

 **Tüpraş**



 **Koç**

Investor Presentation April 2019

Disclaimer

This presentation contains forward-looking statements that reflect the Company management's current views with respect to certain future events. Although it is believed that the expectations reflected in these statements are reasonable, they may be affected by a variety of variables and changes in underlying assumptions that could cause actual results to differ materially.

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REFINING MARKET

Brent Crude Oil Prices (\$/bbl)



PROS

- OPEC+ supply cut through 2018 – 1H 2019
- Political instabilities in Middle East, Africa and Latin America
- Healthy PMI data in developing countries
- Potential impact of sanctions

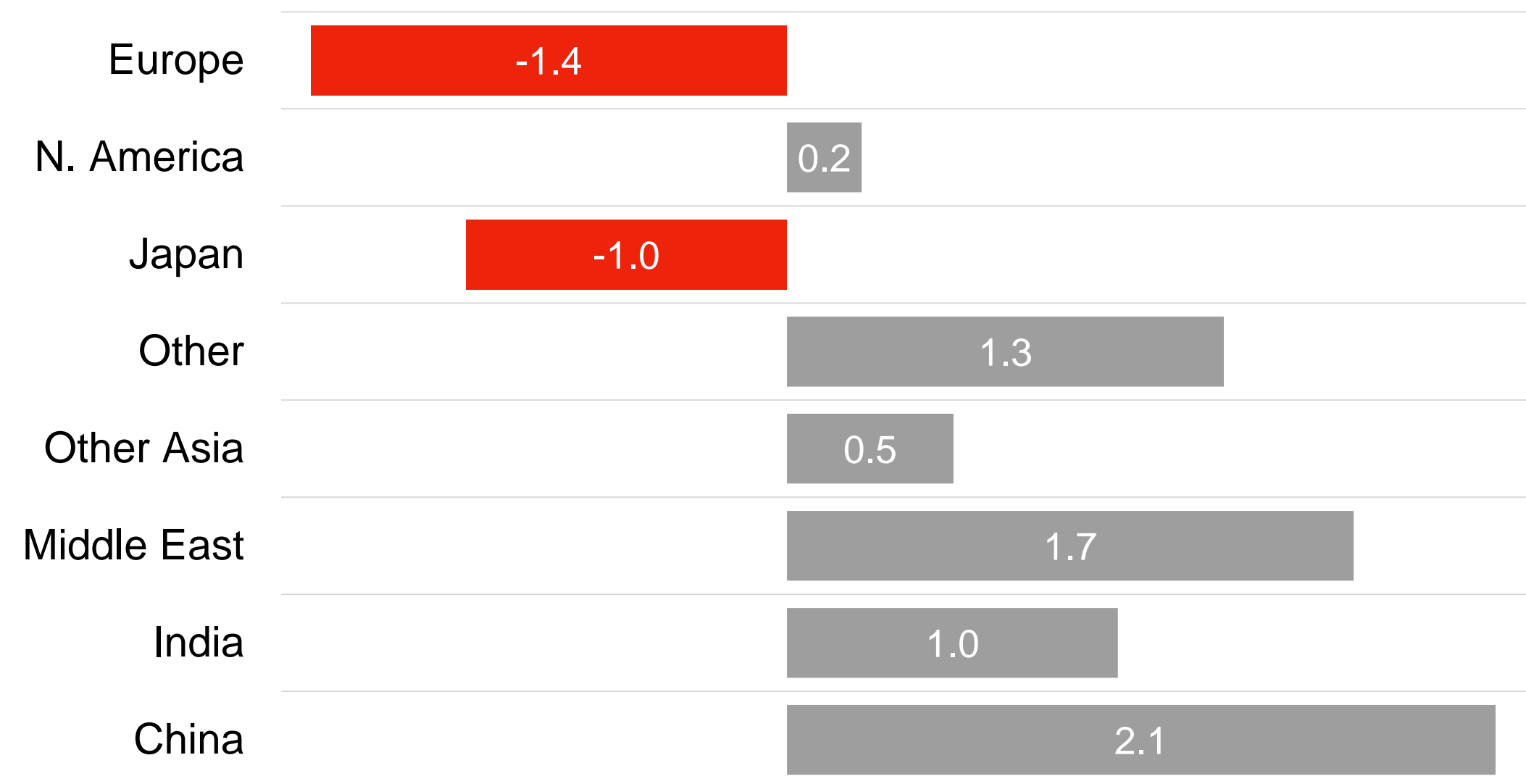
CONS

- Increase in number of rigs & shale production in US
- Inventory Levels
- Impact of trade tariff negotiations
- Weak PMI in Europe and China

Source : Platts
As of March 29th.

Refinery Capacity Change (mb/d)

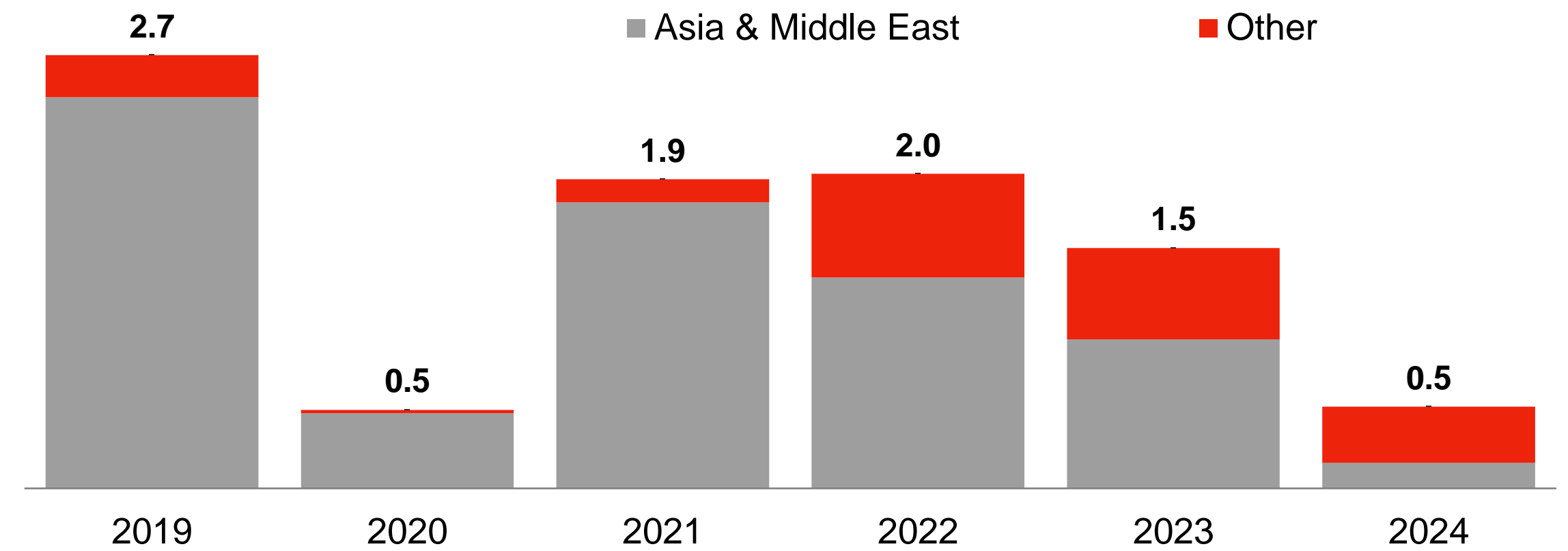
2012-2018 Net Capacity Additions by Region



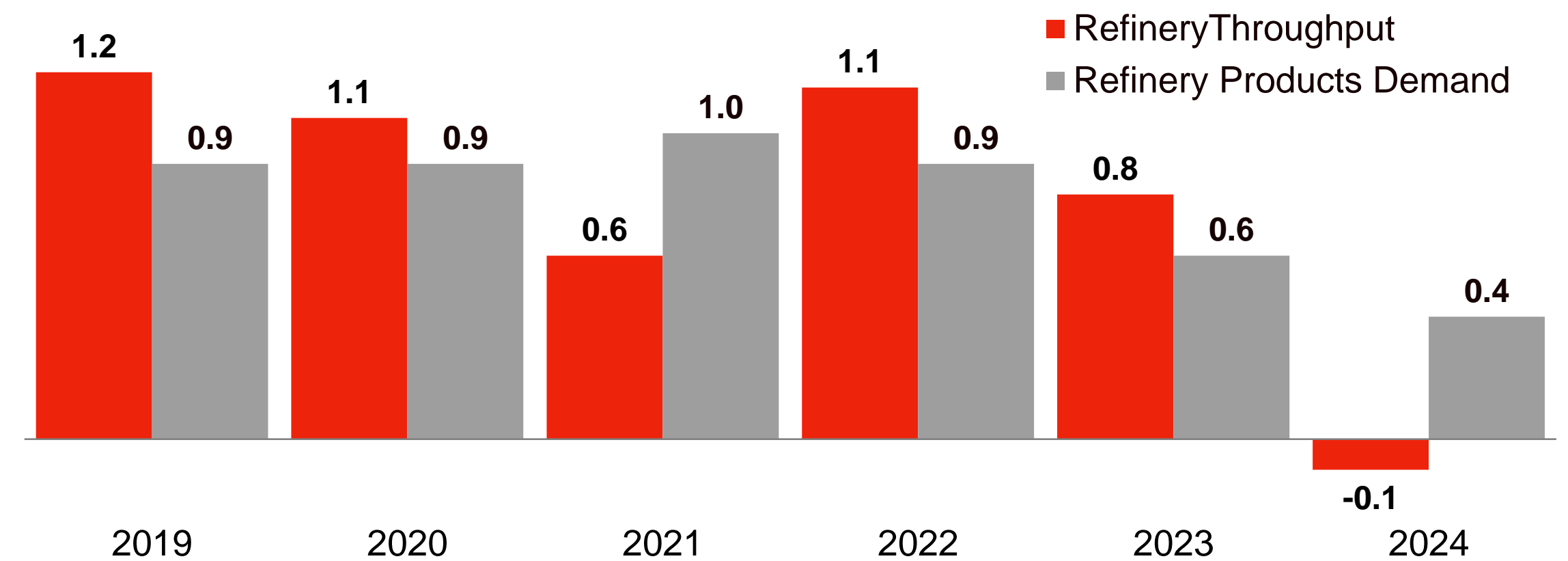
Expectations until 2024:

- ~78% of net capacity additions to come from Asia & Middle East
- Global utilization rate to decline from 82% (2018) to 79% (2024)
- Net capacity and demand in Europe to remain roughly unchanged

2019-2024 Net Capacity Additions



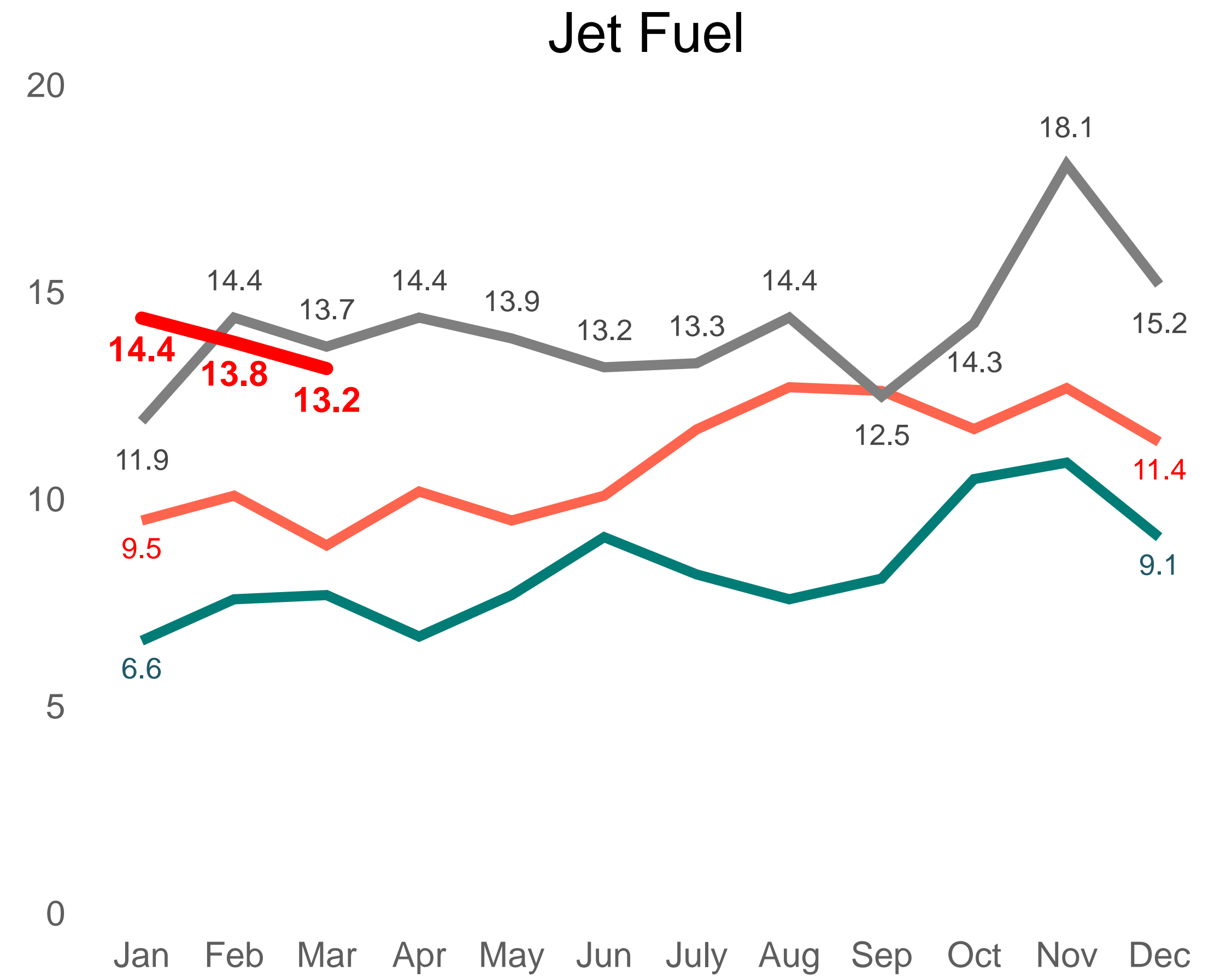
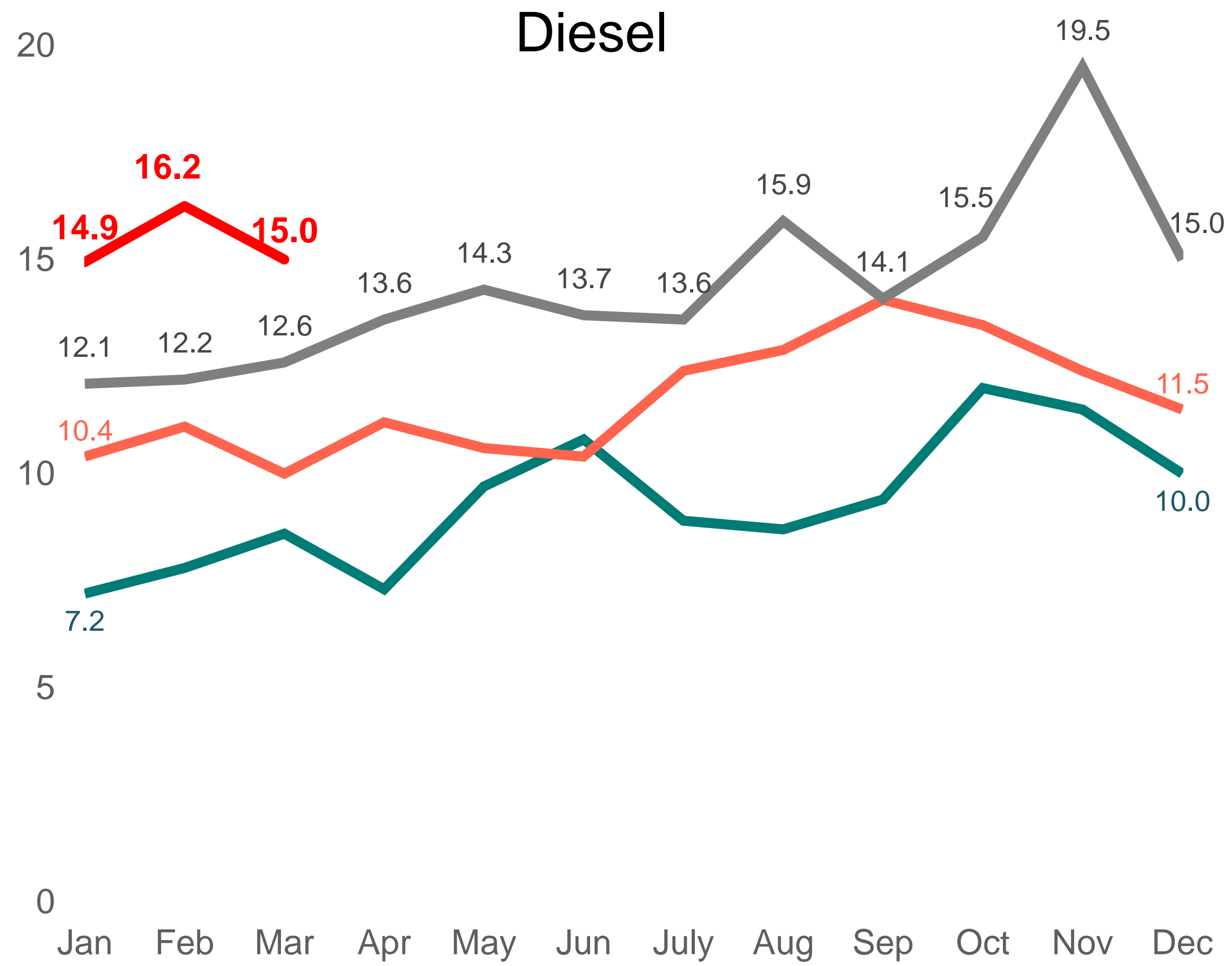
2019-2024 Additional Refinery Throughput vs. Demand



Source: Reuters, International Energy Agency, Tüpraş, sector reports and news.

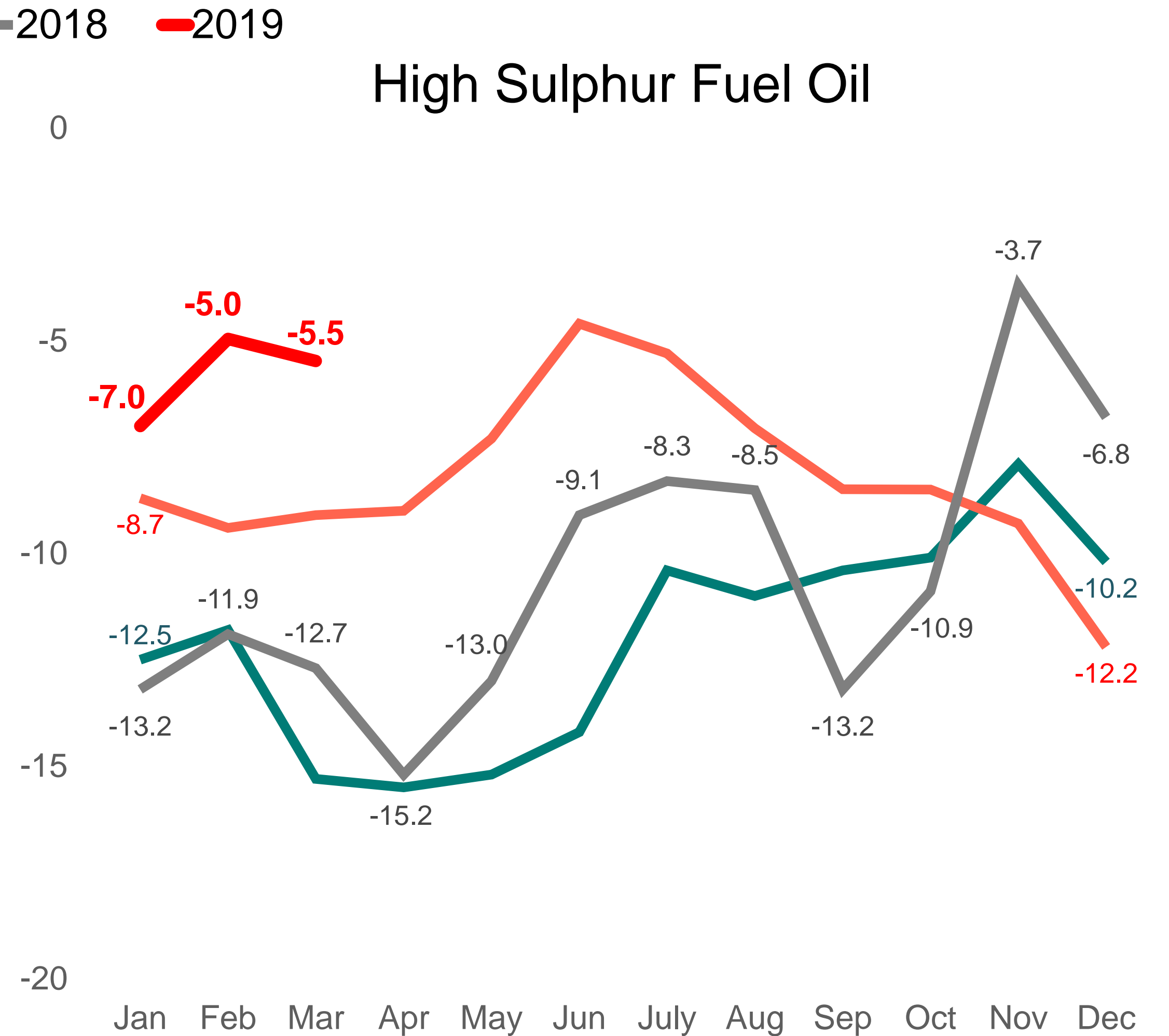
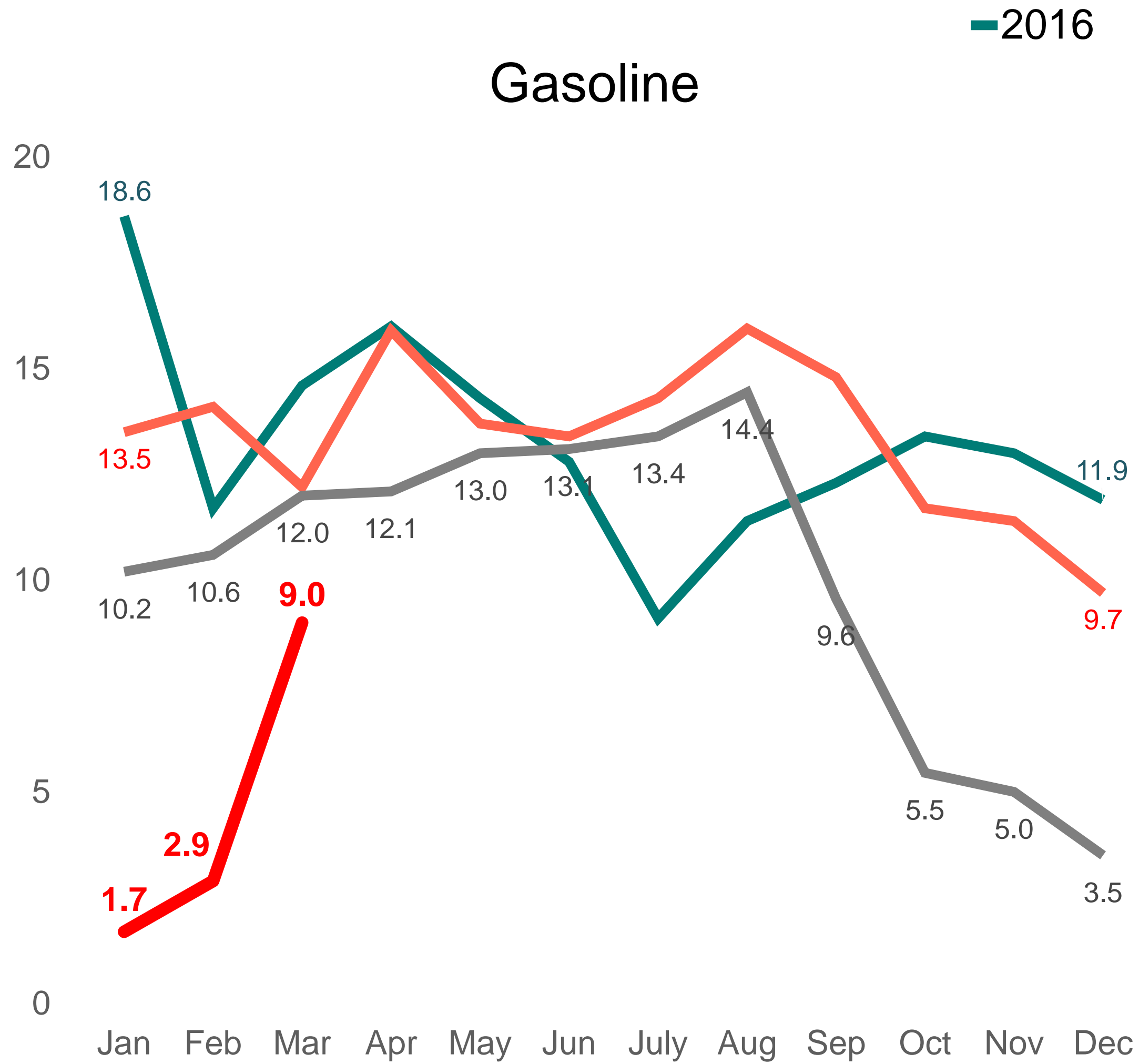
Middle Distillate Cracks (\$/bbl)

—2016 —2017 —2018 —2019



Source : Platts
As of March 29th.

