ANALYST BRIEFING

22 FEBRUARY 2019

REFINING NZ

Your Energy Hive

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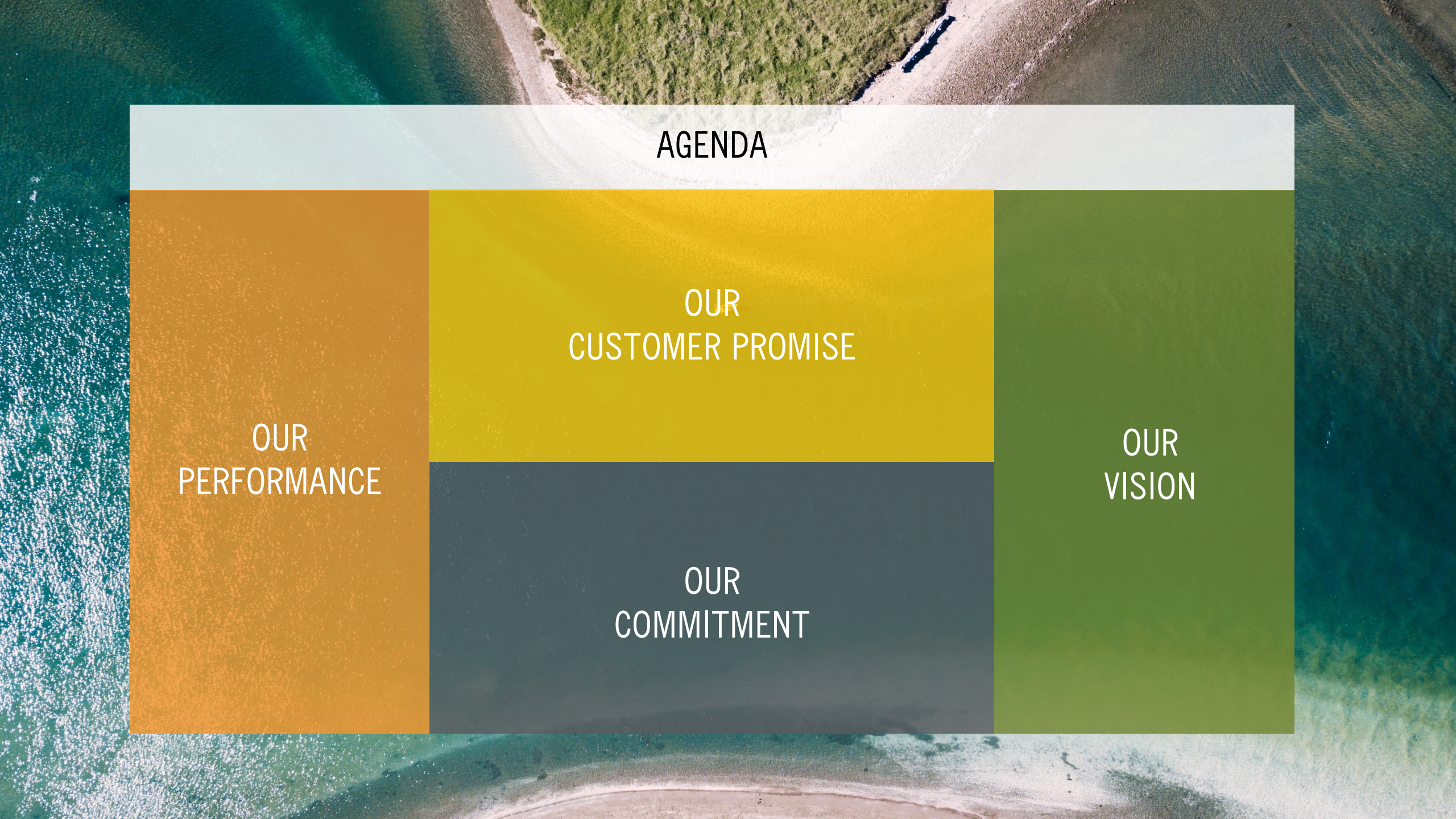
AGENDA
OUR
PERFORMANCE
OUR
CUSTOMER PROMISE
OUR
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OUR
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AGENDA

OUR PERFORMANCE

OUR CUSTOMER PROMISE

OUR COMMITMENT

OUR VISION

NPAT $30m impacted by first full refinery planned shutdown in 14 years

Second half, post shutdown, turns profit:

- strong operational performance
- highest ever throughput
- refining margins towards top of historic range
- weakening exchange rate

Improved health and safety performance in H2

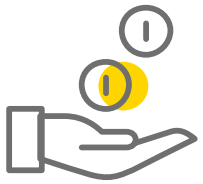
4.5 cps fully imputed final dividend

RESULTS IMPACTED BY THE SHUTDOWN

Gross Refining Margin

USD 6.31 PER BARREL

8.02 per barrel in FY17



EBITDA

NZD 153 M

220m in FY17

Net profit after tax

NZD 30 M

79m in FY17

TRCF [1,2]

