



**PAPAIOEA
PALMERSTON
NORTH
CITY**

PALMERSTON NORTH CITY COUNCIL

MINUTES ATTACHMENTS ENVIRONMENTAL SUSTAINABILITY COMMITTEE

9AM, WEDNESDAY 15 SEPTEMBER 2021

CONFERENCE & FUNCTION CENTRE
354 MAIN STREET, PALMERSTON NORTH

ENVIRONMENTAL SUSTAINABILITY COMMITTEE MEETING

15 September 2021

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| 6 | Progress Towards Actions in the Waste Management and Minimisation Plan 2019 | |
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MEMORANDUM

TO: ELECTED MEMBERS
FROM: MIKE MONAGHAN
SUBJECT: AMENDMENT TO REPORT ON PROGRESS TO WASTE MANAGEMENT AND MINIMISATION PLAN
DATE: 9 SEPTEMBER 2021
CC: SARAH SINCLAIR

PROJECT NO:
 FILE NO:

As an addition to the report titled "Progress towards the Waste Management and Minimisation Plan 2019" we are also providing Elected Members with information relating to the amount of waste sent to landfill, as requested by the resolution for clause 17-20, for the Environmental Sustainability Committee meeting held on 9 September 2020.

Table 1 provides a breakdown of the information used to calculate the updated waste diversion rate. The amount of waste in tonnes sent to landfill is reported, as well as how this compares with the previously captured waste stream data.

Table 1. comparison of 2018 and 2021 data

	2018 waste assessment	2021 data
Recovered material (tonnes)	27,700	32,700
Landfilled material (tonnes)	44,540	50,000
Waste diversion	38%	40%
Population	85,500*	91,612**



Tonnes to landfill per capita	0.53	0.55
Total tonnes recovered per capita	0.32	0.36

* Projected population data provided by PNCC at time of waste assessment preparation

** Projected population from 2020 Strategic Asset Management Plan

2021 landfilled material data is our best estimate.

The total amount of material sent to landfill is difficult to obtain, keeping in mind PNCC only controls a portion of this waste stream. Bonny Glen landfill, whom receives waste from Palmerston North reported that in the 20/21 year, 48,450 tonnes of municipal waste were transported from the Matthews Ave transfer station to their landfill. This figure does not include special waste (waste dropped off directly at the landfill requiring immediate disposal) and does not factor in 'leakage' from surrounding districts where waste is transported between districts for disposal (for example, Manawatu District Council waste disposed of via Matthews Ave). The amount of waste estimated for the analysis is rounded up to factor for special waste and leakage.

Contractor availability

Due to the increased central government workload affecting availability, we have been unable to engage with the contractor who prepared the 2018 waste assessment to reconcile data. In the absence of this, we have carried out the data reconciliation to the best of our ability.

