

2023 NAB Datathon – National Waste



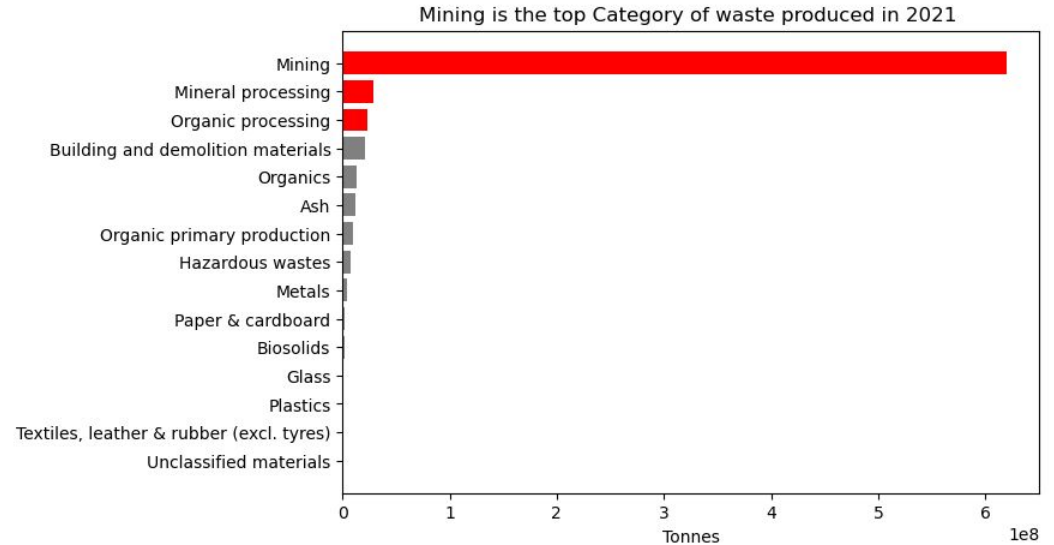
AI Experts
Charis Lai
Roy Chan
Rex Mak
Weiyu Su

Identifying issues

How to have a better waste management?

