MACQUARIE

Cleanaway Waste Mgmt

Outperform

Getting the system humming again

Key Points

- CWY held an investor day in Melbourne, highlighting systemic interventions in culture, systems and performance management.
- FY23 outlook reiterated, while noting ongoing recovery in BAU EBIT margins toward 12%. No FY26 EBIT CAGR targets yet.
- EfW developments point to higher capex costs and competitive landfill markets, but management's discipline appears resolute.

- **What we liked.** The group has a structured and systemic execution plan, that aims to drive incremental cultural change, better operational outcomes and capital-aware performance. The ongoing investment opportunity remains substantial, and it is clear that management are applying due discipline to this pipeline, as in the case of Energy from Waste (EfW).
- **What we liked less.** The news on EfW was somewhat mixed. It was not surprising to hear that capital costs had increased ~15-20%, but a deterioration in the competitive environment in the VIC landfill market does seem to hold a potential delay in a final investment decision were the conditions to persist (all else being equal). As a consequence, equity IRR's are now projected at high single-digit to low double-digit.
- **Outlook.** The group reiterated FY23 guidance (EBITDA of ~$670m, EBIT of ~$300m and net interest of ~$95m), which was first issued in February and affirmed in May. CWY also noted that progress to recouping BAU margins of 12% remained strong. Better labour markets appear to alleviating a key cost risk for the business.

Earnings changes: No change.

Valuation: We retain our TP at $3.05ps on a consistent SOTP-based valuation approach.

Catalyst: FY23 results in August.

Investment Thesis and Recommendation

Outperform. CWY is overcoming its recent challenges, especially in labour markets and its Health business. We continue to like the longer term thesis as profitability recovers, especially in light of the ongoing growth opportunities in the industry and CWY's competitive position in it.

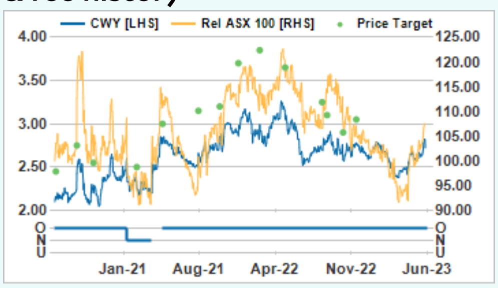
Commercial & Professional Services
Australia

CWY AU	Outperform
Price (at 21 Jun 2023)	AUD2.72
12-month target	AUD3.05
12 month TSR (%)	13.8
Volatility Index	Low
Market Cap (Local)	6,055
Market Cap (USD)	4,097
30-day avg turnover	16.0

Investment Fundamentals

Year end 30 Jun	2022A	2023E	2024E	2025E
Revenue (m)	3,006	3,578	3,822	4,094
EBITDA (m)	581.6	667.1	730.9	805.5
EBITDA growth (%)	8.7	14.7	9.6	10.2
EBIT (m)	257.1	298.5	347.7	400.3
EBIT growth (%)	(0.6)	16.1	16.5	15.1
Reported profit (m)	78.9	127.2	185.1	227.1
Adjusted profit (m)	159.3	159.3	201.1	243.1
EPS adj (¢)	7.7	7.2	9.0	10.9
EPS adj growth (%)	(4.4)	(6.4)	24.8	20.9
PER adj (x)	35.3	37.7	30.2	25.0
PER rel (x)	2.3	2.6	2.1	1.8
Total DPS (¢)	4.9	4.2	4.5	5.4
Total DPS growth (%)	6.5	(13.6)	6.4	20.9
Total div yield (%)	1.8	1.6	1.7	2.0
ROA (%)	4.9	4.9	5.5	6.1
ROE (%)	6.1	5.6	6.5	7.6
EV/EBITDA (x)	10.5	9.8	8.9	8.1
Net debt/equity (x)	37.2	22.8	19.1	15.2
P/BV (x)	2.1	2.0	1.9	1.9

CWY AU rel ASX 100 performance, & rec history



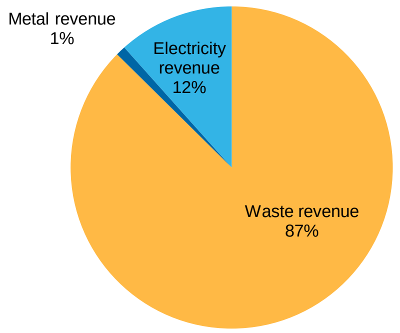
Source: FactSet, Macquarie Research, Jun 2023 (all figures in AUD unless noted, TP in AUD)

Investor day summary

Key takeaways from the briefing:

