

The impact of and response to the China National Sword Policy

Greg Freeman

Managing Director

Impact Environmental Consulting Pty Ltd

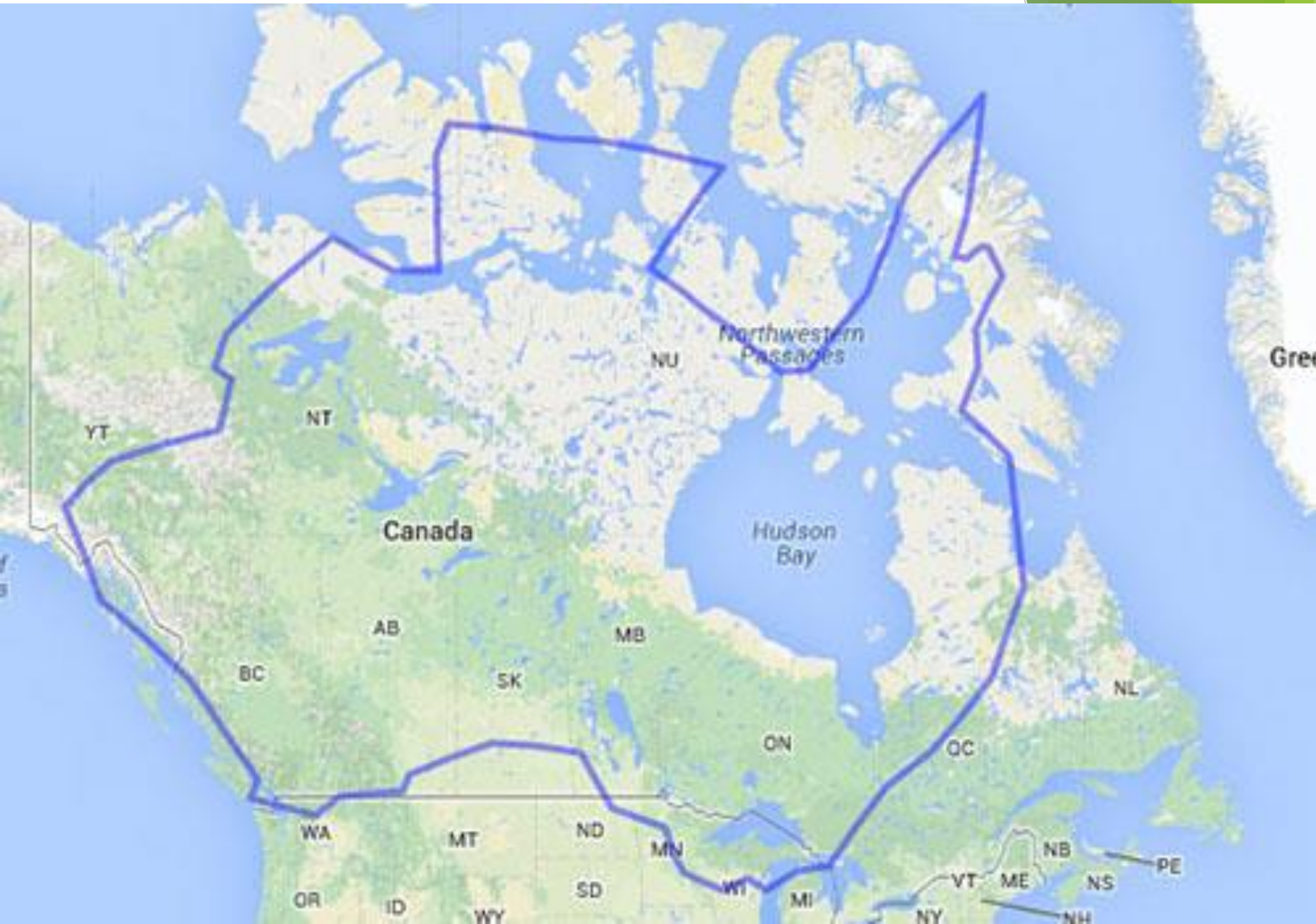
About me

- I run a waste management consulting Company in Australia
- Most of our work is with State and Local Government
- Our Company also runs a large national waste management conference each year
- I was in Canada last year and had Albert Shames from Vancouver City Council come to Australia in 2017
- I have come here to network, learn and share ideas and set up exchange for our conference

