

# Z Energy

## Refining the Outlook

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### OUTPERFORM

Z Energy (ZEL) is facing its toughest operating environment ever, making the 2Q20 and 3Q20 retail margin collapse look like a walk in the park. Lockdown fuel volumes are down materially, with retail volumes down ~-80%. However, the blended provisional petrol/diesel MBIE importer margin is up materially, up +34% on 2H20 to 42.6cpl, helping offset the volume declines. We have cut our FY21 EBITDAF forecast -11% to \$238m, reflecting lower fuel volumes and a lower refining margin outlook. However, our target price is unchanged at \$4.00 as operating cost cuts boost earnings relative to prior expectations. We also retain our OUTPERFORM rating.

NZX Code	ZEL	Financials: Mar/	19A	20E	21E	22E	Valuation (x)	19A	20E	21E	22E
Share price	NZ\$3.15	NPAT* (NZ\$m)	195.8	129.7	37.7	133.5	EV/EBITDA	4.6	5.8	9.1	6.0
Target price	NZ\$4.00	EPS* (NZc)	49.0	32.4	9.4	33.4	EV/EBIT	6.4	9.7	22.5	9.6
Risk rating	Medium	EPS growth* (%)	-7.4	-33.8	-70.9	n/a	PE	6.4	9.7	33.4	9.4
Issued shares	400.0m	DPS (NZc)	43.0	16.5	20.0	30.0	Price / NTA	5.0	36.3	10.9	7.4
Market cap	NZ\$1,260m	Imputation (%)	100	100	100	100	Cash div yld (%)	13.7	5.2	6.3	9.5
Avg daily turnover	889.1k (NZ\$4,607k)	*Based on normalised profits					Gross div yld (%)	19.0	7.3	8.8	13.2

#### Lockdown volumes lower than envisaged, but retail margins higher

Lockdown volumes are tracking lower than envisaged when we made our initial COVID-19 forecast changes before the lockdown took effect. Total ZEL volumes are down -71% vs. pre-lockdown volumes, with retail down ~-80% and jet down -76%. However, MBIE retail margins are tracking materially higher, aided by falling crude oil prices. In the first three weeks of April petrol margins are +44% higher than 2H20 at 43.2cpl, a new record.

#### Revised forecasts reflect weaker volume and gross refining margin outlook, but stronger fuels margin outlook

We have cut our FY20 EBITDAF forecast -\$10m to \$362m, towards the upper end of ZEL's revised \$355m to \$365m guidance range. All of the earnings cut is due to a large \$27m provision, offset by strong retail margins. Our FY21 EBITDAF forecast is down -\$28m to \$238m on lower volume and refining margin assumptions, partially offset by higher retail margins and greater cost out. In updating our forecast, we have considered the timing of possible Alert Level changes and volumes at each Alert Level. Whilst our short-term forecasts are down on earlier expectations, there is still a huge amount of uncertainty about the outlook. Volumes, fuel margins and refining margins are likely to be volatile for some time yet.

#### Debt covenants appear under threat, but ZEL still has time

Our revised forecasts suggest ZEL will get very close to breaching its 3.5x net debt/EBITDAF retail bond covenant. However, 1H21 earnings remain critical, as our analysis also shows that ZEL is unlikely to breach the 3.5x level twice in a row, if it can avoid doing so in 1H21. ZEL, therefore, has time to assess how earnings are tracking in 1Q21 before making a decision on remedial action.

#### ZEL remains a quality business with potential upside post COVID-19

We retain our OUTPERFORM rating and \$4.00 target price. ZEL has a strong market position that will hold it in good stead during the next few months. There is a strong likelihood that some smaller service stations will have to shut, allowing ZEL to gain market share. In addition, ZEL's cost out programme (with details to be revealed at the FY20 result) will leave it in a stronger position post COVID-19.

**Z Energy (ZEL)**

Priced as at 23 Apr 2020 (NZ\$)

**3.15**

<b>12-month target price (NZ\$)*</b>	<b>4.00</b>
Expected share price return	27.0%
Net dividend yield	6.6%
Estimated 12-month return	33.6%

<b>Spot valuations (NZ\$)</b>	
1. DCF	3.97
2. Dividend Yield	3.79
3. Market Multiple	3.98

<b>Key WACC assumptions</b>	
Risk free rate	2.00%
Equity beta	0.84
WACC	7.2%
Terminal growth	-2.0%

<b>DCF valuation summary (NZ\$m)</b>	
Total firm value	2,858
(Net debt)/cash	(972)
Less: Capitalised operating leases	(299)
Value of equity	1,587

<b>Profit and Loss Account (NZ\$m)</b>	<b>2018A</b>	<b>2019A</b>	<b>2020E</b>	<b>2021E</b>	<b>2022E</b>
Sales revenue	4,570.0	5,450.0	4,904.2	2,758.5	3,968.3
<b>Normalised EBITDA</b>	<b>448.0</b>	<b>435.0</b>	<b>362.5</b>	<b>237.7</b>	<b>361.9</b>
Depreciation and amortisation	(102.0)	(122.0)	(146.6)	(141.3)	(137.0)
<b>Normalised EBIT</b>	<b>347.0</b>	<b>312.0</b>	<b>214.9</b>	<b>96.4</b>	<b>224.9</b>
Net interest	(52.0)	(51.0)	(63.8)	(56.7)	(51.1)
Associate income	1.0	(1.0)	(1.0)	0	0
Tax	(82.0)	(61.0)	(40.0)	(11.1)	(48.7)
Minority interests	0	(2.0)	(18.6)	(9.2)	(8.3)
<b>Normalised NPAT</b>	<b>211.5</b>	<b>195.8</b>	<b>129.7</b>	<b>37.7</b>	<b>133.5</b>
Abnormals/other	(6.5)	(15.8)	(35.0)	0	0
<b>Reported NPAT</b>	<b>205.0</b>	<b>180.0</b>	<b>94.7</b>	<b>37.7</b>	<b>133.5</b>
Normalised EPS (cps)	52.9	49.0	32.4	9.4	33.4
DPS (cps)	32.3	43.0	16.5	20.0	30.0

<b>Valuation Ratios</b>	<b>2018A</b>	<b>2019A</b>	<b>2020E</b>	<b>2021E</b>	<b>2022E</b>
EV/EBITDA (x)	4.6	4.6	5.8	9.1	6.0
EV/EBIT (x)	6.0	6.4	9.7	22.5	9.6
PE (x)	6.0	6.4	9.7	33.4	9.4
Price/NTA (x)	11.8	5.0	36.3	10.9	7.4
Free cash flow yield (%)	24.1	22.5	3.2	16.0	10.7
Net dividend yield (%)	10.3	13.7	5.2	6.3	9.5
Gross dividend yield (%)	14.2	19.0	7.3	8.8	13.2
<b>Capital Structure</b>	<b>2018A</b>	<b>2019A</b>	<b>2020E</b>	<b>2021E</b>	<b>2022E</b>
Interest cover EBIT (x)	6.7	6.1	3.4	1.7	4.4
Interest cover EBITDA (x)	8.6	8.5	5.7	4.2	7.1
Net debt/ND+E (%)	57.2	55.4	63.4	57.0	56.5
Net debt/EBITDA (x)	1.8	1.9	2.8	3.5	2.3

<b>Growth Rates</b>	<b>2018A</b>	<b>2019A</b>	<b>2020E</b>	<b>2021E</b>	<b>2022E</b>
Revenue (%)	18.3	19.3	-10.0	-43.8	43.9
EBITDA (%)	6.9	-2.9	-16.7	-34.4	52.3
EBIT (%)	3.3	-10.1	-31.1	-55.2	>100
Normalised NPAT (%)	8.2	-7.4	-33.8	-70.9	>100
Normalised EPS (%)	8.2	-7.4	-33.8	-70.9	>100
Ordinary DPS (%)	10.2	33.1	-61.6	21.2	50.0

<b>Key Ratios</b>	<b>2018A</b>	<b>2019A</b>	<b>2020E</b>	<b>2021E</b>	<b>2022E</b>
Return on assets (%)	12.4	11.0	7.1	3.4	7.7
Return on equity (%)	24.7	21.3	15.8	4.4	15.6
Return on funds employed (%)	17.4	15.8	9.8	4.8	11.1
EBITDA margin (%)	9.8	8.0	7.4	8.6	9.1
EBIT margin (%)	7.6	5.7	4.4	3.5	5.7
Capex to sales (%)	1.9	1.0	1.8	1.6	1.1
Capex to depreciation (%)	140	85	107	56	56
Imputation (%)	100	100	100	100	100
Pay-out ratio (%)	61	88	51	212	90

