



# Energy To the future

 **Tüpraş**

 **Koc** | September 2024

Investor Presentation

# Disclaimer

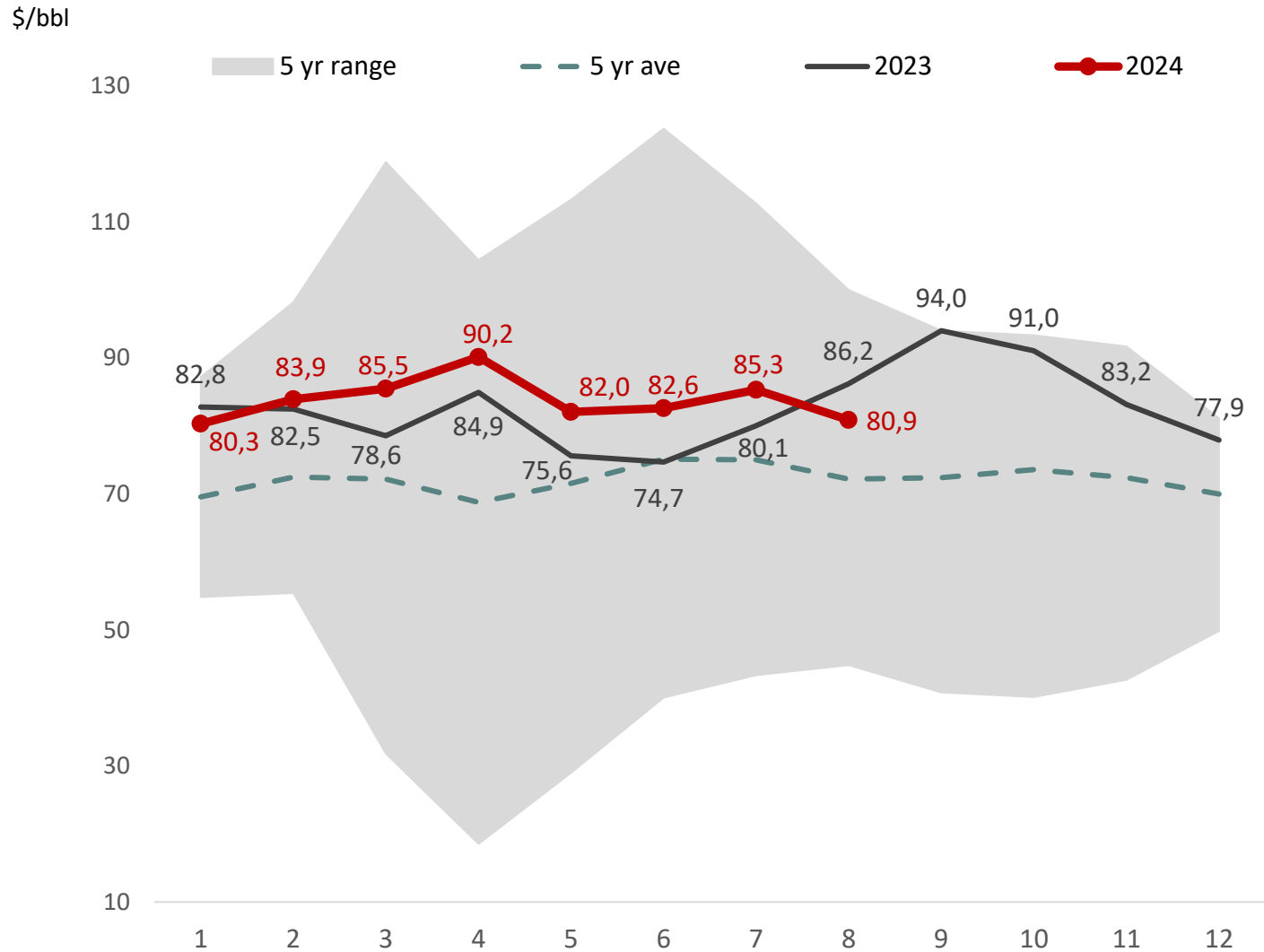
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# Refining Market

# Brent Crude Prices



- + Russian-Ukraine war
- + Impact of sanctions
- + Post-pandemic demand recovery
- + OPEC+ cut decisions
- + New trade dynamics

- Continued Non OPEC supply
- Geopolitical tensions
- Concerns over economic slowdown

Year	Average Brent Prices (\$/bbl)
2019	64.3
2020	41.7
2021	70.7
2022	101.2
2023	82.6

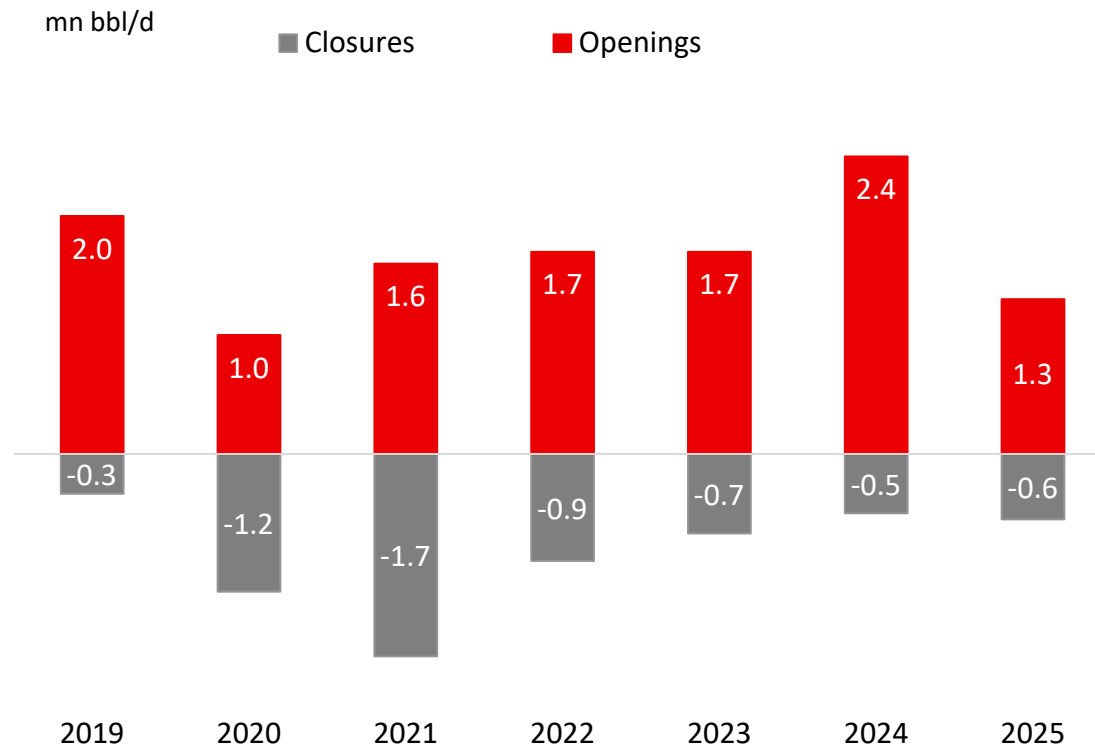
Data as of 31 August, 5 year range shows 2019-2023

# Global Refinery Capacity Changes

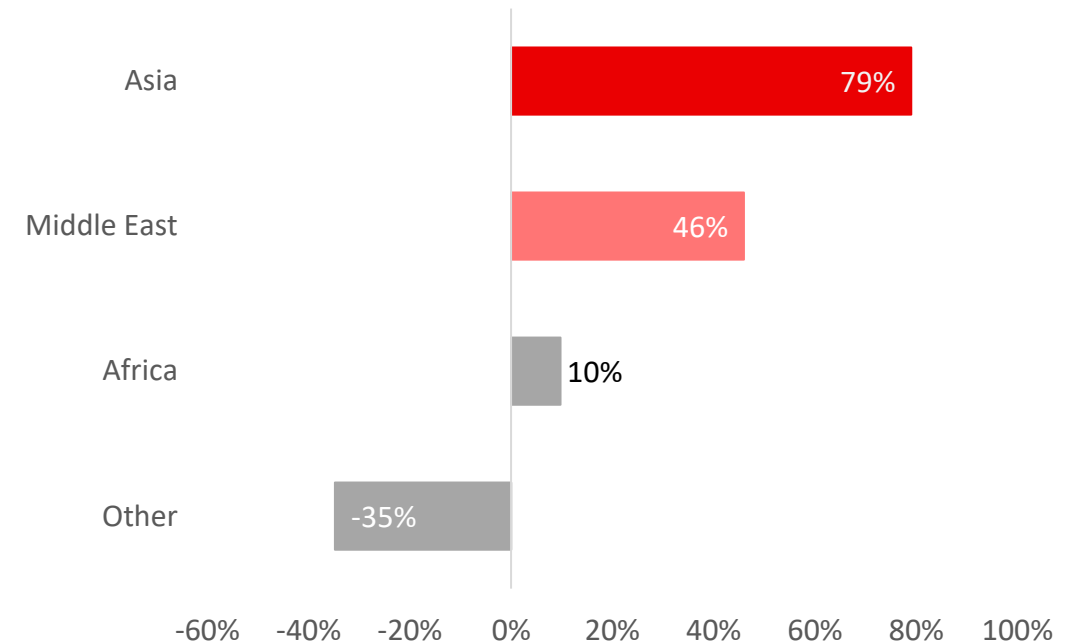
## Expectations until 2025:

- In the 2019-2025 period, 79% of the net capacity increase comes from Asia and 46 % from the Middle East Region.
- 63 % of the closures intensified after the pandemic come from the OECD region.

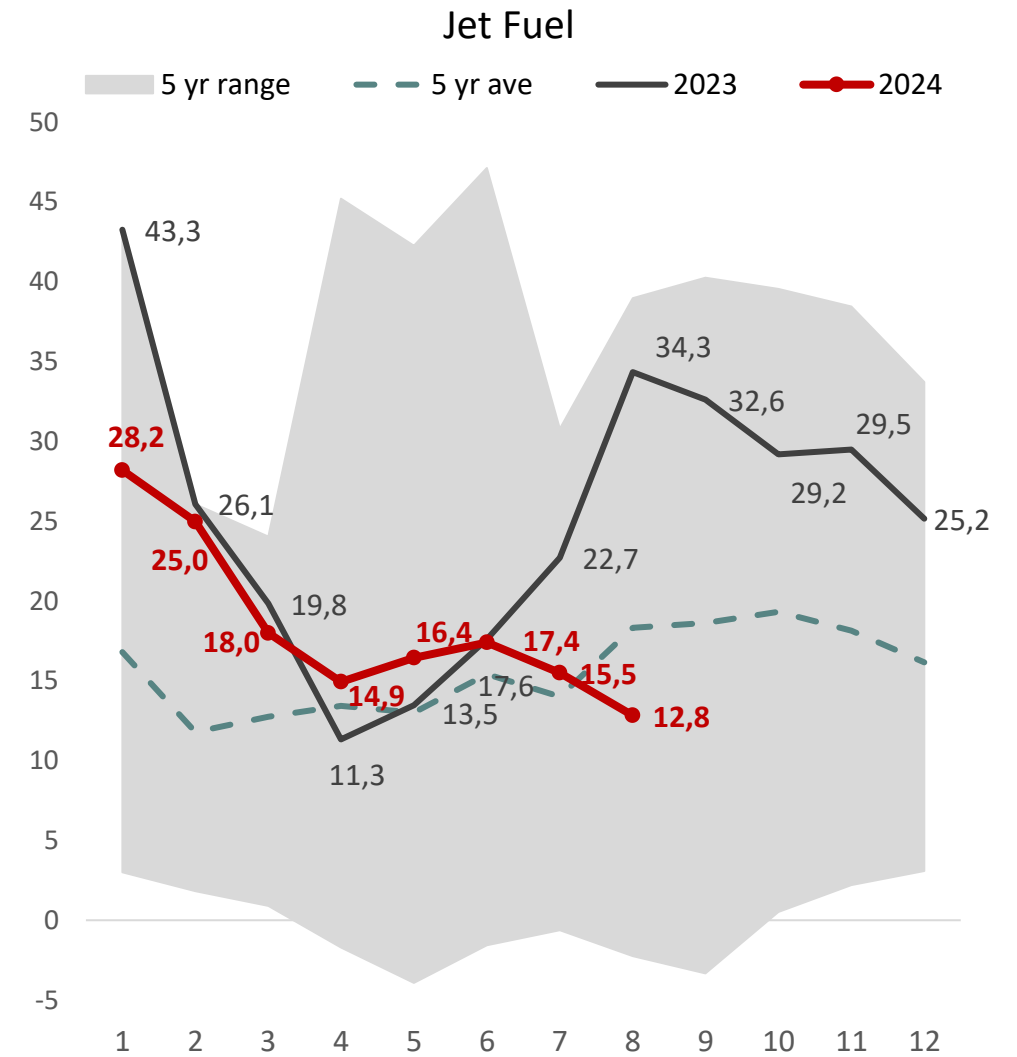
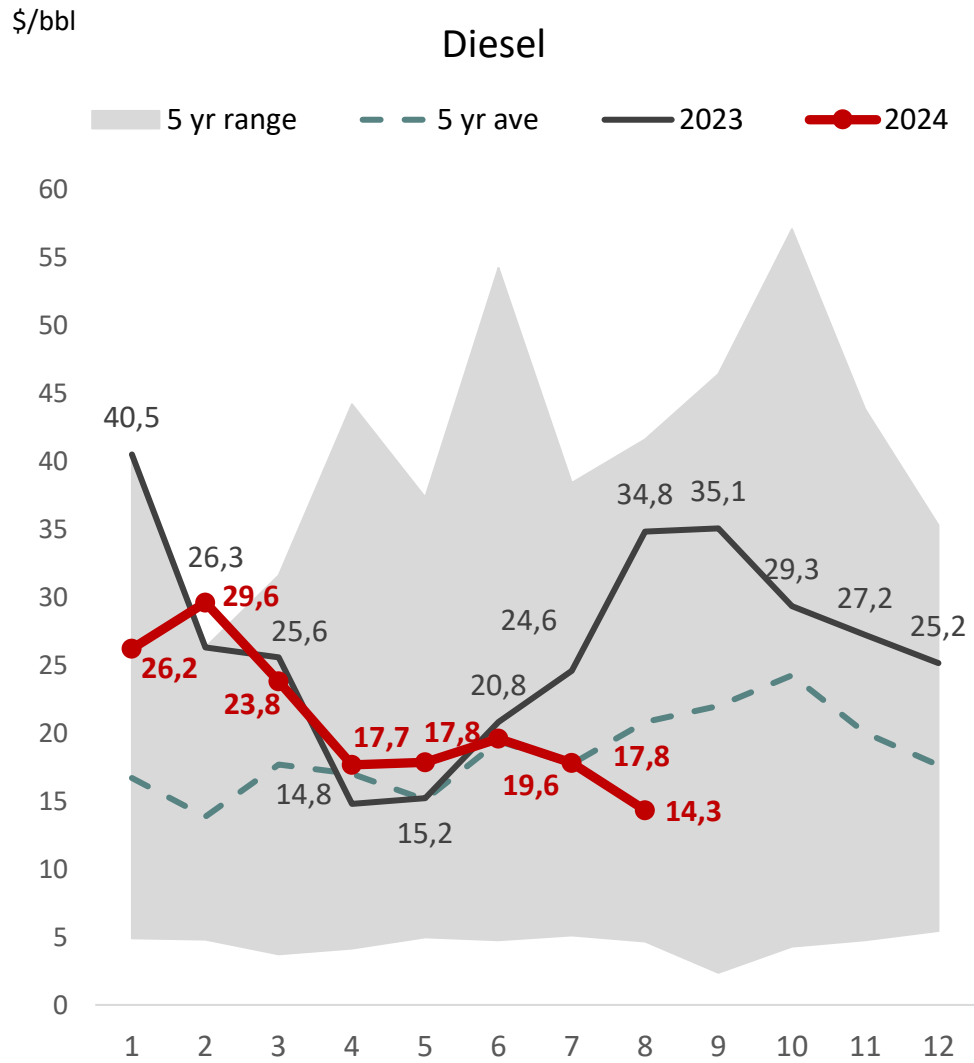
### 2019-2025 Net Capacity Additions



### Capacity Additions by Region

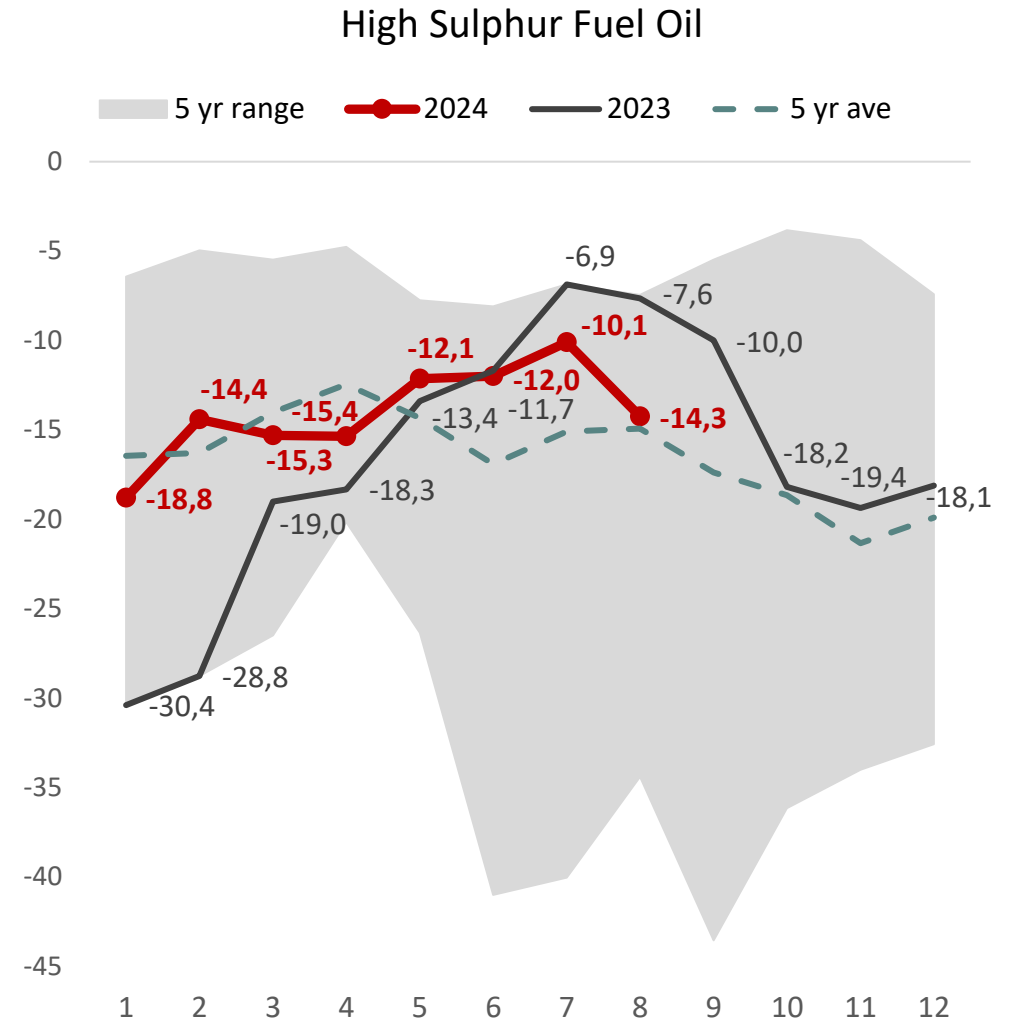
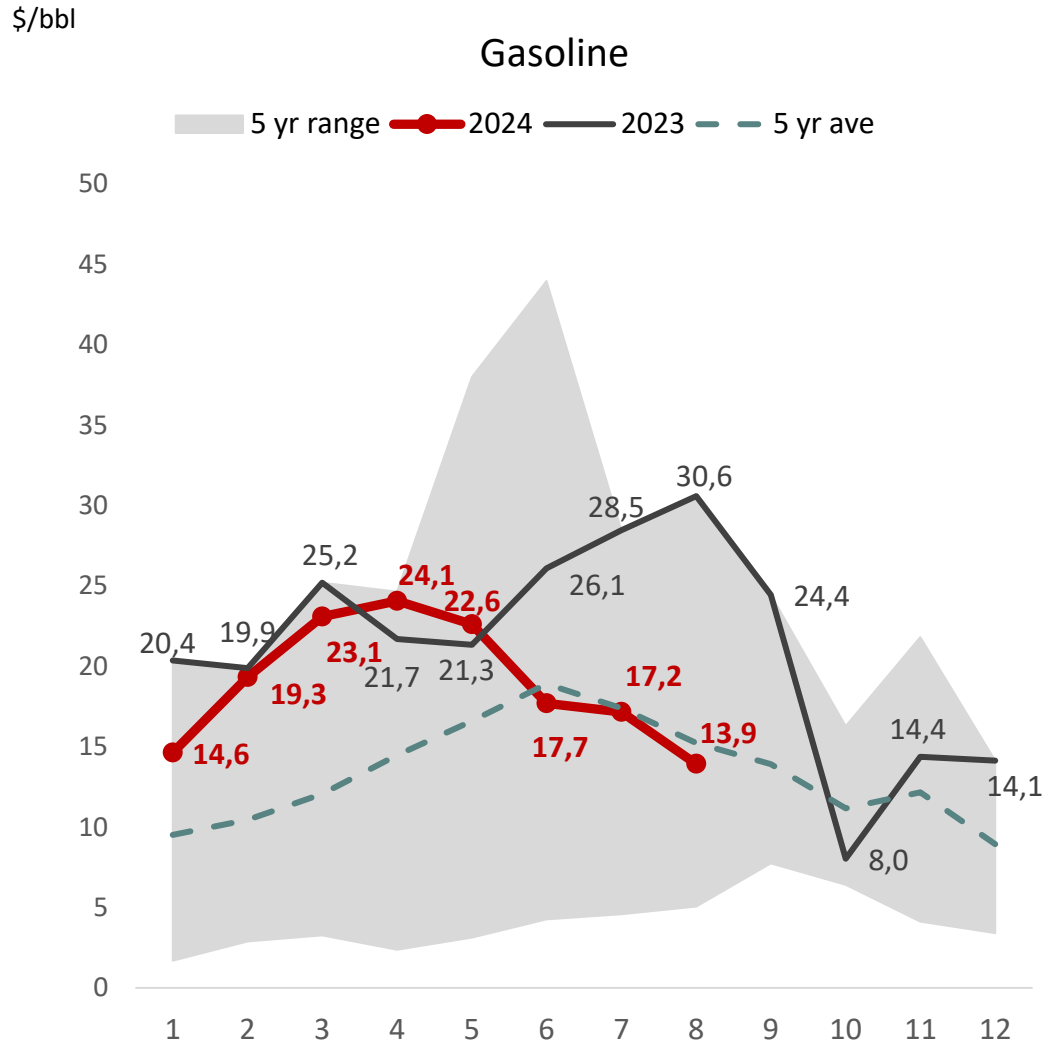