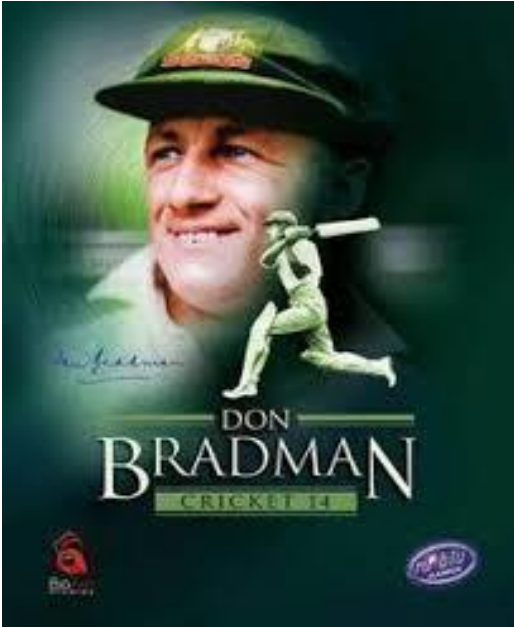
Australia vs Canada

- Both countries have the same colonial heritage, similar federal structures, relatively small populations that occupy a large land mass, a dependence on commodities, experienced a commodity boom and are now dealing with a major decline in their terms of trade, over-heated housing markets (Lowy Institute)
- Australia is a bit more conservative than Canada - 8 Prime Ministers in the last 10 years but....
- Women achieved right to vote in 1902 in Australia, not till 1919 for Canada, 1940 for Quebec
- We have a love of sport, nature and outdoors....and some caution towards the US
- Maybe a similar sense of self depreciating humour?

Our size is similar...



There are differences...



Our Greatest



Your Greatest

To more serious things...

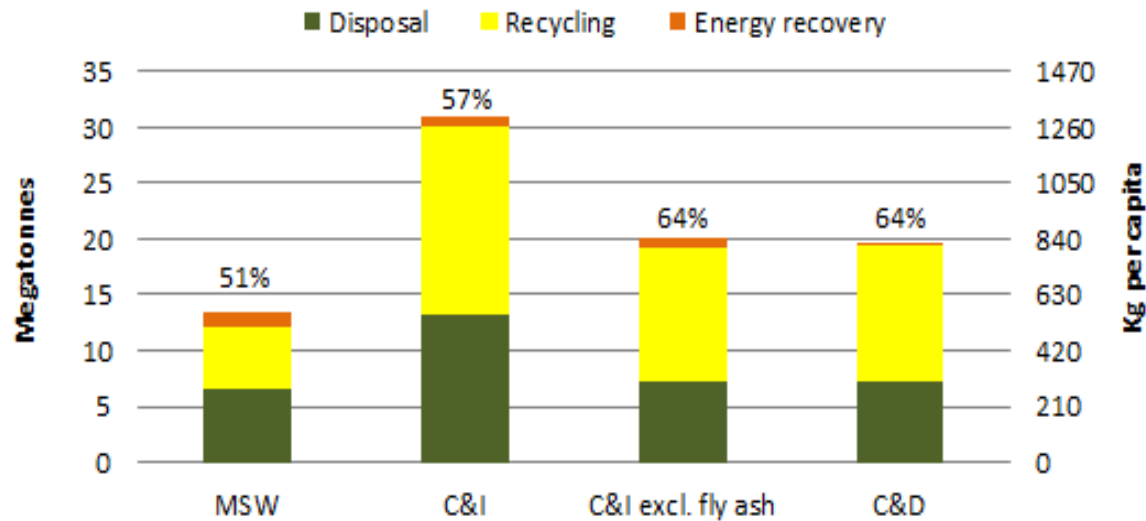
Australian Government Structure

- 3 tiers - Federal, State and Local
- Similar to your Federal, Provincial and Municipal
- In Australia, Federal Government has set National Waste Policy but most policy and programs are undertaken by State and Local Government
- At a local level services are delivered by a combination of day labour and contractor

Current Waste Issues in Australia

- Managing the impact of the China Sword Policy (& Malaysia, Vietnam etc)
- Harmonisation of landfill levies across all states
- Introduction of container deposit scheme across country
- Focus on collecting and processing organics, inc food
- The growth in interest in the Circular Economy approach
- A growing interest in Energy from Waste
- Increased use in technology
- More integration of Social Enterprise into waste management activities
- Higher industry profile with 'War on Waste' ABC program and investigations into cross border waste dumping
- Increased focus on community education
- Consolidation of industry big players
- Focus on increasing professionalism in our industry

