

# Refining NZ

## Cash Neutral to End of FY21

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### NEUTRAL

Refining NZ (NZR) has confirmed it will operate on a cash neutral basis (at worst), until at least the end of FY21. It will achieve this goal by reducing refinery operating capacity. However, critical to the value of NZR is the outcome of the terminal conversion discussions which remain ongoing. NZR provided no indication of when discussions will conclude. Given the wide range of possible value outcomes (some of which are lower than the current share price) we retain our NEUTRAL rating.

| NZX Code           | NZR               | Financials: Dec/             | 19A   | 20E   | 21E   | 22E   | Valuation (x)     | 19A  | 20E  | 21E | 22E |
|--------------------|-------------------|------------------------------|-------|-------|-------|-------|-------------------|------|------|-----|-----|
| Share price        | NZ\$0.61          | NPAT* (NZ\$m)                | 4.2   | -45.8 | -29.0 | -10.2 | PE                | 45.8 | n/a  | n/a | n/a |
| Target price       | NZ\$0.80          | EPS* (NZc)                   | 1.3   | -65.1 | -9.3  | -3.3  | EV/EBIT           | 24.2 | n/a  | n/a | n/a |
| Risk rating        | High              | EPS growth* (%)              | -85.9 | n/a   | 85.7  | 64.9  | EV/EBITDA         | 3.7  | 11.5 | 7.7 | 5.4 |
| Issued shares      | 312.6m            | DPS (NZc)                    | 2.0   | 0.0   | 0.0   | 0.0   | Price / NTA       | 0.3  | 0.4  | 0.4 | 0.4 |
| Market cap         | NZ\$191m          | Imputation (%)               | 100   | 100   | 100   | 100   | Cash div yld (%)  | 3.3  | 0.0  | 0.0 | 0.0 |
| Avg daily turnover | 357.8k (NZ\$351k) | *Based on normalised profits |       |       |       |       | Gross div yld (%) | 4.6  | 0.0  | 0.0 | 0.0 |

### Cash neutral in 2021 – operating capacity reduces

NZR has successfully achieved its goal of being able to operate on a cash neutral basis in FY21. NZR is cutting operating capacity ~22% to 90,000 barrels/day (~33m barrels/year in a non-outage year) by mothballing a small crude distillation unit. FY21 opex cost savings are expected to be ~NZ\$20m vs. FY20 with savings coming from lower labour and "other" costs. There will however be ~NZ\$5m of restructuring costs (offset by surplus asset sales). FY21 capex is expected to be ~NZ\$50m (vs. ~NZ\$35m in FY20) due to deferred maintenance capex. The effect for customers of reducing refinery capacity is to lift the processing fee floor from ~US\$3.0/barrel (when the refinery operates at full capacity) to ~US\$4.3/barrel in FY21 (i.e. the gross refining margin (GRM) needs to be above US\$4.3/barrel to make more than the fee floor). It also lifts the "break-even" point for customers – we estimate to above US\$6.0/barrel, meaning the customers are incentivised to do a deal that results in NZR converting to an import terminal.

### Terminal conversion discussions ongoing – timing uncertain

Discussions with customers on converting the refinery to an import terminal continue. Today's announcement places more pressure on NZR's customers (Z Energy, BP & Mobil) as it alleviates the short-term financial pressure on NZR and confirms its customers are likely to continue competing at a disadvantage to fuel retailers that source fuel based on import prices (due to the increase in the break-even GRM). The key focus of current discussions is the price to access import terminal facilities and the pipeline. Mobil's decision to file a notice of dispute under the Processing Agreement will likely delay final discussions.

### Modest FY21 forecast changes, bigger FY22 changes, but NZR value still depends on terminal conversion discussions

We have lowered FY20/FY21/FY22 EBITDA forecasts -NZ\$3m/-NZ\$3m/-NZ\$58m to NZ\$38m/NZ\$58m/NZ\$83m respectively. Our forecasts assume NZR operates at the fee floor through FY21 and 1H22, and that processing volumes in FY21 and FY22 are consistent with NZR's new operating capacity.

We maintain our view that NZR will likely convert to an import terminal. The value outcomes for NZR remain wide and depend heavily on conversion costs (NZR is keeping that figure confidential given current negotiations) and import terminal & pipeline fees under an import model. Whilst we are gaining comfort that the downside is not negative, there remains a wide range of possible value outcomes (NZ\$0.25/share to NZ\$1.80/share).

