Climate Change Integrated Work Programme—Solid Waste

(Clr Hook) (Prepared prepared by Kaye Mcliveney)

E320-003-001

Purpose

1. To consider how climate change may impact on Council's solid waste activities.

Context

- This report is the third report in the Climate Change Integrated Work Programme (the Programme) series. It details how climate change is incorporated into the decisions made in the management of the solid waste activities.
- 3. The Programme aims to inventory the data and information Council needs to make climate change related decisions. It will assess each Activity Group as to the impacts that climate change may have on that activity and will ensure that climate change is being properly taken into account when relevant and that the staff have the data/information they need to assess the impacts of climate change.

Climate changes expected

4. The current advice from the Ministry for Environment has been reported on previously. It can be accessed via the following link <u>https://mfe.govt.nz/climate-change/likely-impacts-of-climate-change/how-could-climate-change-affect-my-region-0</u>

Council's solid waste function

- 5. Marlborough District Council is bound by legislation to ensure that our solid waste is managed in an effective and efficient manner reducing any potential environmental impact and protecting the public health (Waste Minimisation Act).
- 6. Council is the main source of waste management infrastructure for the district, providing a network of seven transfer stations, a central landfill, waste sorting centre, resource recovery centres, a reuse centre, an e-waste collection facility, hazardous waste storage facility, rural community recycling stations, and a salvage yard, all operated under contract to Council.
- 7. These facilities are designed and operated to ensure the minimum impact on people's amenity and the environment. By promoting the reduction, reuse, and recycling of waste, we will reduce our reliance on landfill for disposal and also have the ability to influence the direction that our waste management and minimisation plan heads.
- 8. Council also collects, through a contract, refuse and recyclables from the kerbsides in Blenheim and Picton.

Waste Minimisation

- 9. Council is subject to obligations under legislation to achieve waste minimisation. A Council policy is to divert as much waste away from the landfill as possible. This has created the diversion facilities described above.
- 10. An important effect of these activities is the reduction of emissions from the landfill due to substantially less waste being placed into the landfill.

Landfill emissions

- 11. The landfill generates and emits gas as a by-product of the decomposition of the waste. Under the Emissions Trading Scheme, the emissions are subject to a surrender obligation where carbon credits are traded against the tonnage of emissions.
- 12. The landfill has a flare and associated collection system which burns the gas on site. The efficiency of this system, along with the percentage of biodegradable material within the incoming waste, has been assessed and is used to allow the site to define its Unique Emissions Factor (UEF). This UEF has allowed the site to reduce its liability for carbon credits from a default in the district of 50,000 tonnes to a surrender value in the district of 14,000 tonnes.

13. Additional upgrades to the landfill gas system will see an improved efficiency in extraction. Future uses of this gas as a fuel continue to be explored. The challenge is in developing a consistent flow of gas.

Waste collection

14. The greater emissions come from the collections and sorting/processing facilities. These are areas that may see improvements in the future by rationalising collection and clever use of the collection vehicles.

Product stewardship

- 15. Product stewardship is the process where those involved in the life cycle of a product or service are also involved in identifying and managing its environmental impacts, from the development and manufacture of the product through to its use and final disposal. The focus is on minimising waste but also has the effect of minimising emissions from the landfill.
- 16. Marlborough has access to the following product stewardship schemes-

Plasback—recovery of used farm plastics;

Glass Packaging Forum scheme—glass;

Agrecovery Rural Recycling Programme—farm chemical drums;

Resene Paintwise—paint and paint packaging;

Rose NZ—used oil.

Closed landfills

- 17. Marlborough has nine closed landfills. While no new waste is being placed in the landfills, they still produce emissions from the waste already there. These landfills are monitored under resource consents and a Closed Landfill Management Plan.
- 18. Bluegums and the closed landfills are all situated near waterways. They are monitored to ensure that the waterways do not cause a threat to the landfills.

Conclusions

19. Council will continue to focus on waste diversion from the landfill, recycling and reuse and product stewardship. Council could in the future filter "carbon thinking" throughout the waste system which could fundamentally change the way we deal with waste. This is likely to be a consequence of the Climate Change Response amendments, the creation of emissions budgets and rules.

Next steps

20. A report on the Solid Waste Activity Group will be presented to the next Planning, Finance & Community Committee.

RECOMMENDED

That the report be received.