Waste Snapshot 2014-15



	Mega-tonnes	Kg per capita	Mega-tonnes	Kg per capita	Mega-tonnes	Kg per capita	Mega-tonnes	Kg per capita
Generation	13.3	565	31	1308	20	849	20	831
Energy recovery	1.3	53	0.9	38	0.9	38	0.2	7
Recycling	5.6	237	17	713	12	505	12	522
Disposal	6.5	275	13	558	7.2	306	7.1	302

Source - National Waste Report 2016

Landfill Levies

When I talk money.....
1\$AUD = @ 90 cents CAD

Taxing Landfills - \$per tonne

State	Metro	Regional
NSW	\$140	\$80
Victoria	\$60	\$30
Queensland	\$70	
Western Australia	\$60	
South Australia	\$83	\$45
New Zealand	\$10	

Residential Collections

Common residential collection system



Processed mainly by in-vessel composting



Destined for Landfill (some processing)



Processed in MRF (some transfers)

PRESS RELEASE TODAY

Mixed Waste Processing

The NSW Environment Protection Authority (EPA) is stopping the use of mixed waste organic material on agricultural land, and is ceasing use on plantation forests and mining rehabilitation land until further controls can be considered

Recycling collections

Common collection system



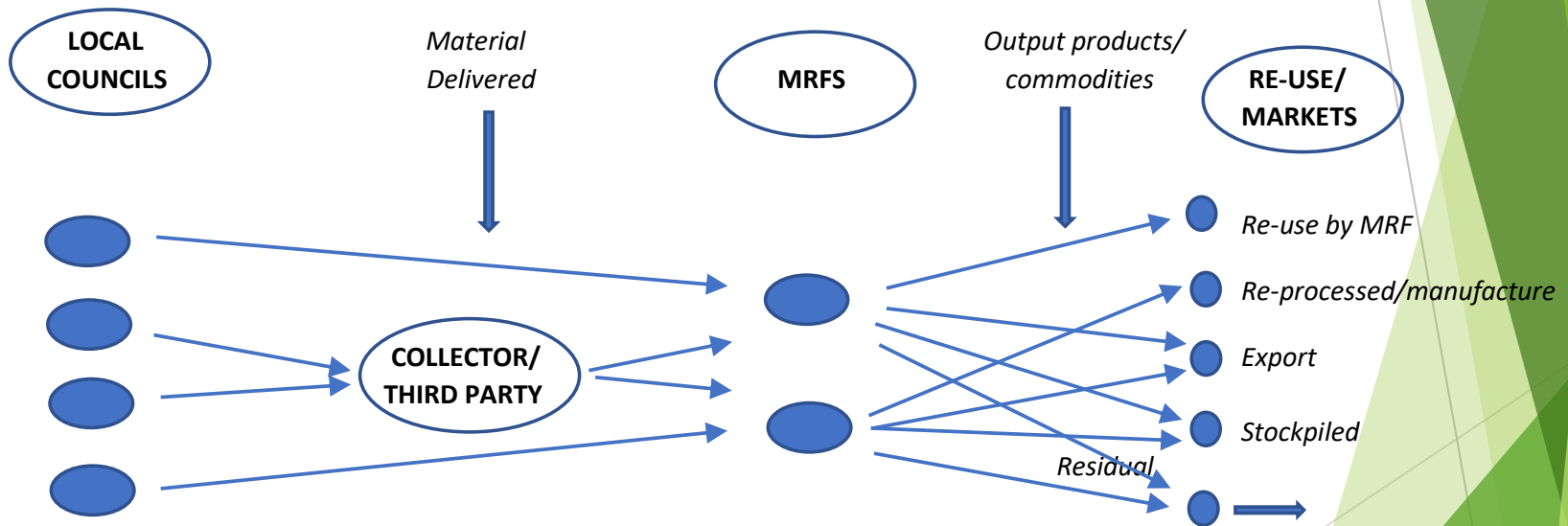
240 or 360 litre
Mobile Garbage
Bin collected by a
single person truck
on a fortnightly
basis

