NEW ZEALAND EQUITY RESEARCH OIL & GAS OIL REFINERY 21 SEPTEMBER 2020

Refining NZ

Customer Costs Continue — July/August 2020 Operating Performance

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Refining NZ's (NZR) operating statistics for July/August 2020 show that processing fees before top-up payments were negative for the refinery, with the reported processing fee of NZ\$23.7m equivalent to the fee floor. The top-up payments from NZR's customers means it continues to operate cash neutral, although we estimate the effective top-up payment for this period was ~NZ\$31.5m due to the -US\$4.18/barrel July/August 2020 gross refining margin. NZR has indicated it expects the fee floor will be in operation for the remainder of the year, and as we await the outcome of the strategic review we maintain our NEUTRAL rating and make no changes to forecasts.

NZX Code	NZR	Financials: Dec/	19A	20E	21E	22E	Valuation (x)	19A	20E	21E	22
Share price	NZ\$0.61	NPAT* (NZ\$m)	4.2	-54.3	-34.4	25.4	PE	45.8	n/a	n/a	7.5
arget price	NZ\$0.80	EPS* (NZc)	1.3	-67.8	-11.0	8.1	EV/EBIT	24.2	n/a	n/a	9.
Risk rating	High	EPS growth* (%)	-85.9	n/a	83.8	n/a	EV/EBITDA	3.7	10.7	7.2	3.
ssued shares	312.6m	DPS (NZc)	2.0	0.0	0.0	0.0	Price / NTA	0.3	0.4	0.4	0.
Market cap	NZ\$191m	Imputation (%)	100	100	100	100	Cash div yld (%)	3.3	0.0	0.0	0.
Avg daily turnover	359.0k (NZ\$364k)	*Based on normalis	sed profit	S			Gross div yld (%)	4.6	0.0	0.0	0.

Grim throughput and refining margins, but NZR protected by the fee floor arrangements

As anticipated, NZR continued to operate at fee floor levels through July/August 2020, with a record low gross refining margin (GRM) of -US\$4.18/barrel. July/August 2020 is the first period where both the Singapore complex benchmark GRM and NZR's uplift have been negative at -US\$2.46/barrel and -US\$1.72/barrel respectively. Not helping the GRM was the six week shut down period (enabling customers to rebalance inventory), resulting in refinery throughput dropping to a record low 1.77m barrels, compared to 7.42m barrels during the same period last year. NZR's underlying processing fee was ~-NZ\$7.8m (i.e. before the fee floor top payment).

NZR's top-up payments ensured its processing fee equalled the fee floor of NZ\$23.7m. NZR continues to operate on a cash neutral basis and keep debt stable at NZ\$249m.

No change to forecasts as focus remains on Strategic Review outcomes

NZR has indicated that it expects to operate at the fee floor for the remainder of the year, which is consistent with our assumption that it receives the NZ\$140m processing fee floor for FY20 and continues to run at a dialled-down mode in the near-term. The main focus for the refinery remains the outcome of its Strategic Review, with the first stage focussed on operating the refinery on a cash neutral basis expected to be announced to market in early October (a week or two later than expected). However, the second stage of the Strategic Review looking at the possible conversion of NZR to an import terminal is the key part of the review, and until then NZR remains in a holding pattern from an investor's perspective.

We make no changes to our forecasts, and there remains a wide range of possible value outcomes from the second stage of the Strategic Review.

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Refining NZ (NZR)

