FORSYTH BARR

NEW ZEALAND EQUITY RESEARCH | OIL & GAS | DOWNSTREAM FUEL RETAILER

11 MARCH 2021

Z Energy
Low Fuel Warning Light Comes On

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OUTPERFORM

We have reviewed our long-term Z Energy (ZEL) volume forecast following the draft Climate Change Commission report and the government's decision to implement a tough tail pipe emissions standard, the upshot being a material cut in long-term volumes. Whilst our revised volume forecast is consistent with the regulatory goals, we view this as a worst case scenario as the hurdles to achieve the goals are high. Importantly, even under the worst case scenario, we still see value in ZEL and retain our OUTPERFORM rating. However, we do not see as much value as previously and cut our target price -20% to NZ$3.45.

NZX Code	ZEL	Financials: Mar/	20A	21E	22E	23E	Valuation (x)	20A	21E	22E	23E
Share price	NZ$2.66	NPAT* (NZ$m)	102.2	15.6	86.8	112.6	PE	10.4	88.8	15.9	12.3
Target price	NZ$3.45	EPS* (NZc)	25.6	3.0	16.7	21.7	EV/EBIT	11.9	31.0	15.0	12.3
Risk rating	High	EPS growth* (%)	-47.8	-88.3	n/a	29.8	EV/EBITDA	6.6	10.6	7.8	7.1
Issued shares	520.1m	DPS (NZc)	16.5	0.0	23.0	23.0	Price / NTA	n/a	4.6	3.7	3.5
Market cap	NZ$1,384m	Imputation (%)	100	100	100	100	Cash div yld (%)	6.2	0.0	8.6	8.6
Avg daily turnover	1,227k (NZ$3,619k)	*Based on normalised profits					Gross div yld (%)	8.6	0.0	12.0	12.0

What's changed?

- **Earnings:** FY21/FY22/FY23 EBITDAF -2%/-4%/-3% lower to NZ$237m/NZ$300m/NZ$326m
- **Target price:** Cut -20% (-NZ$0.85) to NZ$3.45

Even adjusting volumes to the worst case scenario, there is still value in ZEL

The question we have tried to answer is whether there is value in ZEL, even if the worst case scenario eventuates. The answer is yes, but clearly the upside is less than if there was no regulatory intervention. Following the Climate Change Commission's (CCC) draft report, the market has focussed on ZEL's long-term future. We believe fossil fuel bans and new emission targets the government is implementing is the worst case scenario for ZEL — there are huge challenges in implementation. That said, we struggle to see the market valuing any other scenario for the foreseeable future. Whilst the long-term outlook may be more challenging, our near-term volume and earnings forecasts are little changed when material reductions not taking place until the late 2020s. Our revised DCF valuation is NZ$3.36, down from NZ$4.94 (although ~-30cps is due to cost of capital changes).

Near-term positive catalysts should lift ZEL back to NZ$3.00

We see three short-term positive catalysts for ZEL. 1) The reinstatement of the dividend in FY22 (to be announced at the FY21 result in May). Whilst we have trimmed our forecast -2cps to 23cps to ensure ZEL is debt free by 2035, the FY22 gross dividend yield of 12.0% should be attractive. 2) Confirmation of the refinery conversion. This will release working capital (we estimate ~NZ$150m) and relative to the current forecast, refinery contribution should lift earnings at least ~+NZ$10m. 3) Whilst ZEL has taken the top off its guidance range, delivering on guidance is a modest positive in the context of recent years disappointments.

Minor changes to near-term forecast

February 2021 volumes were a continuation of the weak January 2021 volumes, although there are some signs of improvement. Our near-term forecast changes are relatively minor as we have trimmed EBITDAF -NZ$6m to NZ$237m due to softer than expect volumes and retail margins continue to be under pressure due to rising crude oil prices. We are towards the bottom of ZEL's narrower FY21 EBITDAF NZ$235m to NZ$245m guidance range.

Z Energy (ZEL)

Priced as at 11 Mar 2021 (NZ$)	**2.66**

12-month target price (NZ$)*	**3.45**
Expected share price return	29.7%
Net dividend yield	8.6%
Estimated 12-month return	38.3%

Spot valuations (NZ$)	
1. DCF	3.36
2. Dividend Yield	3.19
3. Market Multiple	3.12

Key WACC assumptions	
Risk free rate	2.30%
Equity beta	0.88
WACC	6.2%
Terminal growth	-5.0%

DCF valuation summary (NZ$m)	
Total firm value	2,469
(Net debt)/cash	(723)
Less: Capitalised operating leases	0
Value of equity	1,746

Profit and Loss Account (NZ$m)	**2019A**	**2020A**	**2021E**	**2022E**	**2023E**
Sales revenue	5,450	4,987	3,380	4,078	4,323
Normalised EBITDA	**435**	**366**	**237**	**300**	**326**
Depreciation and amortisation	(122)	(163)	(154)	(144)	(136)
Normalised EBIT	**312**	**203**	**81**	**155**	**189**
Net interest	(51)	(66)	(50)	(50)	(48)
Associate income	(1)	0	(2)	0	0
Tax	(61)	13	(24)	(29)	(40)
Minority interests	(2)	(16)	(7)	(11)	(11)
Normalised NPAT	**196**	**102**	**16**	**87**	**113**
Abnormals/other	(16)	(42)	2	0	0
Reported NPAT	**180**	**60**	**18**	**87**	**113**
Normalised EPS (cps)	49.0	25.6	3.0	16.7	21.7
DPS (cps)	43.0	16.5	0	23.0	23.0

Valuation Ratios	**2019A**	**2020A**	**2021E**	**2022E**	**2023E**
EV/EBITDA (x)	4.8	6.6	10.6	7.8	7.1
EV/EBIT (x)	6.8	11.9	31.0	15.0	12.3
PE (x)	5.4	10.4	88.8	15.9	12.3
Price/NTA (x)	4.2	n/a	4.6	3.7	3.5
Free cash flow yield (%)	20.5	15.5	5.6	8.3	10.9
Net dividend yield (%)	16.2	6.2	0.0	8.6	8.6
Gross dividend yield (%)	22.5	8.6	0.0	12.0	12.0

Growth Rates	**2019A**	**2020A**	**2021E**	**2022E**	**2023E**
Revenue (%)	19	-8	-32	21	6
EBITDA (%)	-3	-16	-35	26	9
EBIT (%)	-10	-35	-60	91	22
Normalised NPAT (%)	-7	-48	-85	>100	30
Normalised EPS (%)	-7	-48	-88	>100	30
Ordinary DPS (%)	33	-62	-100	n/a	0

Capital Structure	**2019A**	**2020A**	**2021E**	**2022E**	**2023E**
Interest cover EBIT (x)	6.1	3.1	1.6	3.1	3.9
Interest cover EBITDA (x)	8.5	5.5	4.8	5.9	6.8
Net debt/ND+E (%)	55.4	72.4	48.8	45.1	44.5
Net debt/EBITDA (x)	1.9	3.0	2.9	2.1	1.9