# Middle Distillate Cracks



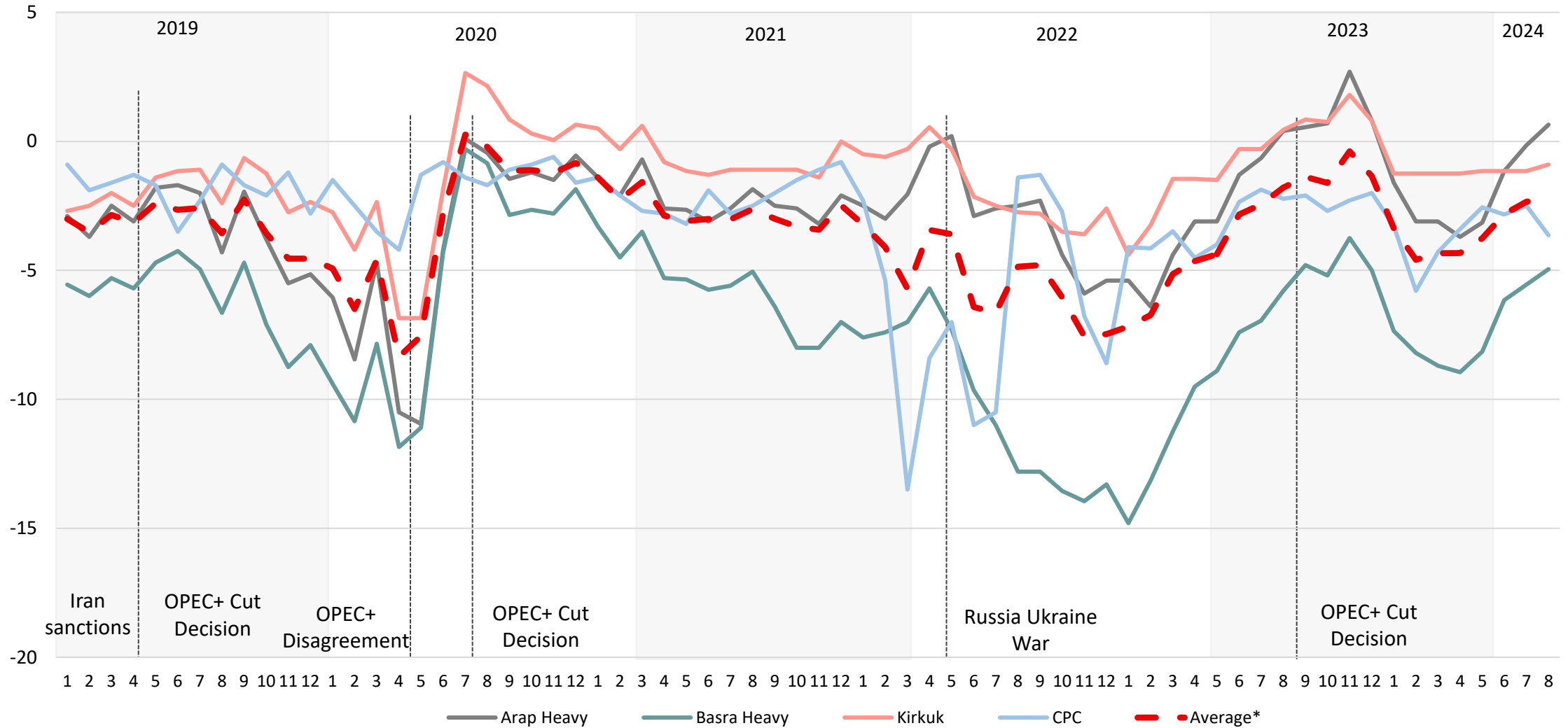
Data as of 31 August, 5 year range shows 2019-2023

# Gasoline and High Sulphur Fuel Oil Cracks



Data as of 31 August, 5 year range shows 2019-2023

# Heavy Crude Differentials to Brent (\$/bbl)

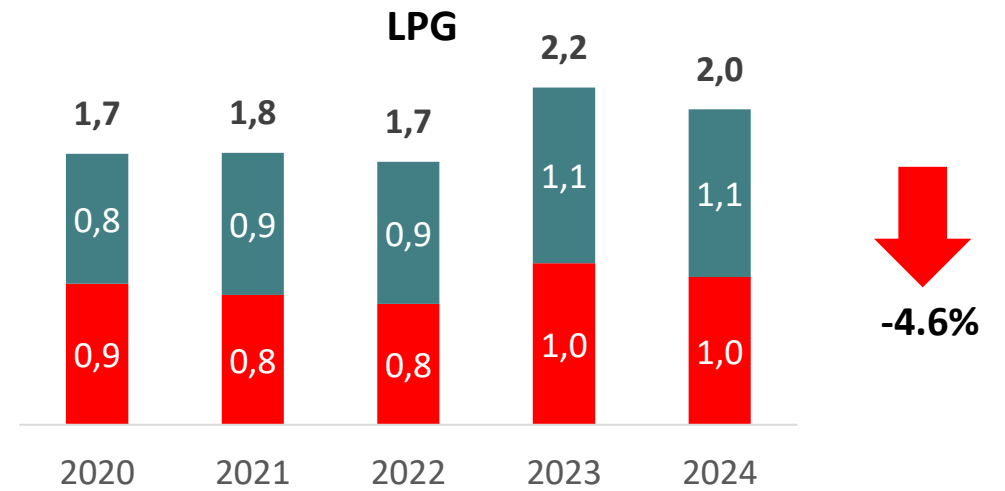
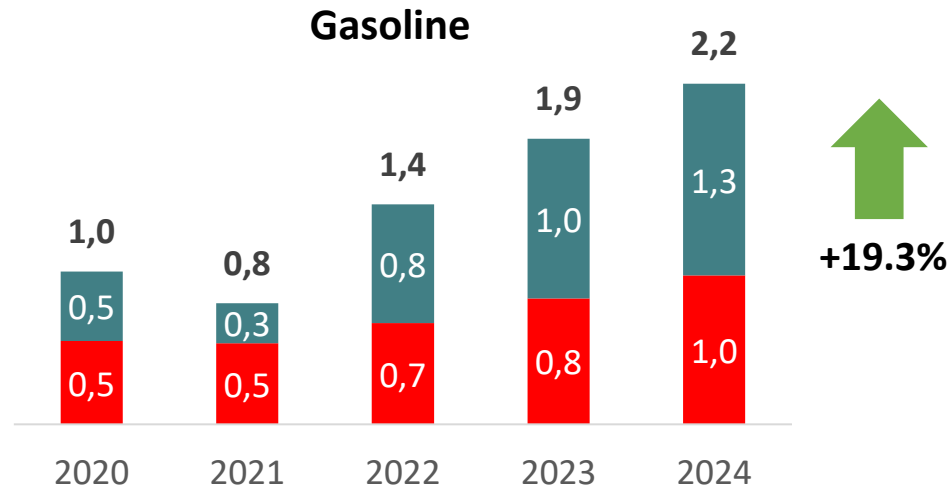
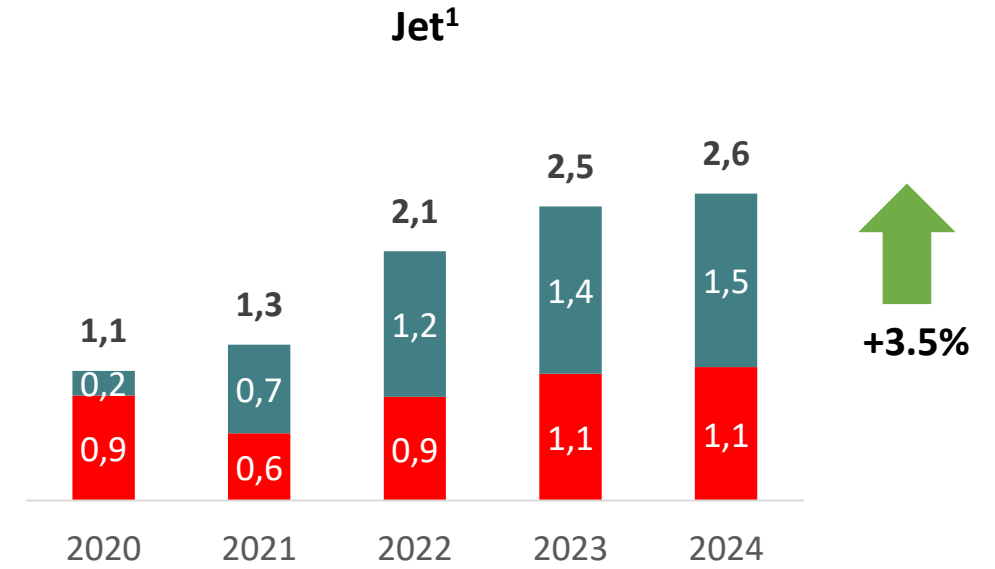
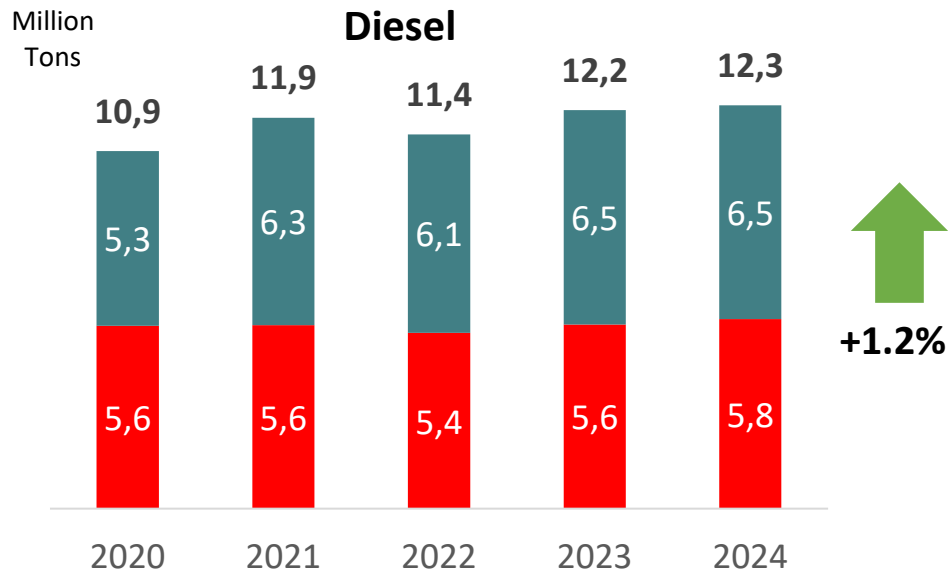


Data as of 31 August

\*Simple average of listed differentials

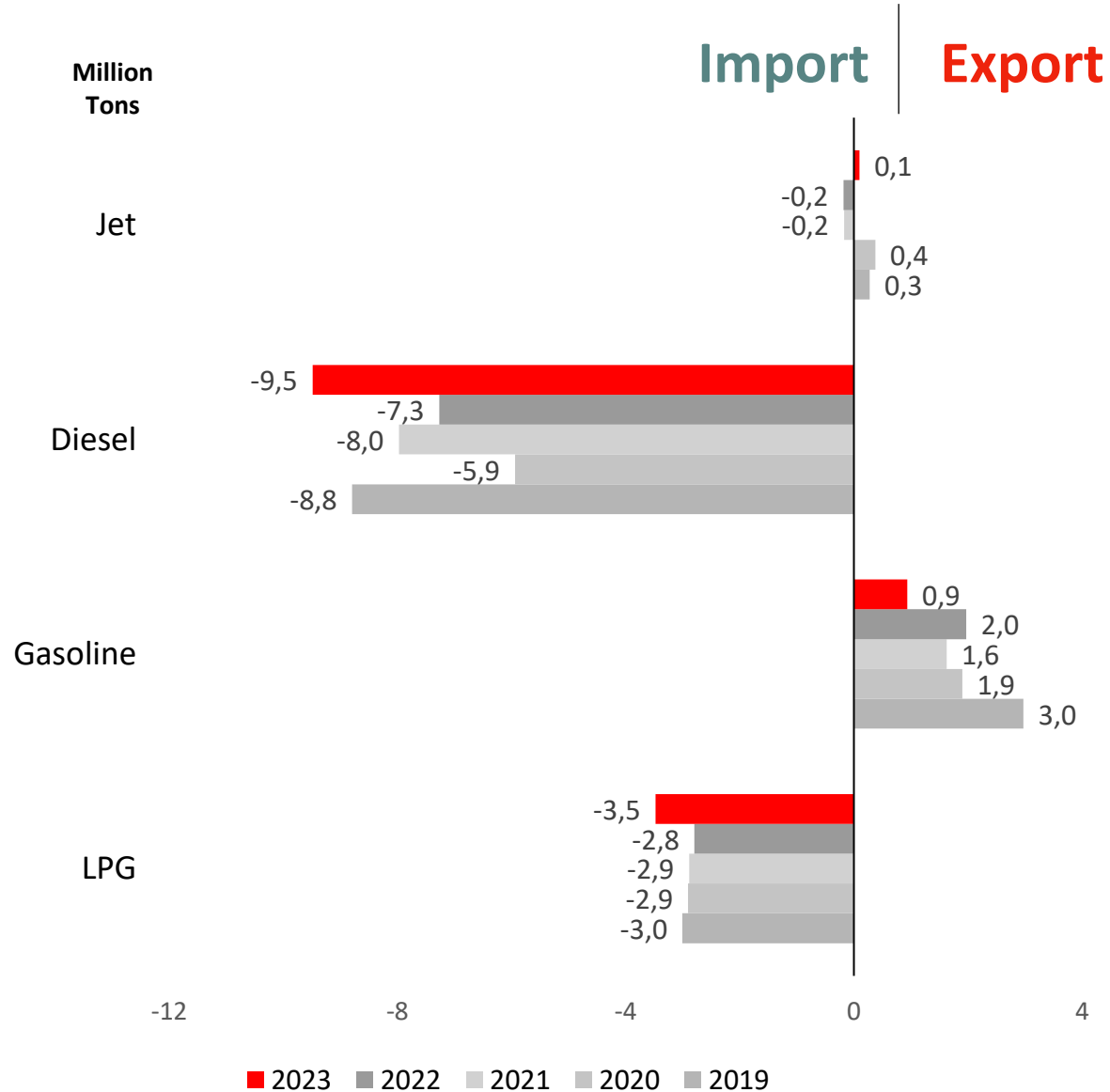
# Turkish Market, 6M 2024

■ Q1 ■ Q2



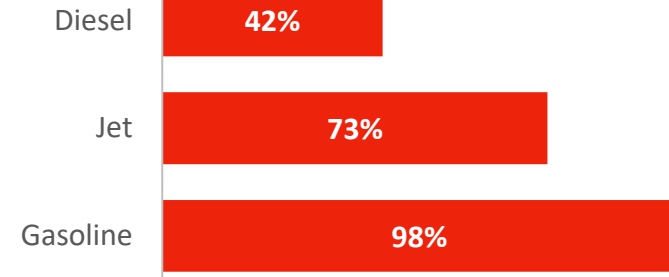
<sup>1</sup>Transit flight consumption included

