FitchRatings

Corporates
Energy (Oil & Gas)
Turkey

Turkiye Petrol Rafinerileri A.S. (Tupras)

Ratings

Rating Type	Rating	Outlook	Last Rating Action
Long-Term IDR	B+	Stable	Affirmed 20 Oct 21
Long-Term Local-Currency IDR	B+	Stable	Affirmed 20 Oct 21
National Long-Term Rating	A(tur)	Stable	Affirmed 20 Oct 21

Click here for full list of ratings

The revision of the Outlook on Turkiye Petrol Rafinerileri A.S.'s (Tupras) ratings, from Negative to Stable, in October 2021 reflected improved refining margins amid rising demand for oil products after the lifting of pandemic-related mobility restrictions. However, the refining sector's performance remains vulnerable to potential pandemic setbacks and market imbalances due to planned additions to refining capacity.

Tupras's rating is supported by the company's leadership in the Turkish refined product market, operation of some of the most complex set of refineries in EMEA and an ability to access and process cheaper, heavier and sour crudes from a number of suppliers. Tupras's ratings are constrained by volatile refining margins and the company's focus on fuel production with limited business integration. Similar to other Turkish corporates, Tupras is reliant on uninterrupted access to local bank funding to support its liquidity.

Key Rating Drivers

Improved Results Expected: Temporary closure by Tupras of its key refining assets in 2020 amid lockdowns and a decrease in fuel demand heavily weighed on cash flow generation and drove funds from operations (FFO) net leverage higher to 14.3x. Fitch Ratings expects that the normalisation of refining margins in 2021 will allow Tupras to deleverage swiftly and forecasts FFO net leverage of 2.4x in 2021 and an average of 2.7x in 2022-2024.

While forecast levels of net leverage are in line with our positive rating sensitivity, the dynamics of refining margins remain uncertain and a longer record of normalised refining-margin environment would be key to support a sustainable recovery in Tupras's credit metrics.

Recovering Demand: Tupras's capacity utilisation increased to 91% in 2Q21 from 65% in 1Q21, with average utilisation of 82% in 2020 (98% in 2019). Demand for diesel, gasoline and jet fuel in Turkey in 8M21 was only 2% below 2019 levels, with diesel and gasoline demand already exceeding pre-pandemic levels (by 5% and 13%, respectively), and weighed down by lacklustre demand for jet fuel, which was 39% below 2019 levels.

Improving demand for fuel in Turkey will increase capacity utilisation, resulting in a further boost to refining margins for Tupras and translating into better cash flow generation in 2021.

Improved Refining Margins: The relaxation of lockdown measures has spurred demand for oil products in Europe, lifting refining margins from the lows seen during the pandemic, although many crack spreads remain below their five-year averages. Diesel and jet fuel cracks were hit particularly hard during the downturn due to a dramatic reduction in air travel. This caused some refineries to reduce jet fuel production and raise the share of diesel in their output, increasing volumes of this distillate in the market.

The inventory increase during the lockdowns also weighed on refining-product prices. However, inventory levels gradually declined in the summer of 2021, alleviating pressure on margins.

Medium-Term Market Dynamics Uncertain: The recovery in the European refining market remains vulnerable to possible pressures from pandemic-related setbacks, including the spread of more infectious Covid-19 variants, the reintroduction of lockdown measures and a slower-than-expected recovery in international and domestic travel. Furthermore, a reduction in

Applicable Criteria

Corporate Rating Criteria (October 2021)

Corporates Recovery Ratings and Instrument Ratings Criteria (April 2021)

National Scale Rating Criteria (December 2020)

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available refining capacity during the downturn that has contributed to the margin rebound could be reversed in 2022-2023, due to planned refinery additions, mainly in Asia and the Middle East. This could squeeze refining margins if an increase in output volumes is not matched by growing demand.

Increase in Energy Prices: Energy costs (mainly natural gas) account for 3% of Tupras's operating costs. While an increase in natural gas tariffs cannot be ruled out for Tupras in 2022, some refining products are substitutes for natural gas and can push demand higher with a positive impact on Tupras's product crack spreads. The markets for natural gas and oil products remain highly volatile, but we assume that the negative implications for Tupras are limited with upside possible in the short term. Sustained high oil prices could have an adverse impact on demand.

Low Capex, High Dividends: Tupras has fairly low maintenance capex of around USD200 million annually. Historically, Tupras has paid 90% of net profit in dividends, but it suspended dividends in 2020 and 6M21 due to weak cash flow generation. Fitch Ratings expects dividend payouts will return to normal levels from 2022.

High Complexity, Low Integration: Tupras maintains a leading position in the Turkish oil refining market and operates some of the most complex set of refineries in EMEA.

It remains focused on refining and has little integration across the value chain compared with MOL Hungarian Oil and Gas Company Plc (BBB-/Stable) and Polski Koncern Naftowy ORLEN S.A. (PKN; BBB-/Rating Watch Positive), which are diversified into upstream, petrochemicals and retail. Tupras's 40% stake in Opet, Turkey's second-largest fuel retailer, only partly offsets this lack of integration, which increases Tupras's earnings volatility through the cycle.

