

9. Verbal Update from Transwaste Canterbury Limited

Committee Comment

1. Gill Cox, Chairman, Ross Pickworth, Director, and Jeremy Parker, JV Manager of Transwaste Canterbury Limited and Hayden Leach, Regional Manager Manager for Kate Valley, provided a PowerPoint presentation and verbal update to the Committee. A copy of the presentation is attached.

Joint Committee Resolved CRLC/2024/00001

Part B

That the Canterbury Regional Landfill Joint Committee:

1. Receive the information in the verbal update from Transwaste Canterbury Limited.

Councillor Barber/Councillor Brine
Attachments

Carried

A Transwaste Canterbury Limited - PowerPoint Presentation

Canterbury Regional Landfill Joint Committee
PUBLIC EXCLUDED MINUTES ATTACHMENTS
Confidential

Date: Monday 8 April 2024
Time: 10 am
Venue: Council Chambers, Level 2, Civic Offices,
53 Hereford Street, Christchurch

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Transwaste Canterbury Ltd

Canterbury Regional Landfill Joint Committee
8th April 2024



- Gill Cox** – Chair, Transwaste Canterbury
Ross Pickworth – Director, Transwaste Canterbury
Hayden Leach – Regional Manager Canterbury Landfill & Energy, WM
Jeremy Parker – Commercial Manager, Transwaste Canterbury



KATE VALLEY LANDFILL AND GARETH JAMES ENERGY PARK

Move to Public Excluded - Contains
confidential and commercially sensitive
information – not to be distributed

Transwaste Kate Valley Landfill



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Interim Result for 6 months to December 2023

	<u>Dec 23</u>	<u>SOI</u>	<u>Dec 22</u>
	<u>(000's)</u>	<u>(000's)</u>	<u>(000's)</u>
Tonnes received	185,415	174,321	183,433
• Sales Revenue (excl levy)	28,953	27,243	26,360
• NPAT	8,044	6,826	7,962
• Shareholders' Funds to Total Assets	49.0%	45.0%	40.1%
• Dividends paid	5,200	4,800	18,300

Tonnage above SOI due to higher tonnage of High-density Waste for the first 4 months of the year. Out look is reducing for the rest of the year.

- Lifetime dividends paid (incl BRRP) \$204.6m (inc BRRP)
- Lifetime Community Trust payments \$1,494k
- No debt at December 2023 (delayed lines investment) impacted Shareholders funds ratio

Transwaste Canterbury Financial Forecast – Year to June

	<u>June 24</u>	<u>SOI</u>	<u>June 23</u>
• Tonnage	359,676	348,100	359,810
	<u>(000's)</u>	<u>(000's)</u>	<u>(000's)</u>
• Sales Revenue (inc levy)	74,506	72,025	63,091
• Sales Revenue (exl levy)	56,522	54,625	52,297
• NPAT (excl dividends received)	14,285	13,659	15,632
• Shareholders' Funds to Total Assets	45.7%	49.6%	48.3%
• Dividends paid	12,050	11,650	18,300

Increasing downside risk due to falling tonnages of high-density waste that may also be a lead indicator for other volumes dropping

Change in Source of Waste by Territorial Local Authority

Breakdown of General Waste by TLA area	2005/06 % of total	2022/23 % of total	2023/24 Half Yr % of total
Christchurch City Council (inc special wastes)	89.3%	84.0%	83.3%
Waimakariri District Council	6.9%	4.8%	5.2%
Ashburton District Council	2.5%	4.1%	4.2%
Selwyn District Council	1.0%	6.1%	6.0%
Hurunui District Council	0.2%	1.0%	1.0%
Kaikoura District Council			0.3%
Total	100.0%	100.0%	100.0%
Tonnage	296,389	359,810	185,415

TCL has also received enquiries regarding accessing Kate Valley from other South Island TLAs (outside of the original permitted region) due to Kate Valley's higher environmental standards.

If accepted these would not materially alter either the overall volume or lifespan of the asset.

2024/27 (draft) Statement of Intent

- Similarly to prior years business goals (outcomes) and related performance measures grouped in the SOI under following headings:
 - Environment
 - Corporate Citizenship/ Community Relations
 - Service Quality
 - Health and Safety
 - Good Employer
 - Consultation/Communication
 - Legislation/Regulatory Compliance
 - Shareholder Interests
- Financial forecasts are based on the known levy changes and the current years budget. The budget for FY24/25 is currently being developed and will be included in the final SOI.
- TCL Strives to extract value from each tonne of waste received and are looking at various beneficial uses for landfill gas.
- Greenhouse gas footprint has been certified for the year to June 22. The Audit of the June 23 year is complete.

Kate Valley landfill – Major capital expenditure projects

Landfill Construction

- Waste placement in cell 2A 3 (east side of landfill).
- Cell Construction of 5A underway (west side of landfill).

Other

- 2nd Flare under construction
- BeneVap leachate treatment plant working up to full potential
- No commencement on Electricity export capacity improvement.
Considering alternate proposals.

Cell 2A 3 now in use at North Eastern end of landfill





The new cell Phase 5A under construction looking toward the current landfill

Sustainability - Landfill Gas

Landfill Gas (LFG) originates from the decomposition of organic matter within the landfill. LFG comprises primarily methane which is captured and destroyed by combustion releasing CO₂. This organic matter would have decomposed naturally even if it were not in the landfill producing CO₂. Hence the CO₂ from methane destruction is not deemed to be a harmful emission as it was already going to be released, it is not additional due to the landfill. Fugitive methane is a harmful emission.