Co-mingled collection includes:

- Paper
 - Cardboard
 - Steel cans
 - Aluminium Cans
 - Glass
 - Hard Plastics
-
- Contamination levels around 5-7% for Single Unit Dwellings and 10-15% for Multi-Unit Dwellings

Australian Recycling Systems

FIGURE 1.1 RECYCLING SYSTEM FEATURES

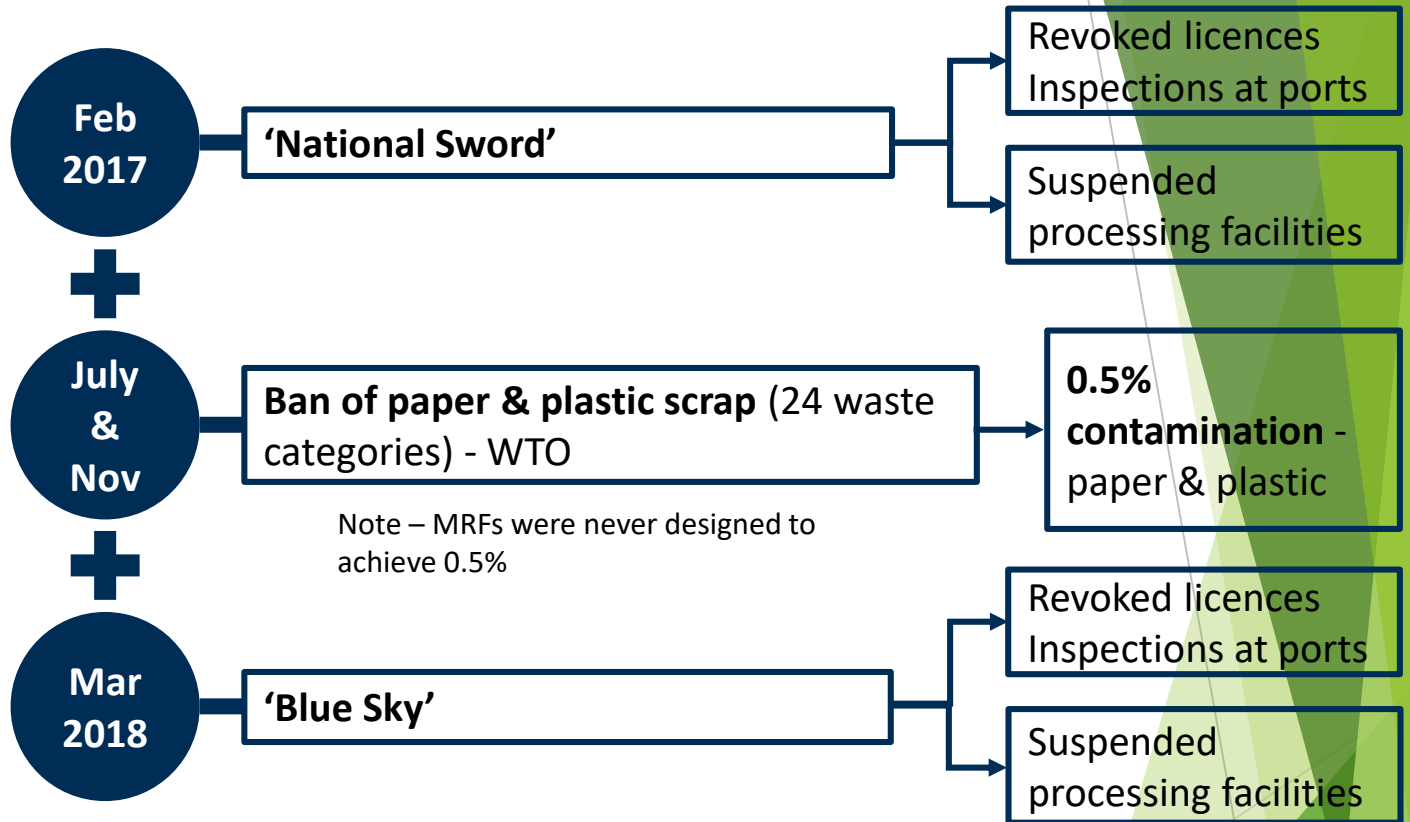


China National Sword Policy

- Until recently, China was a large importer of recyclable materials, accepting more than 30 million tonnes of waste from all over the world every year.
- Australia alone sent 1.25 million tonnes of recycled material to China in 2016-17 which is now impacted by National Sword.
- At the start of January 2018, however, China began to stringently enforce restrictions on the importation of recycled materials under its National Sword policy.
- (Source NSW EPA Website)

What is China's National Sword policy?