Financial Summary

Turkiye Petrol Rafinerileri A.S. (Tupras)

(TRY 000)	Dec 18	Dec 19	Dec 20	Dec 21F	Dec 22F
Gross revenue	88,552,170	89,600,776	63,243,815	103,625,591	108,077,421
Operating EBITDA before income from associates	6,358,794	3,734,916	559,216	5,924,156	6,841,825
FFO	5,579,724	1,638,030	-34,023	4,346,333	5,174,783
FFO interest coverage (x)	5.2	1.5	0.7	3.2	3.7
FFO net leverage (x)	2.4	4.0	14.3	2.4	2.2

F – Forecast.
Source: Fitch Ratings, Fitch Solutions

Rating Derivation Relative to Peers

Tupras's closest EMEA peers are PKN and MOL. PKN's downstream capacity of 689 thousand barrels a day (kbbl/d) exceeds Tupras's 585kbbl/d. Moreover, PKN benefits from an integrated petrochemical segment, a large retail network and some exposure to upstream. MOL's downstream capacity (417kbbl/d) is smaller than Tupras's, but the company's credit profile is stronger due to an integrated business profile with 100kbbl/d of upstream production that provides counter-cyclical cash flows.

Unlike MOL and PKN, Tupras operates in a deficit fuel market, while the coastal location of its two principal refineries allows it to actively manage crude feedstock supplies. Tupras's leverage is much higher than that of MOL and PKN, but the company has lower capital intensity than its peers, as well as a lack of diversification.

Navigator Peer Comparison

Issuer		Business profile						Financial profile		
	IDR/Outlook	Operating Environment	Management and Corporate Governance	Business Diversification	Scale of Operations	Refinery Locations	Refining Asset Quality	Profitability	Financial Structure	Financial Flexibility
Turkiye Petrol Rafinerileri A.S. (Tupras)	B+/Sta	bb+	bbb	bb	bbb-	bbb	bbb	bb	b+	b
Polski Koncern Naftowy ORLEN S.A. (PKN)	BBB-/RWP	a+	a	bbb	BBB-	bbb-	bbb	bbb	bbb	bbb+
MOL Hungarian Oil and Gas Company Plc	BBB-/Sta	bbb	a	bbb	bbb-	bbb-	bbb	bbb+	bbb	bbb+
Compania Espanola de Petroleos, S.A.U (CEPSA)	BBB-/Sta	a	bbb-	bbb	bbb-	bbb-	bbb	bbb+	bbb	a-
KMG International NV	B+/Sta	bb	bb	bb	bb-	bb	bb-	b	b	b-

Source: Fitch Ratings.

Importance: Higher / Moderate / Lower

Rating Sensitivities

Factors that Could, Individually or Collectively, Lead to Positive Rating Action/Upgrade:

- Improved outlook for refining margins in the medium term
- FFO net leverage consistently below 4.0x

Factors that Could, Individually or Collectively, Lead to Negative Rating Action/Downgrade:

- FFO net leverage consistently above 5.0x
- Worsening liquidity
- Consistently negative free cash flow (FCF)

Liquidity and Debt Structure

Liquidity Subject to Bank Funding: As of end-June 2021, reported cash and cash equivalents of TRY16.8 billion (net of restricted cash) covered short-term debt of TRY15.8 billion, adjusted for factoring and payable securitisation of TRY3.5 billion. Combined with Tupras's debt maturity profile over the next 24 months, the company's liquidity is therefore contingent on continued access to domestic banks. This is not uncommon among Turkish corporates but exposes the company to systemic liquidity risk.

Tupras also keeps large deposits at related-party bank Yapi ve Kredi Bankasi A.S. (B+/Negative), amounting to TRY6.3 billion at end-June 2021. Tupras has a long record of cooperation with Yapi ve Kredi Bankasi, and transactions among a wider group of companies with a common majority owner are not uncommon in Turkey. We believe Tupras has not faced any difficulties in accessing its liquidity buffer held in the bank in the past.

ESG Considerations

Unless otherwise disclosed in this section, the highest level of ESG credit relevance is a score of '3'. This means ESG issues are credit neutral or have only a minimal credit impact on the entity, either due to their nature or the way in which they are being managed by the entity. For more information on Fitch's ESG Relevance Scores, visit www.fitchratings.com/esg.

