Emissions Management and Reduction Plan

CEMARS and the carboNZero programme

Waikato Regional Council

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Approved for release by:

Karen Bennett, Manager of the Chief Executive's Office

Contents

1 Introduction

This report is the annual greenhouse gas (GHG) Emissions Management and Reduction Plan prepared for Waikato Regional Council and forms the manage step part of the organisation's application for Programme certification.[1][2]

2 Rationale

The council's mission "working together to build a Waikato region that has a healthy environment, strong economy and vibrant communities" signals the council's commitment to valuing our natural capital and the ecosystem services it provides for people's wellbeing and economic activity. Sustainability principles and values are interwoven into our policies, the services we provide, and the way we operate. The United Nations Sustainable Development Goals, introduced two years ago to tackle global poverty, inequality and climate change by 2030, were the starting point for the council's 2016-2019 Strategic Direction.

As well as having many direct and indirect effects on the communities we work in, climate change will directly affect the work of the Waikato Regional Council.

In New Zealand, regional councils have statutory responsibilities regarding climate adaptation, particularly with a view to natural hazards, infrastructure and assets management. In addition, it has been recognised that regional and local councils can also contribute to climate mitigation and transition to a low carbon economy, and address the opportunities and risks that climate change presents.

WRC is a signatory to the Local Government New Zealand's 2017 Leaders Climate Change Declaration outlining the key commitments and actions that councils plan to undertake to support action on climate change. Aligned to this, WRC has recently completed a regional greenhouse gas inventory to enhance its understanding of the region's carbon profile and facilitate discussion regarding options and pathways for transition to a lower carbon regional economy.

At a corporate level, WRC has committed to managing and reducing greenhouse gas emissions. This means that as well as reducing our emissions to help mitigate climate change, we will also need to adapt our services and operations to changing weather and climate conditions.

In order manage and reduce greenhouse gas emissions and other environmental impacts of our operations, the Waikato Regional Council encourages staff (and the wider Waikato community) to engage with sustainability issues and initiatives. The organisation also seeks to ingrain environmental best practices into operations, systems and decision-making.

Details of commitments and sustainability policies are publicly available and can be found online or through hard copies of documents located at the organisation's main office (401 Grey Street, Hamilton East).

This emissions management and reduction programme applies only to WRC's corporate activities and does not include regional policy interventions.

[1] Throughout this document 'emissions' means 'GHG emissions'.

[2] Programme means the Certified Emissions Measurement And Reduction Scheme (CEMARS) and carboNZero certification programme.

3 Top management commitment

Waikato Regional Council is aiming for sustainability to be integral to all activities, including its customer and stakeholder relationships and approach to risk management. Sustainability is part of the organisational values of doing the right thing for people and planet, and making a positive difference to Waikato and New Zealand by making sure our activities add value environmentally, economically and socially. As part of its commitment to improving its sustainability performance, the Council's executive leadership team (ELT) has committed to managing and reducing emissions, and reporting on progress, through participation in the CEMARS programme. The ELT will be kept informed of emissions reduction initiatives and progress towards emissions reduction goals through regular reporting.

4 Person responsible

Karen Bennett, Manager of the Chief Executive's Office, is the ELT member responsible for overseeing overall emissions management and reduction. She is supported by a team of sustainability champions, comprising members with functional responsibility for emissions management and reduction, and other staff with a passion for improving sustainable practices throughout the organisation. Expertise and support is also provided by contractors and external organisations (including E-Bench and Enviro-Mark).

5 Awareness raising and training

Staff and contractors will be made aware of our emissions reduction commitments through internal communications and campaigns, as well as publicly available reports and communications. New staff will be informed via the staff induction process.

Staff who provide emission source data or who have major influence on the management and reduction of emissions are invited to be part of the Core Sustainability Team, who meet on a regular basis to discuss options for and progress towards emissions reduction. All staff will be provided opportunities to engage in campaigns and/or workshops and/or training to support them reduce the emissions and other environment-related impacts of their role and activities.