# Turkey's Net Import / Export Balance

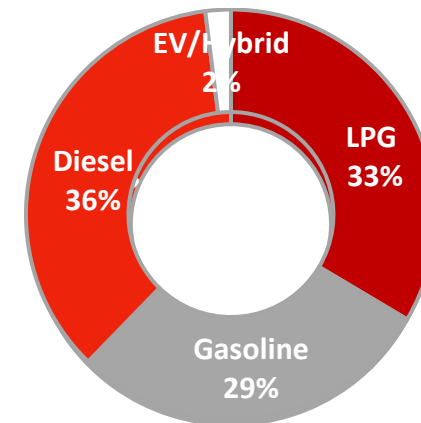


## Market Share of Tüpraş

2023 12M



## Fuel Choice of Passenger Cars 2023

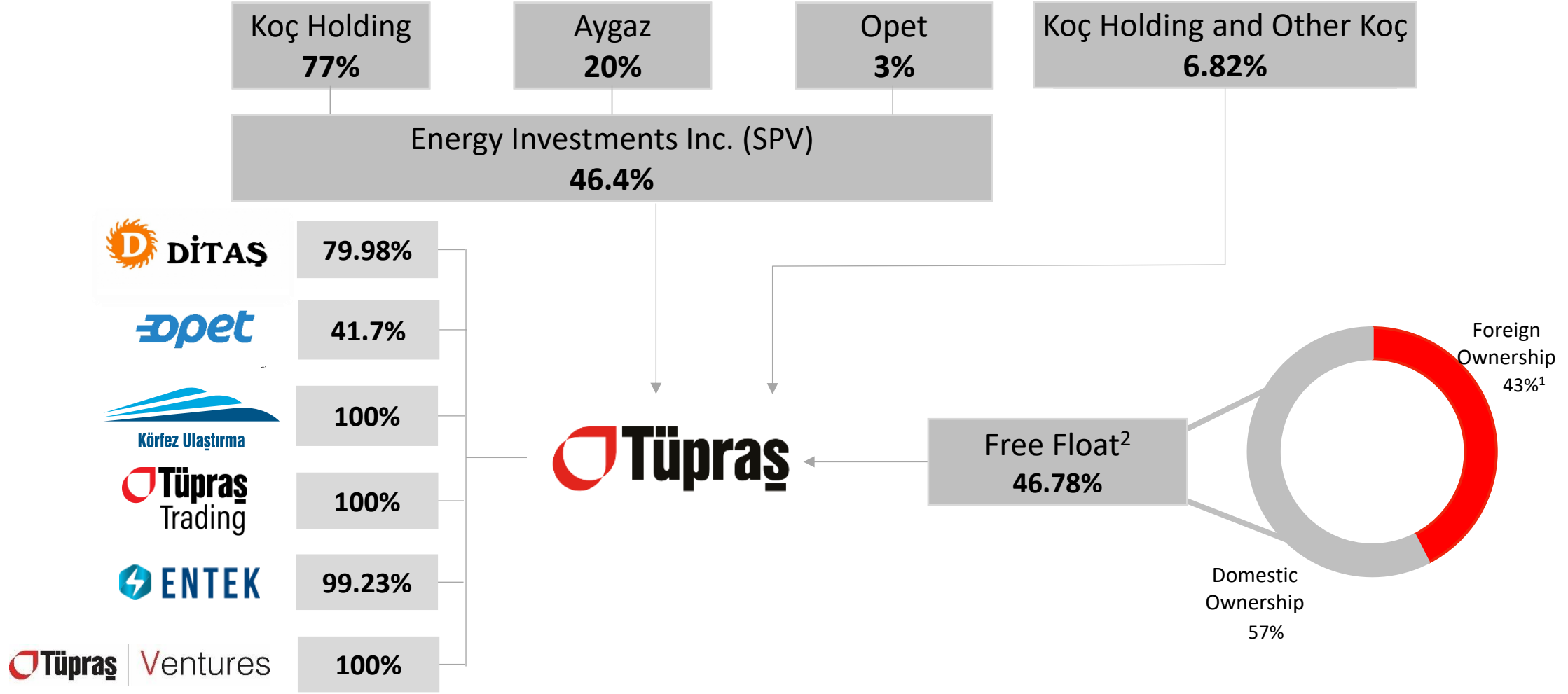




# Company Overview

# Tüpraş Shareholder Structure

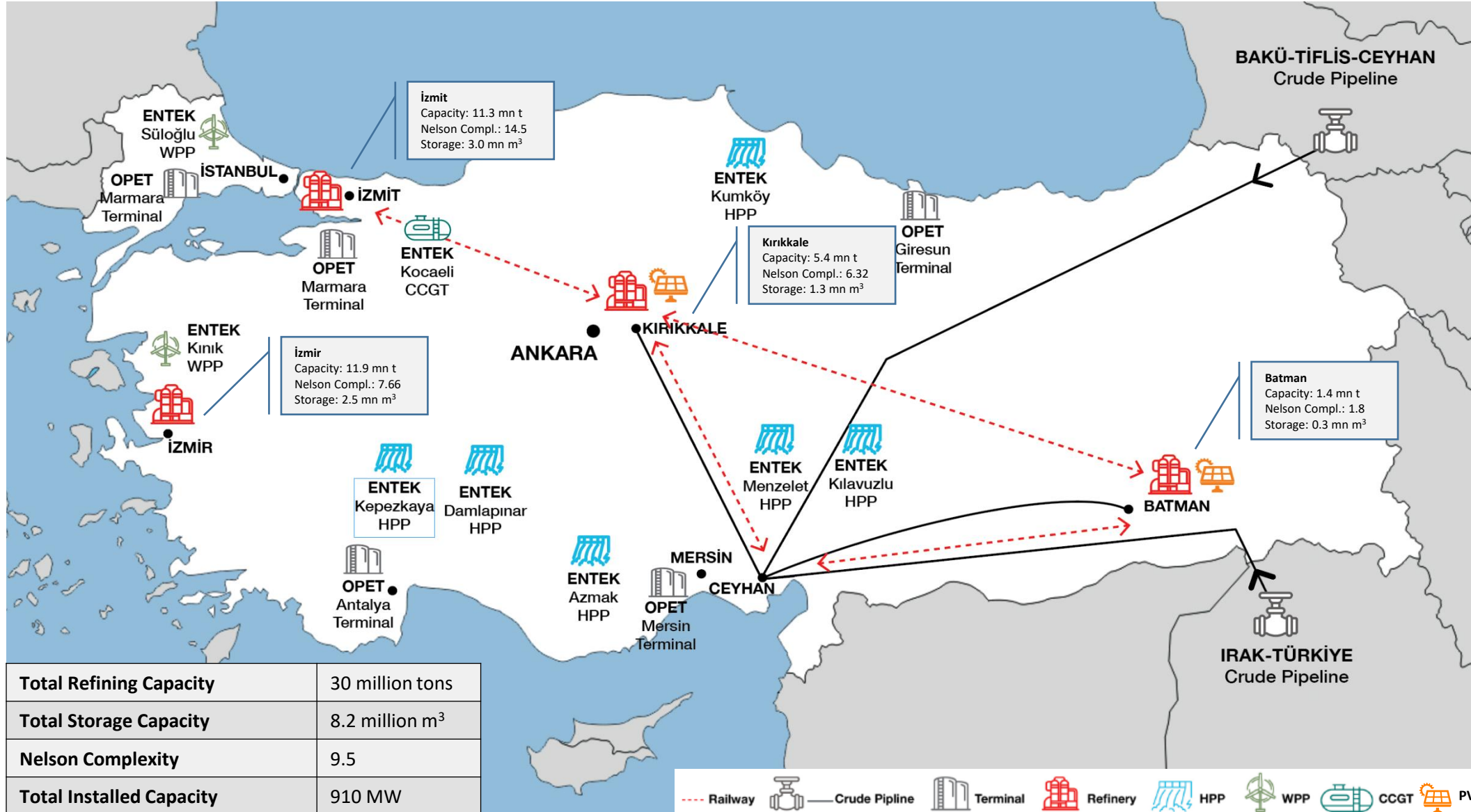
Tüpraş is Turkey's biggest industrial company and leading refiner.



<sup>1</sup> As of December 31, 2023

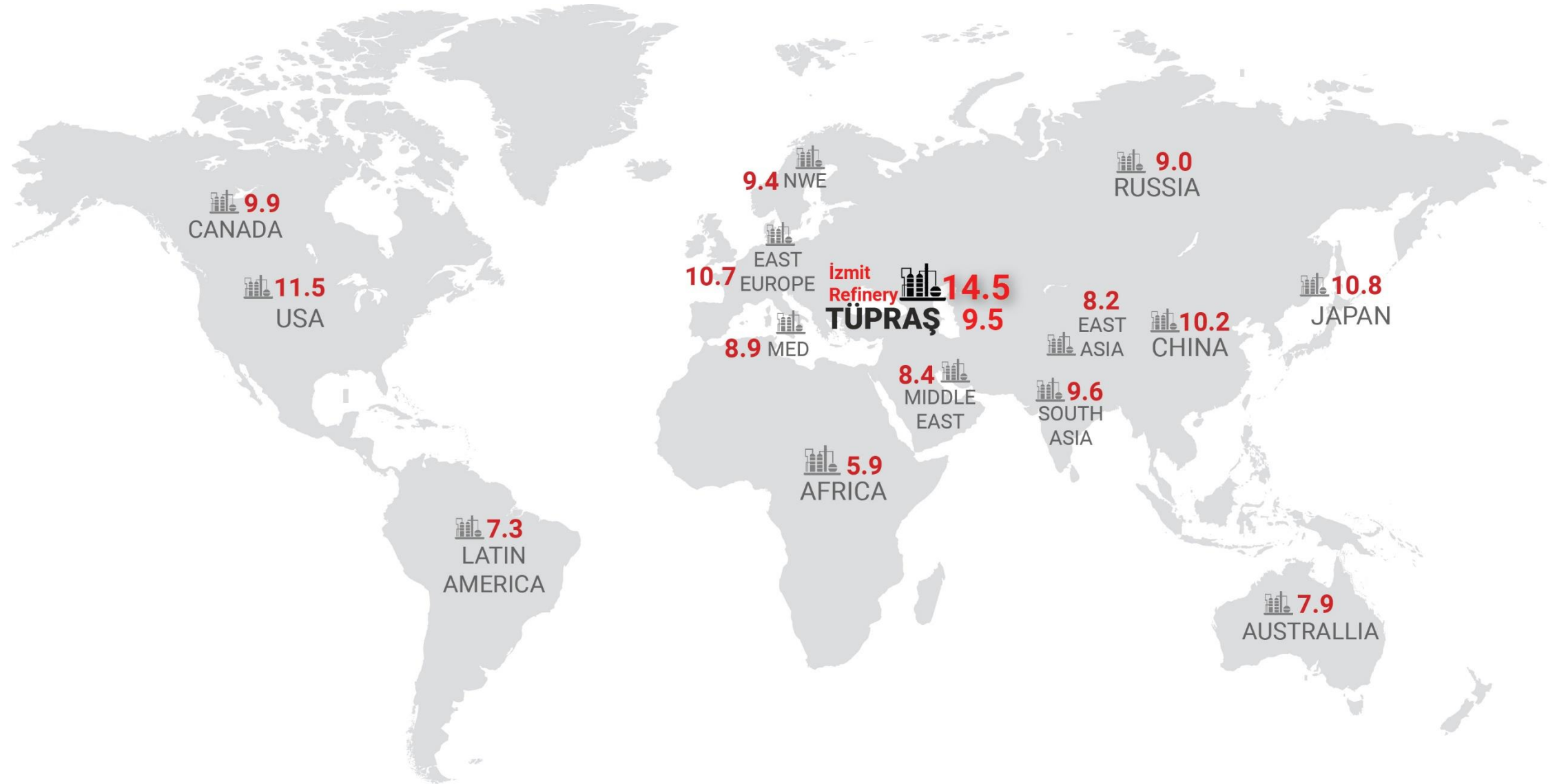
<sup>2</sup> Includes %1.11 shares of Liquid Petroleum Co.

# Tüpraş' Refining Assets & Distribution Network



<b>Total Refining Capacity</b>	30 million tons
<b>Total Storage Capacity</b>	8.2 million m <sup>3</sup>
<b>Nelson Complexity</b>	9.5
<b>Total Installed Capacity</b>	910 MW

# Nelson Complexity of Refining Companies



# Tüpraş Subsidiaries

## OPET – Distribution (%41.7)



**Market Share:** **18.9%** White Products **17.5%** Black Products

**1,874** Stations  
**5** Terminals  
**1.1 million m<sup>3</sup>** Storage capacity  
**190 EV** Charging Unit (7% of stations)

## Körfez Ulaştırma – Railway Transport (%100)



- ~5% share in Turkish rail freight market
- **2.2 mn ton** of product and semi-product carried in 2023
- Operates with **12 locomotives** (7 of them are hybrid) and **554 total of fuel oil and platform wagons**

## Tüpraş Trading UK – Trading (%100)



- Over **4.5 million tons** of product trade
- Over **6.5 million tons** of spot crude oil connections
- **1.3 million tons** of third party trading

## Entek Electricity– (%99.23)



- **1.3 GWs** sales from production

**492 MW**  
 Entek's Installed Capacity  
**116 MW** 2 WPP  
**112 MW** 1 CCGT  
**264 MW** 8 HPP

## DITAŞ Marine Transport (%79.98)



- Transportation of **10.8 million tons** crude cargoes and **7.2 million tons** products cargoes.

**661,787 DWT**  
 Carrying Capacity  
**470,067 DWT** 4 Crude Oil Tanker  
**61,283 DWT** 4 Bitumen Tanker  
**130,437 DWT** 8 Product Tanker

## Tüpraş Ventures (%100)

**Tüpraş Ventures**

KOC GROUP COMPANIES' FIRST PRIVATE VENTURE CAPITAL INVESTMENT FUND

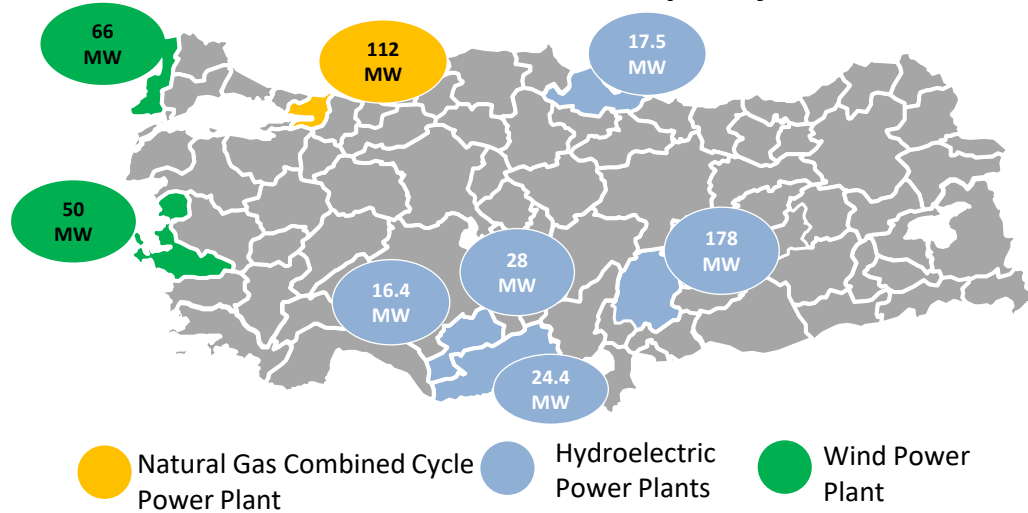
Energy Transformation Sustainability Operational Excellence

- Direct investment in 3 technological developments: **2 green hydrogen, 1 robotics.**
- Collaboration with 2 venture capital funds investing in new technology companies in USA and Europe.
- In 2023, 18 investments were undertaken.

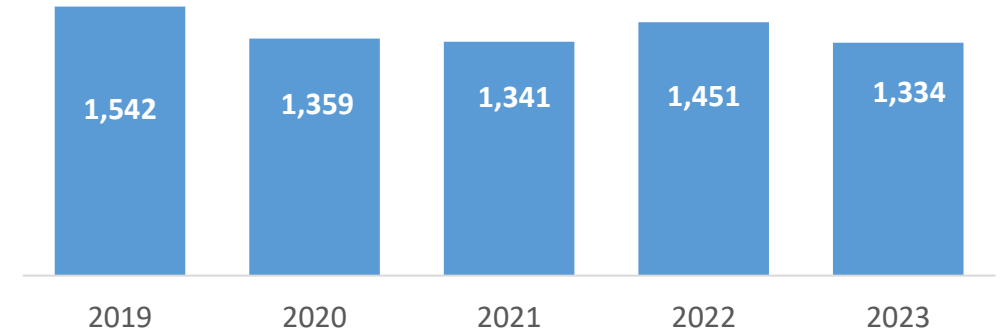
# Tüpraş Subsidiaries

## Entek - Electricity (Tüpraş Share: 99.23%)

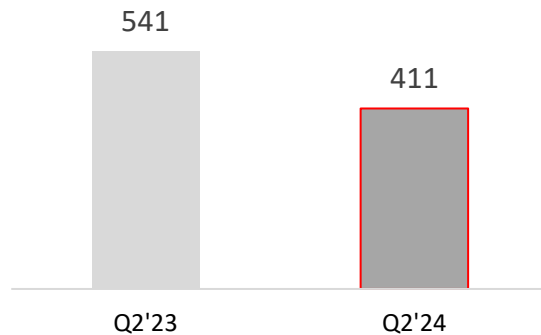
### Entek's Installed Capacity



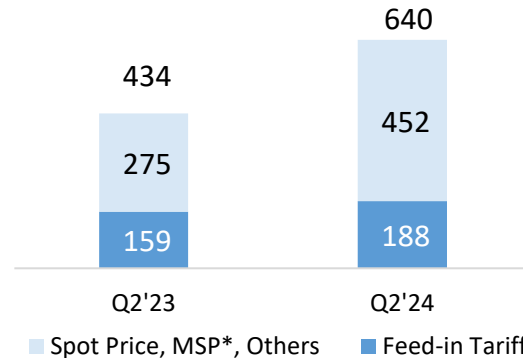
### Production (000 MWh)



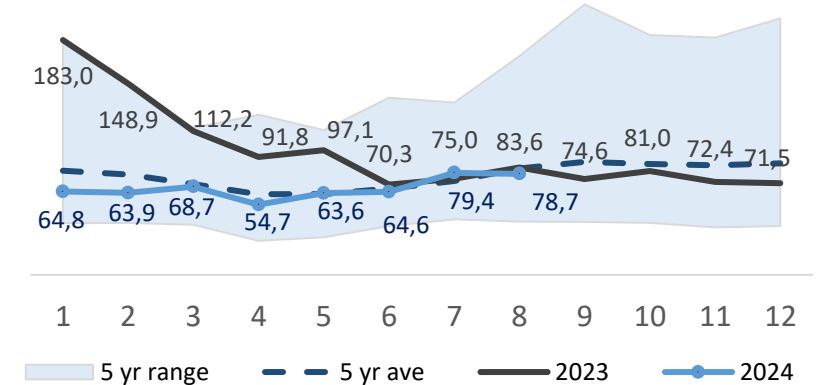
### EBITDA (Mn TL)