0.76

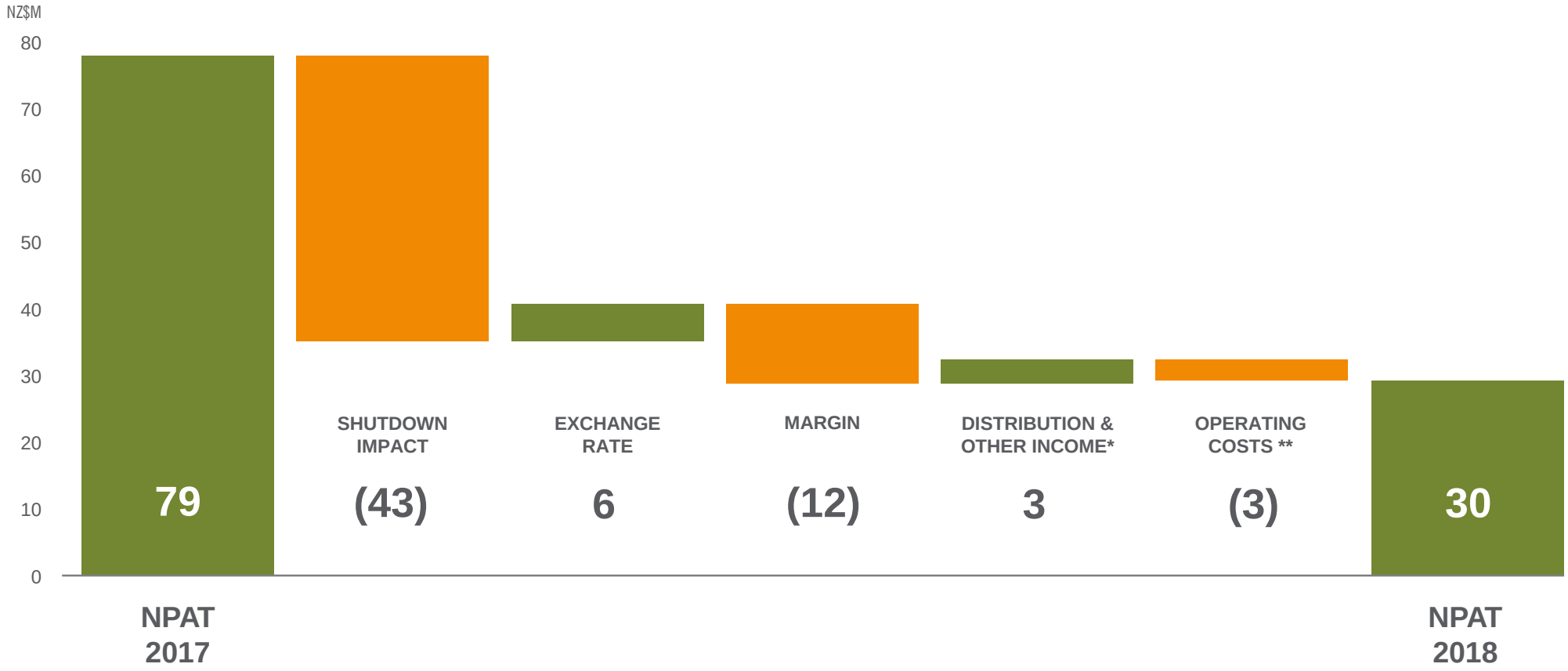
0.89 in FY17

			FY 17	FY 18
Personal	LTIF [1,2]		0.26	**0.48**
Process	Tier 1 (>US$25k) [2]		0	**2**
	Tier 2 (>US$2.5k) [2]		4	**3**
Releases outside consent			4	**5**
Throughput		Mbbl	41.7	**40.4**
RAP Throughput		Mbbl	19.8	**21.0**
Operational availability		%	98.0	**90.7**
Brent price		US$/bbl	54	**71**
Free cash flow [3]		NZ$M	103	**(58)**
Exchange rate		US$/NZ$	0.71	**0.69**

1 Per 200,000 hours, rolling 12-month
2 For a full definition please refer to Glossary in Appendix I.
See our Full Year Report for further detail, available at http://www.refiningnz.com/investor-centre.aspx
3 Free cash flow calculated as operating cash flow minus actual capital expenditures