## Refining NZ (NZR)

Priced as at 05 Oct 2020 (NZ\$)

0.61

### 12-month target price (NZ\$)\*

0.80

Expected share price return

31.1%

Net dividend yield

0.0%

Estimated 12-month return

31.1%

### Key WACC assumptions

Risk free rate

1.30%

Equity beta

1.09

WACC

7.1%

Terminal growth

0.0%

### Spot valuations (NZ\$)

1. Scenario valuation

0.86

2. n/a

n/a

3. n/a

n/a

### DCF valuation summary (NZ\$m)

Total firm value

647

(Net debt)/cash

(256)

Less: Capitalised operating leases

Value of equity

391

| Profit and Loss Account (NZ\$m) | 2018A      | 2019A      | 2020E        | 2021E       | 2022E       |
|---------------------------------|------------|------------|--------------|-------------|-------------|
| Sales revenue                   | 362        | 348        | 227          | 237         | 257         |
| <b>Normalised EBITDA</b>        | <b>153</b> | <b>118</b> | <b>38</b>    | <b>58</b>   | <b>83</b>   |
| Depreciation and amortisation   | (97)       | (100)      | (88)         | (87)        | (87)        |
| <b>Normalised EBIT</b>          | <b>56</b>  | <b>18</b>  | <b>(49)</b>  | <b>(29)</b> | <b>(4)</b>  |
| Net interest                    | (14)       | (13)       | (13)         | (11)        | (10)        |
| Associate income                | 0          | 0          | 0            | 0           | 0           |
| Tax                             | (12)       | (1)        | 16           | 11          | 4           |
| Minority interests              | 0          | 0          | 0            | 0           | 0           |
| <b>Normalised NPAT</b>          | <b>30</b>  | <b>4</b>   | <b>(46)</b>  | <b>(29)</b> | <b>(10)</b> |
| Abnormals/other                 | 0          | 0          | (158)        | 0           | 0           |
| <b>Reported NPAT</b>            | <b>30</b>  | <b>4</b>   | <b>(203)</b> | <b>(29)</b> | <b>(10)</b> |
| Normalised EPS (cps)            | 9.5        | 1.3        | (65.1)       | (9.3)       | (3.3)       |
| DPS (cps)                       | 7.5        | 2.0        | 0            | 0           | 0           |

| Growth Rates        | 2018A | 2019A | 2020A  | 2021A | 2022A |
|---------------------|-------|-------|--------|-------|-------|
| Revenue (%)         | -12.6 | -3.9  | -34.8  | 4.5   | 8.4   |
| EBITDA (%)          | -30.7 | -22.5 | -67.7  | 51.0  | 44.5  |
| EBIT (%)            | -55.3 | -67.1 | n/a    | n/a   | n/a   |
| Normalised NPAT (%) | -62.3 | -85.9 | n/a    | n/a   | n/a   |
| Normalised EPS (%)  | -62.3 | -85.9 | n/a    | n/a   | n/a   |
| Ordinary DPS (%)    | -58.3 | -73.3 | -100.0 | n/a   | n/a   |

| Cash Flow (NZ\$m)                      | 2018A        | 2019A      | 2020E       | 2021E      | 2022E     |
|--|--------------|------------|-------------|------------|-----------|
| <b>EBITDA</b>                          | <b>153</b>   | <b>118</b> | <b>38</b>   | <b>58</b>  | <b>83</b> |
| Working capital change                 | (39)         | 23         | (12)        | 2          | 0         |
| Interest & tax paid                    | (25)         | (19)       | (8)         | (11)       | (10)      |
| Other                                  | 16           | (6)        | 2           | 0          | 0         |
| <b>Operating cash flow</b>             | <b>105</b>   | <b>117</b> | <b>20</b>   | <b>49</b>  | <b>73</b> |
| Capital expenditure                    | (162)        | (78)       | (37)        | (49)       | (55)      |
| (Acquisitions)/divestments             | 0            | 0          | 0           | 0          | 0         |
| Other                                  | 0            | 0          | 5           | 0          | 0         |
| <b>Funding available/(required)</b>    | <b>(58)</b>  | <b>39</b>  | <b>(12)</b> | <b>(0)</b> | <b>18</b> |
| Dividends paid                         | (47)         | (20)       | 0           | 0          | 0         |
| Equity raised/(returned)               | (0)          | (0)        | 0           | 0          | 0         |
| <b>(Increase)/decrease in net debt</b> | <b>(105)</b> | <b>19</b>  | <b>(12)</b> | <b>(0)</b> | <b>18</b> |

