



PALMERSTON NORTH CITY COUNCIL

MINUTES ATTACHMENTS SUSTAINABILITY COMMITTEE

9AM, WEDNESDAY 11 OCTOBER 2023

COUNCIL CHAMBER, FIRST FLOOR CIVIC ADMINISTRATION BUILDING 32 THE SQUARE, PALMERSTON NORTH



SUSTAINABILITY COMMITTEE MEETING

11 October 2023

- Palmerston North City Council Organisational Emissions Inventory 2022/23
 - 1. Presentation Palmerston North City Council Organisational Emissions Inventory 2022/23

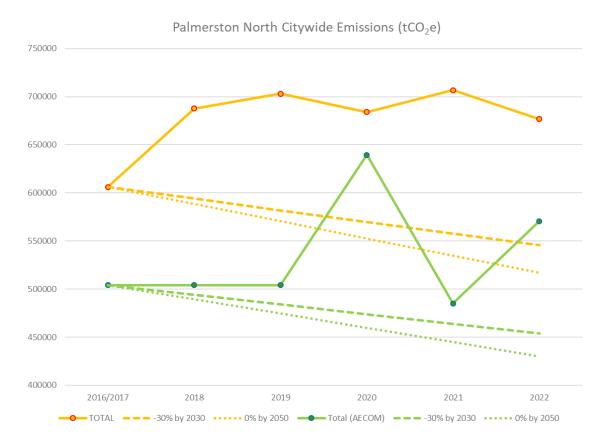
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2022 City-wide Emissions Inventory

Context and Detailed Discussion

Comparing Inventories





The new inventory followed a detailed analysis of the previous approach and identified several areas for improvement.

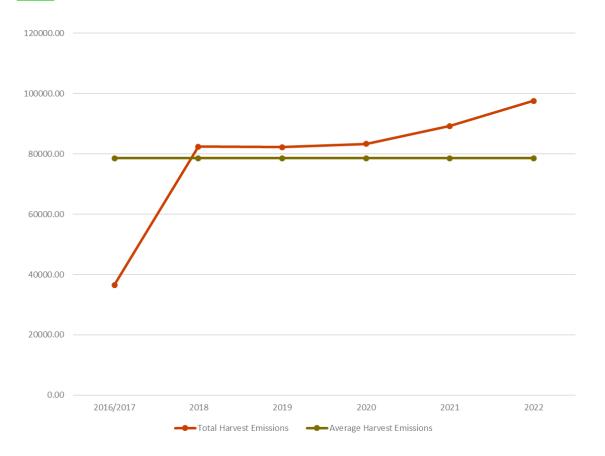
The previous inventories relied on the spreadsheet provided by AECOM in 2018.

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Harvest Emissions





Harvest rates in 2016/17 were approximately 1.5% compared to 3.3% in subsequent years.

Total forest area has also increased over the same period.

Precise harvest figures are considered to be commercially sensitive and therefore harvest numbers are estimates.

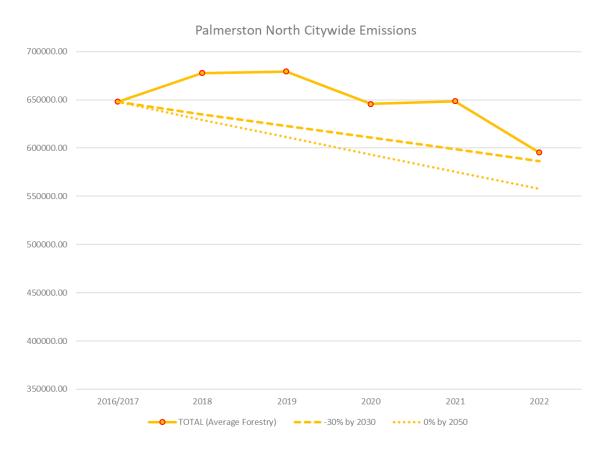
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Gross with Averaged Harvest Emissions





Baseline data from 2016/17 is skewed by unusually low harvest emissions from forestry.