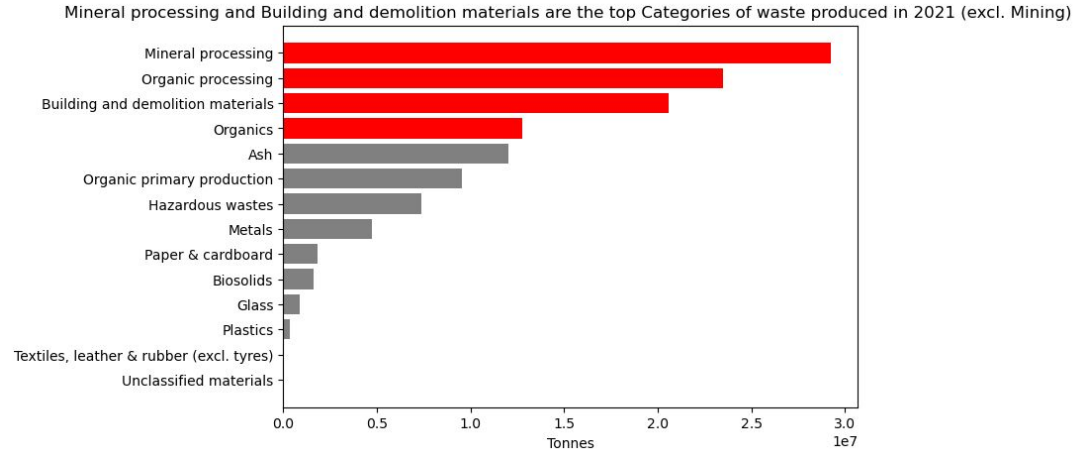
Category

- 1st: Mining - 6 Tonnes
- 2nd: Mineral processing
- 3rd: Organic processing



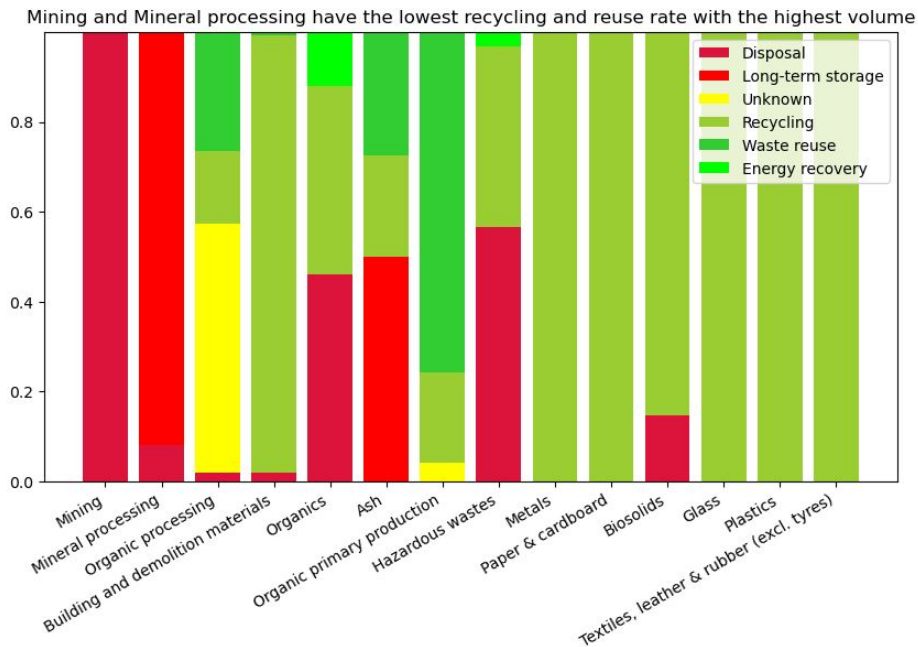
Category

- Mineral processing
 - 3 Tonnes
- Organic processing
 - 2.5 Tonnes