Cash Flow (NZ$m)	**2019A**	**2020A**	**2021E**	**2022E**	**2023E**
EBITDA	**435**	**366**	**237**	**300**	**326**
Working capital change	(159)	268	(152)	(37)	(18)
Interest & tax paid	(161)	(124)	(56)	(87)	(96)
Other	223	(194)	103	(8)	(8)
Operating cash flow	**338**	**316**	**132**	**167**	**204**
Capital expenditure	(55)	(102)	(54)	(52)	(53)
(Acquisitions)/divestments	(28)	21	(1)	0	0
Other	4	(29)	(24)	(24)	(24)
Funding available/(required)	**259**	**206**	**53**	**91**	**127**
Dividends paid	(152)	(203)	0	(42)	(120)
Equity raised/(returned)	(1)	0	337	0	0
(Increase)/decrease in net debt	**106**	**3**	**390**	**49**	**8**

Key Ratios	**2019A**	**2020A**	**2021E**	**2022E**	**2023E**
Return on assets (%)	11.0	6.7	3.2	5.9	7.1
Return on equity (%)	21.3	17.0	1.7	9.3	12.3
Return on funds employed (%)	15.8	13.2	3.0	7.9	9.9
EBITDA margin (%)	8.0	7.3	7.0	7.3	7.5
EBIT margin (%)	5.7	4.1	2.4	3.8	4.4
Capex to sales (%)	1.0	2.0	1.6	1.3	1.2
Capex to depreciation (%)	85	126	68	66	67
Imputation (%)	100	100	100	100	100
Pay-out ratio (%)	88	65	0	138	106

Balance Sheet (NZ$m)	**2019A**	**2020A**	**2021E**	**2022E**	**2023E**
Working capital	358	119	275	312	330
Fixed assets	830	819	790	763	737
Intangibles	668	786	598	553	515
Right of use asset	0	282	280	280	280
Other assets	161	253	163	163	163
Total funds employed	**2,017**	**2,259**	**2,106**	**2,072**	**2,026**
Net debt/(cash)	827	1,083	696	635	615
Lease liability	0	299	299	299	299
Other liabilities	270	275	215	207	200
Shareholder's funds	902	600	902	947	940
Minority interests	18	2	(5)	(17)	(28)
Total funding sources	**2,017**	**2,259**	**2,106**	**2,072**	**2,026**

Operating Performance	**2019A**	**2020A**	**2021E**	**2022E**	**2023E**
Product volumes (m litres)					
Petrol	1,165	1,099	961	1,058	1,066
Diesel - retail	454	445	419	463	466
Diesel - commercial	812	769	761	786	819
Other fuels	1,193	1,120	420	550	746
Supply - domestic	544	537	494	527	529
Sub-total	**4,168**	**3,970**	**3,055**	**3,385**	**3,626**
Supply - industry & export	280	67	52	30	30
Total Fuels	**4,448**	**4,037**	**3,107**	**3,415**	**3,656**
Retail service stations	343	334	340	330	328
Petrol/service station (m litres)	3.82	3.61	3.19	3.53	3.55
Diesel/service station (m litres)	1.32	1.30	1.24	1.37	1.39
Gross profit (NZDm)					
Fuels	700	666	532	575	592
Refining	54	37	(25)	3	23
Non-fuels	81	76	76	80	82
Flick Electric	1	2	3	4	4
Gross profit	**836**	**781**	**585**	**662**	**702**
Fuels gross margin (cpl)	16.8	16.8	17.4	17.0	16.3
Fuels margin incl refining (cpl)	17.0	17.4	15.7	16.2	16.2
Fuels margin excl supply (cpl)	18.0	17.7	16.6	17.1	17.0
Non-fuels revenue/station (NZD 000)	397	373	378	399	408

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

Reassessing value — throwing the kitchen sink at volumes

The main focus of this report is looking at the potential effects of the government's announcement to bring in tail-pipe emissions targets (Clean Car Import Standard) and the Climate Change Commission's (CCC) draft report, which proposes banning the importation of petrol/diesel vehicles. We are adjusting our volume forecasts to be consistent with the Clean Car Import Standard (CCIS) and the banning of petrol/diesel vehicles from 2030. We view this as the worst case volume assumption as there are significant headwinds to be overcome to actually achieve the government's goals. However, following the release of the CCC draft report, it is clear that the market is again concerned about ZEL's long-term outlook.

Valuation changes

The question we are addressing in this report is whether under worst case scenario, long-term volume assumptions, is there still value in ZEL? The answer is yes, despite the material pull-back in our valuation.

We have lowered our DCF -NZ$1.58 (-32%) to NZ$3.36/share. ~20% of the DCF change is due to the increase in our cost of capital assumption to 6.2% from 5.8% (due to rising bond rates). The market refocussing on the long-term outlook has also impacted on our market multiple and dividend yield based valuations.

Our revised target price is NZ$3.45, a reduction of -20% (-NZ$0.85).

Figure 1. Summary of valuation changes

	Old	New	Movement		
	NZ$/share	NZ$/share	NZ$/share	%	Comment
DCF	$4.94	$3.36	($1.58)	-32%	WACC of 6.2%, terminal growth rate (in 2060) of -5%
Market multiple	$3.90	$3.12	($0.78)	-20%	Average of FY23 NPAT at PE of 9.5x and FY23 EBITDAF at a multiple of 7x
Dividend yield	$3.79	$3.19	($0.60)	-16%	FY22 dividend of 23cps at a gross yield of 10.0% (cash yield of 7.2%)
Target price	**$4.30**	**$3.45**	**($0.85)**	**-20%**	Equal weighting of the above three valuation metrics

Source: Forsyth Barr analysis

Whilst we have pulled back our valuation materially, we are retaining our OUTPERFORM rating for two key reasons (in addition to the value upside).

1. Our revised long-term valuation is, in our view, a worst case scenario from a volume perspective. In addition, our margin assumptions also gradually decline from current low levels due to ongoing competition and therefore do not keep pace with cost inflation.
2. We see three positive near-term catalysts:
    1. ZEL will be reinstating its dividend in FY22 and will be providing guidance at the FY21 result in early May. Having been touted as a dividend stock, not paying a dividend for a year (even if COVID-19 was outside of its control) is a serious offence. Reinstatement of the dividend will at least put ZEL back on the radar of income funds.
    2. We have not factored any earnings upside for the refinery converting to an import terminal. We estimate the upside to be ~+NZ$10m, subject to the agreed pipeline and import terminal fees.
    3. Its weak catalyst, but relative to recent disappoints meeting FY21 guidance should help improve sentiment.

Forecast changes

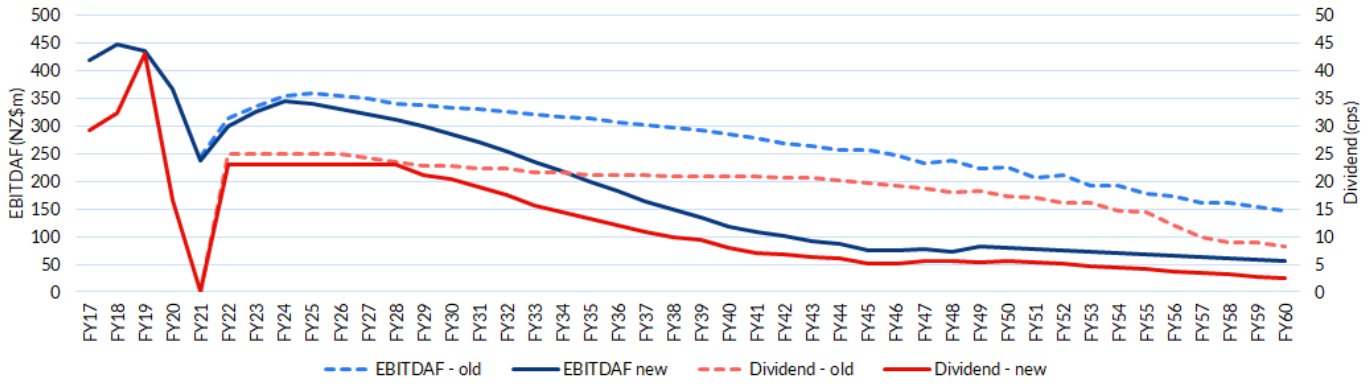
Long-term EBITDAF pull back, more conservative dividend outlook (but it is still healthy for a decade)

We are making material reductions to our long-term volume forecasts as we factor in a worst case downside scenario for industry volumes following the release of the CCC's draft report and the government announcing it is implementing a CCIS. There is a flow on effect to earnings, although most of the impact is not until the end of the 2020s, which is when volume reductions start to bite.