### Total ZCE Sales from Production (GWh)



### Spot Price (\$/Mwh)

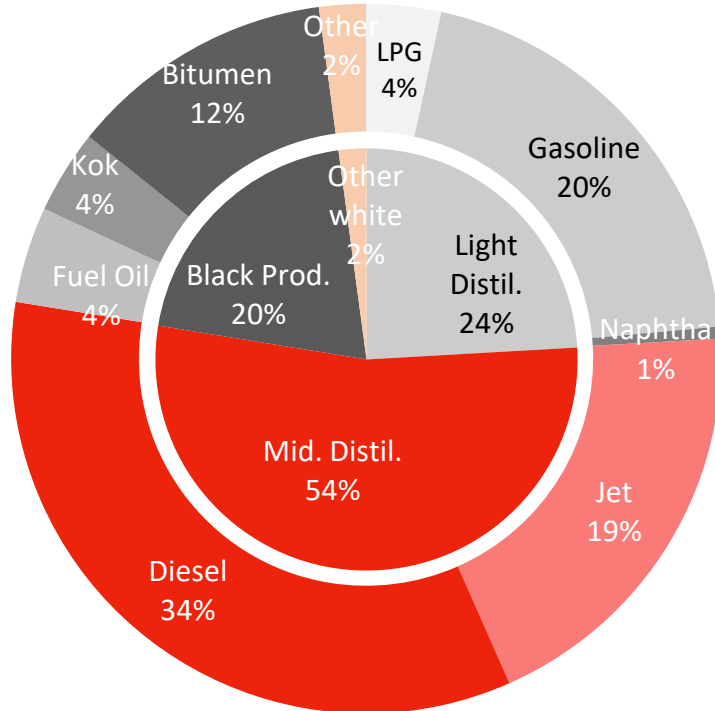




Operations

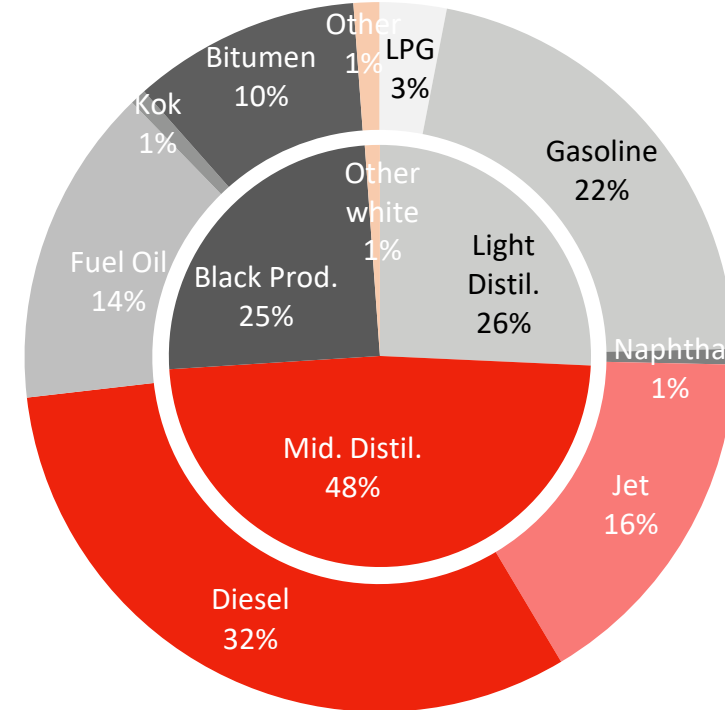
# Q2 Product Yields

Q2 2023



White Product Yield (%)	73.5%
Production	5.9 mn tons
API	30.9

Q2 2024

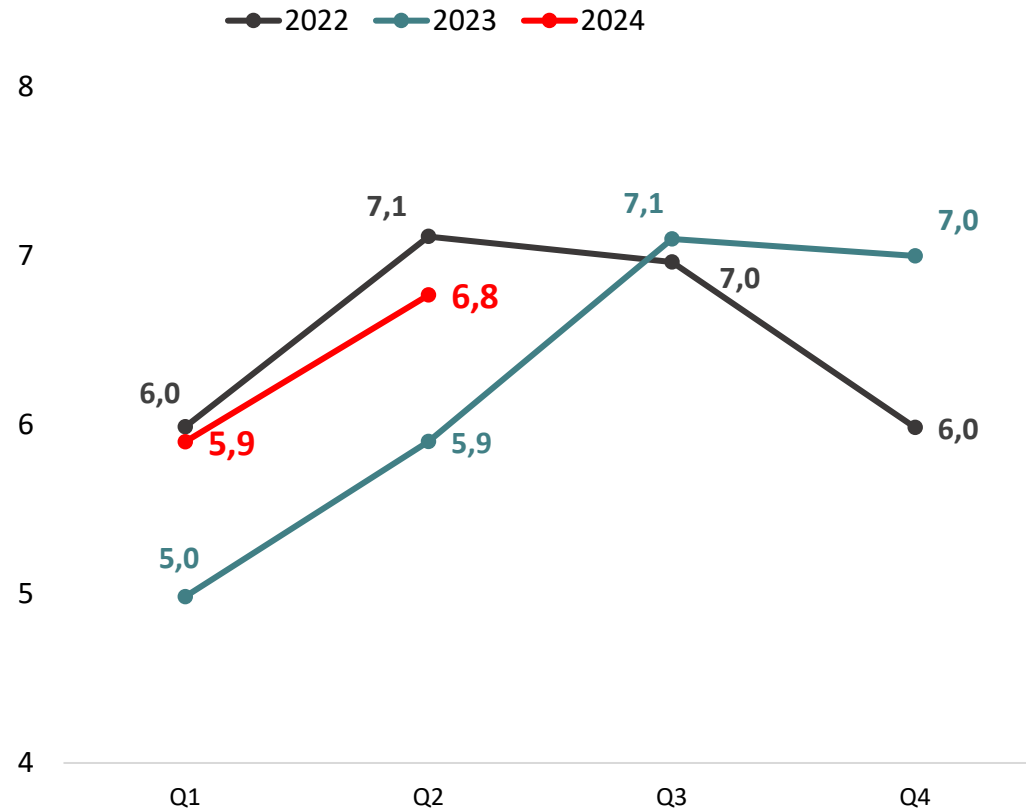


White Product Yield (%)	78.5%
Production	6.8 mn tons
API	31.9

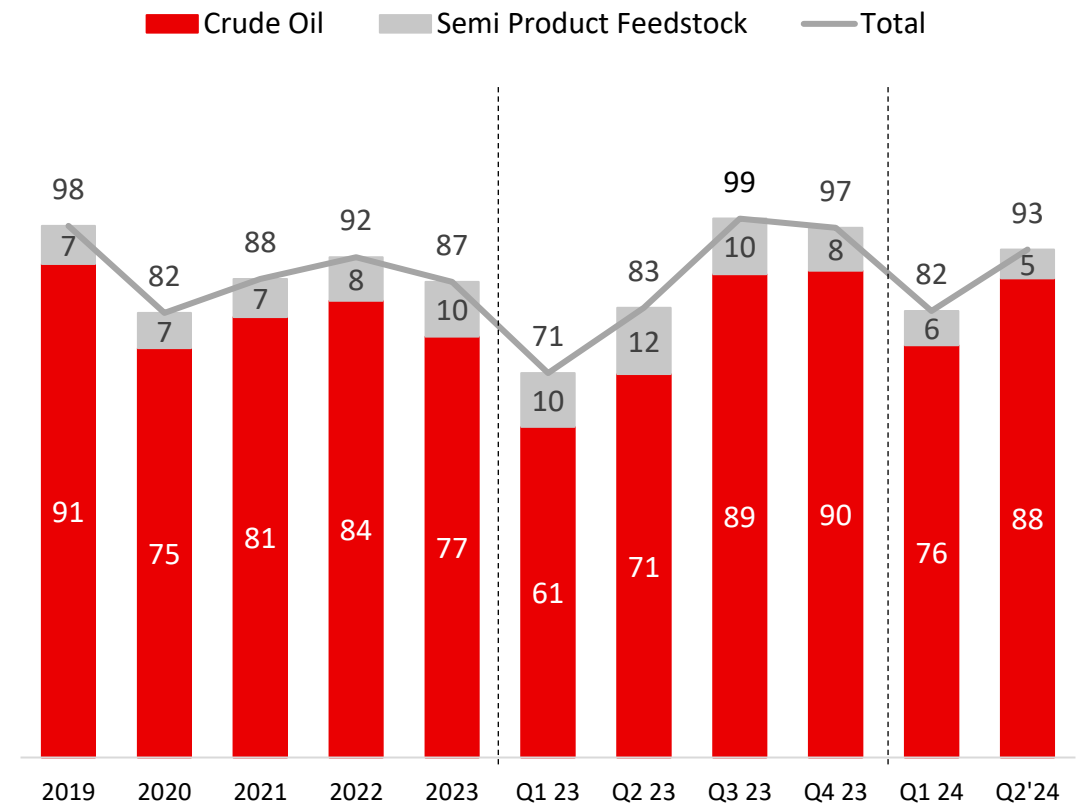
# Capacity Utilization and Quarterly Production Volume

- Tüpraş produced 6.8 million tons in Q2 2024.
- Capacity utilization for Q2 2024 was 93%, higher y/y despite RUP maintenance.

### Quarterly Production (Million Tons)

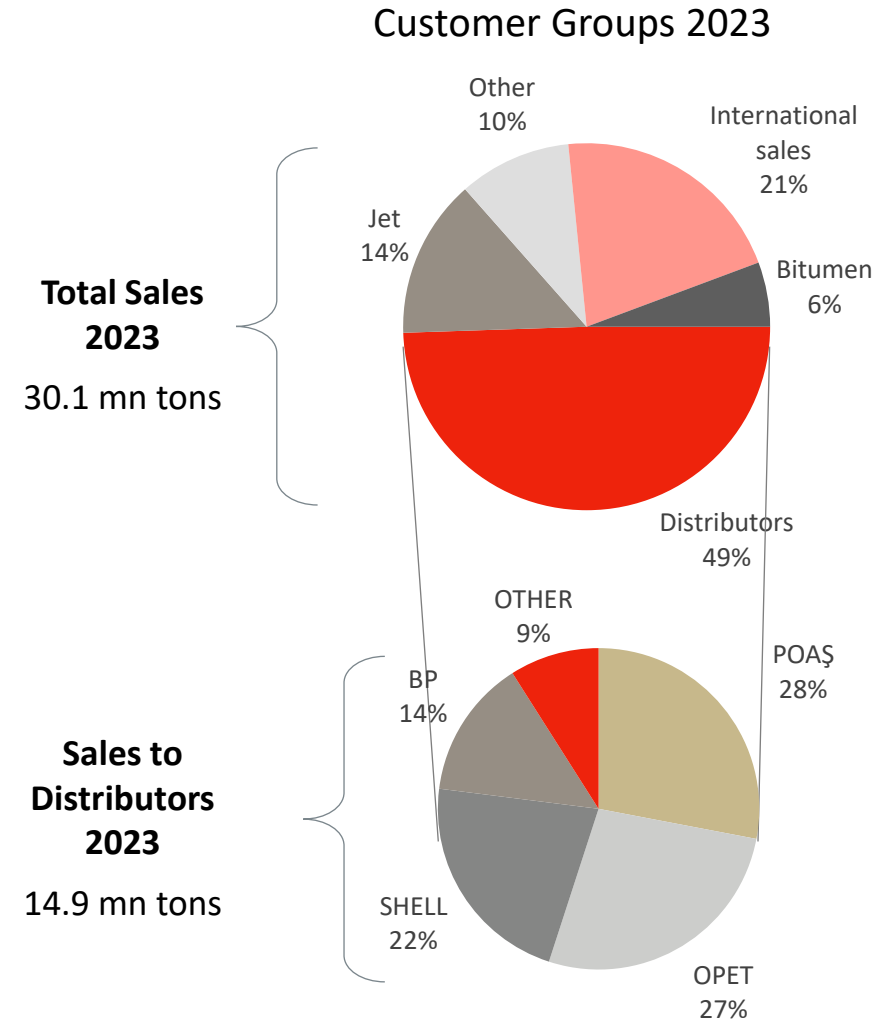
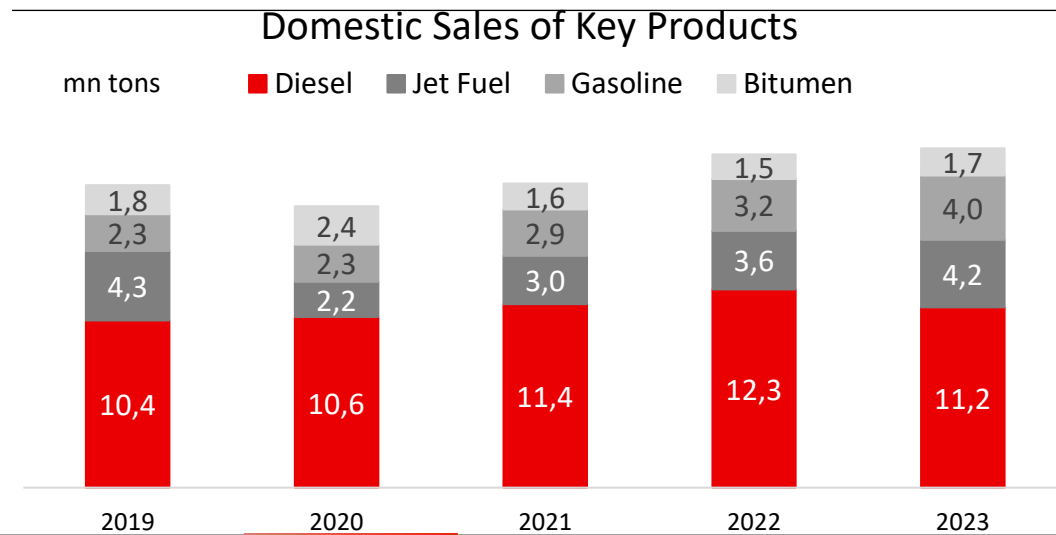
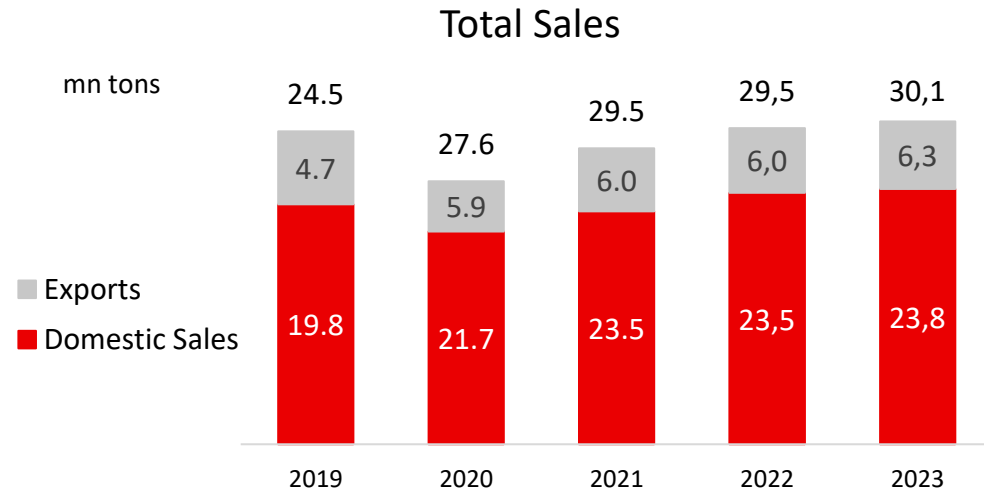


### Capacity Utilization (%)



# Sales

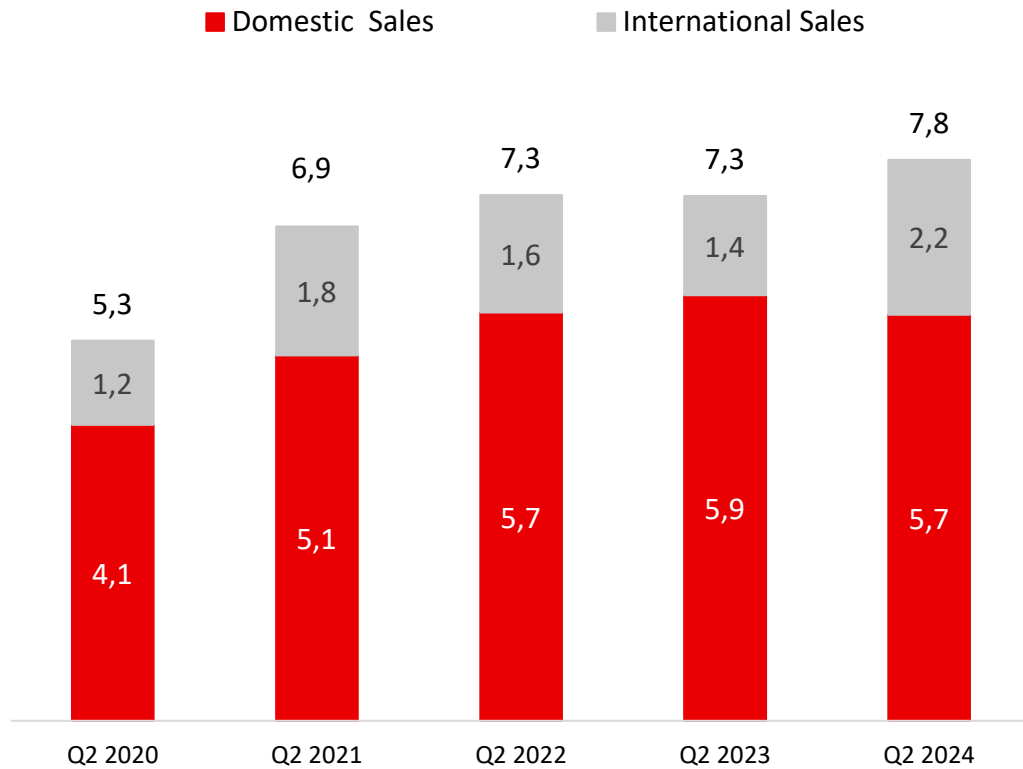
- Tüpraş generated 30.1 million tons of total sales in 2023.



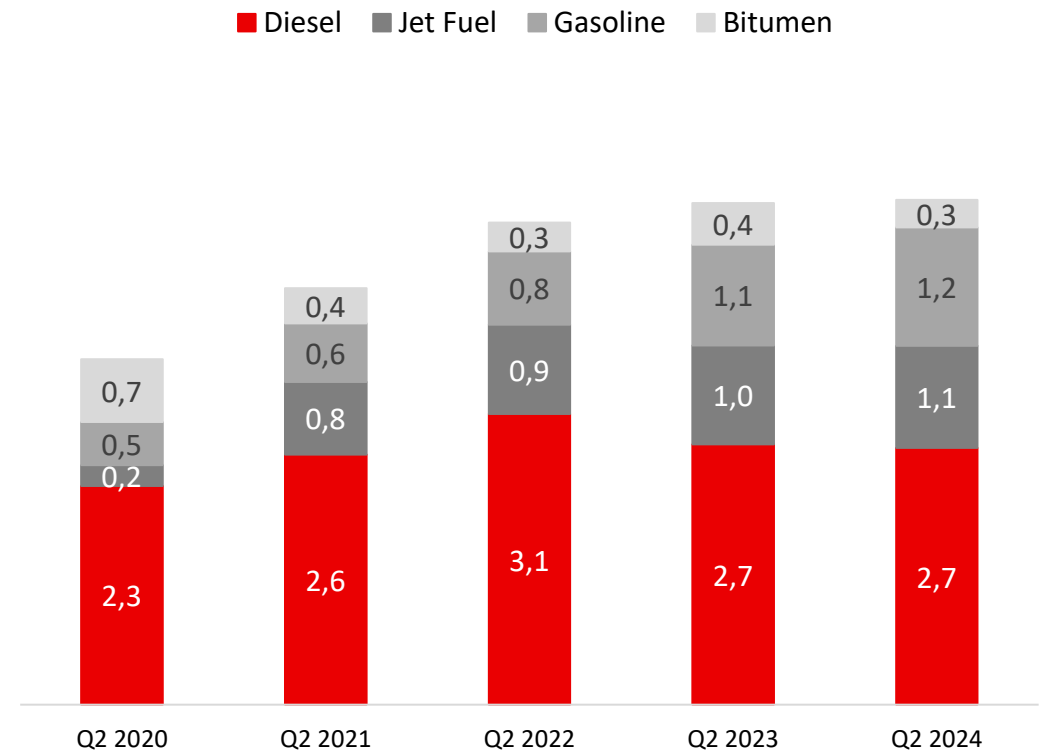
# Product Sales in Q2 2024 (Million Tons)

- Tüpraş' sales are up by 7% compared to Q2 2023 reaching to 7.8 million tons.
- International sales grew by 56% y/y driven by gasoline and HSFO.