Gasoline and High Sulphur Fuel Oil Cracks (\$/bbl)

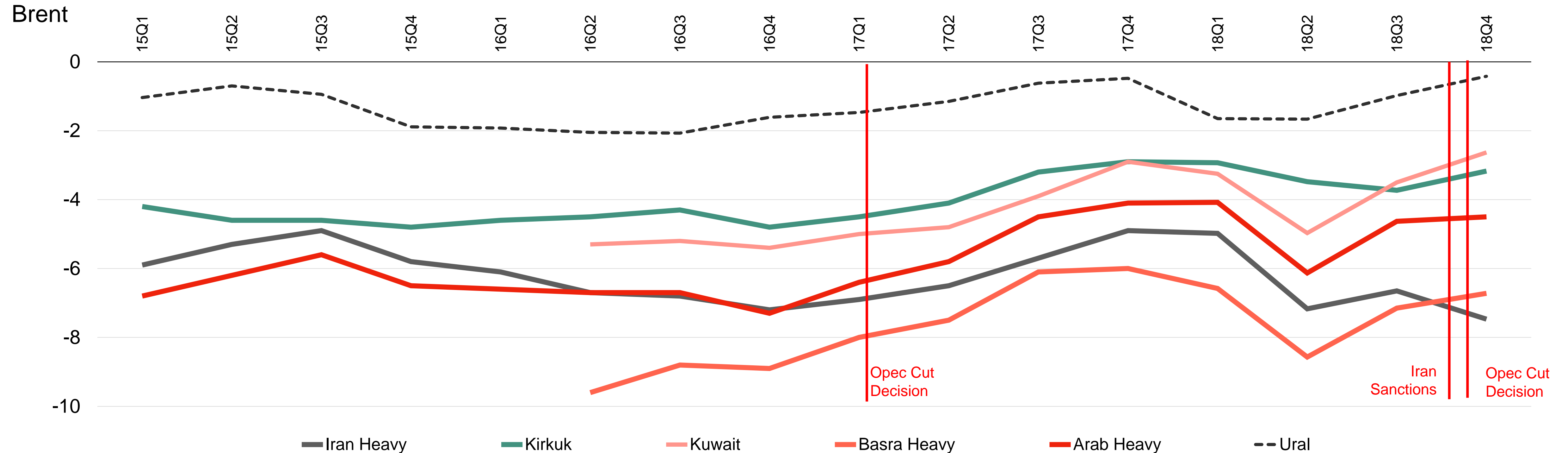


Source : Platts
As of March 29th.

Crude Price Differentials (\$/bbl)

Heavy Crude differentials narrowed in Q4 with Iran sanctions and OPEC+ cut decision.

Heavy Crude Price Differentials



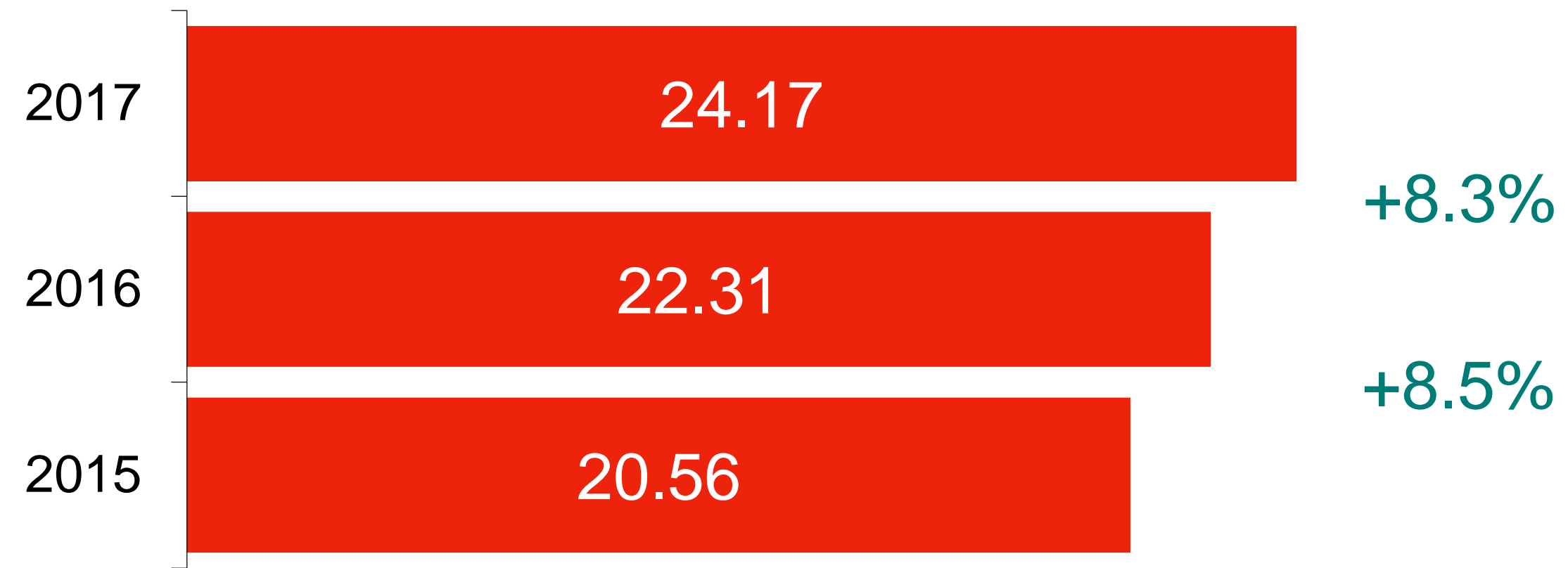
Source : Platts
As of february 15th.



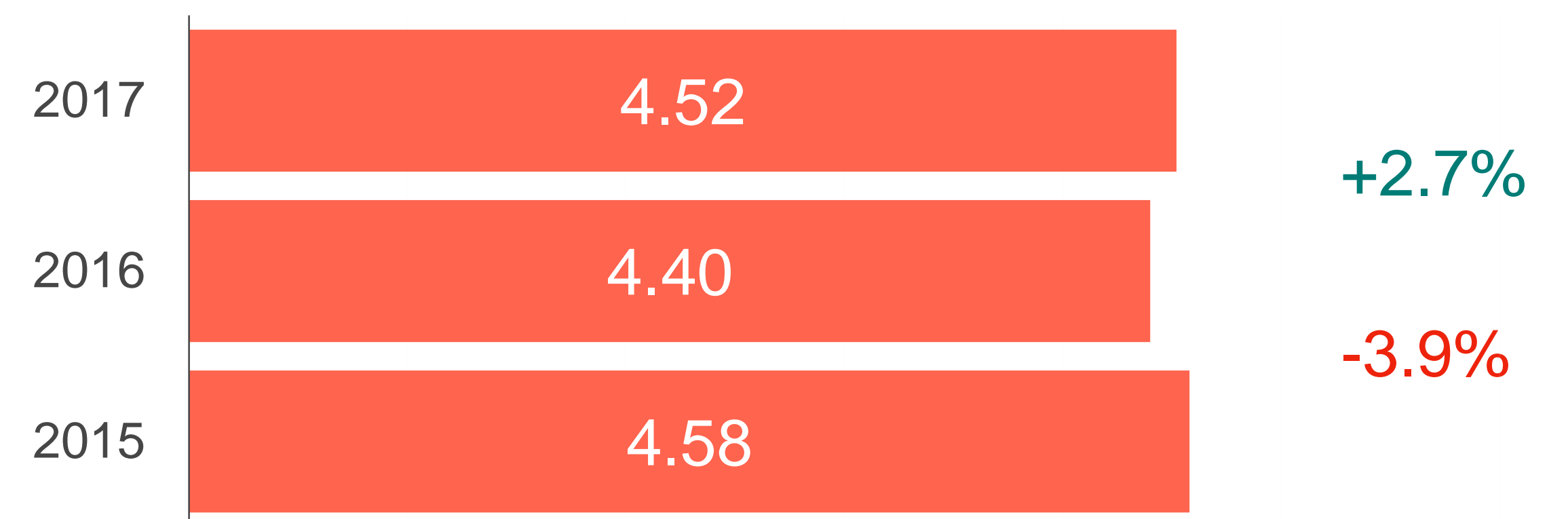
TURKISH MARKET

Turkish Consumption 2015-2017 (Million tons)

Diesel



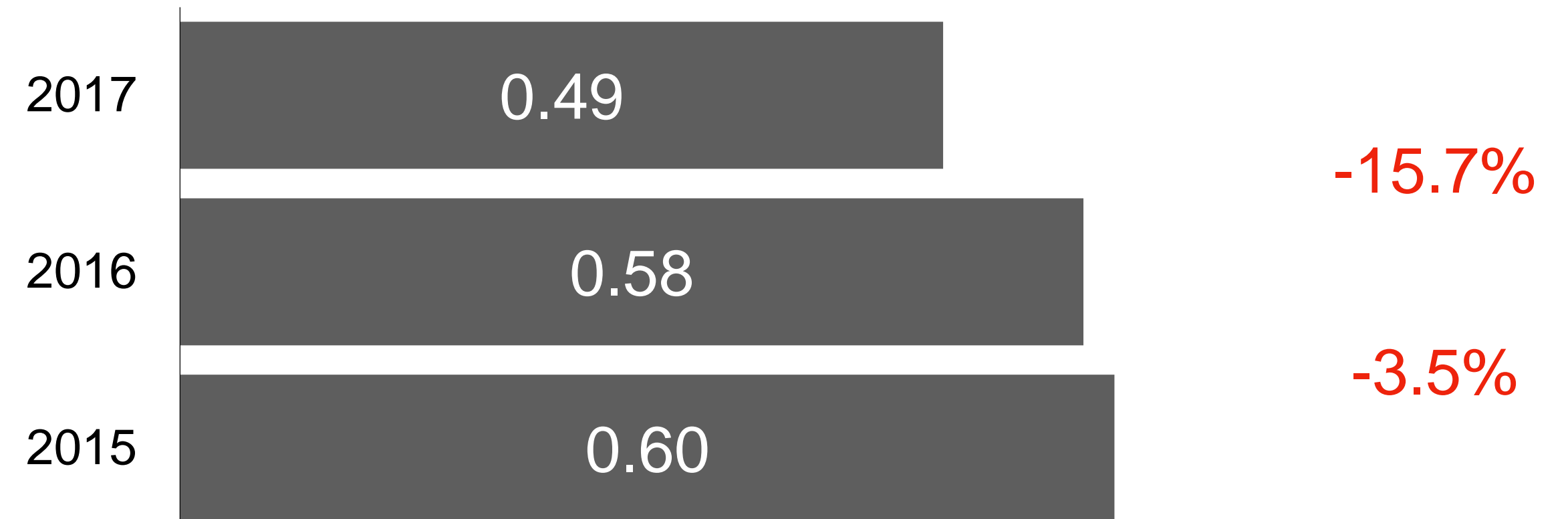
Jet Fuel



Gasoline



Fuel Oil*

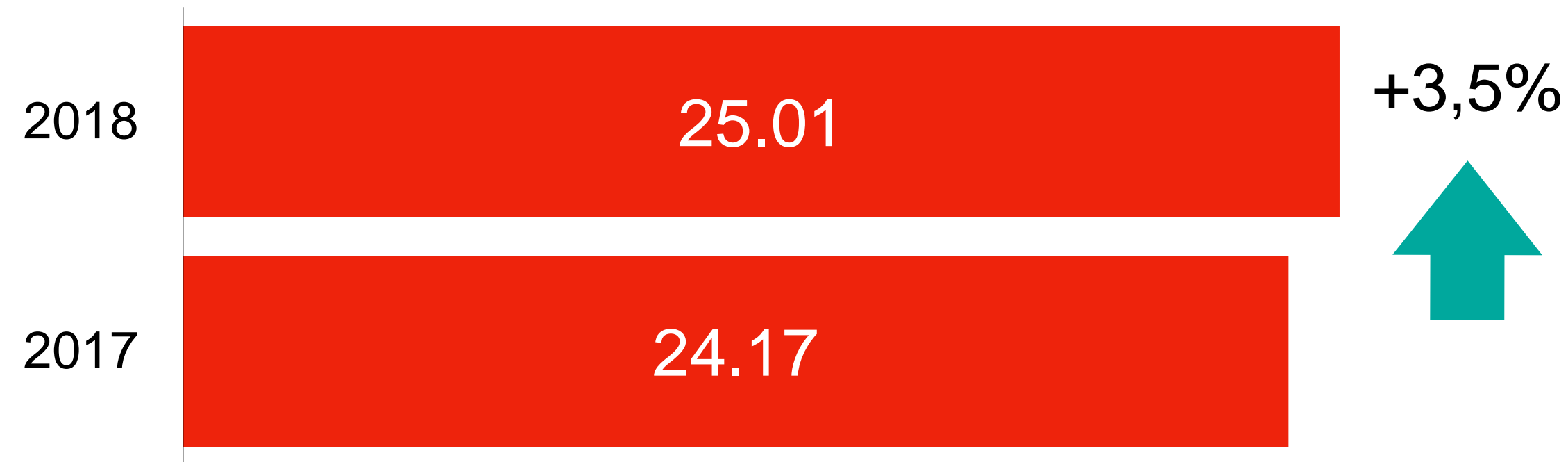


*Bunker excluded.
Source: EMRA

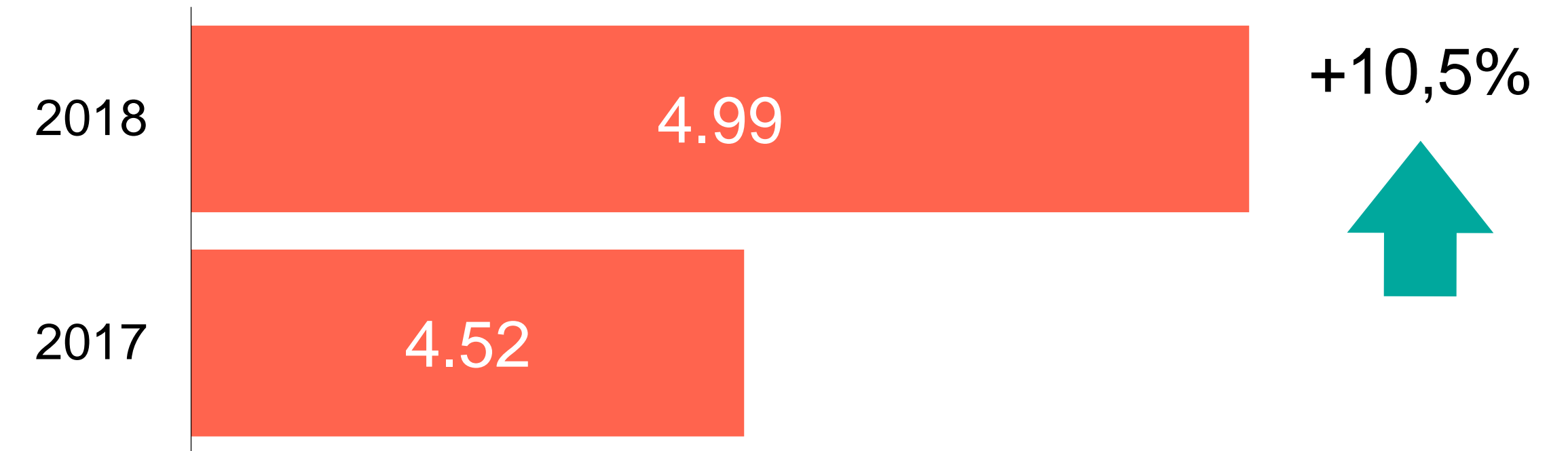
Turkish Market, 2018 (Million tons)

- Tüpraş is well positioned in a growing, short market.
- Diesel and jet fuel consumption in Turkey grew in 2018 with infrastructure projects and aviation growth.

Diesel



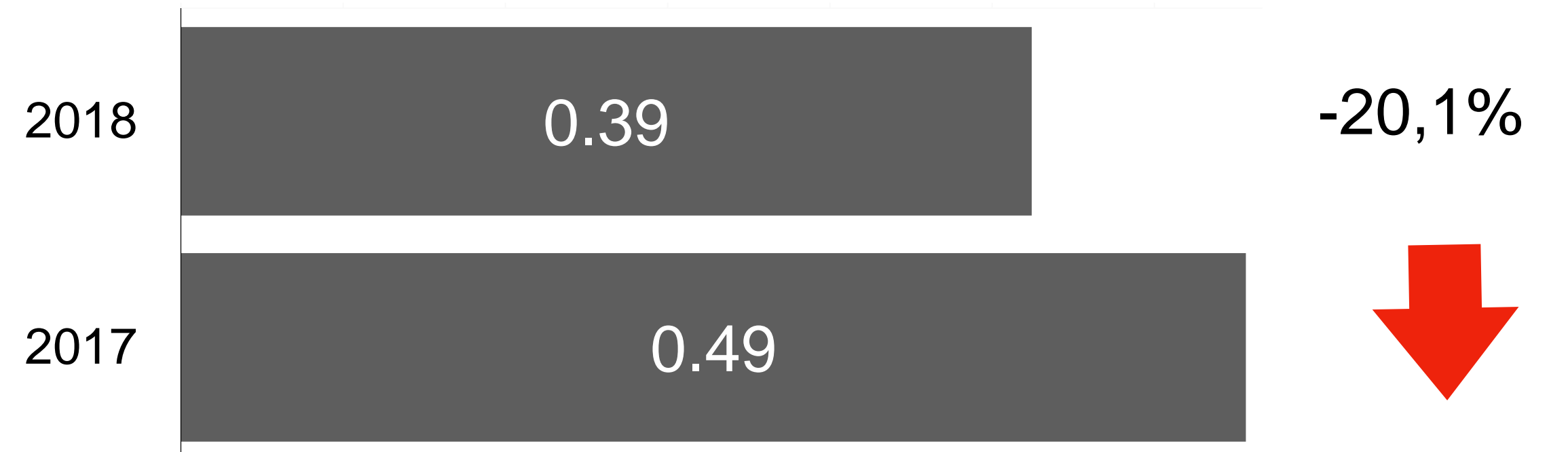
Jet Fuel



Gasoline

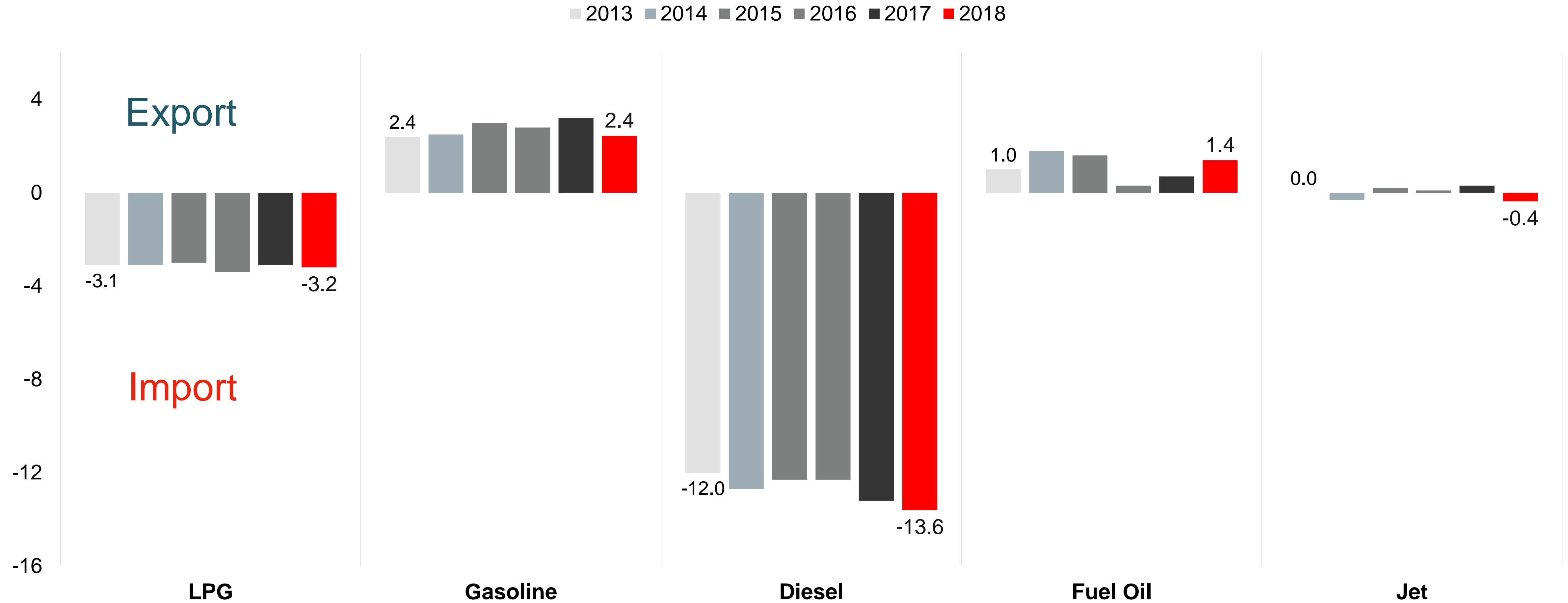


Fuel Oil*



*Bunker excluded.
Source: EMRA

Turkey's Import / Export Balance (Net) (Million Tons)