Future data collection

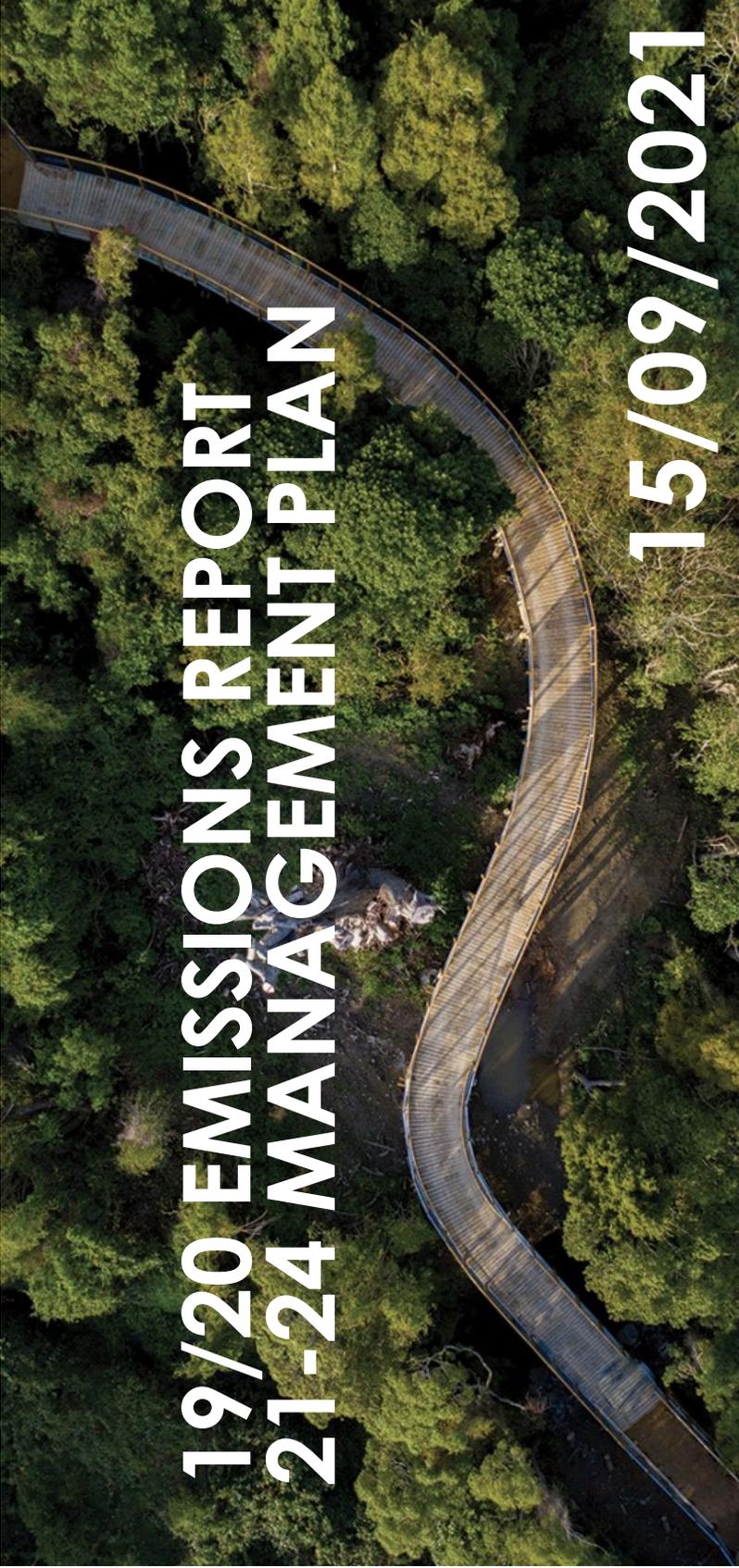
At the time of the previous progress report, we anticipated being able to license private waste collectors operating within Palmerston North. If successful, this would have allowed us to provide more definitive waste stream data, particularly on the municipal waste. We were unable to progress with licensing due to internal resource constraints, but signals from central government that a standardized reported platform is soon to be developed also stalled progress.

We expect government direction shortly on how waste stream data needs to be reported, and that this will become mandatory for all parties that collect, transport and process end of life materials. We are conscious of the fact that any internal platform developed to capture data would need to be consistent with central governments requirements.

Additionally, the next Solid Waste Analysis Protocol (SWAP) and waste assessment, is scheduled to occur in the current financial year. These activities will be able to provide a more in-depth analysis of waste streams and waste diversion and will allow us to set a more consistent baseline for this data to aid with future reporting.

Data quality assurance

This information was excluded from the initial report due to an oversight, however it should be kept in mind that it is an estimate only. Waste stream data is notoriously difficult to capture; however, we are confident that the data provided is a satisfactory reflection of efforts put into waste management and minimisation in Palmerston North. Legislative changes in central government will hopefully alleviate some data capture and quality barriers within the next few years – we expect an update on this from the Ministry for the Environment in the coming months.



19/20 EMISSIONS REPORT 21-24 MANAGEMENT PLAN

15/09/2021



CONTENTS

- 2019/20 Organisational Emissions Inventory (EIR)
- 2021-2024 Operational Emissions Management Plan (EMRP)