| Balance Sheet (NZ\$m)        | 2018A        | 2019A        | 2020E      | 2021E      | 2022E      |
|------------------------------|--------------|--------------|------------|------------|------------|
| Working capital              | 19           | (5)          | 16         | 25         | 29         |
| Fixed assets                 | 1,192        | 1,171        | 902        | 864        | 832        |
| Intangibles                  | 14           | 22           | 12         | 12         | 12         |
| Right of use asset           | 0            | 0            | 0          | 0          | 0          |
| Other assets                 | 0            | 4            | 3          | 3          | 3          |
| <b>Total funds employed</b>  | <b>1,226</b> | <b>1,193</b> | <b>933</b> | <b>905</b> | <b>876</b> |
| Net debt/(cash)              | 260          | 242          | 255        | 256        | 238        |
| Lease liability              | 0            | 0            | 0          | 0          | 0          |
| Other liabilities            | 196          | 191          | 133        | 133        | 133        |
| Shareholder's funds          | 769          | 760          | 544        | 514        | 504        |
| Minority interests           | 0            | 0            | 0          | 1          | 1          |
| <b>Total funding sources</b> | <b>1,226</b> | <b>1,193</b> | <b>933</b> | <b>905</b> | <b>876</b> |

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

| Valuation Ratios         | 2018A | 2019A | 2020E | 2021E | 2022E |
|--------------------------|-------|-------|-------|-------|-------|
| EV/EBITDA (x)            | 2.6   | 3.7   | 11.5  | 7.7   | 5.4   |
| EV/EBIT (x)              | 7.2   | 24.2  | n/a   | n/a   | n/a   |
| PE (x)                   | 6.4   | 45.8  | n/a   | n/a   | n/a   |
| Price/NTA (x)            | 0.3   | 0.3   | 0.4   | 0.4   | 0.4   |
| Free cash flow yield (%) | -30.3 | 20.7  | -8.9  | -0.2  | 9.5   |
| Net dividend yield (%)   | 12.3  | 3.3   | 0.0   | 0.0   | 0.0   |
| Gross dividend yield (%) | 17.1  | 4.6   | 0.0   | 0.0   | 0.0   |

| Capital Structure         | 2018A | 2019A | 2020E | 2021E | 2022E |
|---------------------------|-------|-------|-------|-------|-------|
| Interest cover EBIT (x)   | 4.0   | 1.4   | n/a   | n/a   | n/a   |
| Interest cover EBITDA (x) | 11.1  | 8.8   | 3.0   | 5.4   | 8.1   |
| Net debt/ND+E (%)         | 25.3  | 24.1  | 32.0  | 33.2  | 32.1  |
| Net debt/EBITDA (x)       | 1.7   | 2.0   | 6.7   | 4.4   | 2.9   |

| Key Ratios                   | 2018A | 2019A | 2020E | 2021E | 2022E |
|------------------------------|-------|-------|-------|-------|-------|
| Return on assets (%)         | 4.0   | 1.3   | -4.5  | -2.7  | -0.4  |
| Return on equity (%)         | 3.9   | 0.5   | -8.4  | -5.6  | -2.0  |
| Return on funds employed (%) | 4.6   | 2.1   | -3.7  | -2.0  | 0.4   |
| EBITDA margin (%)            | 42.1  | 33.9  | 16.8  | 24.3  | 32.4  |
| EBIT margin (%)              | 15.3  | 5.3   | -21.8 | -12.4 | -1.5  |
| Capex to sales (%)           | 44.8  | 22.3  | 16.2  | 20.8  | 21.4  |
| Capex to depreciation (%)    | 167   | 78    | 42    | 57    | 63    |
| Imputation (%)               | 100   | 100   | 100   | 100   | 100   |
| Pay-out ratio (%)            | 79    | 150   | 0     | 0     | 0     |

| Operating Performance            | 2018A      | 2019A      | 2020E      | 2021E      | 2022E      |
|----------------------------------|------------|------------|------------|------------|------------|
| <b>Revenue Breakdown (NZ\$m)</b> |            |            |            |            |            |
| Processing fee revenue           | 259        | 242        | 140        | 142        | 158        |
| Natural gas recovery             | 32         | 40         | 26         | 31         | 32         |
| Other refining revenue           | 14         | 16         | 14         | 12         | 12         |
| Pipeline revenue                 | 44         | 36         | 32         | 39         | 42         |
| Other revenue                    | 14         | 14         | 15         | 13         | 13         |
| <b>Total revenue</b>             | <b>362</b> | <b>348</b> | <b>227</b> | <b>237</b> | <b>257</b> |

