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# Development of an Experimental Waste Account for Australia

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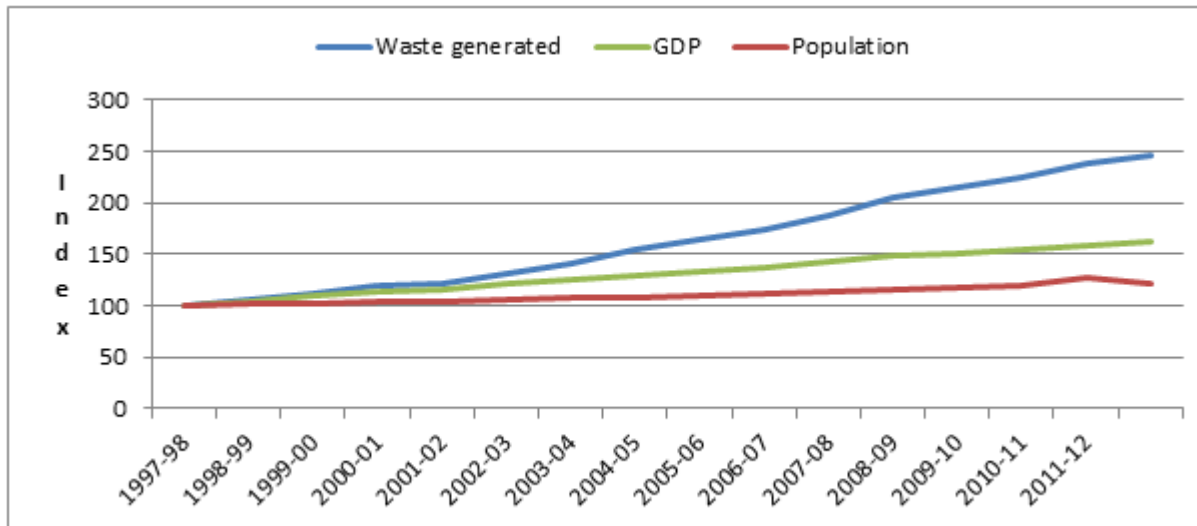
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statistics for informed

decision making

# Why waste is a concern in Australia?

- Population, Waste generation and GDP



# Australia's National Waste Policy

(released by DSEWPaC in November 2009)

## Specific aims of the policy are to:

- ❖ avoid the generation of waste
- ❖ reduce the amount of waste going to landfill (including hazardous waste)
- ❖ manage waste as a resource
- ❖ ensure that waste management, disposal, recovery and re-use are undertaken in a safe, scientific and environmentally sound manner.

## ZERO WASTE SYSTEM



# Waste Account Australia, Experimental Estimates (WAAEE)

- part of a set of integrated environmental–economic accounts using the SEEA framework

## AIM:

to contribute to one of the six key directions of Australia’s National Waste Policy by providing the evidence through meaningful, accurate and current national waste and resource recovery data and information, in order to measure progress and educate and inform the behaviour and the choices of the community.

# Scope

## ❖ The solid waste material covered :

➤ paper and cardboard, glass, plastics, metals, organics, masonry, electrical and electronic, hazardous, leather and textiles, tyres and other rubber, timber and wood products and inseparable/unknown

❖ The solid waste considered is confined only to waste disposed to landfills and recoverable/recyclable waste.

➤ Waste sent to incinerators and other treatment facilities are not covered due to lack of information.

➤ monetary tables include liquid waste that includes sludge.

❖ Own-account waste management not included

## Monetary supply and use tables

- ❖ Follow SNA framework
  
- ❖ Identify two waste related products:
  - waste management services
  - recyclable/recoverable waste material (waste related goods).
  
- ❖ Provide monetary (\$million) information on:
  - output and expenditure relating to waste management services and recyclable/recoverable waste material
  - Imports and exports recyclable/recoverable waste material

# Monetary supply and use tables (continued)

## ❖ Output:

- Income generated from the provision of waste management services
- Waste management related rates collected by the local government authorities
- Income generated from sales of recyclable/recoverable waste material

## ❖ Intermediate consumption expenditure:

- Contract/subcontract expenditure for waste management services
- Fees for the treatment/processing/disposal of waste
- Waste disposal levies/contributions paid to the Environmental Protection Authorities