<b>Cash Flow (NZ\$m)</b>	<b>2018A</b>	<b>2019A</b>	<b>2020E</b>	<b>2021E</b>	<b>2022E</b>
<b>EBITDA</b>	<b>448.0</b>	<b>435.0</b>	<b>362.5</b>	<b>237.7</b>	<b>361.9</b>
Working capital change	61.0	(159.0)	91.0	87.1	(69.7)
Interest & tax paid	(103.0)	(161.0)	(133.3)	(74.0)	(107.7)
Other	(15.0)	223.0	(192.0)	(4.0)	(4.0)
<b>Operating cash flow</b>	<b>391.0</b>	<b>338.0</b>	<b>128.2</b>	<b>246.8</b>	<b>180.6</b>
Capital expenditure	(87.0)	(55.0)	(87.7)	(45.0)	(45.4)
(Acquisitions)/divestments	18.0	(28.0)	36.0	0	0
Other	12.0	4.0	(27.0)	(28.0)	(28.0)
<b>Funding available/(required)</b>	<b>334.0</b>	<b>259.0</b>	<b>49.5</b>	<b>173.8</b>	<b>107.1</b>
Dividends paid	(134.0)	(152.0)	(198.0)	0	(120.0)
Equity raised/(returned)	(2.0)	(1.0)	0	0	0
<b>(Increase)/decrease in net debt</b>	<b>198.0</b>	<b>106.0</b>	<b>(148.5)</b>	<b>173.8</b>	<b>(12.9)</b>

<b>Operating Performance</b>	<b>2018A</b>	<b>2019A</b>	<b>2020E</b>	<b>2021E</b>	<b>2022E</b>
<b>Product volumes (m litres)</b>					
Petrol	1,204	1,165	1,100	865	1,062
Diesel - retail	461	454	439	346	424
Diesel - commercial	807	812	791	678	759
Other fuels	1,153	1,193	1,137	410	808
Supply - domestic	520	544	543	455	528
<b>Sub-total</b>	<b>4,145</b>	<b>4,168</b>	<b>4,011</b>	<b>2,754</b>	<b>3,580</b>
Supply - industry & export	178	280	84	55	95
<b>Total Fuels</b>	<b>4,323</b>	<b>4,448</b>	<b>4,095</b>	<b>2,809</b>	<b>3,675</b>
Retail service stations	343	343	338	331	330
Petrol/service station (m litres)	3.72	3.61	3.42	2.70	3.32
Diesel/service station (m litres)	1.34	1.32	1.29	1.03	1.28
<b>Gross profit (NZDm)</b>					
Fuels	685	700	666	549	619
Refining	77	54	48	(28)	47
Non-fuels	76	81	79	55	73
Flick Electric	0	1	4	6	8
<b>Gross profit</b>	<b>838</b>	<b>836</b>	<b>796</b>	<b>583</b>	<b>747</b>
Fuels gross margin (cpl)	16.5	16.8	16.6	19.9	17.3
Fuels margin incl refining (cpl)	17.6	17.0	17.4	18.5	18.1
Fuels margin excl supply (cpl)	18.3	18.0	17.8	18.9	18.6
Non-fuels revenue/station (NZD 000)	373	398	389	274	363

<b>Balance Sheet (NZ\$m)</b>	<b>2018A</b>	<b>2019A</b>	<b>2020E</b>	<b>2021E</b>	<b>2022E</b>
Working capital	196.0	358.0	288.0	200.9	270.5
Fixed assets	870.0	830.0	805.8	779.7	754.5
Intangibles	750.0	668.0	785.3	733.0	684.6
Right of use asset	0	0	286.0	286.0	286.0
Other assets	134.0	161.0	219.0	219.0	219.0
<b>Total funds employed</b>	<b>1,950.0</b>	<b>2,017.0</b>	<b>2,384.1</b>	<b>2,218.6</b>	<b>2,214.7</b>
Net debt/(cash)	824.0	827.0	1,014.5	826.7	825.5
Lease liability	0	0	299.0	299.0	299.0
Other liabilities	269.0	270.0	250.5	244.3	236.4
Shareholder's funds	857.0	902.0	820.7	858.4	871.8
Minority interests	0	18.0	(0.6)	(9.8)	(18.1)
<b>Total funding sources</b>	<b>1,950.0</b>	<b>2,017.0</b>	<b>2,384.1</b>	<b>2,218.6</b>	<b>2,214.7</b>

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

## Headline forecast changes

In light of new Alert Level information, Level 4 volumes and MBIE margins, we have reviewed our forecasts. Our FY21 EBITDAF forecast is down -\$19m to \$247m. We have also reduced our FY20 EBITDAF forecast -\$10m to \$362m following ZEL's revised \$355m to \$365m guidance range.

Key changes:

- Taken into consideration is ZEL's revised guidance range, in particular the \$27m COVID-19 related provision
- Reduced FY21 volumes -11% to 2,754m litres (-31% lower than FY20)
- Increased the FY21 retail margin assumption +4cpl to 30cpl. The overall company fuels margin has increased +2.4cpl to 19.9cpl.
- Reduced the refinery gross profit contribution -\$49m. This largely offsets the increase in fuel margins
- Reduced operating costs -\$21m

A more detailed table showing the changes made is presented in the Appendix.

**Figure 1. Summary forecast changes**

	FY20	FY20	%	FY21	FY21	%	FY22	FY22	%
	Old	New	Chg	Old	New	Chg	Old	New	Chg
<b>Gross profit</b>	<b>780</b>	<b>797</b>	<b>2%</b>	<b>632</b>	<b>583</b>	<b>-8%</b>	<b>743</b>	<b>747</b>	<b>1%</b>
Operating costs	(408)	(435)	7%	(366)	(345)	-6%	(394)	(385)	-2%
<b>EBITDAF</b>	<b>372</b>	<b>362</b>	<b>-2%</b>	<b>266</b>	<b>238</b>	<b>-11%</b>	<b>348</b>	<b>362</b>	<b>4%</b>
EBIT	225	216	-4%	124	96	-23%	211	225	6%
NPAT (post-minorities)	99	93	-8%	57	38	-41%	123	133	9%
<b>Dividend (cps)</b>	<b>16.5</b>	<b>16.5</b>	<b>0%</b>	<b>20.0</b>	<b>20.0</b>	<b>0%</b>	<b>30.0</b>	<b>30.0</b>	<b>0%</b>
Volumes (excl supply)	4,011	4,011	0%	3,106	2,754	-11%	3,865	3,580	-7%
Gross margin excl supply (cpl)	16.2	16.6	2%	17.5	19.9	14%	15.6	17.3	11%
Gross margin incl refining (cpl)	17.5	17.8	2%	18.2	18.9	4%	17.1	18.6	9%

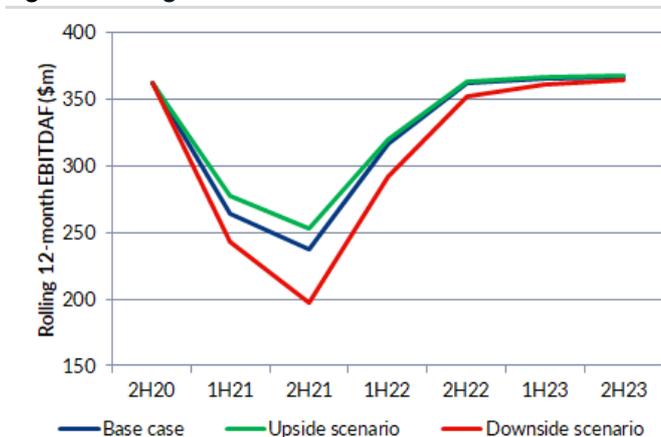
Source: Forsyth Barr analysis

## Volumes scenario analysis and debt covenant implications

In assessing future fuel demand we have looked at two additional scenarios, depending on when Alert Level restrictions are eased. When New Zealand moves from Alert Level 3 to 2 is important to ZEL, as that should be a strong catalyst for an increase in retail volumes.

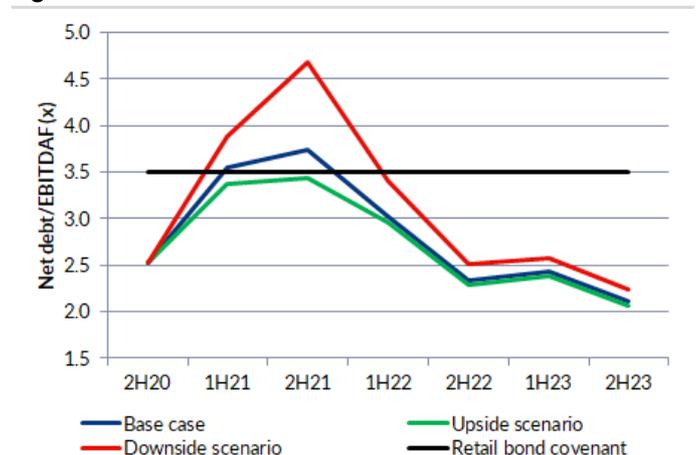
Under our base case scenario, ZEL will marginally breach the 3.5x net debt/EBITDAF retail bond covenant ratio at the 1H21 result and again at 2H21 (two consecutive periods with the net debt/EBITDAF ratio above 3.5x is required for a breach). However, under our upside scenario it will not, albeit the margin is still very small.

