Recycling and resource recovery in Victoria

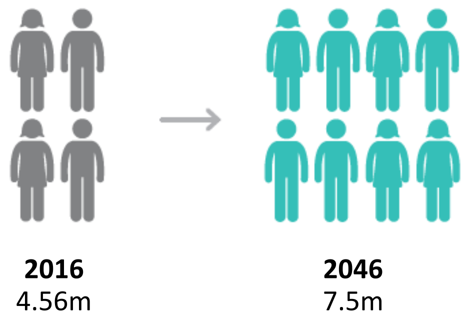
METROPOLITAN
WASTE AND
RESOURCE RECOVERY
GROUP

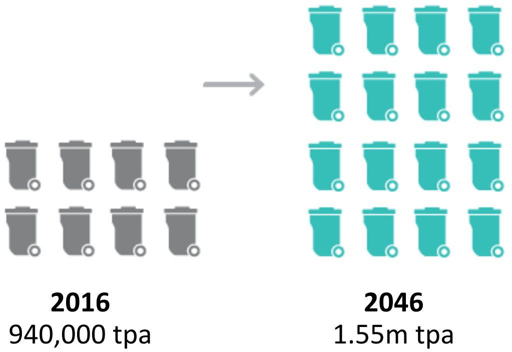
VICTORIA
State
Government

Challenges to managing MSW

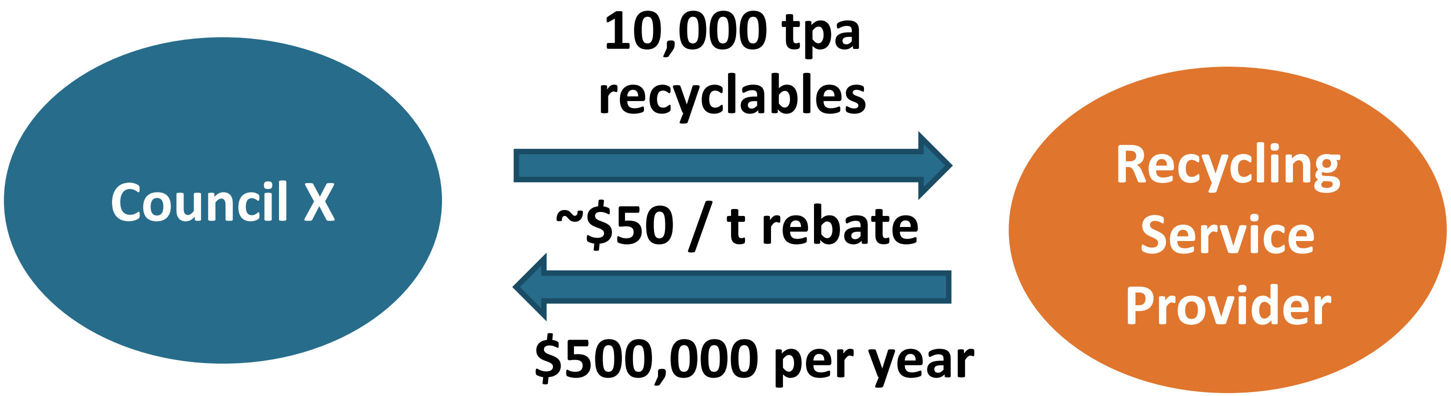
- Major disruption to Victoria's recycling system
- Expected loss of landfill in SE metro area by 2025
- Expected rise in landfill gate fees in the metro area post 1 April 2021 (25%+)
- Delivering new landfill airspace is getting more difficult – community expects more
- Population growth will lead to growth in the quantity of waste and recycling
- Need to maximise the diversion of food and garden waste from landfill

Melbourne's population growth





Recycling: the original SKM rebate model



Predicated on sending significant quantities of poorly sorted plastics and paper to SE Asia

The impact of China's National Sword Policy

Council X

10,000 tpa recyclables

$45 to $150 / t cost to councils

$450,000 to $1.5 million per year

+ $500,000 per year in lost revenue

Recycling Service Provider

A net cost to Council X of $950,000 to $2 million per year

What has the current crisis taught us?

- Materials need to move to market
- We need to understand pricing arrangements
- We need better risk allocation in contracts
- Separate contracts with service providers severely limit councils' control of outcomes
- We need an integrated network of infrastructure
- For most councils recycling is cheaper than landfill

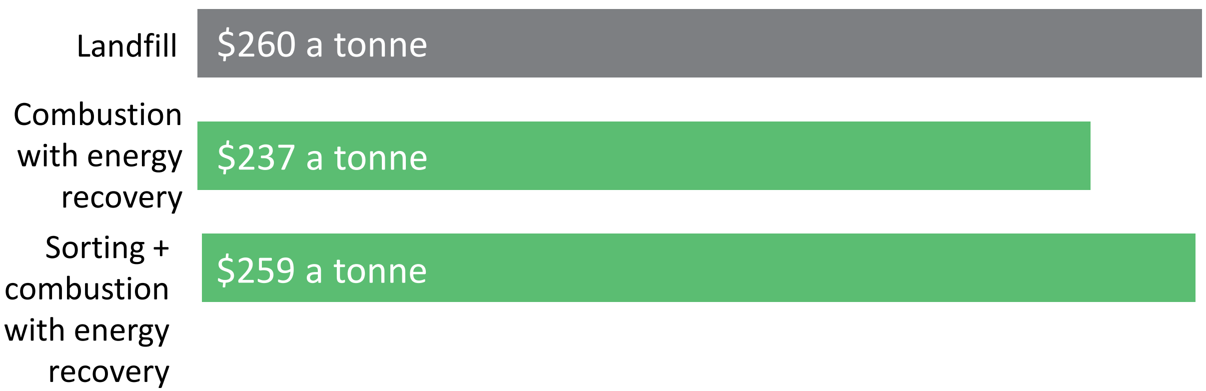
65% more municipal residual waste will go to landfill by 2046 if we don't do anything different