Liquidity and Debt Maturities

Turkiye Petrol Rafinerileri A.S. (Tupras) – Liquidity Analysis

(TRY 000)	2021F	2022F	2023F
Available liquidity			
Beginning cash balance	17,610,803	7,174,562	-6,004,574
Rating-case FCF after acquisitions and divestitures	2,139,275	-754,249	-2,382,946
Total available liquidity (A)	**19,750,078**	**6,420,313**	**-8,387,520**
Liquidity uses			
Debt maturities	-12,575,516	-12,424,887	-2,247,467
Total liquidity uses (B)	**-12,575,516**	**-12,424,887**	**-2,247,467**
Liquidity calculation			
Ending cash balance (A+B)	7,174,562	-6,004,574	-10,634,987
Ending liquidity	**7,174,562**	**-6,004,574**	**-10,634,987**
Liquidity score (x)	1.6	0.5	-3.7

F – Forecast.
Source: Fitch Ratings, Fitch Solutions, Tupras

Scheduled debt maturities	**Original**
(TRY 000)	**31 Dec 20**
2021	12,575,516
2022	12,424,887
2023	2,247,467
2024	5,714,105
2025	100,516
Thereafter	57,292
Total	**33,119,783**

Source: Fitch Ratings, Fitch Solutions, Tupras

Key Assumptions

Fitch's Key Assumptions Within the Rating Case for the Issuer

- Oil prices as per Fitch's price deck: USD63/bbl in 2021, USD55/bbl in 2022, USD53/bbl in 2023 and 2024
- Improving refining margins in 2021-2024
- Capex in line with the company's guidance to 2024
- Dividends in line with Tupras's dividend policy

Financial Data

Turkiye Petrol Rafinerileri A.S. (Tupras)

