



REFINING NZ
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NZX announcement

21 September 2020

Refining NZ Operational Update for July/August 2020

HIGHLIGHTS

- Operated safely through the period, including the six-week temporary shutdown of the refinery to help balance fuel stocks.
- All processing units have now been safely restarted.
- Refinery to Auckland (RAP) pipeline throughput was approximately 62% of the previous corresponding period reflecting the impact of COVID-19 travel restrictions.
- Processing Fee revenue remained at the Fee Floor due to negative international refining margins and low refinery throughput.
- Refining NZ net debt was \$249 million as at the end August, reflecting five months of cash neutral operations at the Fee Floor.
- The company is in the final stage of planning for a refinery simplification, in order to extend cash neutral operations at the Fee Floor into 2021.

COMMENTARY

Refining NZ's excellent health and safety performance continued through July and August, with no Tier 1 or Tier 2 process safety events or recordable cases. Refining NZ promptly addressed the causes of two releases outside of consent that occurred.

The refinery was shut down for six weeks during the period in order to help rebalance stocks across the country, due to the COVID-19 impacts on New Zealand fuel demand. All processing units have now been safely restarted and are expected to operate in low production mode to the end of the year.

Refinery to Auckland Pipeline (RAP) throughput was approximately 62% of the previous corresponding period, reflecting the continuing impact of international border restrictions on jet demand and the impact of recent COVID-19 lockdown restrictions on Auckland fuel demand. International markets remain heavily impacted by the effects of COVID-19 with increased global demand during July and August as lockdown restrictions were eased in many countries, offset by the ramp-up of exports from China and India causing the Singapore Dubai Complex Margin for



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the July/August period to average US\$ -2.46 per barrel. Refining NZ's GRM uplift over the Singapore margin was negative due to the temporary shutdown of the refinery.

Processing Fee revenue was NZ\$23.7 million, reflecting Fee Floor payments by our customers. GRM for the two months was US\$ -4.18 per barrel reflecting low margins and low production during the period and the fuel and loss impact of the shutdown and restart of the refinery. In addition, the Company earned NZ\$4.3 million in terminal fees from the import of petrol and diesel to Marsden Point during the temporary shutdown.

The Company continues to expect Processing Fees to remain at the Fee Floor through 2H 2020, given Fee Floor payments year to date total NZ\$70.4 million (with Processing Fee Revenue excluding Fee Floor payments of NZ\$23.3 million).

Net debt was NZ\$249 million at the end of August, reflecting five months of cash neutral operations at the Fee Floor.

Refining NZ is now in the final stages of planning to simplify refinery operations and structurally reduce operating costs, in order to extend cash neutral operations in 2021 under a Fee Floor scenario. The Company remains on track to provide a market update on the simplification plans in early October.

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OPERATIONAL DATA

		Jul/Aug 2020	Jul/Aug 2019	YTD 2020	FY 2019
Health, Safety & Environment					
LTI	#	0	1	0	1
LTIF	#/200,000hrs	-	-	0.00	0.13
TRC	#	0	1	0	2
TRCF	#/200,000hrs	-	-	0.17	0.27
Tier I Process Safety Events	#	0	0	0	0
Tier II Process Safety Events	#	0	0	0	0
Releases outside of consent	#	2	0	3	1
Refining					
Brent Crude Oil Price	US\$/bbl	44.1	61.5	40.8	64.4
Exchange Rate	US\$/NZ\$	0.66	0.66	0.63	0.66
Operational availability	%	99.5	99.8	97.4	99.7
Unplanned process downtime	%	81.2	0.0	33.2	1.6
Refining throughput	Mbbl	1.77	7.42	17.20	42.69
Gross Refining Margin	US\$/bbl	-4.18	7.10	1.20	5.34
Gross Refining Margin (including Fee Floor/Margin Cap)	US\$M	22.3	52.7	85.0	227.9
Processing Fee (including Fee Floor/Margin Cap)	US\$M	15.6	36.9	59.5	159.5
Processing fee (including Fee Floor/Margin Cap)	NZ\$M	23.7	56.2	93.7	242.0
Distribution					
RAP throughput	Mbbl	2.1	3.4	9.7	20.8



