

2016 CLAIR Forum
*Local Government Environment and
Sustainability*

**Waste management in Japan and
Australia – a resident's perspective**

Jason Khoh 24 Feb 2016



Overview

- Background
- Waste data from Australia and Japan
- Waste management in Tokyo and Sydney
- Unique and Innovative Solutions
- Issues
- Final Thoughts



Background

- **11 years in Japan**
 - Fuchu city and Nerima ward, Tokyo
 - Tsukuba city, Ibaraki Prefecture
- **A Northern-Suburbs boy**
 - Eastwood / Epping / Beecroft / Macquarie Park
- **Focus on waste management practices in:**
 - Nerima City Office
 - City of Ryde

Waste Data: Australia and Japan



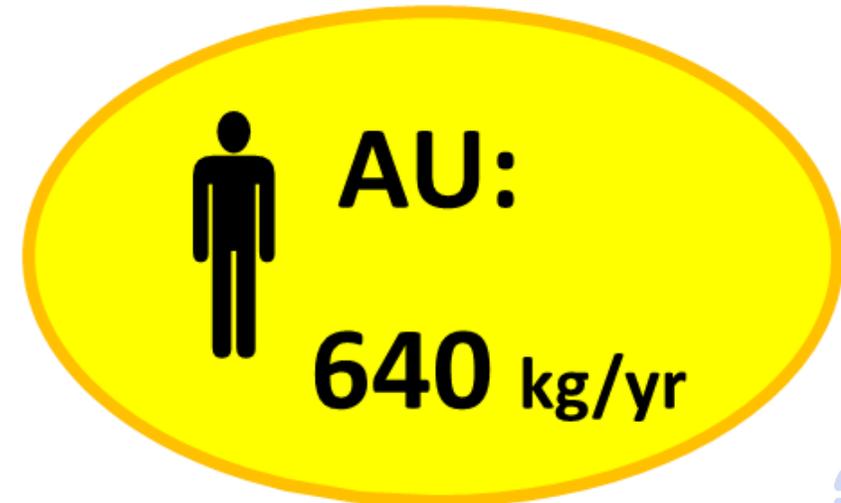
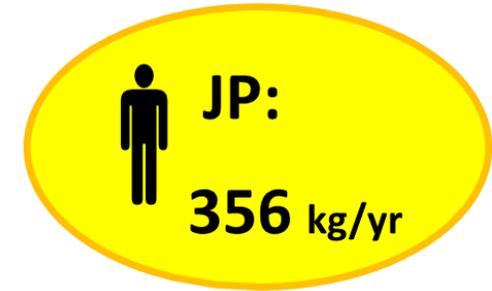
	Australia	Japan
Total Waste (million tonnes/year)	14 mil	45 mil
Population ranking	53 (<i>24 mil</i>)	11 (<i>126 mil</i>)
Waste per capita (per annum)	640 kg	356 kg
Waste per capita ranking	6	N/A

Top Ten Waste-Per-Capita Countries:

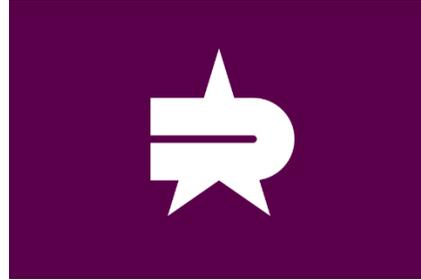
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Waste per Capita (kg/yr) in Australia and Japan

- Sydney: 385
- Tokyo: 401
- NSW: 462
- Osaka: **483** (Worst in Japan)
- VIC: **535**
- WA: **676**
- QLD: **749** (Worst in Australia)



Waste Management in Tokyo

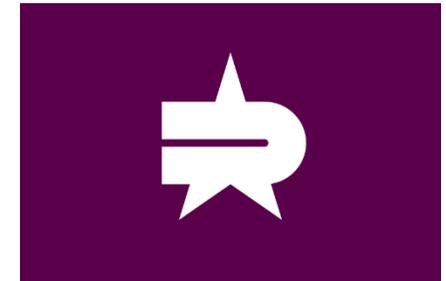


- **Nerima City Office**

- One of 23 special wards
- Tokyo = 23 special wards, 26 cities, 5 towns and 8 villages
- North-west of Central Tokyo and approx. area of 48 km²
- Population: 714,656
- Approx. 1.9% of population are overseas residents (13,552)
- Sister-city with Ipswich city (QLD) since 1994

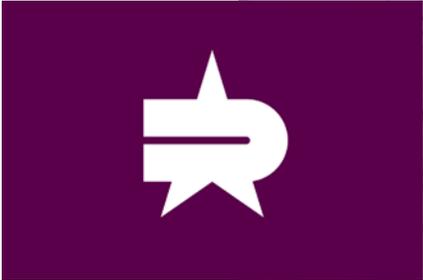
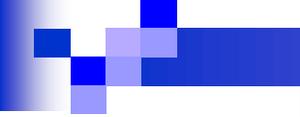
Waste Management in Tokyo