Priced as at 21 Sep 2020 (NZ\$)					0.61						
12-month target price (NZ\$)*					0.80	Spot valuations (NZ\$)					
Expected share price return					31.1%	1. Scenario valuation					0.82
Net dividend yield					0.0%	2. n/a					n/a
Estimated 12-month return					31.1%	3. n/a	3. n/a				n/a
Key WACC assumptions						DCF valuation summary (NZ\$m)					
Risk free rate					1.30%	Total firm value					681
Equity beta					1.09	(Net debt)/cash					(256)
WACC					7.1%	Less: Capitalised operating leases					(===7
Terminal growth					0.0%	Value of equity					425
Profit and Loss Account (NZ\$m)	2018A	2019A	2020E	2021E	2022E	Valuation Ratios	2018A	2019A	2020E	2021E	2022E
Sales revenue	362	348	225	244	348	EV/EBITDA (x)	2.6	3.7	10.7	7.2	3.1
Normalised EBITDA	153	118	41	61	141	EV/EBIT (x)	7.2	24.2	n/a	n/a	9.9
Depreciation and amortisation	(97)	(100)	(102)	(99)	(96)	PE (x)	6.4	45.8	n/a	n/a	7.5
Normalised EBIT	56	18	(61)	(37)	44	Price/NTA (x)	0.3	0.3	0.4	0.4	0.4
Net interest	(14)	(13)	(13)	(11)	(9)	Free cash flow yield (%)	-30.3	20.7	-3.8	2.0	23.8
Associate income	0	0	0	0	0	Net dividend yield (%)	12.3	3.3	0.0	0.0	0.0
Tax	(12)	(1)	20	13	(10)	Gross dividend yield (%)	17.1	4.6	0.0	0.0	0.0
Minority interests	0	0	0	0	0						
Normalised NPAT	30	4	(54)	(34)	25	Capital Structure	2018A	2019A	2020E	2021E	2022E
Abnormals/other	0	0	(158)	0	0	Interest cover EBIT (x)	4.0	1.4	n/a	n/a	4.9
Reported NPAT	30	4	(212)	(34)	25	Interest cover EBITDA (x)	11.1	8.8	3.2	5.8	15.6
Normalised EPS (cps)	9.5	1.3	(67.8)	(11.0)	8.1	Net debt/ND+E (%)	25.3	24.1	31.7	32.9	27.6
DPS (cps)	7.5	2.0	0	0	0	Net debt/EBITDA (x)	1.7	2.0	6.1	4.0	1.4
Growth Rates	2018A	2019A	2020A	2021A	2022A	Key Ratios	2018A	2019A	2020E	2021E	2022E
Revenue (%)	-12.6	-3.9	-35.3	8.2	42.8	Return on assets (%)	4.0	1.3	-5.6	-3.5	4.2
EBITDA (%)	-30.7	-22.5	-65.4	50.1	>100	Return on equity (%)	3.9	0.5	-10.1	-6.9	4.8
EBIT (%)	-55.3	-67.1	n/a	n/a	n/a	Return on funds employed (%)	4.6	2.1	-4.8	-2.8	5.1
Normalised NPAT (%)	-62.3	-85.9	n/a	n/a	n/a	EBITDA margin (%)	42.1	33.9	18.2	25.2	40.3
Normalised EPS (%)	-62.3	-85.9	n/a	n/a	n/a	EBIT margin (%)	15.3	5.3	-27.1	-15.3	12.7
Ordinary DPS (%)	-58.3	-73.3	-100.0	n/a	n/a	Capex to sales (%)	44.8	22.3	16.3	26.6	21.6
						Capex to depreciation (%)	167	78	36	66	78
Cash Flow (NZ\$m)	2018A	2019A	2020E	2021E	2022E	Imputation (%)	100	100	100	100	100
EBITDA	153	118	41	61	141	Pay-out ratio (%)	79	150	0	0	0
Working capital change	(39)	23	(15)	4	(1)	ray outratio (70)	,,	150	Ü	Ü	· ·
Interest & tax paid	(25)	(19)	1	3	(19)	Operating Performance	2018A	2019A	2020E	2021E	2022E
Other	16	(6)	2	0	0	Revenue Breakdown (NZ\$m)	2010/1	201774	20202	LULIL	LULLL
Operating cash flow	105	117	30	69	121	Processing fee revenue	259	242	140	145	230
Capital expenditure	(162)	(78)	(37)	(65)	(75)	Natural gas recovery	32		24	28	41
(Acquisitions)/divestments	0	0	0	0	0	Other refining revenue	14		15	16	16
Other	0	0	0	0	0	Pipeline revenue	44		31	42	48
Funding available/(required)	(58)	39	(7)	4	45	Other revenue	14		15	13	13
Dividends paid	(47)	(20)	0	0	0	Total revenue	362		225	244	348
Equity raised/(returned)	(0)	(0)	0	0	0	iotarievenue	302	340	223	2-1-1	340
(Increase)/decrease in net debt	(105)	19	(7)	4	45	Processing fee drivers					
						Refining margin (USD/barrel)	6.2		2.2	3.7	5.6
Balance Sheet (NZ\$m)	2018A	2019A	2020E	2021E	2022E	NZDUSD	0.69	0.66	0.25	0.50	0.68
Working capital	19	(5)	10	6	7	Throughput (mbls)	40.4		23.4	28.0	40.0
Fixed assets	1,192	1,171	888	854	833	Refining margin (NZD/barrel)	6.2	5.7	2.6	3.8	5.8
Intangibles	14	22	17	17	17						
Right of use asset	0	0	0	0	0	Fee floor (estimated) (USD/barrel)	3.3	3.0	2.2	3.6	3.5
Other assets	0	4	3	3	3						
Total funds employed	1,226	1,193	918	880	860	Operating cost breakdown (NZ\$m)					
Net debt/(cash)	260	242	249	245	200	Process materials and utilities	49	59	45	48	55
Lease liability	0	0	0	0	0	Natural gas costs	32	40	24	28	41
Other liabilities	196	191	133	133	133	Materials & contractor payments	29	31	19	18	22
Shareholder's funds	769	760	535	500	525	Wages & salaries	61	61	62	56	57
Minority interests	0	0	0	1	1	Admin & other expenses	38	39	33	32	33

