2020: 22%).The corporate tax rate for the 2022 year has been determined as 23%. 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).

(Amounts expressed in thousands of Turkish Lira (“TRY”), unless otherwise indicated.)

25. Tax assets and liabilities (Continued)

The law on amending the Tax Procedure Law and the Corporate Tax Law was enacted on 20 January 2022, It has been enacted with the number 7352 and it has been decided that the financial statements will not be subject to inflation adjustment in the 2021 and 2022 accounting periods, including the temporary accounting periods, and in the provisional tax periods of the 2023 accounting period, regardless of whether the conditions for the inflation adjustment within the scope of the repeated Article 298 are met. POA made a declaration on the Implementation of Financial Reporting in High Inflation Economies under TFRS on 20 January 2022, and it was stated that there was no need to make any adjustments within the scope of TAS 29 Financial Reporting in Hyperinflationary Economies in the consolidated financial statements for 2021.

Reconciliation of the income before tax with the calculated corporate tax is as follows:

	2021	2020
Profit /(Loss) before taxation	**2,161,179**	(3,795,394)
Less: Shares in profit/loss of joint ventures	**592,989**	(29,615)
Profit before tax (Excluding the profit/loss shares of Joint Ventures)	**1,568,190**	(3,765,779)
Expected tax expense(*)	**(392,048)**	759,079
Investment incentive income	**1,718,057**	588,815
Deductions and exemptions	**174,774**	102,547
Changes in the tax rate	**36,772**	(76,794)
Effect on revaluation of fixed assets and other assets subject to depreciation (**)	**96,458**	-
Disallowable expenses and differences Not subject to taxation	**(359,018)**	(1,178)
Taxation on income	**1,274,996**	1,372,469

(*) The current year tax rate is taken into account as 25%.

(**) In accordance with the regulation numbered 7326, published in Official Gazette on 9 June 2021, the opportunity to revalue the immovables registered in assets and the economic assets subject to depreciation on the effective date of the law. The companies can benefit from the provision of the article 31 December 2021. The covered assets will be valued with the D-PPI rate and tax will be paid in 3 installments (at two-month intervals) at the rate of 2% over the amount of valuation increase. For the revalued assets, the valuation difference can be depreciated and recognized as taxable expense. Within the scope of the amendment, deferred income tax asset has been recognized in the statement of financial position based on the revaluation records for property, plant, equipment in the tax books, and the deferred income tax related to this asset has been recognized in other comprehensive income.

(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 2021 and 31 December 2020 using the enacted tax rates are as follows:

	Cumulative temporary differences		**Deferred tax (liability)/asset**	
	31 December 2021	31 December 2020	**31 December 2021**	31 December 2020
Gain on revaluation of property	**11,598,575**	8,274,475	**(1,159,864)**	(827,448)
Fair value difference of derivative instruments	**632,642**	(313,375)	**(145,508)**	62,675
Inventories	**149,788**	(185,705)	**(34,451)**	37,141
Provision lawsuits	**(20,087)**	(21,981)	**4,620**	4,396
Cash capital incentives	**(23,790)**	(31,400)	**4,758**	6,280
Provision for unused vacation liability	**(55,089)**	(62,013)	**11,035**	12,403
Employment termination benefits	**(379,579)**	(268,153)	**71,784**	53,631
Deferred financial income (expense), net	**(1,073,031)**	(22,500)	**246,797**	4,500
Accumulated deductible financial losses (**)	**(2,403,799)**	(4,176,390)	**480,760**	835,278
Difference between the carrying values and tax base of property, plant, equipment and intangible assets	**(2,810,278)**	(1,290,035)	**561,354**	258,007
Prepaid expenses	**-**	19,630	**-**	(3,926)
Investment incentives(*)	**(34,664,738)**	(29,724,926)	**6,264,162**	4,546,105
Other	**(314,787)**	(66,925)	**72,401**	13,385
Deferred tax asset – net			**6,377,848**	5,002,427

(*) 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 36.20% revaluation rate, which was announced for the second provisional tax period of 2021 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.