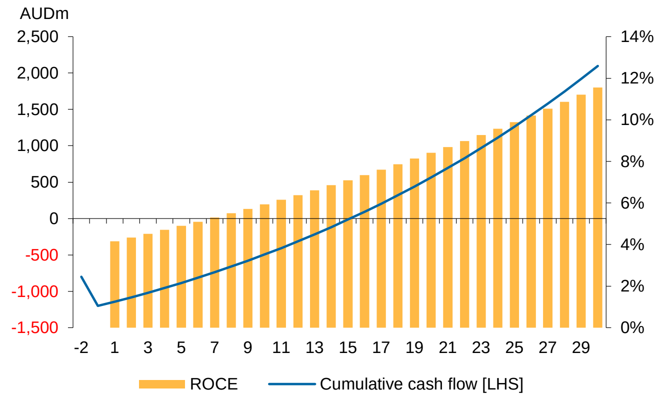
- **Reiterating guidance.** The group reiterated FY23 guidance for EBITDA (~$670m), EBIT (~ $300m) and net interest cost (~$95m), originally noted in February and affirmed in May.
- **Recovery on track.** The group continues to make progress towards improving profitability, aiming at a ~12% BAU EBIT margin, with labour conditions continuing to improve and the Health business readying for the full implementation of new waste treatment.
- **Focus shifts to staff retention.** We got a sense that the level of vacancies across the group have declined and that focus has now shifted towards staff retention. CWY currently experiences ~30% voluntary turnover of staff in the first 12 months of employment. The group sees lower staff turnover as a key enabler in the road to the ~12% BAU EBIT margin.
- **Targets come at FY23.** The group has not yet committed EBIT growth ambitions to FY26. This should be made known at the FY23 results, with a focus on incremental ROIC improvement over the period.
- **Driving improvement.** CWY is emphasizing proactive risk management, evolving its culture to a greater team orientation and driving ownership. Digitisation is gaining traction and delivering improving fleet efficiency, improving management visibility.
- **Incentives to drive ownership.** Branch managers are incentivised to "work with what you've got" and are given EBIT and ROIC based incentives. This ensures branch level managers are held accountable to leverage their assets and make accretive investments. These incentives have also evolved from a branch level, to now include a regional component too, to ensure collaboration between the group's branches. Key drivers of performance have also been devolved to a role level to help align the management system across the business.
- **EfW plans evolving.** The group's Energy from Waste (EfW) plans continue to mature. The group is focused on developing the plans, aiming for approval in VIC by late 2024, with QLD following 6-12 months later. The commercial context is evolving, with heightened landfill competition in VIC affecting economics. Also, the group flagged a ~15-20% capital cost increase from prior guidance owing to inflation. As things stand, CWY see a high single-digit to low double-digit equity IRR. From a funding perspective, CWY will focus on maintaining an investment-grade credit rating, which likely makes the phasing of (and selling down of stakes in) the projects more of an imperative. Much is still unclear, so CWY's focus on building optionality at this point, while displaying much discipline, is key.

Figure 1 - EfW revenue sources



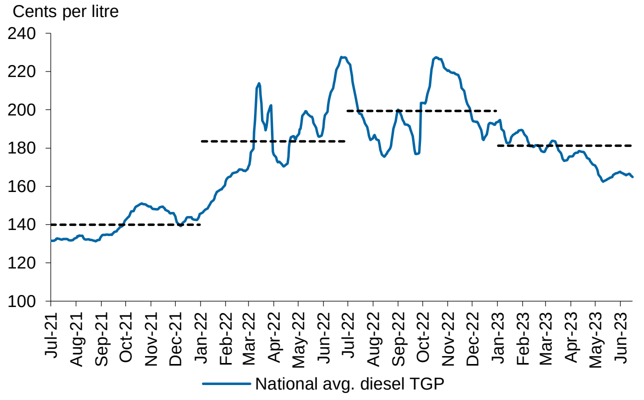
Source: Macquarie Research, June 2023

Figure 2 - Potential EfW returns



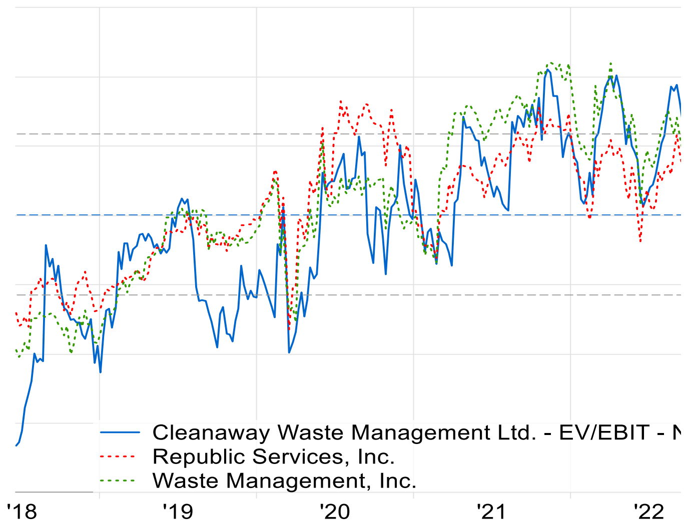
Source: Macquarie Research, June 2023

Figure 3 - Diesel prices have continued declining. Average prices in the 2H FY23 lower vs 2H FY22 and in line with 1H FY22.