Other changes we have made include:

- Pulling back our dividend forecast for the next decade to 23cps (down -2cps from 25cps). The main driver in the reduction of our dividend forecast is not lower forecast earnings, but a view that the ZEL board will be more cognisant of the need to repay debt. We assume ZEL will target to be debt-free by 2035. That said, the decline in our dividend forecast post-2030 is linked to lower earnings.
- Assuming the refinery converts to an import terminal as at 31 March 2023 (i.e. at the end of FY23). This has little change on earnings, and in our view there is upside earnings risk of ~+NZ$10m vs. the modest refining contribution in our old forecast.

Figure 2. Long-term EBITDAF and dividend forecast changes



Source: Forsyth Barr analysis

Significant long-term volume forecast changes

Our revised volume forecasts assume no light vehicle sales volumes from 2048. We had previously assumed a gradual reduction with ~10% of New Zealand's light vehicle fleet staying as petrol/diesel.

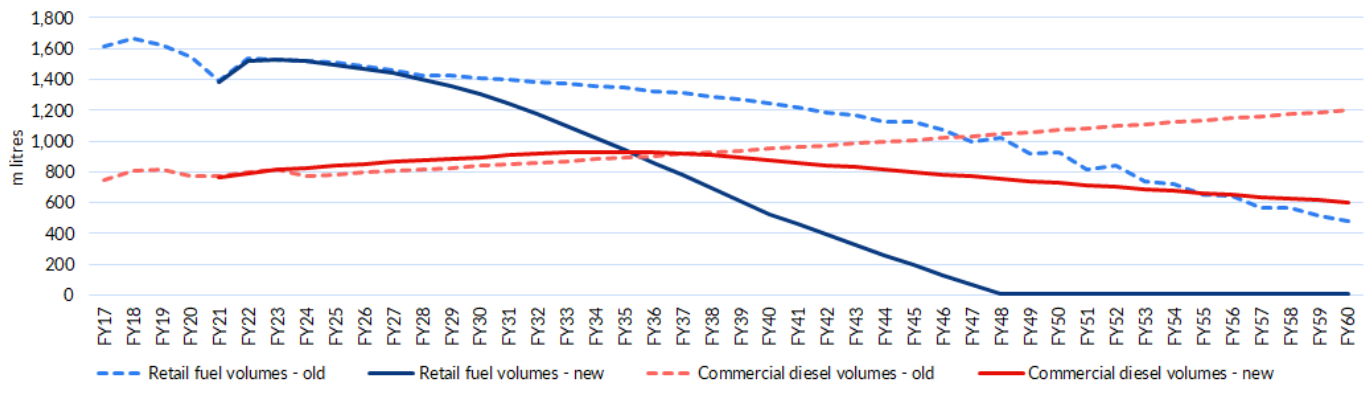
Unlike most other countries, transport in New Zealand has to do much of the heavy lifting to reduce carbon emissions. New Zealand's electricity system is already a low carbon system, hence, to meet the climate change obligations other parts of the economy must decarbonise and transport is the easiest (although that is still hard).

We view our new base case volume assumption as a worst case scenario. In our view, the challenges to meet the government and CCC goals are immense. New Zealand's transport fleet has to improve at a faster rate than any other country has achieved thus far, and there are question marks about whether the technology improvement required to enable the transition will be fast enough. Our revised retail volume forecasts assume:

- All new vehicle registrations meet the CCIS (on average 105gCO_2/km from 2025)
- Only EVs from 2030 onwards
- Steady closure of service stations from 2030 onwards (as volume declines hit)

Our commercial diesel forecast assumptions are broadly consistent with CCC's fuel efficiency assumptions. Previously we had assumed heavy vehicles would not electrify as long haul trucking does not work with batteries. Whilst we are still sceptical heavy long-distance trucking will be able to electrify, there are certain applications that are well suited to electrification, such as buses and relatively short distance trucking with moderate payloads will likely electrify in time. We do not consider hydrogen in this report, however, if it were to become a meaningful part of the transport fuel market we believe ZEL should be able to capture its fair share.

Figure 3. Volume forecast changes



Source: Forsyth Barr analysis

Regulatory pressure to lower emissions ratchets up a notch

The long-term outlook for fuel volumes has become cloudier with the release of the Climate Change Commission (CCC) report pushing for a ban on petrol/diesel fuelled vehicles between 2030 and 2035, and the government implementing a "Clean Car Import Standard" (CCIS) targeting more fuel efficient vehicles (legislation is due in parliament in 2021). The CCIS will have an earlier impact on fuel consumption than the outright ban on fossil-fuelled vehicles as that comes into meaningful effect from 2023. If vehicle importers want to meet the standards, EVs (both battery electric and plug-in hybrids) are going to have to be part of the solution.

The Clean Car Import Standard — what it is and what it means

The government is bringing in a CCIS, based on overseas models, where the fuel efficiency of imports is assessed against an emissions standard (can be on an annual basis). The goal is for light vehicle imports (under 3.5 tonnes) to have CO_2 tailpipe emissions of 105gCO_2/km by 2025. Europe already has this standard and Japan implemented the 105g CO_2/km standard in 2014. NZ is one of the last countries to adopt an emissions standard. Average 2020 tailpipe emissions of new registrations were 171g CO_2/km, meaning New Zealand needs a 39% improvement in four years — the proposed standard is a meaningful step change.

Given the material change from existing emission levels, there is an annual step-down in the target until 2025, with the biggest change taking place in 2025. In recognition that there are different classes of vehicle, the overall 105g CO_2/km target is broken into two categories. The car/SUV target is 102g CO_2/km and the utes/other light vehicle target is 132g CO_2/km.

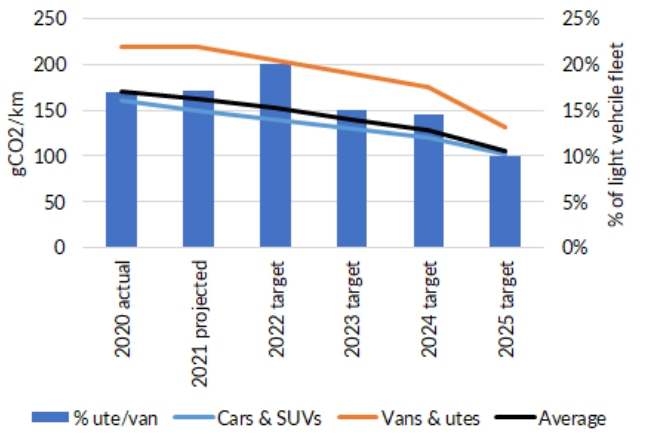
The emissions target does not differentiate between new or used imports.