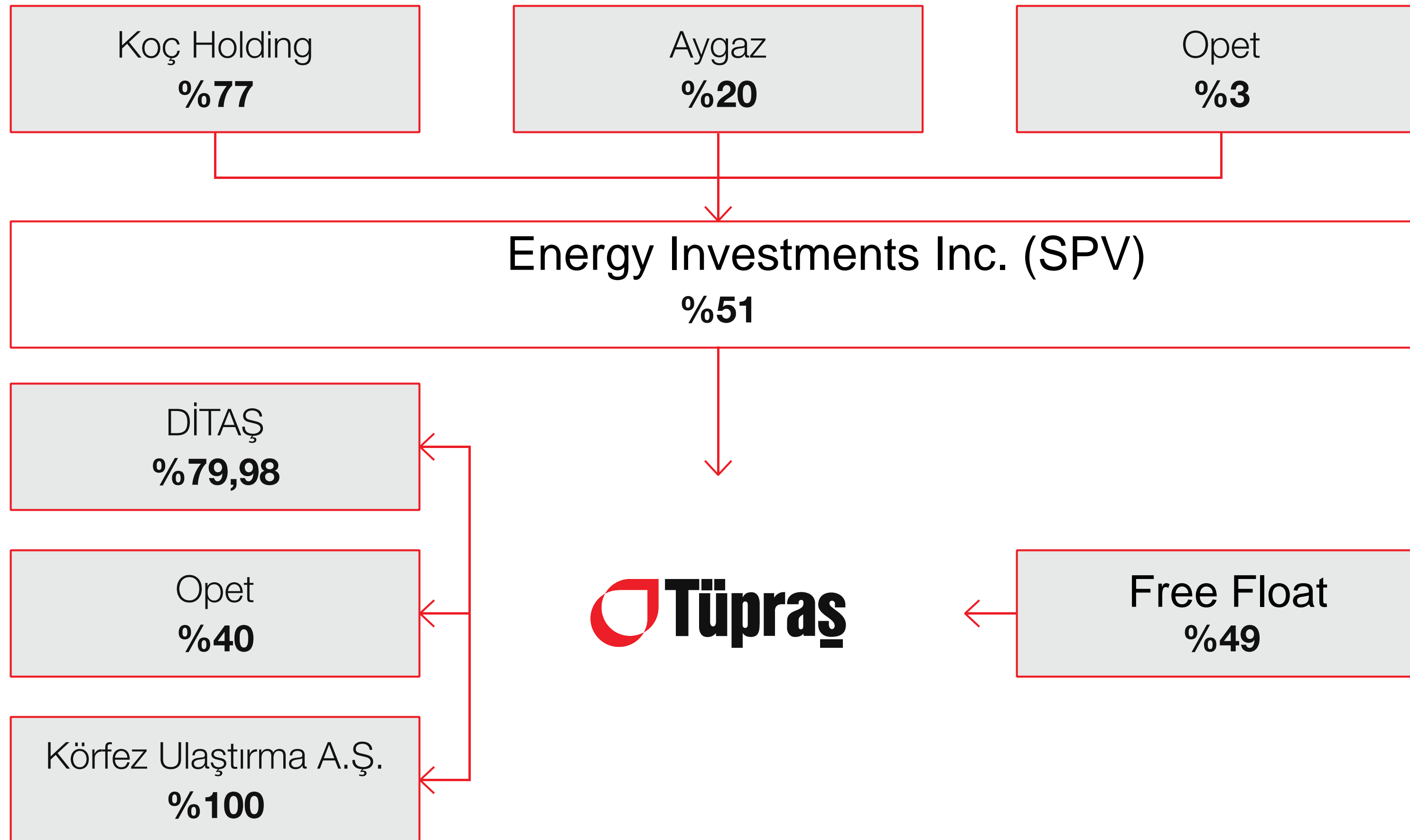


Source: EMRA



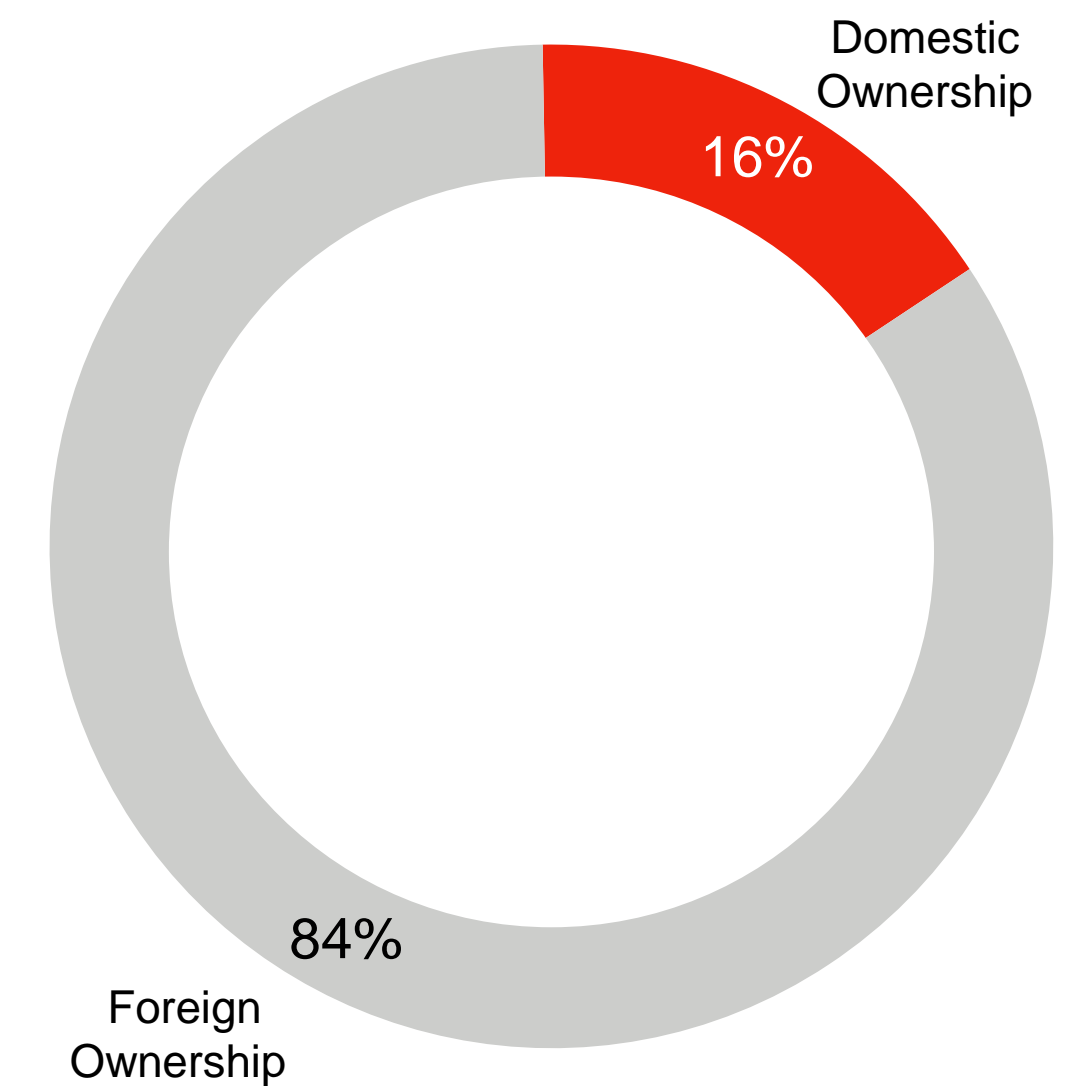
COMPANY OVERVIEW

Tüpraş Shareholder Structure



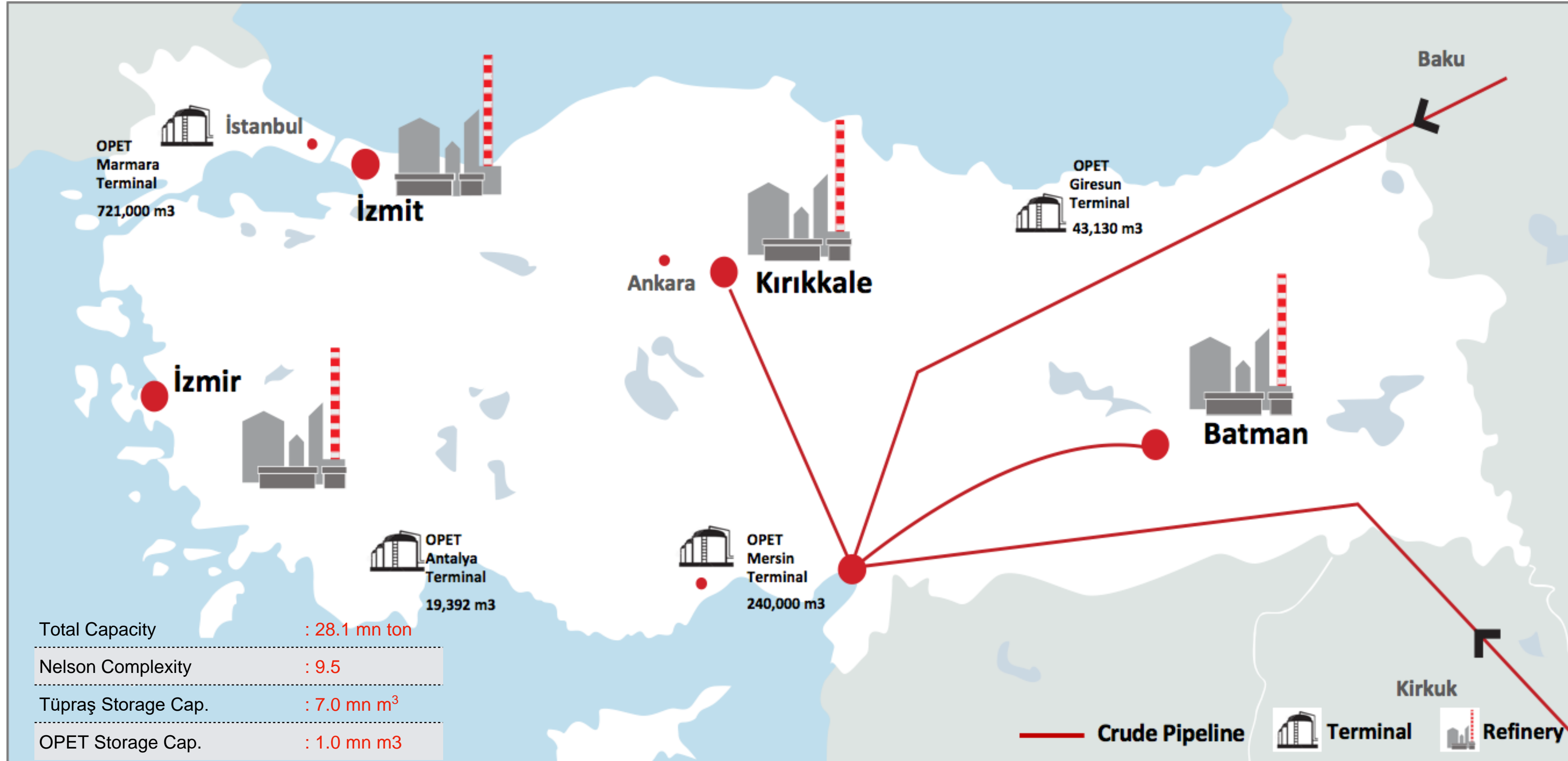
Publicly Traded

*Distribution of Domestic/
Foreign Ownership of Tüpraş
Shares



*As of December 31st, 2018.

Tüpraş Refining Assets & Distribution Network



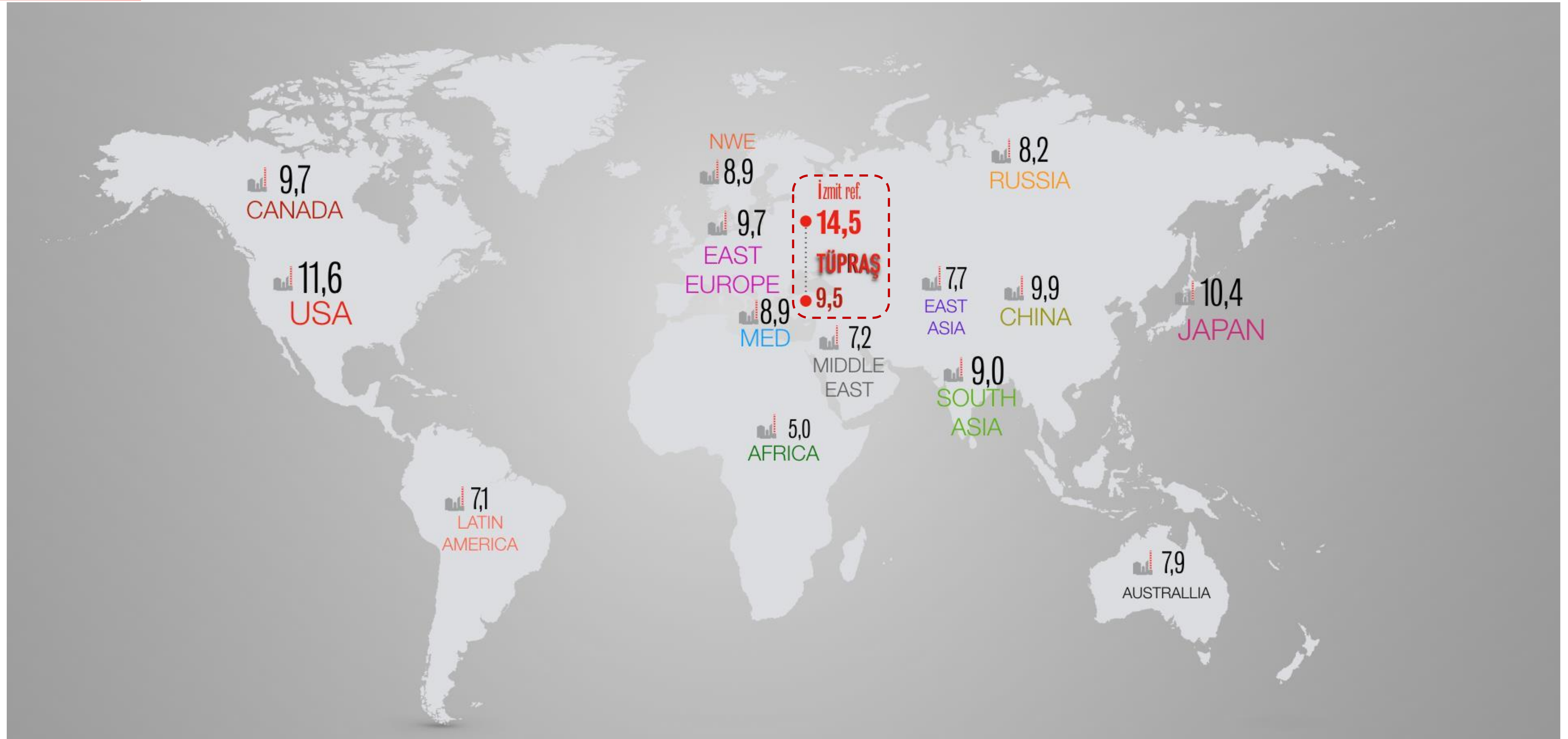
Total Capacity	: 28.1 mn ton
Nelson Complexity	: 9.5
Tüpraş Storage Cap.	: 7.0 mn m ³
OPET Storage Cap.	: 1.0 mn m ³

Turkey Storage Capacity

Tüpraş	: 50%
Opet	: 7%
Other Companies	: 43%

İzmit	İzmir	Kırıkkale	Batman
<ul style="list-style-type: none"> 11.0 MT Capacity NC: 14.5 Storage Capacity: 2.99 mn m³ 	<ul style="list-style-type: none"> 11.0 MT Capacity NC: 7.66 Storage Capacity: 2.51 mn m³ Base oil 400 k tons 	<ul style="list-style-type: none"> 5.0 MT Capacity NC: 6.32 Storage Capacity: 1.27 mn m³ 	<ul style="list-style-type: none"> 1.1 MT Capacity NC: 1.83 Storage Capacity: 0.27 mn m³

Nelson Complexity of Refining Companies



Tüpraş Subsidiaries

OPET, Distribution, Tüpraş Share: 40%



DİTAŞ, Marine Transport, Tüpraş Share: 79.98%



Körfez Ulaştırma, Railway Transport, Tüpraş Share: 100%



Tüpraş Trading UK, Trading, Tüpraş Share: 100%*

📍 We have opened a trading office in London to:



Closely monitor international market opportunities,



Support import and export operations,



Create additional value from supply chain and sales activities.

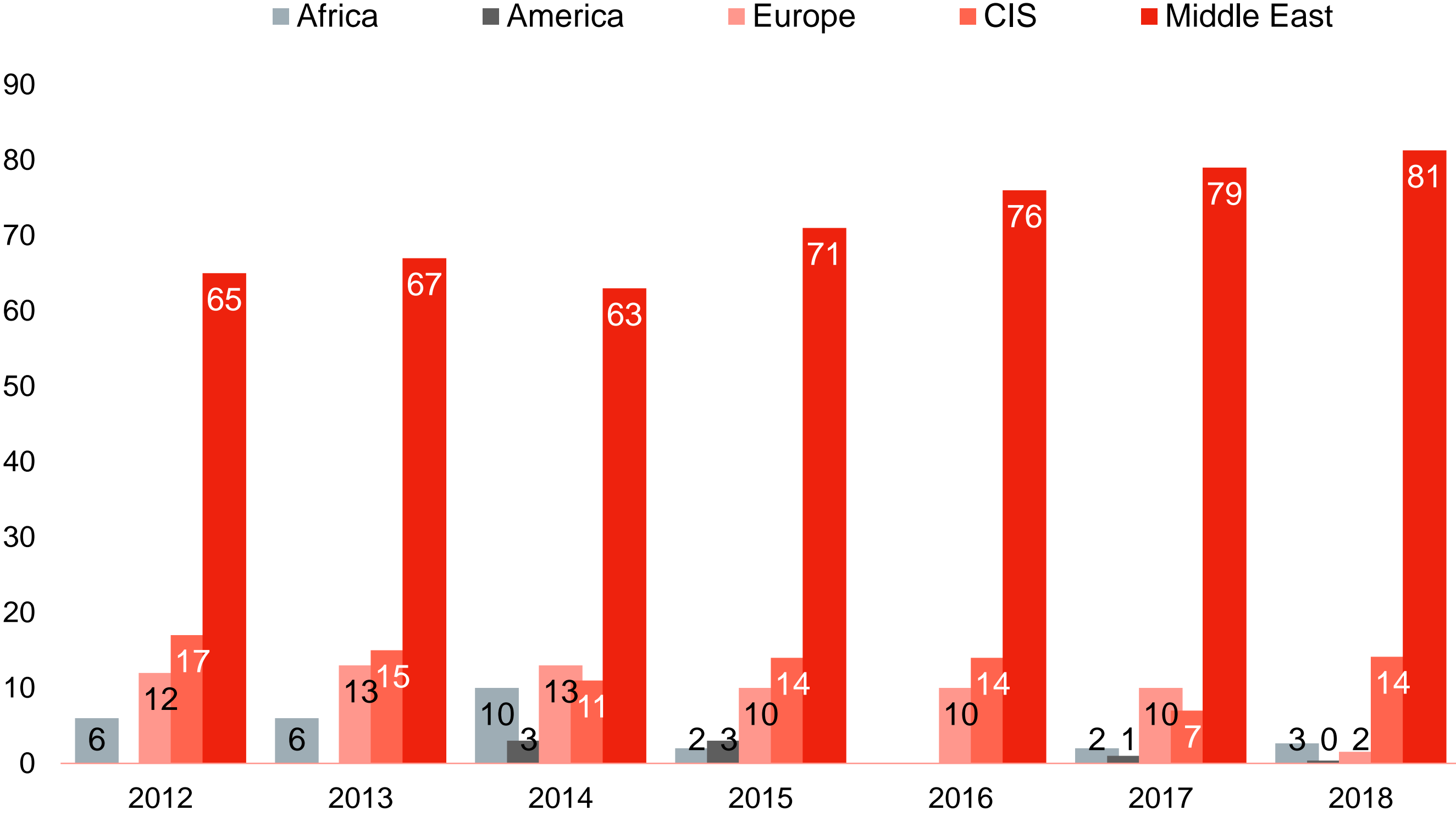
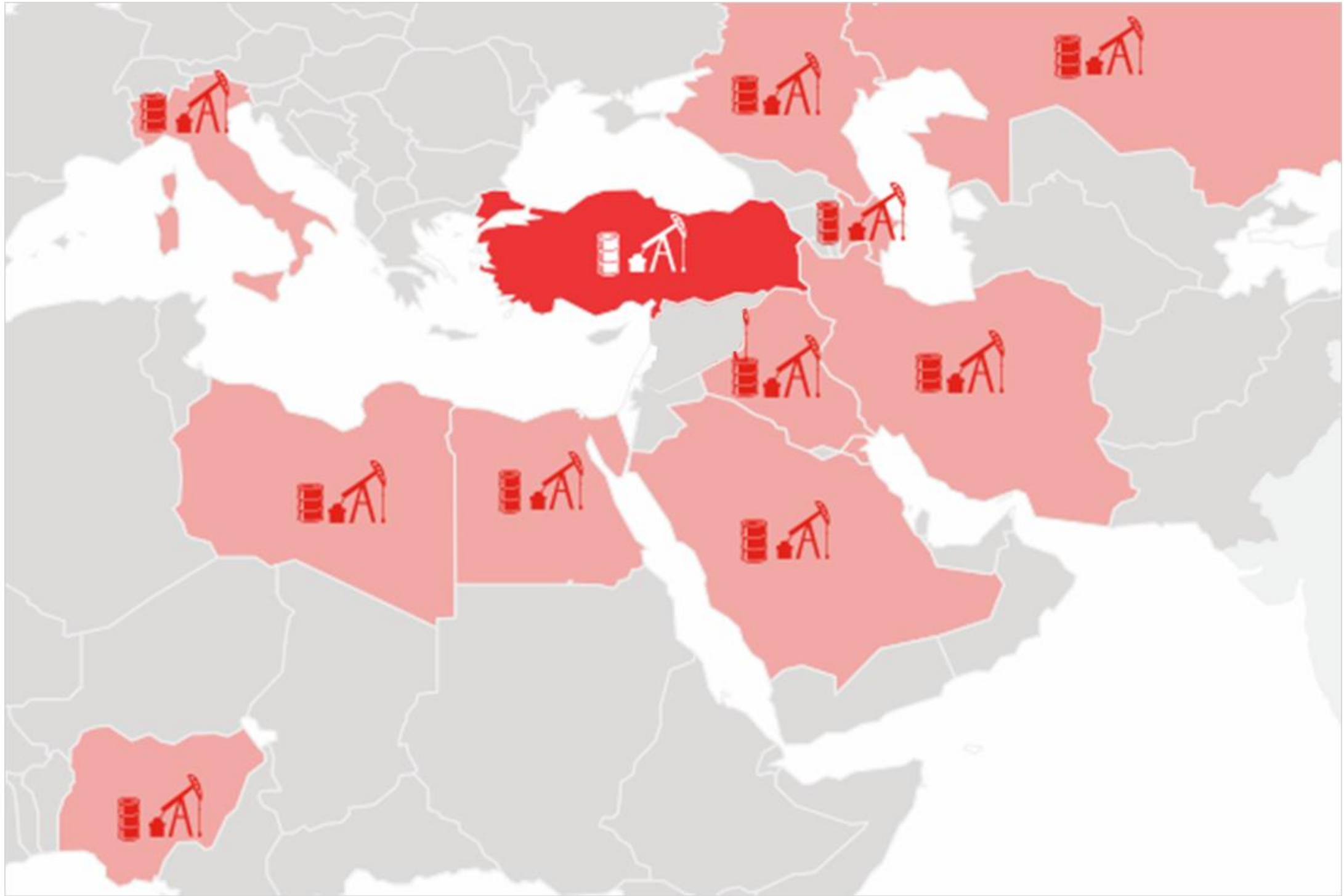
📍 Trading office will be an important step in Tüpraş's integration to global energy market.



OPERATIONS

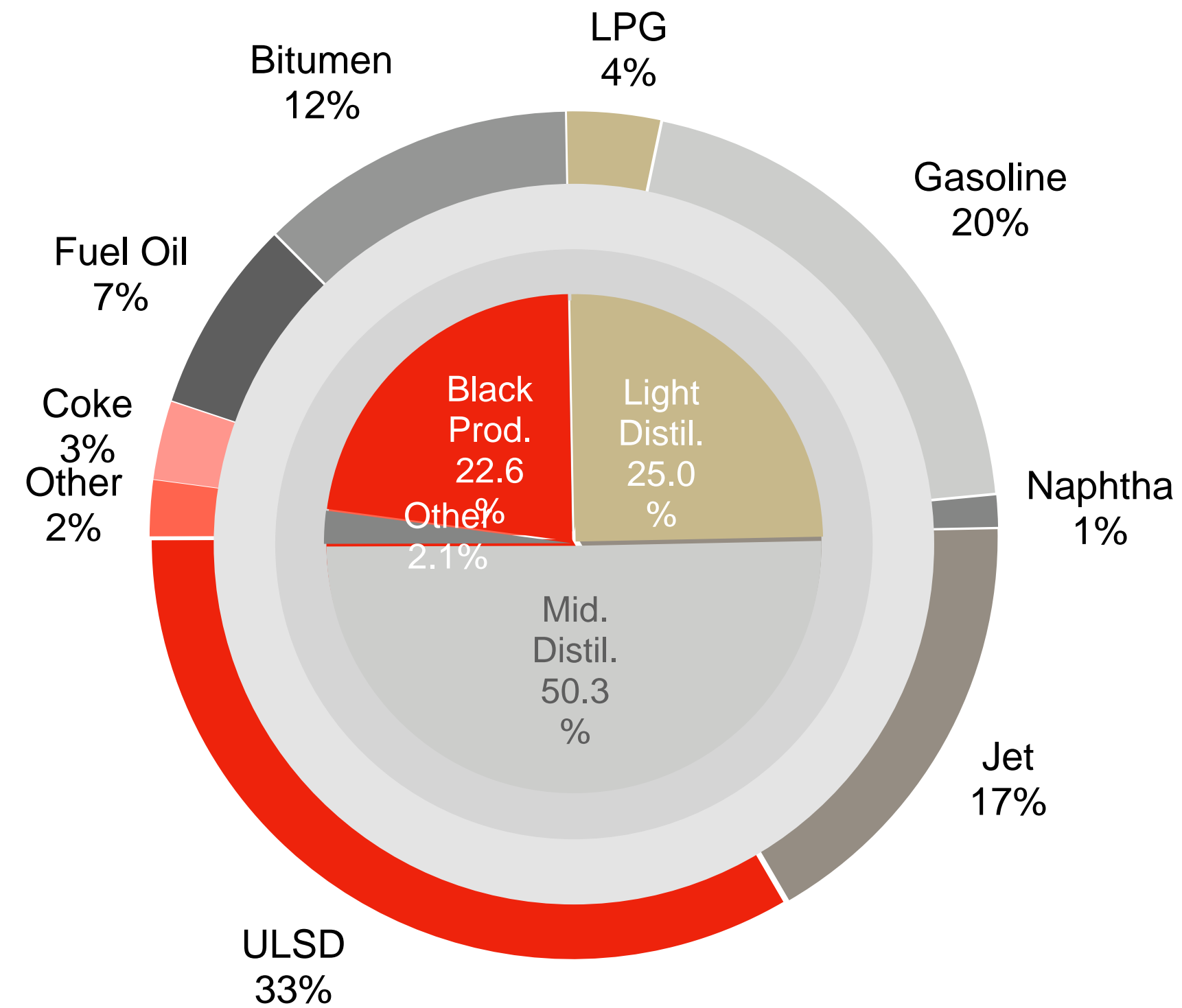
Crude Suppliers of Tüpraş (Million Tons)

In 2018, Tüpraş purchased 20 different types of crude oil from 12 countries, with gravities ranging between 19-47 API.



