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The economic value of the sectors

Assessing the economic contributions of the waste, resource recovery and contaminated land management sectors

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Date: 12 June 2025

About our research commissioned by WasteMINZ

The issue at hand

- The sectors are finding it difficult to influence policy because of limited economic information and research.

Research objectives

- Assess the economic value of the sectors to Aotearoa New Zealand
- Provide a baseline of economic information on the sectors

Scope

- Compile existing economic data on sectors and their economic and social contributions
- Estimate the economic contribution of the sectors by analysing inter-industry flows
- Investigate broader concepts of economic value related to the sectors' activities

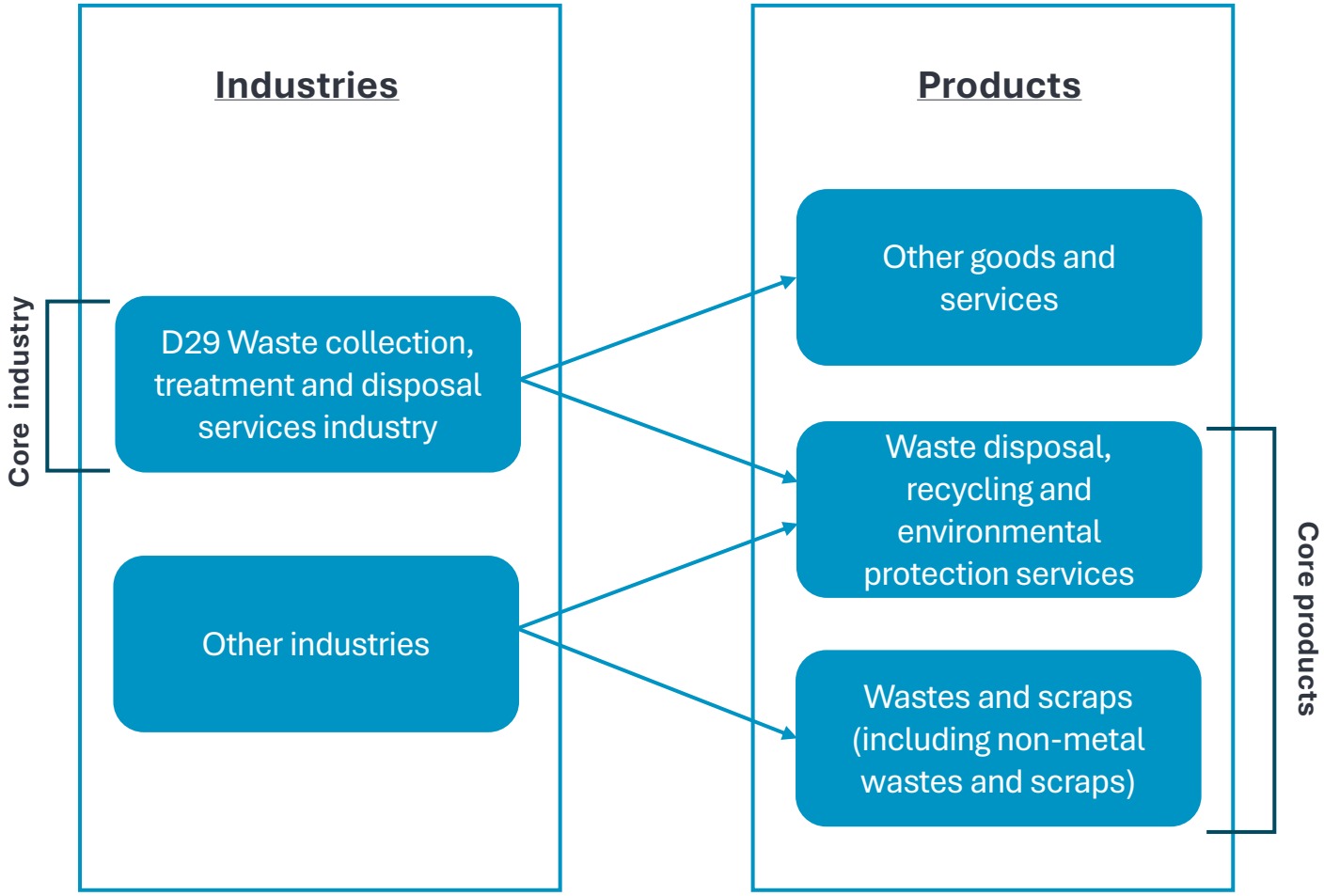
Out-of-scope

- non-quantifiable costs or benefits that lack strong evidence
- commentary on waste disposal levy settings
- wastewater infrastructure.

The sectors encompass activities done by industries

What we mean by ‘the sectors’

We focused on core industries and products



Key datasets and information that we used

Datasets

- Statistics New Zealand
  - Business demography
  - National accounts input-output tables
  - Local authority income and expenditure
- Ministry for the Environment
  - Waste statistics
- Treasury
  - CBAx impact values

Information sources

- Academic literature and public reports
- Stakeholder interviews

Key findings: the economic value of the sectors

- The core waste collection, treatment and disposal services industry
  - produced $2,415 million in direct output,
  - supporting $998 million of gross value added and 7,200 jobs

- The sectors also include sector-related products supplied by a range of industries. This expands the sectors' contribution across the economy to:
  - $3,342 million in direct output
  - $1,363 million in gross value added and 10,400 jobs.

- New Zealand produces less with the same or more resources than other OECD countries
  - USD1,475 of output per tonne of material consumed for New Zealand versus the OECD average of USD2,502

Key findings: broader economic considerations

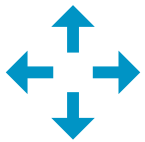
- An estimated 40 percent of waste sent to class 1 landfills is divertible.
  - Resulting in potential avoidable private disposal costs of $222.8 million in 2022.

- Waste emissions account for 4.5% of New Zealand's total greenhouse gas emissions
  - The costs to abate waste sector emissions for 2022 is an estimated $481 million.

- The costs associated with waste have been growing
  - Local councils have increased their spending on solid waste management, reaching $629 million in 2023
  - Illegal dumping costs councils millions of dollars each year
  - Wasted food costs households $872 million or $1,500 per household each year

The rest of this presentation will cover…

Industry snapshot



Broader economic considerations

Interindustry linkages

Where to from here?