Estimates of future post collection costs

Councils are currently paying between

- ***$45 to $150 per tonne for recycling services***
- ***$50 to $120 per tonne for FOGO services***
- ***$110 to $170+ per tonne for landfill services***

Estimated average fees over 20 years for managing residual waste



What this means for councils

A solution is affordable compared to landfill.

Facilities with high recovery and marketable products minimise financial impacts.

These assume no increase in the landfill levy other than CPI

Returning to a single bin is the most expensive option

Recovery of resources from residual waste

Expected outcomes from contracts to manage 500,000 tonnes of waste per year:

Up to 360,000 tpa diverted from landfill a year

500,000-600,000 tpa CO_2-e abated a year (in 2026)

7,500 tpa of metals recycled

$300-$650 million investment

Up to 100 permanent and 400 construction jobs

Up to 300,00 MWh power generated a year

5,000 fewer journeys every year

Improved amenity for residents near landfills

Another residual waste solution for business

Increasing FOGO services

100,000 tpa of organics diverted via food and garden waste recycling

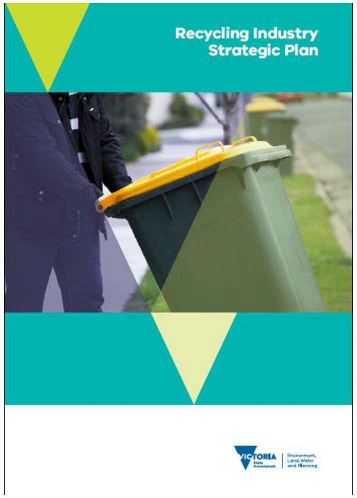
Delivering new infrastructure

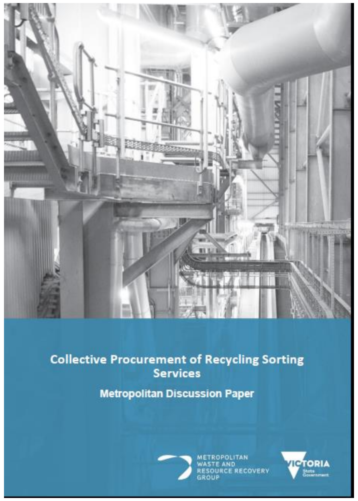
Councils procuring and contracting together can:

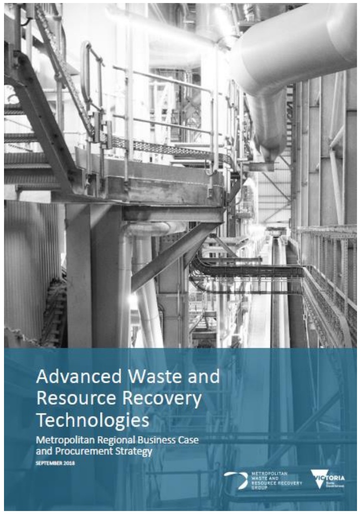
- Aggregate enough recycling and waste to attract investment from the private sector through PPPs
- Influence the type of infrastructure and services that contractors deliver
- Have greater cost certainty over longer contract periods (15 to 20 years)
- Ensure that real recovery of materials and energy from waste takes place

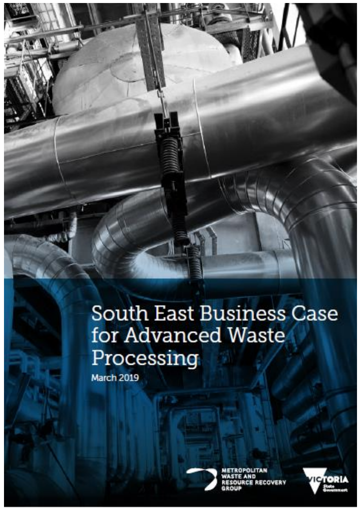
The procurement pipeline

- The metro recycling collaborative procurement
- Regional recycling procurements
- SE metro advanced waste processing procurement
- NW metro strategic assessment for residual waste options
- Re-tendering of the four metro landfill contracts
- Expansion of FOGO services









Objectives for collective contracts

- Affordability (value for money isn't necessarily the lowest price for service)
- Security of service provision
- Transparency in pricing
- Ease of access to the service – logistics and distance
- Onward movement of material to market and linkage to reprocessing / manufacturing
- Sustainable procurement – linkage to council use of recycled products
- Contingency

THANK YOU

paul.clapham@mwrrg.vic.gov.au