STRONG SECOND HALF TURNS PROFIT

Resulting in 4.5 cps fully imputed final dividend

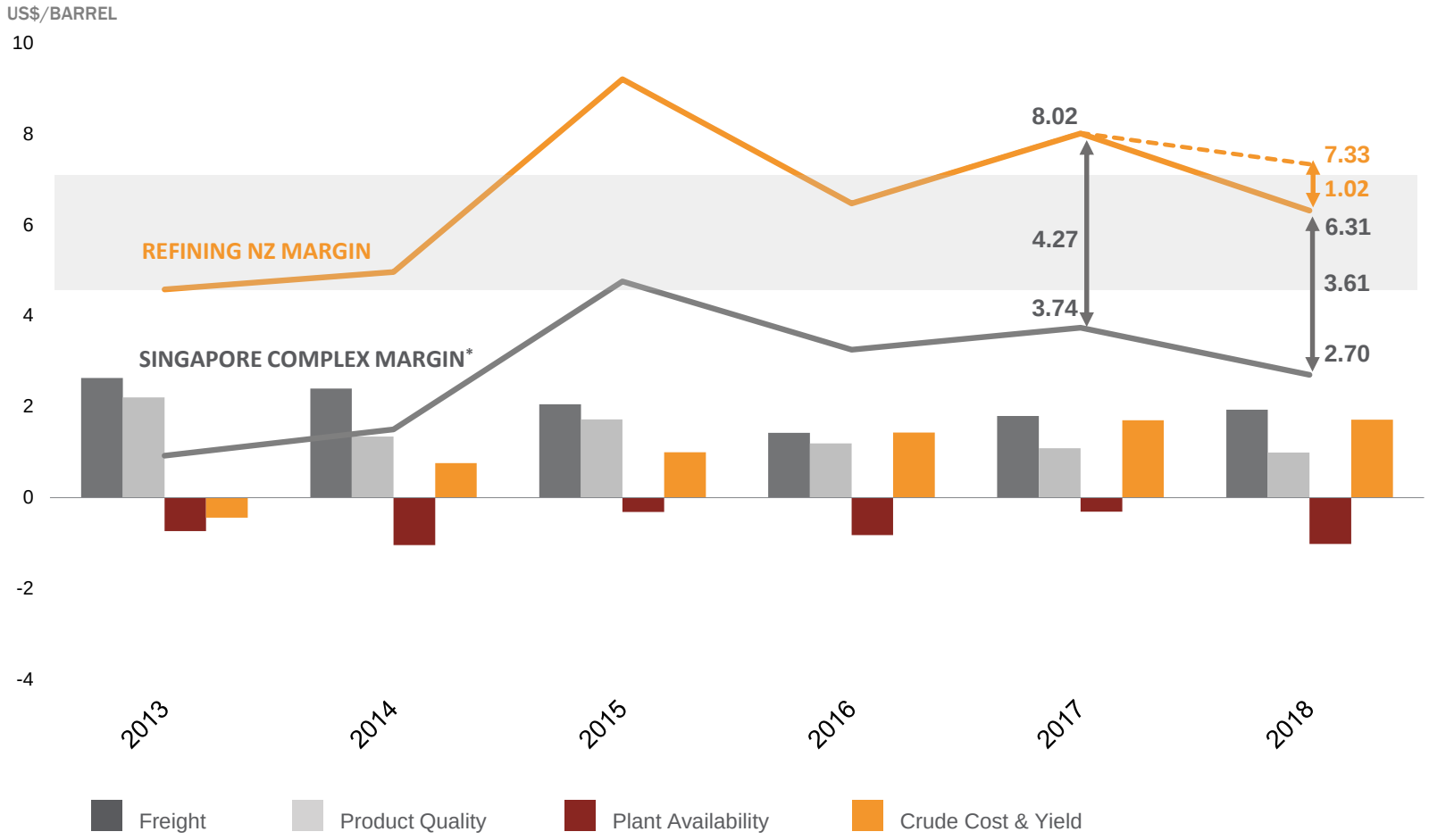


* Excludes insurance recoveries
** Includes RAP remediation costs net of insurance

See our Full Year Report for further detail, available at http://www.refiningnz.com/investor-centre.aspx

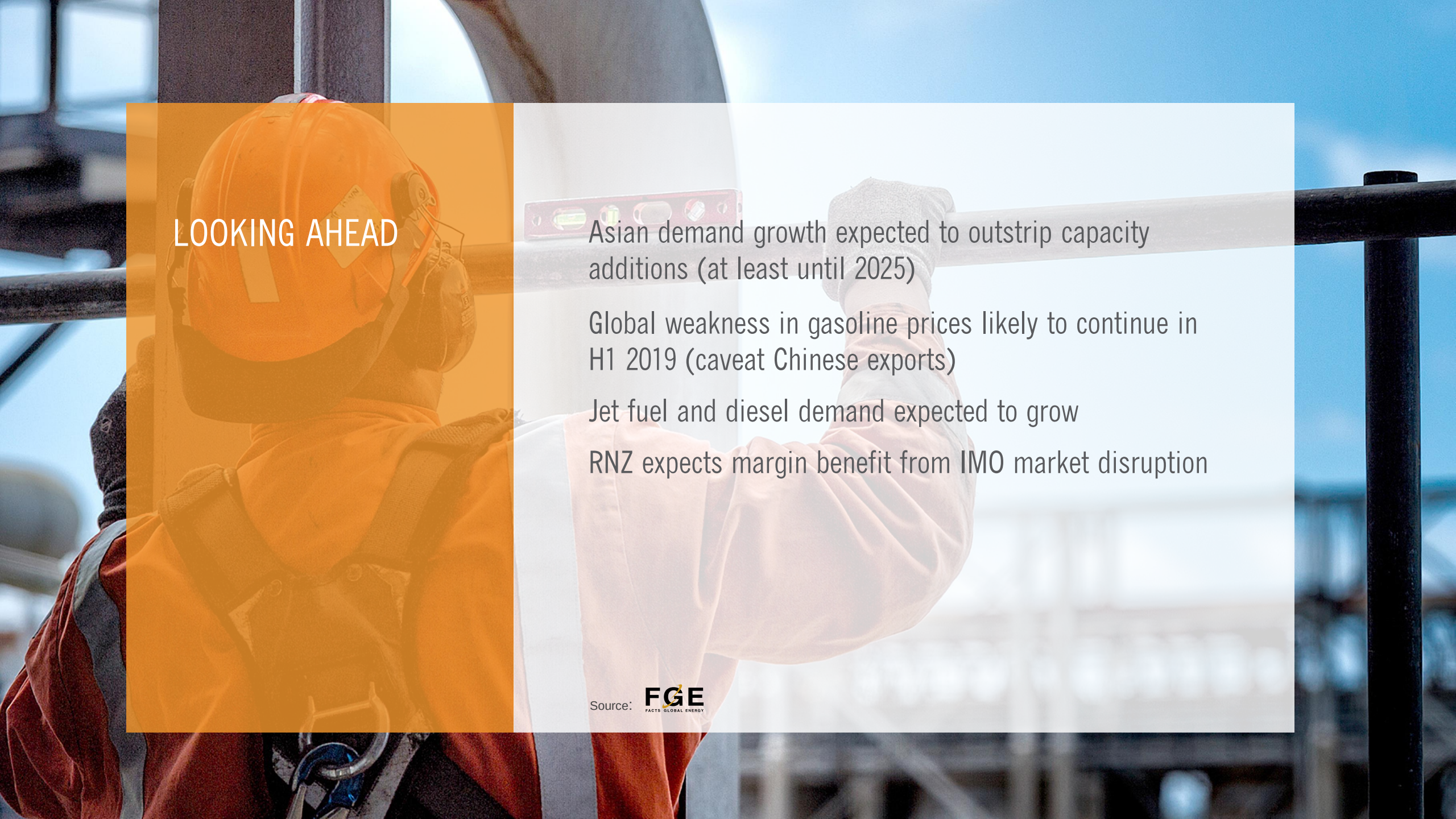
STRONG UNDERLYING MARKET FUNDAMENTALS

Refining margin adjusted for shutdown at US$7.33 per barrel



UPLIFT US$/BARREL	2017	2018	Delta
Freight	1.79	1.93	0.14
Product quality	1.08	0.99	(0.09)
Plant availability	(0.30)	(1.02)	(0.72)
Crude cost and yield	1.70	1.71	0.01
TOTAL	**4.27**	**3.61**	**(0.66)**

* The Singapore Complex Margin is calculated using Platts Dubai crude and Singapore product prices, VLCC freight to Singapore, and the International Energy Agency's Dubai complex refinery yields adjusted for fuel & loss.