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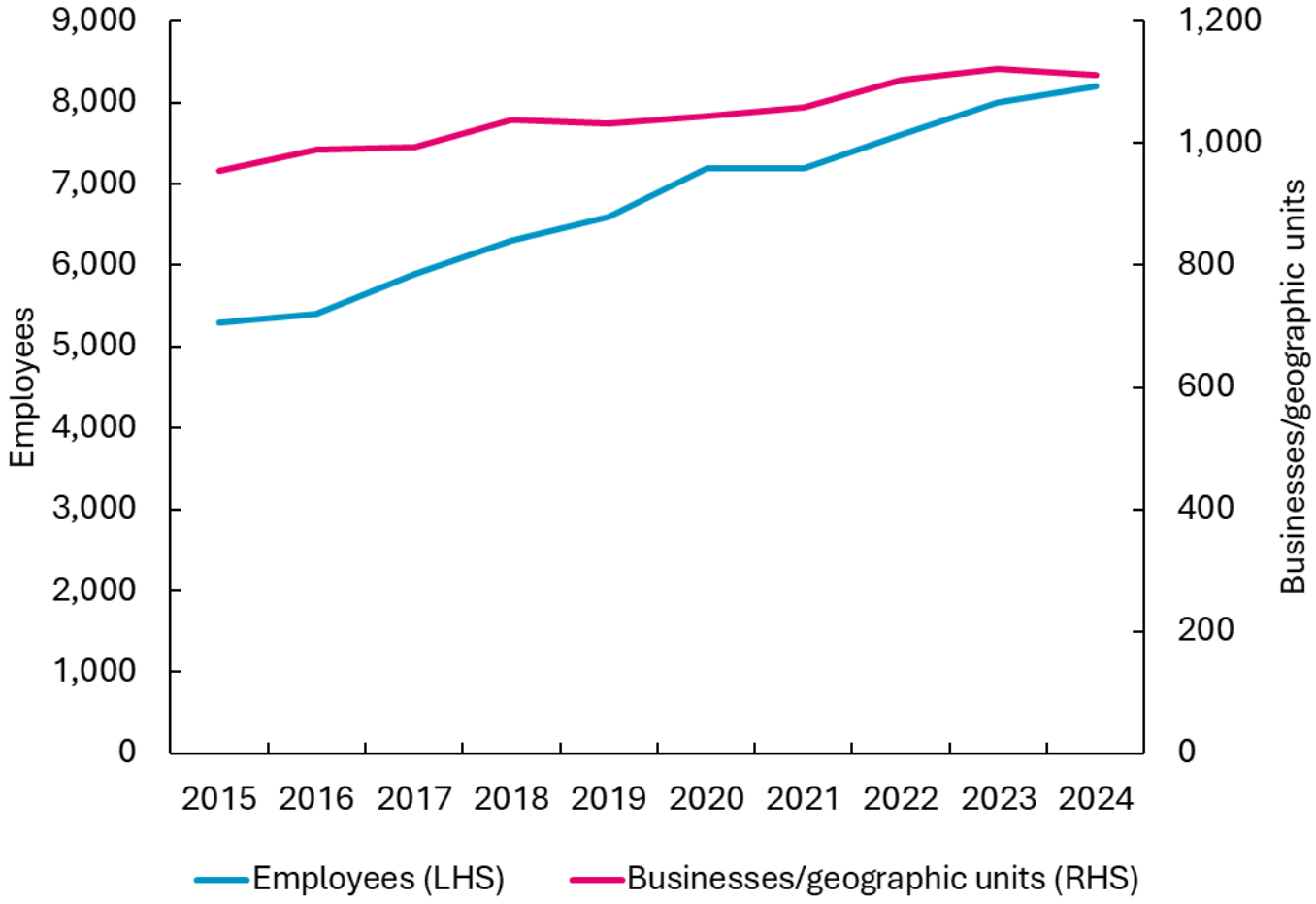
Industry snapshot