Figure 4. Cabinet agreed gCO_2/km targets for new imports

	2020 actual	2021 projected	2022 target	2023 target	2024 target	2025 target
Cars & SUVs	161	150	140	130	120	102
Vans & utes	220	220	205	190	175	132
Average	**171**	**162**	**153**	**139**	**128**	**105**
% car/SUV	83%	83%	80%	85%	85%	90%
% ute/van	17%	17%	20%	15%	15%	10%

Source: CCIS cabinet paper, Forsyth Barr analysis

Figure 5. Cabinet agreed gCO_2/km targets for new imports



Source: CCIS cabinet paper, Forsyth Barr analysis

To ensure compliance there is a penalty regime for importers that do not meet the target. The penalties start being charged from 1 January 2023, with a +50% increase in the penalty from 1 January 2025. The 2025 penalty for new vehicles is $75/gCO2 above the "weight-adjusted" target for that particular vehicle. To give a sense of the potential sticker price impact, we estimate that a new Ford Ranger would face a 2025 penalty of ~NZ$6,600 for an ~NZ$50,000 vehicle. That said, fuel efficiency improvement in the interim and Ford's hybrid offering will reduce the size of any penalty. The penalty for used imports is 50% of the new car penalty.

The new goal is very challenging — vehicle prices are likely to increase and fuel volume forecasts based on the emissions standard is probably worst case

In our view the 2025 target is ambitious for New Zealand, for a variety of reasons. It is likely that the sticker price for new and used imports into New Zealand will increase as importers face the penalties for missing the emissions targets.

1. There are no 100% fossil fuelled vehicles that meet the current required standard

Figure 6. converts the gCO_2/km standard into the more common fuel consumption/100km. The smallest petrol vehicles currently have emissions just above the 102gCO_2/km target. The Suzuki Swift (NZ's most popular small vehicle) fuel economy is 4.6L/100km to 4.8L/100km. The only vehicles that do meet the efficiency are BEVs, PHEVs and hybrids.

Hybrid vehicles (popularised by Toyota) typically produce ~90gCO_2/km, ranging between 76gCO2/km to 102gCO2/km depending on the size of vehicle. PHEVs produce ~40gCO2/km.

Figure 6. Conversion of emission to fuel economy targets

	CO2 target gC0$_2$/km	Regular petrol fuel economcy L/100km	Premium petrol fuel economcy L/100km	Diesel fuel economy L/100km
Car/SUVs	102	4.5	4.4	3.9
Utes/other light commercial	132	5.8	5.6	5.1
Fleet	**105**	**4.6**	**4.5**	**4.0**

Source: Forsyth Barr analysis

Figure 7. Fleet emissions and small car fuel efficiency

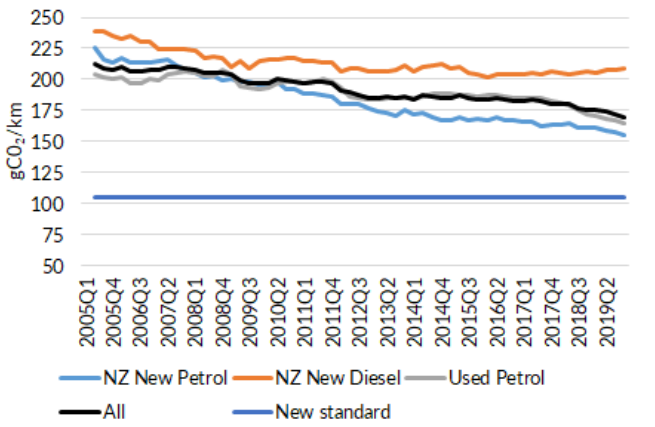
	Typical emissions gCO2/km		Small car fuel efficiency L/100km
PHEV	42	VW Polo	4.5
Petrol Hybrid	93	Suzuki Swift	4.6
Average new entrants to fleet	170	Toyota Yaris	4.9
		Mazda 2	5.3

Source: Forsyth Barr analysis

2. Fuel efficiency improvements are steady, but well below the required rate

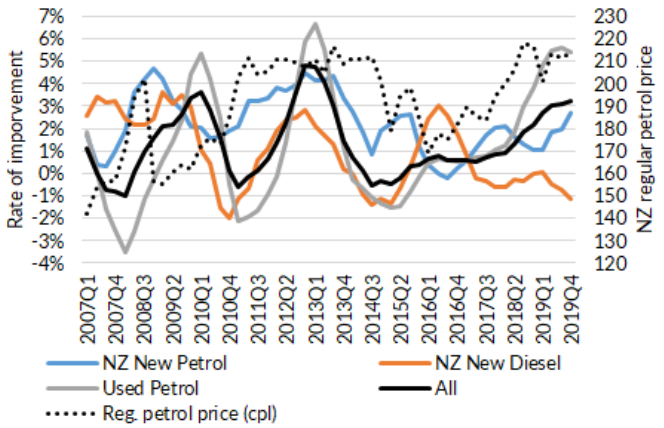
Fuel efficiency improvement across imports has been 1.4% per annum for the last decade. New petrol vehicles have improved at a faster rate (2.2%), with diesel vehicle emissions improving at a much slower rate (0.3%) — we suspect due to the trend towards larger vehicles. However, we note the rate of improvement has stepped up in recent years due mainly to used petrol imports, which appears to be linked to rising fuel prices. There has also been significant growth in hybrids (Figure 10.).

Figure 8. Average emissions of new registrations (new and used)



Source: NZTA, Forsyth Barr analysis

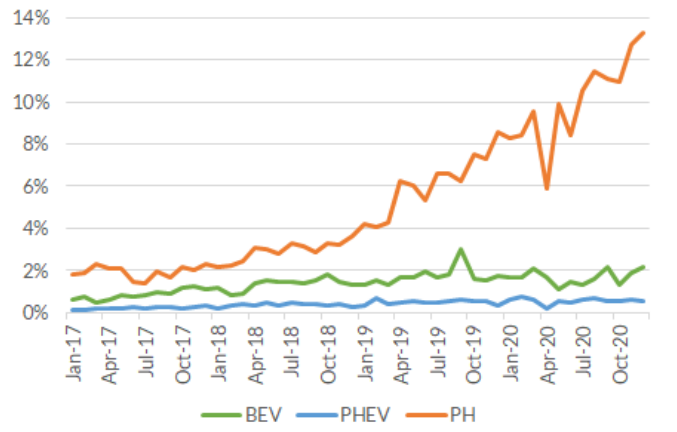
Figure 9. Emissions rate of improvement



Source: NZTA, Forsyth Barr analysis

To achieve the car/SUV target of 102 gCO2/km we note below several scenarios built around EV take-up. Unsurprisingly, the greater the EV take-up, the more likely it is NZ will achieve the targets. In 2020 EV (BEV or PHEV) registrations was 2.3% of total light vehicle registrations. The Norwegians achieved that level of EV penetration in 2012 and five years later hit 30% — so it is possible. However, Norway provided large subsidies and other incentives to consumers to buy electric — it is highly unlikely the NZ Government will get close to the level of subsidy Norway provided.

