



# EMISSIONS MANAGEMENT AND REDUCTION PLAN

Toitū carbonreduce and Toitū carbonzero programme



## Bay of Plenty Regional Council

Person responsible: Mat Taylor - General Manager - Corporate

Prepared by: Adam Macfarlane-Hill - Corporate Sustainability Officer, Corporate

Dated: 16 February 2022

For the period: 01 July 2020 to 30 June 2021

Base year: 01 July 2018 to 30 June 2019

Verification status: Reasonable

*Approved for release by:*

Mat Taylor

*Signature required (electronic or actual) – Ensure that this document is signed by a top manager (with authority to provide top management commitment) before submission for verification.*

# CONTENTS

Introduction .....	3
Rationale .....	3
Top management commitment .....	4
Person responsible .....	4
Awareness raising and training .....	4
Significant emissions sources .....	5
Targets for emissions reduction .....	5
Specific emissions reduction projects .....	8
Unintended environmental impacts .....	11
Key performance indicators .....	15
Monitoring and reporting .....	16
Emissions reduction calculations .....	16
Performance against plan .....	18
Figure 1: GHG emissions by source .....	5
Table 1: Emission reduction targets .....	7
Table 2: Projects to reduce emissions .....	8
Table 3: Projects to improve data quality .....	9
Table 4: Projects to prevent emissions and reduce liabilities .....	10
Table 5: Key Performance Indicators (KPI) .....	15
Table 6: GHG emissions per KPI .....	16
Table 7: GHG inventory results .....	16

## INTRODUCTION

This report is the annual greenhouse gas (GHG) Emissions Management and Reduction Plan prepared for Bay of Plenty Regional Council and forms the manage step part of the organisation's application for Programme certification.<sup>12</sup>

## RATIONALE

Bay of Plenty Regional Council's purpose is outlined in s10 of the Local Government Act (2002).

As a regional council, our overall outcomes are a healthy environment, freshwater for life, safe and resilient communities, and a vibrant region.

Looking after the environment is at the heart of what we do. Our primary role is managing the effects of people's use of freshwater, land, air, and coastal water through regional rules and policies and issuing consents. We manage the region's rivers with responsibility for flood control, and also coordinate navigation safety and emergency management in the region. We have a broader responsibility, with others, for the economic, social, and cultural well-being of the regional community.

We recognize the importance of our leadership and advocacy role in Climate Change and have developed a Bay of Plenty Regional Council Climate Change Action Plan in which we have committed to:

- Supporting new and additional community initiatives
- Working with other local authorities as they engage with their communities
- Engaging with sectors and industry to find solutions
- Exploring ideas and opportunities with others
- Sharing our information and knowledge.

Over time this will mean that Council's Climate Change Action Plan (document available on BOPRC website) and the role will evolve and develop and we welcome community input on the content of our action plan at any time. We will also engage with the community around our role and priorities for climate change as the action plan develops.

The council has also recently engaged NIWA (National Institute of Water and Atmospheric Research) to develop a report on Climate Change projections and impacts for the Bay of Plenty (document available). This will be the basis of ongoing action for mitigation and adaptation work with our communities.

Climate change continues to be a key input into Central Government policy development, both as a direct climate policy and in other areas such as the development of National Policy Statements for Freshwater Management and Urban Development. The release of the Carbon Change Response (Zero-Carbon) Amendment Bill in May 2019 provides a stronger framework around the national response on mitigation and adaptation to guide our regional response. The Bill includes the following national targets for the reduction of greenhouse gas emissions:

- \* reduce all greenhouse gases (except biogenic methane) to net-zero by 2050

---

<sup>1</sup>Throughout this document 'emissions' means 'GHG emissions'.

<sup>2</sup>Programme means the Toitū carbonreduce and Toitū carbonzero certification programme.

\* reduce emissions of biogenic methane within the range of 24–47 percent below 2017 levels by 2050 including to 10 percent below 2017 levels by 2030

Our organizational goals – and the goals for the Bay of Plenty – need to align with this national vision. As a first step towards this, we are focusing on our direct organizational carbon emissions by setting internal emissions targets (page 9). We have joined the Toitū Carbonreduce program to gain access to the specialist tools and expert advice needed to accurately measure our greenhouse gas emissions and become certified. Through the Toitū program, we can actively manage our GHG emissions and monitor progress as we work towards our emissions reduction targets. We also intend to initiate conversations with the various sectors and communities in our region around the setting of an emissions target for the region as a whole. We are a part of the Sustainability professionals’ network at the Bay of Plenty Region.