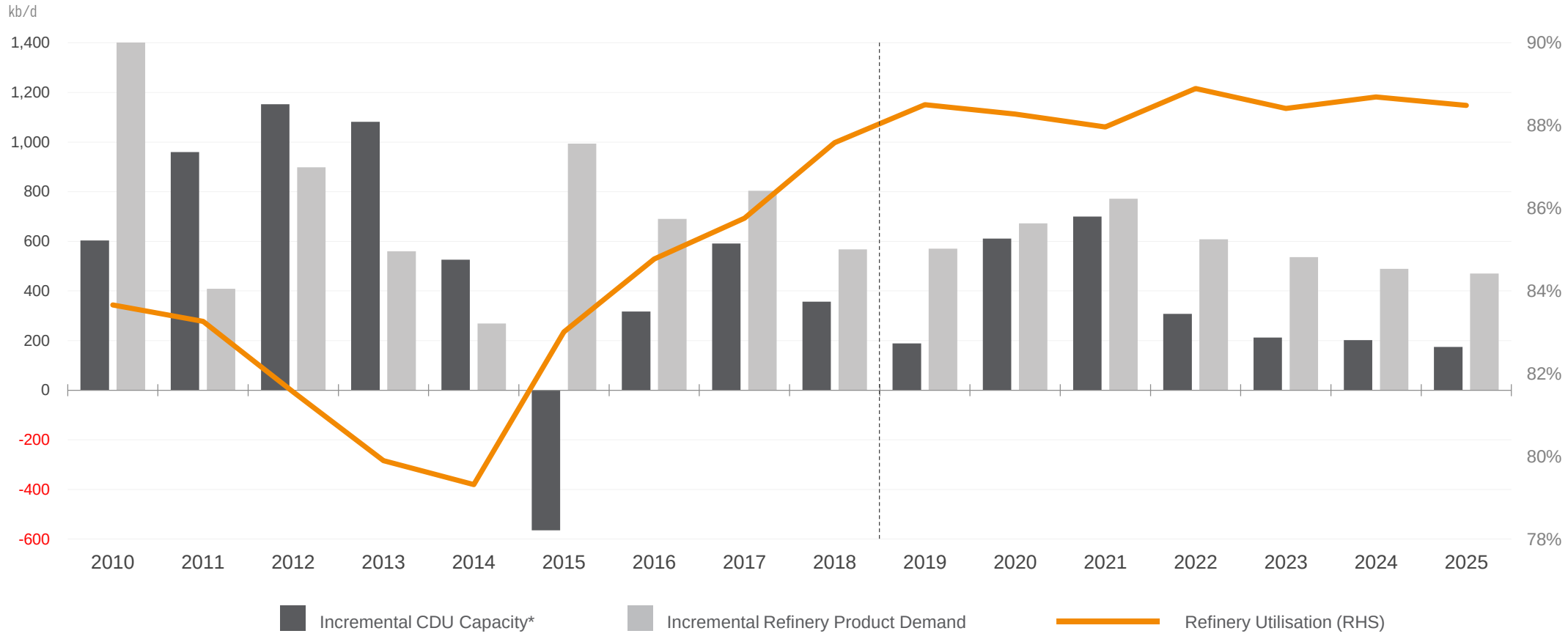
LOOKING AHEAD

- Asian demand growth expected to outstrip capacity additions (at least until 2025)
- Global weakness in gasoline prices likely to continue in H1 2019 (caveat Chinese exports)
- Jet fuel and diesel demand expected to grow
- RNZ expects margin benefit from IMO market disruption

Source: FGE FACTS GLOBAL ENERGY

ASIAN DEMAND GROWTH EXPECTED TO OUTSTRIP CAPACITY ADDITIONS

Forecast supports refinery utilisation and margins – with caveats for IMO and Chinese exports



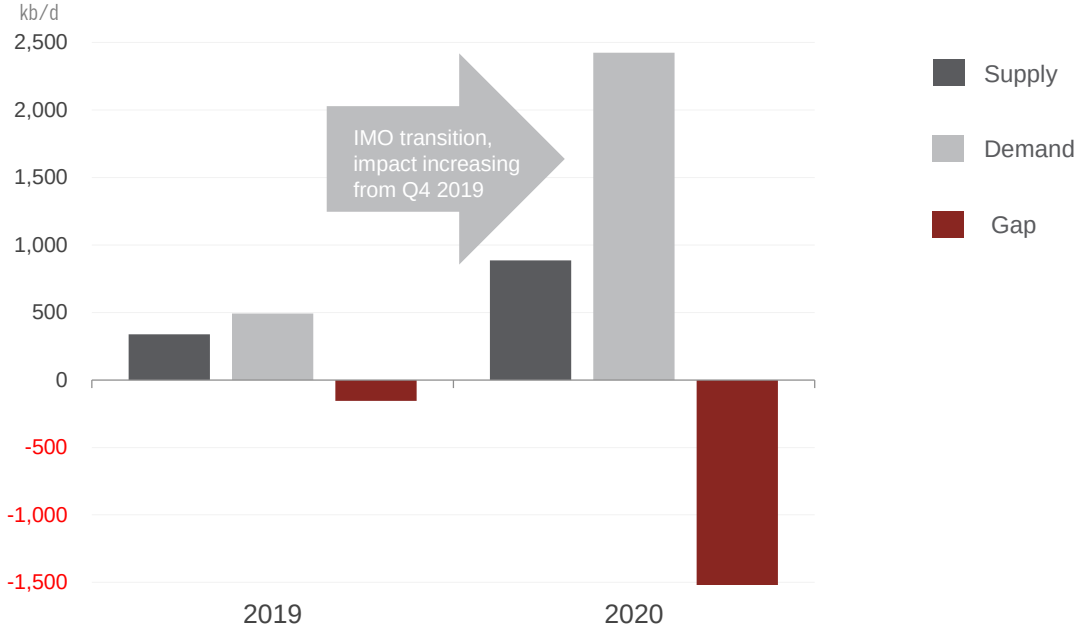
Source: FGE FACTS GLOBAL ENERGY

* Adjusted for possible delays to provide a more realistic assessment of the timing of future refining additions