|                               |      |      |      |      |      |
|-------------------------------|------|------|------|------|------|
| <b>Processing fee drivers</b> |      |      |      |      |      |
| Refining margin (USD/barrel)  | 6.2  | 5.3  | 2.2  | 3.2  | 4.6  |
| NZDUSD                        | 0.69 | 0.66 | 0.64 | 0.67 | 0.68 |
| Throughput (mbbls)            | 40.4 | 42.7 | 25.4 | 31.0 | 31.0 |
| Refining margin (NZD/barrel)  | 6.2  | 5.7  | 2.5  | 3.4  | 4.7  |

|                                    |     |     |     |     |     |
|------------------------------------|-----|-----|-----|-----|-----|
| Fee floor (estimated) (USD/barrel) | 3.3 | 3.0 | 5.1 | 4.4 | 4.5 |
|------------------------------------|-----|-----|-----|-----|-----|

|   |            |            |            |            |            |
|---|------------|------------|------------|------------|------------|
| <b>Operating cost breakdown (NZ\$m)</b> |            |            |            |            |            |
| Process materials and utilities         | 49         | 59         | 48         | 51         | 46         |
| Natural gas costs                       | 32         | 40         | 26         | 31         | 32         |
| Materials & contractor payments         | 29         | 31         | 19         | 20         | 22         |
| Wages & salaries                        | 61         | 61         | 62         | 47         | 48         |
| Admin & other expenses                  | 38         | 39         | 33         | 30         | 26         |
| <b>Total expenses</b>                   | <b>210</b> | <b>230</b> | <b>189</b> | <b>180</b> | <b>174</b> |

## FY21 processing fee floor

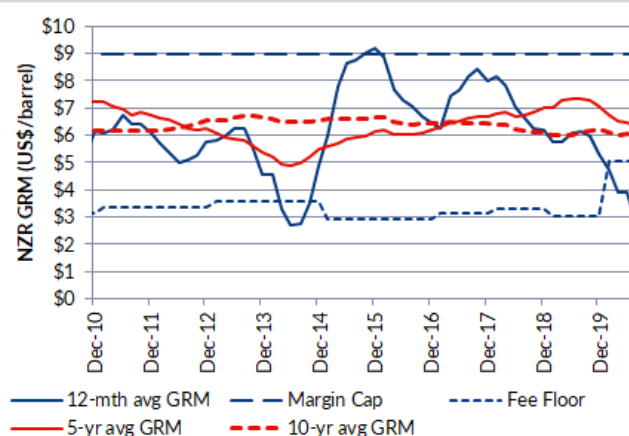
**Figure 1. FY21 processing fee floor sensitivity to NZD USD**

| NZDUSD  | 0.60   | 0.62   | 0.64   | 0.66   | 0.68   | 0.70   |
|---|--------|--------|--------|--------|--------|--------|
| Fee floor gross refining margin (US\$/barrel) | \$3.93 | \$4.06 | \$4.19 | \$4.32 | \$4.45 | \$4.58 |

Source: Forsyth Barr analysis

Note: The sensitivity assumes a NZ\$ processing fee floor of NZ\$142m and throughput of 31m barrels.