## TOP MANAGEMENT COMMITMENT

Bay of Plenty Regional Council is governed by elected Councillors. On 27 June 2019, Councillors acknowledged climate change as a serious issue for the region by “...declaring a climate emergency and making a commitment to work with the community on transitioning to a low carbon future and adapting to our changed climate...”

Bay of Plenty Regional Council, as a response to declaring an emergency has developed a Bay of Plenty Regional Council Climate Change Action Plan, the action progress of which is regularly reported at the Council's Leadership Team meetings. The Leadership Team has committed to fulfilling the intent and action of the Action Plan as an ongoing strategic issue of Council.

## PERSON RESPONSIBLE

The Carbon Reduce Programme for the Bay of Plenty Regional Council sits with the Corporate Business Unit. However, overall responsibility for the reduction of overall emissions sits with all staff.

## AWARENESS RAISING AND TRAINING

The Bay of Plenty Regional Council Climate Change Action Plan outlines a number of specific actions that focus on raising internal staff awareness and development in the area of emission reduction including Focus Area 1: Actions 4.1, 6.1, and Pathways 6a, 6b; Focus Area 2: Actions 7.1, 8.1, 8.2, 9.1; Focus Area 3: 12.1, 12.2 and Focus Area 4: Actions 9.2.

Regular updates, reports, news, and progress are posted on the staff intranet, and a specific staff education program was rolled out in the baseline year (18/19). The Council had also committed to an ongoing communication program going forward from Year 2 of the LTP as outlined above (19/20). We keep our staff posted about the initiatives taken to educate them and create awareness. Some of the training include,

- Segregation of waste
- Educating staff to eliminate waste at the source
- Taking a sustainable transport option
- Encourage car-pooling/sharing rides for office-related work.
- Conserving/Saving energy by switching off lights/TV in the meeting rooms.

## SIGNIFICANT EMISSIONS SOURCES

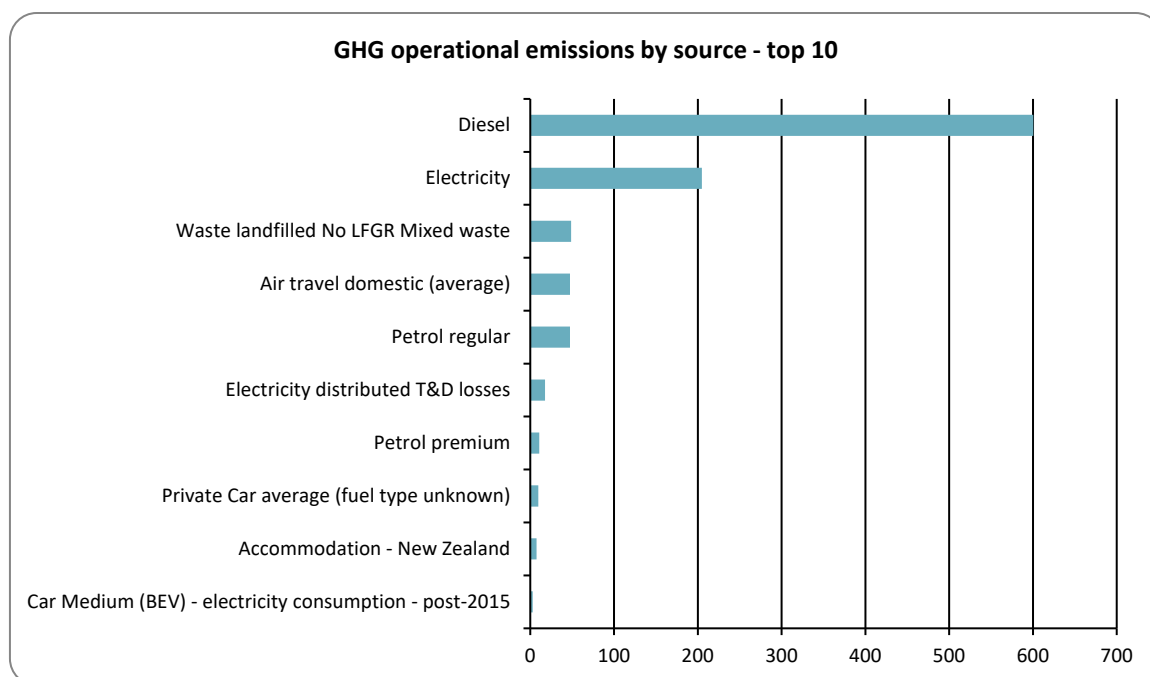


Figure 1: GHG emissions by source.