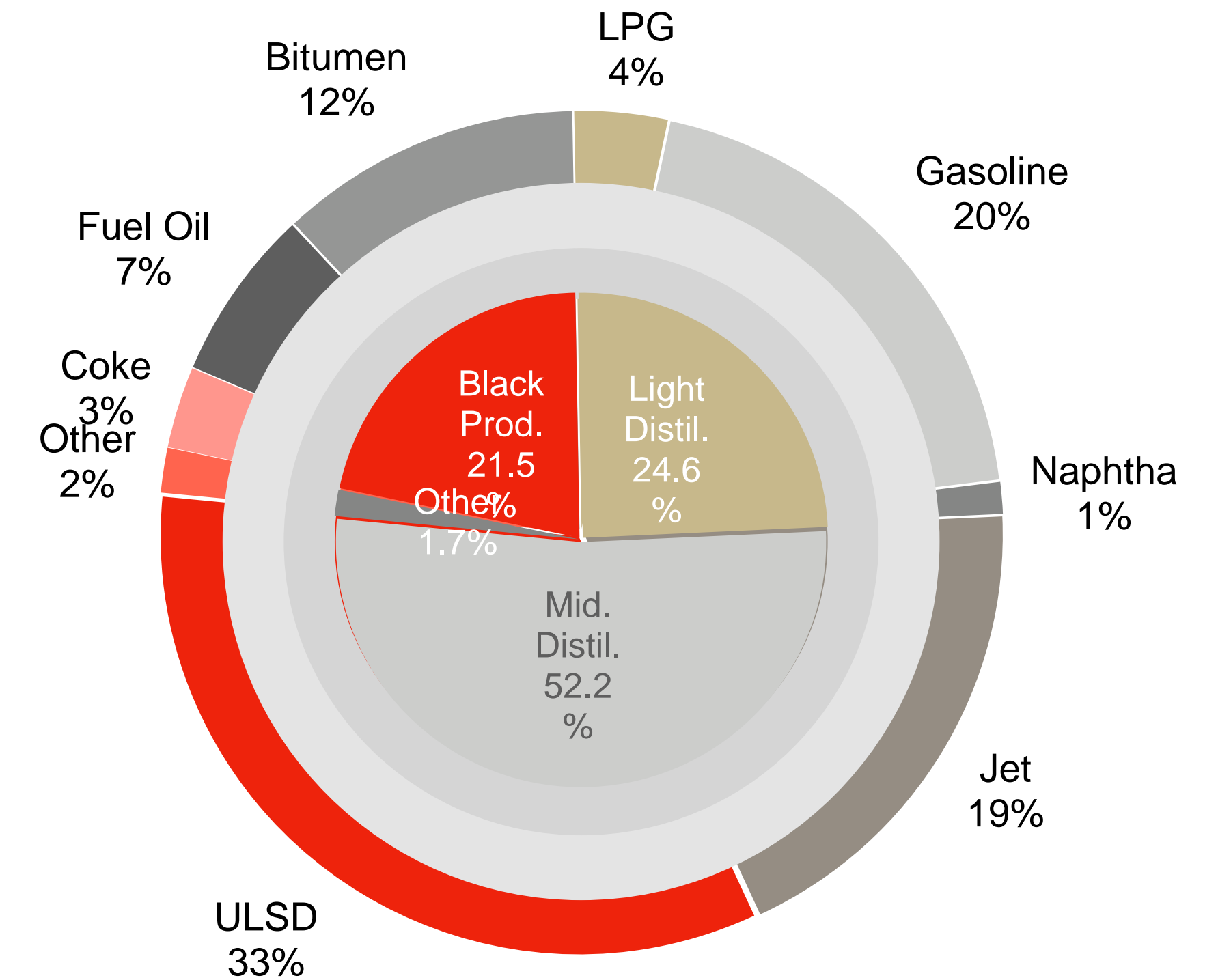
Product Yields of Tüpraş (Million Tons, %)

2017



White Products	%76.27
Production	28.9 mn tons
API	30.3

2018

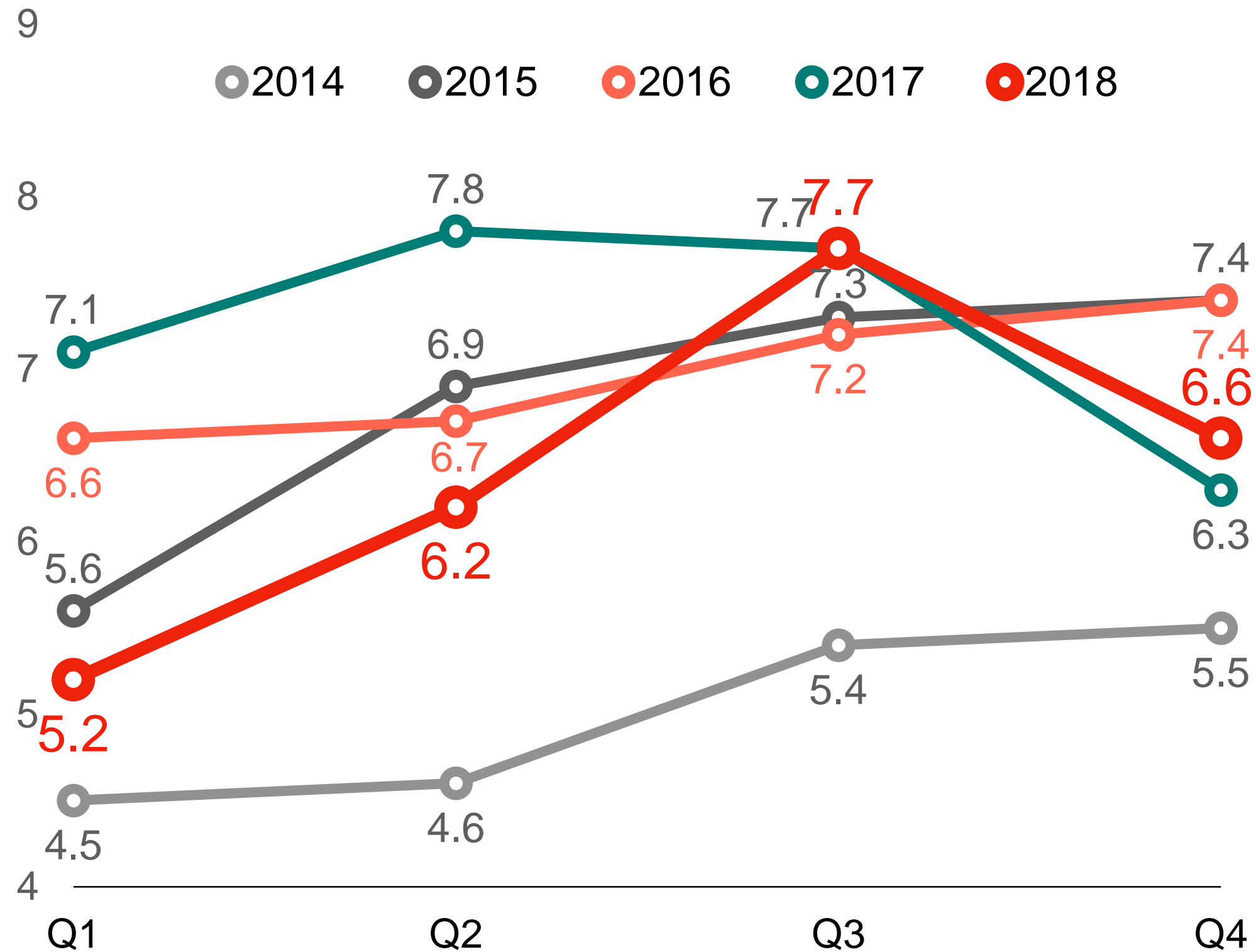


White Products	%77.39
Production	25.7 mn tons
API	30.99

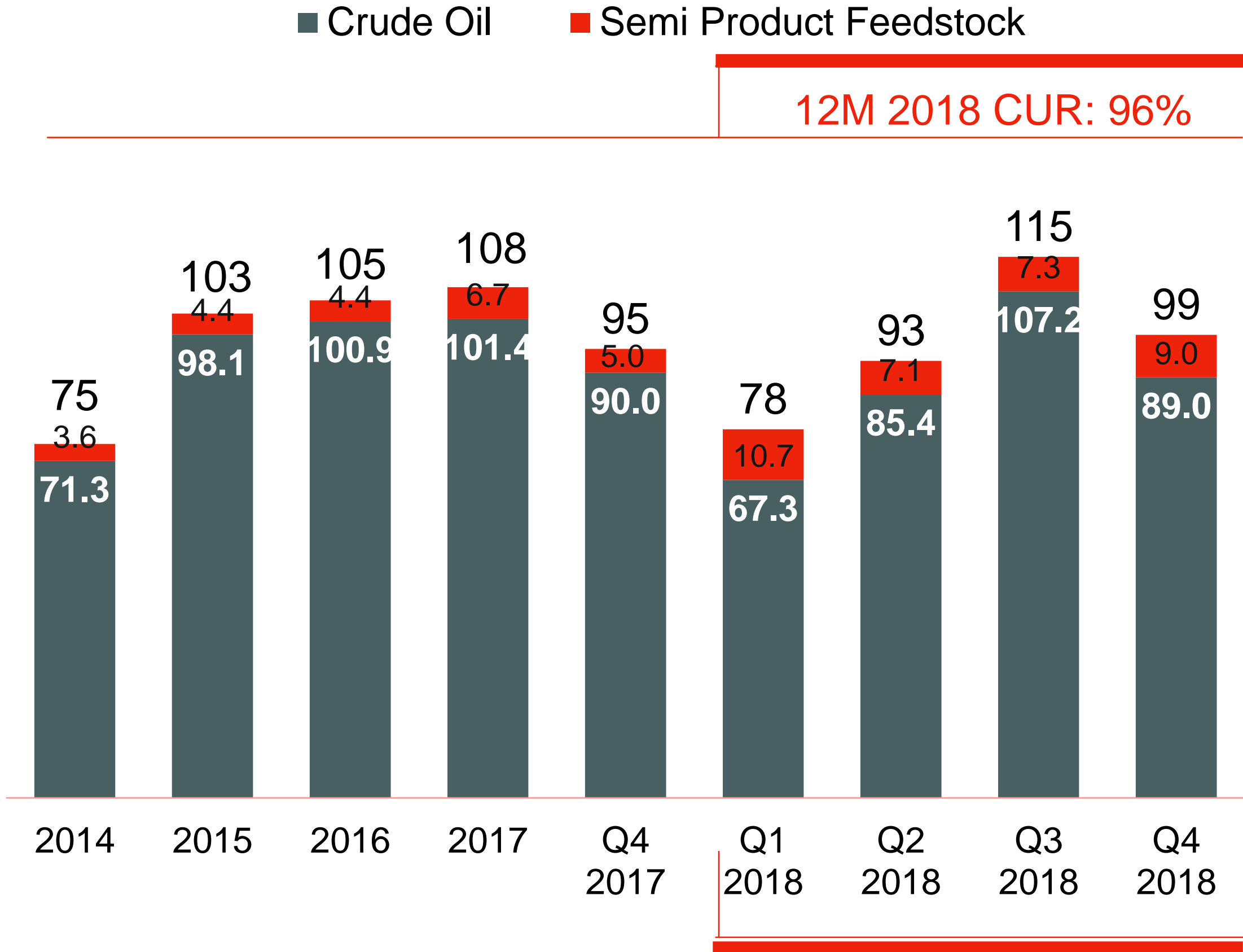
Capacity Utilization and Quarterly Production Volume (Million Tons, %)

99% Capacity Utilization in Q4 2018 (95% in Q4 2017), 96% for the whole year.

Quarterly Production (Million Tons)



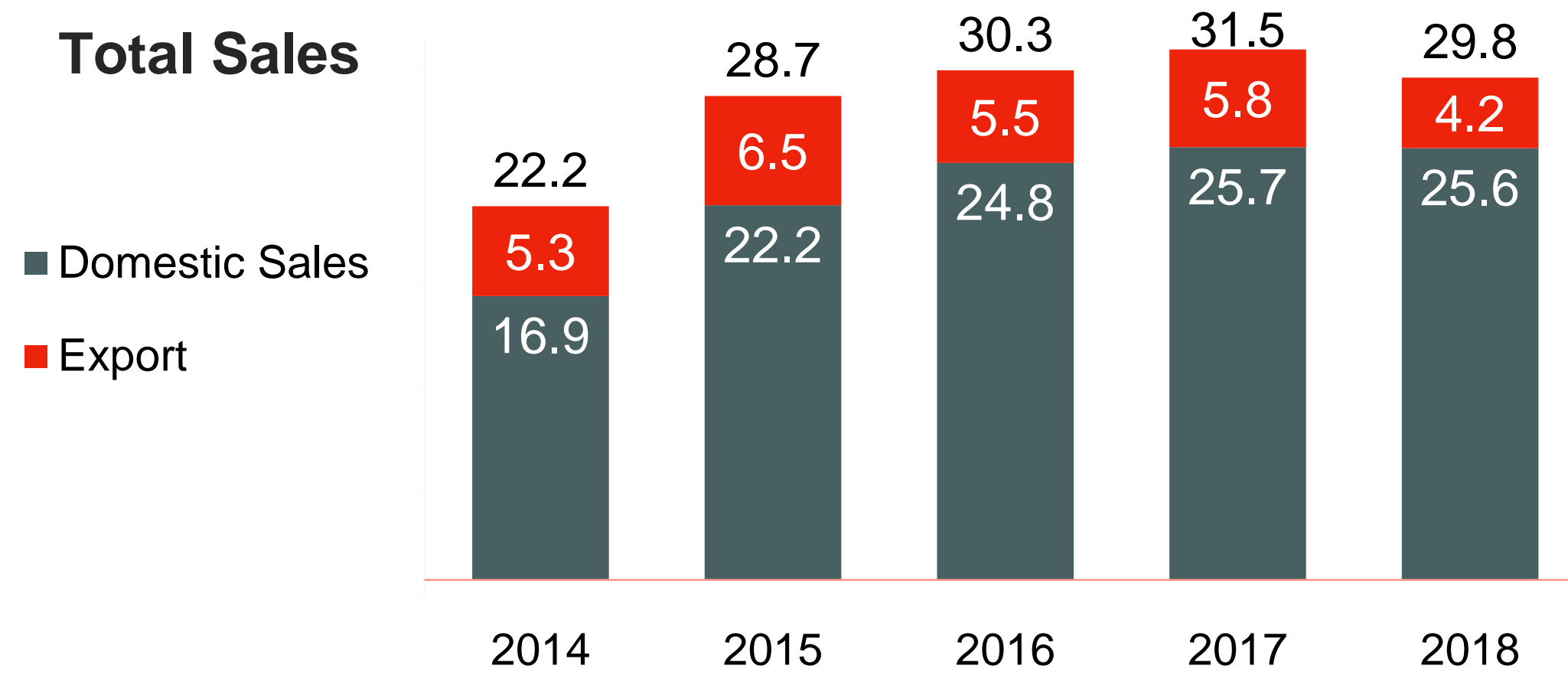
Capacity Utilization* (%)



*Nameplate capacity calculated by standard 330 days of operations.

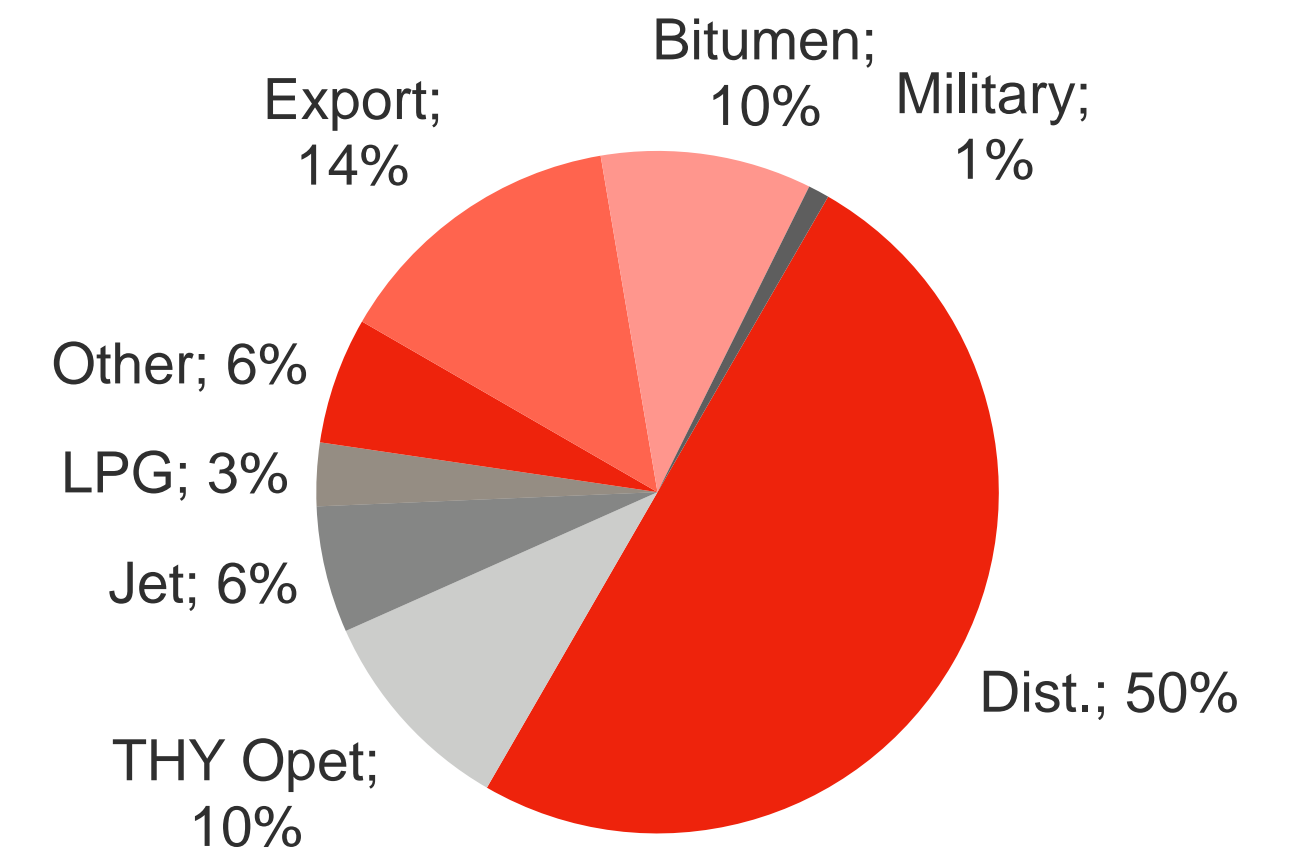
Sales (Million Tons)

Tüpraş generated 29.8 million tons of total sales 2018. Jet fuel and diesel sales increased by 7.4% and 5.3% compared to 2017, respectively.