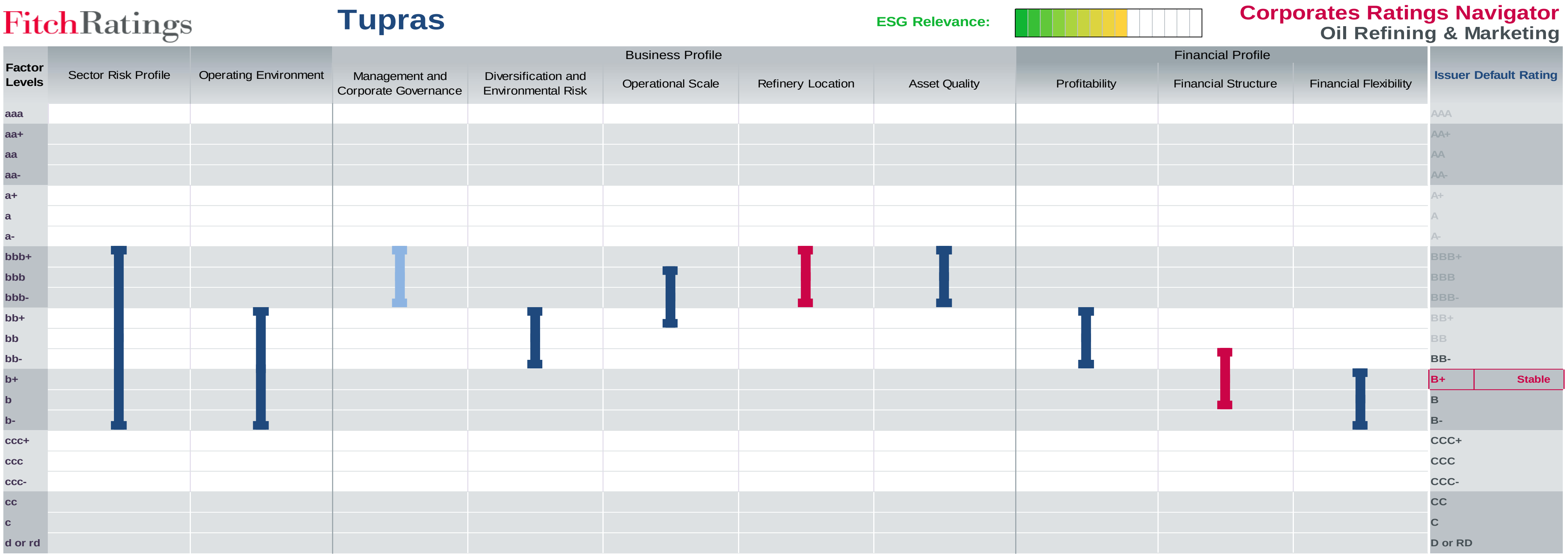
	Historical			Forecast	
(TRY 000)	**Dec 18**	**Dec 19**	**Dec 20**	**Dec 21**	**Dec 22**
Summary income statement					
Gross revenue	88,552,170	89,600,776	63,243,815	103,625,591	108,077,421
Revenue growth (%)	64.1	1.2	-29.4	63.9	4.3
Operating EBITDA (before income from associates)	6,358,794	3,734,916	559,216	5,924,156	6,841,825
Operating EBITDA margin (%)	7.2	4.2	0.9	5.7	6.3
Operating EBITDAR	6,394,523	3,739,090	593,682	5,958,622	6,876,291
Operating EBITDAR margin (%)	7.2	4.2	0.9	5.8	6.4
Operating EBIT	5,736,300	3,063,765	-148,556	5,158,004	6,006,737
Operating EBIT margin (%)	6.5	3.4	-0.2	5.0	5.6
Gross interest expense	-1,309,157	-1,986,929	-1,722,379	-1,873,478	-1,864,115
Pretax income (including associate income/loss)	3,724,380	-311,348	-3,795,394	3,434,526	4,292,622
Summary balance sheet					
Readily available cash and equivalents	4,557,686	8,790,761	17,610,803	13,851,013	17,386,355
Total debt with equity credit	20,281,540	20,928,438	33,119,783	28,420,718	32,710,309
Total adjusted debt with equity credit	20,460,185	20,928,438	33,395,511	28,420,718	32,710,309
Net debt	15,723,854	12,137,677	15,508,980	14,569,705	15,323,954
Summary cash flow statement					
Operating EBITDA	6,358,794	3,734,916	559,216	5,924,156	6,841,825
Cash interest paid	-1,248,137	-1,961,722	-1,630,755	-1,873,478	-1,864,115
Cash tax	-140,935	-105,823	-13,256	-34,345	-42,926
Dividends received less dividends paid to minorities (inflow/(out)flow)	224,000	96,000	120,000	180,000	90,000
Other items before FFO	10,648	-718,887	417,070	0	0
Funds flow from operations	5,579,724	1,638,030	-34,023	4,346,333	5,174,783
FFO margin (%)	6.3	1.8	-0.1	4.2	4.8
Change in working capital	-4,154,319	8,662,417	-2,372,273	-861,449	3,855
Cash flow from operations (Fitch defined)	1,425,405	10,300,447	-2,406,296	3,484,885	5,178,638
Total non-operating/nonrecurring cash flow	-2,193,422	0	0		
Capex	-941,063	-1,337,367	-1,082,896		
Capital intensity (capex/revenue) (%)	1.1	1.5	1.7		
Common dividends	-3,406,452	-3,793,851	-5,606		
Free cash flow	-5,115,532	5,169,229	-3,494,798		
Net acquisitions and divestitures	1,081	1,195	24,188		
Other investing and financing cash flow items	5,696,426	-3,867,885	-6,503,573	-1,200,000	0
Net debt proceeds	-581,975	-1,302,539	8,530,001	-4,699,066	4,289,592
Net equity proceeds	0	0	0	0	0
Total change in cash	0	0	-1,444,182	-3,759,790	3,535,343
Leverage ratios					
Total net debt with equity credit/operating EBITDA (x)	2.4	3.2	22.8	2.4	2.2
Total adjusted debt/operating EBITDAR (x)	3.1	5.5	46.8	4.6	4.7
Total adjusted net debt/operating EBITDAR (x)	2.4	3.2	22.1	2.4	2.2
Total debt with equity credit/operating EBITDA (x)	3.1	5.5	48.8	4.7	4.7
FFO adjusted leverage (x)	3.2	7.0	29.9	4.7	4.7
FFO adjusted net leverage (x)	2.5	4.0	14.1	2.4	2.2
FFO leverage (x)	3.1	7.0	30.6	4.7	4.7
FFO net leverage (x)	2.4	4.0	14.3	2.4	2.2
Calculations for forecast publication					
Capex, dividends, acquisitions and other items before FCF	-6,539,856	-5,130,023	-1,064,314	-1,345,610	-5,932,887
Free cash flow after acquisitions and divestitures	-5,114,451	5,170,424	-3,470,610	2,139,275	-754,249
Free cash flow margin (after net acquisitions) (%)	-5.8	5.8	-5.5	2.1	-0.7
Coverage ratios					
FFO interest coverage (x)	5.2	1.5	0.7	3.2	3.7
FFO fixed-charge coverage (x)	5.1	1.5	0.7	3.2	3.6
Operating EBITDAR/interest paid + rents (x)	5.2	2.0	0.4	3.2	3.7
Operating EBITDA/interest paid (x)	5.3	2.0	0.4	3.3	3.7
Additional metrics					
CFO-capex/total debt with equity credit (%)	2.4	42.8	-10.5	7.6	7.1
CFO-capex/total net debt with equity credit (%)	3.1	73.8	-22.5	14.8	15.0

Source: Fitch Ratings, Fitch Solutions.

How to Interpret the Forecast Presented

The forecast presented is based on Fitch Ratings' internally produced, conservative rating case forecast. It does not represent the forecast of the rated issuer. The forecast set out above is only one component used by Fitch Ratings to assign a rating or determine a rating outlook, and the information in the forecast reflects material but not exhaustive elements of Fitch Ratings' rating assumptions for the issuer's financial performance. As such, it cannot be used to establish a rating, and it should not be relied on for that purpose. Fitch Ratings' forecasts are constructed using a proprietary internal forecasting tool, which employs Fitch Ratings' own assumptions on operating and financial performance that may not reflect the assumptions that you would make. Fitch Ratings' own definitions of financial terms such as EBITDA, debt or free cash flow may differ from your own such definitions. Fitch Ratings may be granted access, from time to time, to confidential information on certain elements of the issuer's forward planning. Certain elements of such information may be omitted from this forecast, even where they are included in Fitch Ratings' own internal deliberations, where Fitch Ratings, at its sole discretion, considers the data may be potentially sensitive in a commercial, legal or regulatory context. The forecast (as with the entirety of this report) is produced strictly subject to the disclaimers set out at the end of this report. Fitch Ratings may update the forecast in future reports but assumes no responsibility to do so. Original financial statement data for historical periods is processed by Fitch Solutions on behalf of Fitch Ratings. Key financial adjustments and all financial forecasts credited to Fitch Ratings are generated by rating agency staff.