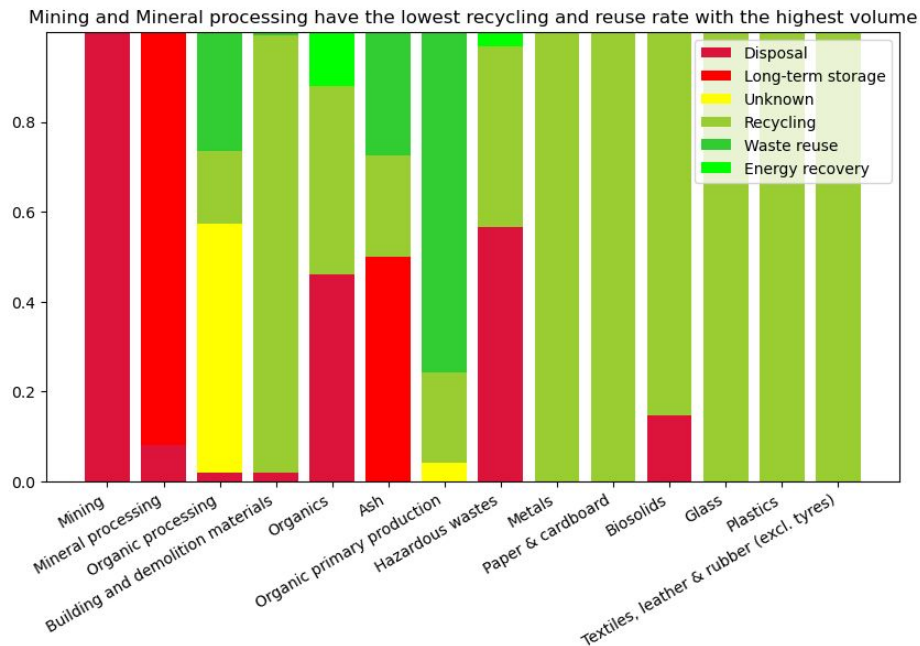
Recycling & Reuse Rate

- lowest recycling and reuse rate
 - Mining
 - Mineral Processing



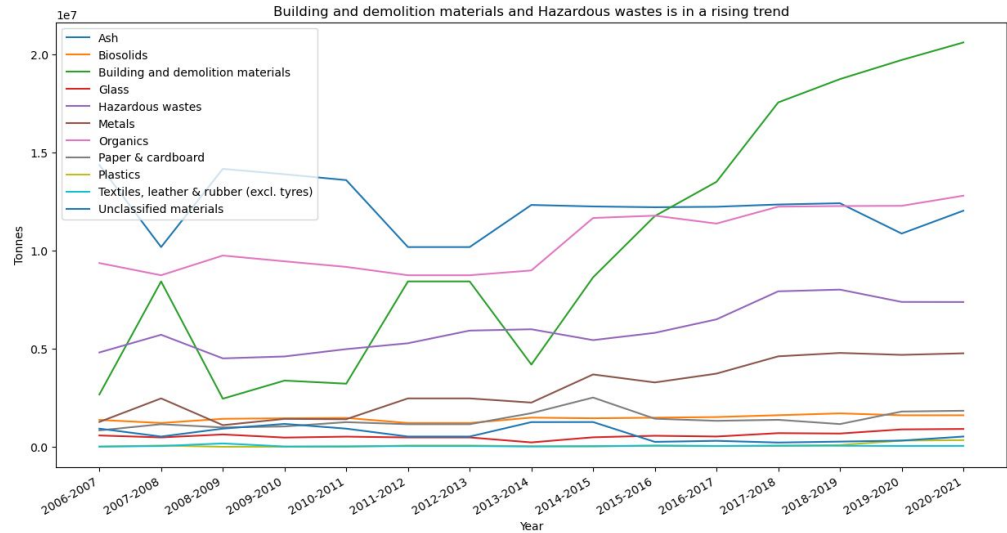
Recycling & Reuse Rate

- Hazardous waste
 - low
- Organic and Ash
 - not ideal