Figure 10. % of new registrations (new and used)



Source: Forsyth Barr analysis

Figure 11. Scenarios that achieve 102gCO$_2$/km for cars/SUVs

	Emissions (2025) gCO$_2$/km	2020 sales	Scenario weightings A	B	C
BEV	0	2.0%	10%	20%	30%
PHEV	35	0.6%	5%	5%	5%
Petrol hybrid	86	13.0%	47%	25%	3%
Petrol/diesel	158	84.4%	38%	50%	62%

Source: Forsyth Barr analysis

3. Other than Toyota, car manufacturers are ill equipped to meet the new standard

The only vehicles that meet the new standard are battery electric vehicles (BEV), plug-in hybrid electric vehicles (PHEV) and petrol hybrids (the Toyota Prius being the most common). At present, only the Toyota and Lexus sister marques have a wide range of vehicles that can meet the goal, with some marques only recently releasing hybrid versions of a model or two. Toyota has the greatest market share (16% in 2020) and the increase in hybrid sales implies Toyota is already selling more hybrids than standard petrol/diesel vehicles.

Whilst manufacturers are all looking to improve fuel efficiency, it will be a significant challenge for many marques to meet the new standards.

Figure 12. New car models that meet the 102gCO_2/km target for cars/SUVs sold in New Zealand in 2020

	BEVs	PHEVs	Hybrids	New Zealand
Marque	Models	Models	Models	2020 new car market share
Audi	1	1		2%
BMW	1	7		2%
Ford		1	4	4%
Hyundai	2	1	1	7%
Jaguar	1			
Kia	1	1	1	10%
Land Rover		1		
Lexus			9	
Mazda			2	8%
Mercedes	1	3		2%
MG	1			
Mini	1	1		
Mitsubishi		1		8%
Nissan	1			5%
Porsche	1	2		
Renault	1			
Subaru			2	3%
Suzuki			1	7%
Tesla	3			
Toyota		1	9	16%
Volvo		4		
VW	1			4%
TOTAL	**16**	**24**	**29**	**77%**
Top 15 brands with nothing below 102g				
Holden/GM				4%
Honda				4%

Source: MIA, Forsyth Barr analysis

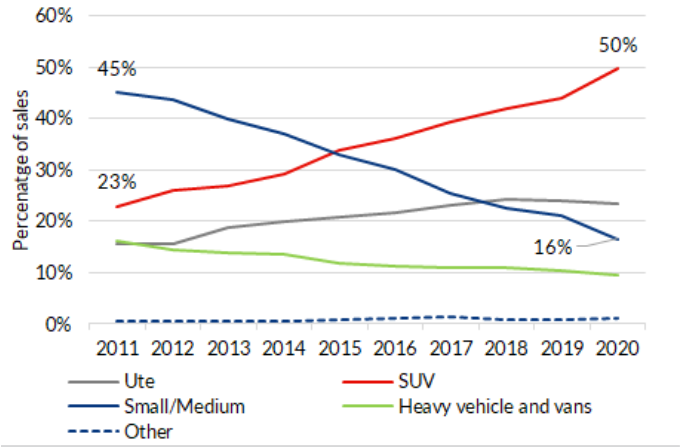
4. The government assumes a rapid drop in ute/van market share — this appears optimistic

In the cabinet paper supporting the policy introduction it assumes that ute sales will drop from 17.5% to ~10% in 2025 (refer Figure 5.). Whilst new ute sales have plateaued in recent years, there is little sign of a decline. If ute sales remain high, the cabinet paper indicated the government will reduce allowable emissions (e.g. car/SUV target reduces to 100gCO_2/km) to ensure the overall 105gCO2/km target is met.

5. It is easier to meet 105gCO2/km in Europe/Japan as the fleet make-up/starting point is very different

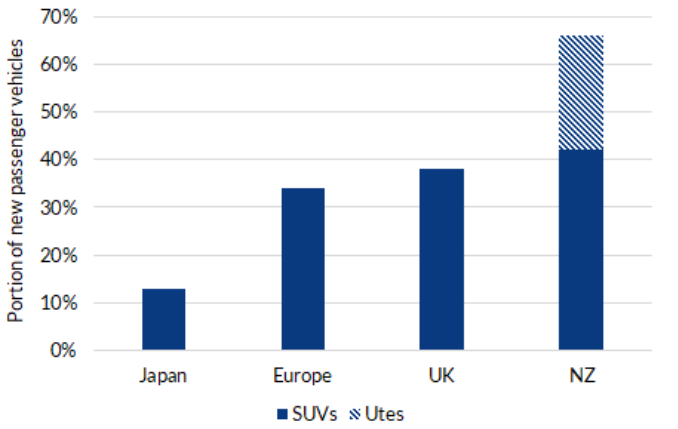
Another issue that the cabinet paper glosses over is the fact the vehicle fleets in Europe and Japan are materially different. In 2018, SUV sales in Japan were only ~12% and in both Europe and the UK were less than 40%. Europe and Japan have ostensibly been able to meet the 105gCO_2/km standard with relatively low uptake of EVs. In 2019 European EV sales were 4.6% and in Japan 0.9%. Achieving the emissions target with such low EV penetration will not be possible in NZ. Japan has been aided by a very high level of hybrid sales, which are above 25%.

Figure 13. NZ new sales by vehicle type



Source: MIA, Forsyth Barr analysis

Figure 14. 2018 SUV sales %



Source: Jato, MIA, Forsyth Barr analysis

EVs only policy from 2030 looking more likely

There is a growing call for NZ to follow other overseas nations and ban the import of fossil fuel vehicles from 2030 and align NZ to the UK and/or Japanese dates bans are implemented. In its draft report the CCC advocates for a date sometime between 2030 and 2035, with its modelling assuming 2032. Putting aside the question whether this will be achievable or not, a ban from 2030 is the worst case scenario for NZ fuel retailers and hence that is what we have adopted as our base assumption.

With the notable exceptions of Norway and South Korea, all countries are targeting 2030 or later as the date to implement a ban.

Figure 15. Countries/US States aiming to ban fossil fuelled vehicles

Year	2025	2030	2032	2035	2040
	Norway	Belgium diesel	Scotland	Belgium petrol	Egypt
	South Korea	Britain ICE		Britain hybrid	France
		Denmark ICE		Denmark hybrid	Spain
		Germany		Japan	Taiwan cars
		India		Taiwan motorcycles	Sri Lanka
		Israel		Caliornia State	Portugal
		Netherlands			New Jersey State
		Iceland			
		Sweden			
		Slovenia			
		Iceland			

Source: Forsyth Barr analysis

Whilst we are adopting the ban as our base assumption, we continue to have a degree of scepticism that a ban will be politically enforceable by 2030 for two key reasons.

First, the rate of improvement in EVs over the past 5 years does not bode well. EVs are still very expensive relative to their petrol/diesel counterparts and the standard EV price point has not improved, north of NZ$60,000. What has improved is range — however, with a typical battery range between 300km to 400km, that is insufficient for mass take-up, in our view. So range still needs to improve and the selling price point has to drop ~-30%. In addition, the options available to consumer need to materially improve.

That said, car manufacturers are investing in EVs in a big way. Whist the available options are limited at present, that will grow, and grow quickly within the next five years. Although many manufacturers are not aiming to be 100% electric by 2030, by far the most common year to start banning fossil fuelled vehicles globally.