Ratings Navigator



Bar Chart Legend:			
Vertical Bars = Range of Rating Factor		Bar Arrows = Rating Factor Outlook	
Bar Colours = Relative Importance		⇧	Positive
■	Higher Importance	⇩	Negative
■	Average Importance	⇳	Evolving
■	Lower Importance	□	Stable

FitchRatings

Tupras

Corporates Ratings Navigator
Oil Refining & Marketing

Operating Environment

bbb-	Economic Environment	bb	Below average combination of countries where economic value is created and where assets are located.
bb+	Financial Access	bbb	Average combination of issuer specific funding characteristics and of the strength of the relevant local financial market.
	Systemic Governance	bb	Systemic governance (eg rule of law, corruption; government effectiveness) of the issuer's country of incorporation consistent with 'bb'.
b-			
ccc+			

Management and Corporate Governance

a-	Management Strategy	bbb	Strategy may include opportunistic elements but soundly implemented.
bbb+	Governance Structure	bbb	Good CG track record but effectiveness/independence of board less obvious. No evidence of abuse of power even with ownership concentration.
bbb	Group Structure	bbb	Some group complexity leading to somewhat less transparent accounting statements. No significant related-party transactions.
bbb-	Financial Transparency	bbb	Good quality reporting without significant failing. Consistent with the average of listed companies in major exchanges.
bb+			

Diversification and Environmental Risk

bbb-	Business Diversification	bb	Very limited integration with non-refining business.
bb+	Environmental Risk	bbb	Moderate exposure to environmental regulations and/or material but manageable remediation costs relative to projected cash flows.
bb			
bb-			
b+			

Operational Scale

bbb+	Capacity (bpd)	bbb	Greater than 500,000 with dominant position or good geographic diversification.
bbb	Number of Refineries	bbb	At least two larger refineries.
bbb-			
bb+			
bb			

Refinery Location

a-	Competitiveness of Markets	bbb	Markets with low competition or widening supply deficit.
bbb+	Logistics	bbb	Close to oil and product pipelines. Low-cost access to end-user markets.
bbb			
bbb-			
bb+			

Asset Quality

a-	Complexity	bbb	High complexity, outstanding product yield compared to competitors.
bbb+	Margins and Utilization rates	bb	Average margins and utilization rates compared to industry benchmarks.
bbb			
bbb-			
bb+			

Profitability

bbb-	FFO Margin	bb	3%
bb+	EBIT Margin	bb	2%
bb	FCF	bb	Neutral to negative across the cycle.
bb-			
b+			

Financial Structure

bb	FFO Leverage	b	4.5x
bb-	FFO Net Leverage	b	4.0x
b+	(CFO-Capex)/Total Debt With Equity Credit	b	2.5%
b			
b-			

Financial Flexibility

bb-	Financial Discipline	bb	Financial policies in place but flexibility in applying them could lead to temporarily exceeding downgrade guidelines.
b+	Liquidity	bb	Liquidity ratio around 1.0x. Less smooth debt maturity or concentrated funding.
b	FFO Interest Coverage	b	2.5x
b-	FX Exposure	bb	FX exposure on profitability and/or debt/cash flow match. Some hedging in place but only partly effective.
ccc+	Op. EBITDA/Interest Paid	ccc	1.25x

Credit-Relevant ESG Derivation

Tupras has 12 ESG potential rating drivers

- GHGs emissions and other pollutants/air toxins resulting from refining process
- Energy use in refining
- Water use in refining
- Hazardous material management
- Operational disruptions from extreme weather events
- Operations proximity to areas of conflict or indigenous lands

Showing top 6 issues

			Overall ESG
key driver	0	issues	5
driver	0	issues	4
potential driver	12	issues	3
not a rating driver	1	issues	2
	1	issues	1

For further details on Credit-Relevant ESG scoring, see page 3.

How to Read This Page: The left column shows the three-notch band assessment for the overall Factor, illustrated by a bar. The right column breaks down the Factor into Sub-Factors, with a description appropriate for each Sub-Factor and its corresponding category.