FORECAST DEMAND VERSUS CAPACITY ADDITIONS

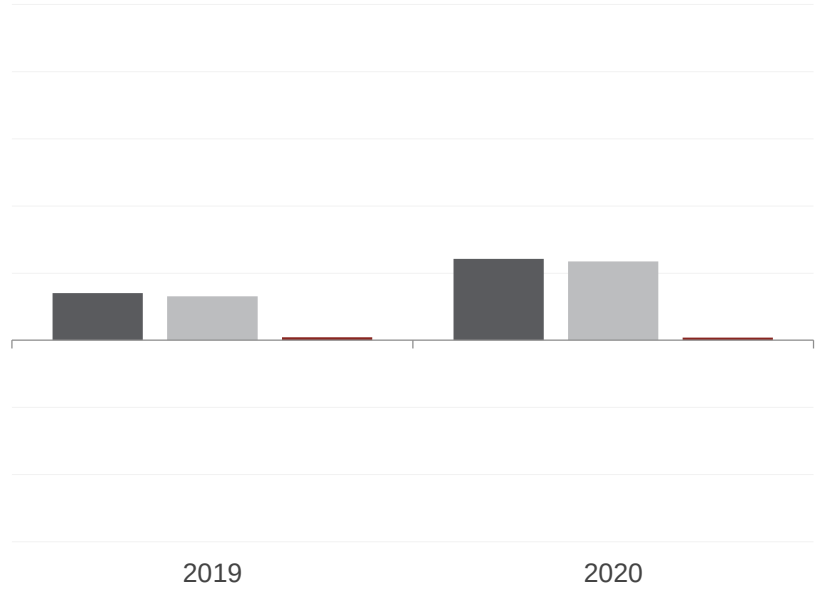
RNZ has a processing bias to diesel/jet fuel

Diesel/Jet fuel



FGE expects changes from IMO to drive significant 2019/2020 demand growth outpacing new upgrading projects

Petrol



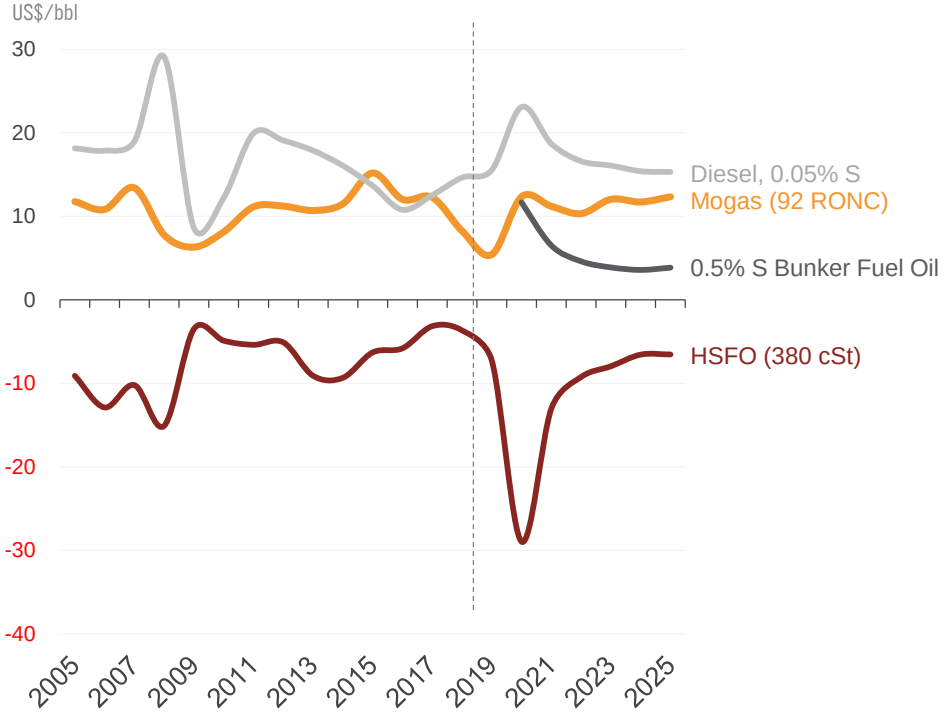
FGE expects price weakness to remain till mid-2019 – thereafter recovering as refiners use naphtha to meet middle distillate demand

Source: FGE FACTS GLOBAL ENERGY

IMO PRICE FORECASTS: DIESEL INCREASE, FUEL OIL FALL

Expect disruption, but overall product cracks remain supported

Singapore product prices vs Dubai crude (product cracks)



Source: FGE FACTS GLOBAL ENERGY

DIESEL / FUEL OIL

Price differential expected to widen

Benefits refiners with upgrading capacity (especially hydrocracking)

NEW 0.5% SULPHUR BUNKER FUEL OIL

Positive product cracks expected

HIGH SULPHUR FUEL OIL

Product cracks expected to recover by 2023

MARPOL – OUR STRATEGIES INCLUDE

Produce 0.5% sulphur marine fuel oil

Increase bitumen production by debottlenecking existing plant

Expand our crude diet

Improve logistics of HSFO exports

2019 PROFIT MATRIX

GRM US$	US$ EXCHANGE RATE 0.60	0.65	0.70	0.75
4.00	(34) / 326	(46) / 342	(56) / 356	(65) / 369
5.00	4 / 273	(10) / 293	(23) / 311	(34) / 326
6.00	43 / 220	25 / 244	10 / 265	(3) / 283
7.00	81 / 169	61 / 195	43 / 220	27 / 241
8.00	120 / 131	96 / 154	76 / 174	58 / 198
9.00	158 / 92	131 / 119	109 / 142	89 / 161

