

Refining NZ

NEUTRAL

Floored

Refining NZ (NZR) has had a difficult finish to FY19, with the Nov/Dec 2019 gross refining margin (GRM) of US\$2.62 the lowest non-outage impacted GRM since 2013. With the GRM below the fee floor of ~US\$3.00/barrel, there is no FY19 impact, but continued low margins will see top-up payments come into effect in early 2020. We have lowered our FY19 NPAT forecast -NZ\$6m to NZ\$0m and FY20 -NZ\$17m to NZ\$43m.

What's changed?

- **Earnings:** FY19/FY20 NPAT -\$6m/-17m to \$0m/\$43m respectively
- **Target Price:** Reduced -18cps to \$1.82
- **Rating:** NEUTRAL rating retained

GRM below fee floor level, but not an issue until 2020

The Nov/Dec 2019 GRM was US\$2.62/barrel. The Singapore benchmark margin was -US\$1.55/barrel, the lowest since Sept/Oct 2013, with IMO2020 regulations thus far having a negative impact on margins. NZR's uplift on the Singapore benchmark margin of +US\$4.17/barrel is solid and a recovery from the low uplift in the prior two-month period. Total processing fee revenue was NZ\$19.2m (FY19 NZ\$242.0m), the lowest non-outage figure since late 2013.

NZR's processing fee floor is NZ\$137.5m, which equates to a little over US\$3.00/barrel. The fee floor in GRM terms fluctuates depending on the NZDUSD fx rate and throughput volumes. Whilst the two month GRM is below the floor, the floor operates on an annual basis. Hence with FY19 processing fee revenue well above the floor, no top-up payment is required. However, if the low GRM persists, then a top-up will be required for Jan/Feb 2020, albeit that should be a temporary issue, with any payments reversed in later months.

IMO2020 a big negative, not a positive

The requirement for low sulphur shipping fuel was expected to be a modest positive for NZR (and most refiners). That has not proved to be the case. Whilst high sulphur fuel oil crack spreads have fallen significantly, as expected, diesel crack spreads have yet to lift materially, with significant product inventory reducing short-term diesel requirements.

Cutting near-term forecasts and dividend, long-term numbers unchanged

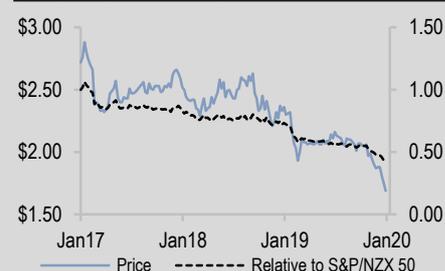
We have cut our FY19 NPAT -NZ\$6m to NZ\$0m. Our FY20 NPAT forecast is cut -NZ\$17m to NZ\$43m with the short-term outlook soft given no substantial recovery in the GRM as of yet. However, NZR notes one of its issues (high crude shipping rates) have started to come off following the China-US trade deal. With free cash flows marginal for the next two years (higher near-term maintenance capex), we have also trimmed our dividend forecast. We assume no FY19 final dividend (hence FY19 dividend is 2cps) and have cut our FY20 dividend -4cps to 8cps. Our target price is cut -18cps to \$1.82.

Investment View

Our rating is NEUTRAL. NZR's near-term outlook is challenging, with shipping fuel specification changes having a negative effect on the GRM. However, we believe these issues should be temporary, and expect the GRM to return to more normal levels later in 2020.

NZX Code	NZR
Share price	NZ\$1.69
Target price	1.82
Risk rating	High
Issued shares	312.6m
Market cap	NZ\$528m
Avg daily turnover	189.8k (NZ\$393k)

Share Price Performance



Financials	18A	19E	20E	21E
NPAT* (NZ\$m)	29.6	-0.3	43.1	53.5
EPS* (NZc)	9.5	-0.1	13.8	17.1
EPS growth* (%)	-62.3	n/a	n/a	24.0
DPS (NZc)	7.5	2.0	8.0	10.0
Imputation (%)	100	100	100	100