There are two priority and one regional comprehensive incentive certificates for the expansion investments made by Körfez, one of the company's subsidiaries. Within the scope of these 3 incentive certificates, in order to continue its main activities, investment expenditures were made for technical machinery as well as locomotives and wagon investments. With these documents, the company benefits from a 40% investment contribution rate, 80% corporate tax reduction, VAT exemption, customs tax exemption, employer's insurance premium support and interest support incentives

(**) Deferred tax assets amounting to TRY480,760 thousand which is to be used within 5 years consist of Group's financial losses amounting to TRY2,403,799 thousand (31 December 2020 – TRY835,278thousand).

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.

(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:

	2021	2020
Deferred tax asset/(liability), net		
1 January	**5,002,427**	3,767,503
Charge for the period	**1,337,730**	1,385,779
Charge to equity:		
- Hedging cash flow gains/(losses)	**368,988**	(37,250)
- Actuarial gains/(losses) arising from defined benefit plans	**1,120**	(134)
- Revaluation of property gains/(losses)	**(332,417)**	(113,471)
31 December	**6,377,848**	5,002,427

26. Earnings per share

	1 January - 31 December 2021	1 January - 31 December 2020
(Loss) profit for the year attributable to shareholders of the Group	**3,319,134**	(2,493,511)
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	**13.25**	(9.96)

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 2021	31 December 2020
Yapı ve Kredi Bankası A.Ş. (2)	**7,012,655**	6,253,361
Total	**7,012,655**	6,253,361

(Amounts expressed in thousands of Turkish Lira ("TRY"), unless otherwise indicated.)

27. Related party transactions (Continued)

b) Due from related parties:

	31 December 2021	31 December 2020
Opet Petrolcülük A.Ş. (1)	**1,382,904**	226,065
Aygaz A.Ş. (2)	**186,648**	24,516
THY OPET Havacılık Yakıtları A.Ş. (1)	**75,814**	51,113
Opet Fuchs Madeni Yağ San. ve Tic. A.Ş. (1)	**21,765**	19,093
Other (2)	**1,133**	3,768
Total	**1,668,264**	324,555

As of 31 December 2021, Tüpraş has derecognized TRY70,000 thousand TL (31 December 2020: TRY250,000 thousand) which has been collected from factoring companies and TRY153,100 thousand (31 December 2020: TRY507,000 thousand) which has been collected via supplier financing, from trade receivables from related parties.

c) Trade payables:

	31 December 2021	31 December 2020
Opet Petrolcülük A.Ş. (1)	**41,542**	16,910
Koç Sistem Bilgi ve İletişim A.Ş. (2)	**37,183**	22,479
Zer Merkezi Hizmetler ve Ticaret A.Ş. (2)	**27,801**	16,368
Ark İnşaat A.Ş. (2)	**23,540**	44,880
Aygaz A.Ş. (2)	**16,170**	8,104
Otokoç Otomotiv Tic. ve San. A.Ş. (2)	**4,988**	4,922
RAM Sigorta Aracılık Hizmetleri A.Ş. (2)	**3,399**	14,269
Setur Servis Turistik A.Ş. (2)	**3,082**	2,996
Aygaz Doğalgaz Toptan Satış A.Ş. (2)	**-**	75,733
THY OPET Havacılık Yakıtları A.Ş. (1)	**-**	1,137
Other (2)	**7,316**	10,688
Total	**165,021**	218,486

d) Other payables:

	31 December 2021	31 December 2020
Koç Holding A.Ş. (3)	**43,328**	30,763
Total	**43,328**	30,763

e) Advances given for property, plant and equipment

	31 December 2021	31 December 2020
Ark İnşaat A.Ş. (2)	**5,643**	2,126
Total	**5,643**	2,126

(Amounts expressed in thousands of Turkish Lira ("TRY"), unless otherwise indicated.)

27. Related party transactions (Continued)

f) Bank loans:

	31 December 2021	31 December 2020
Yapı ve Kredi Bankası A.Ş. (2)	**815,729**	821,310
Total	**815,729**	821,310

g) Lease liabilities:

	31 December 2021	31 December 2020
Koç Ailesi (3)	**67,827**	63.286
Otokoç Otomotiv Tic. ve San. A.Ş. (2)	**16,427**	22,477
Zer Merkezi Hizmetler ve Ticaret A.Ş. (2)	**20**	31
Total	**84,274**	85,794

h) Product and service sales:

	1 January - 31 December 2021	1 January - 31 December 2020
Opet Petrolcülük A.Ş. (1)	**32,432,913**	10,585,137
THY OPET Havacılık Yakıtları A.Ş. (1)	**3,326,389**	1,645,791
Aygaz A.Ş. (2)	**1,458,967**	554,462
Opet Fuchs Madeni Yağ San. ve Tic. A.Ş. (1)	**146,248**	50,895
Demir Export A.Ş. (1)	**31,333**	14,526
Other (2)	**34,096**	23,781
Total	**37,429,946**	12,874,592

i) Product and service purchases:

	1 January - 31 December 2021	1 January - 31 December 2020
Opet Petrolcülük A.Ş. (1)	**476,039**	287,417
Aygaz Doğalgaz Toptan Satış A.Ş. (2)	**393,250**	730,333
Aygaz A.Ş. (2)	**279,649**	91,691
Ram Sigorta Aracılık Hizmetleri A.Ş. (2) (*)	**278,854**	230,035
Zer Merkezi Hizmetler ve Ticaret A.Ş. (2)	**129,502**	101,762
Ark İnşaat A.Ş. (2)	**115,159**	11,240
Koç Sistem Bilgi ve İletişim A.Ş. (2)	**57,590**	54,793
Koç Holding A.Ş. (3) (**)	**39,463**	56,017
Otokoç Otomotiv Tic. ve San. A.Ş. (2)	**27,651**	25,169
THY OPET Havacılık Yakıtları A.Ş. (1)	**68**	11,433
Other (2)	**61,579**	52,254
Total	**1,858,804**	1,652,144

(*) 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.

(**) 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.

(Amounts expressed in thousands of Turkish Lira ("TRY"), unless otherwise indicated.)

27. Related party transactions (Continued)

j) Fixed asset purchases:

	1 January - 31 December 2021	1 January - 31 December 2020
Koç Sistem Bilgi ve İletişim A.Ş. (2)	**22,329**	19,971
Ark İnşaat A.Ş. (2)	**11,228**	158,238
RMK Marine Gemi Yapım Sanayii ve Deniz Taşımacılığı İşletmesi A.Ş (2)	**4,549**	103,680
Other (2)	**2,687**	14,477
Total	**40,793**	296,366

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 TRY102,536thousand as of period ending on 31 December 2021 (31 December 2020 – TRY72,819 thousand). All of this amount consists of short term benefits.

l) Financial expenses paid to related parties:

	1 January - 31 December 2021	1 January - 31 December 2020
Yapı ve Kredi Bankası A.Ş. (2)	**90,583**	68,143
Yapı Kredi Faktoring A.Ş. (2)	**3,515**	3,358
Yapı Kredi Bank Nederland N.V.(2)	**-**	835
Total	**94,098**	72,336

m) Time deposit interest income:

	1 January - 31 December 2021	1 January - 31 December 2020
Yapı ve Kredi Bankası A.Ş. (2)	**909,883**	192,615
Total	**909,883**	192,615

n) Donations:

As of 31 December 2021, total donation is amounting to TRY162 thousand (31 December 2020 – TRY15,338 thousand).

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.

***Liquidity 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 2021 and 31 December 2020. 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.

(Amounts expressed in thousands of Turkish Lira ("TRY"), unless otherwise indicated.)

28. Financial instruments and financial risk management (Continued)

31 December 2021

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)	75,411,907	77,689,079	46,338,917	10,887,794	19,755,120	707,248
Bank borrowings	20,002,145	21,877,076	2,470,950	10,102,392	8,980,638	323,096
Bonds and notes issued	11,352,244	11,354,525	47,715	586,510	10,720,300	-
Lease liabilities	263,152	654,859	17,633	198,892	54,182	384,152
Trade payables	43,704,239	43,712,492	43,712,492	-	-	-
Other liabilities	90,127	90,127	90,127	-	-	-

Contractual maturities	Carrying value	Contractual cash outflows	Up to 3 months	3-12 months	1-5 years	More than 5 years
Derivative instruments (net)	530,891	973,397	728,209	140,142	105,046	-
Derivative cash inflows	3,862,185	21,570,000	18,125,496	2,168,367	1,276,137	-
Derivative cash outflows	3,331,294	20,596,603	17,397,287	2,028,225	1,171,091	-

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	-

Cash outflows will be financed through cash inflows generated from sales or through funding.

(Amounts expressed in thousands of Turkish Lira ("TRY"), unless otherwise indicated.)