44 Production, Mbbl
101 Non Processing Fee Revenue, $m
103 Depreciation, $m

2019 HIGHLIGHTS

No planned shutdowns

Higher volumes (~44 million barrels planned)

Operating costs include:

- resource consent renewal
- seed funding for new initiatives
- support for government inquiry, fuel market study
- increased electricity cost
- higher variable costs (volume driven)

Capital:

- Growth ($15-20 million)
- Other ($60-65 million)

LONG TERM CAPITAL AND ASSET MANAGEMENT PLAN PROGRESSING

Capital efficiency via new technology and innovation

Engaged WSP | OPUS

- structured approach to long term strategic asset management plan
- aligned to ISO 55000:2014

Shutdown and tank maintenance schedules driven by statutory inspection requirement and maintenance plans

Long term reduction in maintenance capital (< depreciation) through robust asset management planning

Reprioritisation of capital in line with the recent strategic review

ROBOTIC WELDING

TANK 13

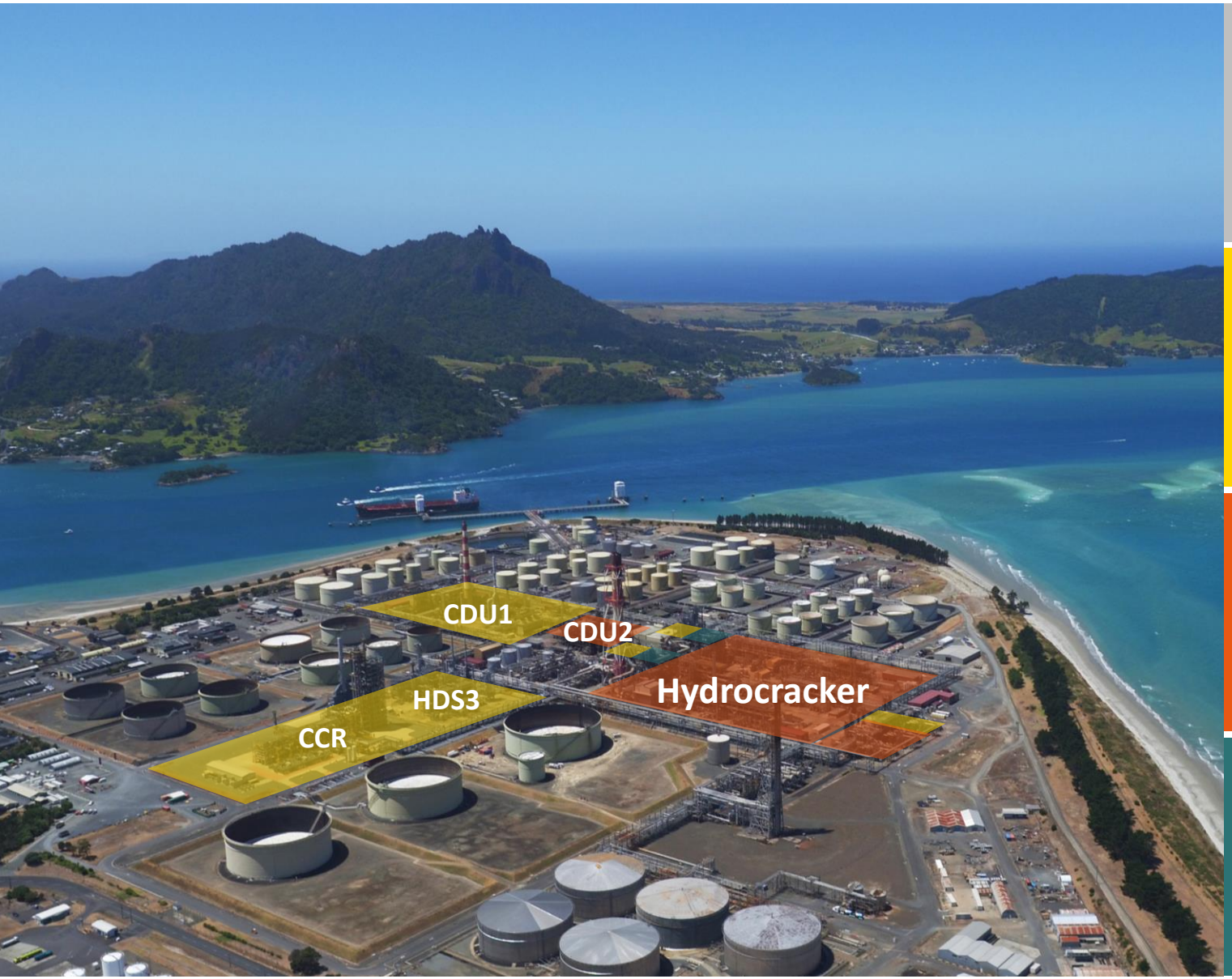
ROVER – IN-LINE INSPECTION

AUTOMATED PAINTING

ROVER

DRONE

SHUTDOWN LOOKAHEAD



2019
- No shutdowns

2020
- Crude Distillation Unit (CDU1)
- Hydrocracker Unit Top Bed Skim
- CCR Platformer

2021
- Hydrocracker
- Crude Distillation Unit (CDU2)

2022
- Hydrocracker Unit Top Bed Skim[1]

[1] Potential optimization may eliminate need for this shutdown

AGENDA

OUR PERFORMANCE

OUR CUSTOMER PROMISE

OUR COMMITMENT

OUR VISION

Short pay back projects delivering

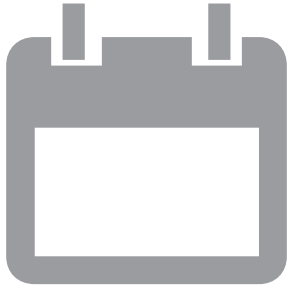
Investing to support Auckland jet fuel resilience