- Waste and recycling collection divided into 5 categories:
 - Combustible waste (twice a week)
 - Incombustible waste (twice a month)
 - Plastic & Paper
 - Glass Bottles & Cans
 - Plastic Bottles
- (once a week)



- 89 different regions, each with different collection days
- No bins!
- Guides in:





Collection Point



Waste Management in Sydney



- **City of Ryde**

- One of 43 local councils in Metropolitan Sydney
- Central northern part of the city with an area of approx. 40 km²
- Population: 114,598
- In 2011, 36% of people in the City of Ryde, came from countries where English was not their first language (Top 3: China, Sth Korea, India)

Waste Management in Sydney

- Waste and recycling collection divided into 3 categories
 - General Waste
 - Recycling
 - Garden Organics
- Council is divided into 5 different zones for waste collection
 - Mon, Tue, Wed, Thu, Fri
 - All 3 categories collected on the same day
 - Rubbish bins put out next to the curb the night before
- Recycling guides also in:



Side-by-side comparison

	Nerima	Ryde
Population density	15K / km ²	3K / km ²
Types of waste	Combustible Incombustible Recyclables	General waste Recyclables
Collection zones	89	5
Collection days	4-5 times / week	Once a week
Disposal method	In plastic bags and containers on side of road	In large rubbish bins on side of road
Disposal time	The morning of collection	The night before collection



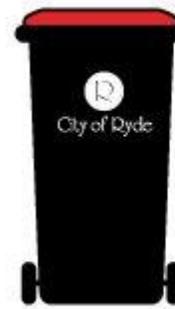
Unique and Innovative Solutions

- **Nerima City**

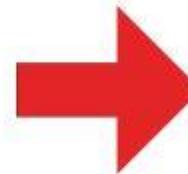
- Recycled vegetable oil
- Fertilizer from school-lunch leftovers
- Subsidies for composters
- Tips to revitalise potting soil

- **City of Ryde**

- Free chipping and mulching
- 80L ecoservice bins (save \$62!)
- Free advertising for Garage Sales
- Free recycling tubs and bags
- Free gardening, compost and worm-farm workshops
- Sustainable Waste-to-Art Prize



140L Waste



80L Waste

Issues

- Nerima City
 - Complex!
 - Hard-to-find guides for over
 - Small window of time to put out
recyclables
 - Quite labour intensive
 - Burden high for residents



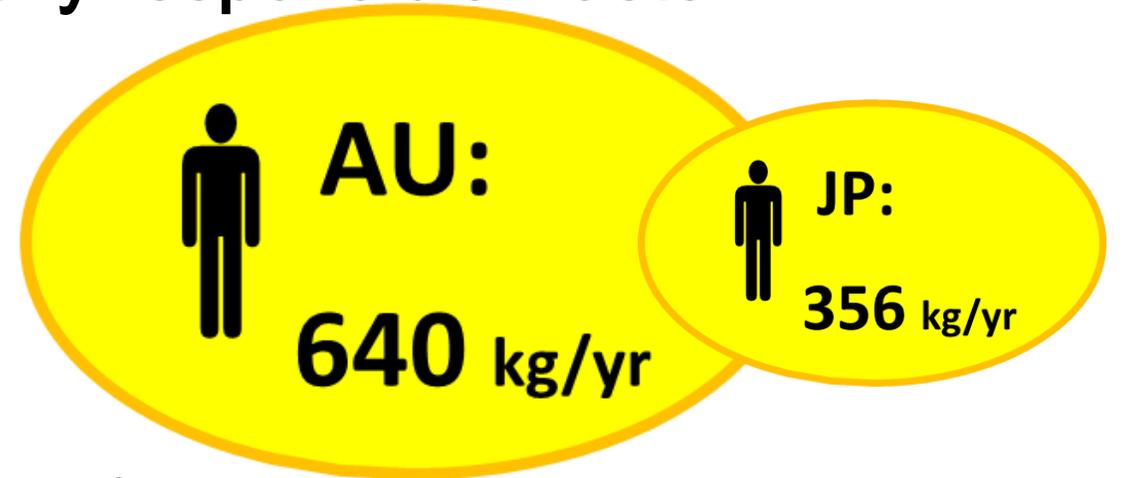
Issues

- City of Ryde
 - Waste and recycling rules too easy
 - Rubbish bins too large
 - Bins with unacceptable material not emptied?
 - Hard-to-find guides for non-English speakers
 - Burden on businesses is low
 - More accountability for contractors
 - Loophole in 'Proximity Principle'



Final Thoughts

- Local governments need to find the right balance between convenience for residents and policies that encourage waste minimisation and ensure environmentally responsible waste management
 - Change starts with each individual
 - Targeted campaigns
 - Incentivise good practices
 - Reduce the size of all bins & number of collections
 - National harmonisation of landfill levies
 - Japan levels are a good initial target for Australia!
- Very keen to hear other people's ideas on this!



“When the blood in your veins returns to the sea,
and the earth in your bones returns to the
ground, perhaps then you will remember that this
land does not belong to you, it is you who
belongs to this land”

References

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