6 Significant emissions sources

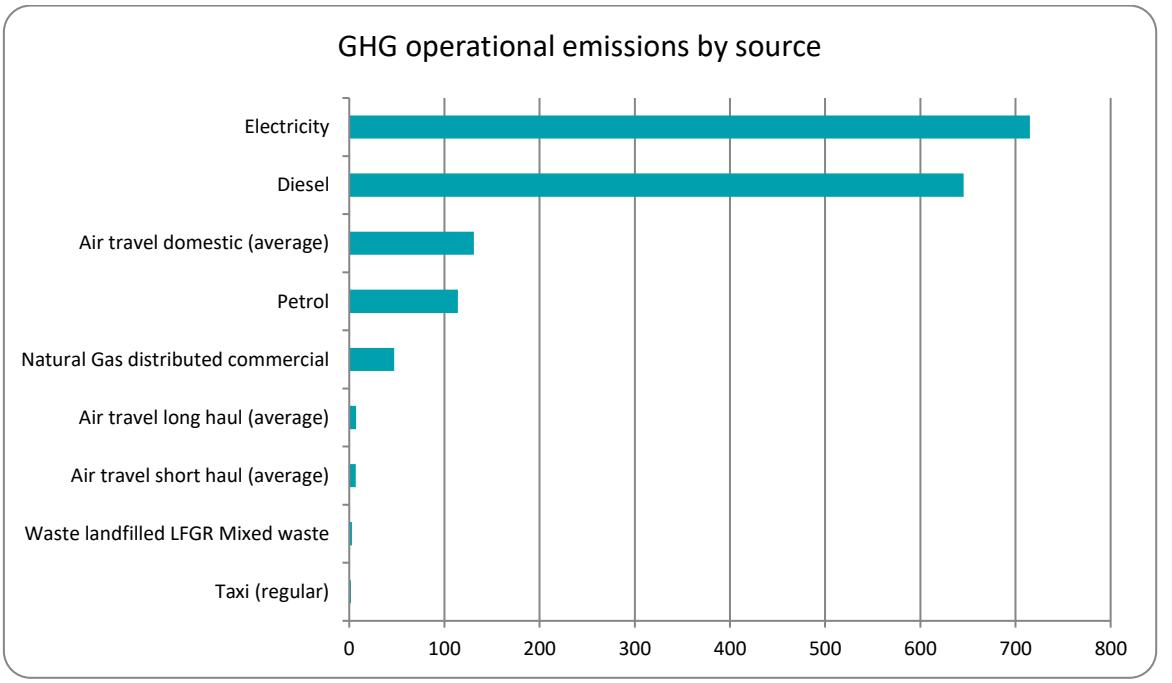

Figure 1: GHG emissions by source.

The Emissions Inventory Report identifies the most significant ongoing emissions sources as electricity and diesel. Petrol use and air travel (domestic) are also significant contributors. Waikato Regional Council has direct control over all the emissions sources mentioned above, and the organisation will use a mix of behaviour, operational and investment interventions to reduce emissions from these areas.

Looking more closely at emissions sources through data available on E-Bench, it has been noted that the activities of the Integrated Catchment Management Directorate (specifically the flood pumps, as well as diesel vehicle use) are by far the greatest sources of emissions. After these Integrated Catchment Management Directorate activities, the next largest contributor to emissions in electricity use in buildings, which is managed by the Finance Directorate. Vehicle travel makes up a large proportion of emissions from every Directorate.

All these factors have been considered in order to develop a Carbon Management and Reduction Programme that is appropriate and effective for the organisation.

7 Targets for emissions reduction

The organisation is committed to managing and reducing its emissions in accordance with the Programme requirements. Table 1 provides details of the emission reduction targets to be implemented. These are 'SMART' targets (specific, measurable, achievable, realistic, time-constrained).