Source: Australian Institute of Petroleum, Macquarie Research, June 2023

Figure 4 - EV/EBIT relative to US peers



Source: Factset, Macquarie Research, June 2023

Figure 5 - Estimate summary

Cleanaway (CWY:$2.72) 21-Jun-23

		1H22a	2H22a	1H23(a)	2H23(e)
Revenue		**1,364.6**	**1,641.6**	**1,777.9**	**1,800.0**
EBITDA	$m	**273.7**	**307.9**	**322.2**	**344.9**
Depreciation	$m	118.9	150.8	167.9	168.7
Amortisation	$m	25.0	30.0	16.0	16.0
EBIT	$m	**129.9**	**127.2**	**138.3**	**160.2**
Net Interest expense	$m	22.9	30.1	45.0	49.4
Pre-Tax Profit	$m	**107.0**	**97.1**	**93.3**	**110.7**
Tax Expense	$m	30.7	28.4	20.6	38.5
Net Profit	$m	**75.3**	**68.0**	**71.6**	**71.7**
Outside equity interests	$m	1.0	0.7	1.1	0.6
Net Abn/Extra	$m	(23.8)	(40.6)	(17.9)	1.8
Reported Earnings (NPAT)	$m	**51.5**	**27.4**	**53.7**	**73.5**
Adjusted Earnings (NPATA)	$m	**80.8**	**78.5**	**79.6**	**79.7**
Gross Cashflow	$m	**243.8**	**276.6**	**267.6**	**244.2**
EPS (Adj/dil)	c	3.9	3.8	3.6	3.6
EPS growth	%	-5.8	-2.9	-6.7	-6.0
CFPS	c	10.8	11.7	9.3	14.1
CFPS growth	%	10.3	9.2	-13.9	20.5
EBITDA/Sales	%	20.1	18.8	18.1	19.2
EBIT/Sales	%	9.5	7.7	7.8	8.9
Earnings split	%	50.7	49.3	50.0	50.0
Revenue growth	%	16.6	32.8	30.3	9.6
EBIT growth	%	-1.7	0.6	6.5	25.9

Profit and Loss ratios		2022A	2023E	2024E	2025E
Revenue growth	%	0.2	0.2	0.1	0.1
EBIT Growth	%	-0.6	16.1	16.5	15.1
EBITDA/Sales	%	19.3	18.6	19.1	19.7
EBIT/Sales	%	8.6	8.3	9.1	9.8
Effective tax rate	%	29.0	29.0	29.0	29.0
Payout ratio	%	63.6	58.7	50.0	50.0
EV/EBIT	x	25.6	22.4	19.1	16.4
EV/EBITA	x	21.1	20.2	17.5	15.1
EV/EBITDA	x	11.3	10.0	9.1	8.1
EV/Sales	x	2.2	1.9	1.7	1.6
Balance sheet ratios					
ROE	%	6.1	5.6	6.5	7.6
ROA	%	4.9	4.9	5.5	6.1
ROFE	%	7.6	8.1	9.3	10.7
Net Debt	$m	976.4	697.0	601.9	494.2
Net Debt/Equity	%	37.2	22.8	19.1	15.2
Interest Cover	x	0.0	0.0	0.0	0.0
Price/NTA	x	-12.5	-66358.4	60.3	27.3
NTA per share	$	-0.22	0.00	0.05	0.10
EFPOWA	m	2067.4	2207.3	2232.7	2232.7

Historical performance		2019A	2020A	2021A	2022A
Revenue	$m	**2,283.1**	**2,332.1**	**2,406.4**	**3,006.2**
EBITDA	$m	**461.6**	**515.7**	**535.1**	**581.6**
Depreciation/Amortisation	$m	220.8	259.1	276.4	324.5
EBIT	$m	**240.8**	**256.6**	**258.7**	**257.1**
Net interest expense	$m	47.8	47.4	43.5	53.0
Pre-Tax Profit	$m	**193.0**	**209.2**	**215.2**	**204.1**
Tax Expense	$m	53.0	59.2	62.0	59.1
Net Profit	$m	**140.0**	**150.0**	**153.2**	**145.0**
Net Abn/Extra	$m	(16.8)	(37.4)	(5.5)	(64.4)
EPS (adj/dil)	c	7.6	8.1	8.1	7.7
EPS growth	%	32.9%	6.7%	(0.5%)	(4.4%)
Ordinary DPS	c	3.6	4.1	4.6	4.9
EBITDA/Sales	%	20.2	22.1	22.2	19.3
EBIT/Sales	%	10.5	11.0	10.8	8.6
ROE	%	6.2	6.5	6.4	6.1
ROFE	%	7.5	7.9	8.0	7.6
EFPOWA	m	2054.3	2062.2	2064.6	2067.4