## ❖ final consumption expenditure:

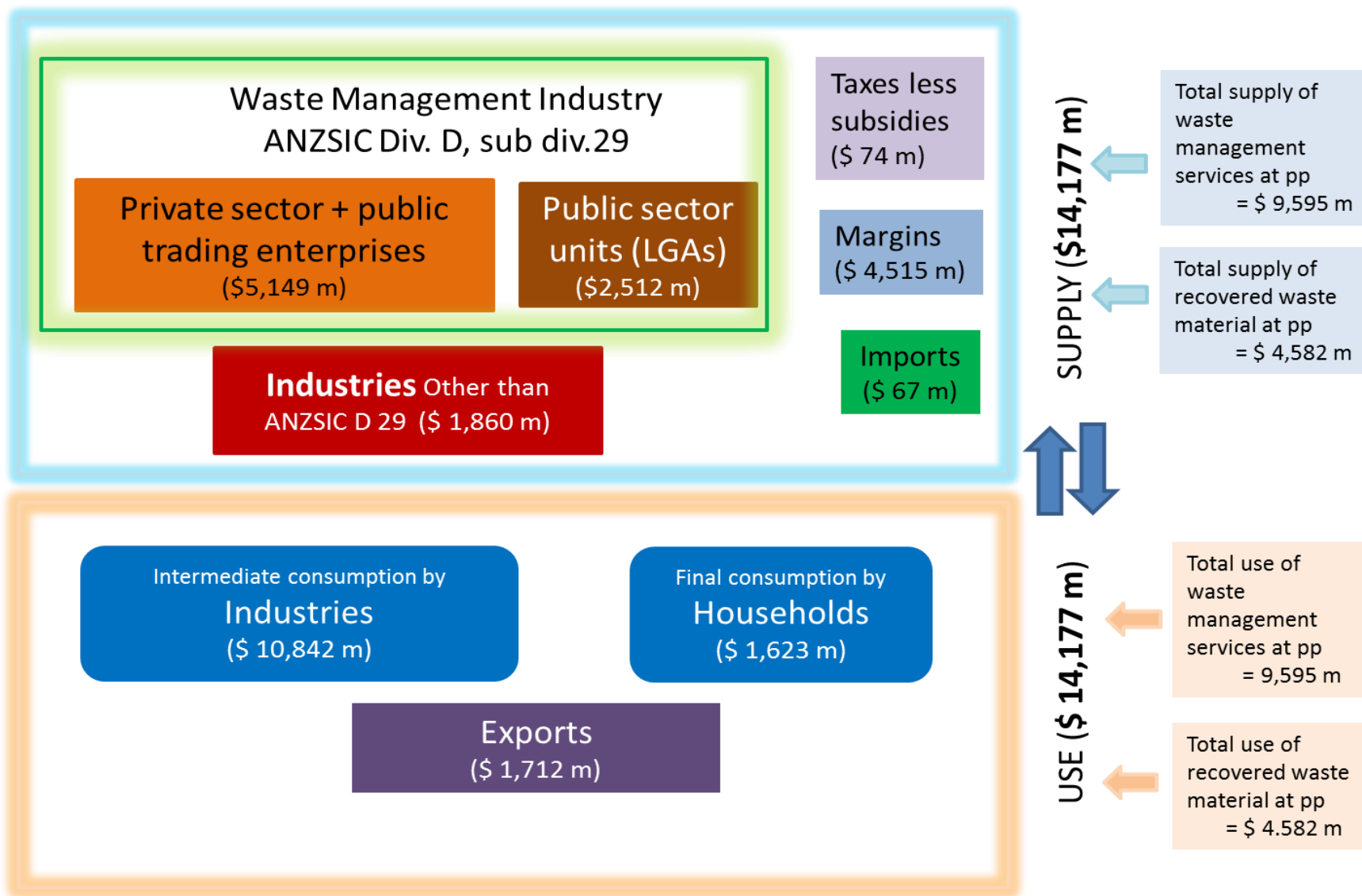
- Payments by households for waste management services

# Physical supply and use tables

- ❖ Based principles of SEEA
- ❖ Physical supply refers to the quantity of solid waste generated by industries and households, plus imports.
- ❖ Physical use refers to the quantity of solid waste collected, treated and disposed by the Waste Management industry and other industries (outside ANZSIC D29) carrying out waste management activity as a secondary activity.
- ❖ physical supply and use tables present aggregates of all available physical data (tonnes) on waste to landfill and recovered waste material in terms of the supply and use of solid waste in the Australian economy and imports and exports of recyclable/recoverable waste material