D29 waste collection, treatment and disposal services

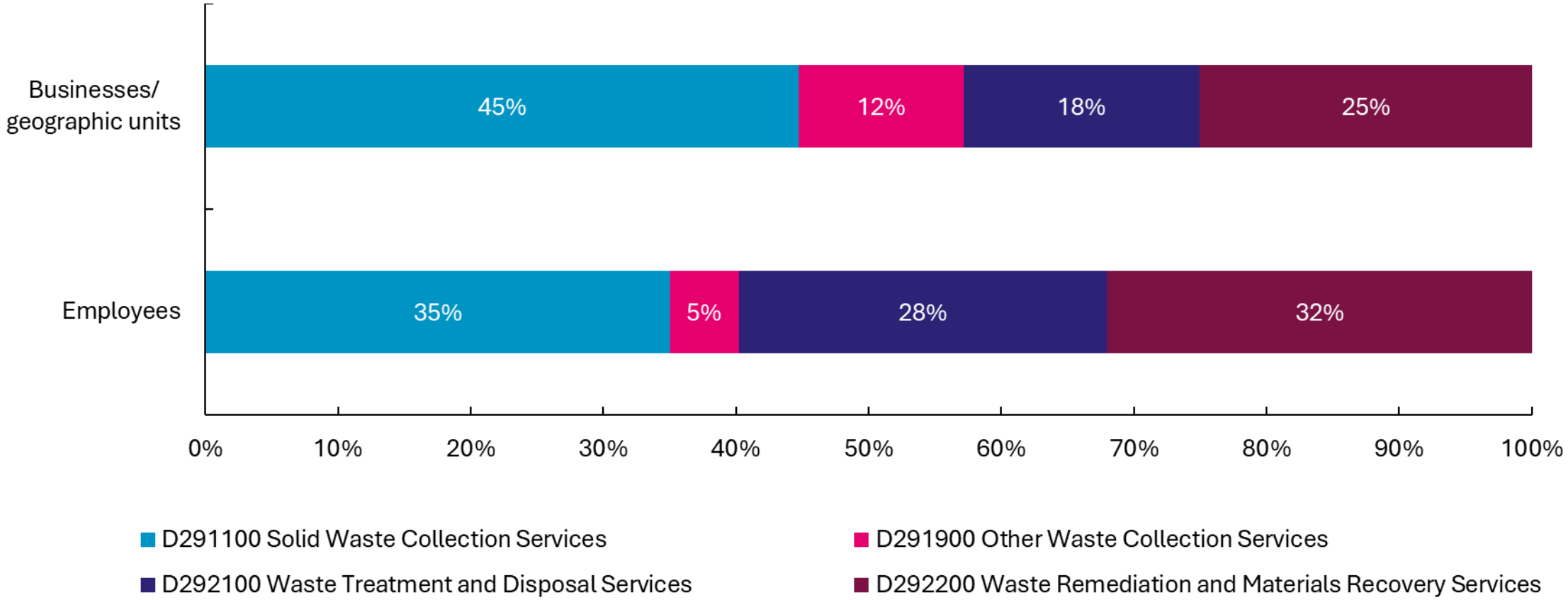
Economic trends for the core industry



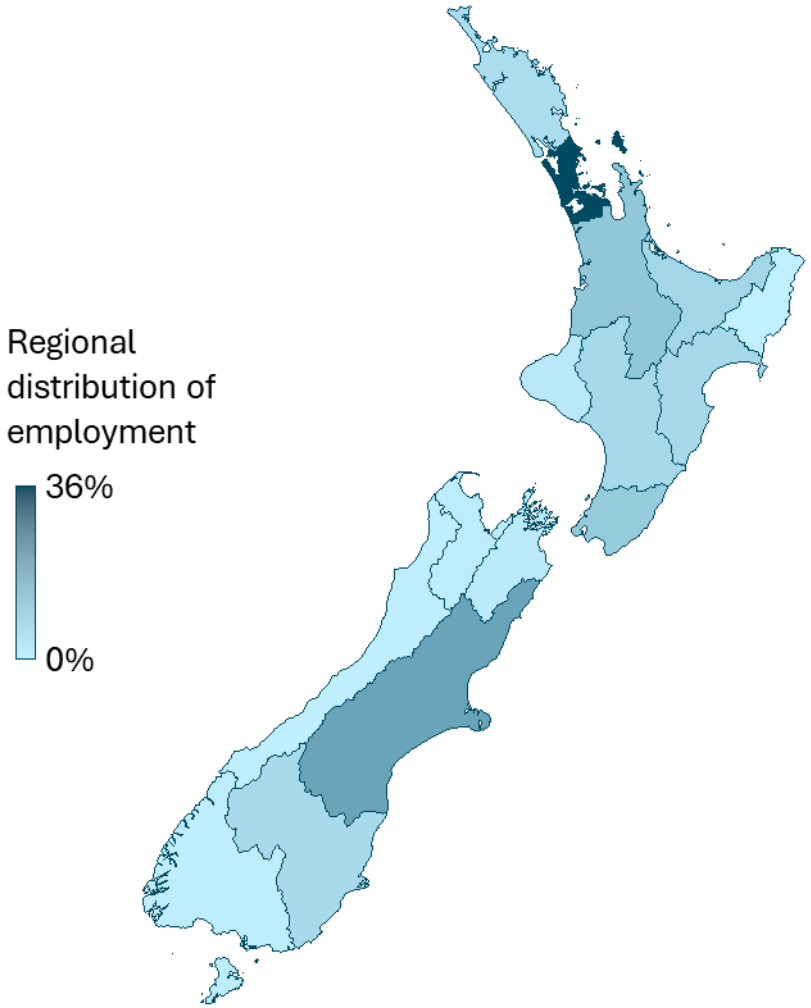
- Grown in size and scale
- Driven by growth in
  - waste treatment and disposal services
  - solid waste collection services

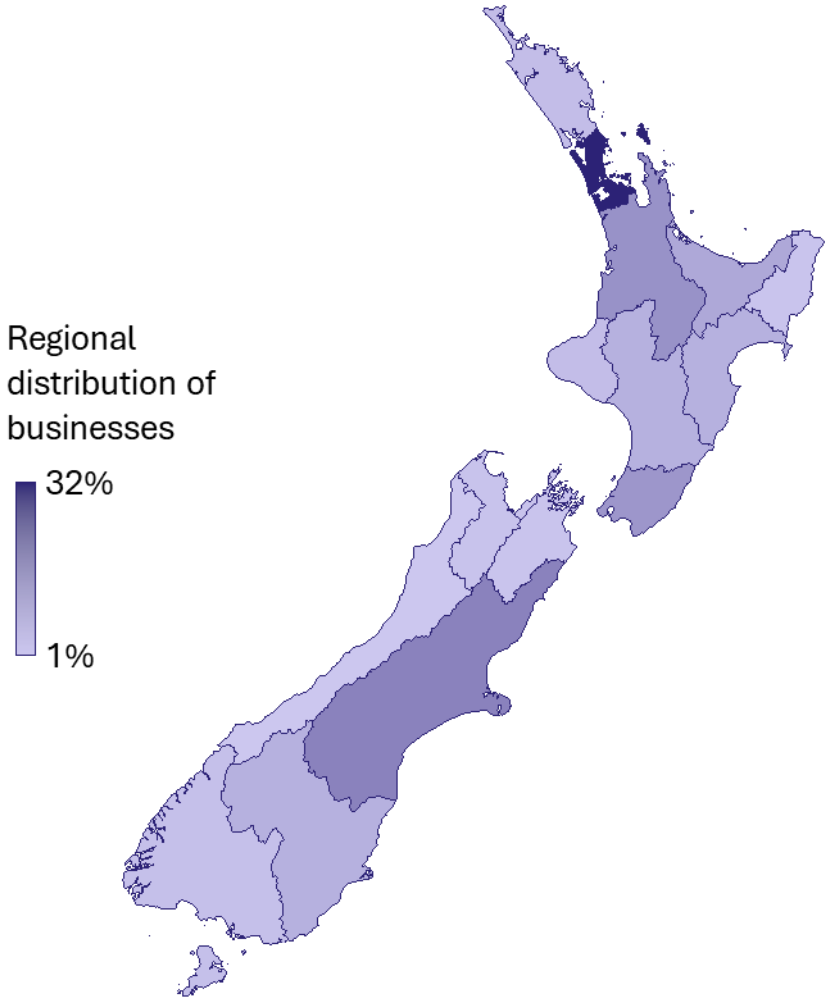
The core industry is made up of several industry classes