New opportunity to potentially lift RAP capacity a further 15%

Commissioning sulphur forming project in 2019

Dredging consented

DELIVERING VALUE



SHORT PAYBACK PROJECTS

	GRM uplift USc/bbl
2018 Completed Projects	
Hydrogen optimisation	6
Additional nitrogen storage	0.5
Variable speed drive on a key compressor	0.5
2019 Projects	
Light-naphtha bypass	3
Crude demulsifier pre-dosing	1
Increased RAP Automation	0.5

JET FUEL IMPORT FACILITY

2017/2018 Completed Projects
First tank conversion, import line, filtering and dosing
2019/2020 Projects
Second tank conversion

PIPELINE

Capacity

Stages I and II delivered

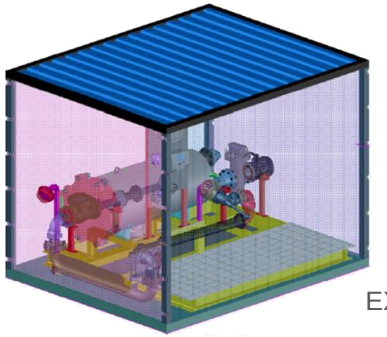
Trialling drag reducing agent (DRA) in Q3

DRA could increase pipeline capacity by around 15%

Resilience

LIDAR

Mobile truck loading skids

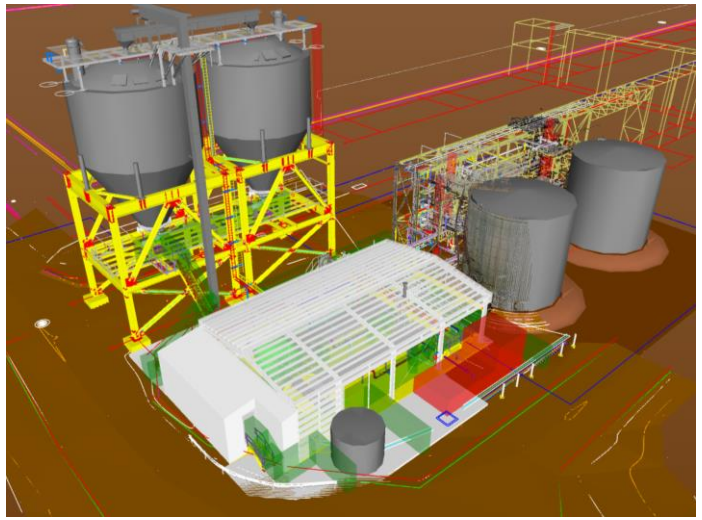


EXAMPLE ONLY

SULPHUR FORMING

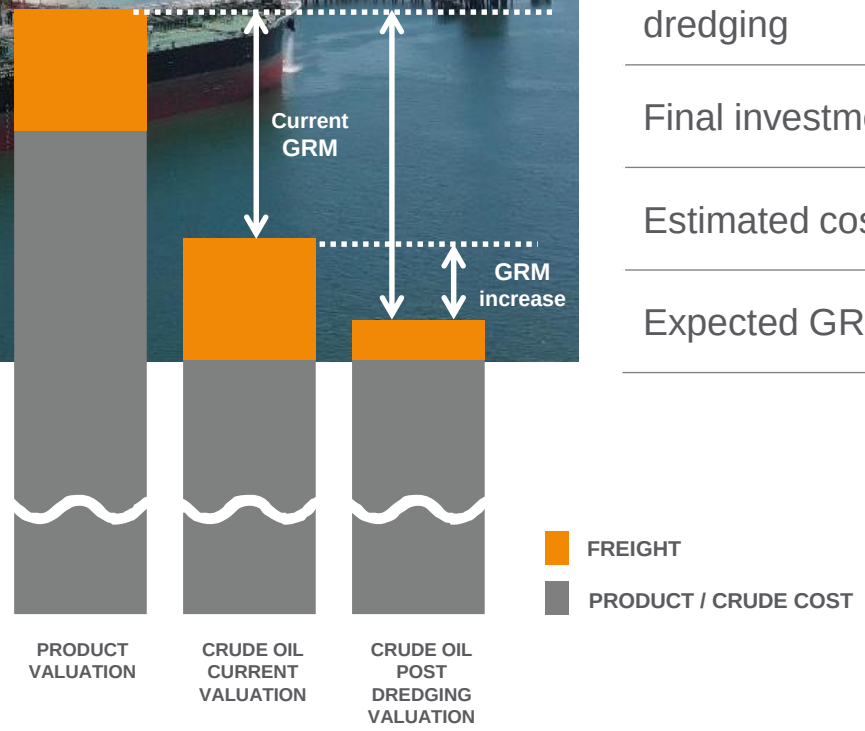
Facility under construction

Commissioning Q4 2019



DREDGING CONSENTED

A major milestone for this margin enhancing initiative



Appeal to the Environment Court resolved

- Conditions agreed by all parties
- 12 months of baseline water quality monitoring
- Reviewing phasing of tank maintenance to accelerate dredging
- Final investment decision to be taken in 2019
- Estimated cost $60-$70 million
- Expected GRM uplift USc/bbl 30+

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SUSTAINABILITY AND COMMUNITY

History of investment that also improves our environmental footprint

- Carbon intensity reduced by ~20% since 2008
- Reduction in on-site SO_2 emissions by ~19% since 2006
- $24 million to improve resilience of waste water systems
- Partnership with EECA on energy saving initiatives