28. Financial instruments and financial risk management (Continued))

***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 2021 and 2020, trade receivables from the top 5 customers of the Group constitute 68% and 57% 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.

Credit risks of the Group for each financial instrument type as at 31 December 2021 and 2020 are as follows:

31 December 2021	**Receivables**						
	Trade Receivables		**Other Receivables**				
	Related parties	**Other parties**	**Related parties**	**Other parties**	**Bank deposits**	**Derivative instruments**	**Other**
Maximum exposed credit risk as of reporting date	**1,668,264**	**11,848,559**	-	**20,541**	**20,400,235**	**3,862,185**	-
- Secured portion of the maximum credit risk by guarantees, etc.	-	**803,208**	-	-	-	-	-
A. Net book value of financial asset either are not due or not impaired	**1,668,264**	**11,727,020**	-	**20,541**	**20,400,235**	**3,862,185**	-
B. Net book value of overdue but not impaired financial assets	-	**121,539**	-	-	-	-	-
C. Net book value of the impaired assets	-	-	-	-	-	-	-
- Overdue(gross book value)	-	**5,528**	-	**2,612**	-	-	-
- Impairment (-)	-	**(5,528)**	-	**(2,612)**	-	-	-
- 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	-	-	-	-	-	-	-

31 December 2020	**Receivables**						
	Trade Receivables		**Other Receivables**				
	Related parties	**Other parties**	**Related parties**	**Other parties**	**Bank deposits**	**Derivative instruments**	**Other**
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	-	-	-	-	-	-	-

(Amounts expressed in thousands of Turkish Lira ("TRY"), unless otherwise indicated.)

28. Financial instruments and financial risk management (Continued)

***Credit risk (Continued)*:**

31 December 2021	Receivables		Bank deposits	Derivative instruments	Other Trade receivables
	Trade receivables	**Other Receivables**			
Overdue (1-30 days)	**68,106**	**-**	**-**	**-**	**-**
Overdue (1-3 months)	**6,081**	**-**	**-**	**-**	**-**
Overdue (3-12 months)	**36,404**	**-**	**-**	**-**	**-**
Overdue (1-5 years)	**10,948**	**-**	**-**	**-**	**-**
Overdue (5+ years)	**-**	**-**	**-**	**-**	**-**

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)	-	-	-	-	-

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 TRY70,726 thousand (31 December 2020: TRY89,116 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 2021 and 31 December 2020 are as follows:

	31 December 2021	31 December 2020
Group 1	**24,306**	9,468
Group 2	**3,329,855**	589,770
Group 3	**9,648,375**	774,025
Group 4	**392,748**	172,705
Total	**13,395,284**	1,545,968

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.

(Amounts expressed in thousands of Turkish Lira ("TRY"), unless otherwise indicated.)

28. Financial instruments and financial risk management (Continued)

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 consituted 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).

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 2021 and 31 December 2020:

	31 December 2021	31 December 2020
Financial instruments with fixed interest rate		
Financial assets		
Time deposits	**18,406,543**	19,673,367
Financial liabilities	**20,722,390**	20,003,939
Financial instruments with floating interest rate		
Financial liabilities (*)	**10,895,151**	9,241,129

(*) As of 31 December 2021, there is interest rate swap and cross currency interest rate swap transactions for loans with floating interest rate amounting to USD 224,662 thousand (31 December 2020: USD365,647 thousand) and TRY1,740,000 thousand (31 December 2020: TRY1,400,000 thousand). There are no EUR interest rate swap transactions as of 31 December 2021. (31 December 2020: EUR61,157 thousand) (Note 17).

As at 31 December 2021, 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 TRY15,756 thousand lower/higher (31 December 2020: TRY9,128 thousand). As at 31 December 2021, 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 2020: None). As at 31 December 2021, 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 TRY1,759 thousand lower/higher (31 December 2020: 1,344).

(Amounts expressed in thousands of Turkish Lira ("TRY"), unless otherwise indicated.)

28. Financial instruments and financial risk management (Continued)

Interest rate risk (Continued)

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 2021 and 2020 based on their contractual repricing dates are disclosed in Note 5.