Valuation (x)	18A	19E	20E	21E
EV/EBITDA	4.8	6.7	4.5	4.1
EV/EBIT	13.3	n/a	11.1	9.4
PE	17.8	n/a	12.3	9.9
Price / NTA	0.7	0.7	0.7	0.7
Cash div yld (%)	4.4	1.2	4.7	5.9
Gross div yld (%)	6.2	1.6	6.6	8.2

*Historic/forecast numbers based on normalised profits

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Refining NZ (NZR)

Priced as at 21 Jan 2020 (NZ\$)

1.69
12-month target price (NZ\$)*
1.82
Spot valuations (NZ\$)

Expected share price return	7.7%	1. DCF	1.94
Net dividend yield	4.8%	2. Market multiples	1.58
Estimated 12-month return	12.5%	3. n/a	n/a

Key WACC assumptions

Risk free rate	2.00%
Equity beta	1.00
WACC	8.5%
Terminal growth	0.0%

DCF valuation summary (NZ\$m)

Total firm value	885
(Net debt)/cash	(281)
Less: Capitalised operating leases	
Value of equity	604

Profit and Loss Account (NZ\$m)

	2017A	2018A	2019E	2020E	2021E
Sales revenue	415	362	347	400	417
Normalised EBITDA	220	153	117	175	193
Depreciation and amortisation	-	(97)	(104)	(104)	(108)
Normalised EBIT	124	56	13	71	84
Net interest	(14)	(14)	(13)	(11)	(10)
Associate income	-	-	-	-	-
Tax	(32)	(12)	0	(17)	(21)
Minority interests	-	-	-	-	-
Normalised NPAT	79	30	(0)	43	53
Abnormals/other	-	-	-	-	-
Reported NPAT	79	30	(0)	43	53
Normalised EPS (cps)	25.1	9.5	(0.1)	13.8	17.1
DPS (cps)	18.0	7.5	2.0	8.0	10.0

Valuation Ratios

	2017A	2018A	2019E	2020E	2021E
EV/EBITDA (x)	3.2	4.8	6.7	4.5	4.1
EV/EBIT (x)	5.8	13.3	62.1	11.1	9.4
PE (x)	6.7	17.8	n/a	12.3	9.9
Price/NTA (x)	0.7	0.7	0.7	0.7	0.7
Free cash flow yield (%)	19.6	-10.9	4.5	1.7	11.6
Net dividend yield (%)	10.7	4.4	1.2	4.7	5.9
Gross dividend yield (%)	14.8	6.2	1.6	6.6	8.2

Capital Structure

	2017A	2018A	2019E	2020E	2021E
Interest cover EBIT (x)	9.0	4.0	1.0	6.3	8.3
Interest cover EBITDA (x)	16.0	11.1	9.0	15.4	19.0
Net debt/ND+E (%)	16.4	25.3	26.1	25.0	22.3
Net debt/EBITDA (x)	0.7	1.7	2.2	1.5	1.2

Growth Rates

	2017A	2018A	2019A	2020A	2021A
Revenue (%)	17.1	-12.6	-4.2	15.0	4.3
EBITDA (%)	31.7	-30.7	-23.2	49.3	10.0
EBIT (%)	55.2	-55.3	-77.1	>100	18.4
Normalised NPAT (%)	66.5	-62.3	n/a	n/a	24.0
Normalised EPS (%)	66.5	-62.3	n/a	n/a	24.0
Ordinary DPS (%)	100.0	-58.3	-73.3	>100	25.0

Key Ratios

	2017A	2018A	2019E	2020E	2021E
Return on assets (%)	9.3	4.0	0.9	5.0	6.0
Return on equity (%)	9.9	3.9	0.0	5.5	6.7
Return on funds employed (%)	10.1	4.6	1.6	5.6	6.5
EBITDA margin (%)	53.1	42.1	33.7	43.8	46.2
EBIT margin (%)	30.0	15.3	3.7	17.8	20.2
Capex to sales (%)	22.8	44.8	22.9	34.4	22.5
Capex to depreciation (%)	n/a	167	76	132	87
Imputation (%)	100	100	100	100	100
Pay-out ratio (%)	72	79	-2,352	58	58