**Figure 2. Rolling 12-month EBITDAF**



Source: Forsyth Barr analysis

**Figure 3. Net debt/EBITDAF ratio**



Source: Forsyth Barr analysis

What happens to earnings in 1H21 is of critical importance, as our analysis indicates that even under the downside scenario, ZEL's debt level will be below 3.5x at 1H22 (or more to the point, ZEL's earnings will have increased sufficiently). If ZEL's net debt/EBITDA is not above 3.5x following the 1H21 result, it is unlikely to breach its retail bond covenant. ZEL, therefore, has time to assess operating conditions and earnings during 1Q21 to see whether remedial action is required.

## Context for this update

There are four key earnings drivers for ZEL at present, two of which are completely outside its control (in the short-term):

- Sales volumes
- Retail margins
- Refining fee floor payments
- Operating costs

### Level 4 lockdown volumes not pretty...

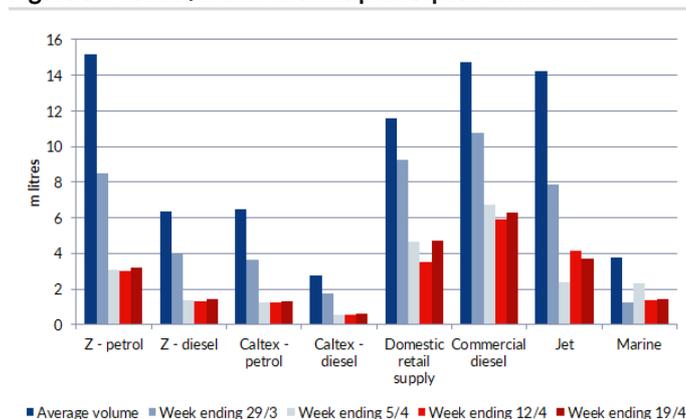
Retail lockdown volumes are tracking ~-80% below normal and commercial diesel volumes are down -57%. Overall, lockdown volumes are tracking -71% down on pre-lockdown levels. Whilst there was a modest improvement in volumes in the week ending 19 April, it is very modest. The retail volume declines are similar across both petrol and diesel, and across brands. In addition, other fuel retailers have reported similar volumes declines – so it is not a Z/Caltex specific issue.

Figure 4. ZEL lockdown fuel volumes

	Average volume m litres	Week ending 12/4 m litres	Week ending 19/4 m litres	% diff to average	% diff to last week	Lockdown average m litres	% diff to average
<b>Volumes by brand/product</b>							
Z - petrol	15.2	3.0	3.2	-79%	7%	3.1	-80%
Z - diesel	6.4	1.3	1.4	-77%	8%	1.4	-78%
Caltex - petrol	6.5	1.2	1.3	-80%	4%	1.2	-81%
Caltex - diesel	2.8	0.6	0.6	-78%	6%	0.6	-79%
Domestic retail supply	11.6	3.5	4.7	-59%	34%	4.3	-63%
Commercial diesel	14.7	5.9	6.3	-57%	6%	6.3	-57%
Jet	14.2	4.1	3.7	-74%	-11%	3.4	-76%
Marine	3.8	1.4	1.5	-61%	4%	1.7	-54%
<b>Volumes by category</b>							
Total Z	21.6	4.3	4.6	-78%	7%	4.5	-79%
Total Caltex	9.2	1.8	1.9	-80%	5%	1.8	-80%
Total retail petrol	21.7	4.2	4.5	-79%	6%	4.3	-80%
Total retail diesel	9.1	1.9	2.0	-78%	7%	2.0	-79%
Total retail (incl supply)	42.4	9.7	11.3	-73%	17%	10.6	-75%
Total commercial	32.7	11.4	11.4	-65%	0%	11.4	-65%
<b>Total volumes</b>	<b>75.0</b>	<b>21.1</b>	<b>22.7</b>	<b>-70%</b>	<b>8%</b>	<b>22.0</b>	<b>-71%</b>

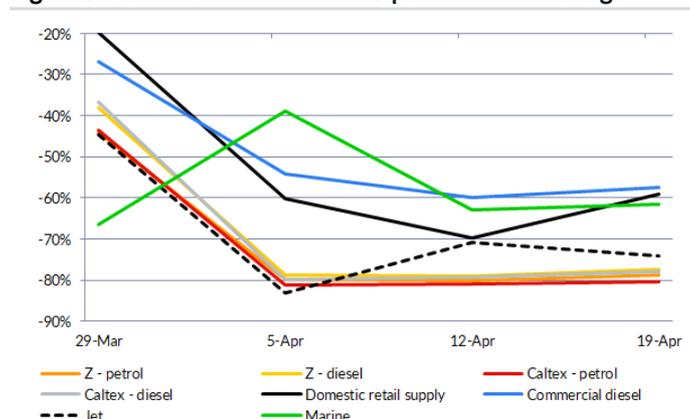
Source: ZEL, Forsyth Barr analysis

Figure 5. Product/brand volumes pre vs. post-lockdown



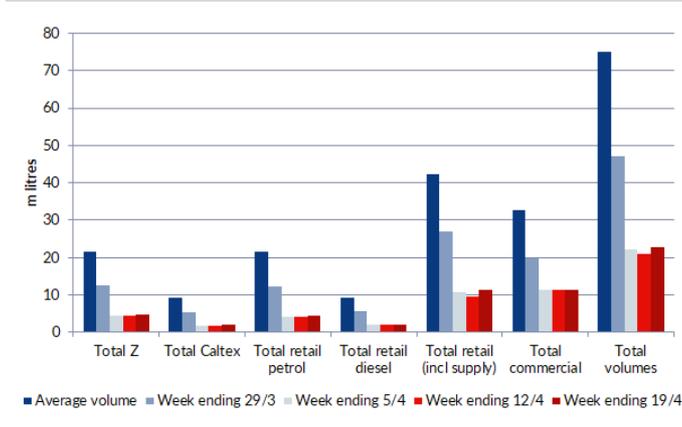
Source: ZEL, Forsyth Barr analysis

Figure 6. Product volume decline vs. pre-lockdown average



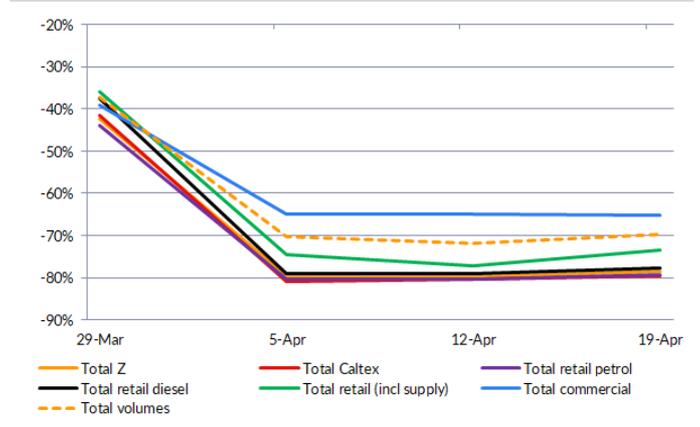
Source: ZEL, Forsyth Barr analysis

**Figure 7. Category volumes pre vs. post-lockdown**



Source: ZEL, Forsyth Barr analysis

**Figure 8. Category volume decline vs. pre-lockdown average**

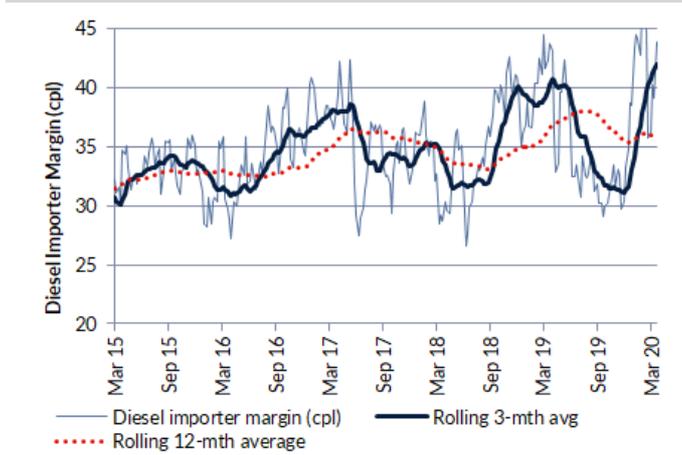


Source: ZEL, Forsyth Barr analysis

**But retail margins are healthy providing a partial offset to low volumes**

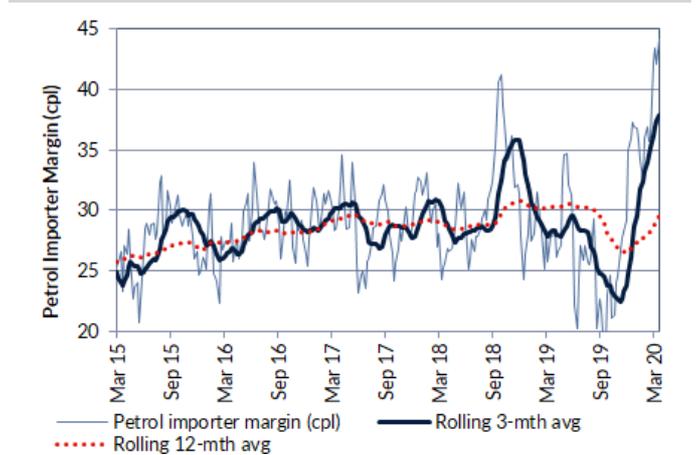
Rolling 3-month MBIE importer margins have hit new highs. The diesel margin is 41.9cpl and the petrol margin is 37.2cpl. However, in the three weeks of MBIE data during the lockdown, the petrol margin is tracking at 43.2cpl, up +13.2cpl in the 2H20 margin. Whilst falling crude oil prices provided the initial boost in 4Q20, margins have remained high during the lockdown period as all market participants are finding operating conditions tough and it is one of the levers the industry can use to try to offset some of the sharp volume declines.