The emission Inventory Report identifies the most significant ongoing sources as Diesel, Electricity, and fleet vehicle use. These three sources are the priority focus on reducing emissions in the coming year. This year we will be adding 2 more EVs to our fleet. Energy Monitoring System is now in place at our Tauranga office and it helps to monitor our energy use. We also conducted an energy audit during the financial year 2020-2021 to identify energy opportunities. In addition, we also conducted a baseline fleet utilization study to understand the ways we use our fleets.

Council will also continue to focus on the 47 actions and pathways in the Climate Change Action Plan (CCAP). The CCAP was revised and updated recently.

## 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, and time-constrained).

The Council is committed to reducing its own GHG emissions in compliance with rule 59b of the program requirements - particularly for the three significant emissions sources.

The Bay of Plenty Regional Council Climate Change Action Plan outlines our overall internal emissions target that is in line with the proposed Central Government targets. We are committing to a target to reduce our organizational greenhouse gases (except biogenic methane) to net-zero by 2050, as a minimum.

A Carbon Reduction Plan due for completion in December 2020 will confirm emission reduction projects, targets, and completion dates. In the meantime, the council has set an interim target of a 5% overall reduction in Council's emissions by June 2020 for Year 1 of the Toitū Carbonreduce program. We also have set an internal KPI to reduce 5% emissions year on year starting 2020 - 2021.

Council also has an energy reduction target set in the 2018-2028 Long Term Plan for overall reduction of building emissions through the Building Upgrade Project. In the Long Term Plan this is outlined as a level of service: "Reduce carbon emissions through the installation of energy-efficient systems in building refurbishments"; with Annual Targets of:

2016/17: Baseline

2018/19: 80% of baseline (20% reduction of 16/17 baseline)

2019/20: 60% of baseline (40% reduction of 16/17 baseline)

2020/21: 50% of baseline (50% reduction of 16/17 baseline)

2021/22- 2027/28: 50% of baseline (50% reduction of 16/17 baseline)

The Bay of Plenty Regional Council Climate Change Action Plan also outlines a number of other projects that contribute to the overall reduction of GHG emissions.

**Table 1: Emission reduction targets**

Emissions reduction initiative	Target (2018-2019)	Emissions Baseline (tCO <sub>2</sub> e)	Emissions - Year 2 2019/2020	% change	Target - Year 3 (2020-2021)	Target date	Metrics/ KPI	Responsibility	Rationale
Electricity: Scope 2	40%	266.99	229.97	-13.86	10%	1/07/2021	kilowatt hours	Property	Reduction of carbon emissions in relation to energy use at the Tauranga and Whakatāne sites resulting from installation of environmentally sustainable design features.
Freight Road van (average) Scope 3 Mandatory: Km Travelled times average weight of parcel per product	5%	12.87		-100.00	5%	1/07/2021	kilogram km	Customer Services	Review organisational initiated freight and seek alternatives
Air Travel domestic (average) Scope 3 Mandatory	5%	130.80	92.18	-29.52	5%	1/07/2021	person kilometres	Executive	Alternative options for training, conferences, meetings
Diesel: Scope 1	5%	598.24	612.26	2.34	5%	1/07/2021	litres	Property	Through the fleet replacement programme more electric vehicles will be added to the fleet. While this will reduce diesel emissions, energy consumption will increase as additional charging infrastructure is installed.

## 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**

Project	Emissions source	Actions to reduce liabilities	Responsibility	Completion date
Update maintenance programme for all HVAC units in offices	HFC refrigerants	Enhance the Air conditioning maintenance programme to ensure best efficient use of units and systems	Property	December 2020
Building energy use	Electricity	Reduction of carbon emissions in relation to building energy use at the Tauranga and Whakatāne sites through installation of LED lighting and solar photovoltaic systems	Property	December 2020
Corporate travel	Air Travel	Establish a baseline and implement initial actions to reduce emissions from corporate air travel and car fleet (including behavioural changes)	Executive Assistants/ Procurement	December 2020
Building management system	Electricity	Introduce a Building Management System to enable monitoring and reporting of energy use, and ability to target improvement areas e.g. air-conditioning, night energy use	Property/ICT	December 2020
Energy Audit	Electricity	Conduct an energy audit to identify opportunities and implement systems that would help save energy	Property	July 2021
Upgrade fleets	Diesel	Upgrade fleets to eventually reduce emissions from Diesel - Plan to upgrade 2 fleets each year to get away with Diesel fleets (LMV) by 2025	Property	Ongoing



Project	Emissions source	Actions to reduce liabilities	Responsibility	Completion date
Fleet management systems	Diesel	Look at collaboration and networking opportunities to reduce the Ululation of Utes to reduce emissions from Diesel	Property	Ongoing