**Figure 2. Historic gross refining margin and processing fee floor**



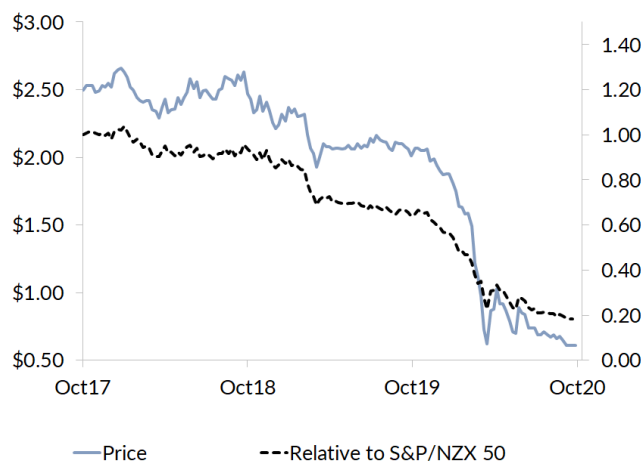
Source: NZR, Forsyth Barr analysis

## Forecast changes

**Figure 3. Forecast changes**

|                                     | FY20<br>Old<br>NZ\$m | FY20<br>New<br>NZ\$m | % Chg       | FY21<br>Old<br>NZ\$m | FY21<br>New<br>NZ\$m | % Chg       | FY22<br>Old<br>NZ\$m | FY22<br>New<br>NZ\$m | % Chg       |
|-------------------------------------|----------------------|----------------------|-------------|----------------------|----------------------|-------------|----------------------|----------------------|-------------|
| Processing fees                     | 140                  | 140                  | 0%          | 145                  | 142                  | -2%         | 230                  | 158                  | -31%        |
| Natural gas recovery                | 24                   | 26                   | 8%          | 28                   | 31                   | 11%         | 41                   | 32                   | -22%        |
| Other income                        | 61                   | 61                   | -1%         | 71                   | 64                   | -10%        | 77                   | 67                   | -13%        |
| <b>Total Revenue</b>                | <b>225</b>           | <b>227</b>           | <b>1%</b>   | <b>244</b>           | <b>237</b>           | <b>-3%</b>  | <b>348</b>           | <b>257</b>           | <b>-26%</b> |
| Natural gas pass through costs      | (24)                 | (26)                 | 8%          | (28)                 | (31)                 | 11%         | (41)                 | (32)                 | -22%        |
| Operating costs                     | (160)                | (163)                | 1%          | (154)                | (148)                | -4%         | (167)                | (142)                | -15%        |
| <b>EBITDA</b>                       | <b>41</b>            | <b>38</b>            | <b>-7%</b>  | <b>61</b>            | <b>58</b>            | <b>-6%</b>  | <b>141</b>           | <b>83</b>            | <b>-41%</b> |
| Depreciation / amortisation         | (102)                | (88)                 | -14%        | (99)                 | (87)                 | -12%        | (96)                 | (87)                 | -9%         |
| <b>EBIT</b>                         | <b>(61)</b>          | <b>(49)</b>          | <b>-19%</b> | <b>(37)</b>          | <b>(29)</b>          | <b>-21%</b> | <b>44</b>            | <b>(4)</b>           |             |
| Net interest                        | (13)                 | (13)                 | -1%         | (11)                 | (11)                 | 3%          | (9)                  | (10)                 | 15%         |
| <b>Pre-tax profit</b>               | <b>(74)</b>          | <b>(62)</b>          | <b>-16%</b> | <b>(48)</b>          | <b>(40)</b>          | <b>-16%</b> | <b>35</b>            | <b>(14)</b>          |             |
| Tax expense                         | 20                   | 16                   | -17%        | 13                   | 11                   | -16%        | (10)                 | 4                    |             |
| <b>Profit after tax</b>             | <b>(54)</b>          | <b>(46)</b>          | <b>-16%</b> | <b>(34)</b>          | <b>(29)</b>          | <b>-16%</b> | <b>25</b>            | <b>(10)</b>          |             |
| Abnormal items                      | (158)                | (158)                | 0%          | -                    | -                    |             | -                    | -                    |             |
| <b>Reported Profit</b>              | <b>(212)</b>         | <b>(203)</b>         | <b>-4%</b>  | <b>(34)</b>          | <b>(33)</b>          | <b>-5%</b>  | <b>25</b>            | <b>(14)</b>          |             |
| Earnings per share                  | -17.4                | -15.0                | -14%        | -11.0                | -10.4                | -5%         | 8.1                  | -4.5                 |             |
| Dividend per share                  | 0.0                  | 0.0                  |             | 0.0                  | 0.0                  |             | 0.0                  | 0.0                  |             |
| Barrels Processed (000)             | 23,432               | 25,432               | 9%          | 28,000               | 31,000               | 11%         | 40,000               | 31,000               | -23%        |
| Gross Refining Margin (US\$/barrel) | \$2.17               | \$2.23               | 2%          | \$3.67               | \$3.23               | -12%        | \$5.55               | \$4.59               | -17%        |
| NZDUSD                              | 0.627                | 0.647                | 3%          | 0.650                | 0.670                | 3%          | 0.675                | 0.675                | 0%          |
| Capital expenditure (\$m)           | (37)                 | (37)                 | 0%          | (65)                 | (49)                 | -24%        | (75)                 | (55)                 | -27%        |

Source: Forsyth Barr analysis

**Figure 4. Price performance**


Source: Forsyth Barr analysis

**Figure 5. Substantial shareholders**

| Shareholder                   | Latest Holding |
|-------------------------------|----------------|
| Mobil Oil NZ Limited          | 17.2%          |
| Z Energy Holdings Limited     | 15.4%          |
| BP                            | 10.1%          |
| Wellington Management Company | 9.3%           |
| ACC                           | 7.0%           |