Second, the fast shift to EVs places a greater burden on lower socio-economic groups that are unable to afford the higher sticker price of EVs. In our view, the social consequences of a fast transition will be challenging for politicians to overcome.

Figure 16. Car manufacturer stated EV goals

Marque	Near term	Long term target
Ford	Invest $22bn in electrification by 2025	European all electric by 2030
GM	Spending $27bn to launch 30 BEVs by the end of 2025	Fully electric by 2035
Honda	100% electrified (BEV/PHEV) sales by 2022	European all electric by 2035
Hyundai	560k BBEVs per year by 2025	Wants 8-10% of global BEV market by 2040
Kia	11 BEVs by 2026	By 2030, 40 percent of all sales electrified (BEV/PHEV)
Mazda	By 2025 the majority of models electrified	Electrified (BEV/PHEV) variant of all models by 2030
Mitsubishi		50 percent of sales to be BEVs by 2030
Nissan	Eight new models by 2023	All cars sold in key markets electric by 2030
Toyota	10 pure-electric models by 2025	40% electrified (PHEV or full-electric) by 2025, 70% by 2030
Volvo	50% BEV, 50% PHEV by 2025	Fully electric by 2030
VW	1m BEVs by end of 2023	70% of Europe sales electric by early 2030s

Source: Company websites, Forsyth Barr analysis

Retail margins under pressure from rising crude prices

Retail margins are under pressure, again. However, our analysis indicates that the margin pressure that is being observed at present is due to rising crude oil prices as opposed to another structural step-down. We have broken the last four years into several distinct periods, when crude oil prices were rising at a rapid rate, when crude oil prices were falling at a rapid rate and when prices were relatively stable.

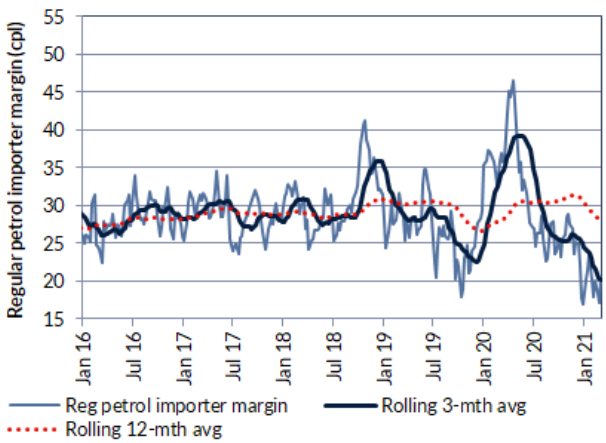
The analysis supports the view that rising crude prices squeezes margins and falling crude prices inflates margins. It also highlights the structural change in retail margins that took place in 2019, with retail margins falling -5cpl vs. the mid-point of the preceding periods. The average retail margin over the last four months, when crude prices have risen steadily is ~-3.5cpl lower than the last stable period. This decline is similar to the level of decline vs. the mid-point seen during past periods where margins were rising.

Figure 17. MBIE margin analysis

Crude movement		Up	Down	Up	Flat	Down	Flat	Up
Start date		30-Jun-17	30-Sep-18	31-Dec-18	31-May-19	24-Jan-20	30-Jun-20	31-Oct-20
End date		30-Sep-18	31-Dec-18	24-Apr-19	24-Jan-20	20-Mar-20	31-Oct-20	5-Mar-21
Start crude price	NZD$/barrel	65	125	83	100	95	65	58
End crude price	NZD$/barrel	125	83	110	95	47	58	88
Crude movement	NZD$/barrel	60	-42	27	-5	-48	-7	30
Crude movement (NZD$/barrel)	%	92%	-34%	33%	-5%	-51%	-11%	52%
Crude oil change / week	NZD$/barrel	+$0.9	-$3.2	+$1.7	-$0.1	-$6.0	-$0.4	+$1.7
Average MBIE margin								
Regular	NZ$ cpl	28.7	35.8	28.0	26.9	35.5	25.7	21.9
Premium	NZ$ cpl	39.6	45.6	38.0	38.2	47.8	38.3	36.6
Diesel	NZ$ cpl	33.3	40.0	40.0	33.6	43.5	38.3	34.8
Blended	**NZ$ cpl**	**31.5**	**38.3**	**32.5**	**30.3**	**39.3**	**30.7**	**27.3**

Source: MBIE, Forsyth Barr analysis

Figure 18. Regular petrol importer margins



Source: MBIE, Forsyth Barr analysis

Figure 19. Spot MBIE margins

NZ cpl	Regular petrol	Premium petrol	Diesel	Blended
Spot	20.4	36.3	34.8	**26.9**
Last 4 weeks	19.0	34.9	33.8	**25.6**
Last 3 months	20.1	35.3	34.5	**26.4**
FY21 YTD	27.1	40.7	38.5	**32.4**
FY20	28.7	39.8	36.0	**32.5**
FY19	30.2	40.8	35.8	**33.5**
FY18	29.0	40.1	34.9	**32.5**

Source: MBIE, Forsyth Barr analysis

We have trimmed our short-term 2H21 retail margin assumption -0.5cpl to 22.3cpl to reflect the short-term weakness in margins. Our long-term assumptions are unchanged, but already assume ongoing retail margin weakness. Our FY22 retail margin assumption is 23.0cpl, -3.4% lower than FY21.

February 2021 volumes, less worse than January 2021, but still weak

February 2021 volumes are still weaker than the numbers ZEL was posting in late 2020. Z branded volumes had their worst month since August 2020 (when Auckland went into its second lockdown) with daily average February 2021 down -6% on February 2020. Commercial diesel volumes were also down on the pcp, the second month in a row, following six consecutive months ahead of pcp volumes.

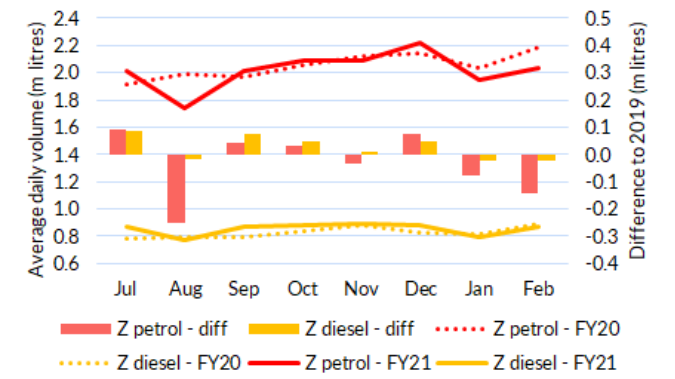
The positive volume story has come from domestic supply volumes up +2% on February 2020 (particularly diesel, up +4%) and bitumen, up +7% on February 2020.