D29 waste collection, treatment and disposal services

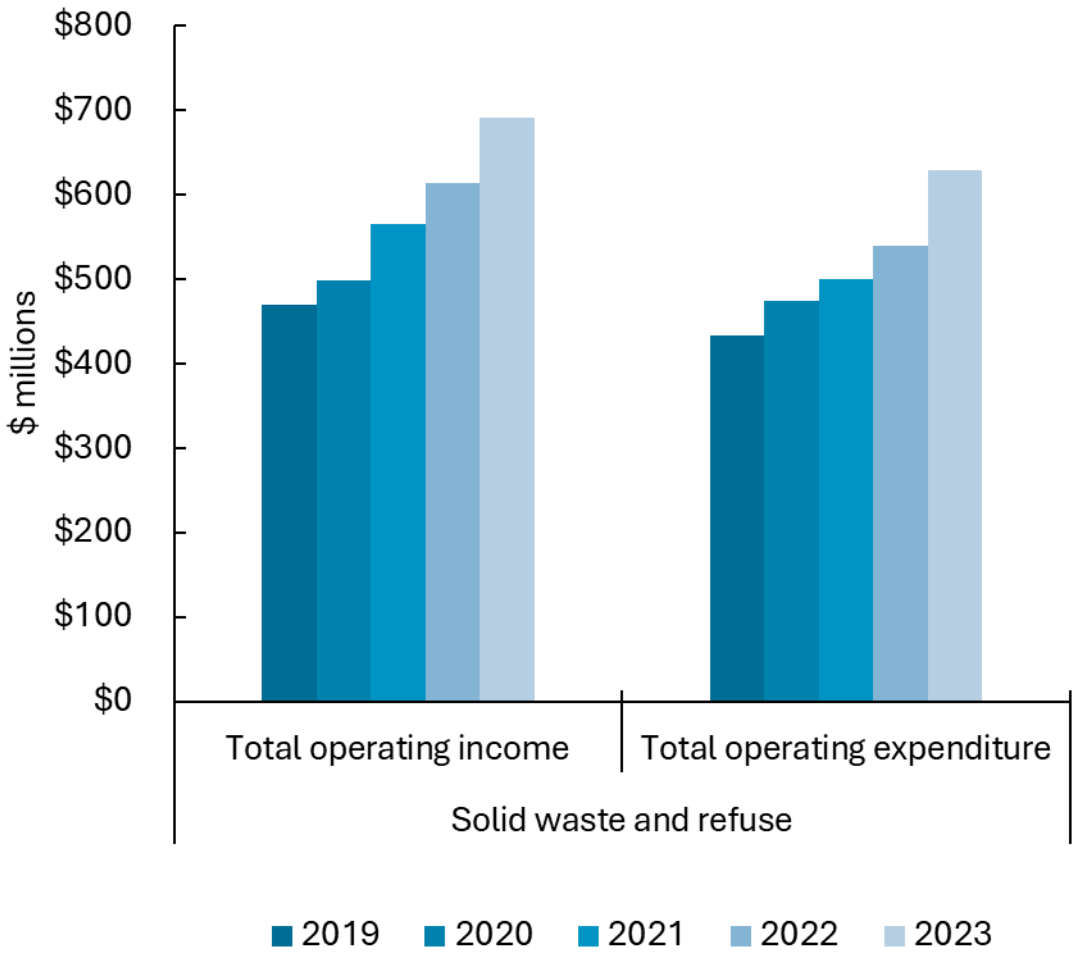


The distribution of the core industry across the country





Managing waste has increased over the years



- Councils received $691 million and spent $629 million related to their solid waste and refuse activities in 2023
- Grew 45–47 percent between 2019 and 2023
- Expenditure has remained similar in proportion to total operating expenditure of $9.7–13.6 billion over the same period.