## Total Product Sales



## Domestic Sales of Selected Products





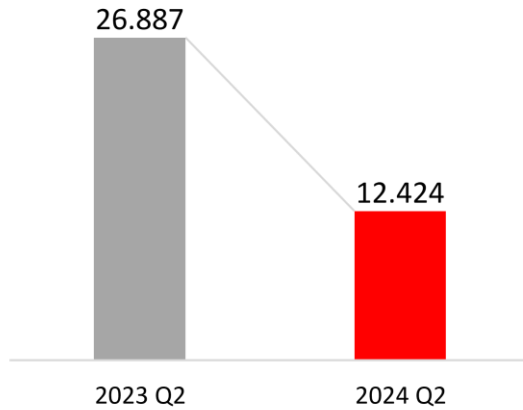
Financials

# Income Statement (Million TL)

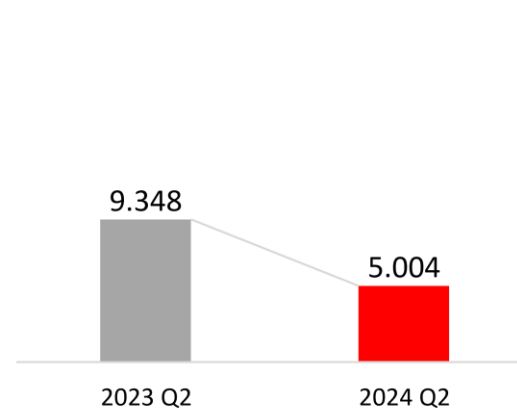
Million TL	Q2 2024	Q2 2023	%	H1 2024	H1 2023	%
Net Sales	190,716	183,630	4%	370,097	357,349	4%
COGS	-173,284	-154,319	12%	-338,383	-302,275	12%
<b>Gross Profit</b>	<b>17,432</b>	<b>29,310</b>	<b>-41%</b>	<b>31,714</b>	<b>55,074</b>	<b>-42%</b>
Operating Expenses	-6,861	-5,265	30%	-13,206	-10,957	21%
Income/Loss from other operations	9	-11,349	-100%	-3,614	-12,337	-71%
<b>Operating Profit</b>	<b>10,579</b>	<b>12,696</b>	<b>-17%</b>	<b>14,893</b>	<b>31,779</b>	<b>-53%</b>
Inc./Loss from Equity pick ups	-2	1,372	-100%	303	925	-67%
<b>Operating Profit Before Fin. Income/Loss</b>	<b>10,577</b>	<b>14,068</b>	<b>-25%</b>	<b>15,196</b>	<b>32,704</b>	<b>-54%</b>
Financial Income/Expense	1,101	-3,791	-129%	4,614	-5,231	-188%
Monetary Gain/Loss	-2,687	-945	184%	-8,768	-4,617	90%
<b>Profit Before Tax</b>	<b>8,991</b>	<b>9,332</b>	<b>-4%</b>	<b>11,042</b>	<b>22,857</b>	<b>-52%</b>
<b>Net Profit (excluding minority interest)</b>	<b>5,004</b>	<b>9,348</b>	<b>-46%</b>	<b>5,351</b>	<b>12,395</b>	<b>-57%</b>
<b>EBITDA*</b>	<b>12,424</b>	<b>26,887</b>	<b>-54%</b>	<b>22,815</b>	<b>48,643</b>	<b>-53%</b>
Inventory Gain/Loss	68	8,049	-99%	3,659	8,021	-54%
<b>EBITDA CCS*</b>	<b>12,356</b>	<b>18,838</b>	<b>-34%</b>	<b>19,156</b>	<b>40,622</b>	<b>-53%</b>

# Financial Highlights

EBITDA (mn TL)

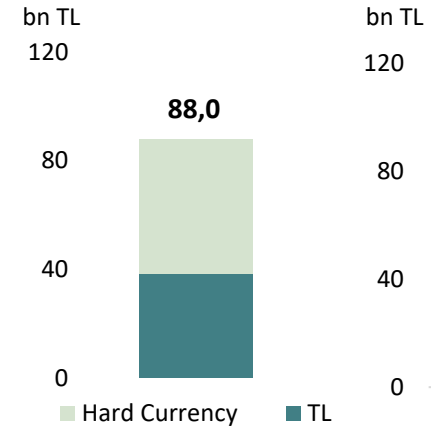


Net Income\* (mn TL)

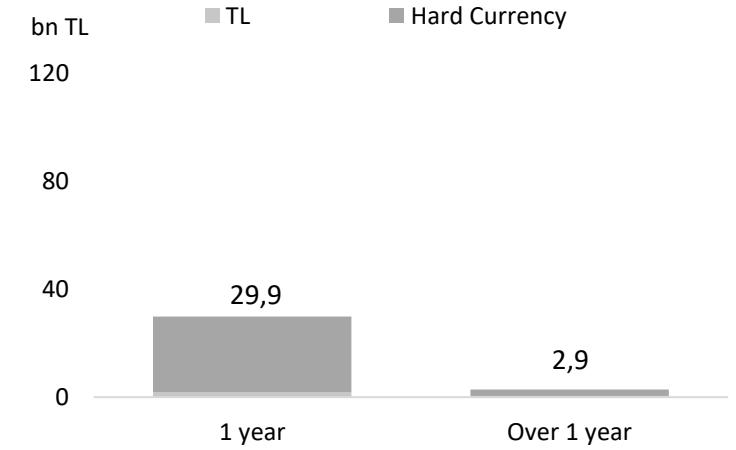


\* Excluding minority interest

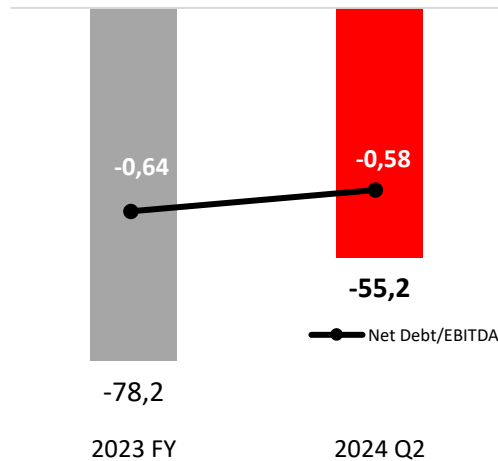
Cash Currency Breakdown



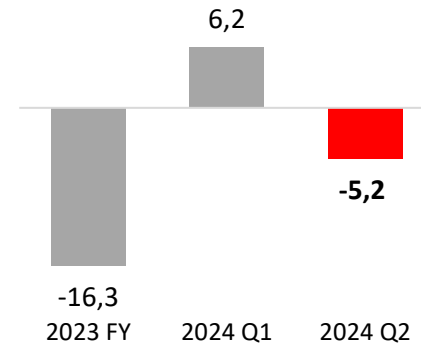
Redemption Schedule



Net Debt & Net Debt / EBITDA



Working Capital (bn TL)



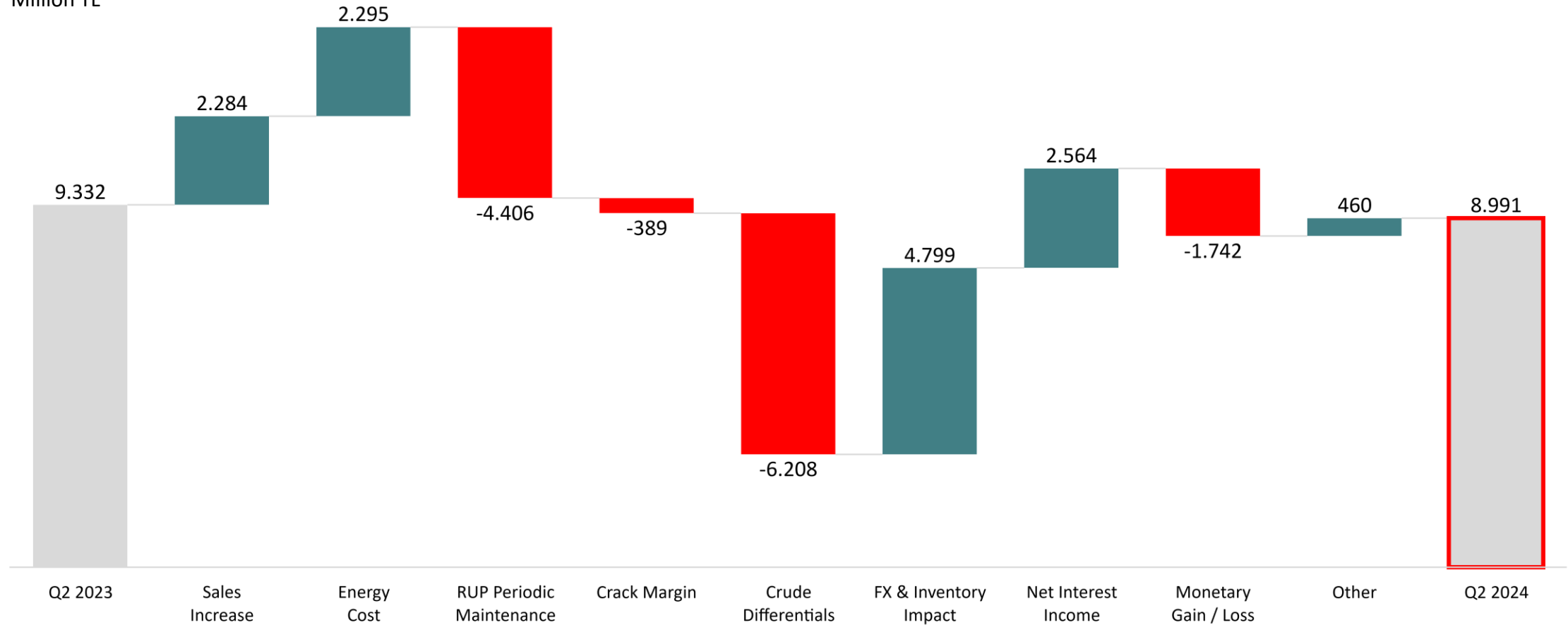
## Financial Management

- Working capital requirement turned negative as the effects of Red Sea tensions are reduced and inventory turnover improved.
- Net cash position continued with strong operating cashflow.

# Profit Before Tax Bridge (2023 Q2 – 2024 Q2)

Higher sales, lower energy expenses and strong net interest income supported the PBT despite narrower differentials and scheduled RUP maintenances negative impact.

Million TL

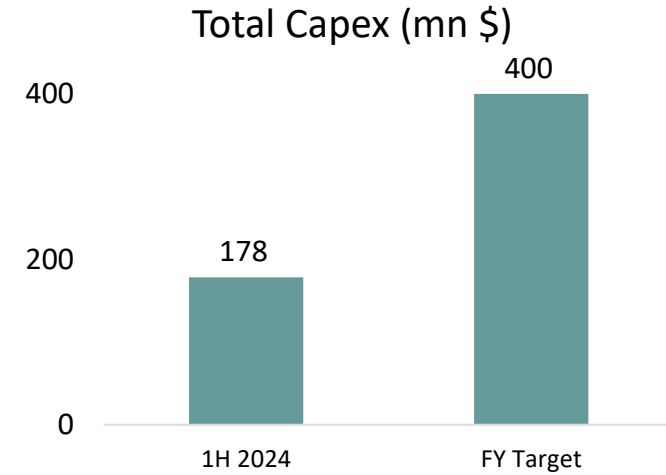
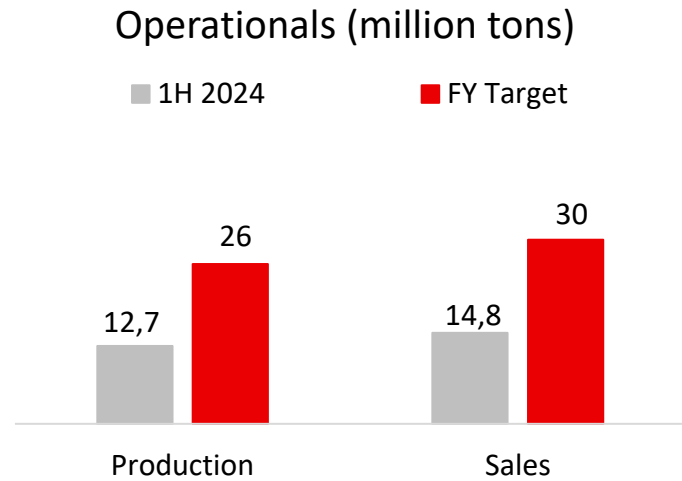
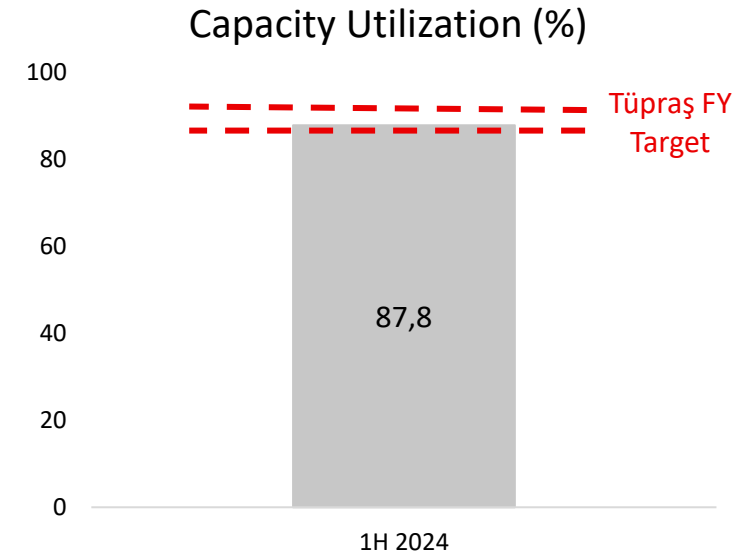
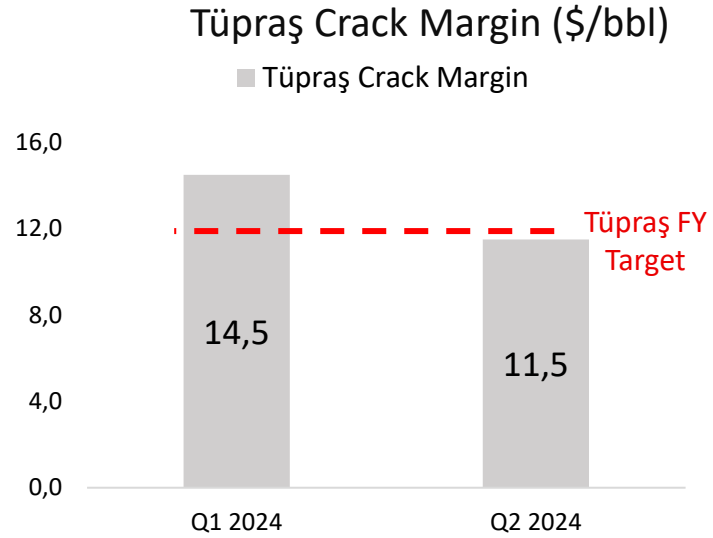


Tüpraş Crack Margin expectation ~12 \$/bbl

- ~26 mn tons annual production, ~30 mn tons annual sales and 85-90% average capacity utilization

Consolidated Capex ~400 million \$

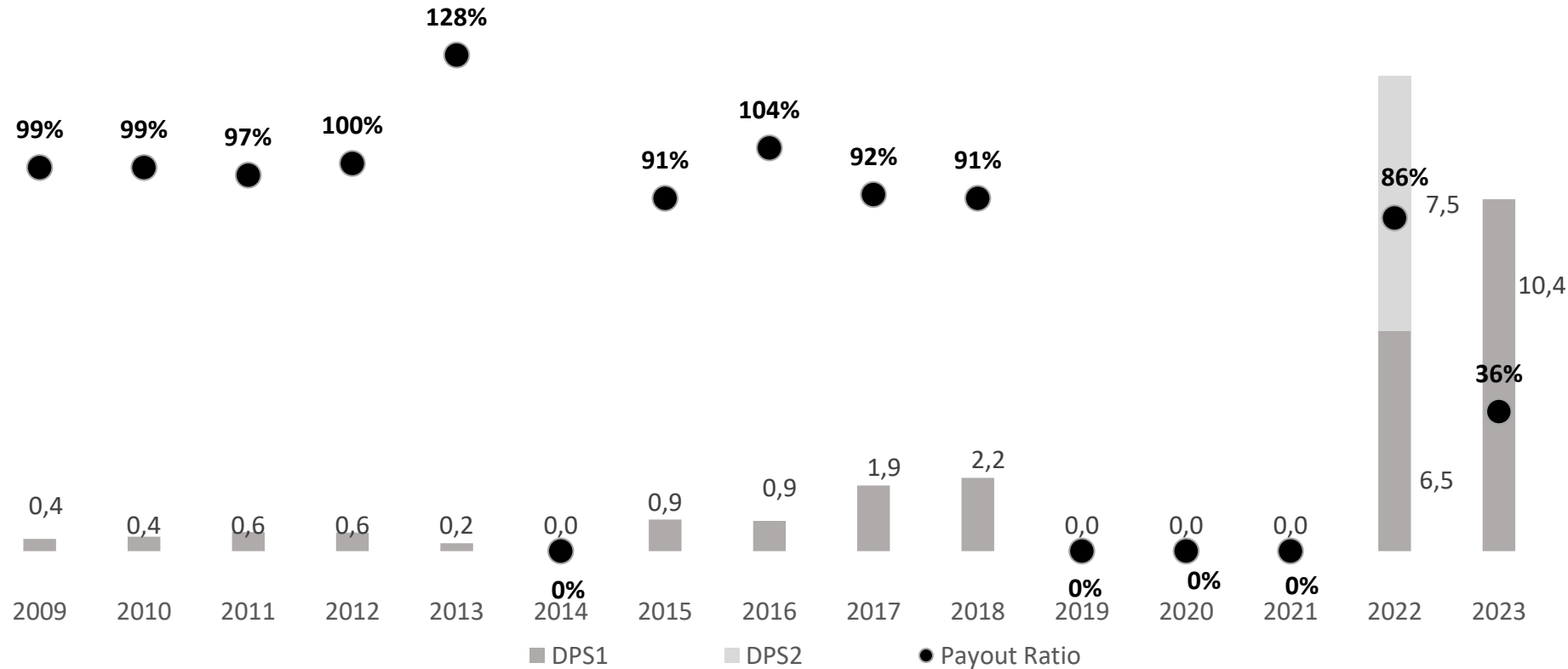
# Q2 2024 Results



# Tüpraş Balance Sheet (Million TL)

	31.06.2024	31.12.2023	Diff.	Diff. (%)
<b>Current Assets</b>	<b>211,849</b>	<b>250,904</b>	<b>-39,055</b>	<b>-16</b>
Cash & C. Equivalents	88,003	122,270	-34,267	-28
Trade Receivables	44,952	50,442	-5,490	-11
Derivatives	1,053	2,575	-1,522	-59
Inventories	65,206	55,462	9,743	18
Pre-paid expenses	1,678	1,594	83	5
Other Current Assets	10,958	18,560	-7,602	-41
<b>Long Term Assets</b>	<b>206,288</b>	<b>206,616</b>	<b>-329</b>	<b>0</b>
Financial Assets & Subsidiaries	10,284	10,781	-497	-5
Tangible & Intangible Fixed Assets	172,505	173,116	-611	0
Derivatives	67	46	21	45
Pre-paid expenses	3,675	2,264	1,412	62
Deferred Tax	5,764	8,065	-2,301	-29
Other Long-term Assets	13,993	12,344	1,649	13
<b>Total Assets</b>	<b>418,137</b>	<b>457,520</b>	<b>-39,383</b>	<b>-9</b>
<b>Short Term Liabilities</b>	<b>176,401</b>	<b>193,677</b>	<b>-17,276</b>	<b>-9</b>
Financial Loans	29,930	37,381	-7,450	-20
Trade Payables	115,326	122,186	-6,860	-6
Derivatives	3,295	664	2,630	396
Provisions	3,371	1,530	1,841	120
Other ST Liabilities	24,479	31,917	-7,437	-23
<b>Long Term Liabilities</b>	<b>6,443</b>	<b>10,705</b>	<b>-4,261</b>	<b>-40</b>
Financial Loans	2,872	6,683	-3,812	-57
Payables & Provisions	1,832	2,587	-755	-29
Derivatives	469	585	-116	-20
Other LT Liabilities	1,270	849	421	50
<b>Total equity attributable to equity holders of the parent</b>	<b>232,310</b>	<b>250,422</b>	<b>-18,112</b>	<b>-7</b>
<b>Minority Interests</b>	<b>2,982</b>	<b>2,716</b>	<b>266</b>	<b>10</b>
<b>Total Liabilities &amp; Equity</b>	<b>418,137</b>	<b>457,520</b>	<b>-39,383</b>	<b>-9</b>

# Dividend (TL)



## Strategic Transition Dividend Plan

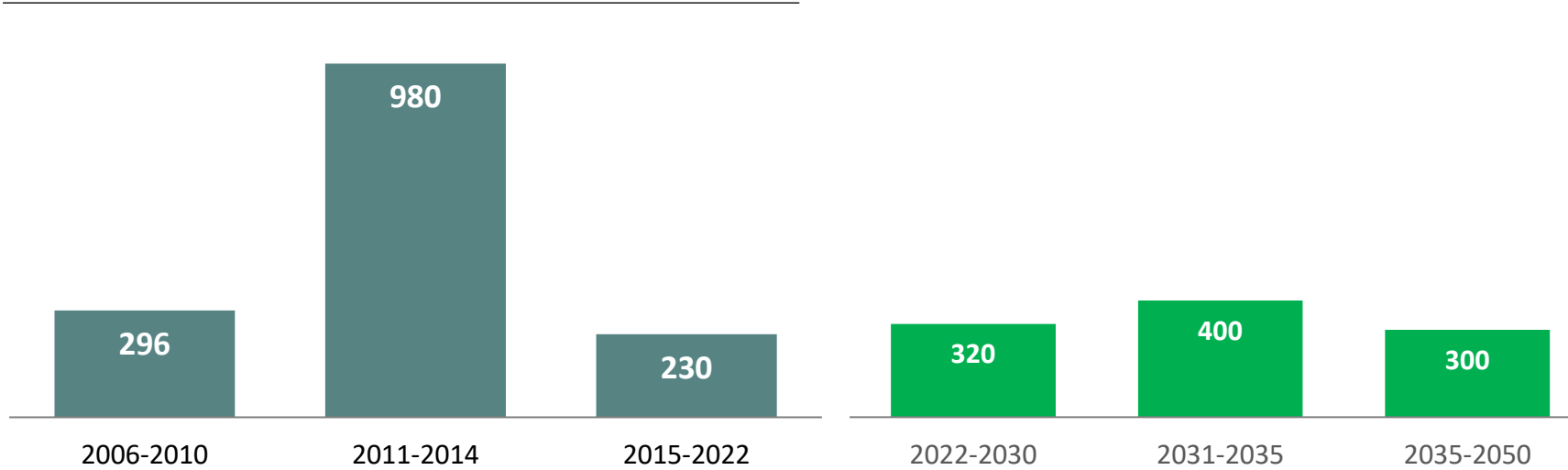
Our new business model enables us to pay ~80% average dividends and we will remain as a high dividend payer

\*2009-2023 dividend payout ratio, which is calculated according to distributable net income based on statutory accounts

# Investments (Million \$)


Avg. 460 Mn\$

Avg. 350 Mn\$



## CURRENT PROJECTS

- FCC Modernization in İzmir
- New Sulphur Recovery Unit in Kırıkkale
- Solar Power Plant in Kırıkkale
- Firefighting System Modernization in Kırıkkale
- Wind Power Plant in İzmir

7+   
After privatization  
Billion \$ investment

~50%  
of total capex  
ESG related  
investments in  
2022



# Financial Policy

**Financial Discipline:** Risk management policies focusing on areas such as leverage, liquidity, counterparty risk, commodity, interest rate and currency exposure.