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

**Table 3: Projects to improve data quality**

Project	Emissions source	Actions to improve data quality	Responsibility	Completion date
Electricity Data improvement	Electricity	Working with Genesis Energy and Mercury to develop a bespoke reporting system to electricity usage and reduction. Going forward the data from the supplier will be compiled monthly to compare energy utilization periodically. Setting up automated report generation through our Energy Monitoring Systems	Property	December 2020
Building Management Systems	Electricity, water, HVAC systems	Develop a reporting structure to baseline system Develop a plan for reduction of baseline data. Will be working with Canam to provide us monthly report	Property	December 2020
Waste	Waste to landfill	Have set up a contract with waste management to provide us monthly reports of the waste collected and sent to landfill and to recycle. We will also be setting up internal measuring system to measure the volume of green waste generated and sent to the worm farms.	Property	December 2020
Update the Bay of Plenty Community Carbon Footprint 2015/16 Report	regional carbon footprint	Update the Report to baseline the community carbon footprint for 2020 Develop a plan, in consultation with the community, on reducing regional carbon footprint, including a system for tracking data	Env Strategy	July 2021

Project	Emissions source	Actions to improve data quality	Responsibility	Completion date
Freight Data Improvement	Freight	Work with all courier contractors to develop system for tracking Develop a system for tracking all freight Develop a plan for reducing freight emissions over time	Property	Ongoing
Travel and Accommodation	Travel and Accommodation	Work with Orbit to set up an automated monthly reporting system to analyse periodic travel undertaken	Property	Ongoing
Fleet Utilization	Diesel	Monitoring and analysing the utilization of Utes using the GPS systems to plan and implement efficient utilization system and reduce emissions from diesel	Property	December 2022

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**

Project	Emissions source	Actions to reduce liabilities	Responsibility	Completion date
Update maintenance programme for all HVAC units in offices	HFC refrigerants	Enhance the Air conditioning maintenance programme to ensure best efficient use of units and systems	Property	December 2020
Sustainable planting of Regional Parks	n/a	Develop a planting programme that utilised native trees to ensure permanent sequestration - reducing liability of carbon sink removal in the future	ICM	December 2020
Sustainable planting of coastal areas and wetlands	n/a	investigate the efficacy of coastal and wetland plants for carbon sequestration - reducing liability of carbon sink removal in the future	ICM	December 2020
Fleet vehicle Maintenance schedule enhancement	fuel, carbon monoxide	Enhance the maintenance schedule for petrol/diesel fleet vehicles to ensure efficient performance	Property	December 2020

## UNINTENDED ENVIRONMENTAL IMPACTS

Bay of Plenty Regional Council have endeavoured, in developing the actions and projects above to keep any unintended impacts to a minimum. However, BOPRC will work quickly to mitigate negative impacts if they do occur upon undertaking these projects.

	Target Date	Responsibility	Env Impact: Resource Use	Env Impact: Electricity Consumption	Env Impact: Fuel consumption	Env Impact: Water Consumption	Env Impact: Wastewater Discharge	Env Impact: Waste to Landfill	Env Impact: Air Quality	Env Impact: Water Quality	Env Impact: Transport congestion	Env Impact: Biodiversity	Env Impact: Land Use	Env Impact: Flooding	Env Impact: Local Economy
<b>Projects to Reduce emissions:</b>															
<b>Project - Internal</b>															
Building energy use	December 2020	Property	Light Green	Green	Light Green	Light Green		Green							
Building management system	December 2020	Property	Light Green	Green	Light Green	Light Green	Light Green								
Internal resource use	December 2020	Property	Green	Light Green	Light Green			Green							
Low carbon behaviour	July 2021	ICT	Green	Light Green	Green			Green	Light Green		Light Green				
Internal Mail	July 2021	Customer Service	Light Green		Light Green			Green	Light Green						

Reducing waste	July 2021	Customer Service	Dark Green				Light Green		Dark Green	Light Green							
Low carbon catering	December 2020	Customer Service	Light Green						Dark Green								
property initiatives	December 2020	Property	Dark Green	Dark Green			Light Green	Light Green									
efficiency of equipment	December 2020	Customer Service	Dark Green	Dark Green						Light Green							
Corporate travel	December 2020	Executive	Dark Green		Dark Green												
Electric Fleet vehicles	December 2020	Property	Dark Green	Yellow	Dark Green					Light Green		Light Green					
Staff transport	December 2020	Executive	Dark Green	Yellow	Dark Green					Light Green							Light Green
staff accommodation	December 2020	Executive	Light Green	Light Green													
Staff travel patterns	July 2021	Transport	Light Green									Light Green					
Staff travel plan	July 2021	Transport	Light Green			Light Green					Light Green						
Induction	July 2021	People and Culture	Light Green														
Low carbon champions	July 2021	People and Culture	Light Green	Light Green	Light Green	Light Green						Light Green					