Cash Flow (NZ\$m)

	2017A	2018A	2019E	2020E	2021E
EBITDA	220	153	117	175	193
Working capital change	23	(39)	(3)	(0)	(6)
Interest & tax paid	(37)	(25)	(22)	(28)	(31)
Other	(8)	16	11	-	-
Operating cash flow	198	105	103	146	155
Capital expenditure	(95)	(162)	(80)	(137)	(94)
(Acquisitions)/divestments	-	-	-	-	-
Other	(0)	-	-	-	-
Funding available/(required)	103	(58)	24	9	61
Dividends paid	(38)	(47)	(20)	(6)	(31)
Equity raised/(returned)	(1)	(0)	(0)	-	-
(Increase)/decrease in net debt	65	(105)	3	3	30

Operating Performance

	2017A	2018A	2019E	2020E	2021E
Revenue Breakdown (NZ\$m)					
Processing fee revenue	327	259	242	295	310
Natural gas recovery	24	32	40	41	41
Other refining revenue	12	14	15	14	14
Pipeline revenue	38	44	37	38	39
Other revenue	13	14	14	13	13
Total revenue	415	362	347	400	417

Processing fee drivers

	2017A	2018A	2019E	2020E	2021E
Refining margin (USD/barrel)	8.0	6.2	5.3	6.5	7.0
NZDUSD	0.71	0.69	0.66	0.67	0.68
Throughput (mbls)	41.7	40.4	42.7	43.0	43.0
Refining margin (NZD/barrel)	7.9	6.2	5.7	6.9	7.2

Fee floor (estimated) (USD/barrel)

	2017A	2018A	2019E	2020E	2021E
Fee floor (estimated) (USD/barrel)	3.2	3.3	3.0	3.1	3.2

Operating cost breakdown (NZ\$m)

	2017A	2018A	2019E	2020E	2021E
Process materials and utilities	46	49	59	54	51
Natural gas costs	24	32	40	41	41
Materials & contractor payments	31	29	31	31	32
Wages & salaries	59	61	62	64	65
Admin & other expenses	34	38	38	35	36
Total expenses	194	210	230	225	224

Balance Sheet (NZ\$m)

	2017A	2018A	2019E	2020E	2021E
Working capital	(17)	19	22	22	28
Fixed assets	1,129	1,192	1,169	1,202	1,188
Intangibles	8	14	18	18	18
Right of use asset	-	-	-	-	-
Other assets	-	0	0	0	0
Total funds employed	1,120	1,226	1,208	1,242	1,234
Net debt/(cash)	155	260	263	260	229
Lease liability	-	-	-	-	-
Other liabilities	172	196	204	204	204
Shareholder's funds	792	769	742	778	800
Minority interests	0	0	0	0	1
Total funding sources	1,120	1,226	1,208	1,242	1,234

* Forsyth Barr target prices reflect valuation rolled forward at cost of equity less the next 12-months dividend

Nov/Dec 2019 operating statistics

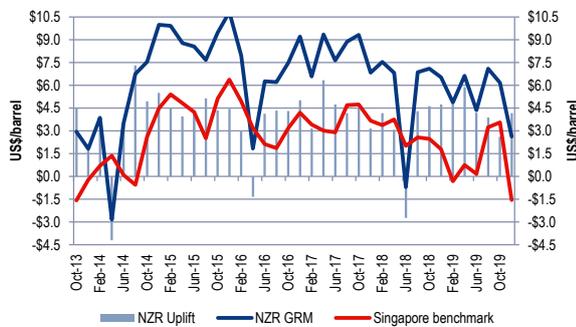
Figure 1. Operating statistics

Bi-monthly data	Nov/Dec	Sep/Oct	Nov/Dec	% Diff pcp	% Diff mom
	2018	2019	2019		
Throughput (000 barrels)	7,307	7,245	6,803	-7%	-6%
Gross Refining Margin (US\$/barrel)	\$6.53	\$6.16	\$2.62	-60%	-57%
NZDUSD	0.679	0.634	0.650	-4%	3%
NZD processing revenue (\$m)	49.2	49.3	19.2	-61%	-61%