## Leverage & Liquidity

### Liquidity risk management & targets/limits for financial ratios:

- Net financial debt/EBITDA
- Net financial debt/Equity
- Current ratio
- Share of long-term debt

## Counterparty Risk Policy

Deposit is kept within bank-based limits:

- Credit rating assessment and strong capital base.
- Cap on the maximum deposit allocated to a single bank.
- Cap for deposits subject to banks shareholders' equity

## Interest Rate & Fx

- The fixed/floating profile of financial debt.
- Management of FX risk with derivative instruments
- Zero FX exposure target on daily basis.

## Commodity Hedging Policy

### Inventory Hedging Policy:

- Operational hedge: Optimum stock policy & forward pricing mechanism.
- Financial hedge: Cargo based hedging to match the pricing period of purchases with sales.

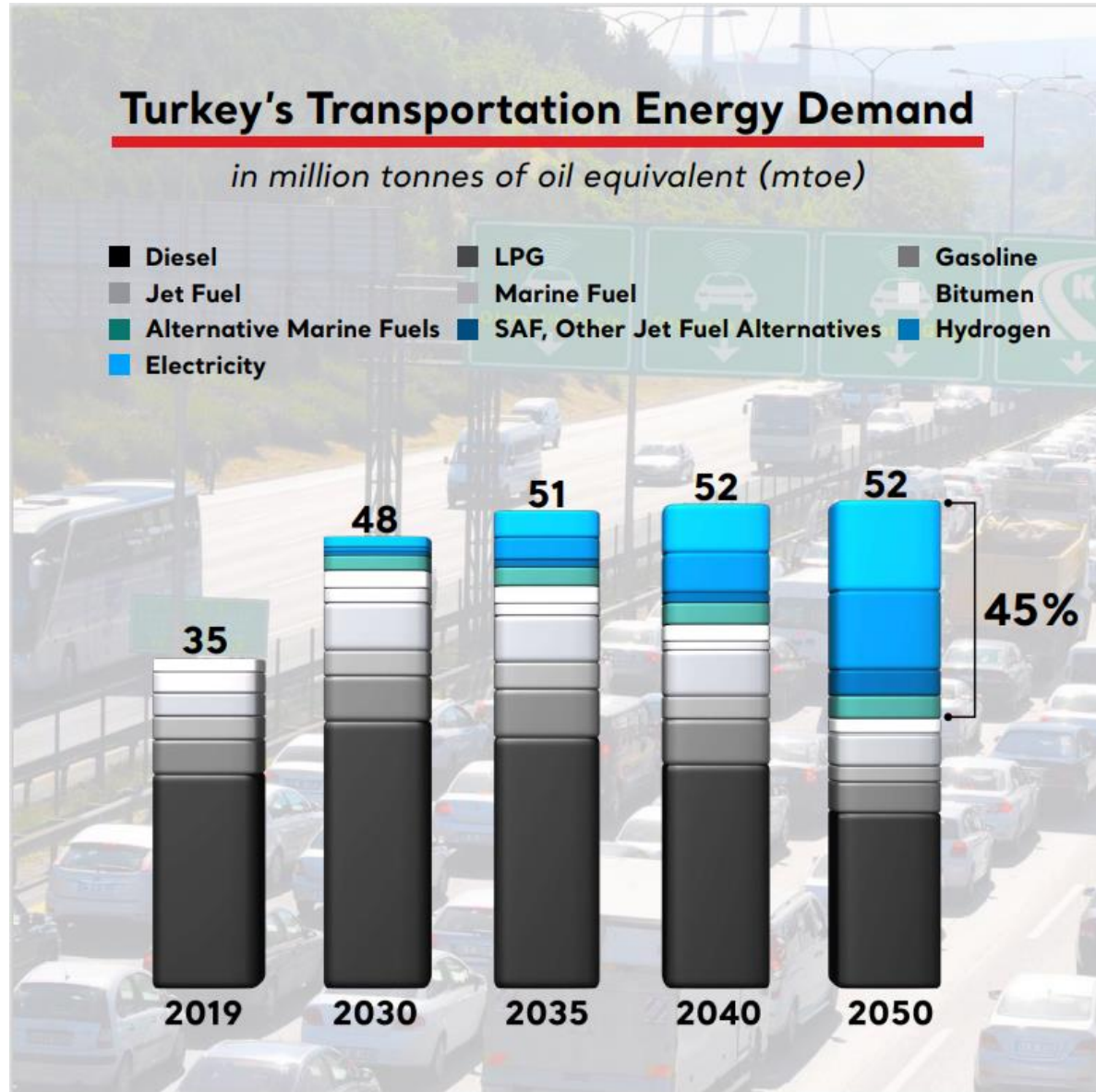
### Crack Margin Hedging Policy:

- Financial hedge: Crack margin (gasoline, diesel, jet fuel, fuel oil) risk mitigation by using derivatives.
- Hedge ratio between %0-%50 with up to 1 year hedge tenor



Strategy

# Turkey's Transportation Energy Demand



## OUR PROJECTIONS



Turkey's fossil fuel consumption **to peak in 2030**



**Diesel** to be partially **replaced by H<sub>2</sub>**, for commercial vehicles existing domestic refining capacity will still be well positioned



In passenger cars, **EVs to lead new sales** starting early 2030s and become the dominant powertrain before 2040

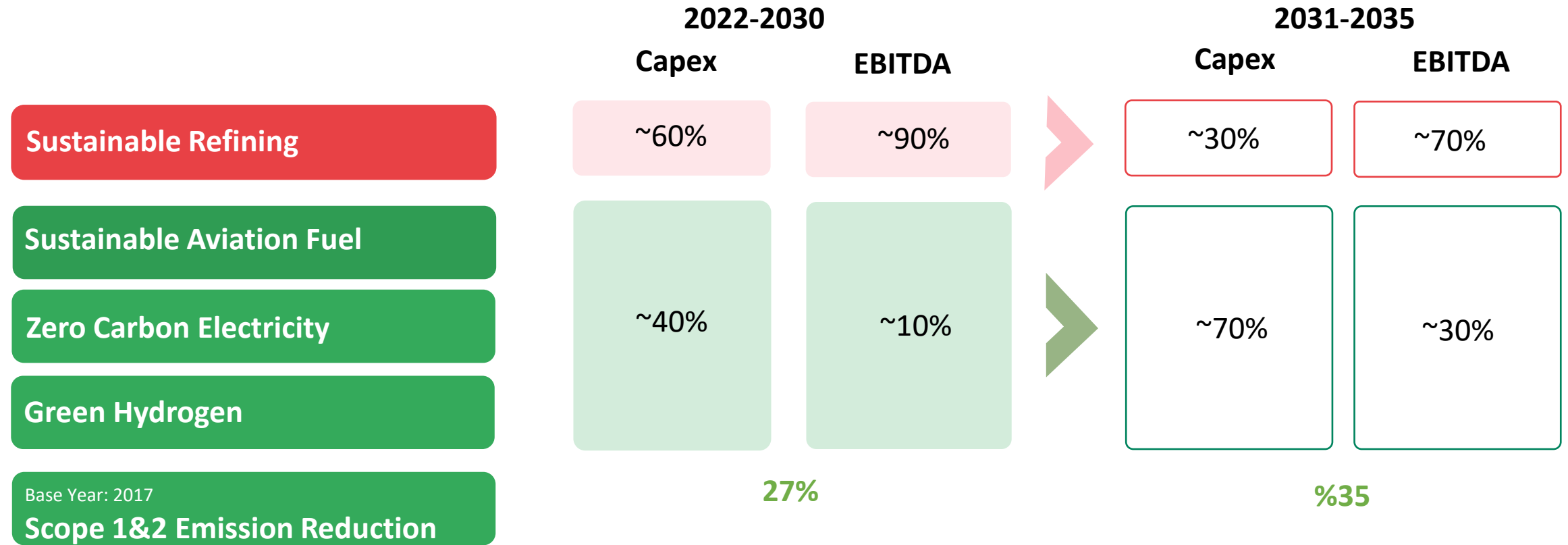


**H<sub>2</sub>** to enter a **rapid growth phase** from 2030



**Sustainable Aviation Fuel** to cover ~10% of aviation fuel by 2030

# Strategic Transition Plan



## Sustainable & Profitable Tüpraş

2035

Average EBITDA  
**> \$1 Billion / Year**

Average Capex  
**~ \$350 Million /Year**

ROACE  
**> 25%**

Net Debt/  
EBITDA  
**<2.0x**

Average Pay-Out Ratio  
**~ 80%**

# Strategic Transition Plan – Investment Areas



## SUSTAINABLE REFINING

### Energy Efficiency and Decarbonization Projects

- Remain as a **Major EBITDA Contributor**
- **Improve energy efficiency** to drive up profitability
- **Diversify product portfolio** through lighter chemicals
- Within **2022-2035**;
  - **~2.3 bn USD capex, ~13 bn USD Cumulative EBITDA**



## ZERO CARBON ELECTRICITY

### Integrating Zero Carbon Electricity to produce Green H<sub>2</sub>

- Ensure affordable **green H<sub>2</sub> production, capturing electrification demand**
- **Primarily supply zero carbon electricity for H<sub>2</sub> production, remaining portion to be sold**
- Within **2022-2035**;
  - **~1.3 bn USD capex , ~400 MUSD Cumulative EBITDA**



## BIOFUELS

### Becoming the Lead SAF Supplier in Turkey

- Capture changing market for **liquid fuels**, ensure **long term profitability in aviation sector**.
- **Conversion of existing unit** in İzmir to produce **Sustainable Aviation Fuel (SAF)**
- Within **2022-2035**;
  - **~600 MUSD capex, ~1.1 bn USD Cumulative EBITDA**



## GREEN HYDROGEN

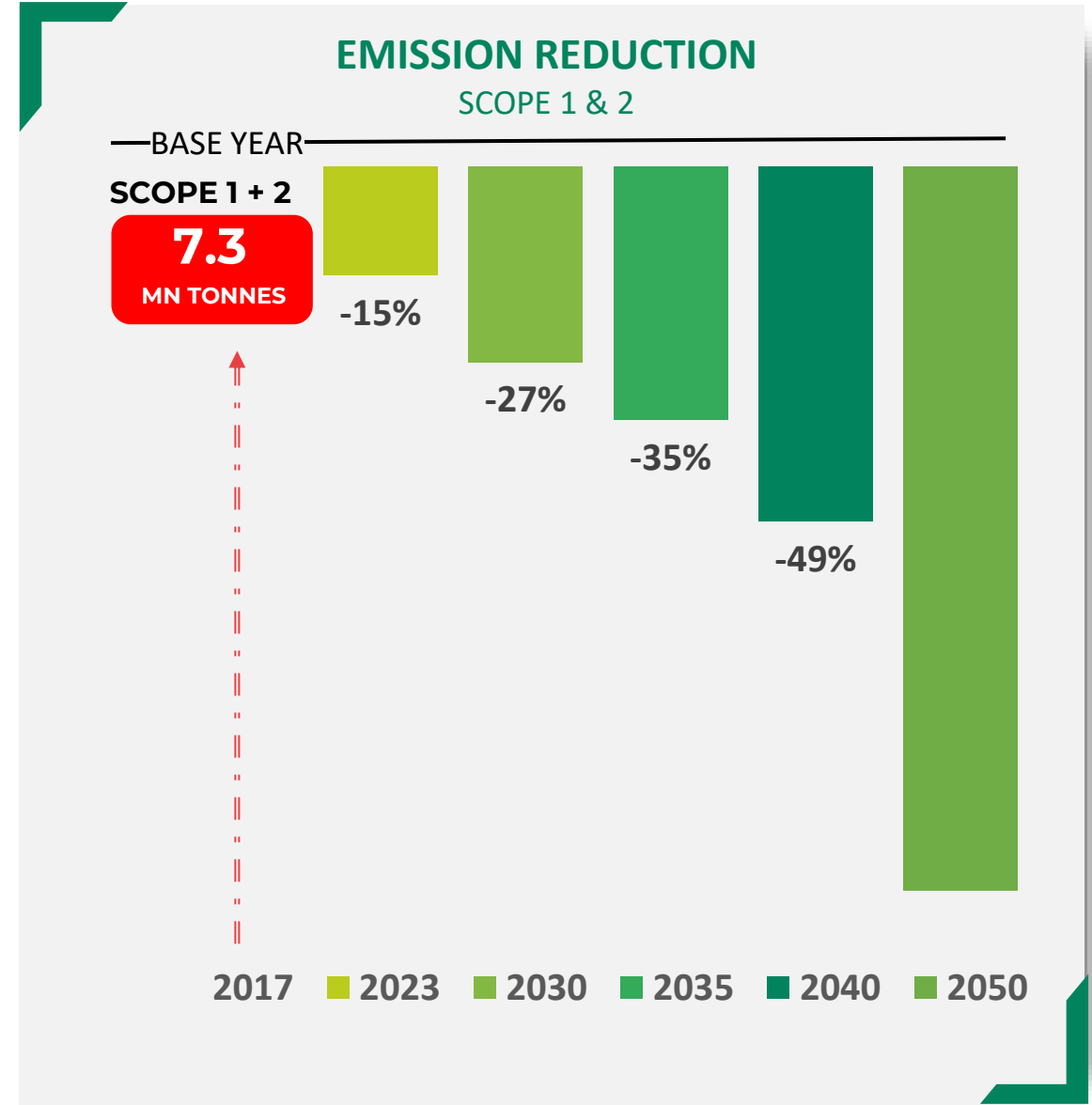
### Reducing Refining Emissions

- Capture changing market for **land transportation, reduce refining emissions**.
- **Reduce Scope 1-2 emissions** of refineries. Followed by **H<sub>2</sub> sales**, starting from 2030.
- Within **2022-2035**;
  - **~690 MUSD capex, ~640 MUSD Cumulative EBITDA**

# Strategic Transition Plan – Emission Reduction



**We will invest in energy efficiency & decarbonization Projects, green hydrogen & zero carbon electricity usage in refining to reduce scope 1 & 2 emissions**



# Strategic Transition Plan - Financials

We are  
sustainable  
and  
profitable.

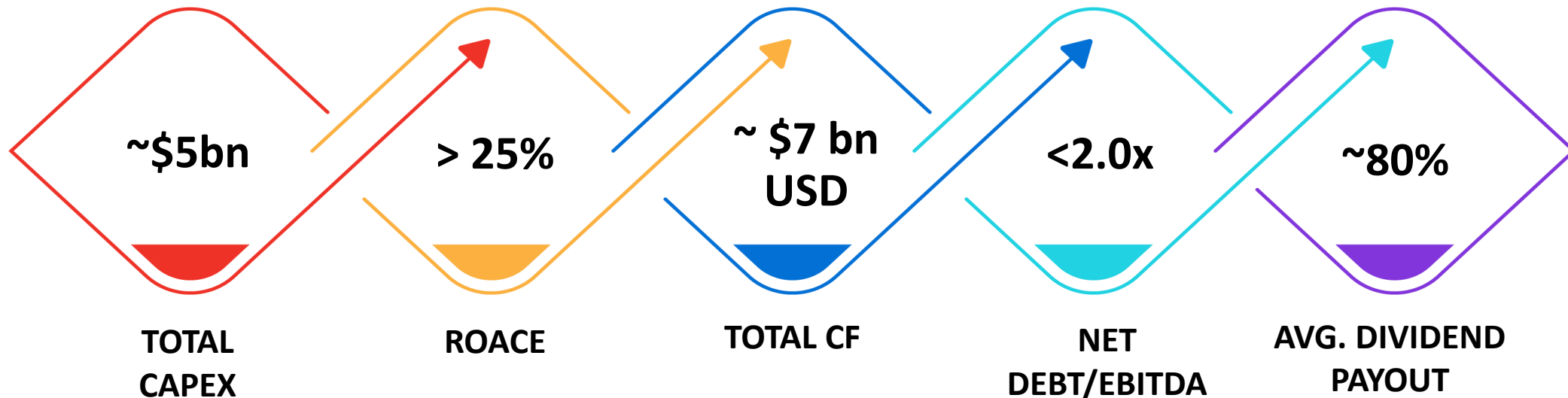
Will **eliminate our scope 1 & 2 emissions by 2050** while executing our plan and achieving these results.