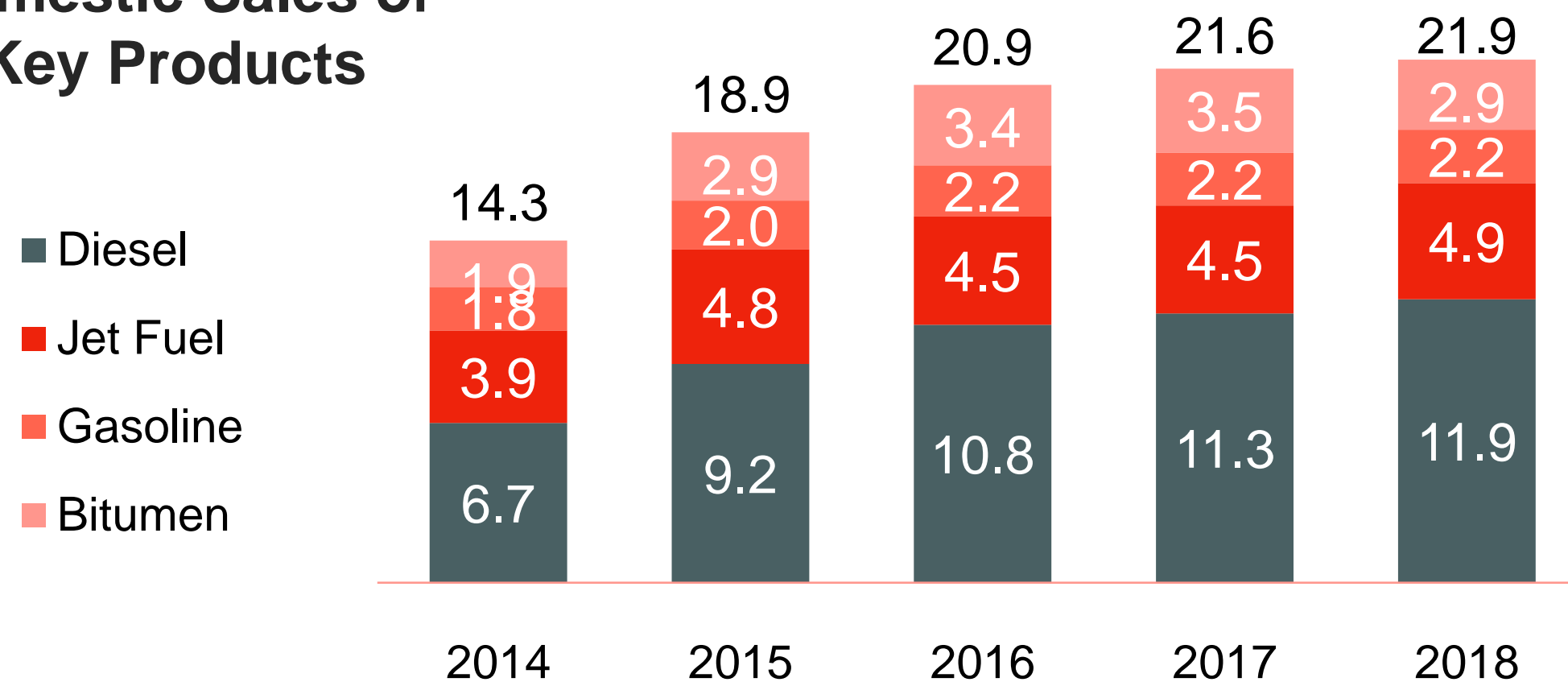


Customer Groups

29.8 mn tonnes

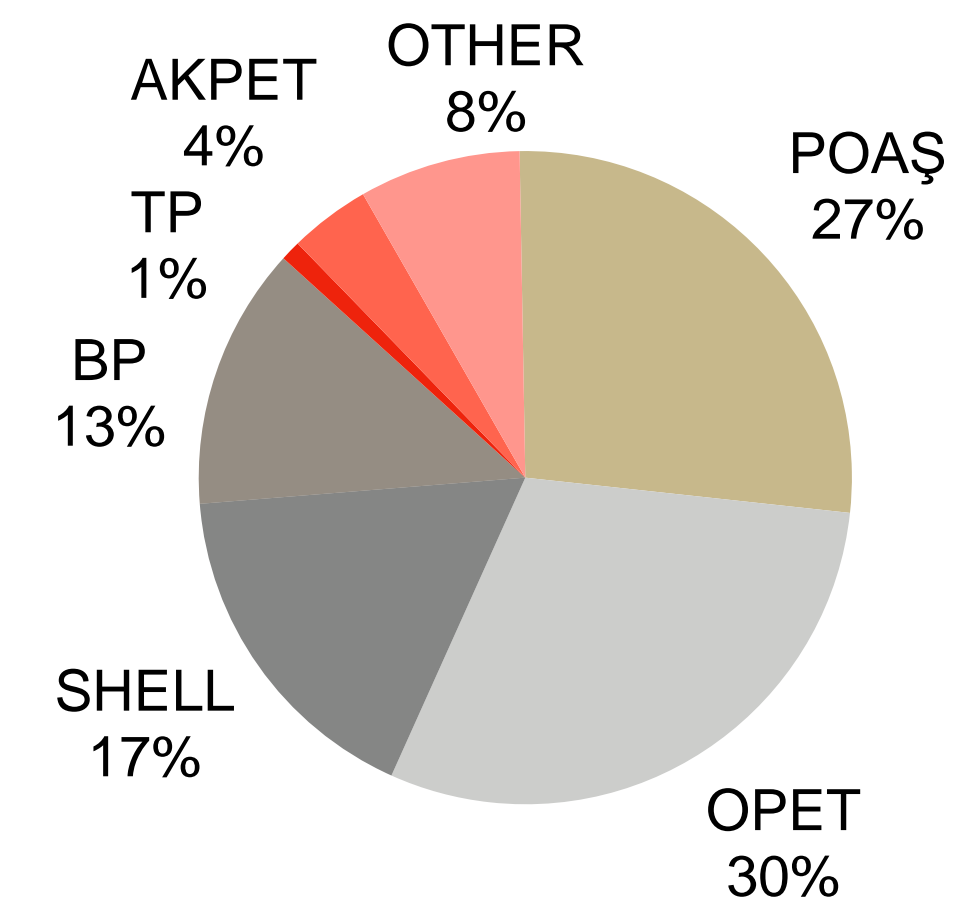


Domestic Sales of Key Products



Sales to Distributors

14.8 mn tonnes





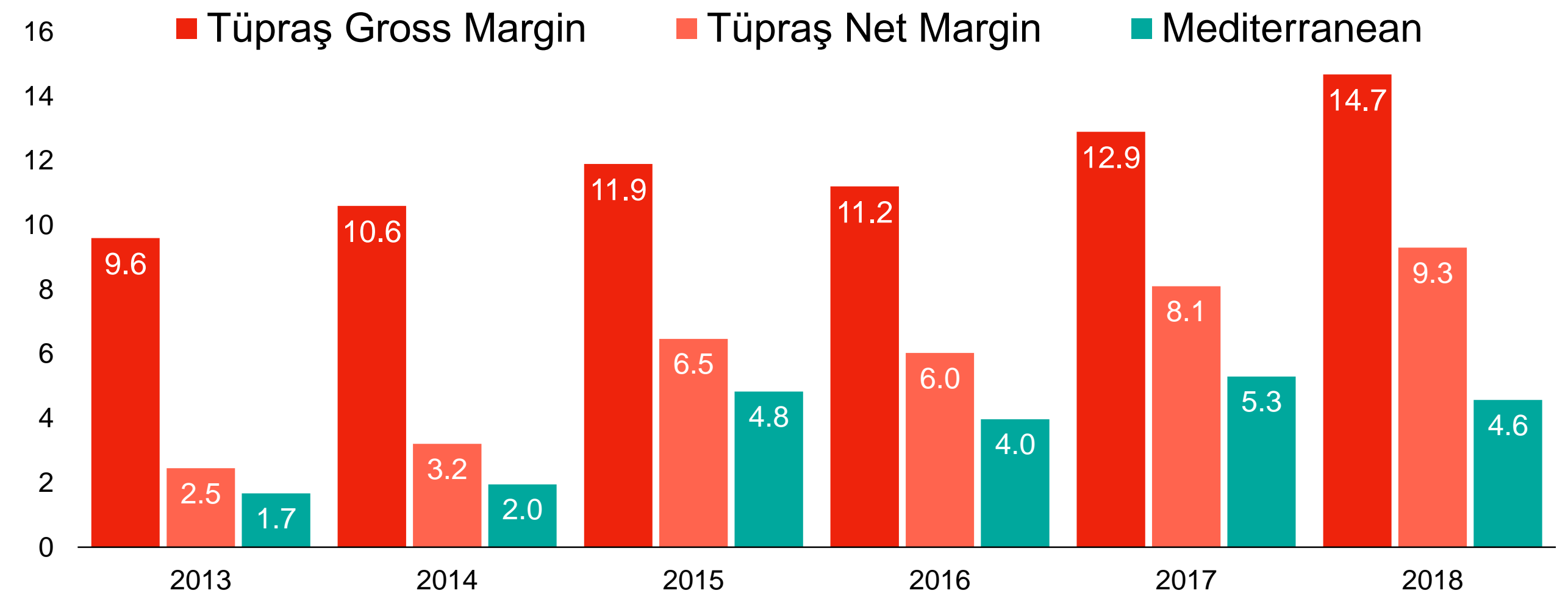
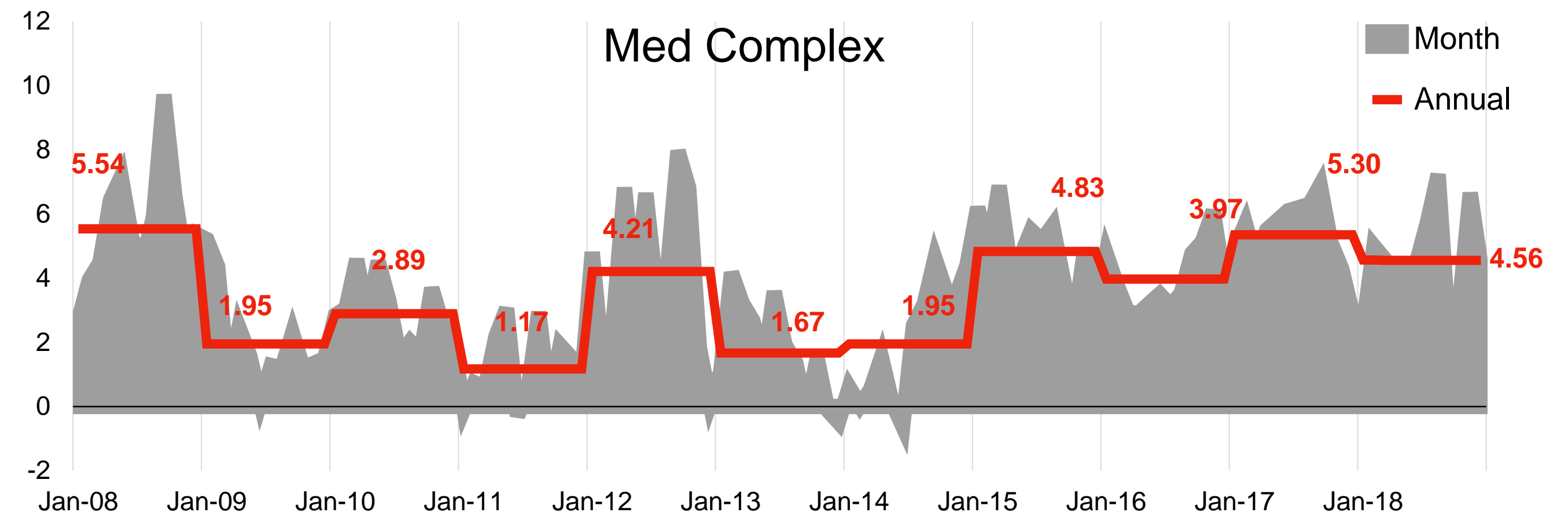
KEY FINANCIALS

Margin Environment (\$/bbl)

Tüpraş' 9.3 \$/bbl Net Refining Margin in 2018 was higher than 4.7 \$/bbl Med Complex margin.

Premium to the benchmark Mediterranean peers' refining margin due to:

- Refined products deficit characteristic to the Turkish market
- Access to cheaper sources of crude oil
- Ability to use heavier and sour crudes
- Proximity to major suppliers
- Reduces transport costs
- Implemented cost reduction measures
- Energy efficiency programs
- Capacity to produce higher value added range of refined products
- Direct pipeline connections with domestic clients
- High export capability



Income Statement (Million TL)

Strong EBITDA generation continued in Q4 2018, Net Income supported further with FX and tax revaluation gains.

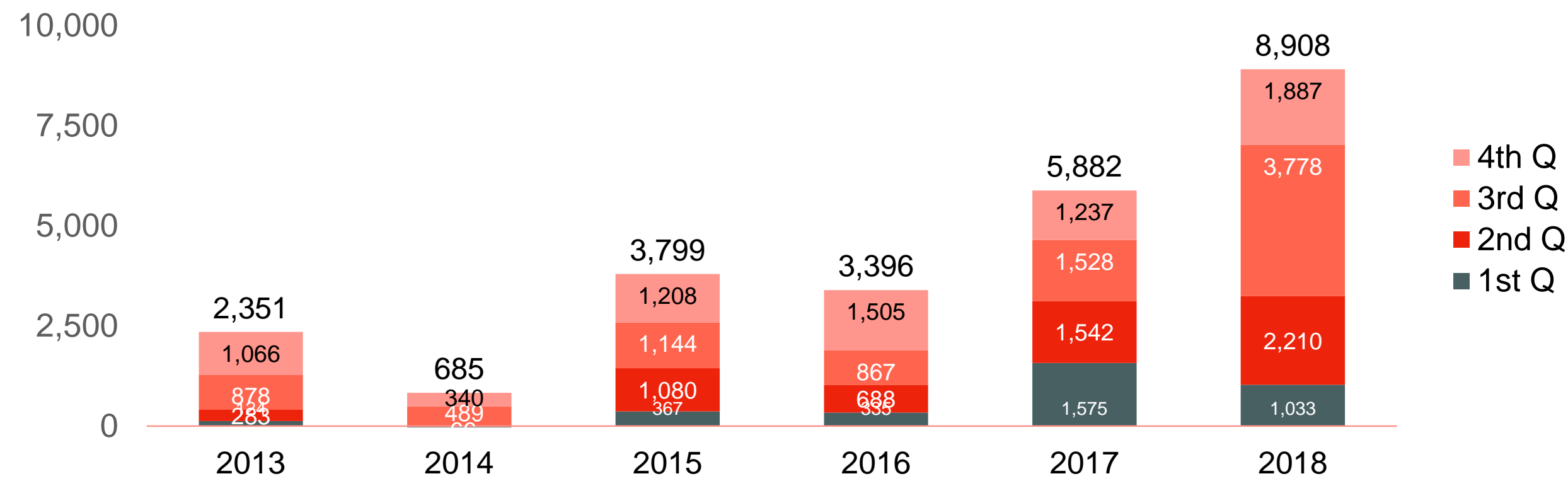
Million TL	Q4 2018	Q4 2017	%	12M 2018	12M 2017	%
Net Sales	24,803	14,604	70	88,552	53,948	64
COGS	-22,778	-13,204	73	-79,328	-47,734	66
Gross Profit	2,025	1,400	45	9,224	6,214	48
Operating Expenses	-438	-357	23	-1,307	-1,150	14
Income/Loss from other operations	1,591	-265	-699	-2,181	-206	958
Operating Profit	3,178	778	308	5,736	4,857	18
Income/Loss from equity investment	72	61	18	257	234	9
Operating Profit Before Fin. Income/Loss	3,249	839	287	5,993	5,092	18
Financial Income /Expense	-1,600	-85	1.786	-2,268	-618	267
Profit Before Tax	1,649	754	119	3,724	4,474	-17
Net Profit (including minority interest)	1,789	501	257	3,761	3,841	-2
EBITDA (*)	1,887	1,237	53	8,908	5,882	51
Inventory Gain/Loss	-212	341	-162	2,741	612	348
EBITDA CCS (*)	2,100	896	134	6,167	5,270	17

* On CMB reports, EBIT includes extra items such as FX impacts of trade receivables and payables. In our EBITDA calculation, FX related items are excluded from EBIT as customary in international practices.

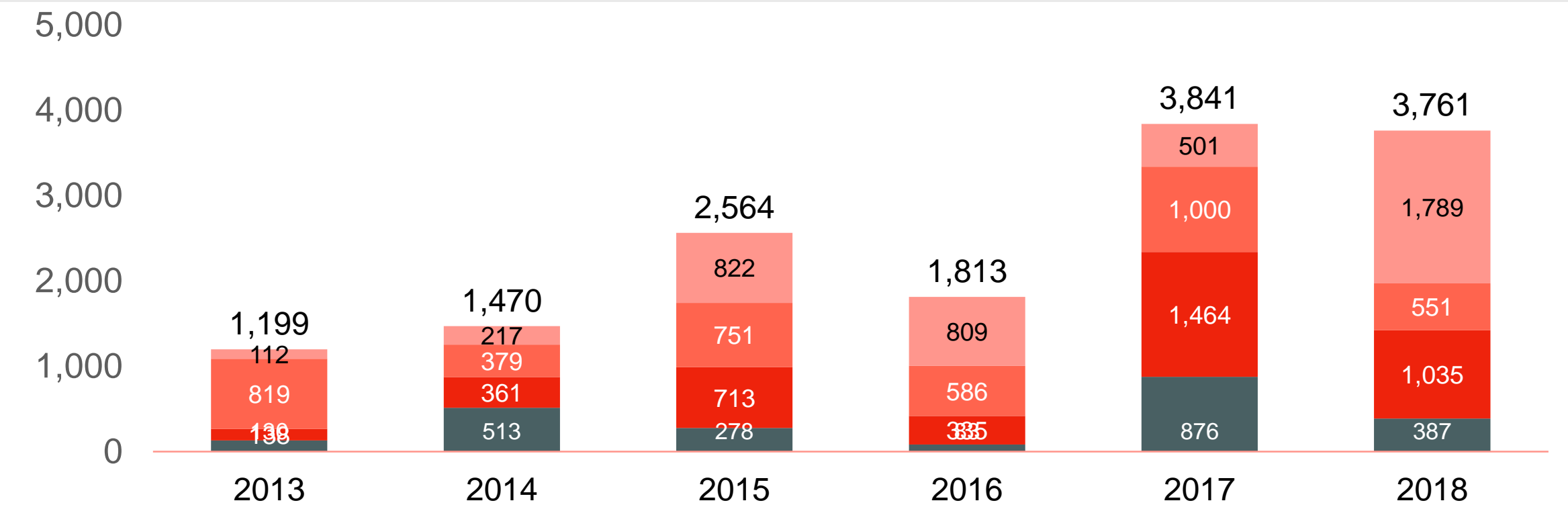
Financial Highlights (Million TL)

Tüpraş achieved 1,887 MTL EBITDA in Q4 2018 with high capacity utilization and inventory gain.

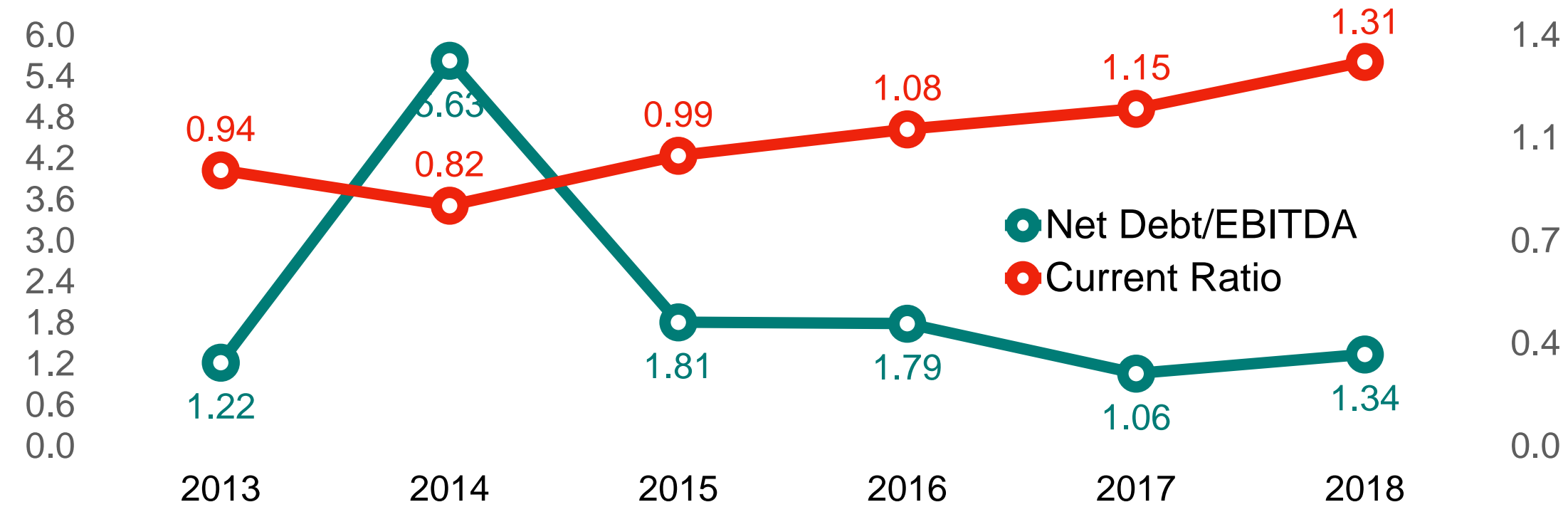
EBITDA



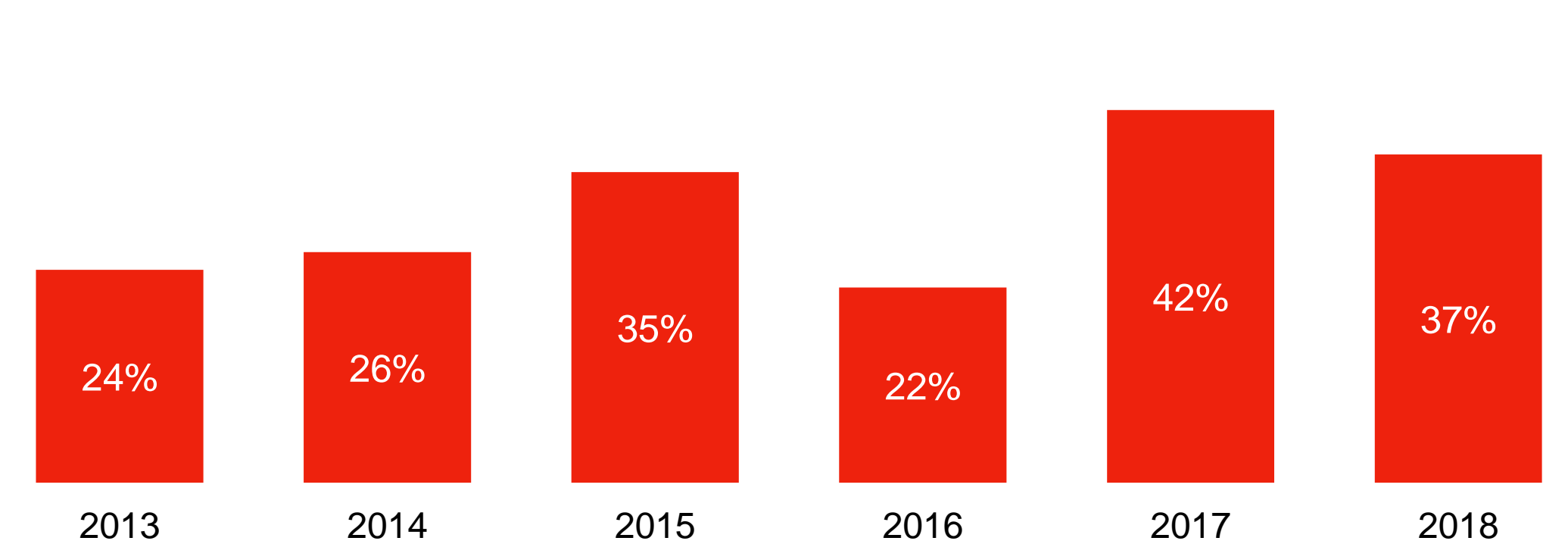
Net Income



Current Ratio & Net Debt/ EBITDA



Return of Average Equity

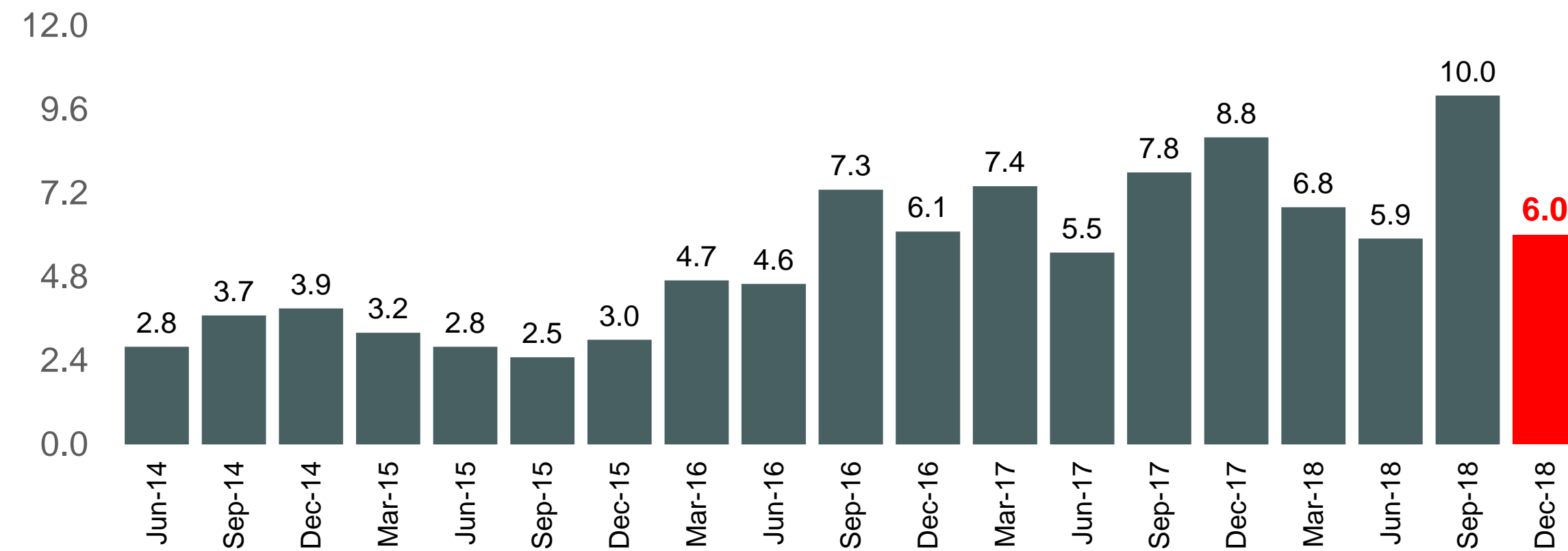


*Rolling EBITDA is calculated with dollar terms.

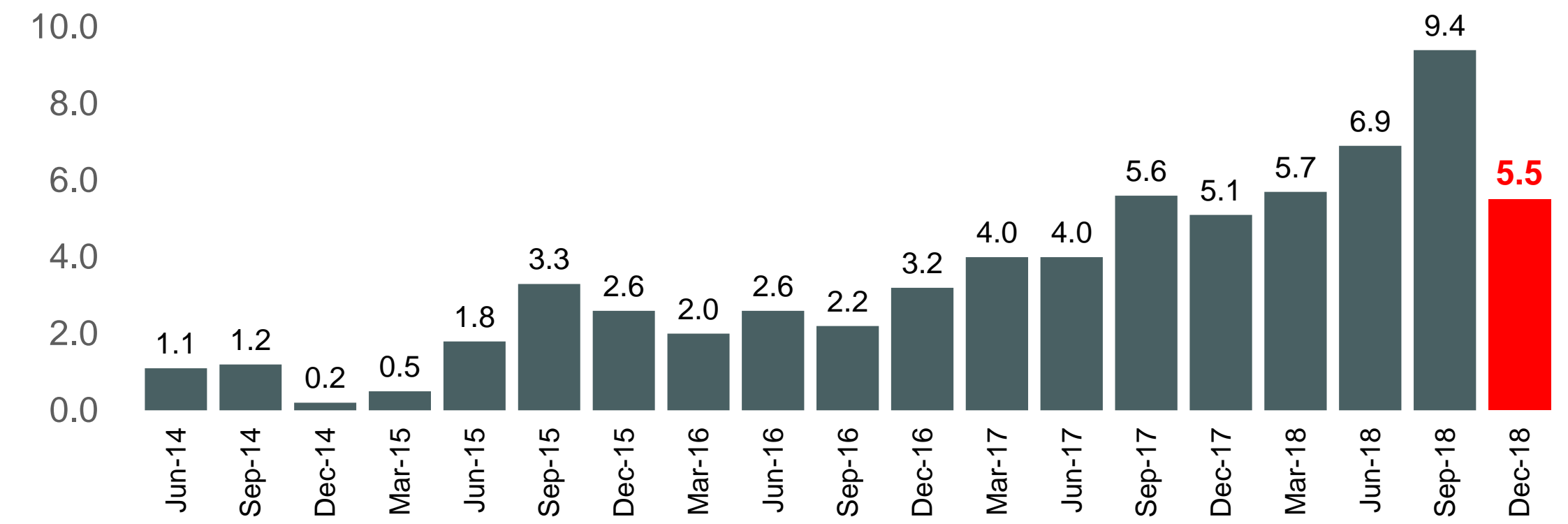
Balance Sheet Analysis (Billion TL)

Strict financial management policies improved current ratio to 1.3x.