Targets for emissions reduction will be developed to coincide with updates for the Long Term Plan (LTP), which take place every three years. Progress will be monitored continuously and reviewed on an annual basis to ensure the organisation is staying on track to meet these targets.

The overall target is to reduce emissions intensity by 2% per year from the base year, which may involve steady reductions and/or larger reductions followed by maintenance of reductions. Note: reductions are to be compared to base year, rather than the previous year.

The next review of the LTP is in June 2018. For this date there is a soft target of a 2% reduction in emissions. In time for the following review of the LTP (June 2021), the target for emissions reduction is 8%. Due to the scope of the organisation's activities and the factors that influence the organisation's ability to act, a reduction target based on emissions intensity per $ M turnover (inflation adjusted) will be used.

As shown in Table 1, there are specific sub-targets at a more detailed level, by emission source. By achieving each sub-target, the aggregated results will mean we achieve our overall target for the total inventory.

Table 1: Emission reduction targets.

Emissions reduction initiative	Target	Baseline (tCO_2e)	Target date	Metrics/ KPI	Responsibility	Rationale
Total Scope 1, Scope 2 and Scope 3 (mandatory) emissions	8%	1672	1/06/2021	$ M turnover	Karen Bennett, Manager of Chief Executive's Office.	Achievable through the application of the reduction projects discussed further below. The $ M turnover metric was selected as it is linked to the capacity of the organisation to engage in different activities.
Electricity	10%	715	1/06/2021	$ M turnover	Mike Garrett (Chief Financial Officer) and Clare Crickett (Director of ICM).	Achievable through operational changes (by optimising time of use of flood pumps), and supported by behavioural changes (engagement of staff in energy-efficient practices).
Diesel	8%	646	1/06/2021	$ M turnover	Nicki Hamilton (Fleet Management Coordinator), and personal responsibility of staff using vehicles. Also Clare Crickett (Director of ICM)	Achievable through adjustment of fleet management system and staff support for more fuel efficient driving. Also through operational changes and/or investment into flood pump and diesel generator fuel efficiency.
Petrol	5%	114	1/06/2021	FTE staff	Nicki Hamilton (Fleet Management Coordinator), and personal responsibility of staff using vehicles.	Achievable through adjustment of fleet management system and staff support for more fuel efficient driving.
Air travel (all)	8%	145	1/06/2021	$ M turnover	Managers of Directorates	Achievable through behavioural changes.
Natural Gas	40%	47	1/06/2021	Absolute	Appropriate ICM staff	Achievable if natural gas heating sources are switched off when not required (e.g. summer).

8 Specific emissions reduction projects

In order to achieve the reduction targets identified in Table 1 specific projects have been evaluated to achieve these targets. These are detailed below.

Table 2: Projects to reduce emissions.

Objective	Actions	Responsibility	Completion date
Reduction of electricity use	Investigate and implement optimisation of flood pumps use times, so that they are only used when required.	Zone Managers with support from EECA energy advisor.	1/06/2018
Reduction of electricity use	Campaign for resource efficiency in offices.	Core Sustainability Team and WRC Communications.	Initial roll out to be completed by March 2018, with ongoing reminders and engagement opportunities.
Reduction of diesel use (pumps and generators)	Investigate options for fuel efficiency optimisation in existing infrastructure.	Zone managers.	1/06/2018
Reduction of vehicle fuel use	Staff engagement campaign in fuel-efficient driving.	Nicki Hamilton (Fleet Management Coordinator) and WRC Communications	Initial roll out to be completed by March 2018, with ongoing reminders and engagement opportunities.
Reduction of vehicle fuel use	Adjustment of fleet management system so default vehicles are hybrid, if available.	Nicki Hamilton (Fleet Management Coordinator).	1/01/2018
Reduction of vehicle fuel use	Transition WRC fleet to lower emissions vehicles.	Nicki Hamilton (Fleet Management Coordinator).	1/06/2019
Reduction of air travel	Greater focus on assessing opportunities for reducing air travel and whether alternative meeting or travel options are available.	Directors	1/02/2018 for initiative establishment, with ongoing implementation.