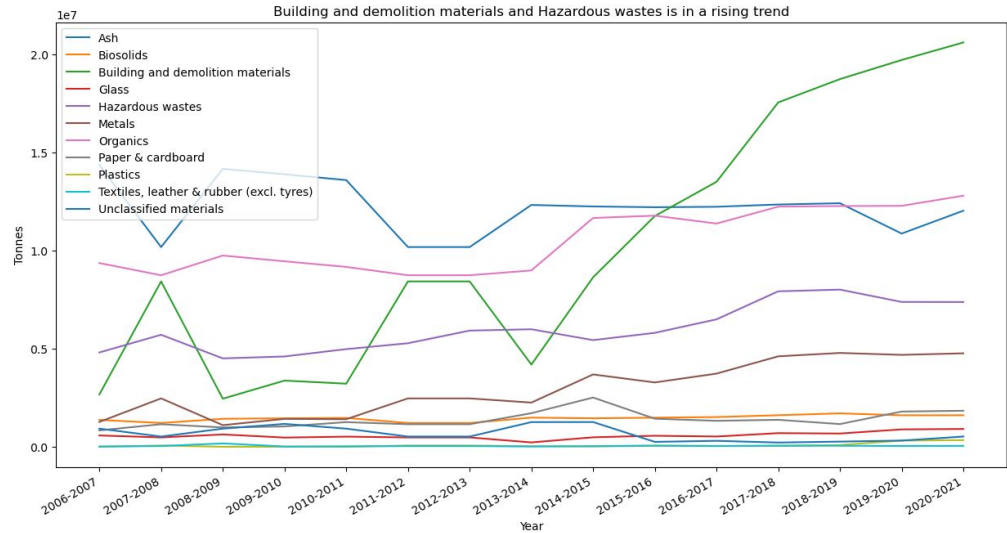
Amount Trend

- Building and demolition
- Hazardous waste
- Organics



Amount Trend

- Potential Risks



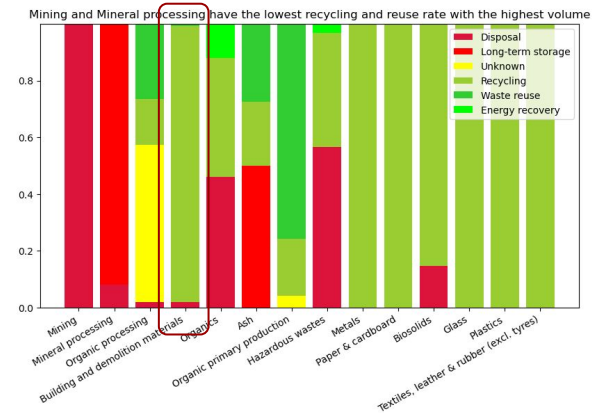
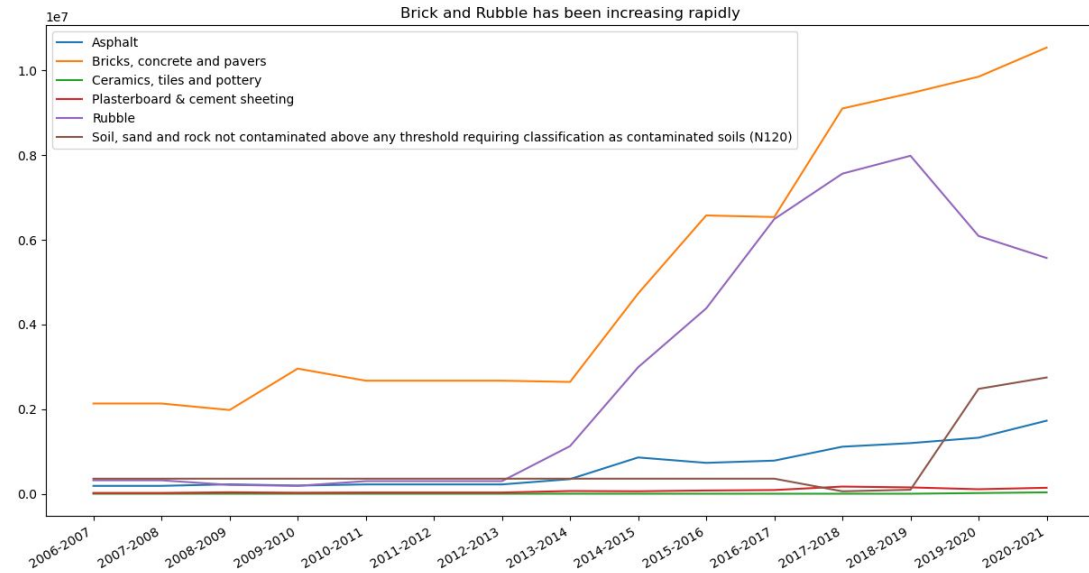
Exploratory Data Analysis