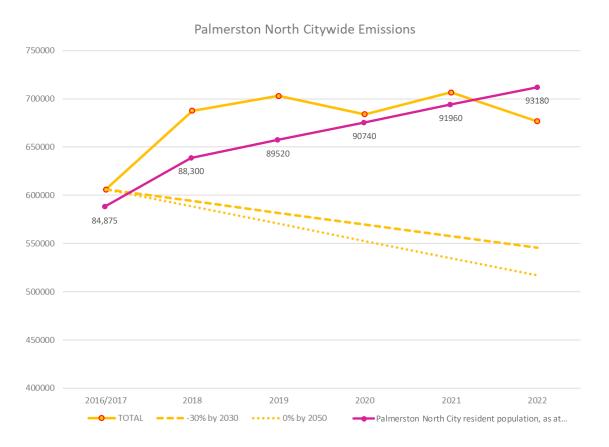
Averaging forestry emissions over time provides a more regular distribution but may mask significant short-term changes.

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Gross vs Per Capita Emissions





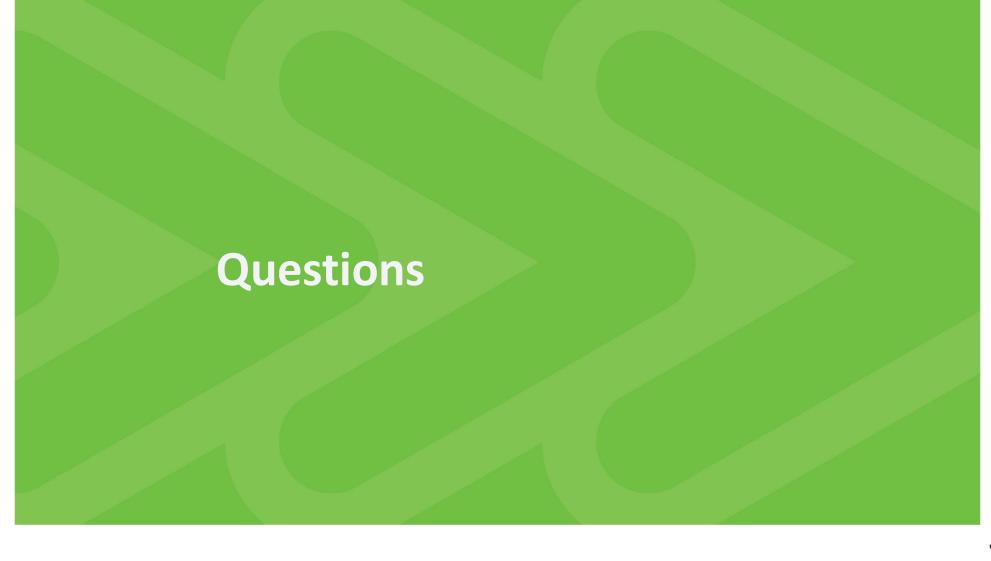
Total emissions have increased by 10% since baseline, but have flatlined since 2018.

Population has increased by 11%, meaning per capita emissions have declined by 7% since 2018.

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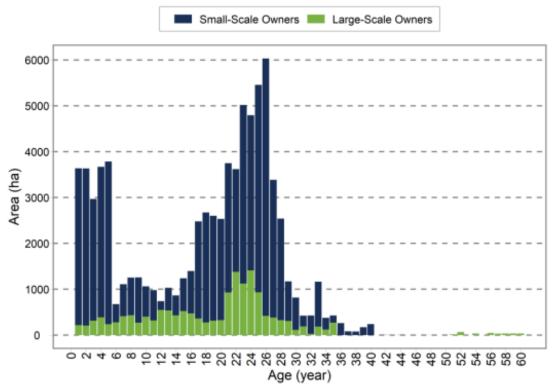




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Forest Age Class Distribution

Figure 4-1: Western Southern North Island Modelled Age-class Distribution for All Species



The change in 21-25 year-old forest stands is illustrative of the change in forestry from the 2016/17 baseline year.