FitchRatings **Tupras**

Corporates Ratings Navigator
Oil Refining & Marketing

Credit-Relevant ESG Derivation

Tupras has 12 ESG potential rating drivers

- Tupras has exposure to emissions regulatory risk but this has very low impact on the rating.
- Tupras has exposure to energy productivity risk but this has very low impact on the rating.
- Tupras has exposure to water management risk but this has very low impact on the rating.
- Tupras has exposure to waste & impact management risk but this has very low impact on the rating.
- Tupras has exposure to extreme weather events but this has very low impact on the rating.
- Tupras has exposure to land rights/conflicts risk but this has very low impact on the rating.

Showing top 6 issues

			Overall ESG Scale
key driver	0	issues	5
driver	0	issues	4
potential driver	12	issues	3
not a rating driver	1	issues	2
	1	issues	1

Environmental (E)

General Issues	E Score	Sector-Specific Issues	Reference	E Scale
GHG Emissions & Air Quality	3	GHGs emissions and other pollutants/air toxins resulting from refining process	Business Diversification; Scale of Operations; Refining Asset Quality; Profitability	5
Energy Management	3	Energy use in refining	Business Diversification; Scale of Operations; Profitability	4
Water & Wastewater Management	3	Water use in refining	Business Diversification; Scale of Operations; Profitability	3
Waste & Hazardous Materials Management; Ecological Impacts	3	Hazardous material management	Business Diversification; Scale of Operations; Refinery Locations	2
Exposure to Environmental Impacts	3	Operational disruptions from extreme weather events	Business Diversification; Refinery Locations; Profitability	1

Social (S)

General Issues	S Score	Sector-Specific Issues	Reference	S Scale
Human Rights, Community Relations, Access & Affordability	3	Operations proximity to areas of conflict or indigenous lands	Management and Corporate Governance; Profitability; Financial Flexibility	5
Customer Welfare - Fair Messaging, Privacy & Data Security	1	n.a.	n.a.	4
Labor Relations & Practices	3	Impact of labor negotiations and employee (dis)satisfaction	Profitability; Financial Structure; Financial Flexibility	3
Employee Wellbeing	2	Worker safety and accident prevention	Business Diversification; Refining Asset Quality	2
Exposure to Social Impacts	3	Social resistance to major projects or operations that leads to delays and cost increase	Profitability; Financial Structure; Financial Flexibility	1

Governance (G)

General Issues	G Score	Sector-Specific Issues	Reference	G Scale
Management Strategy	3	Strategy development and implementation	Management and Corporate Governance	5
Governance Structure	3	Board independence and effectiveness; ownership concentration	Management and Corporate Governance	4
Group Structure	3	Complexity, transparency and related-party transactions	Management and Corporate Governance	3
Financial Transparency	3	Quality and timing of financial disclosure	Management and Corporate Governance	2
				1

How to Read This Page
ESG scores range from 1 to 5 based on a 15-level color gradation. Red (5) is most relevant and green (1) is least relevant.

The Environmental (E), Social (S) and Governance (G) tables break out the individual components of the scale. The right-hand box shows the aggregate E, S, or G score. General Issues are relevant across all markets with Sector-Specific Issues unique to a particular industry group. Scores are assigned to each sector-specific issue. These scores signify the credit-relevance of the sector-specific issues to the issuing entity's overall credit rating. The Reference box highlights the factor(s) within which the corresponding ESG issues are captured in Fitch's credit analysis.

The Credit-Relevant ESG Derivation table shows the overall ESG score. This score signifies the credit relevance of combined E, S and G issues to the entity's credit rating. The three columns to the left of the overall ESG score summarize the issuing entity's sub-component ESG scores. The box on the far left identifies the some of the main ESG issues that are drivers or potential drivers of the issuing entity's credit rating (corresponding with scores of 3, 4 or 5) and provides a brief explanation for the score.

Classification of ESG issues has been developed from Fitch's sector ratings criteria. The General Issues and Sector-Specific Issues draw on the classification standards published by the United Nations Principles for Responsible Investing (PRI) and the Sustainability Accounting Standards Board (SASB).

CREDIT-RELEVANT ESG SCALE

How relevant are E, S and G issues to the overall credit rating?

5	Highly relevant, a key rating driver that has a significant impact on the rating on an individual basis. Equivalent to "higher" relative importance within Navigator.
4	Relevant to rating, not a key rating driver but has an impact on the rating in combination with other factors. Equivalent to "moderate" relative importance within Navigator.
3	Minimally relevant to rating, either very low impact or actively managed in a way that results in no impact on the entity rating. Equivalent to "lower" relative importance within Navigator.
2	Irrelevant to the entity rating but relevant to the sector.
1	Irrelevant to the entity rating and irrelevant to the sector.