**\$350mn** average CAPEX until 2035, totaling **\$5 bn.**

ROACE will remain above 25% creating **~\$7bn total CF** until 2035

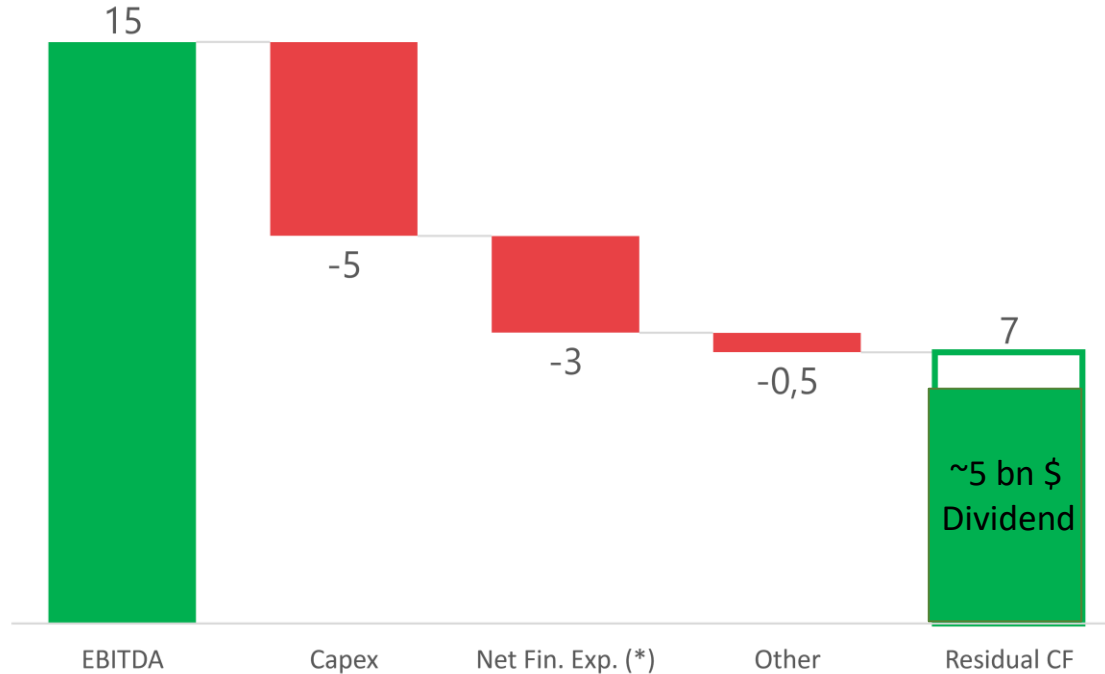
With ample CF, **Net Debt / EBITDA** will be below **<2.0x**

Will remain a **high dividend payer**, average **~80% dividend pay-out**



# Strategic Transition Plan - Financials

Cumulative Cash Flow Bridge (\$ bn)



(\*) Consists of net additional funding and related financial expenses

## Sound Financial Plan

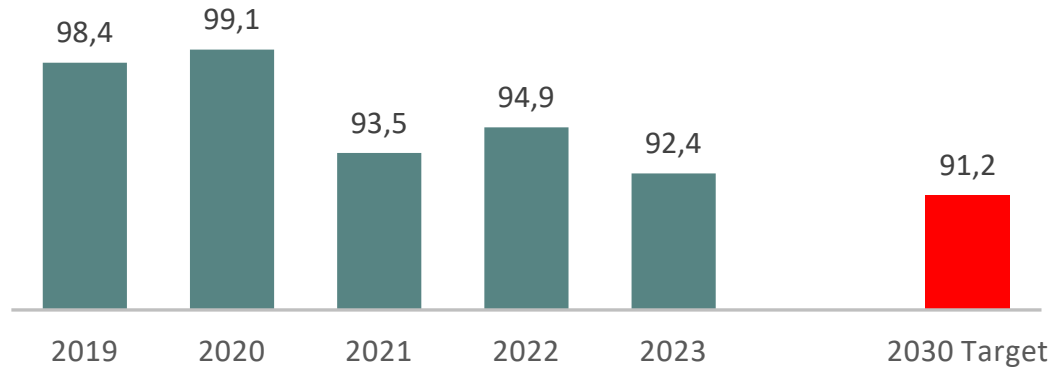
- Superior EBITDA generation and disciplined capex plan leads to very low external funding requirement.
- Strong FCF generation ensures strong dividend potential
- 80% dividend payout on average according to our new business model
- Net Debt / EBITDA will remain below 2x



ESG

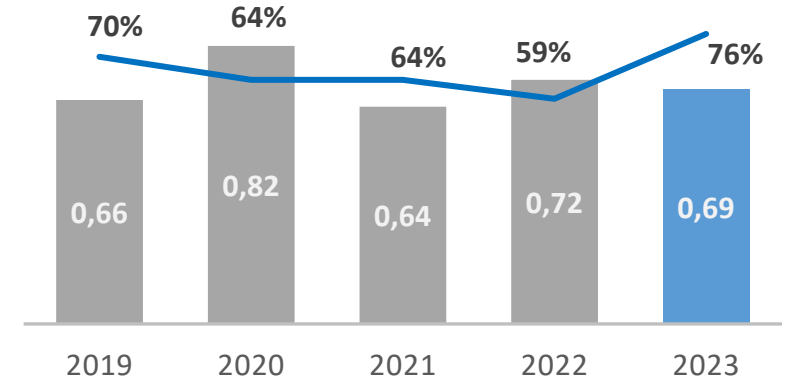
# Tüpraş's Environmental Highlights

### Energy Intensity Achievements

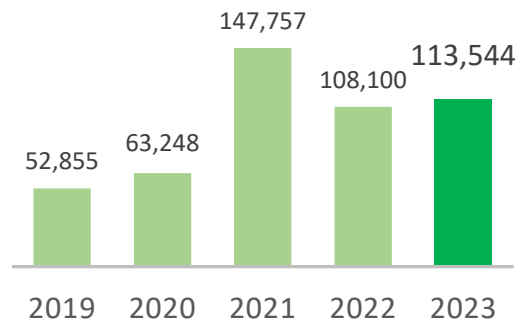


### Water Consumption per processed crude oil (m3/ton)

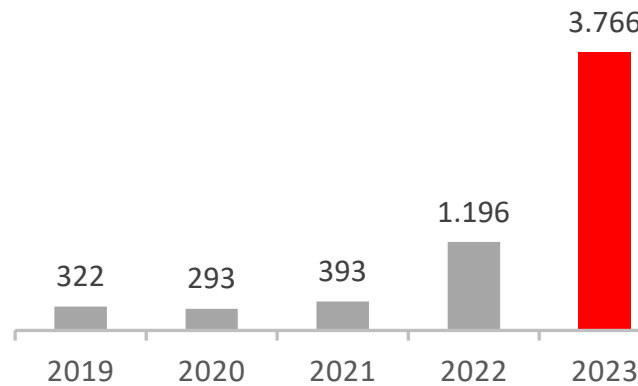
### Ratio of recovered water to total water consumption (%)



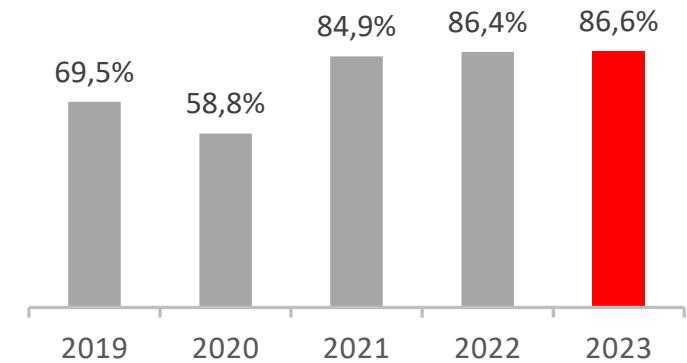
### Levelized Greenhouse Gas Emissions Reductions through Energy Efficiency Projects (tons CO2e)



### Environmental Investment and Operational Expenditures (MTL)



### Waste recycling rate



A photograph of an industrial worker in a dark blue uniform with reflective yellow-green stripes, a white hard hat, a green ear protector, and a white face mask. The worker is wearing yellow gloves and is operating a large, silver, handwheel valve on a large, cylindrical industrial vessel. The vessel has several horizontal bands and a small window. The background is slightly blurred, showing another worker in a similar uniform. A red banner is at the bottom left.

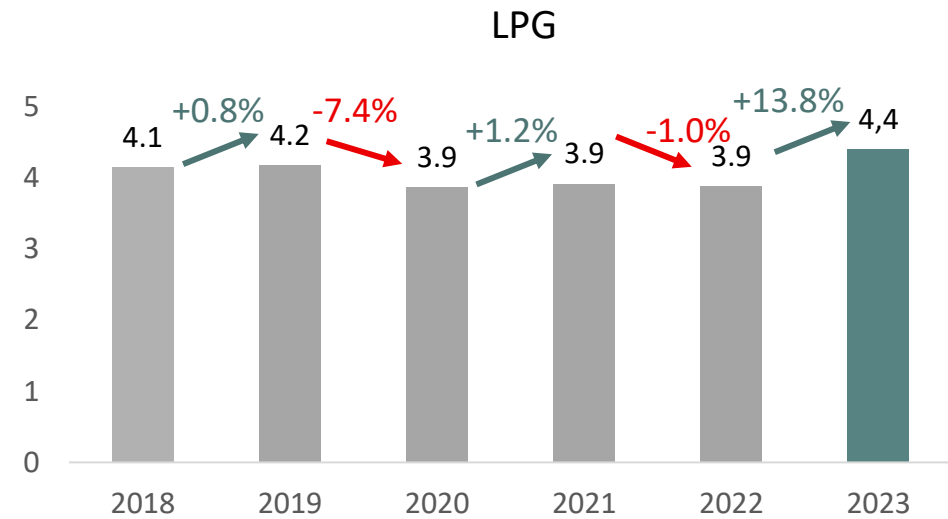
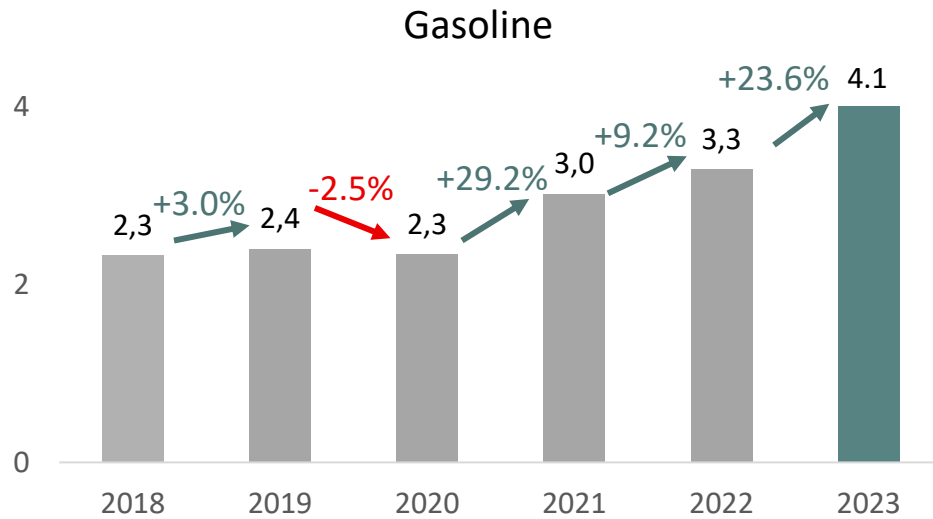
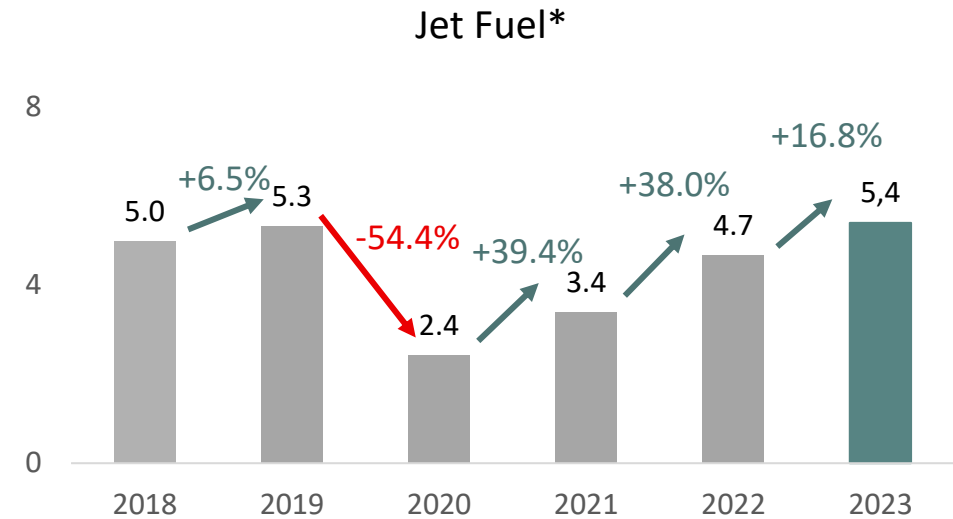
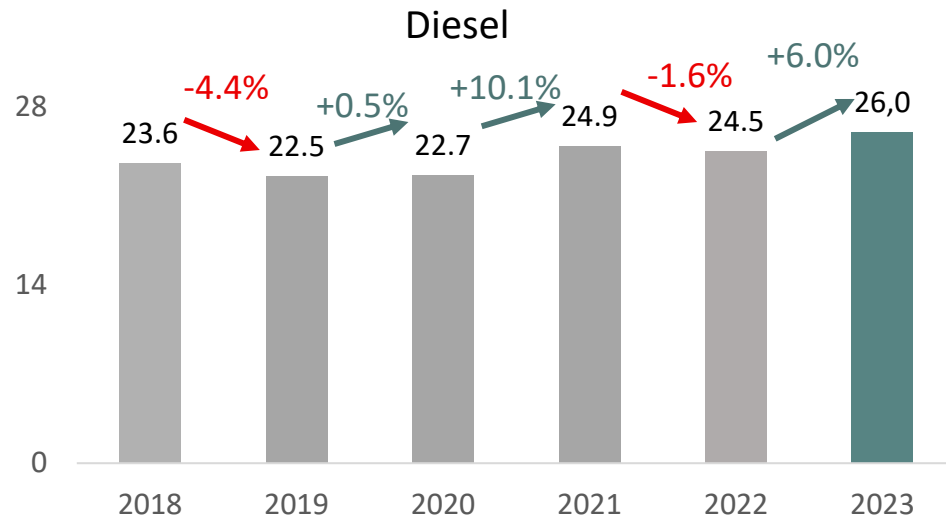
Appendix

# 2024 Refinery Maintenance Schedule

Refinery	Unit	Starting Quarter	Duration (weeks)	Purpose	Planned
İzmit	Crude Oil & Vacuum	Q4	5	Periodic Maintenance	Postponed
	Desulphurizer	Q4	5		Postponed
	RUP	Q1	13		Completed
	FCC	Q2	6	Periodic Maintenance	Completed
İzmir	FCC	Q3&Q4	21	Revamp	Planned
	Crude Oil , Vacuum, HYC	Q1	7	Periodic Maintenance	Completed
Batman	Crude Oil & Vacuum	Q2&Q4	10	Seasonal	Ongoing

# Turkish Market Fuel Consumption 2018-2023

Million  
Tons



# Competition - STAR Refinery

## Timeline



- Feasibility studies began in 2010 and construction kicked off in 2011
- Goldman Sachs has acquired a 13% stake in SOCAR Turkey for \$1.3 billion.
- Total investment size 6.3 bn USD, with 3.3 bn USD credit agreement.
- Following the completion of construction late 2018, reached full capacity utilization in August 2019
- Star reached to 13 mn tons of capacity

## Turkish Market Structure (mn tons, 2023)

Turkey Demand	Tüpraş	STAR	Total	Turkish Market Demand*	Balance
LPG	0.9	0.2	1.1	4.4	<b>-3.3</b>
Petchem F.	0.2	1.7	1.9		
Gasoline	5.1		5.1	4.1	<b>1.0</b>
Jet Fuel	4.6	1.3	5.9	5.4	<b>2.1</b>
Diesel	8.9	6.9	15.7	26.0	<b>-9.3</b>
Fuel Oil	1.3		1.3	0.3	<b>1.0</b>
Bitumen	2.6		2.6		
Pet coke	0.8	0.9	1.7		
<b>Total</b>	<b>~30</b>	<b>~13</b>	<b>~43</b>		

\* Source: EMRA

# Competition - Regional Competition

- Tüpraş competes with 69 refineries in the Mediterranean and Black Sea markets.
- Mediterranean regional product balance is also affected from Middle East, North West Europe and Asia flows

## Mediterranean



**54 Refineries ~7.7 mbd**

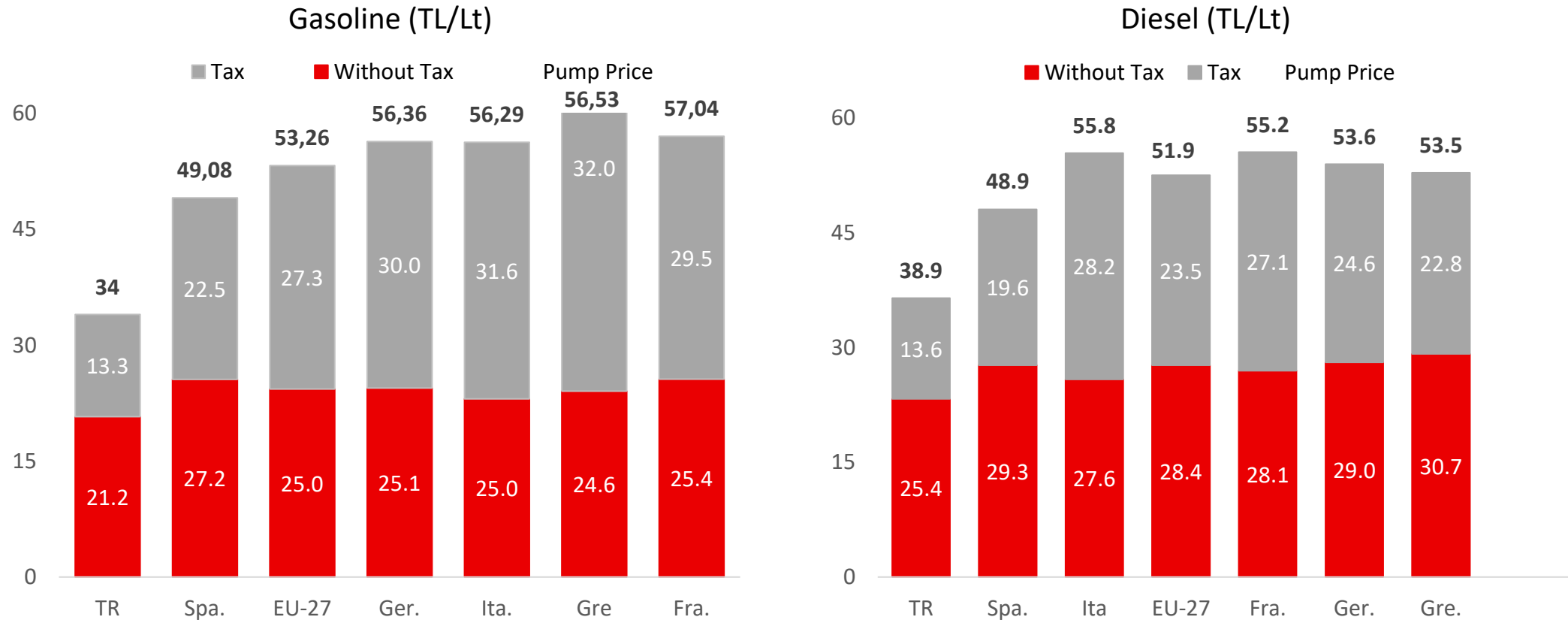
## Black Sea



**15 Refineries ~1.5 mbd**

# European Pump Price Comparison

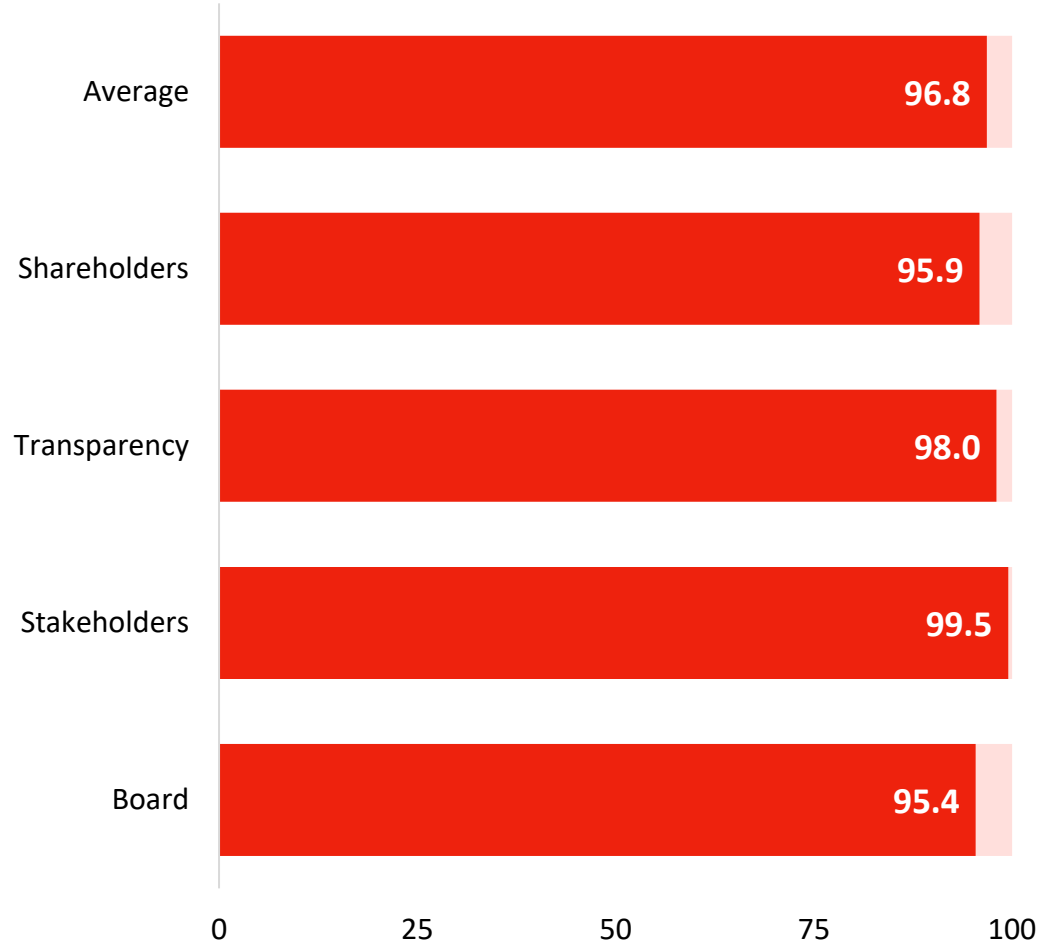
Turkish fuel prices are highly competitive with other European countries.