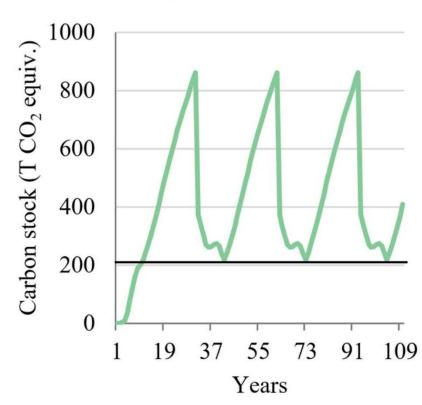


Forest Carbon Stock Cycle

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Typical *Pinus radiata* harvest cycles include regular peaks and troughs.

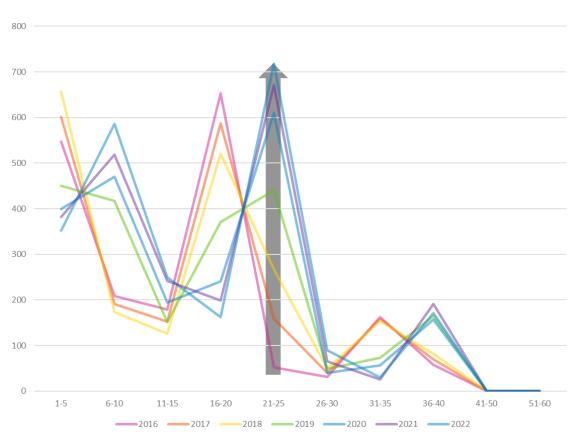




Age Class Variance Over Time

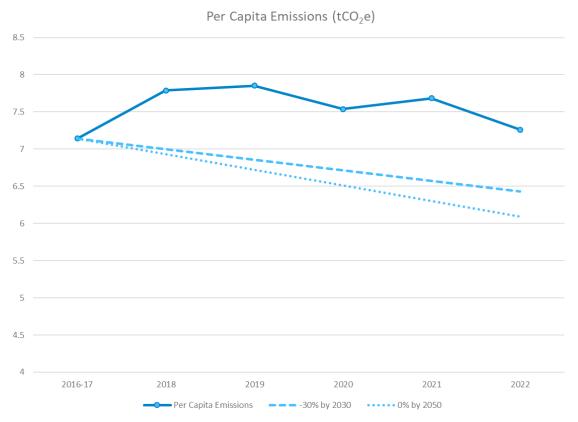


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Per Capita Emissions

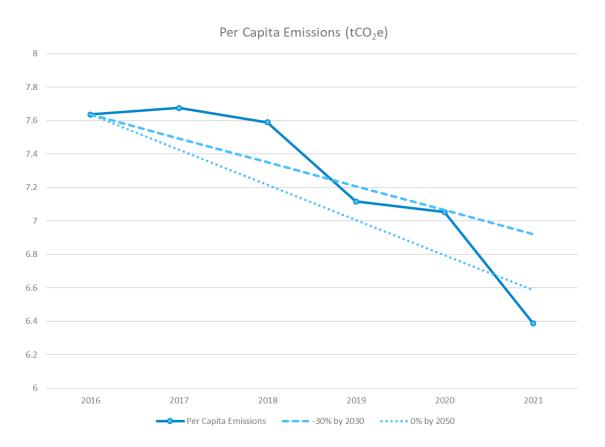




Per Capita emissions closely follow the overall emissions but with a more declining trend as opposed to a static trend.

Per Capita with Averaged Harvest Emissions





Per Capita emissions closely follow the overall emissions but with a more declining trend as opposed to a static trend.