Semi-annual data	2H18	1H19	2H19	% Diff pcp	% Diff hoh
	Throughput (000 barrels)	22,562	21,220		
Gross Refining Margin (US\$/barrel)	\$6.83	\$5.31	\$5.36	-21%	1%
NZD processing revenue (\$m)	161.3	117.2	124.7	-23%	6%

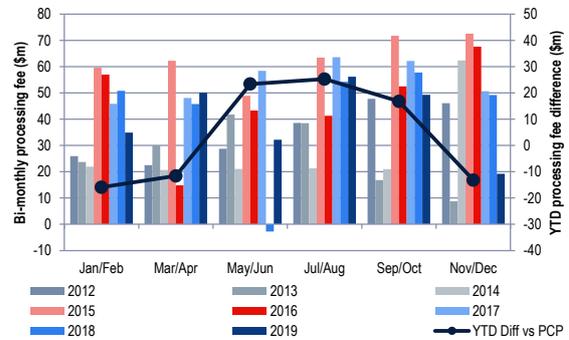
Source: NZR, Forsyth Barr analysis

Figure 2. GRM breakdown



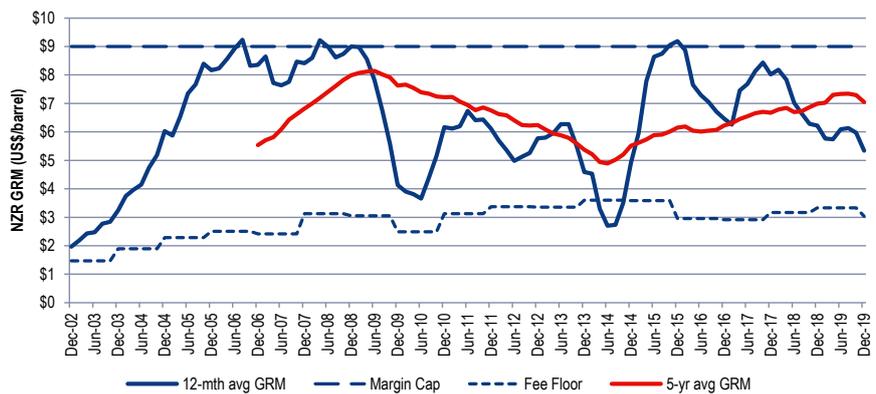
Source: NZR, Forsyth Barr analysis

Figure 3. Historic NZ\$ processing fee



Source: NZR, Forsyth Barr analysis

Figure 4. Historic GRM vs. margin cap and fee floor



Source: NZR, Forsyth Barr analysis

Forecast changes

Figure 5. Forecast changes

	FY19	FY19		FY20	FY20		FY21	FY21	
	Old	New	% Chg	Old	New	% Chg	Old	New	% Chg
	\$m	\$m		\$m	\$m		\$m	\$m	
Processing fees	251	242	-4%	317	295	-7%	310	310	0%
Natural gas recovery	40	40	0%	41	41	0%	41	41	0%
Other income	66	66	0%	64	64	0%	66	66	0%
Total Revenue	356	347	-2%	422	400	-5%	417	417	0%
Natural gas pass through costs	(40)	(40)	0%	(41)	(41)	0%	(41)	(41)	0%
Operating costs	(191)	(190)	0%	(184)	(184)	0%	(183)	(183)	0%
EBITDA	126	117	-7%	197	175	-11%	193	193	0%
Depreciation / amortisation	(104)	(104)	0%	(104)	(104)	0%	(108)	(108)	0%
EBIT	21	13	-40%	94	71	-24%	84	84	0%
Net interest	(13)	(13)	1%	(11)	(11)	7%	(10)	(10)	3%
Pre-tax profit	8	(0)	n/m	83	60	-28%	75	74	-1%
Tax expense	(2)	0	n/m	(23)	(17)	-28%	(21)	(21)	-1%
Profit after tax	6	(0)	n/m	60	43	-28%	54	53	-1%
Earnings per share	1.9	-0.1	n/m	19.1	13.8	-28%	17.2	17.1	-1%
Dividend per share	4.0	2.0	-50%	12.0	8.0	-33%	12.0	10.0	-17%
Barrels Processed (000)	43,220	42,687	-1%	43,000	43,000	0%	43,000	43,000	0%
GRM (US\$/barrel)	\$5.45	\$5.34	-2%	\$7.00	\$6.52	-7%	\$7.00	\$7.00	0%
NZDUSD	0.659	0.660	0%	0.665	0.665	0%	0.680	0.680	0%
Capital expenditure (\$m)	(80)	(80)	0%	(137)	(137)	0%	(94)	(94)	0%