 $^{^{\}ast}$ Forsyth Barr target prices reflect valuation rolled forward at cost of equity less the next 12-months dividend

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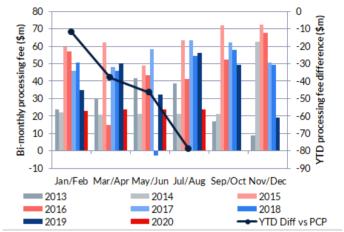
July/August 2020 operating performance

Figure 1. July/August 2020 operating statistics

	Jul/Aug	May/	Jul/Aug	% Diff	% Diff
	2019	Jun	2020	рср	mom
		2020			
Throughput (000 barrels)	7,419	3,867	1,766	-76%	-54%
Gross Refining Margin (US\$/	\$7.10	\$4.59	-\$4.18	n/a	n/a
barrel)					
NZDUSD	0.656	0.630	0.660	1%	5%
NZD processing revenue (NZ\$m)	56.2	23.3	23.7	-58%	2%
Fee floor payment (NZ\$m)	0.0	3.6	31.5		

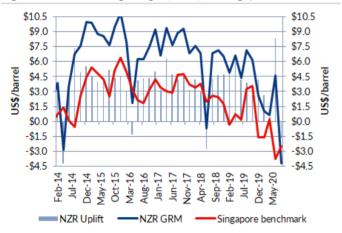
Source: NZR, Forsyth Barr analysis

Figure 2. Bi-monthly processing fee revenue



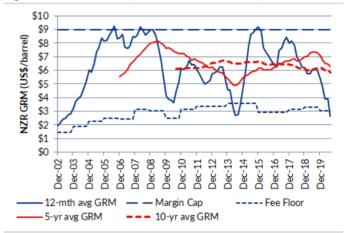
Source: NZR, Forsyth Barr analysis

Figure 3. Gross refining margin (GRM) vs. Singapore benchmark



Source: NZR, Forsyth Barr analysis

Figure 4. Historic GRM (excludes fee floor effect)



Source: NZR, Forsyth Barr analysis

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Figure 5. Price performance



Source: Forsyth Barr analysis

Figure 6. Substantial shareholders

Shareholder	Latest Holding
Mobil Oil NZ Limited	17.2%
Z Energy Holdings Limited	15.4%
BP	10.1%
Wellington Management Company	9.3%
ACC	5.0%

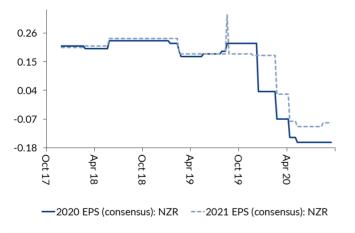
Source: NZX, Forsyth Barr analysis, NOTE: based on SPH notices only

Figure 7. International valuation comparisons

Company	Code	Price	Mkt Cap	PE		EV/EBITDA		EV/EBIT		Cash Yld	
(metrics re-weighted to reflect NZR's bal	(m)	2020E	2021E	2020E	2021E	2020E	2021E	2021E			
Refining NZ	NZR NZ	NZ\$0.61	NZ\$191	<0x	<0x	10.6x	7.0x	<0x	<0x	0.0%	
FORMOSA PETROCHEMICAL CORP	6505 TT	TWD84.80	TWD807,801	>50x	21.8x	29.0x	13.3x	44.9x	16.8x	3.1%	
IDEMITSU KOSAN CO	5019 JP	¥2426.00	¥722,620	4.4x	10.0x	11.9x	7.8x	<0x	23.8x	5.0%	
SK INNOVATION CO	096770 KS	KRW158500.00	KRW14,655,792	<0x	26.9x	<0x	9.5x	<0x	21.9x	1.8%	
S-OIL CORP	010950 KS	KRW54400.00	KRW6,124,504	<0x	9.4x	>75x	8.1x	<0x	12.4x	3.1%	
			Compco Average:	4.4x	17.0x	20.5x	9.7x	44.9x	18.7x	3.2%	
EV = Current Market Cap + Actual Net D	NZR Relative:	n/a	n/a	-48%	-27%	n/a	n/a	-100%			

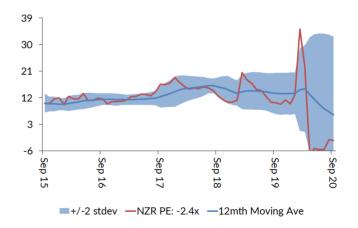
 $Source: *Forsyth \ Barr \ analysis, Bloomberg \ Consensus, Compcometrics \ re-weighted \ to \ reflect \ headline \ (NZR) \ companies \ fiscal \ year \ end$

Figure 8. Consensus EPS momentum (NZ\$)



Source: Forsyth Barr analysis

Figure 9. One year forward PE (x)



Source: Forsyth Barr analysis

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