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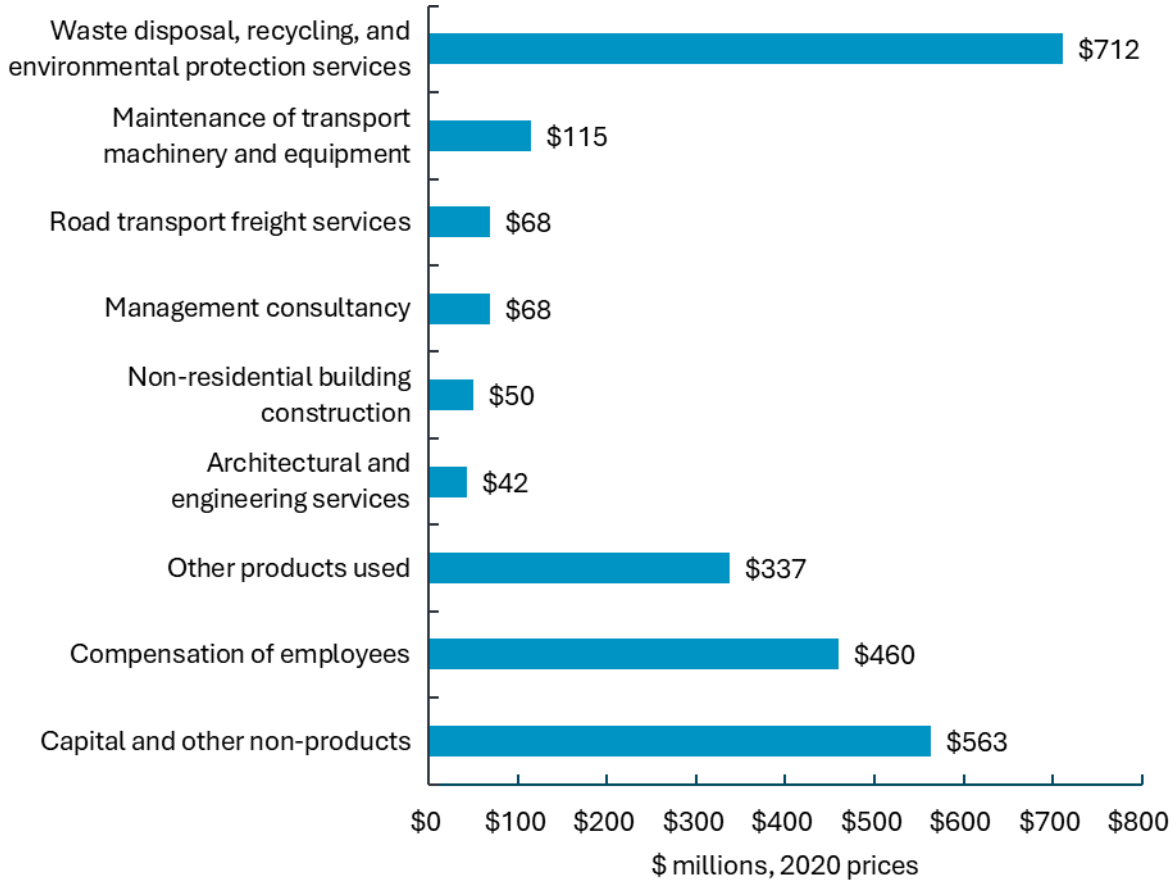
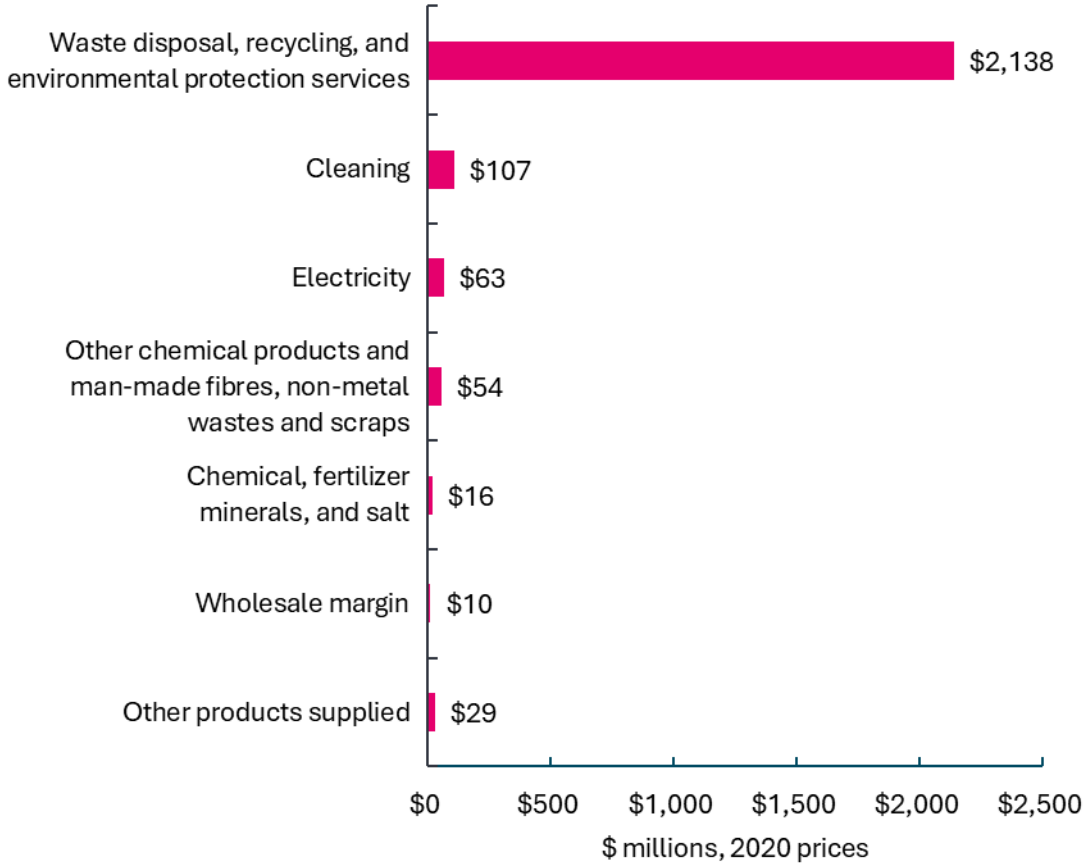
Interindustry linkages