Source: Forsyth Barr analysis

Investment summary

Our rating is NEUTRAL. NZR’s near-term outlook is challenging, with shipping fuel specification changes having a negative effect on the GRM. However, we believe these issues should be temporary, and expect the GRM to return to more normal levels later in 2020.

Business quality

- **Important piece of NZ infrastructure:** NZR produces ~70% of New Zealand’s refined fuel requirements and is a core part of the fuel supply infrastructure. In addition, the refinery to Wiri (Auckland) pipeline is a key strategic asset. Auckland is serviced solely from the refinery, which means NZR will always have a future supplying Auckland.
- **NZR margin uplift:** NZR typically receives +US\$3 to US\$4/barrel more than the Singapore complex margin with freight differentials (it is cheaper to import bulk crude than refined product) and product differentials being the primary drivers.

Earnings and cash flow outlook

- **Significant operating leverage:** NZR is a high fixed cost business meaning changes in the gross refining margin (GRM) and NZDUSD have a significant impact on processing fee revenue and therefore earnings. These two factors are NZR’s main value drivers and both are notoriously volatile.
- **Shipping fuel oil changes:** Ships need to switch to low sulphur products from 2020 which could be either positive or negative for NZR, but to date have been negative.
- **Asia/Pacific refining capacity:** Surplus refining capacity is forecast to fall in the next few years, which should be supportive of refining margins.

Financial structure

- **Moderate financial leverage:** NZR targets debt levels below \$200m, however, periods of low earnings and/or high capex can result in higher debt levels. Whilst NZR has some downside protection from a processing fee floor, it limits losses, as opposed to preventing them.

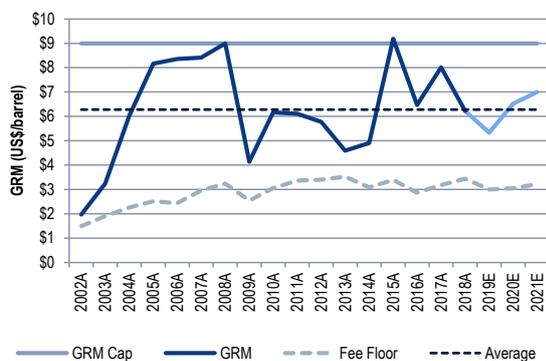
Risk factors

- **Capex outlook:** High operating leverage within NZR mean controlling opex and capex is very important. NZR’s guided long-term capex of ~\$64m is significantly lower than historic capex levels and if underlying opex/capex were to increase, that would have a material impact on NZR’s value.
- **Falling fuel volumes:** A long-term threat to NZR is a fall in fuel demand. However, in our view the material impacts of lower volumes is beyond 2040.