		2022A	2023E	2024E	2025E
ND/EBITDA	x	1.7	1.0	0.8	0.6
EBITDA/Net Interest	x	11.0	7.1	8.6	10.3
ND/Tangible assets	%	35%	22%	18%	14%

Profit & Loss		2022A	2023E	2024E	2025E
Revenue	$m	**3,006.2**	**3,577.9**	**3,821.6**	**4,094.2**
EBITDA	$m	**581.6**	**667.1**	**730.9**	**805.5**
Depreciation	$m	269.6	336.6	351.2	373.2
Amortisation	$m	54.9	32.0	32.0	32.0
EBIT	$m	**257.1**	**298.5**	**347.7**	**400.3**
Net interest expense	$m	53.0	94.4	84.8	78.2
Pre-Tax Profit	$m	**204.1**	**204.0**	**262.9**	**322.1**
Tax Expense	$m	59.1	59.1	76.1	93.3
Net Profit	$m	**143.3**	**143.3**	**185.1**	**227.1**
Outside equity interests	$m	1.7	1.7	1.7	1.7
Net Abnormals/Extra.	$m	(64.4)	(16.1)	-	-
Reported Earnings (NPAT)	$m	**78.9**	**127.2**	**185.1**	**227.1**
Adjusted Earnings (NPATA)	$m	**159.3**	**159.3**	**201.1**	**243.1**
Gross Cashflow	$m	**520.4**	**511.8**	**585.4**	**649.5**
EPS (adj/diluted)	c	7.7	7.2	9.0	10.9
EPS growth	%	-4.4%	-6.4%	24.8%	20.9%
PE (adj)	x	35.3	37.7	30.2	25.0
CFPS	c	22.6	23.5	25.3	28.2
CFPS Growth	%	9.7	4.3	7.7	11.2
PGCFPS	x	12.1	11.6	10.7	9.7
DPS	c	4.9	4.2	4.5	5.4
Yield	%	1.8	1.6	1.7	2.0
Franking	%	12.5	-	-	100.0

Cashflow Analysis		2022A	2023E	2024E	2025E
Pre-tax Profit	$m	**204.1**	**204.0**	**262.9**	**322.1**
Depreciation & Amortisation	$m	324.5	368.6	383.2	405.2
Tax Paid	$m	-6.5	-59.1	-59.1	-76.1
Gross cashflow	$m	**522.1**	**513.5**	**587.1**	**651.2**
Changes in working capital	$m	7.6	21.5	-4.6	-5.1
Other	$m	-63.4	-16.1	-17.1	-17.1
Operating Cashflow	$m	**466.3**	**519.0**	**565.4**	**628.9**
Acquisitions	$m	-529.3	-175.4	0.0	0.0
Capex - Plant & Equip.	$m	-263.0	-370.0	-370.0	-400.0
Asset Sales	$m	22.9	0.0	0.0	0.0
Other	$m	-4.0	0.0	0.0	0.0
Investing cashflow	$m	**-773.4**	**-545.4**	**-370.0**	**-400.0**
Dividend (ordinary)	$m	-94.0	-94.2	-100.2	-121.2
Equity raised	$m	0.0	400.0	0.0	0.0
Other	$m	-1.2	0.0	0.0	0.0
Financing cashflow	$m	**-95.2**	**305.8**	**-100.2**	**-121.2**
Net Change in cash/debt	$m	**-402.3**	**279.4**	**95.2**	**107.7**

Balance Sheet		2022A	2023E	2024E	2025E
Cash	$m	66.5	230.9	386.0	558.7
Receivables	$m	532.5	572.5	611.5	655.1
Inventories	$m	26.7	31.8	33.9	36.4
Investments	$m	52.2	227.6	227.6	227.6
Property, Plant & Equipment	$m	1,434.5	1,467.9	1,486.7	1,513.5
Intangibles	$m	3,074.3	3,058.3	3,042.3	3,026.3
Other Assets	$m	676.0	660.0	644.0	628.0
Total Assets	$m	**5,862.7**	**6,248.9**	**6,432.0**	**6,645.5**
Payables	$m	470.1	536.7	573.2	614.1
Short Term Debt	$m	100.6	100.6	100.6	100.6
Long Term Debt	$m	942.3	827.3	887.3	952.3
Operating leases	$m		0.0	0.0	0.0
Other Liabilities	$m	1,721.5	1,721.5	1,721.5	1,721.5
Total Liabilities	$m	**3,234.5**	**3,186.1**	**3,282.6**	**3,388.5**
Shareholders Funds	$m	2,625.3	3,058.2	3,143.1	3,249.0
Minority Interests	$m	2.9	4.6	6.3	8.0
Total Shareholders Equity	$m	2,628.2	3,062.8	3,149.4	3,257.0
Total Funds employed	$m	**5,862.7**	**6,248.9**	**6,432.0**	**6,645.5**

Source: Company data, Macquarie Research, June 2023

Key Risks to Investment Thesis

- Key risks to our view relate to the softening macro context in Australia, which could affect outcomes in a comparatively small part of the group's business in the SME space, in particular. This could affect performance across the group's integrated value chain.