**Figure 9. MBIE diesel importer margin**



Source: MBIE, Forsyth Barr analysis

**Figure 10. MBIE petrol importer margin**

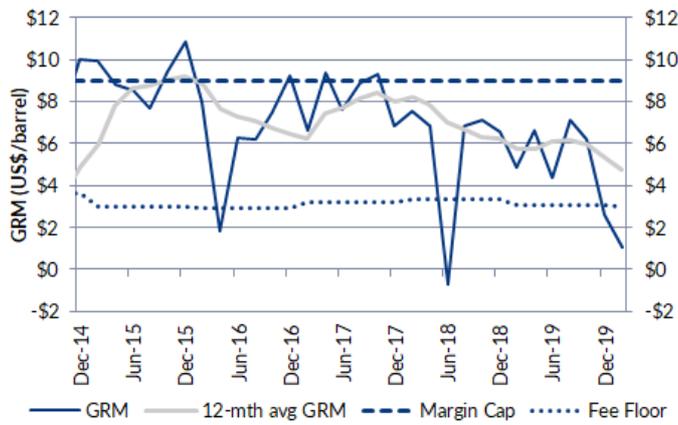


Source: MBIE, Forsyth Barr analysis

**Refining margins weak, and likely to remain so**

Historically, the refinery has provided a benefit to ZEL, margins above US\$6/barrel are usually positive. However, refining margins over the past six month have been stubbornly low, due in the first instance to marine fuel specification changes playing out differently than expected and more recently due to COVID-19 impacting product demand. The outlook is for margins to remain low as world oil markets deal with the sudden demand drop.

**Figure 11. NZR reported gross refining margin**



Source: Refining NZ, Forsyth Barr analysis

**Figure 12. Bloomberg benchmark Singapore gross refining margin**



Source: Bloomberg, Forsyth Barr analysis

## Thinking about the outlook

### Volumes will vary depending on Alert Levels and how quickly demand recovers

In our report *Flock of Black Swans Take Out Jet* (published 25 March) our focus was on the sensitivity of earnings to various volume declines that we knew were coming. It was necessarily a high level assessment. We now have Alert Level 4 volume data, and are better able to estimate what volumes may look like going forward as New Zealand moves through the various Alert Levels – albeit it is still a very fluid scenario and there are many uncertainties.

Our approach has been to consider how many weeks New Zealand will be at each Alert Level and then consider what the demand impact will be under each Alert Level on each product. A summary of the Alert Levels is included at the back of the report.

Indications are that the situation is coming under control. We believe that once New Zealand exits Alert Level 4 (on Tuesday 28 April), it is unlikely to go back and is more likely to move to Alert Level 2 sooner rather than later. When the move might be from Alert Level 2 to 1 (and indeed 0) is less certain, but equally we expect the demand effects are greatest going from Level 4 to 3 for commercial volumes and 3 to 2 for retail volumes.

Key points to note are:

- We anticipate New Zealand will remain at least at Alert Level 1 for the whole of FY21 i.e. our border will remain closed to most countries
- Retail volumes will improve the most when New Zealand moves to Alert Level 2, at which point most people will be able to return to work
- Commercial volumes should improve the most as New Zealand moves to Alert Level 3, enabling forestry, construction work and other industries to recommence operations
- Jet volumes will take a long time to recover (more detail below)
- Domestic supply volumes are assumed to have 80% of the impact of retail volumes as many of the sites ZEL supplies are more rural in nature
- We have considered marine volumes separately because of the seasonal effects of cruise ships on 2H volumes
- Demand impacts when New Zealand is no longer under the Alert system are the initial estimates of the demand at the point in time taking into account the low fuel prices that will prevail at that time and an estimate of the economic effect

**Figure 13. Weeks at each Alert Level – 12 months from 1 April**

Alert Level	4	3	2	1	0	TOTAL
Base	4	3	16	29	0	52
Upside	4	2	8	38	0	52
Downside	4	8	32	8	0	52

Source: Forsyth Barr analysis

**Figure 14. Demand impact at each alert level**

Alert Level	4	3	2	1	0
Retail (petrol & diesel)	-80%	-60%	-20%	-10%	-5%
Commercial diesel	-60%	-20%	-15%	-10%	-5%
Jet	-80%	-90%	-85%	-70%	-50%
Domestic supply	-64%	-48%	-16%	-8%	-4%

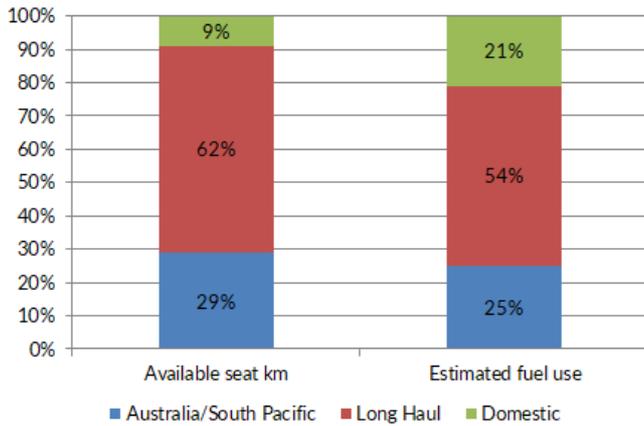
Source: Forsyth Barr analysis

**Three distinct jet fuel markets**

In arriving at our estimated jet fuel impacts, we have considered three unique markets. The domestic market (which accounts for ~21% of jet fuel demand), the Australian/South Pacific market and the long-haul market. Most fuel is consumed on take-off and landing, hence, domestic fuel demand is far greater than its proportion of available seat kilometres (ASK).

We do not expect domestic travel to greatly increase until Alert Level 2 and international travel until there is no Alert Level and even then it will take time for international travel to return. The possible exception is the opening up of travel to Australia and our South Pacific neighbours. We have assumed that there is a 50% chance that this partial border re-opening takes place under Alert Level 1.

**Figure 15. 2019 ASK vs. estimated fuel use**



Source: OAG, MBIE, Forsyth Barr analysis

**Figure 16. Estimated jet fuel demand at each alert level**

Alert Level	4	3	2	1	0
Domestic	-80%	-80%	-50%	-25%	-20%
Australia/Pacific	-80%	-90%	-90%	-70%	-20%
Long Haul	-85%	-95%	-95%	-90%	-80%
<b>Jet fuel demand (weighted)</b>	<b>-83%</b>	<b>-91%</b>	<b>-84%</b>	<b>-71%</b>	<b>-52%</b>

Source: Forsyth Barr analysis

Note: When estimating total jet demand, we have rounded the above figures to the nearest 5%. Long-haul jet demand under Alert Level 4 is higher than other Alert Levels due to repatriation flights that have taken place.

**Half yearly demand expectations vs. normal**

Our base case is the demand volumes will fall ~40% in 1H21 vs normal, with high margin retail volumes down -33%. There is an expected improvement in 2H21, although marine will not recover to the same extent as that is when the cruise season takes place. Cruise ship volumes are ~33% of total marine volumes on an annual basis, but ~67% of volumes in 2H, hence, we expect there will be a bigger drop in 2H21 marine volumes as it is hard to imagine the cruise ship industry bouncing back in the short-term.