Building and Demolition(B&D), Hazardous, Organic

Category -

B&D waste

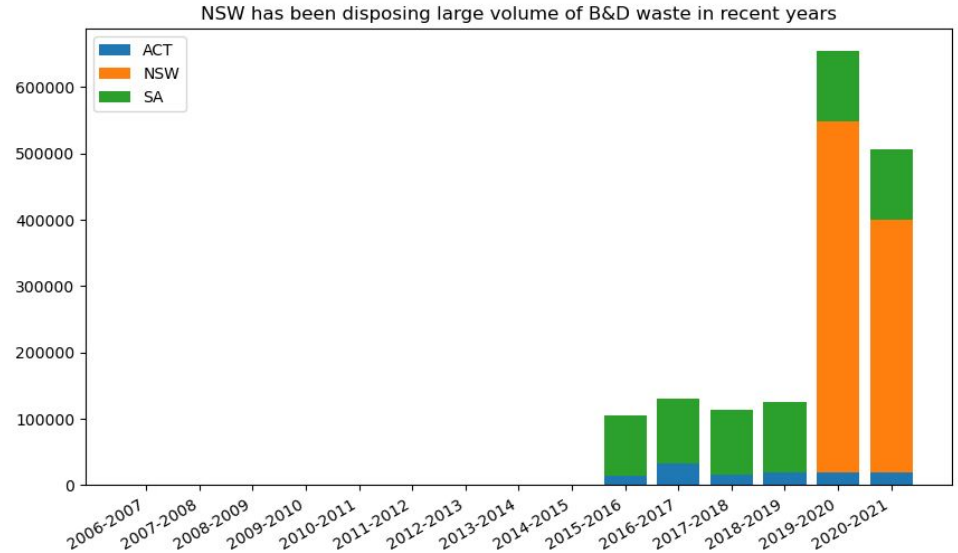
- Sharp Increasing trend since 2013



Category -

B&D waste

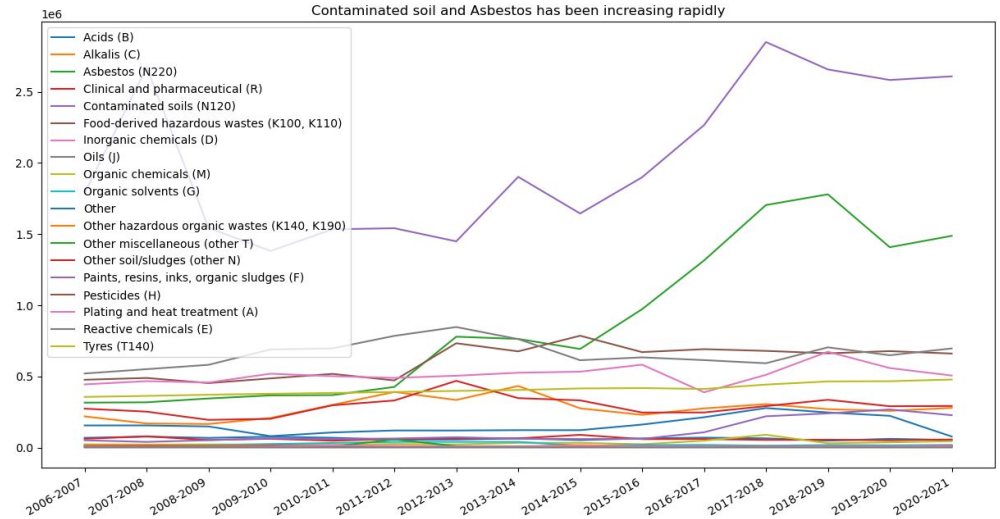
- New South Wales
- large volume



Category -

Hazardous waste

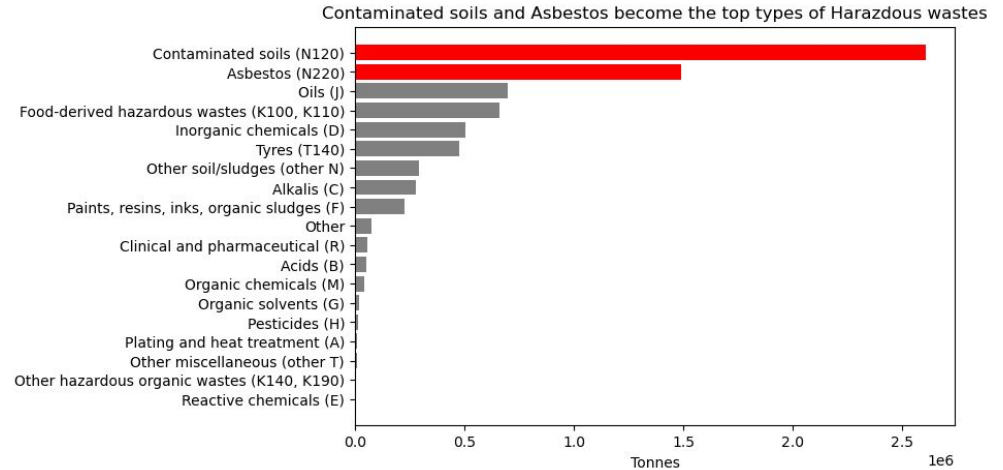
- Rapid increase
 - Contaminated soil
 - Asbestos