Company Description

Cleanaway Waste Management (CWY) provides waste management services across Australia. CWY engages in waste collection, liquid waste treatment and hazardous waste treatment. The company provides industrial cleaning services specialising in high-pressure water blasting and vacuum loading. The company's hydrocarbon treatment facilities produce recycled oils for re-use by electricity generators and boiler start-up.

Cleanaway Waste Mgmt (CWY AU) AUD unless otherwise noted

Income Statement Jun FY	2022A	2023E	2024E	2025E	1H/23A	2H/23E
Revenue	**3,006**	**3,578**	**3,822**	**4,094**	**1,778**	**1,800**
EBITDA	**581.6**	**667.1**	**730.9**	**805.5**	**322.2**	**344.9**
Depreciation	269.6	336.6	351.2	373.2	167.9	168.7
Amortisation	54.9	32.0	32.0	32.0	16.0	16.0
EBIT	257.1	298.5	347.7	400.3	138.3	160.2
Net Interest Expense	53.0	94.4	84.8	78.2	45.0	49.4
Pre-Tax Profit	116.3	181.0	262.9	322.1	69.6	111.4
Tax Expense	35.7	52.2	76.1	93.3	14.8	37.4
Net Profit	80.6	128.9	186.8	228.8	54.8	74.1
Outside Equity Interests	1.7	1.7	1.7	1.7	1.1	0.6
Net Non Recurring & Assoc	(64.4)	(16.1)	0.0	0.0	(17.9)	1.8
Reported Earnings	**78.9**	**127.2**	**185.1**	**227.1**	**53.7**	**73.5**
Adjusted Earnings	**159.3**	**159.3**	**201.1**	**243.1**	**79.6**	**79.7**
Gross Cashflow	469.5	513.6	570.0	634.0	256.6	257.0
Diluted Shares Outstanding (m)	2,067	2,207	2,233	2,233	2,182	2,233
EPS (adj) (¢)	7.7	7.2	9.0	10.9	3.6	3.6
EPS (adj) [AUD]	7.7	7.2	9.0	10.9	3.6	3.6
FFO (c)	0.0	0.0	0.0	0.0	0.0	0.0
AFFO (c)	0.0	0.0	0.0	0.0	0.0	0.0
CFPS (c)	22.7	23.3	25.5	28.4	11.8	11.5
Total DPS (¢)	4.9	4.2	4.5	5.4	2.5	1.8
Total DPS [AUD]	4.9	4.2	4.5	5.4	2.5	1.8

Balance Sheet	2022A	2023E	2024E	2025E
Cash	66.5	230.9	386.0	558.7
Receivables	532.5	572.5	611.5	655.1
Inventories	26.7	31.8	33.9	36.4
Investments	52.2	227.6	227.6	227.6
Fixed Assets	1,435	1,468	1,487	1,513
Intangibles	3,074	3,058	3,042	3,026
Other Assets	676.0	660.0	644.0	628.0
Total Assets	**5,863**	**6,249**	**6,432**	**6,646**
Payables	470.1	536.7	573.2	614.1
Short Term Debt	100.6	100.6	100.6	100.6
Long Term Debt	942.3	827.3	887.3	952.3
Provisions	846.7	846.7	846.7	846.7
Other Liabilities	874.8	874.8	874.8	874.8
Total Liabilities	**3,235**	**3,186**	**3,283**	**3,389**
Shareholders' Funds	2,625	3,058	3,143	3,249
Minority Interests	2.9	4.6	6.3	8.0
Other	0.0	0.0	0.0	0.0
Total Shareholders' Equity	**2,628**	**3,063**	**3,149**	**3,257**
Net Debt	976.4	697.0	601.9	494.2
Net Debt / Equity (%)	37.2	22.8	19.1	15.2
Interest Cover (x)	3.2	2.9	4.1	5.1
ROE (%)	6.1	5.6	6.5	7.6
ROA (%)	4.9	4.9	5.5	6.1
ROIC (%)	5.7	5.9	6.6	7.6