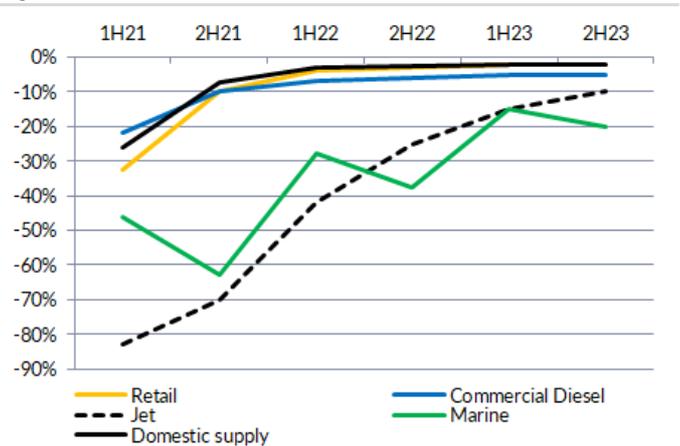
Looking beyond FY21, we assume a steady recovery in volumes, however, that will depend in large part to the extent of the economic recovery. During the GFC, petrol volumes fell -6% and diesel volumes -9%. However, oil prices were materially higher in 2008 (peaking at ~US\$150/barrel), so it is difficult to gauge how much of the fuel decline in 2009 was due to a slowing economy vs. a price response.

**Figure 17. 1H/2H21 demand scenarios**

	1H21			2H21		
	Base	Upside	Downside	Base	Upside	Downside
Retail	-33%	-28%	-42%	-10%	-10%	-17%
Commercial diesel	-22%	-20%	-23%	-10%	-10%	-13%
Jet	-83%	-78%	-86%	-70%	-70%	-79%
Marine	-46%	-43%	-49%	-63%	-63%	-68%
Domestic Supply	-26%	-22%	-33%	-8%	-8%	-13%
<b>Total</b>	<b>-41%</b>	<b>-36%</b>	<b>-46%</b>	<b>-24%</b>	<b>-23%</b>	<b>-31%</b>

Source: Forsyth Barr analysis

**Figure 18. Base case demand vs. normal**



Source: Forsyth Barr analysis

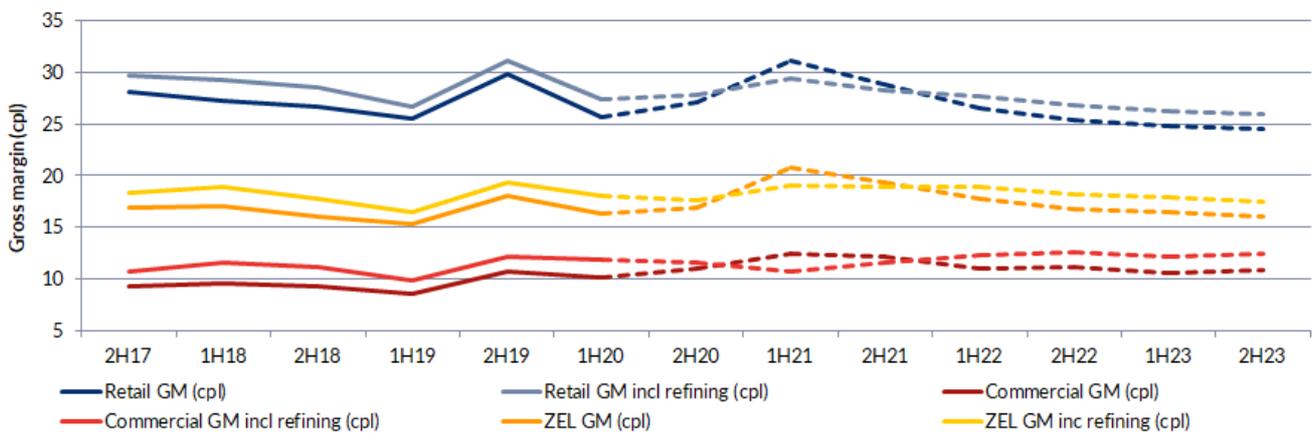
**Retail margins likely to remain firm, commercial margins expected to be stable**

One of the levers ZEL has (to some degree at least) is retail margins. Unsurprisingly, retail margins have been high in recent weeks. The whole sector is struggling with the massive drop in volumes, including the discounters. We do not foresee a regulatory issue coming out of the current high retail margins (albeit we note the ACCC has made noises in Australia that fuel retailers should be passing on the low oil prices to consumers).

Whilst we expect a blip in retail margins in 1H21, we anticipate that will quickly be competed away when conditions return to normal. One of the factors that will keep a lid in retail margins is that fact Gull imports all its fuel, which is as an advantage in the current climate. Using the refinery is a headwind at present, as highlighted in the chart below, we expect the refinery to be a drag on ZEL's reported gross margin in 1H21, not a benefit.

Our commercial margin assumptions are flat as these are typically locked into contracts. The apparent increase in commercial margins in 1H21 is due to the decline in low margin jet fuel volumes – i.e. a mix change

**Figure 19. Estimated retail and commercial and company gross margins (including and excluding the refinery)**



Source: ZEL, Forsyth Barr analysis

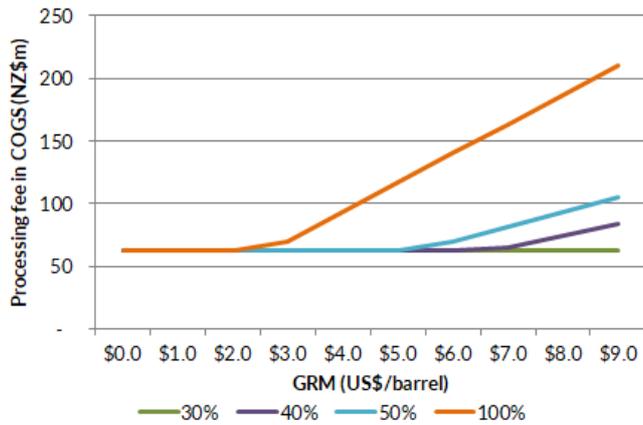
**Using the refinery is costing ZEL at present**

ZEL's processing agreement with NZR means its minimum processing fee for FY21 is ~NZ\$63m per annum. Under normal circumstances, that equates to a GRM of ~US\$3/barrel. However, with the refinery operating below capacity (otherwise it would make too much jet fuel – refer to our NZR note dated 16 April for more details), we believe that the fee floor is likely to be closer to US\$8/barrel.

Our analysis indicates that ZEL is likely to pay the fee floor in FY21, so long as the GRM is less than ~US\$5.0/barrel. In terms of reported earnings, ZEL may show a refining gross profit loss. In terms of forecasting ZEL's earnings, we focus on the gross profit margin, after including the refinery contribution. There tends to be an offsetting effect between fuel margins and gross refining margins. i.e. when gross refining margins are low, retail fuel margins are higher and vice versa.

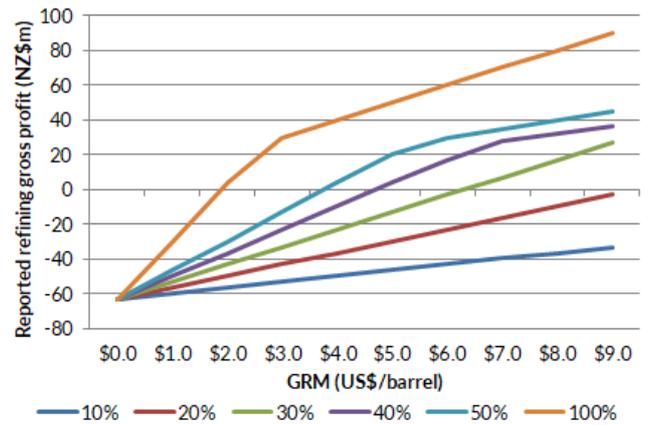
At present ZEL (and the other refinery users) is at a competitive disadvantage to Gull, because Gull imports all of its fuel. That will keep a lid on retail margins.

**Figure 20. FY21 processing fees at various NZR utilisation rates**



Source: Forsyth Barr analysis

**Figure 21. FY21 reported refining gross profit at utilisation rates**



Source: Forsyth Barr analysis

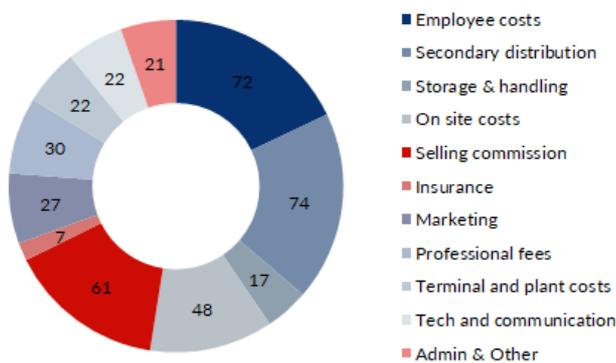
In the appendix we have detailed how ZEL calculates the refinery gross profit, the costs and benefits of using the refinery and the implications of NZR's recently announced Strategic Review. It is important to understand the refinery processing fees are part of the cost of goods sold.

**Cost out to be revealed at FY20 result**

The lever that ZEL has most control over is operating costs – but even then there are significant costs that are fixed. ZEL's operating cost base is ~\$400m. We estimate ~5% (~\$20m) of operating costs are variable to volume, within secondary distribution. A further ~10% of operating costs are discretionary, with a large proportion of that in marketing (7% of costs over the past 12 months), with more discretionary costs in professional fees and admin & other.