Figure 20. Monthly fuel volumes

m litres	Feb-20	Jan-21	Feb-21	Daily avg vol % chg % chg vs. pcp	Daily avg vol % chg % chg vs. prior mth	Commentary
Volumes by brand/product						
Petrol - Z	63	60	57	-7%	5%	The worst petrol outcome since August 2020 when Auckland was in lockdown
Petrol - Caltex	28	28	26	-3%	4%	Soft volumes, but not signifcantly so. Caltex has less exposure to Auckland
Petrol - Domestic supply	11	10	10	-4%	11%	
Diesel - Z	26	24	24	-3%	10%	Continuation of diesel volume decline for Z, but not as weak as petrol
Diesel - Caltex	12	12	12	0%	11%	Good Caltex diesel performance vs. other retail segments
Diesel - Domestic supply	33	30	34	4%	22%	Strong diesel recovery
Diesel - Commercial	67	61	62	-5%	11%	Second month in a row of below ppc commmercial diesel volumes
Other - Jet	68	27	24	-64%	-2%	Jet volumes consistent with recent months
Other - Marine	11	0	2	-86%	368%	
Other - Bitumen & other	20	10	21	7%	133%	Strong bitumen month and rebound on January
Total ZEL excl export	340	263	271	-17%	14%	
Terminal gate sales	0	11	12		9%	
Industry & Export	1	1	17			ZEL suppplied blendstock for refining purposes to a competitor
Total ZEL	**341**	**276**	**300**	**-9%**	**20%**	
Volumes by category						
Total Z	89	85	81	-6%	6%	
Total Caltex	40	40	38	-2%	6%	
Total retail petrol (excl supply)	91	88	83	-5%	4%	
Total retail diesel (excl supply)	38	36	36	-2%	10%	
Total Domestic supply	45	41	44	2%	19%	The biggest bright spot in otherwise weak volumes
Total retail (incl supply)	174	165	163	-3%	9%	
Total commercial	166	98	108	-33%	21%	Commercial still dominated by jet and marine declines
Total volumes	**340**	**263**	**271**	**-17%**	**14%**	

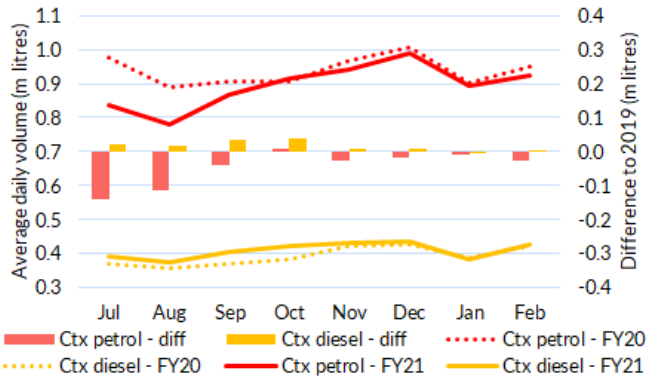
Source: ZEL, Forsyth Barr analysis

Figure 21. Daily average Z branded volumes



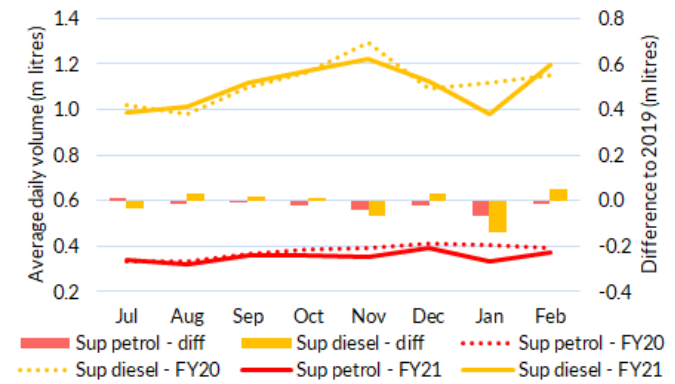
Source: ZEL, Forsyth Barr analysis

Figure 22. Daily average Caltex branded volumes



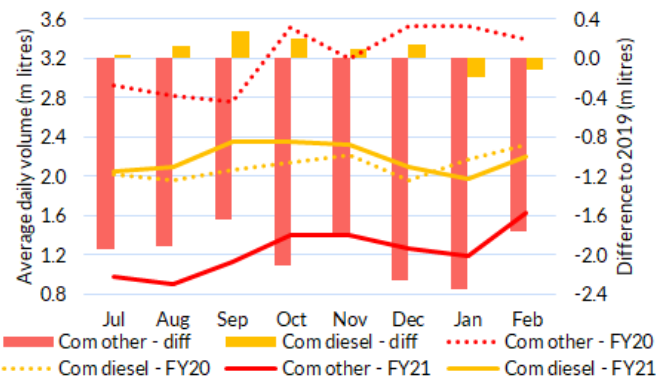
Source: ZEL, Forsyth Barr analysis

Figure 23. Daily average domestic supply volumes



Source: ZEL, Forsyth Barr analysis

Figure 24. Daily average commercial volumes



Source: ZEL, Forsyth Barr analysis

Short-term forecast changes

ZEL has narrowed its FY21 EBITDAF guidance range to between NZ$235m to NZ$245m (from NZ$235m to NZ$265m). Our old EBITDAF forecast was NZ$243m, which we have trimmed to NZ$237m. The main changes are:

- A -0.5cpl lower 2H21 retail gross margin due to the ongoing increases in crude oil prices squeezing margins
- A -1% reduction in forecast volumes following the weak monthly volume update

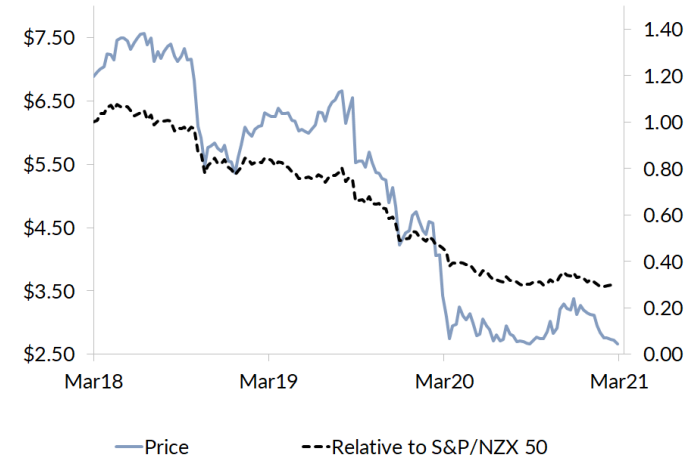
FY22 & FY23 forecasts are trimmed due mainly to a reduction in jet and marine volumes. Jet because international travel is constantly pushed further out and marine due to the refinery producing less fuel oil and ZEL exiting the use of the Aniwhenua barge in Auckland.