The core industry uses products for its own output

What the core industry uses



What the core industry produces



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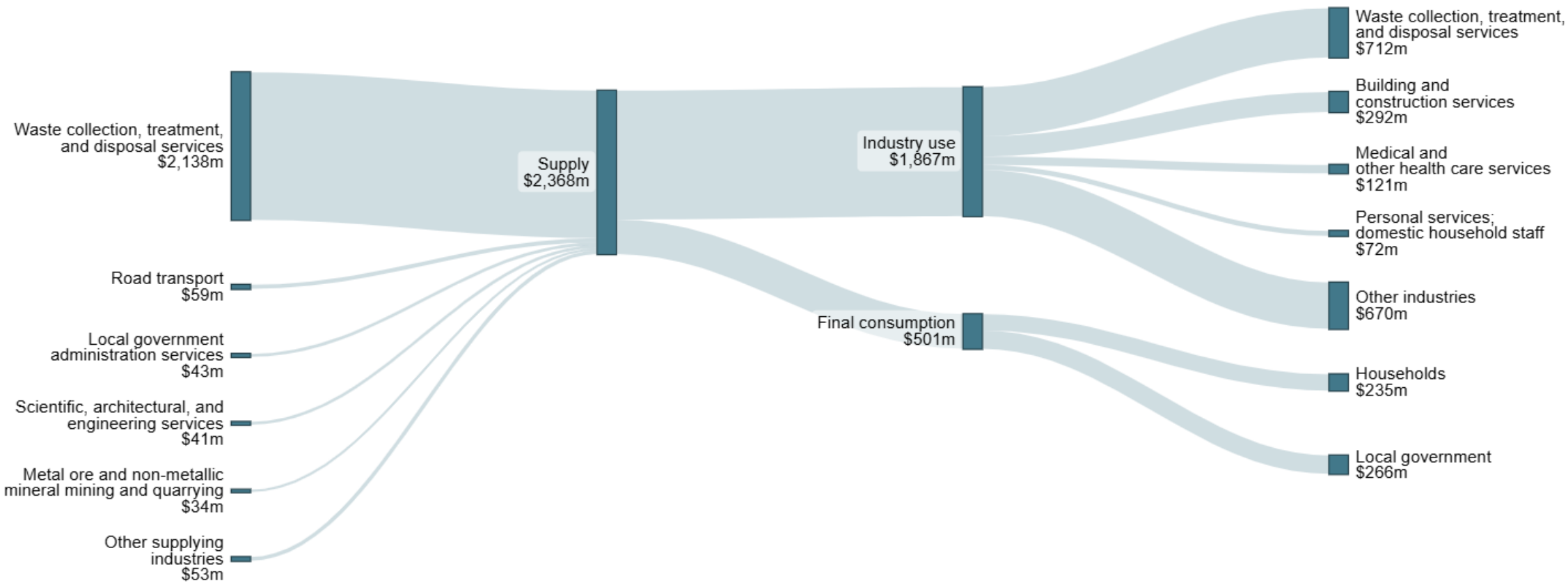
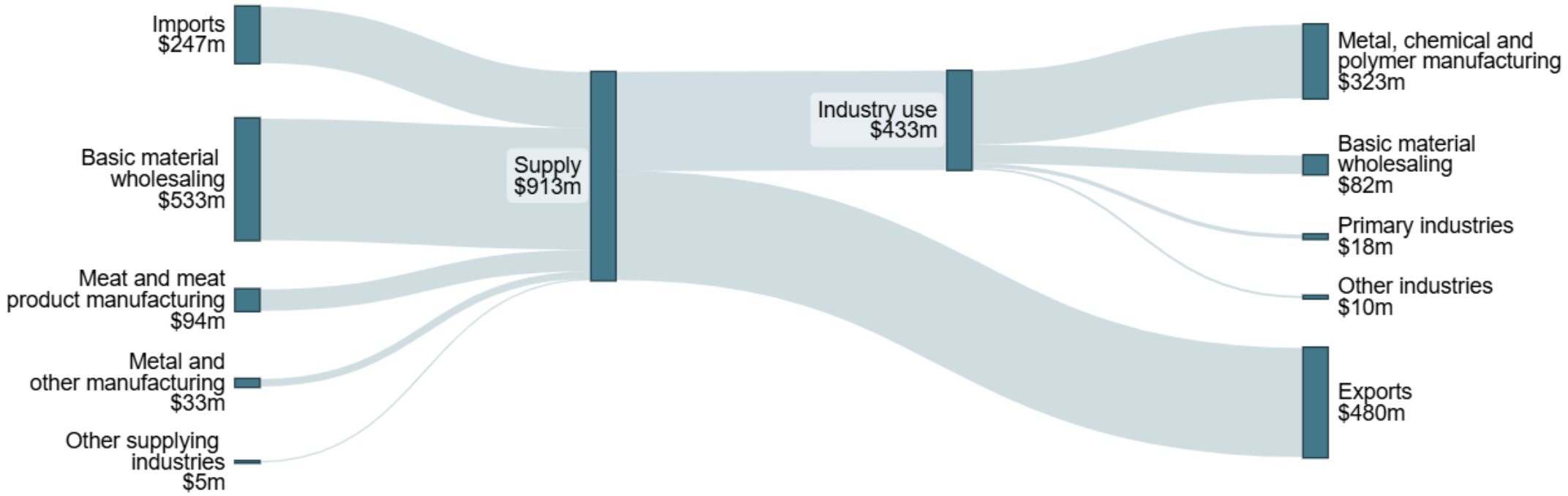
Supply and use of waste disposal, recycling, and environmental protection services