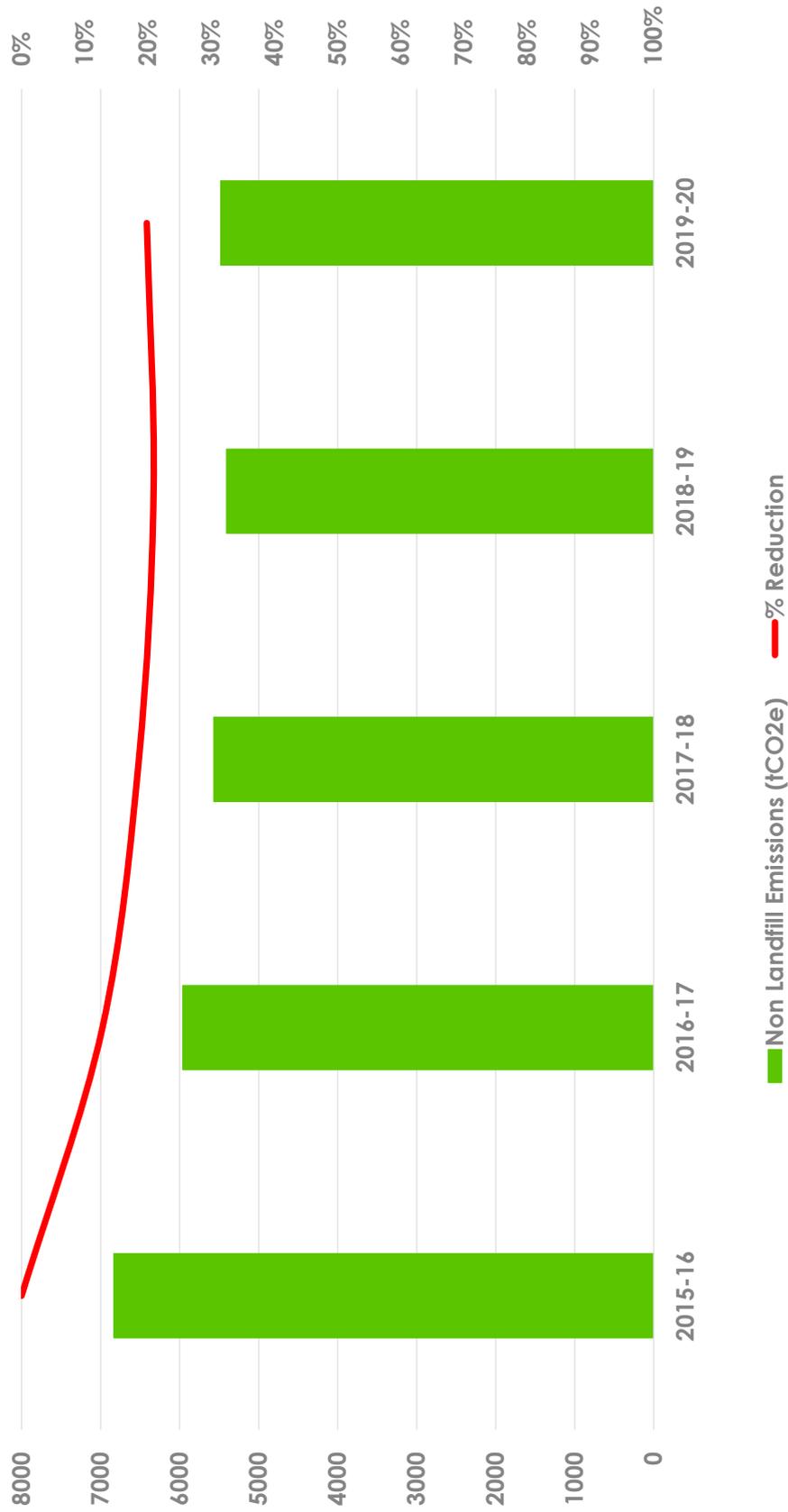
2019/2020 EMISSIONS INVENTORY



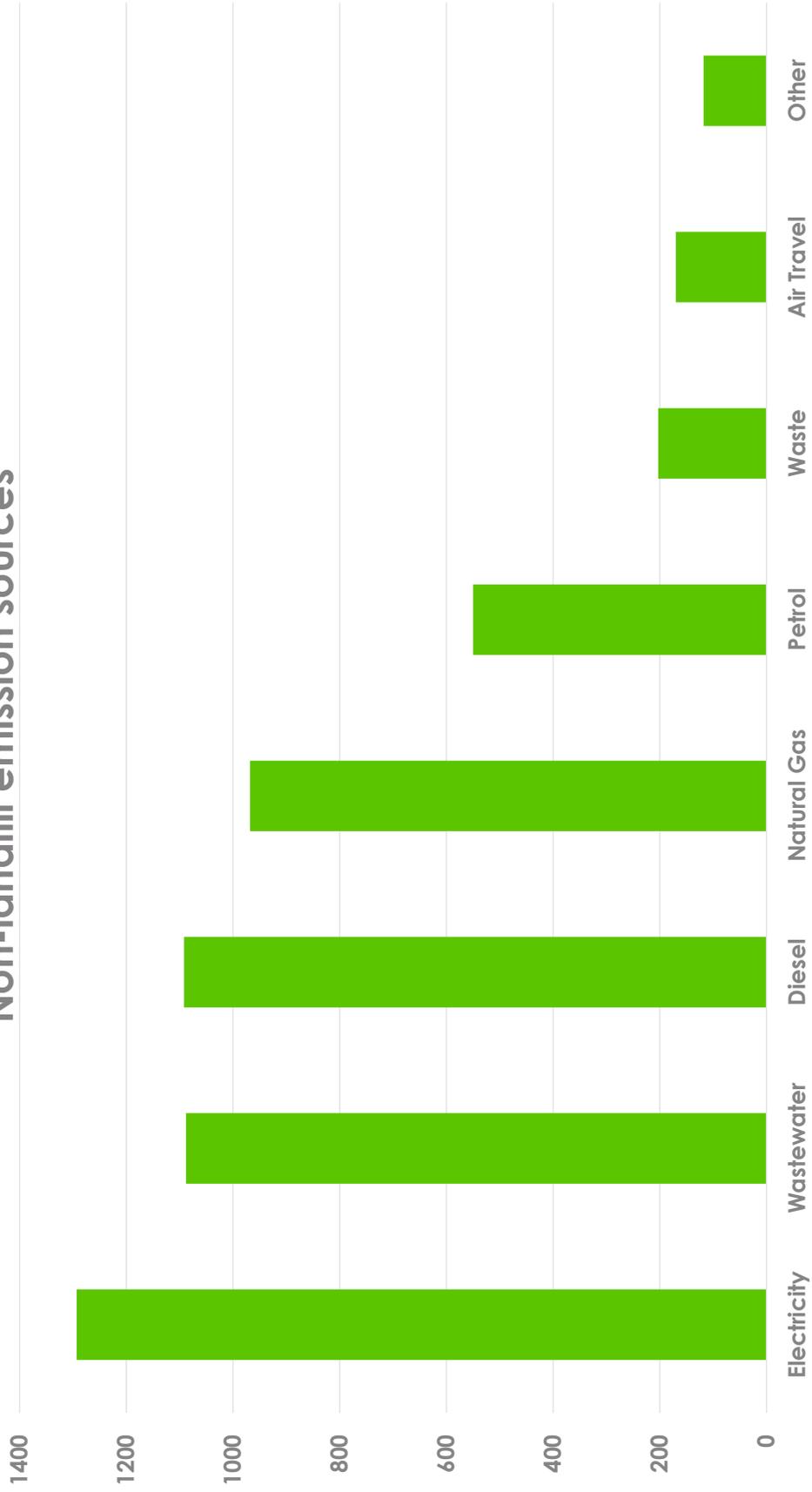
KEY FINDINGS

- Total gross emissions declined by 960tCO₂e since 18/19 to 20440t
- Non-landfill emissions increased by 74 to 5480
- Total emissions have declined 23% compared to the 15/16 baseline, while non-landfill emissions have lagged slightly at 20%

PNCC Non-Landfill Emissions Inventory



Non-landfill emission sources



2021-2024 EMISSIONS MANAGEMENT AND REDUCTION PLAN



EMRP

- Formalisation of the decisions made through the 2021 -2024 LTP
- Affirms that the primary mechanism over the next three years for organisational emission reductions is to be the Low Carbon Fund
- Projects to be prioritised and funding allocated over the next ~month based on which are expected to deliver the greatest emission reductions per dollar spent



QUESTIONS?



2020 EMISSIONS

Sector/Category Source	Emissions (tCO ₂ e)	tCO ₂ e difference since 16/17 (%)	
Stationary Energy	Electricity Consumption	51233	
	Electricity T&D Loss	5337	
	Petrol and Diesel	48156	
	Natural Gas	47923	
	Natural Gas T&D Loss	5473	169113
	LPG	9523	+34626 (+25%)
	Landfill Gas	7	
	Coal	1460	
	Biofuels	1	
Transportation	Petrol	128734	
	Diesel	90179	
	Rail Emissions	1642	231682
	Jet Kerosene	9380	-11229 (-4.7%)
	Av Gas	975	
	LPG	772	
Waste	Solid Waste Disposal	38739	40537
	Waste Water	1798	+6649 (+14%)
IPPU (Industry)		32040	+5151 (+19%)
Agricultural		167767	+45158 (+37%)
Total gross emissions (excl. forestry)		641139	+67283 (+12%)
Forestry	Exotic Forest Sequestration	-79,816	N/A
	Native Forest Sequestration	-19,191	
	Total Harvest Emissions	97376	
Total net emissions (incl. forestry)		639508	+135310 (+27%)