Company description

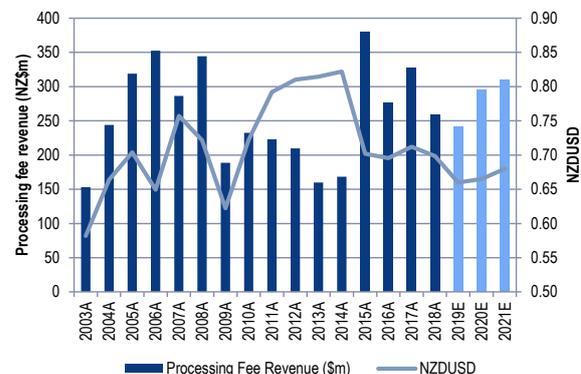
NZR refines crude oil for the NZ market at the Marsden Point Oil Refinery. It produces approximately 60% of NZ’s petrol, 65% of diesel and 85% of jet fuel. NZR also owns and operates a pipeline to Wiri, in south Auckland, supplying all of Auckland’s refined product. NZR is a tolling operation, receiving a processing fee for refining crude oil. It has a fixed cost base and therefore has high operating leverage to global refining margins and the NZDUSD. NZR’s customers are the main three main fuel retailers, Z Energy, BP and Mobil.

Figure 6. Gross refining margin



Source: NZR, Forsyth Barr analysis

Figure 7. Processing fee revenue



Source: NZR, Forsyth Barr analysis

Figure 8. 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%

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

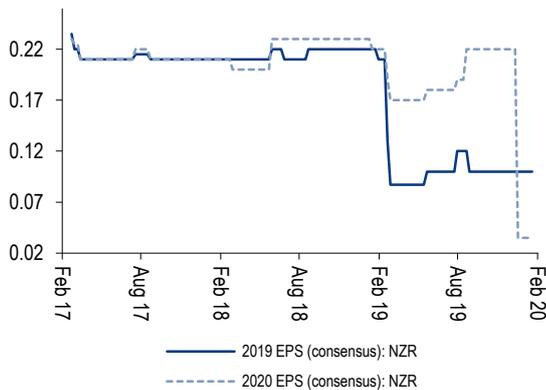
Figure 9. International Compcos

Company	Code	Price	Mkt Cap (m)	PE		EV/EBITDA		EV/EBIT		Cash D/Yld 2020E	
				2019E	2020E	2019E	2020E	2019E	2020E		
Refining NZ	NZR NZ	NZ\$1.69	NZ\$528	<0x	12.3x	6.7x	4.5x	61.9x	11.1x	4.7%	
Formosa Petrochemical Corp	6505 TT	TWD96.90	TWD923,065	25.1x	n/a	10.5x	n/a	12.8x	n/a	n/a	
Idemitsu Kosan Co	5019 JP	¥2972.00	¥897,323	8.0x	7.1x	7.1x	6.1x	13.2x	n/a	5.7%	
Showa Shell Sekiyu KK	5002 JP	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
SK Innovation Co	096770 KS	KRW135500.00	KRW12,529,084	17.1x	9.0x	7.3x	5.8x	12.3x	8.6x	5.2%	
S-Oil Corp	010950 KS	KRW83700.00	KRW9,423,180	37.8x	9.3x	13.2x	8.0x	24.2x	9.9x	4.0%	
				Compcos Average:	22.0x	8.4x	9.5x	6.6x	15.6x	9.2x	5.0%
				NZR Relative:	n/a	+45%	-29%	-32%	+296%	+20%	-5%

EV = Current Market Cap + Actual Net Debt

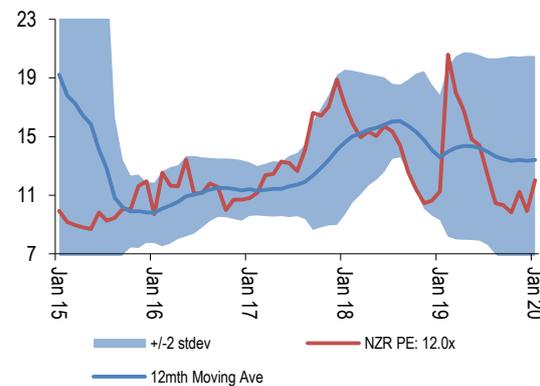
Source: *Forsyth Barr analysis, Bloomberg Consensus, Compcos metrics re-weighted to reflect headline (NZR) companies fiscal year end

Figure 10. Consensus EPS Momentum



Source: Forsyth Barr analysis, Bloomberg

Figure 11. 12 Month Forward PE



Source: Forsyth Barr analysis

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