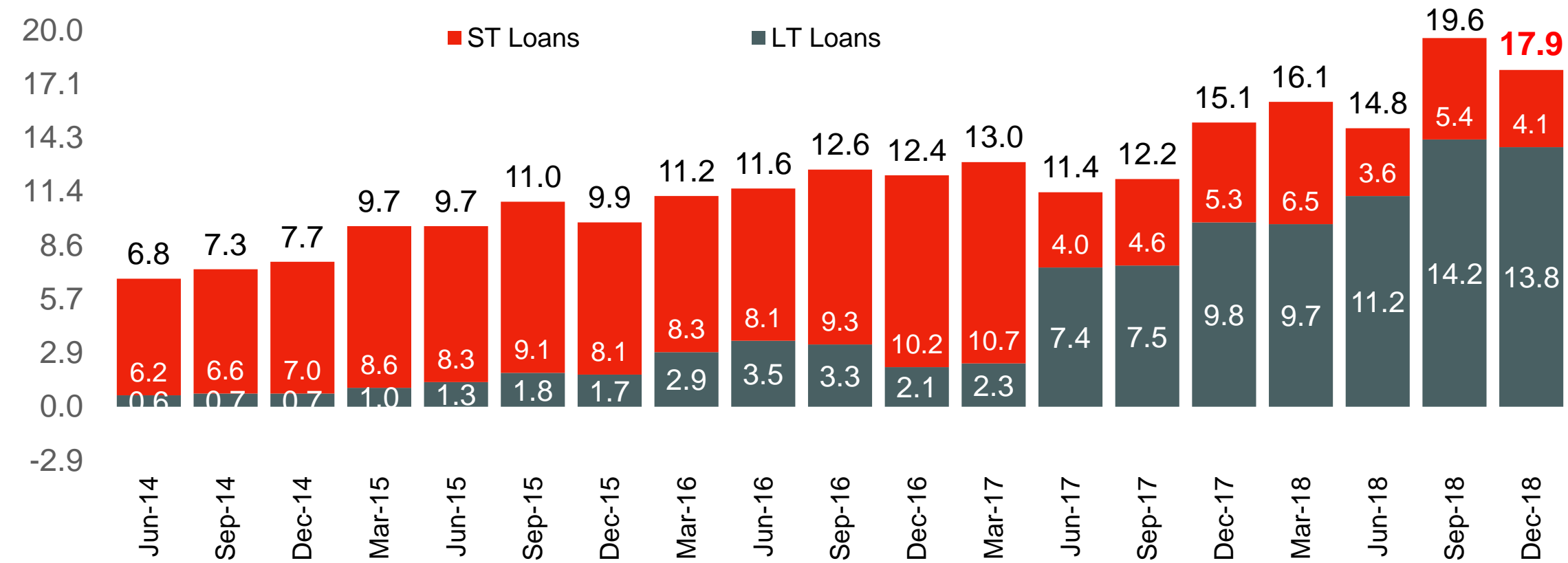
Cash & Cash Equivalents



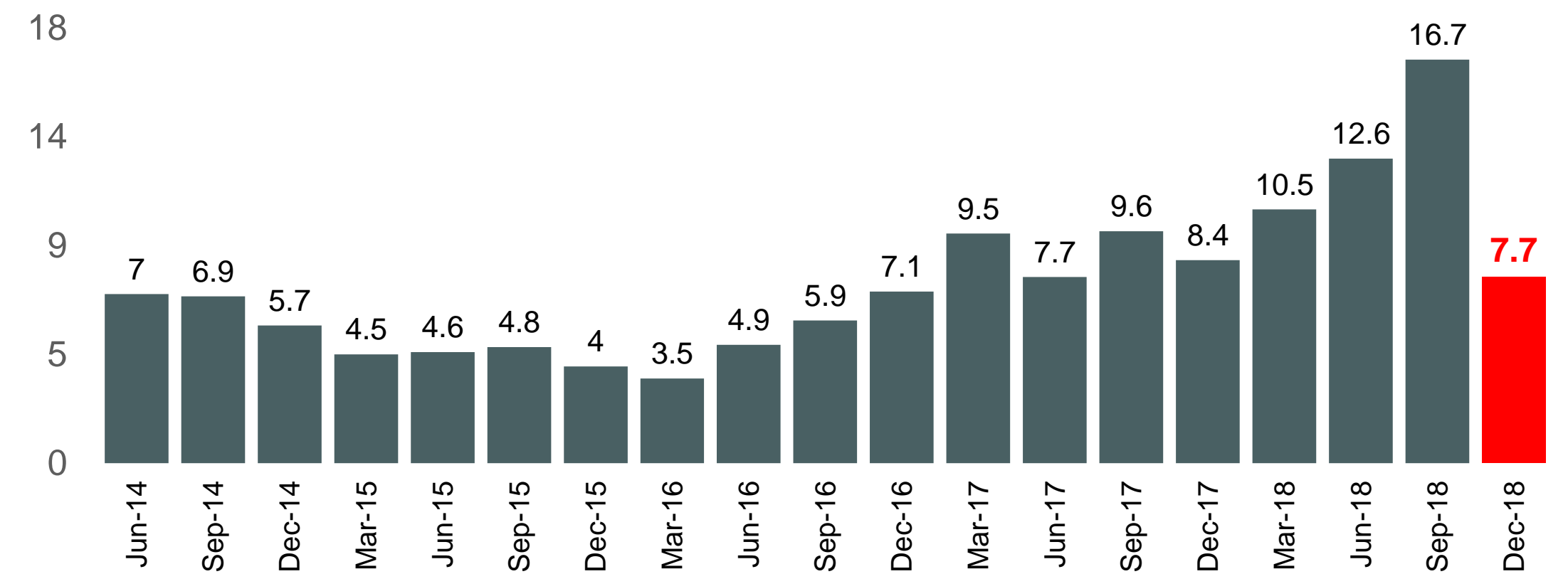
Receivables



Financial Loans



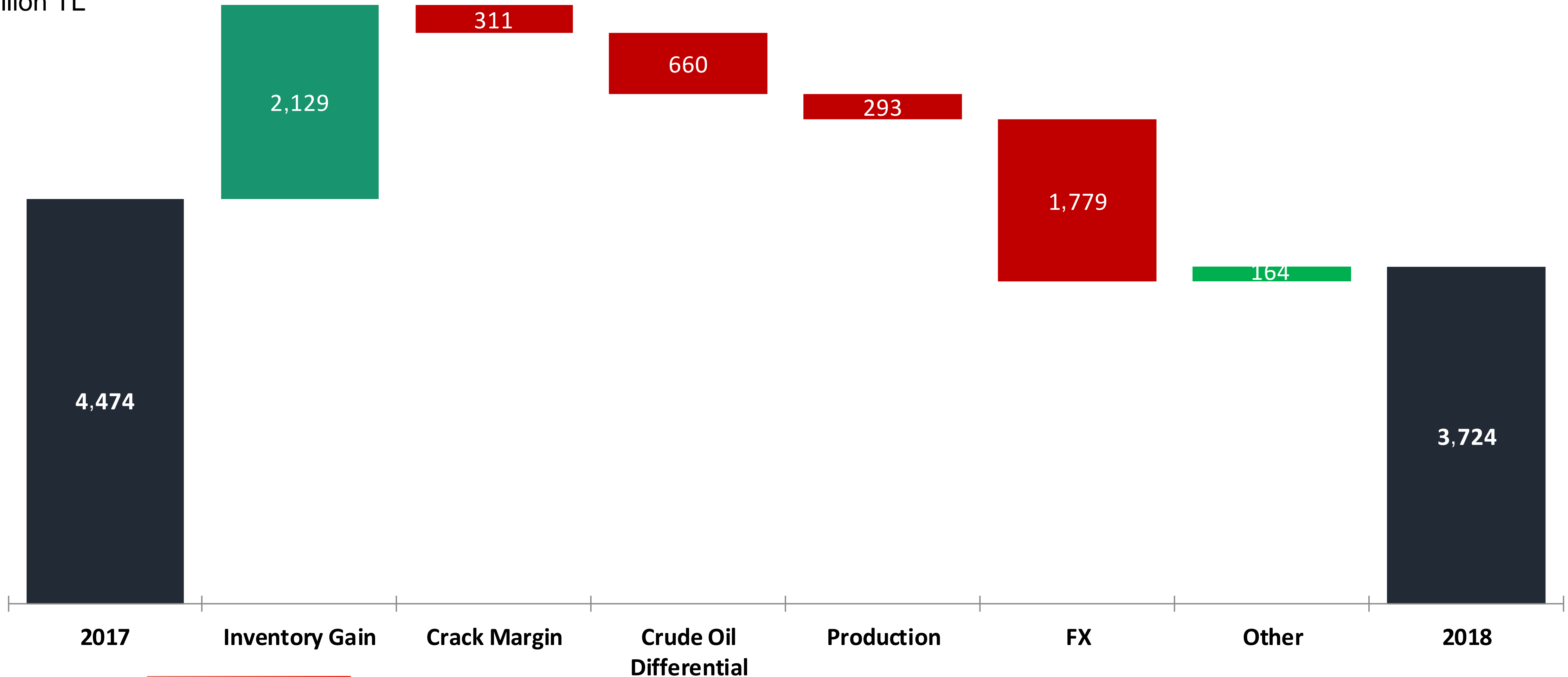
Payables



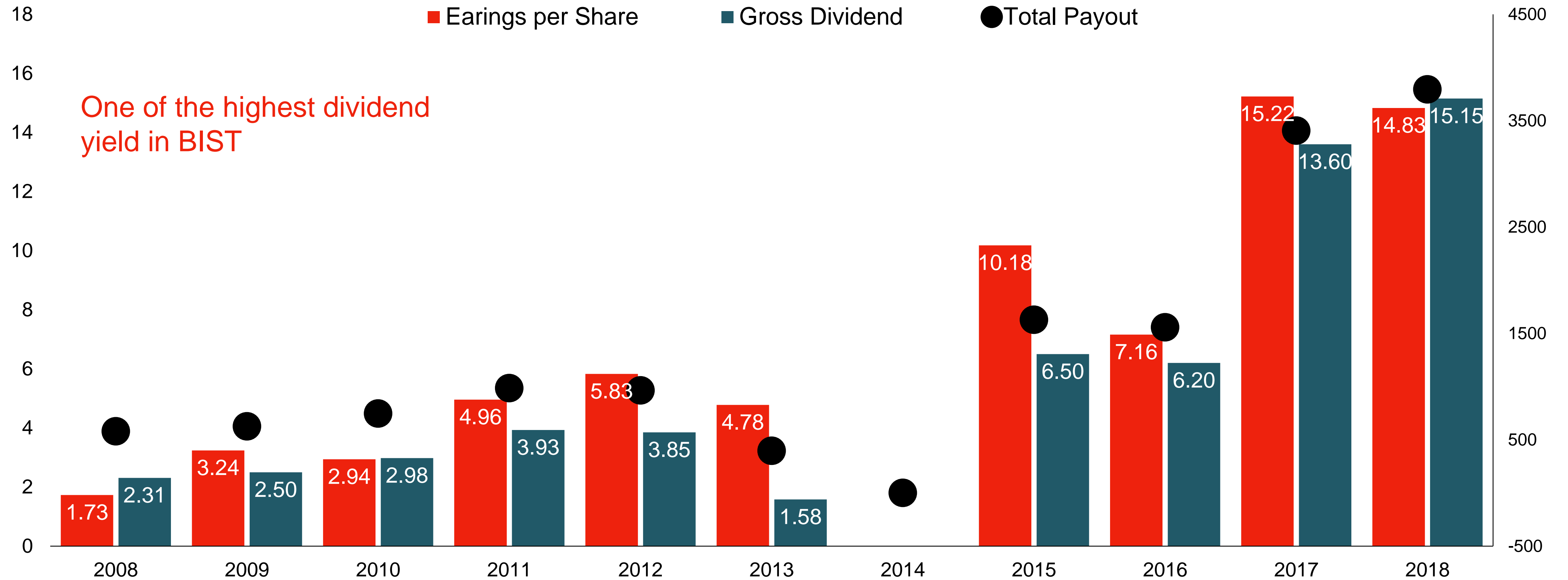
2018 Profit Before Tax Bridge

2018 PBT was lower mainly due to Crude Oil Differential and Crack Margin impacts. With the help of FX based pricing, FX losses incurred from payables were recovered with Inventory Gains.

Million TL



Dividend (TL)



2012/2013 EPS includes the tax incentive.

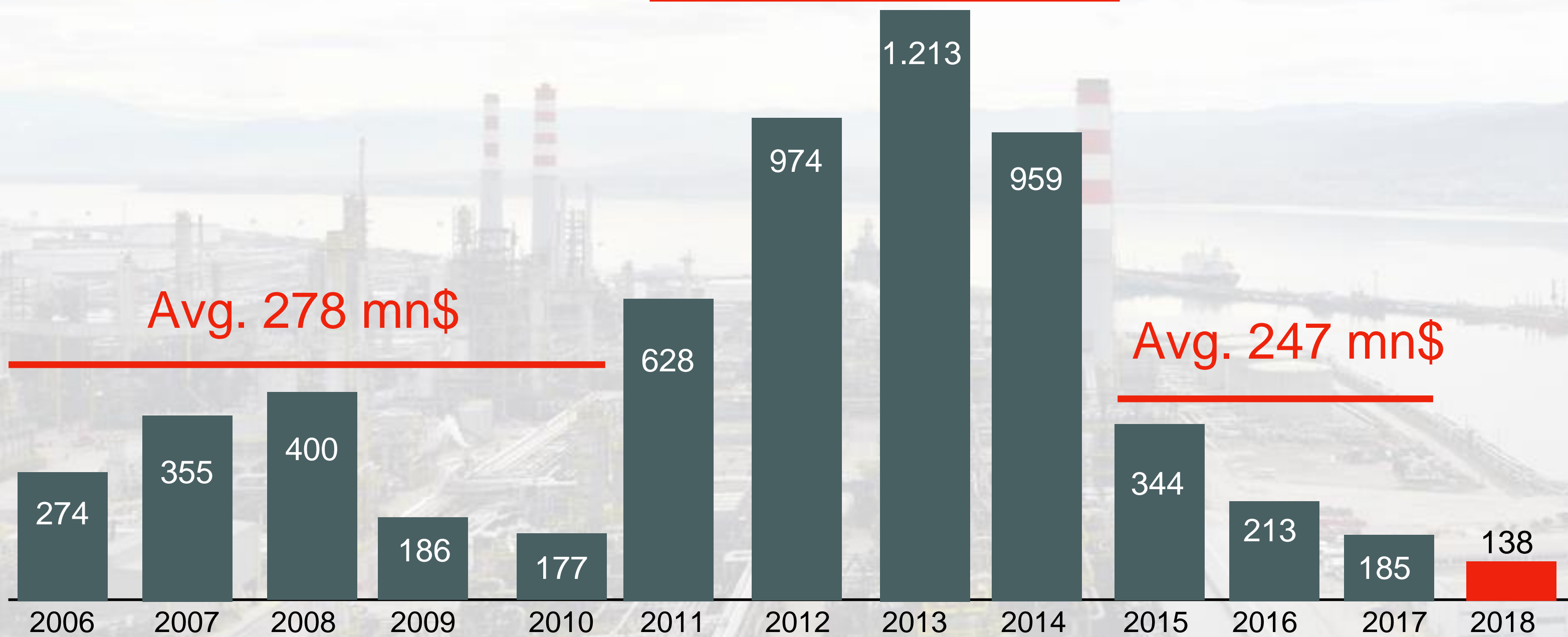
Investments (Million \$)

- 9.5 Nelson complexity
- High white product yield
- Process more heavier and sour crudes
- Run all refineries with 100% capacity utilization
- 6 bn USD investments since privatization

Avg. 943 mn\$

Avg. 278 mn\$

Avg. 247 mn\$

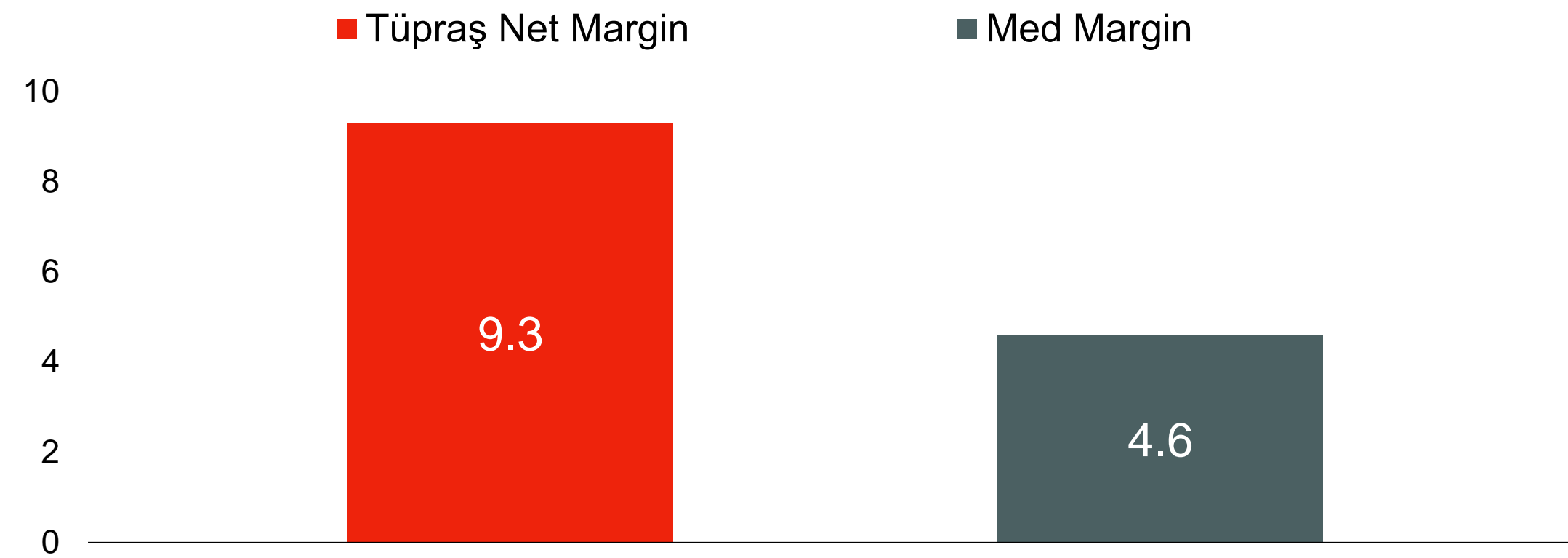


Ongoing Projects

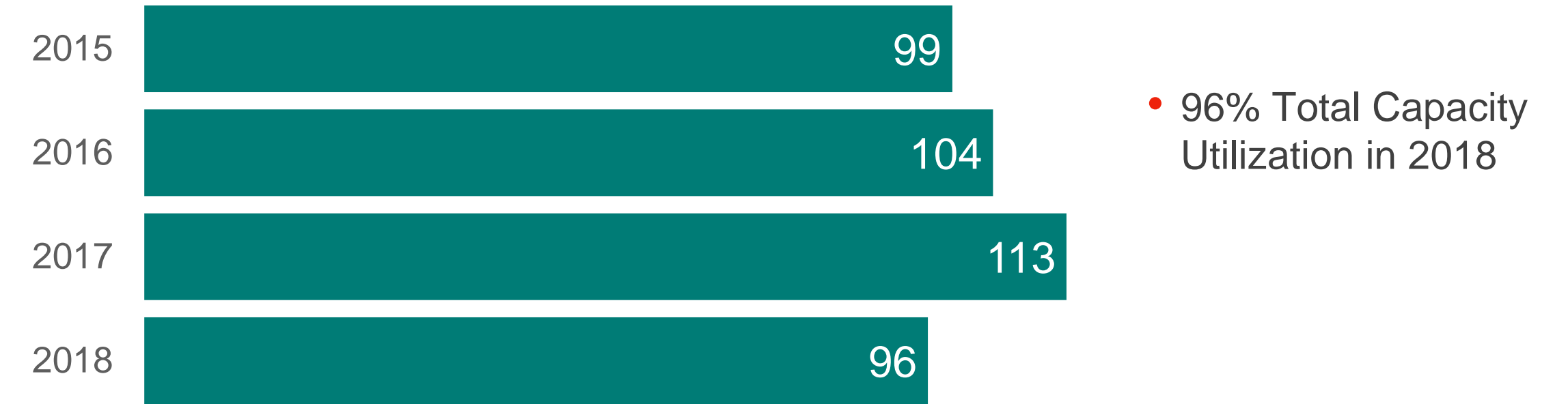
- Revamp of Crude Unit
- FCC Modernization
- New Sulphur Units
- Energy Saving Projects
- Optimization of conversion units

2018 Results

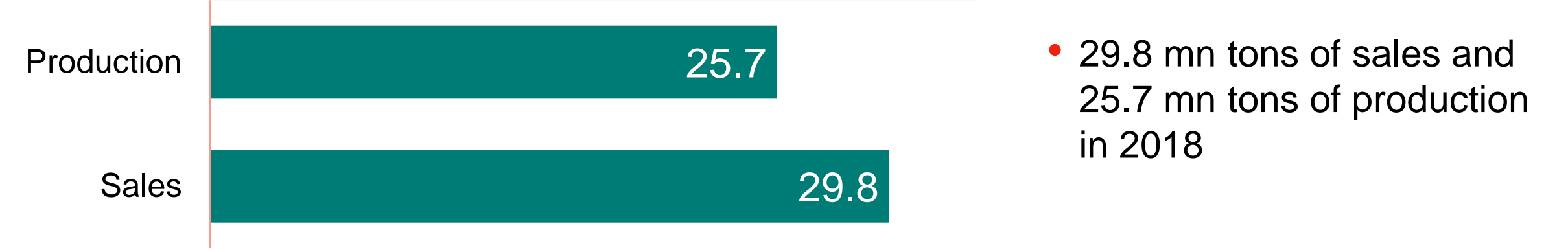
Refining Margins (\$/bbl)



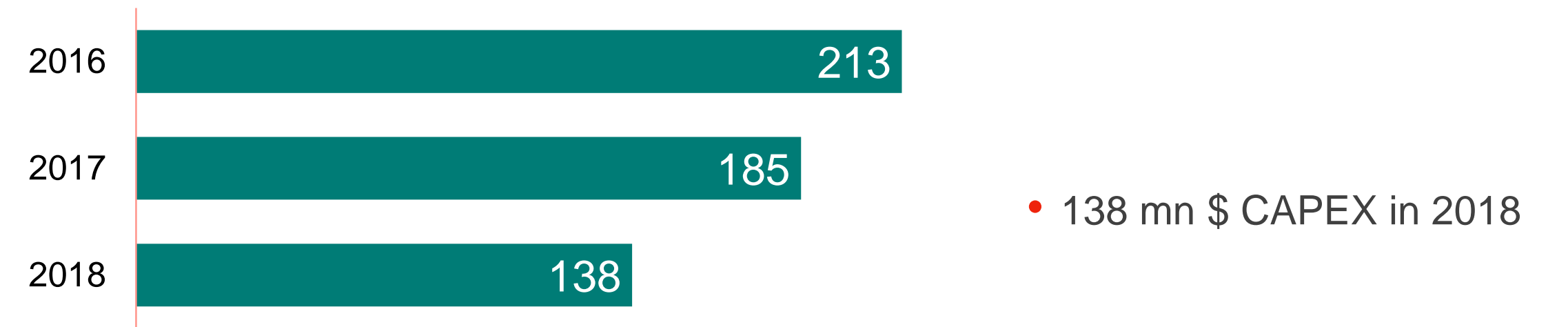
Capacity Utilisation (%)



2018 Operational (mn ton)



Capex (mn \$)