Prices of Europe and Turkey, as of December 31, 2023

# Tüpraş - Ratings

## Tüpraş BIST Corporate Governance Rating Score

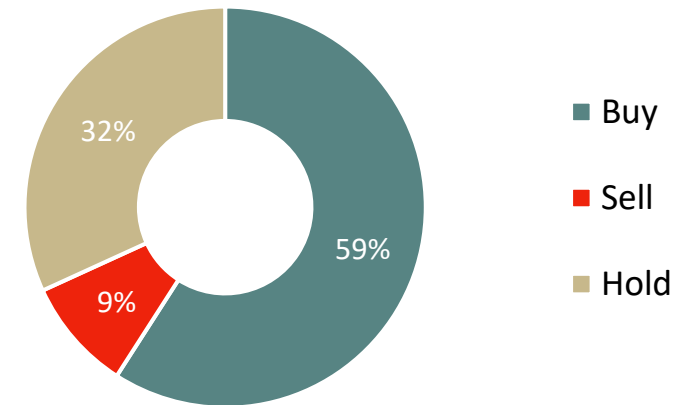


Source: SAHA Corporate Governance and Rating Services Inc. (November 2023)

## Credit Rating Scores

Foreign Currency Long Term	FitchRatings	MOODY'S	S&P Global Ratings
Tüpraş	B+ (Stable)	B2 (Positive)	
Turkey	B + (Positive)	B3 (Positive)	B (Positive)
Koç Holding		B2 (Positive)	BB(Positive)

## Analyst Recommendations

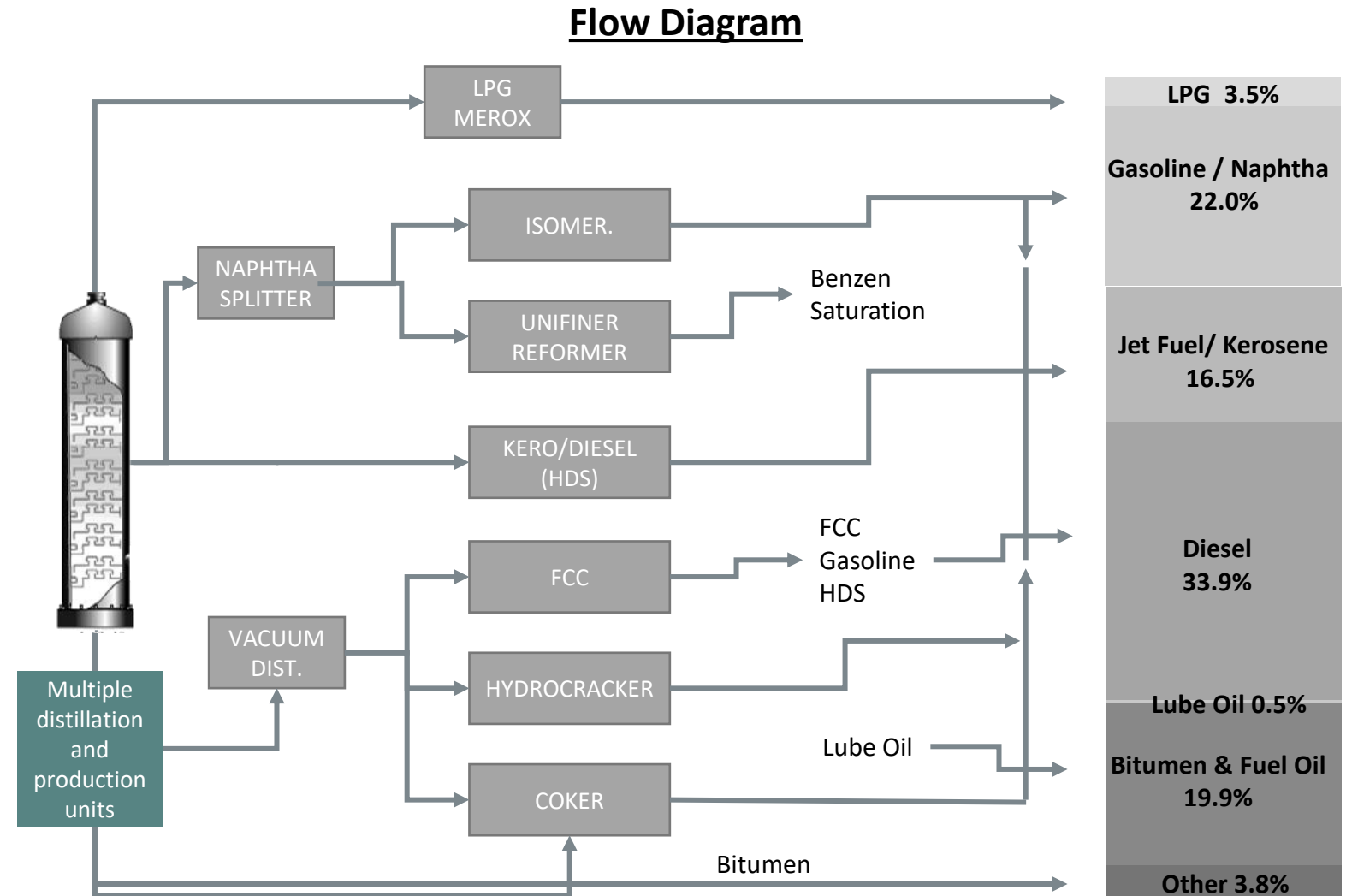


Source: Bloomberg\*  
\*data as of Agu'24

# Tüpraş Production Flow and Yield Breakdown

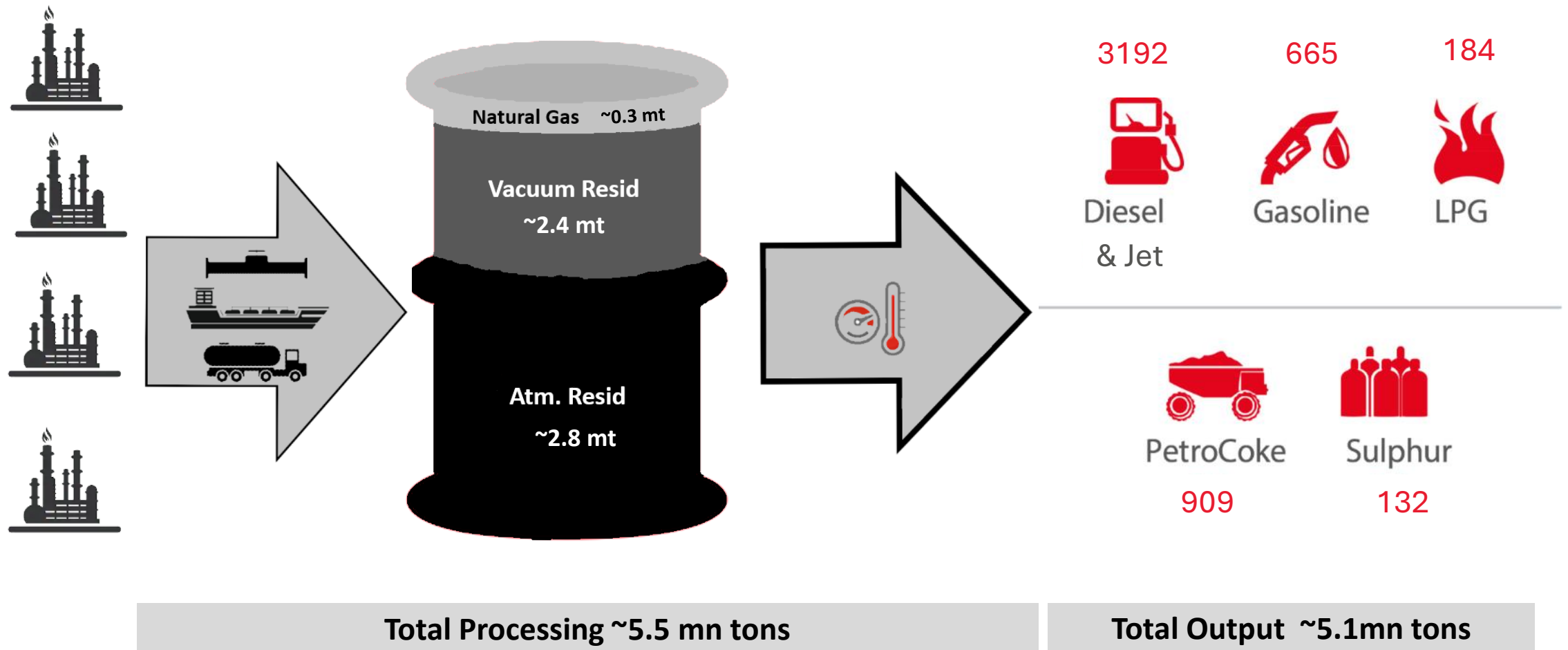
- Tüpraş has 30 million tons of production capacity
- Tüpraş operates 4 refineries with an integrated system optimization program

Key Units	# of Units	Capacity (m <sup>3</sup> /d)
CRUDE OIL	8	99,420
VACUUM DIST.	8	42,752
HYDROCRACKER	4	18,032
ISOMERATION	3	7,804
UNIFINER REFORMER	5	16,225
KERO/DIESEL (HDS)	9	37,265
FCC	2	4,650
COKER	1	9000
NAPHTA SPLITTER	8	
LPG MEROX	6	

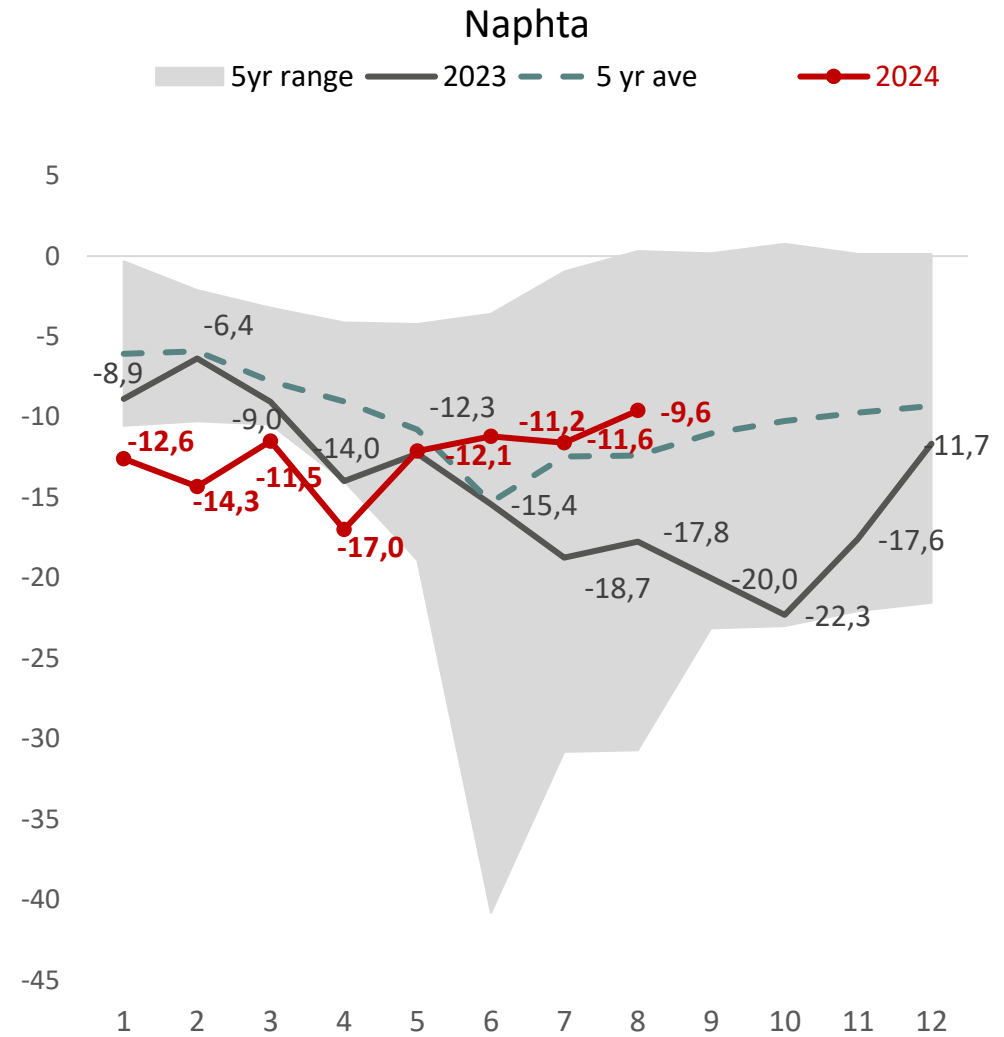
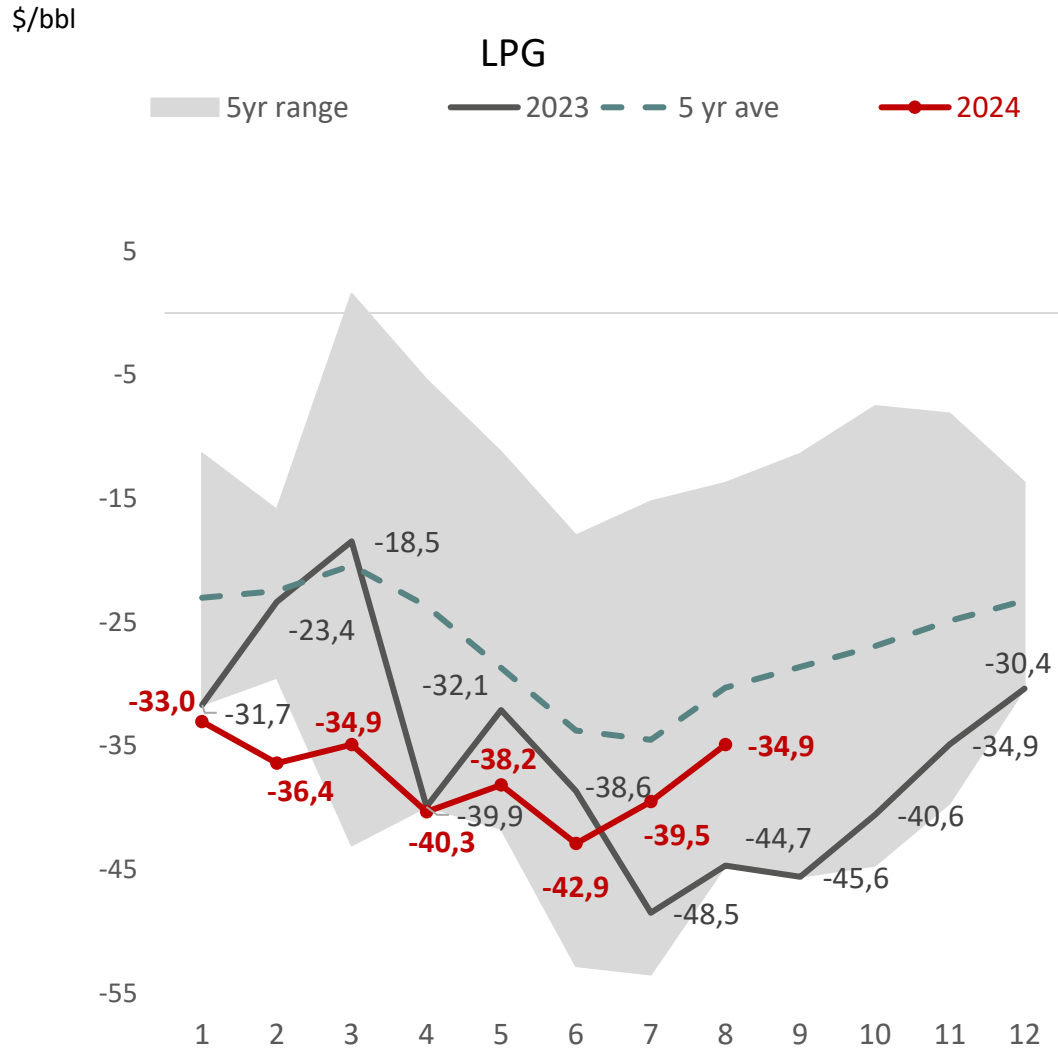


# RUP Feedstock and Production

- Residuum Upgrade Plant (RUP) was completed in 2015 and it is the main conversion unit of Tüpraş.
- The second scheduled maintenance began in Q1 2024, is expected to be completed in 92 days.



# LPG and Naphta Cracks



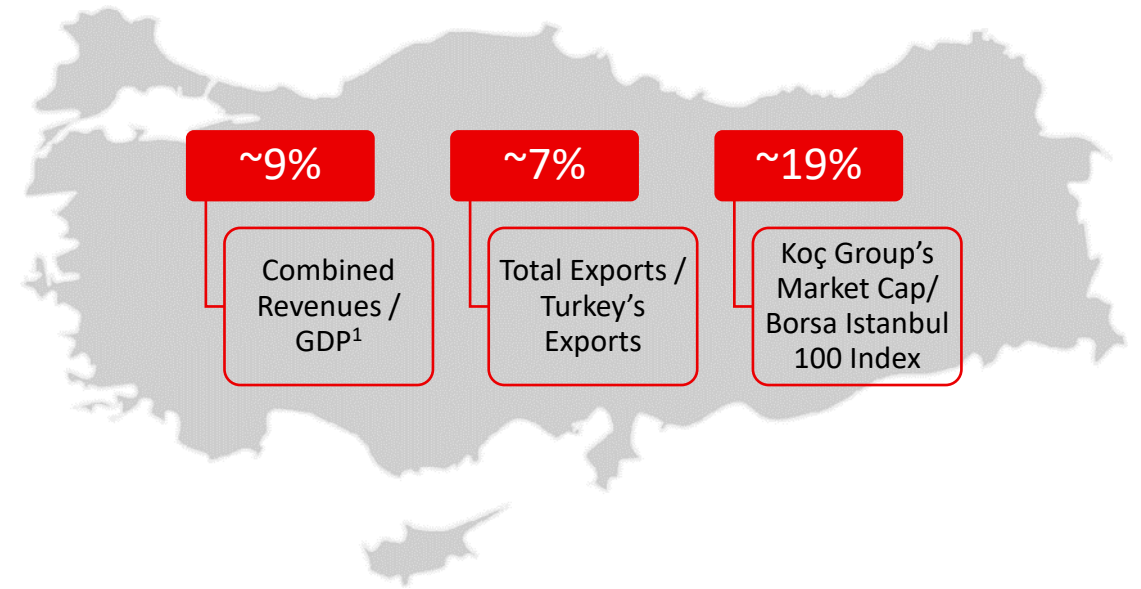
Data as of 31 August, 5 year range shows 2019-2023

## Turkey's Leading Investment Holding Company

- Koç Holding is Turkey's largest industrial and services group
- The only Turkish company in Fortune Global 500<sup>2</sup>.

## Pioneer in its Sectors

- Leading positions with clear competitive advantages in sectors with long-term growth potential such as energy, automotive, consumer durables and finance.



Notes : Data as of YE22

(1) 2022 Report (based on consolidated revenues)

(2) 2022 report (based on consolidated revenues)



 **Tüpraş**

 **Koç**



Investor  
Presentation

Latest Webcast



2023 Integrated  
Annual Report

Strategic  
Transition Plan



[tuprasir@tupras.com.tr](mailto:tuprasir@tupras.com.tr)

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