Table 3: highlights emission sources that contributed to poor data quality in the Emissions Inventory Report and describes the actions that will be taken to improve the data quality in future inventories.

Table 3: Projects to improve data quality.

Emissions source	Actions to improve data quality	Responsibility	Completion date
Waste	Work with cleaning staff and/or waste pickup providers to obtain data for waste generated.	Charmaine Van Niewkerk (Facilities Management Coordinator)	1/06/2018
Freight (all)	Investigate options for collecting use data on freight and associated emissions	Jonathan Mardon (Senior Business Analyst)	1/06/2018

The emissions inventory identified various emissions liabilities. Table 4 details the actions that will be taken to prevent GHG emissions from these potential emissions sources.

Table 4: Projects to prevent emissions and reduce liabilities.

Emissions source	Actions to reduce liabilities	Responsibility	Completion date
Air conditioning units	Regular servicing and preventing damage to units	Charmaine Van Niewkerk (Facilities Management Coordinator)	Ongoing
Fleet vehicles	Regular servicing and preventing damage to vehicles	Nicki Hamilton (Fleet Management Coordinator)	Ongoing

9 Unintended environmental impacts

The projects to reduce emissions (as listed in section 8) have been assessed to identify any impacts on other aspects of the environment and are listed below. Additional measures, based on guiding principles from our sustainability policy, will be implemented to ensure that any impacts are minimised.

ENVRONMENTAL IMPACTS	Optimise use of flood pumps	Campaign for resource efficiency in offices	Staff fuel-efficient driving	Adjustment of fleet management system	Replacement of fleet vehicles	Reduction of air travel	Reduction of natural gas use
Resource use							
Electricity consumption							
Fuel consumption							
Water consumption							
Wastewater discharge							
Waste to landfill							
Air, land & water quality							
Transport congestion							
Biodiversity							
Land use							
Flooding							
Local economy							

Dark Green	Significant positive impact
Light Green	Some positive impact
White	No change
Yellow	Some adverse impact
Red	Significant adverse impact

10 Key performance indicators

KPI's for the base year (2016-17) are as follows:

Table 5: KPIs.

KPI	2017
Turnover/revenue ($Millions)	122.00
FTE Staff	483
Total emissions (tCO2e)	1,671.56 tCO_2e

Table 6: GHG emissions per KPI.

Total gross GHG emissions per Turnover/revenue ($Millions)	2017
Total gross GHG emissions per Turnover/revenue ($Millions)	13.70
Total mandatory GHG emissions per Turnover/revenue ($Millions)	13.70

11 Monitoring and reporting

At an organisation-wide level, the emissions intensity has been calculated using the mandatory KPI of $ turnover as defined in Rule 59b of the technical requirements. Additional KPIs of 'FTE' and 'absolute emissions' are being used to monitor performance in specific reductions projects.

12 Emissions reduction calculations

Table 7: GHG inventory results.

	2017
Scope 1	806.75
Scope 2	714.99
Scope 3 Mandatory	149.81
Scope 3 Additional	0.00
Scope 3 One time	0.00
Total gross emissions	**1,671.56**
Reporting reductions	
5-year average (tCO_2e)	1,671.56
5-year average (tCO_2e) (scope 1 & 2)	1,521.74
Emissions intensity reductions	

	2017
Turnover/revenue ($Millions)	122.00
GDP deflator values Yr1 prices (assumed)	
Adjusted turnover ($M)	
Emissions intensity (tCO_2e/$M)	13.70
5-year average emissions intensity (tCO_2e/$M)	13.70
Percentage change in absolute emissions	(no data)
Percentage change in emissions intensity	(no data)

13 Performance against plan

This is EMRP has been written for the base year period. An updated EMRP will be produced at the next recertification.