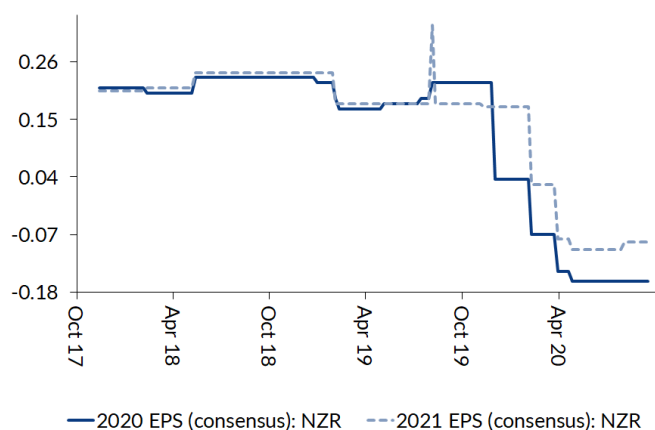
Source: NZX, Forsyth Barr analysis, NOTE: based on SPH notices only

**Figure 6. International valuation comparisons**

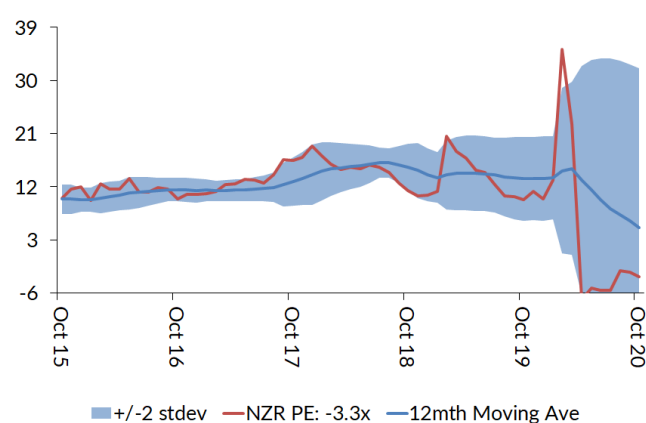
| Company  | Code      | Price        | Mkt Cap (m)   | PE 2020E | PE 2021E | EV/EBITDA 2020E | EV/EBITDA 2021E | EV/EBIT 2020E | EV/EBIT 2021E | Cash Yld 2021E |
|--|-----------|--------------|---------------|----------|----------|-----------------|-----------------|---------------|---------------|----------------|
| (metrics re-weighted to reflect NZR's balance date - December) |           |              |               |          |          |                 |                 |               |               |                |
| Refining NZ  | NZR NZ    | NZ\$0.61     | NZ\$191       | <0x      | <0x      | 11.3x           | 7.5x            | <0x           | <0x           | 0.0%           |
| FORMOSA PETROCHEMICAL CORP                                     | 6505 TT   | TWD80.00     | TWD762,077    | >50x     | 21.9x    | 40.2x           | 13.2x           | >75x          | 18.5x         | 3.0%           |
| IDEMITSU KOSAN CO  | 5019 JP   | ¥2229.00     | ¥663,940      | 4.1x     | 9.2x     | 11.5x           | 7.5x            | <0x           | 23.1x         | 5.5%           |
| SK INNOVATION CO   | 096770 KS | KRW139000.00 | KRW12,852,713 | <0x      | 23.4x    | <0x             | 8.8x            | <0x           | 20.3x         | 2.0%           |
| S-OIL CORP   | 010950 KS | KRW51600.00  | KRW5,809,272  | <0x      | 9.1x     | >75x            | 7.9x            | <0x           | 12.2x         | 3.2%           |
| Compco Average:  |           |              |               | 4.1x     | 15.9x    | 25.9x           | 9.3x            | n/a           | 18.5x         | 3.4%           |
| NZR Relative:  |           |              |               | n/a      | n/a      | -56%            | -20%            | n/a           | n/a           | -100%          |

EV = Current Market Cap + Actual Net Debt

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

**Figure 7. Consensus EPS momentum (NZ\$)**


Source: Forsyth Barr analysis

**Figure 8. One year forward PE (x)**


Source: Forsyth Barr analysis

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|-------------------|----------------|---------------------|
| <b>42.6%</b>      | <b>44.4%</b>   | <b>13.0%</b>        |

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