Another factor we have taken into consideration is the \$27m provision ZEL has taken in FY20 related to COVID-19 costs. We note that ZEL is incentivised to maximise the provision to lower FY20 profitability to aid FY21 profitability – as that will help ZEL meet its debt covenants. Whilst our revised forecasts assume all of the provision will be used in FY21, it is possible that some of the provision will not be used and instead released back into profit.

**Figure 22. Operating cost base (12 months to 30 Sept 2019)**



Source: ZEL, Forsyth Barr analysis

**Figure 23. Operating cost forecast**



Source: ZEL, Forsyth Barr analysis

ZEL has previously indicated it will update the market on its cost out plans at the FY20 result. The retail margin collapse in 1H20 kicked-off this work. The level of urgency to cut costs has only increased in the past six weeks.

## Appendix

### Forecast changes

Figure 24. Forecast changes

	FY20	FY20	%	FY21	FY21	%	FY22	FY22	%
	Old	New	Chg	Old	New	Chg	Old	New	Chg
Revenue	4,931	4,904	-1%	3,126	2,759	-12%	4,273	3,968	-7%
<b>Gross profit</b>	<b>780</b>	<b>797</b>	<b>2%</b>	<b>632</b>	<b>583</b>	<b>-8%</b>	<b>743</b>	<b>747</b>	<b>1%</b>
Gross Margin	15.8%	16.3%	3%	20.2%	21.1%	5%	17.4%	18.8%	8%
Operating costs	(408)	(435)	7%	(366)	(345)	-6%	(394)	(385)	-2%
<b>EBITDAF</b>	<b>372</b>	<b>362</b>	<b>-2%</b>	<b>266</b>	<b>238</b>	<b>-11%</b>	<b>348</b>	<b>362</b>	<b>4%</b>
Depreciation & amortisation	(147)	(147)	0%	(141)	(141)	0%	(137)	(137)	0%
<b>EBIT</b>	<b>225</b>	<b>216</b>	<b>-4%</b>	<b>124</b>	<b>96</b>	<b>-23%</b>	<b>211</b>	<b>225</b>	<b>6%</b>
Net Interest	(64)	(64)	0%	(58)	(57)	-1%	(51)	(51)	0%
Other	(38)	(38)	0%	-	-	-	-	-	-
<b>Pre-tax profit</b>	<b>123</b>	<b>114</b>	<b>-8%</b>	<b>67</b>	<b>40</b>	<b>-41%</b>	<b>160</b>	<b>174</b>	<b>9%</b>
Tax expense	(43)	(40)	-6%	(19)	(11)	-41%	(45)	(49)	9%
<b>NPAT</b>	<b>81</b>	<b>74</b>	<b>-8%</b>	<b>48</b>	<b>29</b>	<b>-41%</b>	<b>115</b>	<b>125</b>	<b>9%</b>
Minority interest	19	19	0%	9	9	0%	8	8	0%
NPAT post-minorities	99	93	-7%	57	38	-34%	123	133	8%
<b>Normalised Profit</b>	<b>136</b>	<b>130</b>	<b>-5%</b>	<b>57</b>	<b>38</b>	<b>-34%</b>	<b>123</b>	<b>133</b>	<b>8%</b>
Earnings per share (eps)	34.1	32.4	-5%	14.3	9.4	-34%	30.9	33.4	8%
<b>Dividend (cps)</b>	<b>16.5</b>	<b>16.5</b>	<b>0%</b>	<b>20.0</b>	<b>20.0</b>	<b>0%</b>	<b>30.0</b>	<b>30.0</b>	<b>0%</b>
Key operating assumptions									
Petrol	1,100	1,100	0%	935	865	-7%	1,073	1,062	-1%
Diesel - Retail	439	439	0%	373	346	-7%	428	424	-1%
Diesel - Commercial	791	791	0%	685	678	-1%	791	759	-4%
Jet	843	843	0%	375	200	-47%	767	562	-27%
Marine	154	154	0%	132	68	-49%	133	102	-23%
Bitumen & Other	139	139	0%	142	142	0%	143	143	0%
Domestic supply	543	543	0%	464	455	-2%	531	528	-1%
<b>ZEL specific volumes (m litres)</b>	<b>4,011</b>	<b>4,011</b>	<b>0%</b>	<b>3,106</b>	<b>2,754</b>	<b>-11%</b>	<b>3,865</b>	<b>3,580</b>	<b>-7%</b>
Industry and export supply	84	84	0%	55	55	0%	95	95	0%
<b>Total fuel volumes (m litres)</b>	<b>4,095</b>	<b>4,095</b>	<b>0%</b>	<b>3,162</b>	<b>2,809</b>	<b>-11%</b>	<b>3,960</b>	<b>3,675</b>	<b>-7%</b>
GM excl supply (cpl)	16.2	16.6	2%	17.5	19.9	14%	15.6	17.3	11%
GM incl refining (cpl)	17.5	17.8	2%	18.2	18.9	4%	17.1	18.6	9%
<b>Gross profit make-up</b>									
Fuels gross profit	650	666	2%	544	549	1%	602	619	3%
Refining gross profit	48	48	0%	21	(28)	-233%	59	47	-20%
Non-fuel gross profit	77	79	3%	60	55	-8%	72	73	1%
NZR dividend	1	1	0%	-	-	-	2	-	-100%
Flick gross profit	4	4	0%	6	6	0%	8	8	0%
	<b>780</b>	<b>797</b>	<b>2%</b>	<b>632</b>	<b>583</b>	<b>-8%</b>	<b>743</b>	<b>747</b>	<b>1%</b>

Source: Forsyth Barr analysis

## Alert Levels

Figure 25. Alert Levels

Alert Level	4 - Lockdown	3 - Restrict	2 - Reduce	1 - Prepare
	Likely the disease is not contained.	High risk the disease is not contained.	The disease is contained, but the risk of community transmission remains.	The disease is contained in New Zealand.
<b>Risk assessment</b>	<ul style="list-style-type: none"> <li>Community transmission is occurring.</li> <li>Widespread outbreaks and new clusters.</li> </ul>	<ul style="list-style-type: none"> <li>Community transmission might be happening.</li> <li>New clusters may emerge but can be controlled through testing and contact tracing.</li> </ul>	<ul style="list-style-type: none"> <li>Household transmission could be occurring.</li> <li>Single or isolated cluster outbreaks.</li> </ul>	<ul style="list-style-type: none"> <li>COVID-19 is uncontrolled overseas.</li> <li>Isolated household transmission could be occurring in New Zealand.</li> </ul>
<b>Range of measures</b>	<ul style="list-style-type: none"> <li>People instructed to stay at home (in their bubble) other than for essential personal movement.</li> <li>Safe recreational activity is allowed in local area.</li> <li>Travel is severely limited.</li> <li>All gatherings cancelled and all public venues closed.</li> <li>Businesses closed except for essential services (eg supermarkets, pharmacies, clinics, petrol stations) and lifeline utilities.</li> <li>Educational facilities closed.</li> <li>Rationing of supplies and requisitioning of facilities possible.</li> <li>Reprioritisation of healthcare services.</li> </ul>	<ul style="list-style-type: none"> <li>Bubbles must stay within their immediate household bubble, but can expand this to reconnect with close family/whānau, or bring in caregivers, or support isolated people. This extended bubble should remain exclusive.</li> <li>Schools (years 1 to 10) and Early Childhood Education centres can safely open, but will have limited capacity. Children should learn at home if possible.</li> <li>People must work from home unless that is not possible.</li> <li>Businesses can open premises, but cannot physically interact with customers.</li> <li>Low risk local recreation activities are allowed.</li> <li>Public venues are closed, eg libraries, museums, cinemas, foodcourts, gyms, pools, playgrounds, markets.</li> <li>Gatherings of up to 10 people are allowed but only for wedding services, funerals and tangihanga. Physical distancing and public health measures must be maintained.</li> <li>Healthcare services use virtual, non-contact consultations where possible.</li> <li>Inter-regional travel is highly limited, eg for essential workers, with limited exemptions for others.</li> <li>People at high risk of severe illness are encouraged to stay at home where possible, and take additional precautions when leaving home. They may choose to work.</li> </ul>	<ul style="list-style-type: none"> <li>Physical distancing of 1 metre outside home (including on public transport).</li> <li>Gatherings of up to 100 people indoors and 500 outdoors allowed while maintaining physical distancing and contact tracing requirements.</li> <li>Sport and recreation activities are allowed if conditions on gatherings are met, physical distancing is followed and travel is local.</li> <li>Public venues can open but must comply with conditions on gatherings, and undertake public health measures.</li> <li>Health services operate as normally as possible.</li> <li>Most businesses open, and business premises can be open for staff and customers with appropriate measures in place. Alternative ways of working encouraged, eg remote working, shift-based working, physical distancing, staggering meal breaks, flexible leave.</li> <li>Schools and Early Childhood Education centres open, with distance learning available for those unable to attend school eg self-isolating.</li> <li>People advised to avoid non-essential inter-regional travel.</li> <li>People at high risk of severe illness are encouraged to stay at home where possible, and take additional precautions when leaving home. They may choose to work.</li> </ul>	<ul style="list-style-type: none"> <li>Border entry measures to minimise risk of importing COVID-19 cases.</li> <li>Intensive testing for COVID-19.</li> <li>Rapid contact tracing of any positive case.</li> <li>Self-isolation and quarantine required.</li> <li>Schools and workplaces open, and must operate safely.</li> <li>Physical distancing encouraged.</li> <li>No restrictions on gatherings.</li> <li>Stay home if you're sick, report flu-like symptoms.</li> <li>Wash and dry your hands, cough into your elbow, don't touch your face.</li> <li>No restrictions on domestic transport, avoid public transport or travel if you're sick.</li> </ul>