Core products



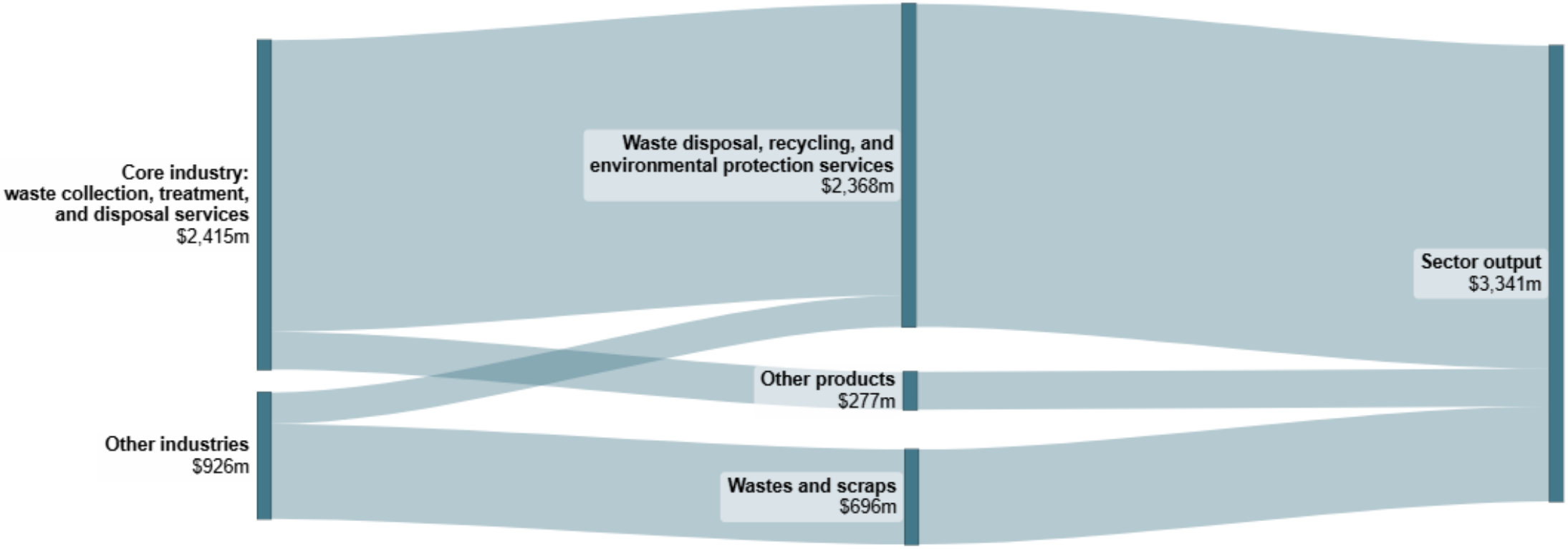
Supply and use of wastes and scraps

Core products



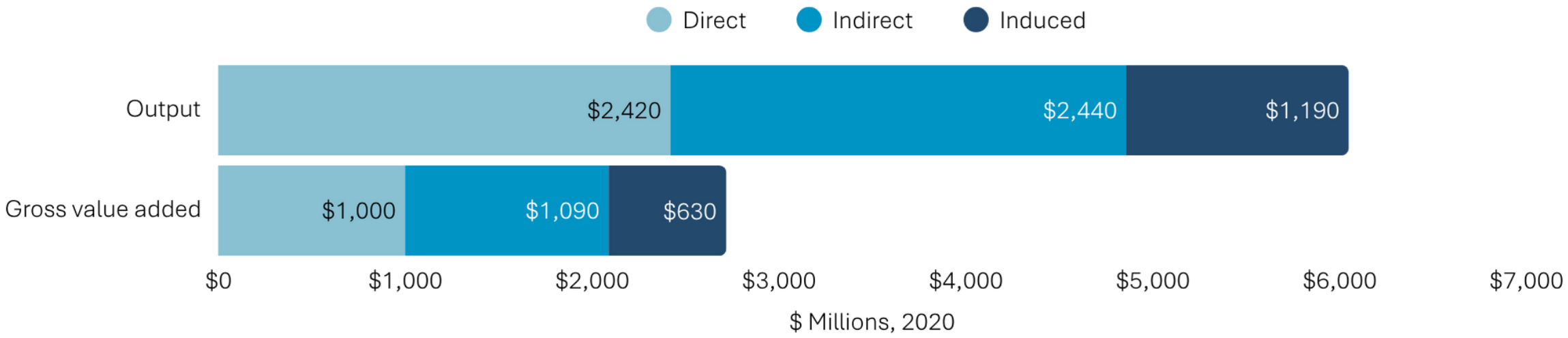
The sectors produce $3.3 billion in economic output

This supports $1.4 billion in gross value added and 10,400 employees.



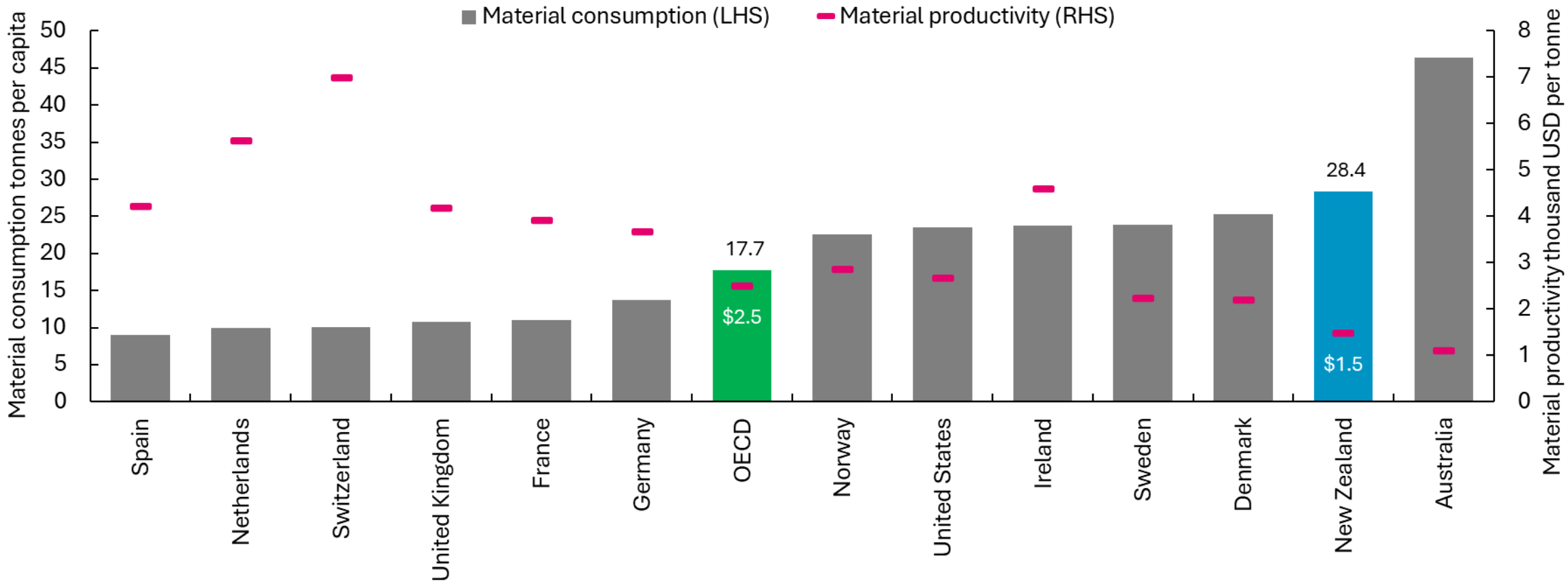
Total economic contribution of the core industry

The waste collection, treatment, and disposal services industry directly and indirectly contributes to the economy.