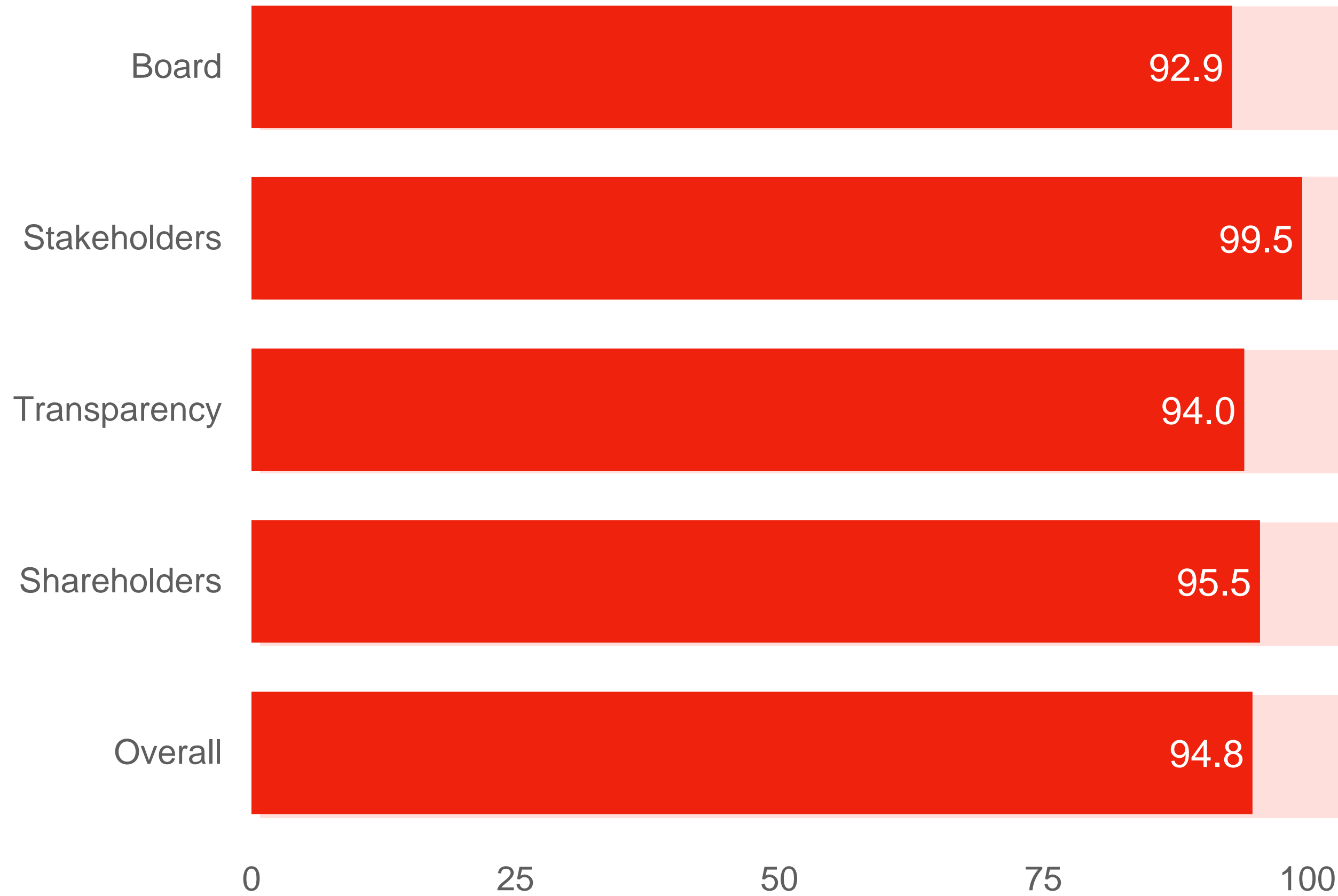


Tüpraş Balance Sheet

Million TL	31/12/2018	31/12/2017	Difference	% Difference
Current Assets	20,962	20,366	596	3
Cash & C. Equivalents	5,983	8,802	-2,819	-32
Receivables	5,429	5,027	402	8
Derivatives	176	347	-171	-49
Inventories	6,765	5,291	1,474	28
Pre-paid expenses	109	62	46	74
Other Current Assets	2,502	837	1,665	199
Long Term Assets	19,074	17,797	1,277	7
Financial Assets & Subsidiaries	1,271	1,148	123	11
Fixed Assets	12,397	12,369	29	0
Derivatives	168	101	68	67
Pre-paid expenses	378	99	279	281
Deferred Tax	3,566	3,068	498	16
Other Long Term Assets	1,293	1,013	280	28
Total Assets	40,036	38,163	1,873	5
Short Term Liabilities	15,950	17,676	-1,726	-10
Financial Loans	4,113	5,274	-1,160	-22
Payables	7,663	8,370	-707	-8
Derivatives	236	177	59	33
Deferred Incomes	5	20	-16	-76
Provisions	80	90	-10	-11
Other ST Liabilities	3,852	3,745	107	3
Long Term Liabilities	24,086	20,487	3,599	18
Financial Loans	13,836	9,777	4,059	42
Payables & Provisions	257	224	34	15
Derivatives	42	3	39	1,156
Other LT Liabilities	5	5	-1	-13
Equity	9,825	10,373	-549	-5
Minority Interests	121	104	17	16
Total Liabilities	40,036	38,163	1,873	5

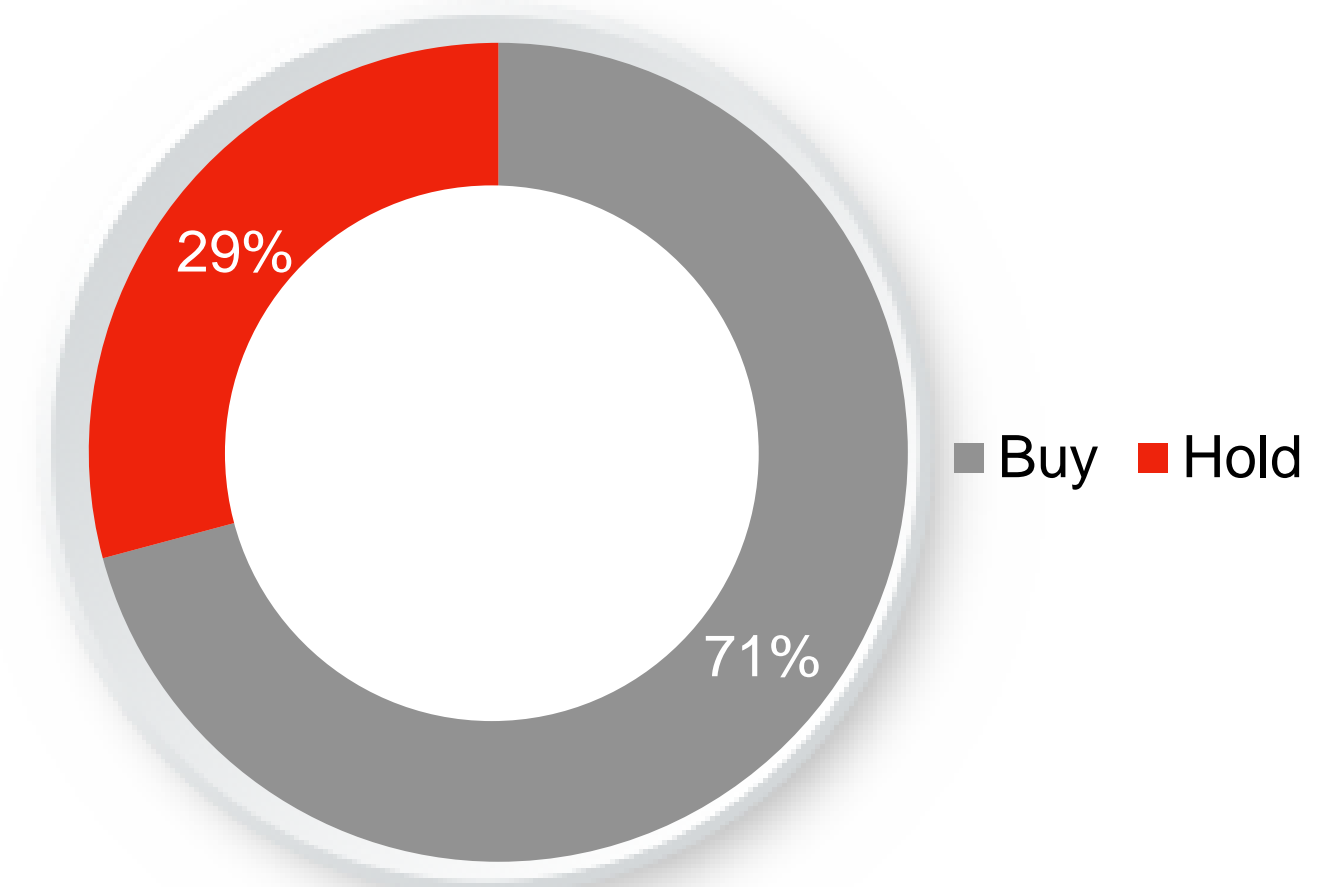
Creating Competitive & Sustainable Shareholder Value

Tüpraş has one of the highest Corporate Governance Ratings.



Foreign Currency Long Term	FitchRatings	MOODY'S	S&P Global Ratings
Tüpraş	BB+(Neg.)	Ba2 (Negative)	
Türkiye	BB (Neg.)	Ba3 (Negative)	B+ (Stable)
Koç Holding		Ba2 (Negative)	BB- (Stable)

Analyst Recommendations



Financial Policy

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

Leverage & Liquidity

Proactive in 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.
- Threshold for deposits subject to banks shareholders' equity.

Interest Rate & Fx

- The fixed/floating profile of financial debt.
- Proactive management of FX risk with derivative instruments
- Zero FX exposure target.

Commodity Hedging Policy

Inventory Hedging Policy:

- Operational hedge: Optimum stock policy & forward pricing mechanism.
- Financial hedge: Expected inventory exposure for the year end is hedged by using derivatives.
- Hedging ratio increasing throughout the year.

Crack Margin Hedging Policy:

- Financial hedge: Crack margin (gasoline, diesel, jet fuel, fuel oil) risk mitigation by using derivatives.
- Statistical / mechanical approach: Historical average prices + standard deviations.
- Hedge ratio between %0-%50 with up to 1 year hedge tenor.

FX Exposure Management (31 December 2018)

Tüpraş continues to employ strict FX policies to mitigate currency risks stemming from volatility.

- A significant portion of the Group's crude oil and refined product purchases are denominated in US Dollars. In addition, the Group finances its capital expenditures mostly through borrowings denominated in US Dollars.
- Natural Hedge: The Group is able to mitigate some of the impact of volatility in exchange rates through natural hedges: crude oil and refined product inventories are US Dollar denominated assets.
- Cash flow Hedge: RUP Facility financing loans designated as hedging instruments of highly probable export revenues.
- As a general Koç Holding financial policy, Group companies are allowed to keep foreign exchange positions within certain limits.

Consolidated Assets

Cash
955

Receivables &
other assets
136

Stock
1,201

Forward & CFH
1,500

Consolidated Liabilities

Payables
1,189

ST Financial
598

- RUP : 182
- Other: 416

LT Financial
1,994

- RUP : 780
- Eurobond 700
- Other Loans : 514

Million \$

+11 mn \$

* Cash flow hedge accounting : 874 mn \$

Tüpraş: Growing, Resilient, Profitable

Tüpraş is a compelling investment case with strong sales growth, resilient and profitable operational and financial structure.



Growing

- Operating in a diesel short market (supplies 45% of the market) , along with strong jet growth.
- Well poised to capture future opportunities including IMO 2020 with its output complexity.
- Continuous investment in logistics, infrastructure and trading capabilities.



Resilient

- Strong balance sheet with no immediate rollover requirement.
- Secure receivables portfolio, tight working capital management.
- Pricing mechanism in place to address commodity and FX fluctuations.



Profitable

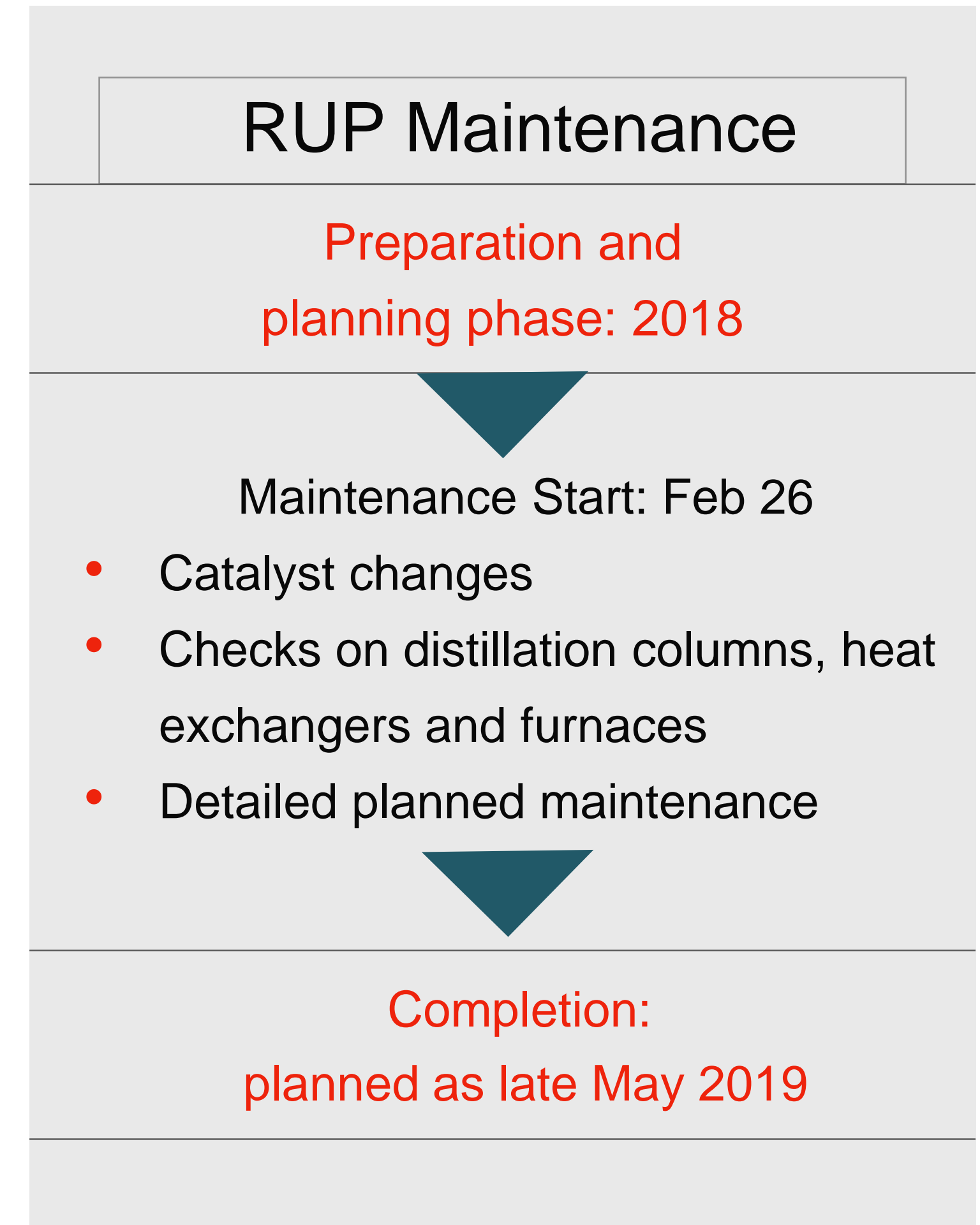
- Benefits from full system optimization given high complexity, procurement and logistics flexibility.
- Prudent hedging practices to ensure stable earnings Outlook.
- High dividend pay-out ratio annually.



OUTLOOK

2019 Refinery Maintenance Schedule

	Unit	Quarter	Duration (weeks)	Reason
İzmir	Plt 100 Crude Oil	Q4	2-3	Periodic Maintenance
	Plt 9200 CCR	Q1	2-3	Periodic Maintenance
İzmit	RUP	Q1&Q2	12-13	Detailed Maintenance
	Plt 2 Crude Oil & Vacuum Unit	Q4	7-8	Periodic Maintenance
	Plt 7 FCC	Q4	5-6	Periodic Maintenance
Kırıkkale	-	-	-	-
Batman	Plt 1100 Crude Oil & Vacuum Unit	Q1&Q2	*3-4	Periodic Maintenance



* Total duration allocated among quarters

2019 Expectations

Med Complex Margin

Med Complex margin expectation in 2019 is 3.75 – 4.25 \$/bbl.

Tüpraş Net Margin

Net Tüpraş refinery margin expectation in 2019 is 6.0 – 7.0 \$/bbl.

Operations

- Capacity utilization target is 95-100%.
 - Production: ~28 million tons
 - Total sales: ~30 million tons
-

Investment

Refining investments expectation is 250 Million \$.

Competition # 1 (SOCAR-STAR Refinery)



- Goldman Sachs has acquired a 13% stake in SOCAR Turkey for \$1.3 billion.
- Goldman Sachs has the right to resell 10% of its stakes to Socar, and the remaining 3% to 'Sermaye Investments Limited' owned by SOCAR within 6 years at the same price.

Credit	:	3.3 Billion \$	• 3.3 billion \$ credit agreement. First 4 years grace period total 15-18 years term.
Equity	:	2.4 Billion \$	• Project finance is supplied to company (1.5 Billion \$).
Total Investment	:	5.7 Billion \$	• It is expected to be operational as of 2019.

Star Refinery Production Numbers (k ton)

Fuels	Diesel	4,500
	Jet Fuel	1,600
	Sulphur	158
	Petrocoke	698
Petrochemical Feedstock	LPG	260
	Naptha	1,600
	Mixed xylene	460
	Reformate	524

STAR Refinery (Total Cap. 10 mn ton)

2019 mn ton	Production			Turkish Demand	Balance
	Tüpraş	Star	Total		
LPG	1.1	0.3	1.4	4.1	-2.7
Petchem Feeds	0.2	2.6	2.8		
Gasoline	6.1		6.1	2.4	3.7
Jet Fuel	5.2	1.6	6.8	5.2	1.6
Diesel	10.7	4.5	15.2	26.5	-11.3
Coke	0.8	0.7	1.5	4.6	-3.1
Fuel Oil	1.8		1.8	1.3	0.5
Bitumen	3.1		3.1	3.1	

Competition # 2 (Regional Competition)

- Tüpraş is competing with 71 refineries in the Mediterranean and Black Sea markets.
- Mediterranean regional product balance is also affected from Middle East, North West Europe and Asia.

Mediterranean



54 Refineries
7.8 mn bpd

Black Sea

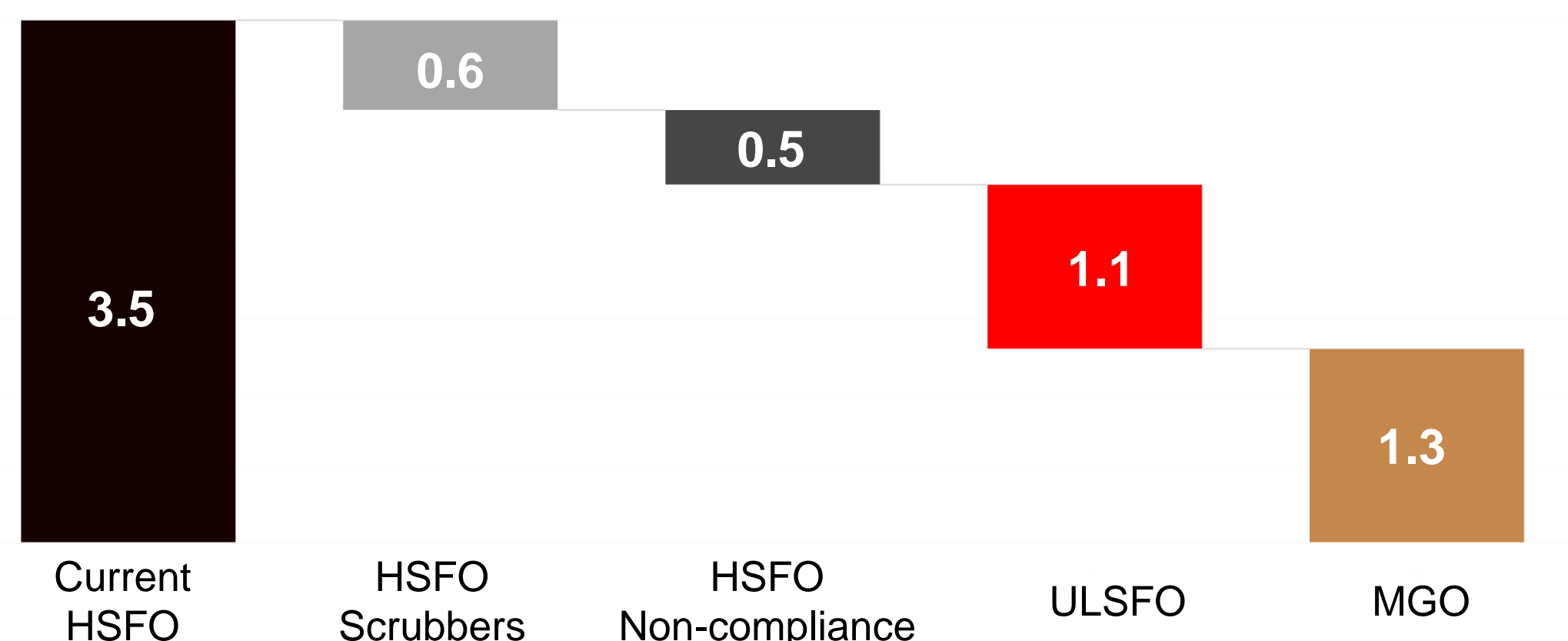


17 Refineries
1.8 mn bpd

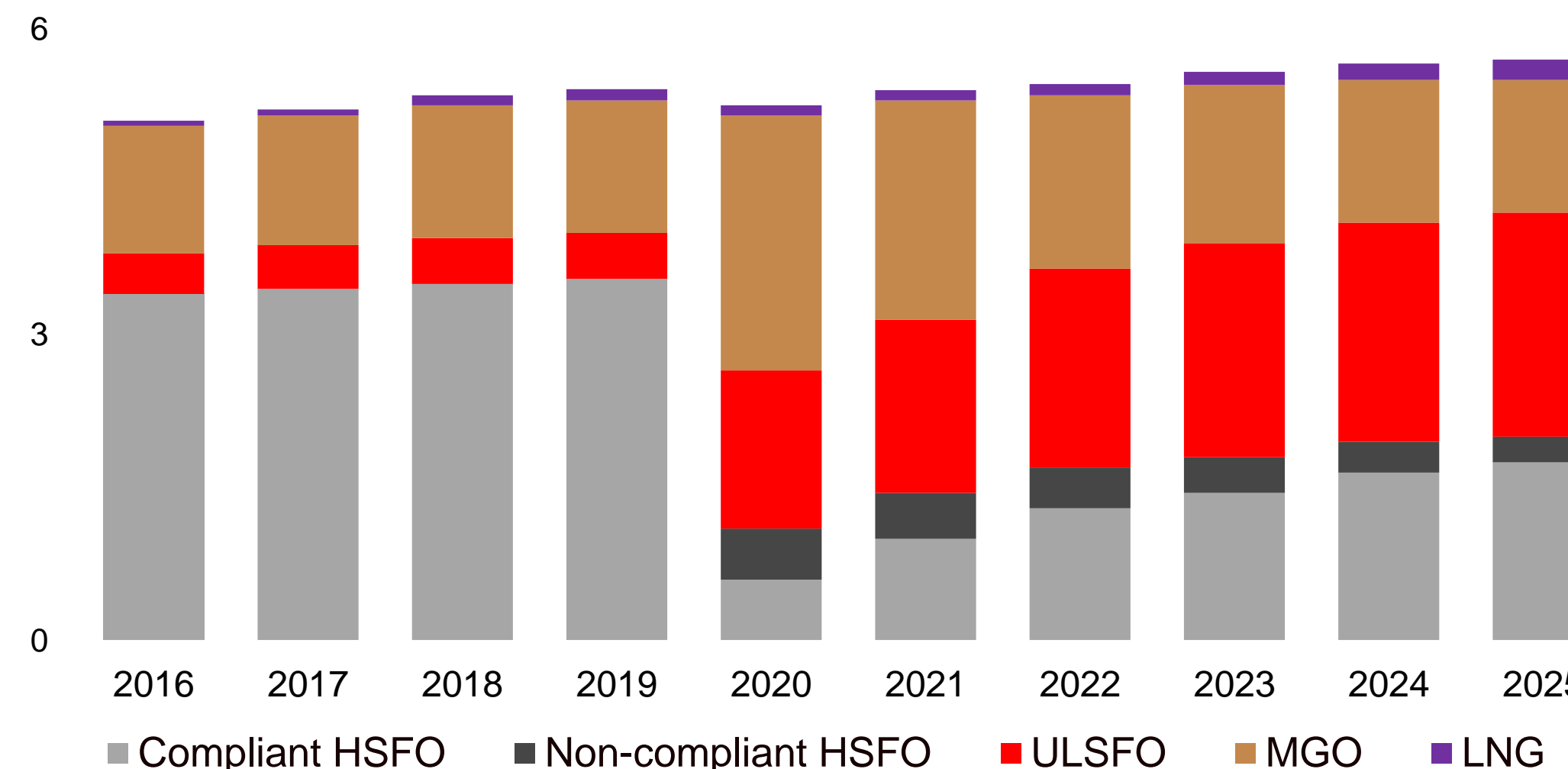
Marine Bunker Specification Changes and Its Effects

IMO 2020: the sulphur cap for marine bunkers is reduced from 3.5% to 0.5% (5000ppm)
 - effective from **1 Jan 2020**.