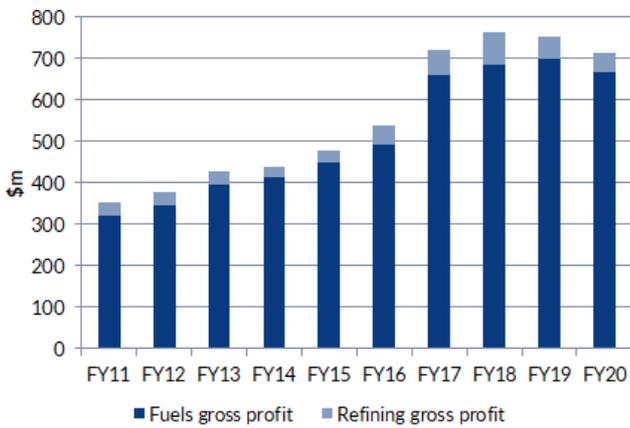
Source: <https://covid19.govt.nz/alert-system/covid-19-alert-system/>, Forsyth Barr analysis

**How the refinery is reported in ZEL financial statements**

Since listing, ZEL has presented a refining gross profit. Before the Caltex takeover, this fluctuated between \$24m (FY14) and \$48m (FY16) depending on refining margins. After the Caltex takeover, the refining gross profit increased and has been between \$54m (FY19) and \$77m (FY18) due to increased volumes.

However, ZEL's refining gross profit is something of a misnomer because the refinery is a supplier to ZEL. The refining gross profit is designed to represent the benefit ZEL receives from using the refinery. It is in fact the -30% discount ZEL receives by using the refinery.

**Figure 26. ZEL fuels gross profit breakdown**



Source: ZEL, Forsyth Barr analysis

**Figure 27. ZEL's refining and fuels gross profit calculation**

**Refining gross profit** = ZEL GRM x 30% discount x throughput volume - any fee floor top-up payments

**Fuels gross profit** = fuel sales - COGS - refining gross profit (as calculated above)

**Cost of goods sold (COGS)** = the cost of procuring and shipping refined product to ZEL terminals, which includes:

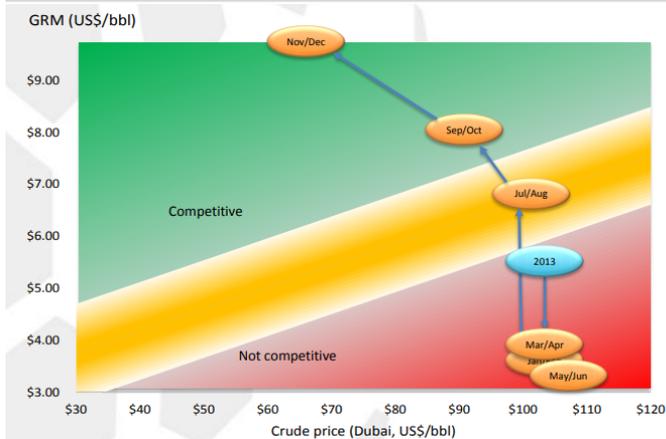
- Imported crude oil costs
- NZR processing fees and RAP fees
- Coastal shipping fees & Wiri oil service fees
- Imported refined product costs (for product not sourced from the refinery)

Source: Forsyth Barr analysis

When gross refining margins (GRM) are high, ZEL receives a significant benefit (the discount in absolute terms increases), but when refining margins are low, it is better off importing refined product, as indicated in the figure below. However, ZEL will still report positive a refining gross profit, unless the fee floor top-up payments are greater than the discount it receives.

Currently, the refinery is operating below capacity, hence, the fee floor in US\$/barrel terms increases because the fee floor is a fixed amount. If ZEL's processing fees are less than ~NZ\$64m per annum, it has to top up its refinery payments to that amount.

**Figure 28. Refinery competitive position**



Source: NZR (published Feb 2015)

**Figure 29. ZEL refining gross profit**

ZEL throughput (m barrels)	2.0	4.0	6.0	8.0	10.0	20.0
Fee floor (US\$/barrel)	\$27.0	\$13.5	\$9.0	\$6.8	\$5.4	\$2.7
Refinery utilisation	10%	20%	30%	40%	50%	100%
	\$0.0	-63	-63	-63	-63	-63
	\$1.0	-60	-56	-53	-50	-46
GRM	\$2.0	-56	-50	-43	-36	-30
US\$/barrel	\$3.0	-53	-43	-33	-23	-13
	\$4.0	-50	-36	-23	-10	4
	\$5.0	-46	-30	-13	4	20
	\$6.0	-43	-23	-3	17	30
	\$7.0	-40	-16	7	28	35
	\$8.0	-36	-10	17	32	40
	\$9.0	-33	-3	27	36	45

Source: Forsyth Barr analysis

We assume a NZDUSD of 0.6 for the above analysis

**The benefits and costs of using the refinery**

Normally the benefits of using the refinery outweigh the costs. However, as international refineries get bigger and more efficient, it is harder for NZR to remain competitive. Currently, the costs far outweigh the benefits and the fee floor arrangement is hurting. The critical benefit of the refinery is access to the RAP as there is no other feasible way of getting product to the Auckland market (in particular jet fuel to the airport). The other key benefit is the -30% discount the customers receive to offset the additional costs of buying crude, holding extra working capital and dealing with the additional logistical complexity.

**Figure 30. Benefits and costs of using the refinery**

Benefits	Costs
<ul style="list-style-type: none"> <li>■ ZEL receives a -30% discount off the notional processing fee</li>   <li>■ NZR is usually cheaper than importing product</li>   <li>■ Access to the refinery to Auckland pipeline (RAP)</li> </ul>	<ul style="list-style-type: none"> <li>■ Longer supply chain — ~ 3 months to import and process crude vs. 1 month to import product</li>   <li>■ Higher working capital requirements</li>   <li>■ NZR is less flexible as ZEL cannot simply import what it needs</li>   <li>■ Logistically more complex to operate, especially when tying in coastal shipping logistics</li> </ul>

Source: Forsyth Barr analysis

### NZR's Strategic Review should be a positive for ZEL (and NZR)

NZR is undertaking a wide-ranging strategic review, with initial findings expected to be reported in June 2020. Whichever option NZR arrives at, we expect the customers will be in a better off position. Possible options include:

- *Continuing with the current model:* For this to be the best outcome, NZR needs to find significant operational performance improvements, which will benefit ZEL as both a customer and a shareholder
- *Alter the processing agreement and/or pipeline agreement:* Altering the customer agreement will require ZEL's (and BP & Mobil's) agreement. Any change is, therefore, going to benefit the customers (but would also need to benefit NZR)
- *Structurally separate the refinery and infrastructure assets or convert to an import terminal:* Again, either option has to be agreed to by the customers

## Investment Summary

Our rating is **OUTPERFORM**. Z Energy (ZEL) is offering investors good value, with the market pricing in downside that we do not believe is likely to eventuate. Whilst there is a high degree of uncertainty in the current environment, ZEL is a strong business that we expect will come out of the COVID-19 crisis stronger than it went in.

### Business quality

- **Industry structure:** The industry is an oligopoly dominated by ZEL, BP, and Mobil (Exxon). ZEL's NZ-centric business model provides it with a market leading position. ZEL sells ~45% of NZ fuel volumes.
- **Refining performance:** ZEL refines ~75% of its product at NZR. NZR is generally a positive and provides a competitive advantage over imported product when refining margins are high.

### Earnings and cashflow outlook

- **Fuel margins:** Fuel margins are the key value driver and with retail competition intensifying, are becoming increasingly volatile. Commercial margins remain stable.
- **Sales volumes:** Fuel demand is generally inelastic, so whilst it is an important value driver its variability is less than margins. However, volumes are important for maintaining supply chain economics.
- **COVID-19 uncertainty:** The outbreak of COVID-19 is causing significant uncertainty. On the positive side, falling oil prices helps ZEL's short-term retail margins. Jet fuel volumes are the most impacted, but petrol and diesel will also see a significant demand drop. We expect the severe demand declines to be relatively short-lived.