Figure 25. Short-term forecast changes

NZ$m	FY21 Old	FY21 New	% Chg	FY22 Old	FY22 New	% Chg	FY23 Old	FY23 New	% Chg
Revenue	3,384	3,380	0%	3,986	4,078	2%	4,149	4,323	4%
Gross profit	**592**	**585**	**-1%**	**671**	**662**	**-1%**	**702**	**702**	**0%**
Gross Margin	17.5%	17.3%	-1%	16.8%	16.2%	-4%	16.9%	16.2%	-4%
Operating costs	(349)	(348)	0%	(358)	(363)	1%	(367)	(376)	2%
EBITDAF	**243**	**237**	**-2%**	**313**	**300**	**-4%**	**335**	**326**	**-3%**
Depreciation & amortisation	(154)	(154)	0%	(144)	(144)	0%	(136)	(136)	0%
EBIT	**89**	**83**	**-7%**	**169**	**155**	**-8%**	**198**	**189**	**-4%**
Net Interest	(50)	(50)	0%	(50)	(50)	2%	(47)	(48)	3%
Other	4	4	0%	-	-		-	-	
Pre-tax profit	**44**	**38**	**-14%**	**119**	**105**	**-12%**	**151**	**141**	**-7%**
Tax expense	(26)	(24)	-7%	(33)	(29)	-12%	(42)	(40)	-7%
NPAT	**18**	**13**	**-25%**	**86**	**76**	**-12%**	**109**	**102**	**-7%**
Minority interest	7	7	0%	11	11	0%	11	11	0%
NPAT post-minorities	25	21	-17%	97	87	-11%	120	113	-6%
Normalised Profit	**20**	**16**	**-22%**	**97**	**87**	**-11%**	**120**	**113**	**-6%**
Earnings per share (eps)	3.8	3.0	-22%	18.7	16.7	-11%	23.1	21.7	-6%
Dividend (cps)	-	-		25.0	23.0	-8%	25.0	23.0	-8%
Key operating assumptions									
Retail - petrol	969	961	-1%	1,064	1,058	-1%	1,059	1,066	1%
Retail - diesel	426	419	-2%	469	463	-1%	466	466	0%
Commercial - diesel	775	761	-2%	798	786	-1%	817	819	0%
Comerciel - jet	250	263	5%	527	406	-23%	671	603	-10%
Commercial - marine	42	39	-7%	39	12	-69%	41	13	-69%
Commercial - bitumen & other	110	118	7%	125	133	6%	127	130	2%
Domestic supply	505	494	-2%	539	527	-2%	541	529	-2%
ZEL specific volumes (m litres)	**3,078**	**3,055**	**-1%**	**3,560**	**3,385**	**-5%**	**3,722**	**3,626**	**-3%**
Industry and export supply	39	52	33%	30	30	0%	30	30	0%
Terminal gate sales	112	111		150	150		150	150	
Total fuel volumes (m litres)	**3,117**	**3,107**	**0%**	**3,590**	**3,415**	**-5%**	**3,752**	**3,656**	**-3%**
GM excl supply (cpl)	17.5	17.4	0%	16.4	17.0	4%	15.9	16.3	3%
GM incl refining (cpl)	16.7	16.6	-1%	16.5	17.1	3%	16.6	17.0	2%
Gross profit make-up									
Fuels gross profit	538	532	-1%	583	575	-1%	590	592	0%
Refining gross profit	(25)	(25)	2%	5	3	-36%	26	23	-11%
Non-fuel gross profit	76	76	0%	79	80	1%	81	82	1%
NZR dividend	-	-		-	-		-	-	
Flick gross profit	3	3	0%	4	4	0%	4	4	0%
	592	**585**	**-1%**	**671**	**662**	**-1%**	**702**	**702**	**0%**

Source: Forsyth Barr analysis

Figure 26. Price performance



Source: Eikon, Forsyth Barr analysis

Figure 27. Substantial shareholders

Shareholder	Latest Holding
ACC	9.3%
L1 Capital Partners Pty	5.0%

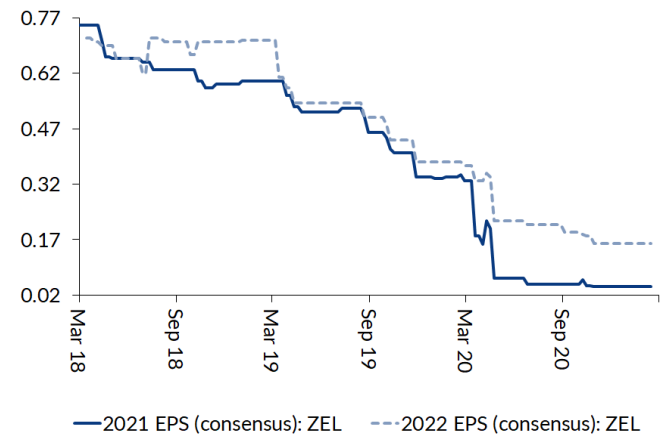
Source: NZX, Forsyth Barr analysis, NOTE: based on SPH notices only

Figure 28. International valuation comparisons

Company	Code	Price	Mkt Cap	PE		EV/EBITDA		EV/EBIT		Cash Yld
(metrics re-weighted to reflect ZEL's balance date - March)			(m)	2021E	2022E	2021E	2022E	2021E	2022E	2022E
Z Energy	**ZEL NZ**	**NZ$2.66**	**NZ$1,384**	**>50x**	**15.9x**	**10.4x**	**8.2x**	**30.3x**	**15.9x**	**8.6%**
SUBURBAN PROPANE PARTNERS LP	SPH US	US$14.98	US$937	14.2x	13.2x	8.4x	8.7x	16.3x	16.3x	8.0%
AMPOL	ALD AT	A$23.40	A$5,576	<0x	16.8x	<0x	6.9x	<0x	11.9x	3.5%
VIVA ENERGY GROUP	VEA AT	A$1.71	A$2,741	<0x	24.4x	15.7x	7.5x	<0x	17.7x	3.1%
CONTACT ENERGY *	CEN NZ	NZ$7.07	NZ$5,409	20.3x	19.7x	13.6x	13.2x	26.2x	25.1x	5.1%
MERCURY *	MCY NZ	NZ$6.13	NZ$8,351	30.4x	26.6x	18.9x	16.7x	32.0x	27.4x	3.0%
TRUSTPOWER *	TPW NZ	NZ$8.06	NZ$2,523	30.7x	26.0x	16.5x	14.7x	21.6x	18.7x	4.2%
MERIDIAN ENERGY *	MEL NZ	NZ$5.49	NZ$14,069	33.9x	34.1x	21.4x	21.5x	37.1x	37.1x	3.1%
GENESIS ENERGY *	GNE NZ	NZ$3.90	NZ$4,070	21.2x	17.8x	13.2x	12.2x	27.6x	23.4x	4.5%
			Compco Average:	**25.1x**	**22.3x**	**15.4x**	**12.7x**	**26.8x**	**22.2x**	**4.3%**
EV = Current Market Cap + Actual Net Debt			**ZEL Relative:**	**n/a**	**-29%**	**-32%**	**-35%**	**13%**	**-28%**	**101%**

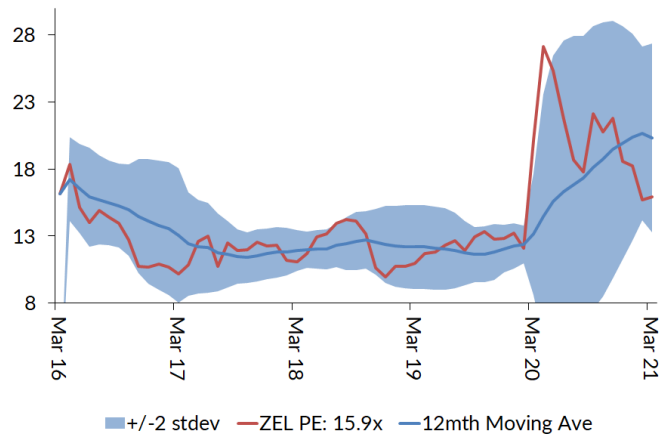
Source: *Forsyth Barr analysis, Bloomberg Consensus, Compco metrics re-weighted to reflect headline (ZEL) companies fiscal year end

Figure 29. Consensus EPS momentum (NZ$)



Source: Forsyth Barr analysis

Figure 30. One year forward PE (x)



Source: Forsyth Barr analysis

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