Ratio	2022A	2023E	2024E	2025E		
Revenue Growth (%)	24.9	19.0	6.8	7.1	-	-
EBITDA Growth (%)	8.7	14.7	9.6	10.2	-	-
EBIT Growth (%)	(0.6)	16.1	16.5	15.1	-	-
EPS Growth (%)	(4.4)	(6.4)	24.8	20.9	-	-
Total DPS growth (%)	6.5	(13.6)	6.4	20.9	-	-
CFPS Growth (%)	9.1	2.5	9.7	11.2	-	-
EBITDA/Sales (%)	19.3	18.6	19.1	19.7	-	-
EBIT/Sales (%)	8.6	8.3	9.1	9.8	-	-
Payout Ratio (%)	63.6	58.7	50.0	50.0	-	-
EV/EBITDA (x)	10.5	9.8	8.9	8.1	-	-
EV/EBIT (x)	23.7	21.8	18.7	16.3	-	-
EV/Sales (x)	2.0	1.8	1.7	1.6	-	-
PGCFPS (x)	11.3	11.0	10.1	9.0	-	-
P/BV (x)	2.1	2.0	1.9	1.9	-	-
NTA per Share ($)	(0.2)	(0.0)	0.0	0.1	-	-
PE (adj) (x)	35.3	37.7	30.2	25.0	-	-
FFO yield (%)	NM	NM	NM	NM	-	-
AFFO yield (%)	NM	NM	NM	NM	-	-
Total Div Yield (%)	1.8	1.6	1.7	2.0	-	-
Franking (%)	12.5	0.0	0.0	100.0	-	-

Cash Flow Analysis	2022A	2023E	2024E	2025E
EBITDA	**581.6**	**667.1**	**730.9**	**805.5**
Tax Paid	(6.5)	(59.1)	(59.1)	(76.1)
Chgs in Working Cap	7.6	21.5	(4.6)	(5.1)
Net Interest Paid	(53.0)	(94.4)	(84.8)	(78.2)
Other	(63.4)	(16.1)	(17.1)	(17.1)
Operating Cashflow	**466.3**	**519.0**	**565.4**	**628.9**
Acquisitions	(529.3)	(175.4)	0.0	0.0
Capex	(263.0)	(370.0)	(370.0)	(400.0)
Other	18.9	0.0	0.0	0.0
Investing Cashflow	**(773.4)**	**(545.4)**	**(370.0)**	**(400.0)**
Dividends Paid	(94.0)	(94.2)	(100.2)	(121.2)
Equity Movements	0.0	400.0	0.0	0.0
Debt Movements	399.4	(115.0)	60.0	65.0
Other	(1.2)	0.0	0.0	0.0
Financing Cashflow	**304.2**	**190.8**	**(40.2)**	**(56.2)**
Net Chg in Cash/Debt	**(2.9)**	**164.4**	**155.2**	**172.7**
Free Cashflow	**203.3**	**149.0**	**195.4**	**228.9**

Source: Company data, Macquarie Research Jun 2023

Key Quant Pick

The quant model currently holds a neutral view on Cleanaway Waste Management. The strongest style exposure is Quality, indicating this stock is likely to have a superior and more stable underlying earnings stream. The weakest style exposure is Growth, indicating this stock has weak historic and/or forecast growth. Growth metrics focus on both top and bottom line items.

Macquarie Alpha Model: Key rankings

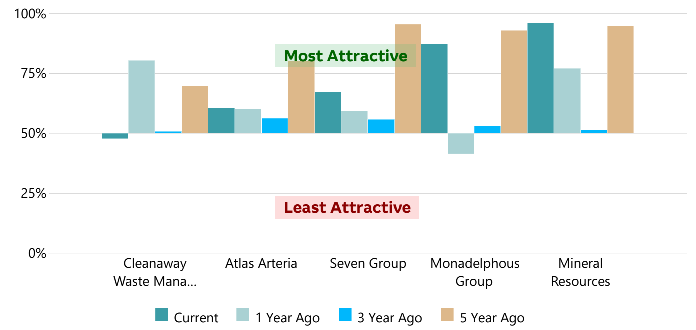
The Macquarie Quant's flagship Alpha model is a dynamic multi-factor model based on a staple of quant factors such as value, momentum, revisions, quality, and risk.

	Global	Market (Country)	Sector
	Whole Universe	Australia & NZ	Comm. & Prof. Services
Macquarie Alpha Model	**9051/17558**	**221/423**	**298/468**
Fundamental (Consensus) *	**9810/17558**	**244/423**	**285/468**

** based on Total Shareholder Return = Consensus Price target / Current Price*

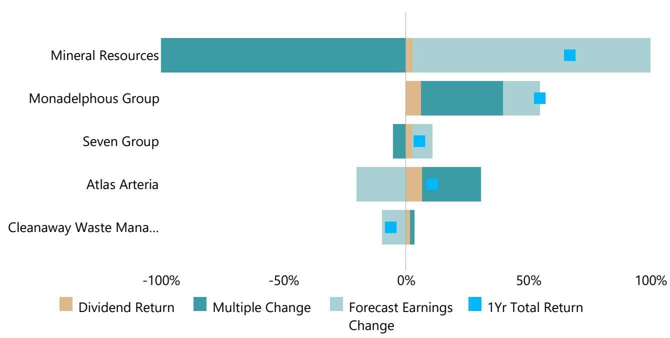
Current and Historical Alpha Model Rank

The chart shows the Macquarie Alpha model ranking against the company's peers and over recent history.