Category –

Hazardous waste

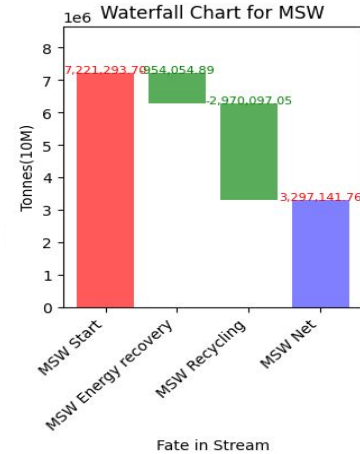
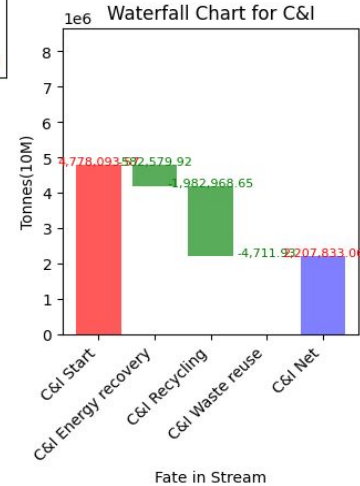
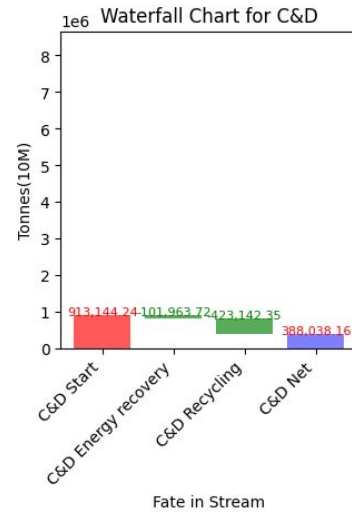
- Contaminated soils
 - 2.5 Tonnes
- Asbestos
 - 1.5 Tonnes



Category -

Organic waste

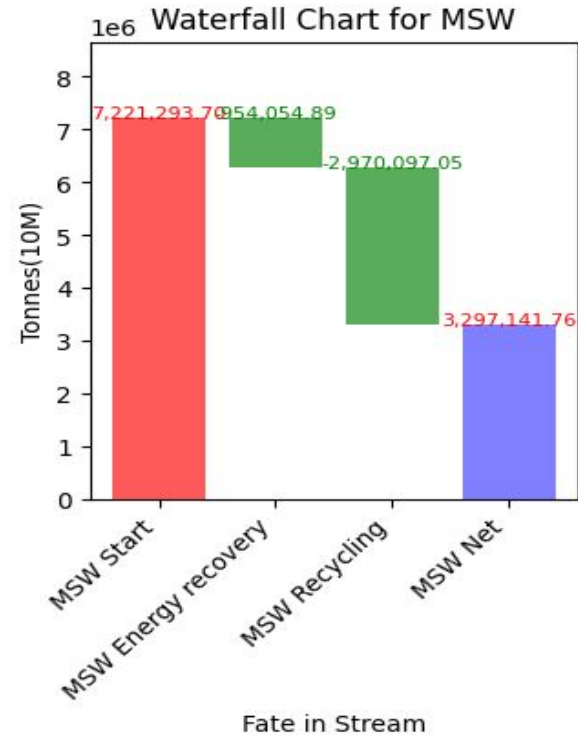
- Green - waste
- Red - decrease
- Blue - net total