Significant contributor to the Northland economy

Highly skilled workforce

A FOCUS ON OUR ENVIRONMENTAL FOOTPRINT

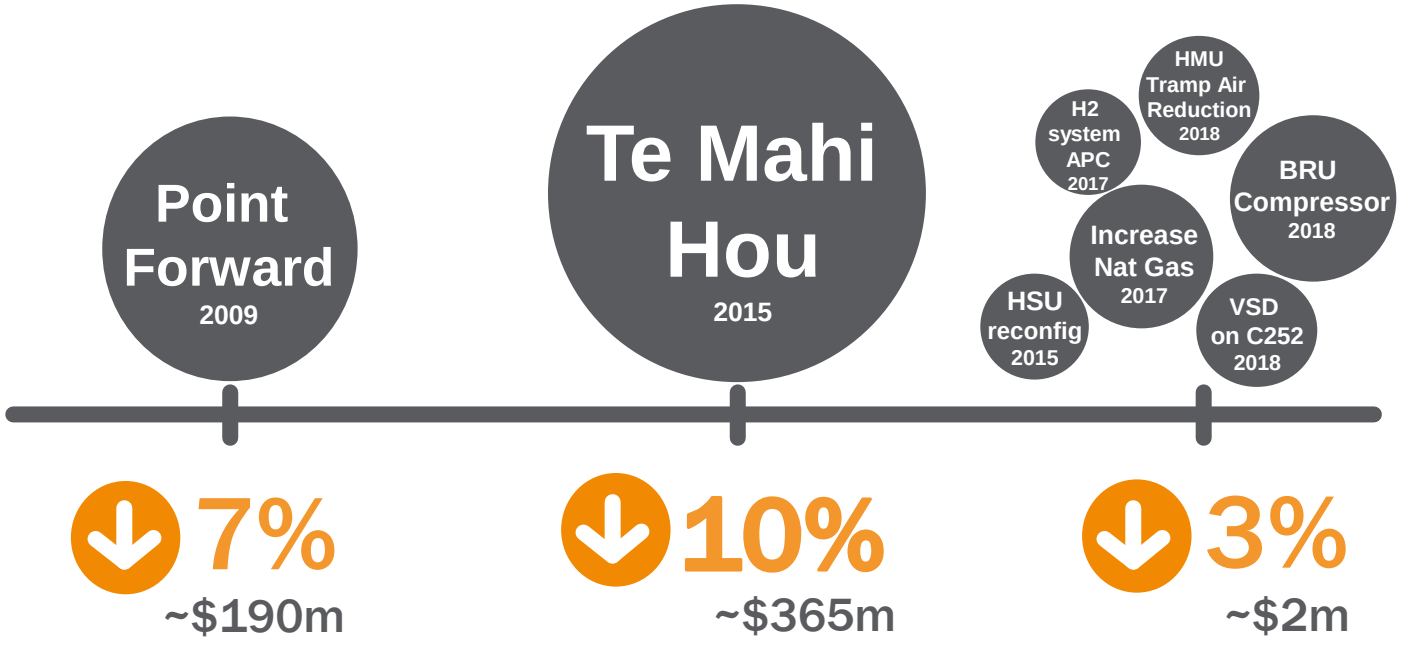
- Continued reductions in CO_2 and SO_2 emissions
- Reduced carbon content of our sources of energy mix – natural gas
- Investment continues- minimising impact on our local community

CO_2 intensity

2008
~250
KG CO2 / T PRODUCT

2018
REDUCED TO
~200

20%



OUR PEOPLE – SAFETY AND WELLBEING

609

Employees and contractors
2018

Highly skilled workforce

Improved health and safety performance in second half of 2018

Our H&S metrics compare well in a NZ context, but we aspire to continue to improve [1]

Implementation of DuPont process safety audit recommendations

Safety Case submitted to WorkSafe

[1] 2017 Benchmarking Report of the Business Leaders' Health & Safety Forum

OUR COMMUNITY

SUPPORTING NEW LEARNING

RNZ SCHOLARS

EMERGENCY RESPONSE

MARAE REFURBISHMENT

COMMUNITY SUPPORT

Lifted community engagement – Safety Case presented to community

Initiated $120K in scholarship program for local STEM students

Strong engagement with our local Iwi, Patuharakeke

26 emergency exercises conducted in 2018 - involving local and national agencies

Our industrial fire brigade responded to ~85 community callouts in 2018

RNZ contributes almost

7%

per annum

of Northland's GDP [1]

Increase from ~4.5% in 2006

[1] www.infometrics.co.nz

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RNZ brings substantial capability to NZ's 2050 renewable energy and growth agenda:

- safe, reliable and efficient infrastructure
- deep scientific and technical capability
- robust balance sheet
- good reputation and community support

This is the starting point for our new strategy

STRATEGIC DIRECTION

Our new realistic strategy will:

- retain profitable refining at the core
- harness natural resources
- leverage existing capabilities and assets
- confirm our role in energy transition
- remain committed to commercial return and shareholder value

Strategic update in Q2/Q3

APPENDIX 1

Glossary

- **LTIF** - Lost time injury frequency (rolling 12 month per 200,000 hours)
- **TRCF** - Total recordable case frequency (rolling 12 month per 200,000 hours)
- **Tier 1 Process Safety Event (API 754)** - A tier 1 Process Safety Event (PSE) is an unplanned or uncontrolled release of any material, including non-toxic and non-flammable, from a process which results in one or more of the following: A LTI and/or fatality; A fire or explosion resulting in greater than or equal to $25,000 of direct cost to the company; A release of material greater than the threshold quantities given in Table 1 of API 754 in any one-hour period; A officially declared community evacuation or community shelter-in-place.
- **Tier 2 Process Safety Event (API 754)** - A tier 2 Process Safety Event (PSE) is an unplanned or uncontrolled release of any material, including non-toxic and non-flammable, from a process which results in one or more of the following: A recordable injury; A fire or explosion resulting in greater than or equal to $2,500 of direct cost to the company; A release of material greater than the threshold quantities given in Table 2 of API 754 in any one-hour period.

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