Incentives	July 2021	People and Culture													
<b>Project - Community</b>															
Existing trees	December 2020	ICM													
Planting programme	July 2021	ICM													
Planting/Sustainable harvesting	July 2021	ICM													
Coast care	July 2021	ICM													
Current Bus fleet	July 2021	Transport													
Electric Buses	July 2021	Transport													
Alternative transport	July 2021	Transport													
Current Regional emissions	December 2020	Env Strategy													
regional waste strategy	December 2020	Env Strategy													
regional waste reduction	December 2020	Env Strategy													

combustion free urban centres	December 2020	Env Strategy																		
regional emissions target	December 2020	Env Strategy																		
Community EV charging stations	December 2020	Env Strategy																		
EV incentives	December 2020	Env Strategy																		
<b>Projects to improve data quality</b>																				
Electricity Data improvement	December 2020	Property																		
Building Management Systems	December 2020	Property																		
Waste	December 2020	Property																		
Update the Bay of Plenty Community Carbon Footprint 2015/16 Report	July 2021	Env Strategy																		
Freight	December 2020	Property																		

<b>Projects to prevent emissions and reduce liabilities</b>															
Update maintenance programme for all HVAC units in offices	Property	December 2020													
Enhanced Sustainable planting of Regional Parks	ICM	December 2020													
Sustainable planting of coastal areas and wetlands	ICM	December 2020													
Fleet vehicle Maintenance schedule enhancement	Property	December 2020													

## KEY PERFORMANCE INDICATORS

Table 5: Key Performance Indicators (KPI)

KPI	2019	2020	2021
Turnover/revenue (\$Millions)	144.65	138.53	136.85

**Table 6: GHG emissions per KPI**

KPI	2019	2020	2021
Total gross GHG emissions per Turnover/revenue (\$Millions)	8.15	7.50	7.30
Total mandatory GHG emissions per Turnover/revenue (\$Millions)	8.00	7.39	7.25

There is a Corporate KPI in the 2018-2028 Long Term Plan to reduce carbon emissions through the installation of energy efficient systems in the Tauranga and Whakatane building refurbishment projects. This is measured through the reduction of carbon emissions in relation to building energy use at the Tauranga and Whakatāne sites (baseline is 2016/17 emissions) with reduction target goals set for each year of the Long-Term Plan.

## MONITORING AND REPORTING

Monitoring and reporting of progress of projects, actions and targets will be undertaken by the Customer Contact Manager and reported internally on a quarterly basis and at a governance level bi-annually.

## EMISSIONS REDUCTION CALCULATIONS

**Table 7: GHG inventory results**

	2019	2020	2021
Scope 1	683.52	671.45	658.75



	2019	2020	2021
Scope 2	267.65	218.36	207.74
Scope 3 Mandatory	206.03	134.10	125.08
Scope 3 Additional	22.35	15.35	7.60
Scope 3 One time	0.00	0.00	0.00
Total gross emissions	1,179.56	1,039.25	999.17
Reporting reductions	0.00	0.00	0.00
5-year average (tCO <sub>2</sub> e)	1,179.56	1,109.41	1,072.66
5-year average (tCO <sub>2</sub> e) (scope 1 & 2)	951.17	920.49	902.49
Emissions intensity reductions	0.00	0.00	0.00
Turnover/revenue (\$Millions)	144.65	138.53	136.85
GDP deflator values Yr1 prices (assumed)	0.00	0.00	0.00
Adjusted turnover (\$M)	0.00	0.00	0.00
Emissions intensity (tCO <sub>2</sub> e/\$M)	8.15	7.50	7.30
5-year average emissions intensity (tCO <sub>2</sub> e/\$M)	8.15	7.83	7.65
Percentage change in absolute emissions	0.00	-11.90	-3.86
Percentage change in emissions intensity	0.00	-8.00	-2.68

## PERFORMANCE AGAINST PLAN

Comparing the data between our baseline and Year 1 shows that we have made some progress in reducing our overall carbon emissions (~6% reduction). While this year has posted several other challenges in terms of lockdown, relocating offices, refurbishing buildings, etc., we have made progress in reducing emissions from electricity (our second largest emission source) and travel. With the upgradation of the fleet to EVs, we tend to cut down emissions from Diesel sources going forward.

(No information supplied)