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 2021 and 31 December 2020:

		31 December 2021		31 December 2020
		USD(*)	TRY	USD(*)
Monetary assets	**16,145,074**	**1,211,274**	1.173.619	159.883
Monetary liabilities	**(63,749,820)**	**(4,782,791)**	(29.337.009)	(3.996.595)
Monetary assets / (liabilities) foreign currency position	**(47,604,746)**	**(3,571,517)**	(28.163.390)	(3.836.712)
Non-monetary assets	**14,358**	**1,077**	105,732	14,404
Net foreign currency position of derivative financial instruments	**18,249,110**	**1,369,128**	16,095,327	2,192,674
Net foreign currency asset / (liability) position	**(29,341,278)**	**(2,201,311)**	(11,962,331)	(1,629,634)
Cash flow hedging (**)	**5,170,028**	**387,878**	4,360,123	593,982
Net foreign currency position after cash flow hedging	**(24,171,250)**	**(1,813,433)**	(7,602,208)	(1,035,652)
Inventory in natural hedge scope (***)	**24,197,942**	**1,815,436**	7,220,776	983,690
Net foreign currency position after cash flow hedging and natural hedge	**26,692**	**2,002**	(381,432)	(51,962)

(*) 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 USD387,878 thousand, which is equivalent to TRY5,170,028 thousand (USD593,982 thousand / TRY4,360,123 thousand in 31 December 2020) 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 2021, TRY4,108,543 thousand of (31 December 2020: TRY2,736,854) 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 2021, the foreign exchange loss amounting to TRY1,618,926 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 2021, foreign exchange loss of these loans in 2021 amounting to TRY2,990,615 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 2021, the Group has crude oil and petroleum products inventories amounting to TRY24,197,942 thousand (31 December 2020: TRY7,220,776 thousand).

(Amounts expressed in thousands of Turkish Lira ("TRY"), unless otherwise indicated.)

28. Financial instruments and financial risk management (Continued)

Foreign exchange position table

	31 December 2021					31 December 2020				
	TRY equivalent (In terms of functional currency	**USD**	**EUR**	**GBP**	**Other**	TRY equivalent (In terms of functional currency	USD	EUR	GBP	Other
Trade receivables	2,286,540	171,534	11	-	-	358,951	45,743	2,568	1	40
Monetary financial assets (including cash, banks)	13,858,534	1,014,354	729	18,212	-	814,668	105,636	3,962	357	-
Other	9,491	237	108	262	(6)	103,077	13,540	255	139	-
Current assets	**16,154,565**	**1,186,125**	**848**	**18,474**	**(6)**	1,276,696	164,919	6,785	497	40
Monetary financial assets	-	-	-	-	-	-	-	-	-	-
Other	4,867	-	-	271	-	2,655	-	-	267	-
Non-current assets	**4,867**	**-**	**-**	**271**	**-**	2,655	-	-	267	-
Total assets	**16,159,432**	**1,186,125**	**848**	**18,745**	**(6)**	1,279,351	164,919	6,785	764	40
Trade payables	41,249,784	3,077,863	14,123	-	11,879	13,026,055	1,759,069	12,127	74	3,642
Financial liabilities	4,274,587	319,889	354	303	-	3,676,865	424,446	61,982	291	-
Other monetary liabilities	3,596,305	269,811	-	-	-	379,918	50,265	36	1,068	-
Current liabilities	**49,120,676**	**3,667,563**	**14,477**	**303**	**11,879**	17,082,838	2,233,780	74,145	1,433	3,642
Financial liabilities	14,605,610	1,087,904	6,586	310	-	12,208,681	1,653,846	6,941	613	-
Other monetary liabilities	23,534	1,766	-	-	-	45,490	6,197	-	-	-
Non-current liabilities	**14,629,144**	**1,089,670**	**6,586**	**310**	**-**	12,254,171	1,660,043	6,941	613	-
Total liabilities	**63,749,820**	**4,757,233**	**21,063**	**613**	**11,879**	29,337,009	3,893,823	81,086	2,046	3,642
Net asset/(liability) position of off-balance sheet foreign currency derivatives	**18,249,110**	**1,369,128**	**-**	**-**	**-**	16,095,327	2,117,625	61,157	-	-
Total amount of off-balance sheet derivative financial assets	35,955,537	2,697,542	-	-	-	17,901,631	2,363,699	61,157	-	-
Total amount of off-balance sheet derivative financial liabilities	(17,706,427)	(1,328,414)	-	-	-	(1,806,304)	(246,074)	-	-	-
Net foreign currency asset/(liability) position	**(29,341,278)**	**(2,201,980)**	**(20,215)**	**18,132**	**(11,885)**	(11,962,331)	(1,611,279)	(13,144)	(1,282)	(3,602)
Cash flow hedging	**5,170,028**	**387,878**	**-**	**-**	**-**	4,360,123	593,982	-	-	-
Net foreign currency position after cash flow hedging	**(24,171,250)**	**(1,814,102)**	**(20,215)**	**18,132**	**(11,885)**	(7,602,208)	(1,017,297)	(13,144)	(1,282)	(3,602)
Net monetary foreign currency asset/(liability) position	**(47,604,746)**	**(3,571,345)**	**(20,323)**	**17,599**	**(11,879)**	(28,163,390)	(3,742,444)	(74,556)	(1,688)	(3,602)
Fair value of derivative instruments Used for hedging	**1,083,025**	**81,253**	**-**	**-**	**-**	(238,142)	(32,442)	-	-	-