Category -

Organic waste

- Household - 47.7%

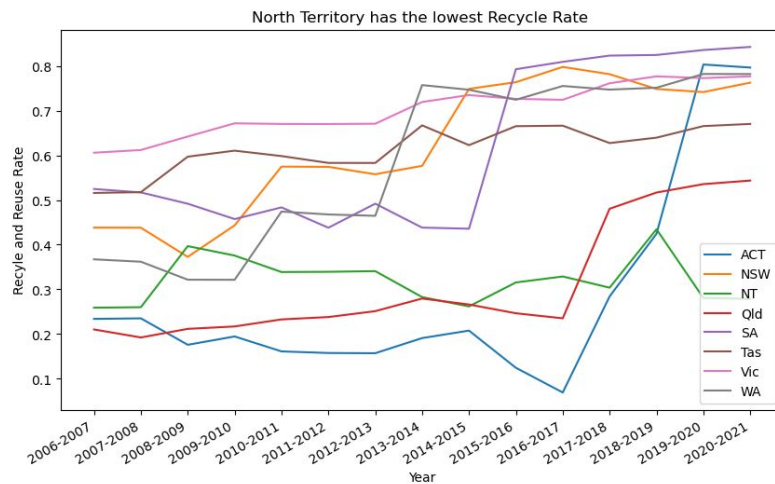
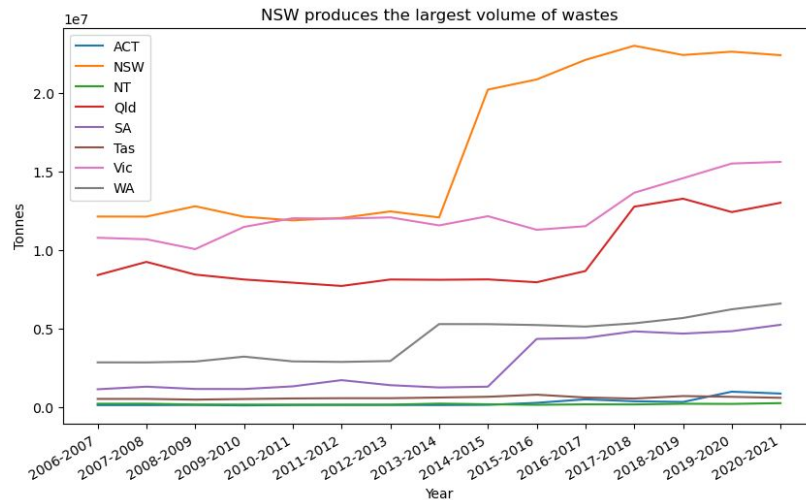


Jurisdiction

Jurisdiction –

Waste Production and Recycling

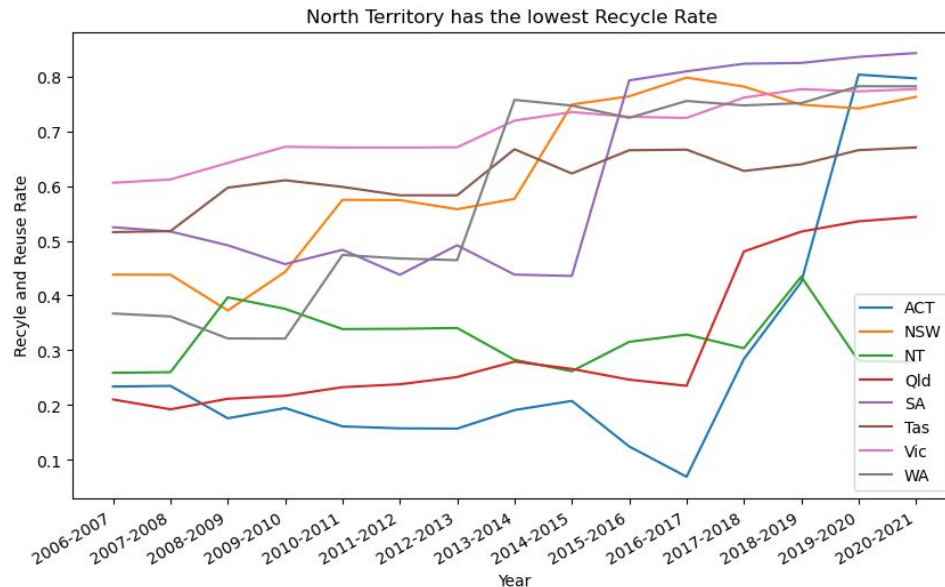
- Queensland:
 - Production - top 3
 - Recycle - bottom 2



Jurisdiction –

Recycle Rate

- Most - Victoria
- Least - North Territory



Summary

Summary

1. B&D waste
 - a. high recycling rate
 - b. rising trend in disposal
 - c. New South Wales States
2. Hazardous waste
 - a. sharp rising trend
 - b. Action: Reduction from sources

Summary

3. Organic waste
 - a. more recycling
 - b. Municipal solid waste
4. Queensland
 - a. volume of waste - top 3
 - b. recycle rate - bottom 2
 - c. more recycle is needed

Thank You