- Over 95% of expected methane generation was captured in FY23 (per MoE model). Striving to improve this in FY24.
- This avoided an equivalent emission of 106,000 cars and was used to generate sufficient electricity for 2,100 houses.
- Gas capture saved Transwaste (and its customers) \$9.5m in ETS costs in FY23, with a similar amount saved by pre-purchasing ETS units.
- Much of the combustion of methane took place in the electricity generation system.
- Gas is also now being used to treat leachate onsite (further reducing road trips)
- Other beneficial uses of the gas are also being investigated.



The new BeneVap landfill gas powered leachate treatment plant – reduces road transport emissions by treating on site using and destroying methane from landfill gas (visible plume is steam)

Green House Gas Emissions

TCLs baseline Green House Gas footprint was measured and certified for the year ended 30 June 2022. It should be noted the base year emissions were an aberration being unusually high due to several one-off items.

The audit of the current has been completed but the report not yet certified.

	2023 Audited/Unpublished	2022 Certified Baseline
Potential emission from landfill gas	267,320	261,676
Gas destroyed	255,304	226,135
Direct emission	12,016	35,541
Transport and Landfill Diesel	4,423	3,794
GHG Footprint	16,439	39,335
Sequestration by TCL Forest	-6,804	-6,415
Net Emission	9,636	32,920

70% drop in net emission in the year



Green House Gas Emissions – Key Points

- Gas Capture rose significantly during the last year. This relies on a network of approx. 60 wells (so far) built into the landfill with gas extracted under negative pressure.
- Leakage of gas from the landfill is monitored by Methane sniffing drones.
- The ETS scheme requires TCL to surrender ETS units for the higher of the actual direct emission or 10% of the potential emission generated. We do not offset these ETS units in our GHG reporting.
- No offset is claimed for the electricity generated for no additional emissions
- Transport and fuel comprised c. 1/4 of the total emissions for FY23.
- In 2023 emissions from Transport and Landfill diesel are fully offset by carbon sequestration into TCLs own forests.
- In 2023 we significantly expanded the Scope 3 indirect emission (non mandatory) reporting of data from subcontractors causing the increase in 2023 diesel emissions.

Sustainability - Energy Generation

Currently Kate Valley only has Landfill Gas to electricity generation. Others sources of energy and uses of energy may come.

1. Landfill Gas to Electricity: In use on site. and used to drive internal combustion generators. Methane is destroyed in the process.
2. Solar: Solar generation on the landfill footprint is being considered. The site has sites within the landfill precinct for 2 MW of solar capacity to supplement the generators.
3. Hydrogen manufacture: Manufacture of H₂ is being actively investigated using electricity generated on site. H₂ generated would first of all used by Transwaste in the Kate Valley plant and transport fleet, and then exported off site for commercial use.

Sustainability - Competition

- Transwaste accepts competition but will resist any erosion of environmental standards. To this end Transwaste is submitting on regional land fill consent applications to ensure standards are maintained.
- Several consents for new facilities in the region have been lodged by third parties. Frequently they state as justification that Kate Valley is running out of space.
- For clarification - Kate Valley expects to remain operating the current facility to the end of the current consent (2039).
- Transwaste also has plans in place to continue to provide a safe disposal option to the communities residual waste after this date subject to consenting.
- Kate Valley landfill sequesters carbon held in plastics that would be released under waste to energy proposals.
- For organics that do decay over several years in the landfill, ultimately releasing its biogenic carbon a waste to energy plant releases this on day 1, accelerating the release by several years.

Health and Safety

Kate Valley – rolling last 12 months (to February 2024)

LTI – employees nil (2022 – nil)

MTI – employees nil (2022 – nil)

Just passed 2,000 days without an LTI or MTI

- The site was hit by a major wind event in October 2023 with site windspeeds of 108KM/h recorded on site and 215 km/h in the vicinity.
- There was localised damage to forests and buildings owned by TCL.
- Some waste containers were rolled.
- Power supply to and from the site was cut for approximately a week.

- The site was closed for the afternoon. There were no injuries and practices have where practicable since been modified to reduce susceptibility.

Tiromoana Bush Update



2023



2005

Expansion of Native bush areas
since establishment.

Tiromoana Bush – 2022 - 2027 Management Plan

- 300 year vision in 5 year blocks.
- Focus on both small animal/mustelid/cat pest control, on reducing pig numbers and keeping deer out.
- Restoration planting and monitoring of survival rates.
- Investing c.\$150k+ per annum excluding capital projects
- Working with others
 - Hurunui Biodiversity Trust,
 - Corporate planting days
 - Receiving relocated native fauna from other developments
- Website for walkway and Tiromoana Bush
<https://transwastecanterbury.co.nz/walkways/tiromoana-bush-walkway/> (Briefly closed due to fire hazards, now open again)
- Please go and have a look and walk it!

Tiromoana Bush Pest Control

- Pest trapping continues to yield large numbers of pests including c. 550 mustelids and c.170 feral cats

	YE June 20	YE June 21	YE June 22	YE June 23	YTD June 24	Total
Weasel	139	87	70	72	55	423
Stoat	29	26	15	18	11	99
Ferret	6	9	3	3	2	23
Feral Cat	11	59	32	42	25	169
Hedge Hog	114	116	105	99	103	537
Ship Rat	66	177	170	214	189	816
Mouse	54	88	105	116	74	437
Possum	117	32	44	64	60	317
Total	536	594	544	628	519	2,821

- Culls of large pests removed a further 2 deer and 23 pigs from Tiromoana Bush so far this year.
- A further 42 feral cats and 80 deer, pigs and goats have been removed from the adjoining Transwaste land.

Tiromoana Bush



Questions?