Drivers of Stock Return

Breakdown of 1-year total return (local currency) into returns from dividends, changes in forward earnings estimates and the resulting change in earnings multiple.



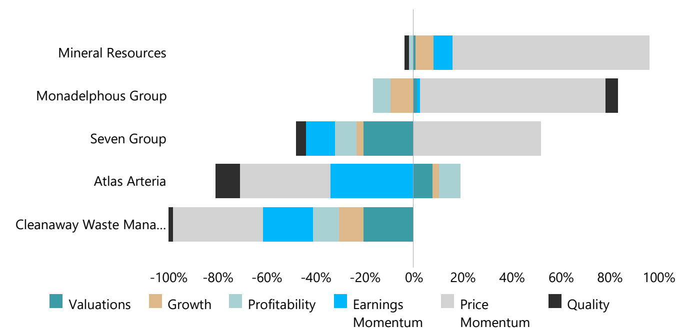
Alpha Model Decomposition

The Macquarie Alpha is decomposed into its sector and market relative factor & styles exposures (a higher/better percentile is coded in green, whilst lower in red).

Factors / Styles	Percentile relative to sectors (/468)	Percentile relative to market (/423)	Core factors in definition
ALPHA	36%	48%	See all the styles below
VALUE	27%	43%	Book, CF, Yield, Earnings Multiples
ANALYST	38%	26%	Revisions (Earnings, Recommendations)
MOMENTUM	22%	54%	Price Momentum
GROWTH	20%	15%	EPS, Sales (Forecast, Historic)
PROFITABILITY	46%	35%	ROE, Margin, Asset Turnover
QUALITY	38%	62%	Accruals, Earn Stability, Cash Conversion
CAPITAL	36%	43%	Investment/Capex, Net share issuance
LIQUIDITY	82%	74%	Size, Turnover, Analyst Coverage
RISK	43%	69%	Beta, Volatility, Earnings Certainty, Leverage
TECHNICAL	86%	85%	MACD, RSI, Bollinger, Williams R, etc

Factors driving the Alpha Model vs peers

For the comparable firms this chart shows the key underlying styles and their contribution to the current overall Alpha score.



Macquarie Style Returns over last year

Recent performance to Macquarie style factors

Australia & NZ	Jun - 23	May - 23	Apr - 23	Mar - 23	Feb - 23	Jan - 23	Dec - 22	Nov - 22	Oct - 22	Sep - 22	Aug - 22	Jul - 22	Last 5 Years (ann)	Last 10 Years (ann)
	Monthly Factor Long-Short Returns for													
ALPHA	-1%	-1%	-3%	0%	4%	6%	-8%	-1%	2%	0%	4%	-2%	-3%	2%
VALUE	-2%	1%	2%	-2%	4%	6%	-10%	5%	5%	2%	-1%	6%	0%	-1%
ANALYST	0%	-3%	-5%	-3%	5%	5%	0%	1%	-1%	-1%	2%	-2%	10%	6%
MOMENTUM	-4%	-2%	0%	-3%	2%	5%	-8%	3%	0%	-2%	2%	-9%	-11%	0%
GROWTH	-4%	0%	-6%	3%	-1%	5%	0%	1%	-1%	-7%	3%	4%	-7%	-2%
PROFITABILITY	4%	-3%	5%	-2%	4%	-3%	2%	2%	-1%	-4%	1%	-5%	4%	3%
QUALITY	-2%	-1%	2%	-6%	0%	-2%	-1%	6%	0%	-1%	2%	-8%	-11%	-8%
CAPITAL	-2%	0%	1%	1%	-3%	1%	-3%	1%	2%	1%	2%	0%	-2%	1%
LIQUIDITY	0%	2%	4%	1%	2%	1%	-5%	-1%	4%	2%	3%	2%	-1%	0%
RISK	-5%	0%	-2%	-3%	1%	0%	-6%	2%	-1%	6%	1%	6%	0%	0%
TECHNICAL	3%	-1%	8%	4%	0%	3%	-3%	9%	3%	-2%	6%	4%	11%	10%

Source (all charts): FactSet, Refinitiv, and Macquarie Quant. For more details on the Macquarie Alpha model or for more customised analysis and screens, please contact the Macquarie Global Quantitative Team: maccapequitiesresearchquantglobal@macquarie.com. Explanation for items on this page can be found at https://www.macquarieinsights.com/rp/d/r/p/OTUyMzg1

Important Disclosures

Recommendation definitions

Macquarie – Asia and USA
Outperform – expected return >10%
Neutral – expected return from -10% to +10%
Underperform – expected return <-10%

Macquarie – Australia/New Zealand
Outperform – expected return >10%
Neutral – expected return from 0% to 10%
Underperform – expected return <0%

During periods of share price volatility, recommendations and target prices may occasionally and temporarily be inconsistent with the above definitions.

