



UNCRD

Moving towards zero waste – An inherent requirement of smart cities- Experiences of Green Industries South Australia



Government of South Australia
Green Industries SA





Where is

Adelaide

South Australia?



WESTERN AUSTRALIA

NORTHERN TERRITORY

QUEENSLAND

**South
Australia**

NEW SOUTH WALES

AUSTRALIAN
CAPITAL
TERRITORY

Adelaide

VICTORIA

TASMANIA







The Global response:



Defining a 'Smart City'

- Utilises the Internet of things, is Data and Insight driven
- Uses Renewable energy and is energy efficient
- Has efficient transport
- Has an entrepreneurial ecosystem
- **Increases Recycling and reduces waste – Zero Waste**
- **Adopts Cleaner production**
- Has Green buildings
- Uses Bio-materials
- Sustainable water systems
- Better health care
- Resilient
- Citizen friendly
- Green Spaces
- Research and Learning

Where does 'Zero Waste' fit with Smart cities in South Australia?

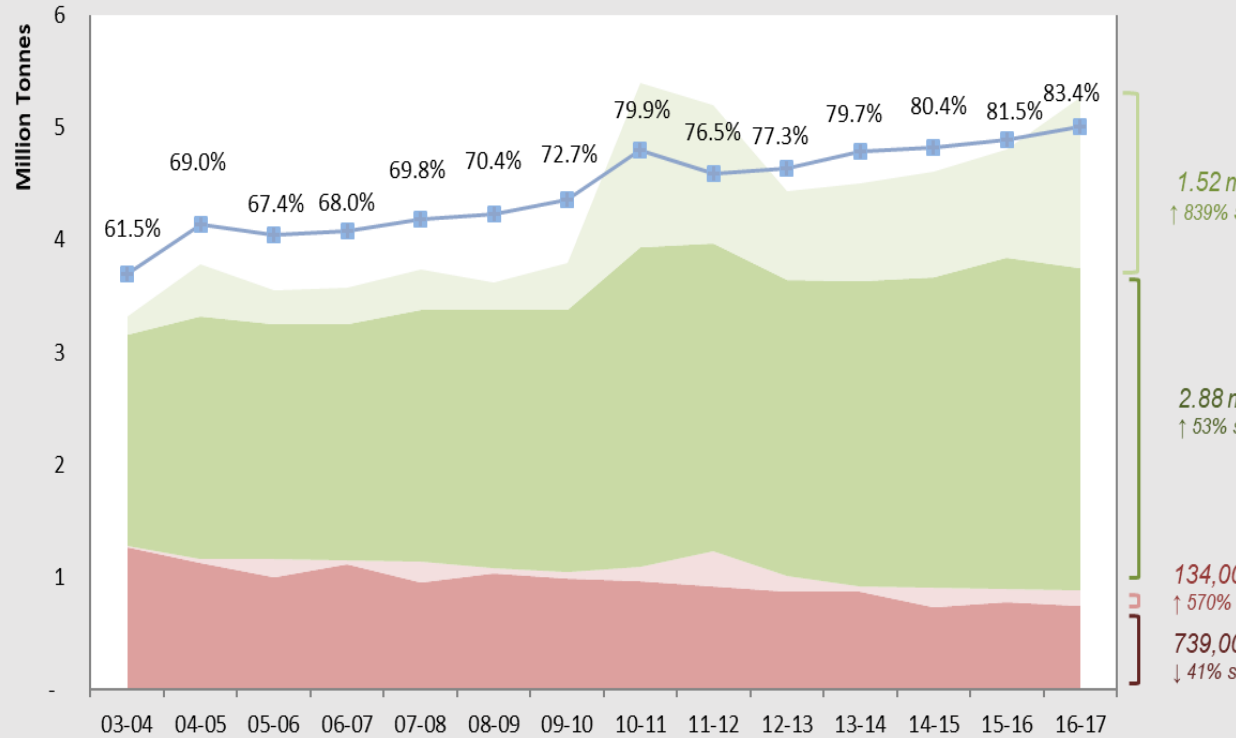
Adelaide:

- 10GB city
- Planned city with parklands

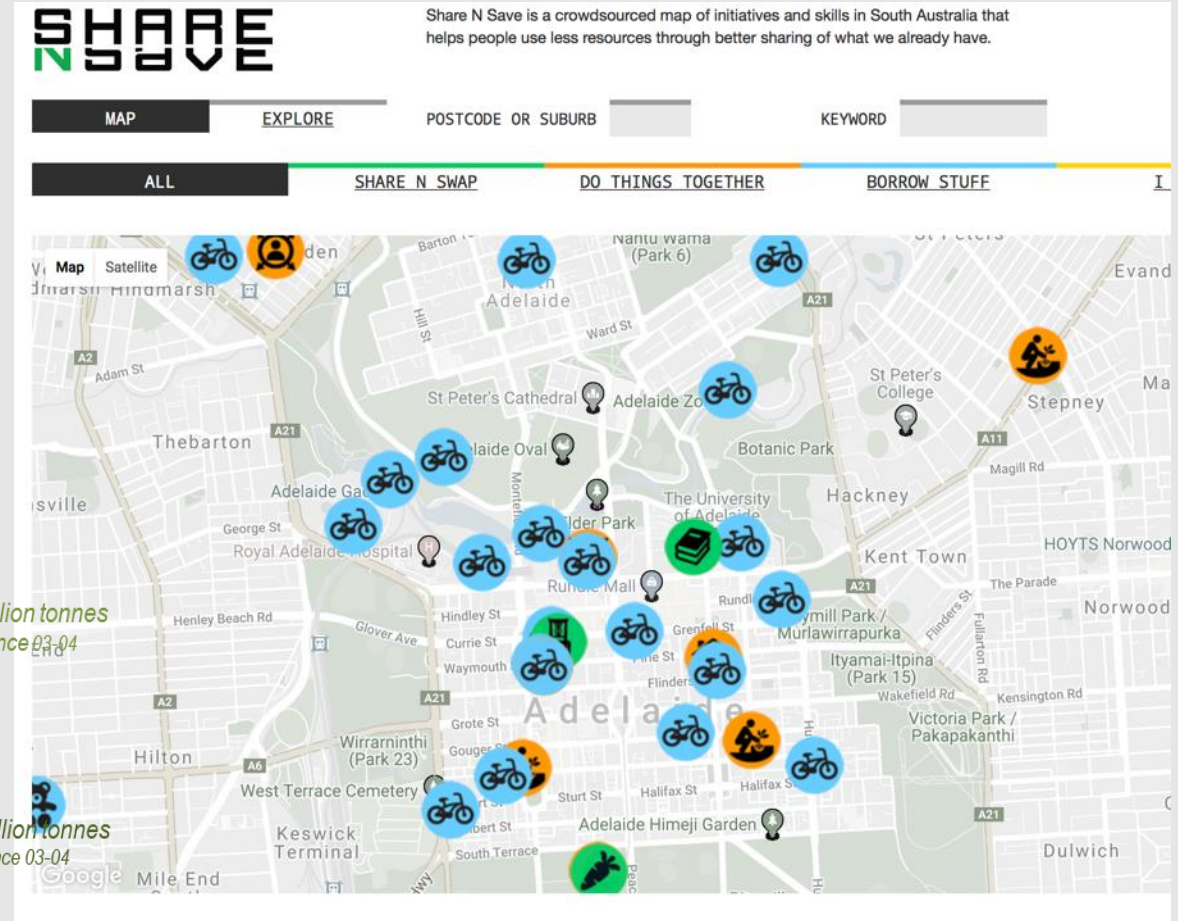


Internet of things

- Share n Save
- Data acquisition-
- Recycling Activity Statement



■ Landfill - Standard Reporting Materials*
■ Landfill - Separately Reported Materials*
■ Resource Recovery - Standard Reporting Materials*
■ Resource Recovery - Separately Reported Materials & Clean Fill*
■ Diversion %



1.52 million tonnes
↑ 839% since 03-04

2.88 million tonnes
↑ 53% since 03-04

134,000 tonnes
↑ 570% since 03-04

739,000 tonnes
↓ 41% since 03-04



Renewable Energy

Over 50% renewable energy- some waste to energy in cement kiln
Anaerobic digestion

Efficient transport

Investment in waste collection routing and weighing technology
Electric vehicles?
Infrastructure plan



Adelaidenow.com.au



<http://www.adelaidebrighton.com.au/about-us>

• Entrepreneurs

- In 12 months we have commercialised 7 new companies in the sector- more to come.



• Bio materials

- Waste to activated carbon
- Anaerobic digestion
- Bio bags for food waste
- Banned LW Plastic bags
- Compost industry



- **Green buildings and Green Star ratings**
 - Waste and recycling management part of the measure
 - Guidelines for Multi Unit Dwellings
- **Water**
 - Composting- water conservation
 - Virginia Pipeline- reuse
 - Stormwater aquifer recharge and reuse



- **Resilience**

- Disaster Waste Management
- Food security (food waste mitigation)



Source: Australian National Review, Pinery Bushfire South Australia

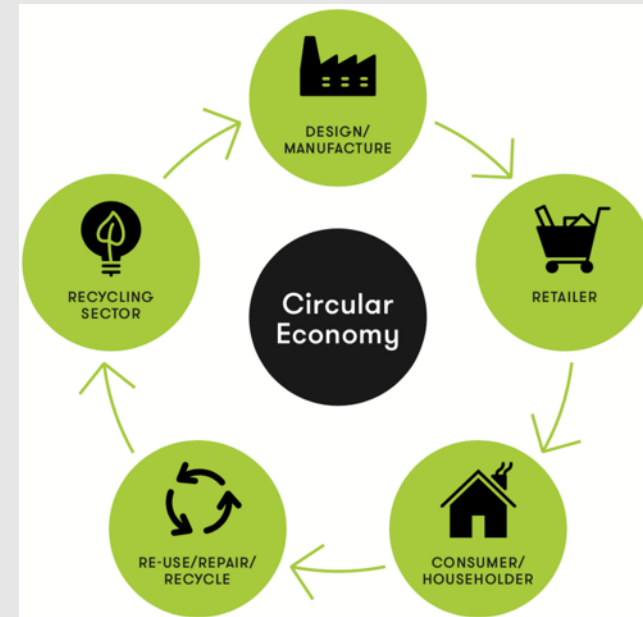
- **Citizen friendly**

- Recycle Right education;
- Beverage Container deposit systems



- **Research and Learning**

- Circular Economy- New leadership learning



To be a smart city:

- Its NOT just about the IT infrastructure.
- Waste management is essential - to begin with
 - It links to better health, education, better streetscapes, enabling proper governance,
- The rest follows.