HSFO Replacement Expected in 2020, million b/d



Gradual Change in Marine Bunker Fuels, thousand b/d



Compliance can be met with:

- Marine Gasoil (Diesel)
- Ultra Low Sulphur Fuel Oil (ULSFO)
- Scrubbers
- LNG

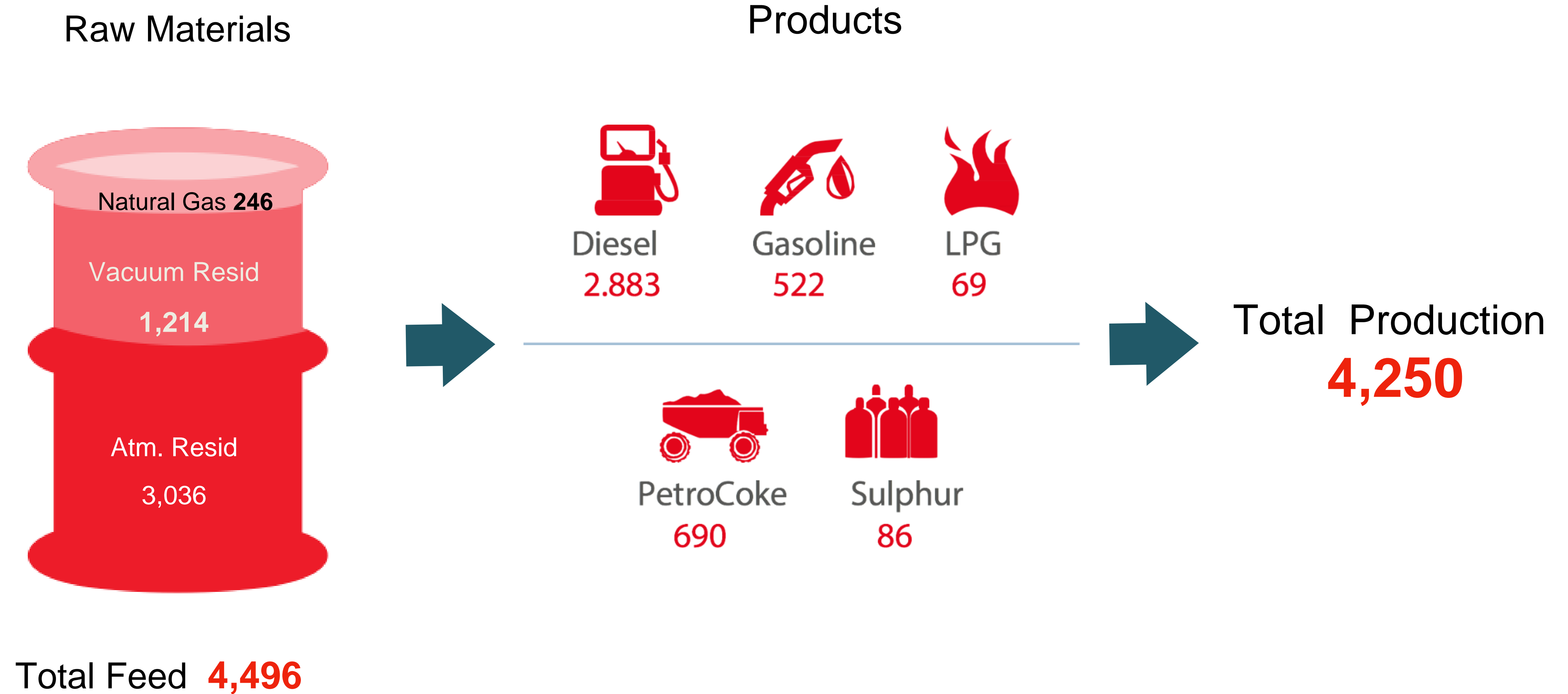
Expectations 2020 and beyond:

- MGO (Diesel) is expected to be the no.1 choice in 2020
- ULSFO/blend becomes more widespread through the years as availability & compatibility issues get resolved
- Compliant HSFO use grows as scrubber numbers rise from ~2,000 after Jan 1st, 2020 (some ports started bans on open-loop scrubbers thus this projection might change)



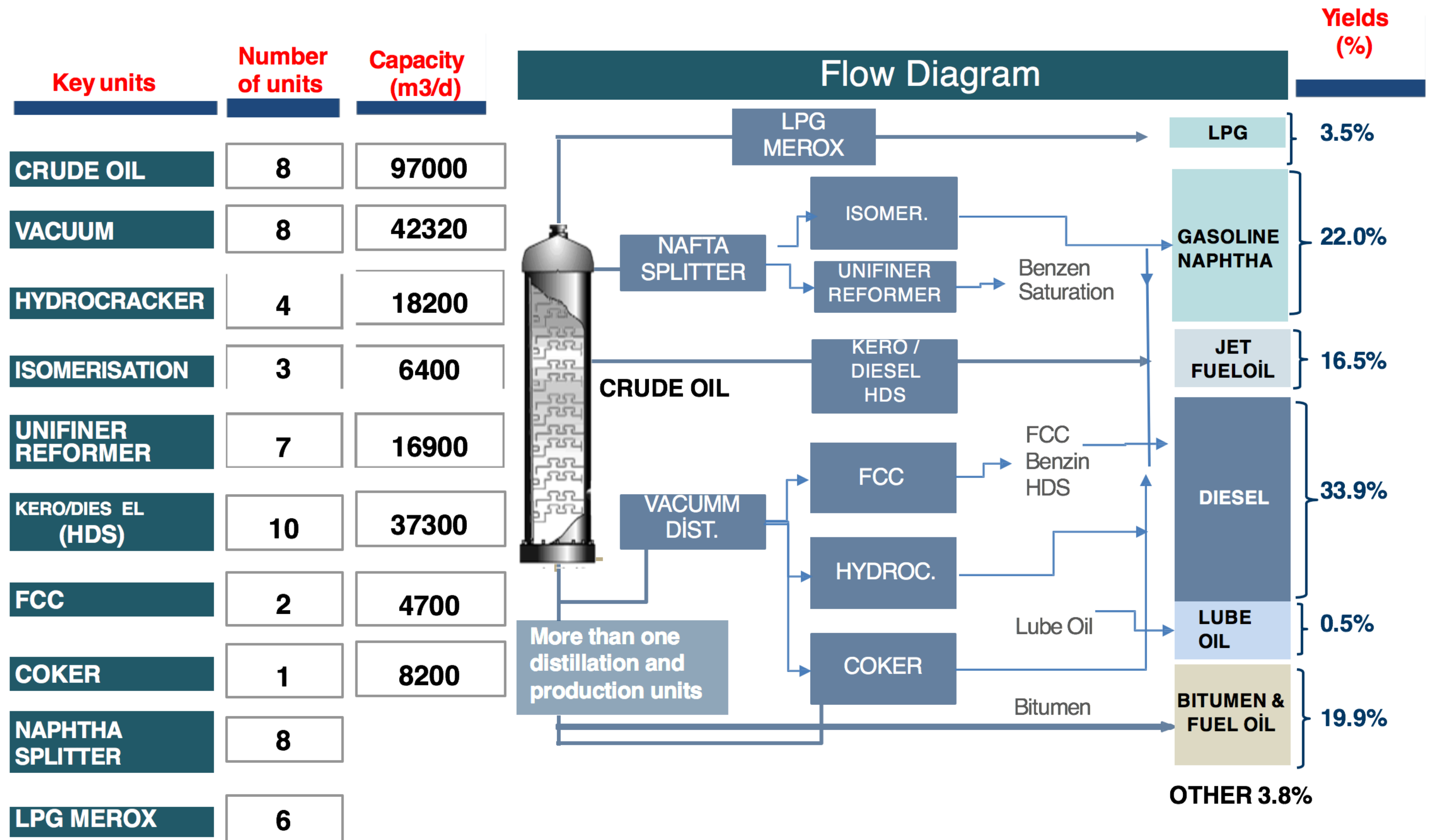
Appendix

RUP feedstock and production (000 Tons)



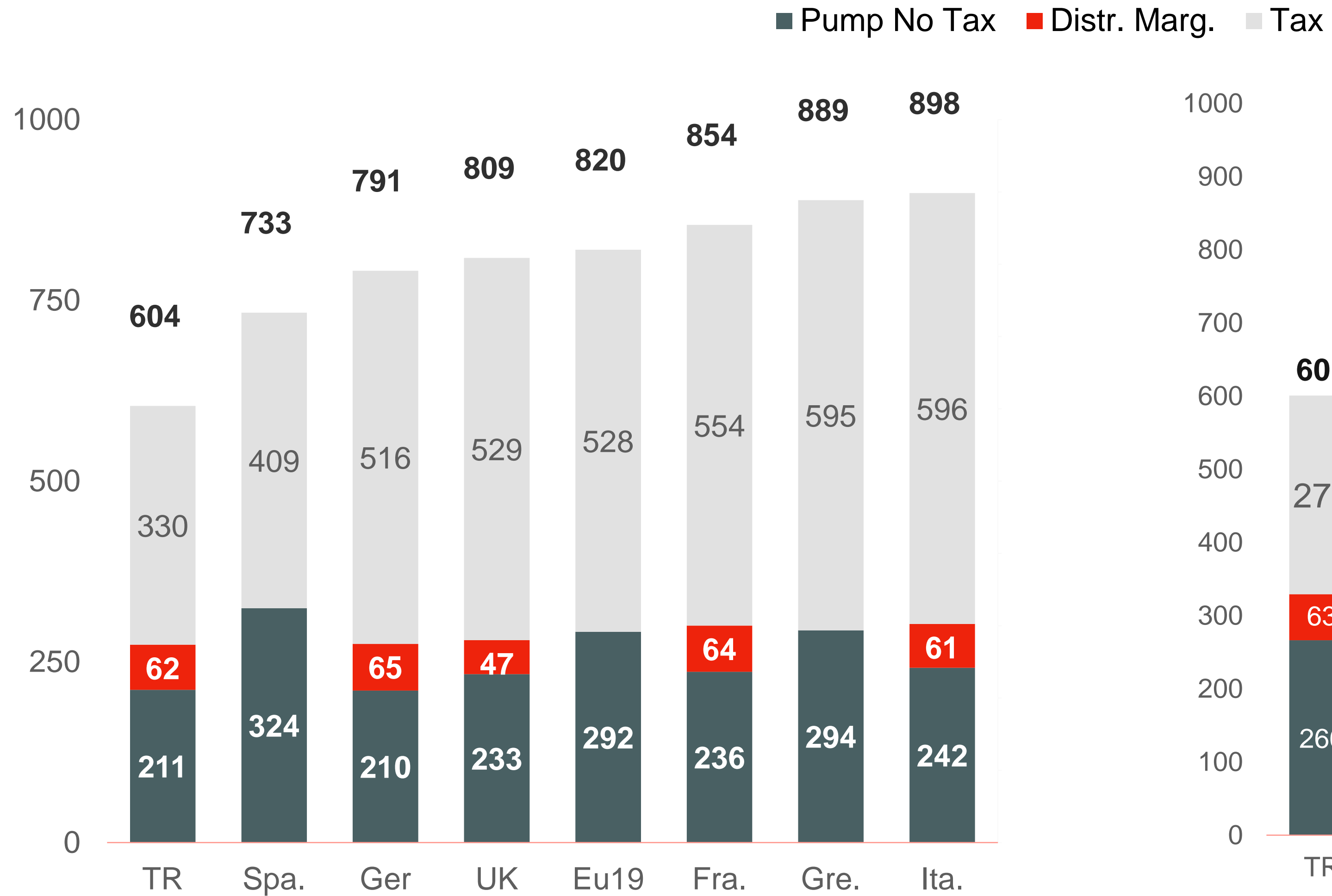
Tüpraş Production Flow and Yield Breakdown

- Increased conversion capacity
- Strong integration among refineries

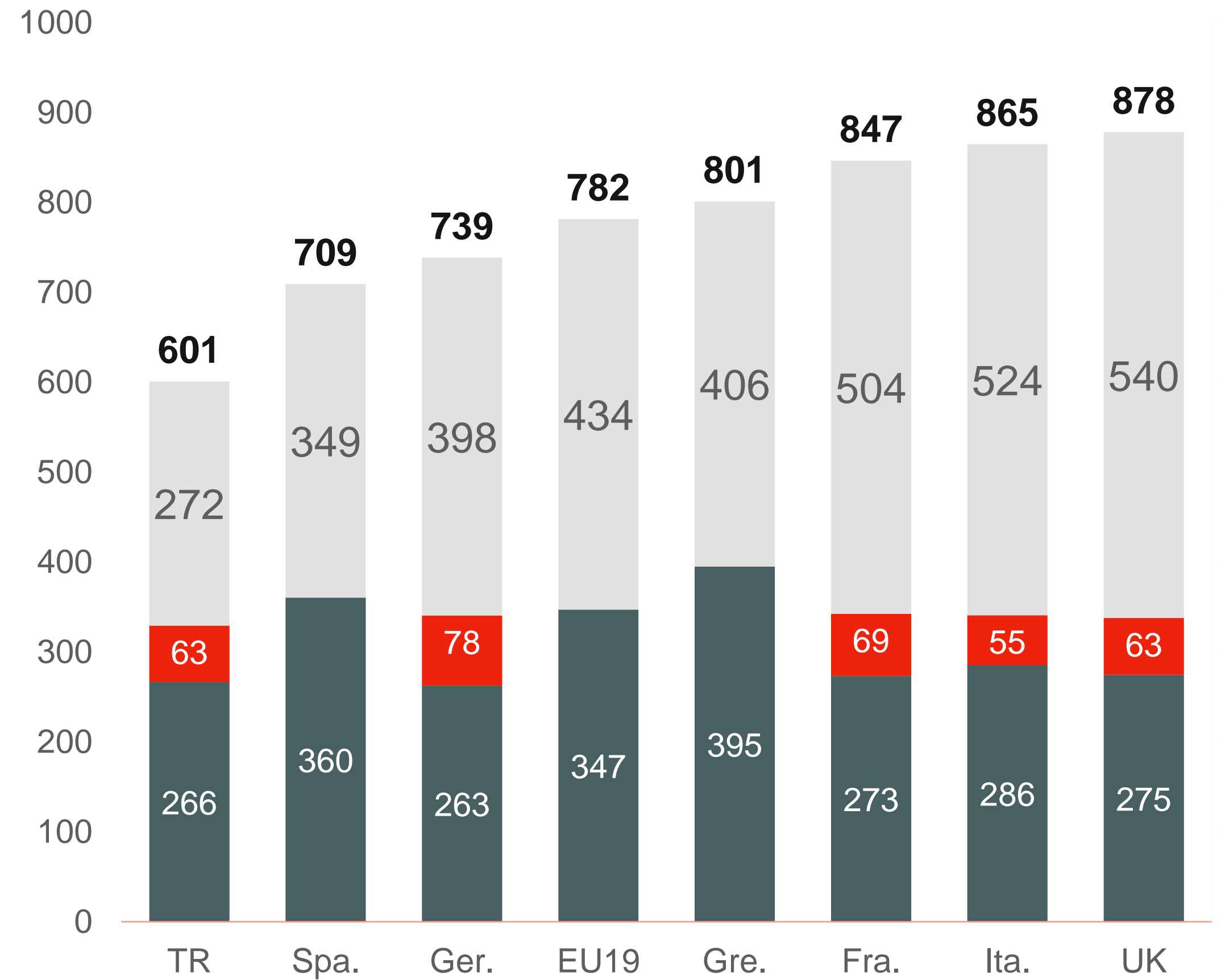


European Pump Price Comparison

Gasoline (Krş / Lt)



Diesel 10 (Krş / Lt)



Not: Prices valid on 11 February 2019.

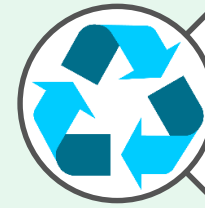
Tüpraş - ESG

Environmental Responsibility

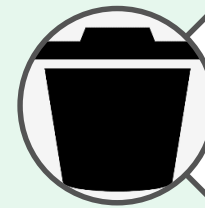
In 2018



Amount of water recycled:
20.8 mn m³



Water recycle ratio:
69.5%



Amount of solid waste recycled:
28.9 ktons



Solid waste recycle ratio:
88.6%



Energy cost saved:
36 million \$



Greenhouse Gas Emission Reduced:
244 ktons CO₂e



Environmental Training Provided:
10,391 person-hrs

Social Support

Gender Equality

- **HeForShe** (Global cooperation with **UN Women** and **Fenerbahçe Sports Club**)
- **I Support Social Gender Equality for My Country-** (collaboration with **Koç Holding**)
- **Father Support Program** in Batman Refinery

Education

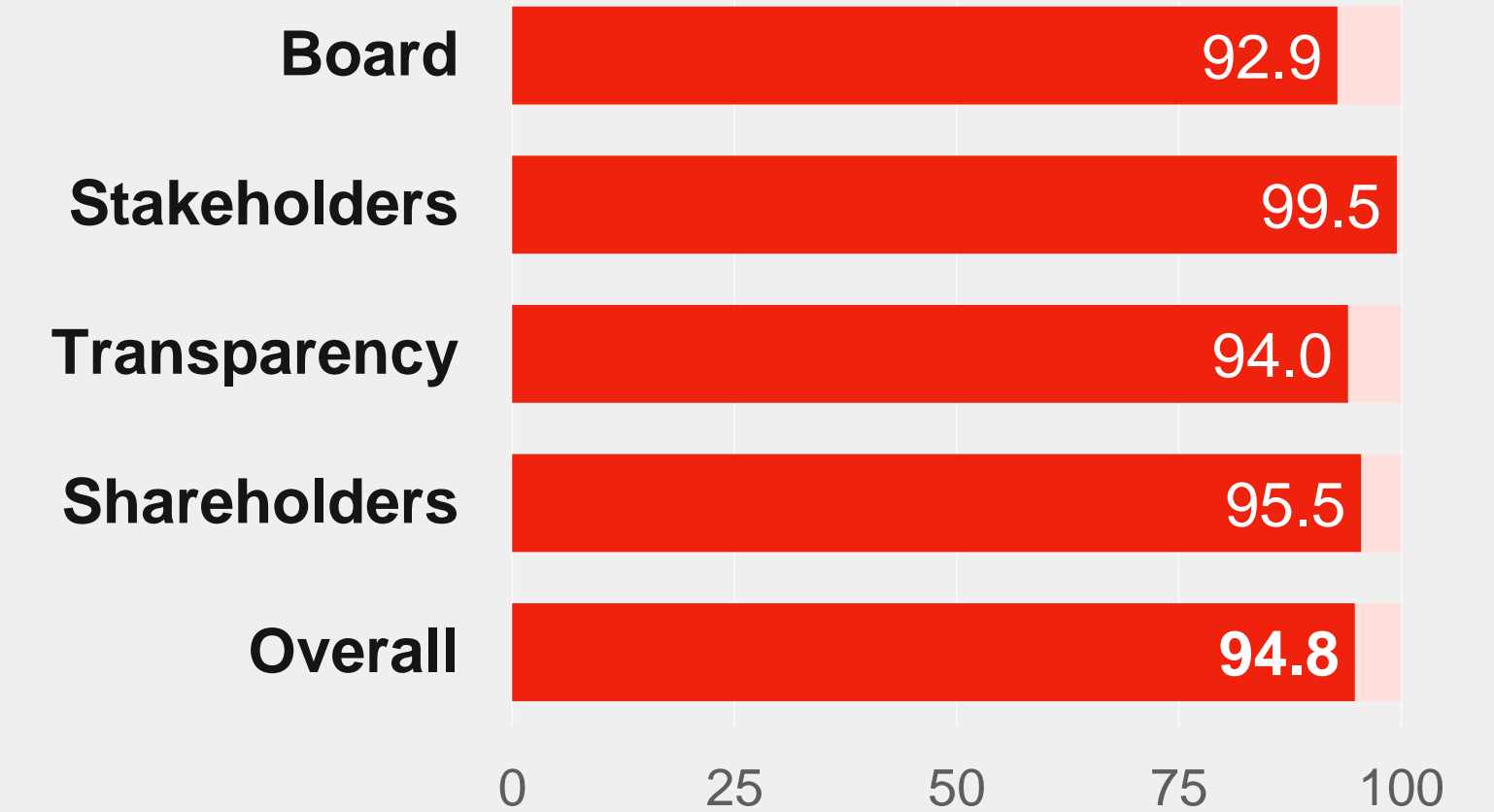
- Operational sponsorship for **TEGV's¹ «Firefly Mobile Learning Units Project»** (262,627 students in 10 years)
- Scholarship fund for **TEV² : «Our Energy For Equality Never Ends»**

Culture & Sports

- **Young Musicians on World Stages**
- Support for the **Batman Disabled Sports Club Association** and **Batman Tüpraşspor Football Club**

Governance Excellence

One of the highest Corporate Governance Ratings³



Foreign Currency Long Term	FitchRatings	MOODY'S	S&P Global Ratings
Tüpraş	BB+	Ba2	
Türkiye	BB	Ba3	B+
Koç Holding		Ba2	BB-

Turkey's Leading Investment Holding Company

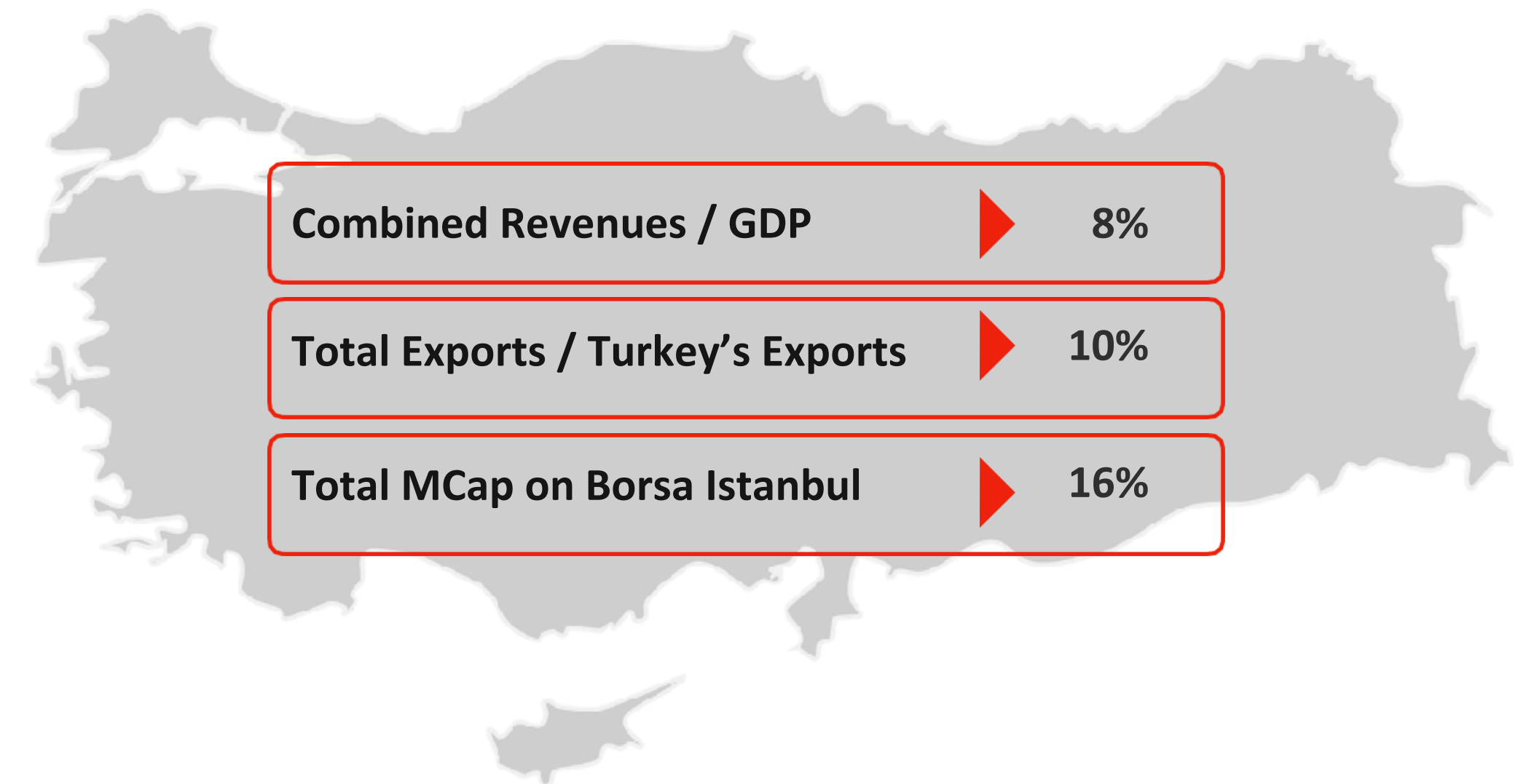
Turkey's largest industrial and services group in terms of revenues, exports, employees, taxes paid and market capitalization.

Turkey's Leading Investment Holding Company

- The only Turkish company in Fortuna 500¹.
- 20% CAGR in consolidated profit² the last five years.

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 YE18, 2018 GDP reflects the projection of Turkish government's New Economic Program.

(1) 2018 Report

(2) In TL terms between 2014-18

 **Tüpraş**

 **Koç**