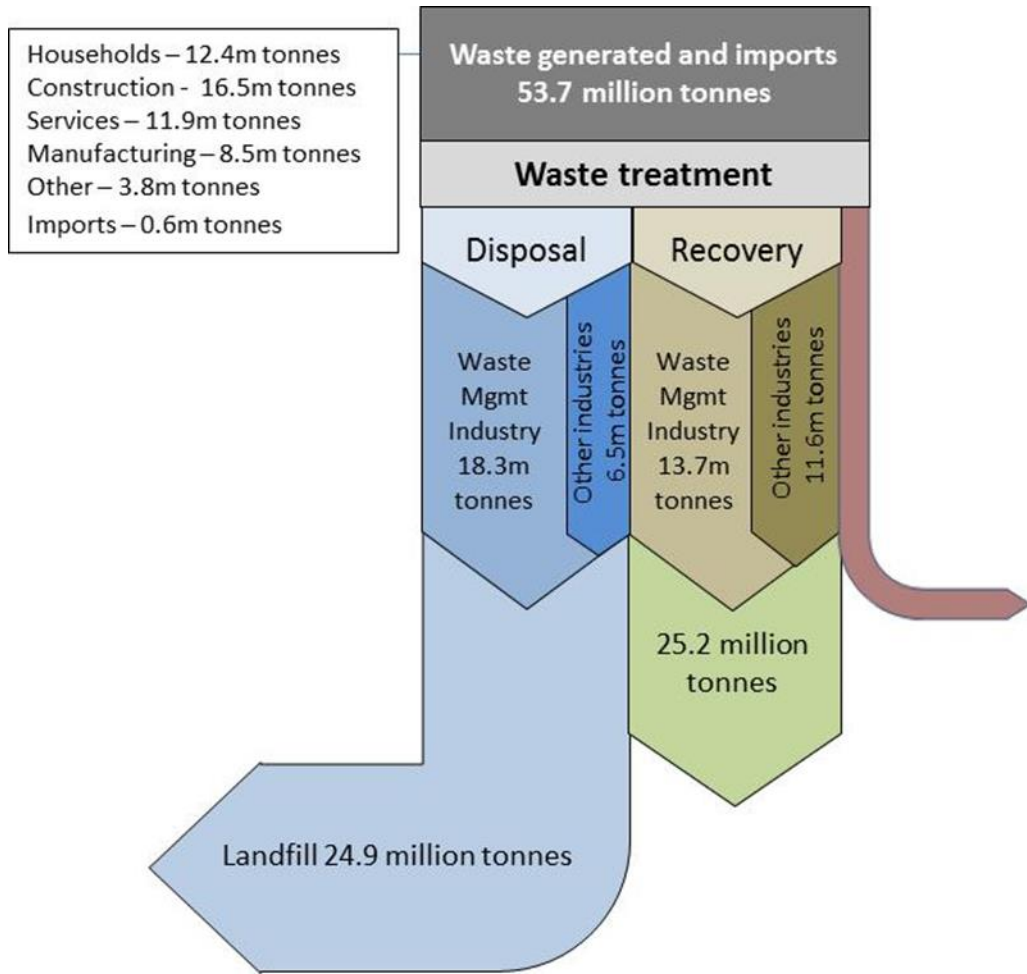


# RESULTS: Monetary flows in waste management\*



\* Waste management = waste management services + recovered waste material

# Results: Physical flow waste generation and recovery



# Data sources

## ❖ ABS Waste Management Services (WMS) Survey

- WMS09-10 (ANZSIC D 29 including Local Government units) was one off ABS-funded survey
- Provides comprehensive physical and monetary data on the waste management services industry

## ❖ ABS Economic Activity Survey (EAS)

- an economy wide survey collecting financial data
- EAS10-11 collected income and expenditure (supply and use) related to waste products
- Income and intermediate consumption expenditure for 2009-10 back casted using EAS

## ❖ ABS Public Finance and National Accounts data

- Taxes and subsidies for waste management services
- Input/output data for product balance in physical estimates

## ❖ ABS International Trade data

- Imports and exports of waste management services and recyclable/recoverable waste material

## Data sources (continued)

- ❖ Waste and recycling in Australia (WRiA) – commissioned by SEWPaC (Dept. of Environment)
  - Data on the physical waste supply and use of waste primarily derived from WRiA
  
- ❖ Financial report (admin) data
  - Good data source for Household expenditure on waste management services
  - Recyclable: non-recyclable split for waste management services available
  - Limitation: Time consuming
  
- ❖ Other data sources :
  - ABS Household Expenditure Survey
  - ABS Consumer Price Index

# Key challenges & Issues

- ❖ Lack of data for recyclable/recoverable waste material
  - No data on cost of purchasing recyclable/recoverable waste material by recyclers
  - No data available for expenditure on purchasing recyclable/recoverable waste material by other industries
  - No data available for income generated by sales of recyclable/recoverable waste material by type and by industries outside ANZSIC D29
  - No inventories data
- ❖ Treatment of income generated by sales of recyclable/recoverable waste material – 100% trade margins
  - Decision based on assumption – no solid data
- ❖ Lack of data available to provide sufficient information on the breakdown of waste materials by ANZSIC industry for physical use tables

## Further developments and extensions

- ❖ Looking for alternative (better) data sources and new data sources to fill the gaps
- ❖ Possibility of future recyclers' survey
- ❖ Development of combined monetary and physical tables
  - Help derive many indicators useful in informed decision making

# Questions to the London Group

- ❖ Do you have any comments on the methodology used to produce the ABS waste account?
- ❖ Would the ABS monetary and physical supply and use tables be suitable as “core” tables?
- ❖ Would a combined presentation of physical and monetary measurements of waste be a useful extension?