Simplified Group Structure Diagram

Tupras
B+/Stable

USD576m Residuum upgrading project club loan
USD700m 4.5% senior unsecured notes due 2024
TRY1,150m notes due 2022

Source: Fitch Ratings, Fitch Solutions, Tupras, as of end-December 2020

Peer Financial Summary

Company	Issuer Default rating	Financial statement date	Gross revenue (USDm)	Operating EBITDA before income from associates (USDm)	FFO (USDm)	FFO interest coverage (x)	FFO net leverage (x)
Turkiye Petrol Rafinerileri A.S. (Tupras)	B+						
		2020	9,041	80	-5	0.7	14.3
		2019	15,825	660	289	1.5	4.0
		2018	18,650	1,339	1,175	5.2	2.4
Polski Koncern Naftowy ORLEN S.A. (PKN)	BBB-						
		2020	22,122	1,353	1,064	14.7	3.0
		2019	28,959	2,179	1,767	31.9	0.4
		2018	30,361	2,518	2,215	35.5	0.7
MOL Hungarian Oil and Gas Company Plc	BBB-						
		2020	13,028	1,731	1,804	38.4	1.5
		2019	18,491	2,264	2,512	37.4	0.6
		2018	19,112	2,827	2,734	32.5	0.4
Compania Espanola de Petroleos, S.A.	BBB-						
		2020	17,962	538	207	3.2	12.5
		2019	26,706	1,962	1,452	16.9	2.2
		2018	29,155	2,143	1,933	15.6	1.9

Source: Fitch Ratings, Fitch Solutions.

Fitch Adjusted Financials

Fitch Adjustments and Reconciliation Table for Tupras

(TRY 000)	Notes and Formulas	Reported Values	Sum of Adjustments	CORP- Lease Treatment	- CORP - Factoring	Adjusted Values
31 December 2020						
Income Statement Summary						
Revenue		63,243,815				63,243,815
Operating EBITDAR		624,918	-31,236	-31,236		593,682
Operating EBITDAR After Associates and Minorities	(a)	744,918	-31,236	-31,236		713,682
Operating Lease Expense	(b)	0	34,466	34,466		34,466
Operating EBITDA	(c)	624,918	-65,702	-65,702		559,216
Operating EBITDA After Associates and Minorities	(d) = (a-b)	744,918	-65,702	-65,702		679,216
Operating EBIT	(e)	-117,320	-31,236	-31,236		-148,556
Debt and Cash Summary						
Total Debt with Equity Credit	(f)	29,016,178	4,103,605		4,103,605	33,119,783
Lease-Equivalent Debt	(g)	0	275,728	275,728		275,728
Other Off-Balance-Sheet Debt	(h)	0				0
Total Adjusted Debt with Equity Credit	(i) = (f+g+h)	29,016,178	4,379,333	275,728	4,103,605	33,395,511
Readily Available Cash and Equivalents	(j)	17,610,803				17,610,803
Not Readily Available Cash and Equivalents		2,214,489				2,214,489
Cash Flow Summary						
Operating EBITDA After Associates and Minorities	(d) = (a-b)	744,918	-65,702	-65,702		679,216
Preferred Dividends (Paid)	(k)	0				0
Interest Received	(l)	513,702				513,702
Interest (Paid)	(m)	-1,630,755				-1,630,755
Cash Tax (Paid)		-13,256				-13,256
Other Items Before FFO		385,834	31,236	31,236		417,070
Funds from Operations (FFO)	(n)	443	-34,466	-34,466		-34,023
Change in Working Capital (Fitch-Defined)		-327,668	-2,044,605		-2,044,605	-2,372,273
Cash Flow from Operations (CFO)	(o)	-327,225	-2,079,071	-34,466	-2,044,605	-2,406,296
Non-Operating/Nonrecurring Cash Flow		0				0
Capital (Expenditures)	(p)	-1,082,896				-1,082,896
Common Dividends (Paid)		-5,606				-5,606
Free Cash Flow (FCF)		-1,415,727	-2,079,071	-34,466	-2,044,605	-3,494,798
Gross Leverage (x)						
Total Adjusted Debt/Operating EBITDAR[a]	(i/a)	39.0				46.8
FFO Adjusted Leverage	(i/(n-m-l-k+b))	26.0				29.9
FFO Leverage	(i-g)/(n-m-l-k)	26.0				30.6
Total Debt with Equity Credit/Operating EBITDA[a]	(i-g)/d	39.0				48.8
(CFO-Capex)/Total Debt with Equity Credit (%)	(o+p)/(i-g)	-4.9%				-10.5%
Net Leverage (x)						
Total Adjusted Net Debt/Operating EBITDAR[a]	(i-j)/a	15.3				22.1
FFO Adjusted Net Leverage	(i-j)/(n-m-l-k+b)	10.2				14.1
FFO Net Leverage	(i-g-j)/(n-m-l-k)	10.2				14.3
Total Net Debt with Equity Credit/Operating EBITDA[a]	(i-g-j)/d	15.3				22.8
(CFO-Capex)/Total Net Debt with Equity Credit (%)	(o+p)/(i-g-j)	-12.4%				-22.5%
Coverage (x)						
Operating EBITDA/(Interest Paid + Lease Expense)[a]	a/(-m+b)	0.5				0.4
Operating EBITDA/Interest Paid[a]	d/(-m)	0.5				0.4
FFO Fixed-Charge Coverage	(n-l-m-k+b)/(-m-k+b)	0.7				0.7
FFO Interest Coverage	(n-l-m-k)/(-m-k)	0.7				0.7

[a] EBITDA/R after dividends to associates and minorities.