HISTORICAL INFORMATION – REFINING

Appendix II 2020		2016	2017	2018	2019	2020
Jan/Feb	Barrels 000's	6,826	7,160	7,011	6,963	6,909
	RNZ USD GRM per barrel ¹⁾	7.96	6.58	7.54	4.88	1.04
	Singapore Dubai Complex GRM	4.95	3.42	3.37	-0.32	-1.58
	Uplift vs. Singapore Dubai Complex ³⁾	3.01	3.16	4.17	5.20	2.62
	NZD Processing Fee (million) ²⁾	57.0	45.9	50.8	34.9	23.0
Mar/Apr	Barrels 000's	7,471	5,140	6,958	7,312	4,656
	RNZ USD GRM per barrel ¹⁾	1.84	9.35	6.82	6.63	0.67
	Singapore Dubai Complex GRM	3.18	3.02	3.75	0.75	0.19
	Uplift vs. Singapore Dubai Complex ³⁾	-1.34	6.33	3.07	5.88	0.48
	NZD Processing Fee (million) ²⁾	14.8	48.1	45.8	50.1	23.7
May/Jun	Barrels 000's	6,837	7,755	3,910	6,945	3,867
	RNZ USD GRM per barrel ¹⁾	6.26	7.63	0.18	4.36	4.59
	Singapore Dubai Complex GRM	2.13	2.90	2.02	0.17	-3.78
	Uplift vs. Singapore Dubai Complex ³⁾	4.13	4.73	-1.84	4.19	8.37
	NZD Processing Fee (million) ^{2), 5)}	43.3	58.4	0.7	32.2	23.3
Jul/Aug	Barrels 000's	6,833	7,511	7,615	7,419	1,766
	RNZ USD GRM per barrel ¹⁾	6.20	8.87	6.86	7.10	-4.18
	Singapore Dubai Complex GRM	1.86	4.70	2.57	3.23	-2.46
	Uplift vs. Singapore Dubai Complex ³⁾	4.34	4.17	4.29	3.87	-1.73
	NZD Processing Fee (million) ²⁾	41.3	63.6	54.3	56.2	23.7
Sept/Oct	Barrels 000's	7,251	6,816	7,639	7,245	
	RNZ USD GRM per barrel ¹⁾	7.49	9.31	7.09	6.16	
	Singapore Dubai Complex GRM	3.18	4.73	2.47	3.55	
	Uplift vs. Singapore Dubai Complex ³⁾	4.31	4.58	4.62	2.61	
	NZD Processing Fee (million) ²⁾	52.5	62.2	57.8	49.3	
Nov/Dec	Barrels 000's	7,447	7,342	7,307	6,803	
	RNZ USD GRM per barrel ¹⁾	9.20	6.83	6.53	2.62	
	Singapore Dubai Complex GRM	4.19	3.67	1.80	-1.55	
	Uplift vs. Singapore Dubai Complex ³⁾	5.01	3.16	4.73	4.16	
	NZD Processing Fee (million) ²⁾	67.6	50.7	49.2	19.2	
Total	Barrels 000's	42,665	41,724	40,440	42,687	17,198
	USD GRM per barrel ¹⁾	6.47	8.02	6.31	5.34	1.20
	NZD Processing Fee (million) ²⁾	276.6	328.9	258.7	242.0	93.7
	YTD Cap adjustment					
	NZD Processing Fee (million) ¹⁾					

1) Excludes Fee Floor/Cap adjustment

2) Includes Fee Floor/Cap adjustment

3) RNZ uplift vs. Singapore Dubai Complex GRM is in USD per barrel



EXPLANATORY NOTES/GLOSSARY

LTI (Lost time injuries) and LTIF (Lost time injury frequency)

Lost time injuries refer to fatalities, permanent disabilities or time lost from work.

Lost time injury frequency refers to the number of lost time injuries over a rolling 12-month period, per 200,000 hours worked.

TRC (Total recordable cases) and TRCF (Total recordable case frequency)

Total recordable cases refer to lost time injuries, medical treatment and restricted work cases.

Total recordable case frequency refers to the number of recordable injuries over a rolling 12-month period, per 200,000 hours worked.

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; an 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.

Operational availability

Operational availability is the percent of time available for manufacturing after subtracting maintenance and regulatory/process downtimes.

Unplanned process downtime

A unit downtime is “planned” if the refinery is aware of and has scheduled that unit outage in the previous year. Unplanned process downtime is the weighted average of unplanned downtime across all process units.

Refining throughput

Refining throughput is the volume of feedstock intake, comprising crude oil, residues, natural gas and blendstock, measured in barrels. One barrel equates to approximately 159 litres.



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Turnaround

A scheduled outage of one or more process units, planned well in advance and typically occurring in cycles of 2 years or more, for the purpose of significant mechanical inspection and repair.

Gross Refining Margin (excluding Fee Floor/Margin Cap)

The Gross Refining Margin is calculated in USD as the difference between the value of products and the cost of feedstock for each refining customer. The value of products use Singapore quoted prices adjusted for New Zealand quality and the cost of importing those products to New Zealand. Feedstocks are valued using the notional market values adjusted for the cost of getting the feedstock to the refinery. The Gross Refining Margin incorporates the cost of hydrocarbon used as fuel and incurred as process losses.

Typically, Refining NZ has an uplift over the Singapore complex margins of around USD 3.00 to 4.00 per barrel. The value of the uplift varies due to fluctuations in freight rates, product quality premium, crude market premium and operational performance. Product quality premium are the cost differentials between products made to New Zealand quality and products made to the quality that applies to quoted prices in Singapore. Crude market premium are the cost differences between the crude types actually processed at Refining NZ and Dubai (used as basis for the Singapore complex margins). Refining NZ's crude diet comprises of crudes that price off Dubai as well as crudes that price off different markers such as Brent. The fluctuations of these price markers relative to each other impact the uplift.

Margin Cap/Fee Floor Adjustment

The processing agreements with our customers contain both Floor and Margin Cap clauses, both effective over a full calendar year. The Fee Floor is the minimum Processing Fee due, for a calendar year, up to a current maximum of NZD 140.0 million. If the year-to-date Processing Fee is below the pro-rata Fee Floor, then an interim pro-rata Fee Floor payment is made by the Customers. Should the Processing Fee exceed the Fee Floor in future months any pro-rata Fee Floor payments that have been made are repaid to the Customers. The Margin Cap limits the Gross Refining Margin for each customer to a maximum of USD 9.00 per barrel over the calendar year. Should the Gross Refining Margin fall below the Cap in future months any pro-rata Cap reductions that have been made are repaid by the Customers. The Cap and the Floor are subject to year-to-date adjustments. Any balance remaining at the end of the year cannot be carried over to the next year.

Processing Fee (after Fee Floor/Margin Cap)

The Processing Fee is 70% of the Gross Refining Margin after any adjustment for the Margin Cap or Fee Floor. The Processing Fee is paid by our customers in NZD.



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RAP throughput

RAP throughput is the volume of refined products, comprising gasoline, jet fuel and diesel that are delivered via the Refinery to Auckland Pipeline (RAP) to the Wiri oil terminal.