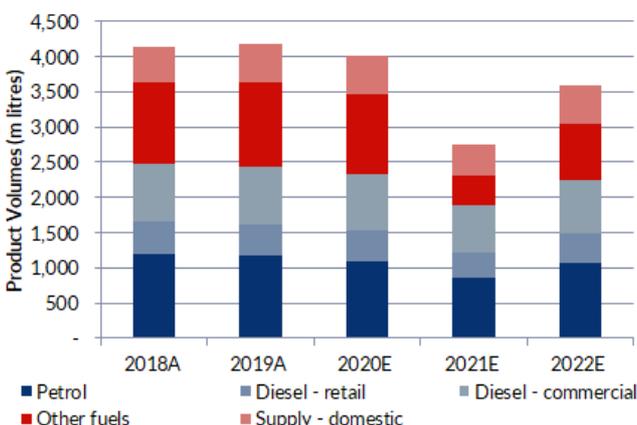
### Financial structure

- **Dividend growth:** The COVID-19 crisis is likely to force the Board to reconsider its dividend policy. After a temporary dividend suspension, we expect dividends will resume at ~30cps.
- **Flick Electric:** ZEL has acquired a 70% stake in electricity retailer Flick Electric. We do not expect it to impact on earnings in the near-term.

### Risk factors

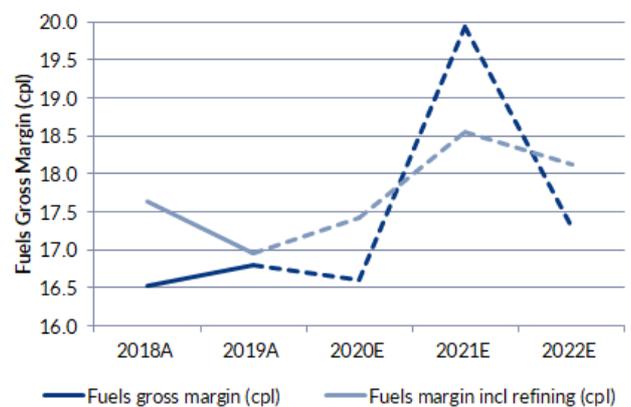
- **Long-term threat to industry volumes:** Increased vehicle efficiency and the threat from electric vehicles will pressure industry volumes. However, the near-term risks are low with industry volumes growing.
- **Retail Fuel Market Study (RFMS):** The RFMS has found that the retail fuel sector is over-earning and that the wholesale market needs opening up via terminal gate pricing. Whilst we do not believe this will have a material impact on sector earnings, it is a risk.

Figure 31. Fuel volumes

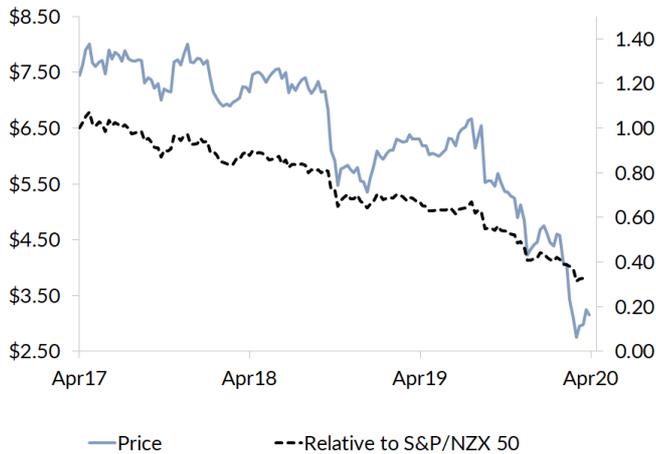


Source: ZEL, Forsyth Barr analysis

Figure 32. Fuels gross margin



Source: ZEL, Forsyth Barr analysis

**Figure 33. Price performance**


Source: Forsyth Barr analysis

**Figure 34. Substantial shareholders**

Shareholder	Latest Holding
ACC	7.1%
Lazard	6.7%
Commonwealth Bank of Australia	6.1%

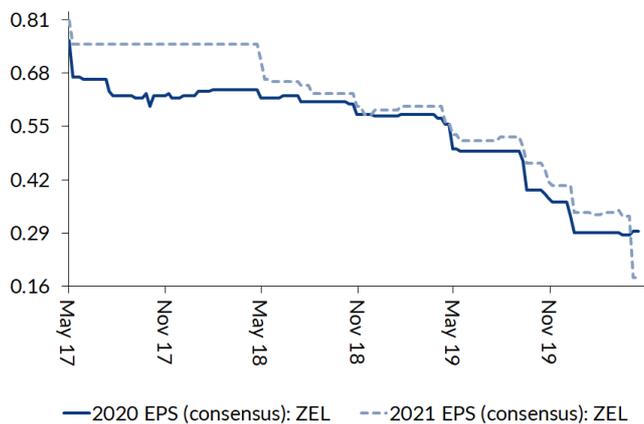
Source: NZX, Forsyth Barr analysis, NOTE: based on SSH notices only

**Figure 35. International valuation comparisons**

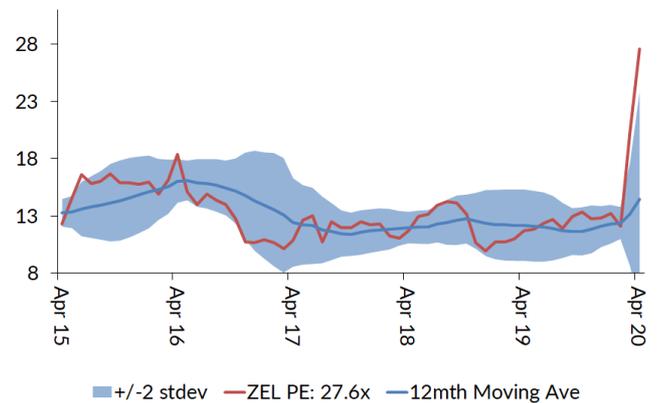
Company (metrics re-weighted to reflect ZEL's balance date - March)	Code	Price	Mkt Cap (m)	PE		EV/EBITDA		EV/EBIT		Cash Yld 2021E
				2020E	2021E	2020E	2021E	2020E	2021E	
<b>Z Energy</b>	<b>ZEL NZ</b>	<b>NZ\$3.15</b>	<b>NZ\$1,260</b>	<b>9.7x</b>	<b>33.4x</b>	<b>5.8x</b>	<b>8.8x</b>	<b>9.7x</b>	<b>21.7x</b>	<b>6.3%</b>
SUBURBAN PROPANE PARTNERS LP	SPH US	US\$12.62	US\$780	11.4x	11.0x	8.2x	8.2x	15.0x	15.7x	19.0%
WORLD FUEL SERVICES CORP	INT US	US\$22.77	US\$1,488	8.3x	n/a	4.9x	n/a	6.9x	n/a	n/a
Contact Energy*	CEN NZ	NZ\$5.08	NZ\$3,648	15.0x	14.9x	10.0x	9.8x	18.8x	19.0x	7.7%
Mercury*	MCY NZ	NZ\$4.10	NZ\$5,585	23.6x	21.3x	13.3x	12.9x	22.4x	21.4x	3.9%
Trustpower*	TPW NZ	NZ\$5.06	NZ\$1,584	18.8x	15.7x	11.4x	10.3x	14.5x	12.8x	6.7%
Meridian Energy*	MEL NZ	NZ\$3.90	NZ\$9,996	20.2x	21.6x	13.3x	13.9x	20.7x	22.4x	5.5%
Genesis Energy*	GNE NZ	NZ\$2.40	NZ\$2,471	15.1x	13.3x	10.1x	9.4x	25.3x	23.0x	7.3%
CALTEX AUSTRALIA	CTX AT	A\$20.51	A\$5,121	13.1x	11.3x	6.6x	6.0x	10.6x	9.4x	5.4%
VIVA ENERGY GROUP	VEA AT	A\$1.26	A\$2,440	21.2x	17.5x	8.6x	7.1x	23.4x	17.4x	5.2%
<b>Compcop Average:</b>				<b>16.3x</b>	<b>15.8x</b>	<b>9.6x</b>	<b>9.7x</b>	<b>17.5x</b>	<b>17.7x</b>	<b>7.6%</b>
<b>ZEL Relative:</b>				<b>-40%</b>	<b>111%</b>	<b>-40%</b>	<b>-10%</b>	<b>-44%</b>	<b>23%</b>	<b>-16%</b>

EV = Current Market Cap + Actual Net Debt

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

**Figure 36. Consensus EPS momentum (NZ\$)**


Source: Forsyth Barr analysis

**Figure 37. One year forward PE (x)**


Source: Forsyth Barr analysis

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