Source: Fitch Ratings, Fitch Solutions, Tupras

Recovery Worksheet

Recovery Analysis

Issuer Name	Turkiye Petrol Rafinerileri A.S. (Tupras)
Issuer Default Rating	B+
Sector	Energy (Oil and Gas)
Statement Date	31 December 2021
Currency	TRY 000

Going-Concern (GC) Enterprise Value	
GC EBITDA	3,734,916
EBITDA multiple (x)	5.0
Additional value from affiliates, minority interest, other	-
Going Concern Enterprise Value	**13,870,450**

Liquidation Value (LV)	**Book Value**	**Advance Rate (%)**	**Available to Creditors**
Cash	19,825,292	0	-
Accounts receivable	1,410,994	75	1,058,246
Inventory	7,700,630	75	5,775,473
Net property, plant and equipment	21,875,889	50	10,937,945
LV of off-balance sheet assets	-	100	-
Additional value from affiliates, minority interest, other	-	100	-
Total Liquidation Value			**17,771,663**

Enterprise Value for Claims Distribution	
Greater of GC enterprise or liquidation value	17,771,663
Less administrative claims	1777166.3
Total Enterprise Value	**15,994,496**

Distribution of Value

Priority	Amount	Concession Allocation	Value Recovered	Recovery (%)	Recovery Rating	Notching	Rating
Super senior (factoring and securitsation)	4,103,605	0	4103605	100	RR1	+3	BB+
Unsecured loans	29,016,178	0	11890891	41	RR4	0	B+

Source: Fitch Ratings, Fitch Solutions, Tupras

Our recovery analysis is based on a liquidation value approach, which yields a higher value than a going-concern approach. It assumes Tupras will be liquidated in a bankruptcy rather than reorganised.

The liquidation estimate reflects Fitch's view of the value of balance-sheet assets that can be realised in a sale or liquidation conducted during a bankruptcy or insolvency proceedings and distributed to creditors. Fitch has applied:

- A 100% discount to cash held
- A 25% discount to account receivables based on analysis of Tupras's receivables portfolio and peer analysis.
- A 25% discount to inventory, lower than the usual 50% discount as we consider commodities to be more readily marketable
- A 50% discount to net property, plant and equipment based on the quality of the company's assets and peer analysis.

All loans and bonds are unsecured and rank pari passu.

After deduction of 10% for administrative claims, our analysis resulted in a waterfall generated recovery computation (WGRC) in the 'RR4' band, indicating a 'B+' instrument rating. The WGRC output percentage on current metrics and assumptions was 41%.

B+/B/B-/CCC Table

Considerations	B+	B	B-	CCC+	CCC	CCC-	CC	Trend	Fitch's View
Business Model	Robust	Sustainable	Intact	Redeemable	Compromised	Disrupted	Irredeemable	◀▶	Tupras is Turkey's largest refiner, operating four plants. Its largest refinery is one of the most complex in Europe and the Middle East.
Strategy/ Execution Risk	Limited	Moderate	Meaningful	Challenging yet achievable	Uncertain	Highly speculative	Not credible	◀▶	The company is not starting any new projects, and has significant capex flexibility.
Cash Flow	Consistently positive	Neutral to positive	Volatile	Mostly negative	Constantly negative	Accelerating cash outflow	Irreversible outflow	◀▶	We expect the company to return to profitability in 2021 and 2022 with neutral to positive FCF generation. It has the ability to cut capex when in need. There is a risk that FCF will remain negative if margins stay depressed.
Leverage Profile	Clear deleveraging path	Deleveraging capacity	High but sustainable	Significant outlier	Unsustainable	Disproportionate and increasing	Unrecoverable	◀▶	Leverage remains high in 2021 but we expect deleveraging following improvement in FFO.
Governance and Financial Policy	Committed	Some commitment to deleveraging	Aggressive	Ineffective	Uncommitted	Hostile	Inevitable balance-sheet restructuring	◀▶	The management is committed to reducing leverage and has decided not to pay the 2019 dividend. The owner is one of the largest employers in Turkey.
Refinancing Risk	Limited	Manageable	High	Off-market options	Excessive	Unavailable	Imminent	◀▶	The company has demonstrated a track record of access to significant uncommitted lines on the Turkish market. Tupras was able to tap the market in the past few months, increasing its debt held in lira, at lower rates.
Liquidity	Comfortable	Satisfactory	Limited	Minimal headroom	Poor/partly funded	Unfunded	De facto insolvent	◀▶	On top of available uncommitted lines, the company has borrowed heavily during the pandemic, which has resulted in a very strong cash position.
CONCLUSION	B+								

Source: Fitch Ratings

The ratings above were solicited and assigned or maintained at the request of the rated entity/issuer or a related third party. Any exceptions follow below.