As at 31 December 2021, the Group has TRY26,692 thousand as net foreign currency deficit after natural hedging (31 December 2020: TRY381,432 thousand net foreign currency deficit).

(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 2021 and 31 December 2020.

Statement of foreign currency risk sensitivity				
31 December 2021				
	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	(4,760,246)	4,760,246	(500,711)	500,711
Amount hedged for USD risk (-)	2,325,623	(2,325,623)	-	-
USD net effect	**(2,434,623)**	**2,434,623**	**(500,711)**	**500,711**
10% change in EUR rate				
Euro net assets/ liabilities	(30,660)	30,660	-	-
Amount hedged for Euro risk (-)	-	-	-	-
EUR net effect	**(30,660)**	**30,660**	**-**	**-**
TOTAL	**(2,465,283)**	**2,465,283**	**(500,711)**	**500,711**

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

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.

(Amounts expressed in thousands of Turkish Lira ("TRY"), unless otherwise indicated.)

28. Financial instruments and financial risk management (Continued)

Export and import

	1 January - 31 December 2021	1 January - 31 December 2020
Export		
USD (equivalent of thousand TRY)	**25,746,961**	13,583,940
Total	**25,746,961**	13,583,940
Import		
USD (equivalent of thousand TRY)	**117,751,750**	47,661,580
Total	**117,751,750**	47,661,580

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 2021 and 31 December 2020 are as follows:

	31 December 2021	31 December 2020
Total financial liabilities (Note 5)	**31,617,541**	29,245,068
Less: Cash and cash equivalents (Note 4)	**(16,152,381)**	(17,621,288)
Net financial liabilities	**15,465,160**	11,623,780
Total shareholders' equity	**17,827,517**	11,672,525
Total capital invested	**33,292,677**	23,296,305
Gearing ratio	**46.45%**	49.90%

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.

(Amounts expressed in thousands of Turkish Lira ("TRY"), unless otherwise indicated.)

28. Financial instruments and financial risk management (Continued)

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: The fair value of financial assets and financial liabilities are determined in accordance with generally accepted pricing models based on discounted cash flow analysis using prices from observable current market transactions. Assumptions and inputs used in valuation techniques include risk-free and benchmark interest rates, credit spreads and other variables used in estimating discount rates, bond and equity prices, foreign currency exchange rates, equity and equity index prices and expected price volatilities and correlations.
Level 3: Valuation techniques does not contains observable market inputs

Fair value hierarchy table as at 31 December 2021 is as follows:

Financial assets at fair value in statement of financial position	**Level 1**	**Level 2**	**Level 3**
Derivative financial assets	**-**	**3,862,185**	**-**
Financial liabilities at fair value in statement of financial position			
Derivative financial liabilities	**-**	**3,331,294**	**-**

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	-

29. Government grants

Government incentives and aids that the Group has are as follows:

a) 100% customs duty exemption for imported machinery and equipment,
b) VAT exemption for investment goods procured domestically and abroad,
c) Incentives in the scope of research and development law (100% Corporate Tax exemption, Social Security Institution incentives, Stamp tax incentive, etc.),
d) Cash supports received from Teydeb in return for research and development expenses,
e) Discounted corporate tax incentive,
f) Insurance premium employer share support,
g) Corporate tax incentive within the scope of investment allowance exemption,
f) Insurance premium employer's share, employment agency, minimum wage and trainee education supports
g) Real estate tax incentive
h) Interest support.

30. Subsequent events

None.

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