Recommendations – 12 months
Note: Quant recommendations may differ from Fundamental Analyst recommendations

Volatility index definition

This is calculated from the volatility of historical price movements.

Very high – highest risk – Stock should be expected to move up or down 60–100% in a year – investors should be aware this stock is highly speculative.

High – stock should be expected to move up or down at least 40–60% in a year – investors should be aware this stock could be speculative.

Medium – stock should be expected to move up or down at least 25–40% in a year.

Low – stock should be expected to move up or down at least 15–25% in a year.
* Applicable to select stocks in Asia/Australia/NZ

Note: expected return is reflective of a Medium Volatility stock and should be assumed to adjust proportionately with volatility risk

Financial definitions

All "Adjusted" data items have had the following adjustments made:
Added back: goodwill amortisation, provision for catastrophe reserves, IFRS derivatives & hedging, IFRS impairments & IFRS interest expense
Excluded: non recurring items, asset revals, property revals, appraisal value uplift, preference dividends & minority interests

EPS = adjusted net profit / efpowa*
ROA = adjusted ebit / average total assets
ROA Banks/Insurance = adjusted net profit /average total assets
ROE = adjusted net profit / average shareholders funds
Gross cashflow = adjusted net profit + depreciation
*equivalent fully paid ordinary weighted average number of shares

All Reported numbers for Australian/NZ listed stocks are modelled under IFRS (International Financial Reporting Standards).

Recommendation proportions for quarter ending 31 March 2023

	AU/NZ	Asia	USA	
Outperform	56.13%	64.77%	64.49%	(for global coverage by Macquarie, 2.51% of stocks followed are investment banking clients)
Neutral	37.74%	23.98%	32.71%	(for global coverage by Macquarie, 1.83% of stocks followed are investment banking clients)
Underperform	6.13%	11.26%	2.80%	(for global coverage by Macquarie, 0.00% of stocks followed are investment banking clients)

Company-Specific Disclosures

Company Name	Disclosure
Cleanaway Waste Mgmt (CWY AU) **Outperform** 12-month target: AUD3.05 - EV/EBIT Valuation: AUD 3.05 - Sum of Parts Price: AUD2.72	MACQUARIE CAPITAL (AUSTRALIA) LIMITED or one of its affiliates has provided Cleanaway Waste Management Ltd with investment advisory services in the past 24 months, for which it received compensation. Macquarie Capital (Australia) Ltd or one of its affiliates has investment banking services relationship with Cleanaway Waste Management. Macquarie Group Limited together with its affiliates owns a net long of 0.5% or more of the equity securities of Cleanaway Waste Management Ltd. Macquarie Group Limited together with its affiliates beneficially owns 1% or more of the equity securities of Cleanaway Waste Management Ltd.

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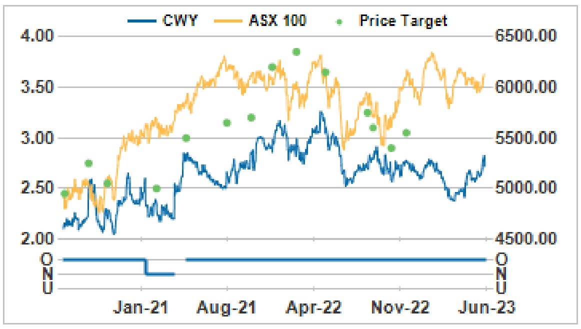
Recommendation history

Company name	Date	Recommendation	Target price
Cleanaway Waste Mgmt (CWY AU)	29-Nov-2022	Outperform	AUD 3.05
	21-Oct-2022	Outperform	AUD 2.90
	4-Sep-2022	Outperform	AUD 3.10
	20-Aug-2022	Outperform	AUD 3.25
	3-May-2022	Outperform	AUD 3.65
	17-Feb-2022	Outperform	AUD 3.85
	16-Dec-2021	Outperform	AUD 3.70
	22-Oct-2021	Outperform	AUD 3.20
	20-Aug-2021	Outperform	AUD 3.15
	6-May-2021	Outperform	AUD 3.00
	19-Feb-2021	Neutral	AUD 2.50
	21-Jan-2021	Neutral	AUD 2.55
	14-Oct-2020	Outperform	AUD 2.55
	26-Aug-2020	Outperform	AUD 2.75
	25-Jun-2020	Outperform	AUD 2.45



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