New Zealand has lower than average material productivity

Material productivity is 59% that of the OECD average



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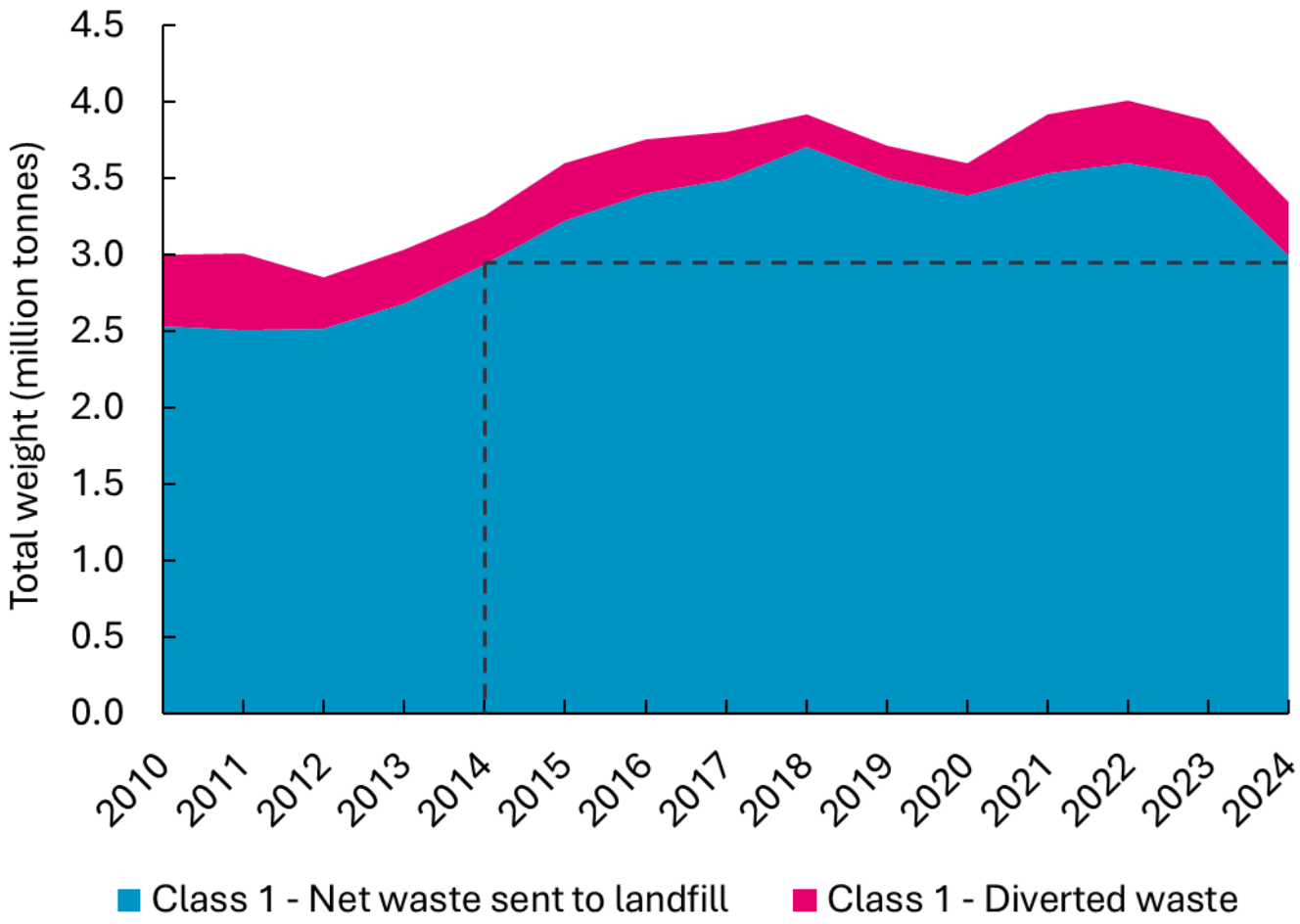
Beyond the economic data

Waste sent to landfill is back down to 2014 levels

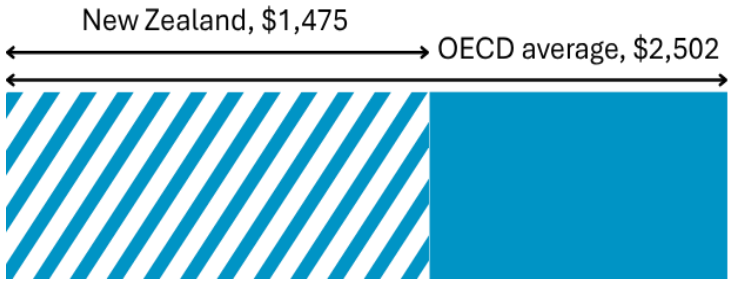


- In 2024, class 1 facilities
  - handled 3.35 million tonnes of materials
  - diverted 0.35 million tonnes
- Waste sent to landfill across the classes:
  - class 1 = 47%
  - class 2 = 9%
  - class 3–4 = 44%
- 24% of all material sent to class 1–4 landfills was diverted in 2024.
- Reporting for class 2–4 landfills has only recently begun.

Broader economic impacts

We have a significant opportunity to improve waste management across the country.

NZ'S MATERIAL PRODUCTIVITY IS 59% OF THE OECD AVERAGE



New Zealand gets less out of the materials we use than other countries.

OECD. 'Material resources, consumption and material flow accounts.'

THE HIGH COST OF WASTED FOOD

$872M each year

$1,500 per household

Wasted food is estimated to cost households

Prime Minister's Chief Science Advisor. 2024. 'Preventing Food Loss and Waste in Aotearoa New Zealand. Evidence for Action across the Supply Chain.'

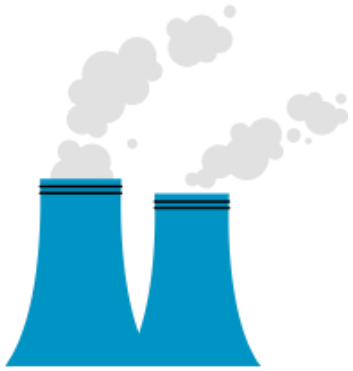
OPPORTUNITIES TO REDUCE WASTE

40% of waste sent to class 1 landfills is divertible, costing over $220 million in 2022.

Council waste audit reports

Broader economic impacts

WASTE SECTOR EMISSIONS



Waste sent to landfills produces greenhouse gas emissions, and efforts to divert waste have decreased the sectors' emissions. The cost of abating the emissions in 2022 is $480 million.

Ministry for the Environment 2024. 'Waste Sector Emissions'.

THE FINANCIAL BURDEN OF ILLEGAL DUMPING

Illegal waste dumping costs local councils and ratepayers millions of dollars each year to clean up.

Dinsadale, Mike. 2025. '$150k Spent Clearing Illegal Dump Sites Could Pay for Community Infrastructure Instead'. NZ Herald,

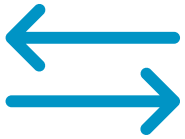
COMMUNITY INVOLVEMENT IN WASTE ISSUES

Communities care about sector issues and volunteer their time through community-based organisations.

Zero Waste Network New Zealand. 2024. 'ZWN Collective Impact Ecosystem 2024'.

Where to from here?

Established baseline of the economic data on the sectors and their activities



Shifts in how New Zealand deals with sector-related issues obscures the sectors' value in the future

Future research can drill down into key segments. E.g., satellite accounts, market studies, etc.