The actions:

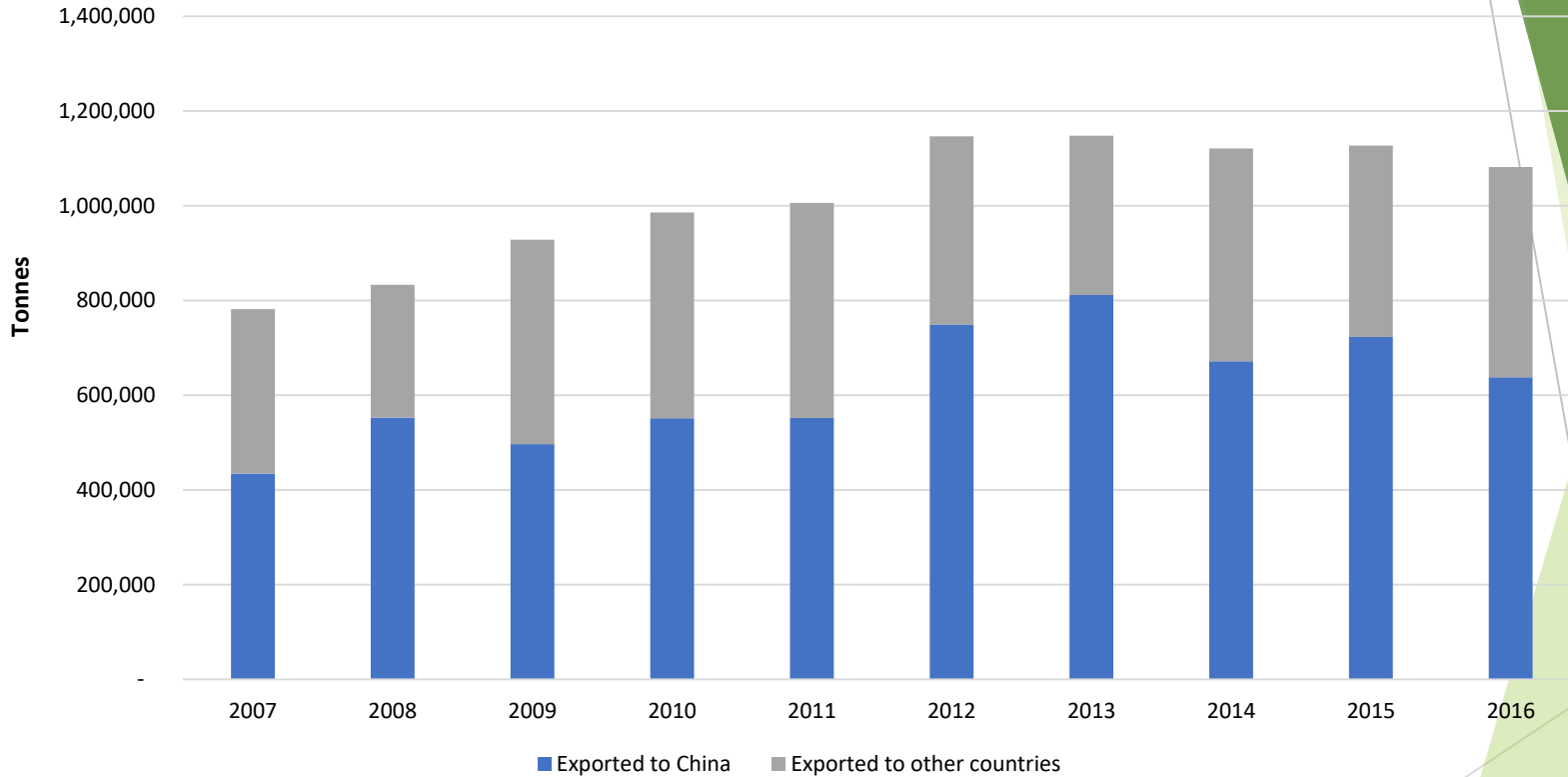


The goal:

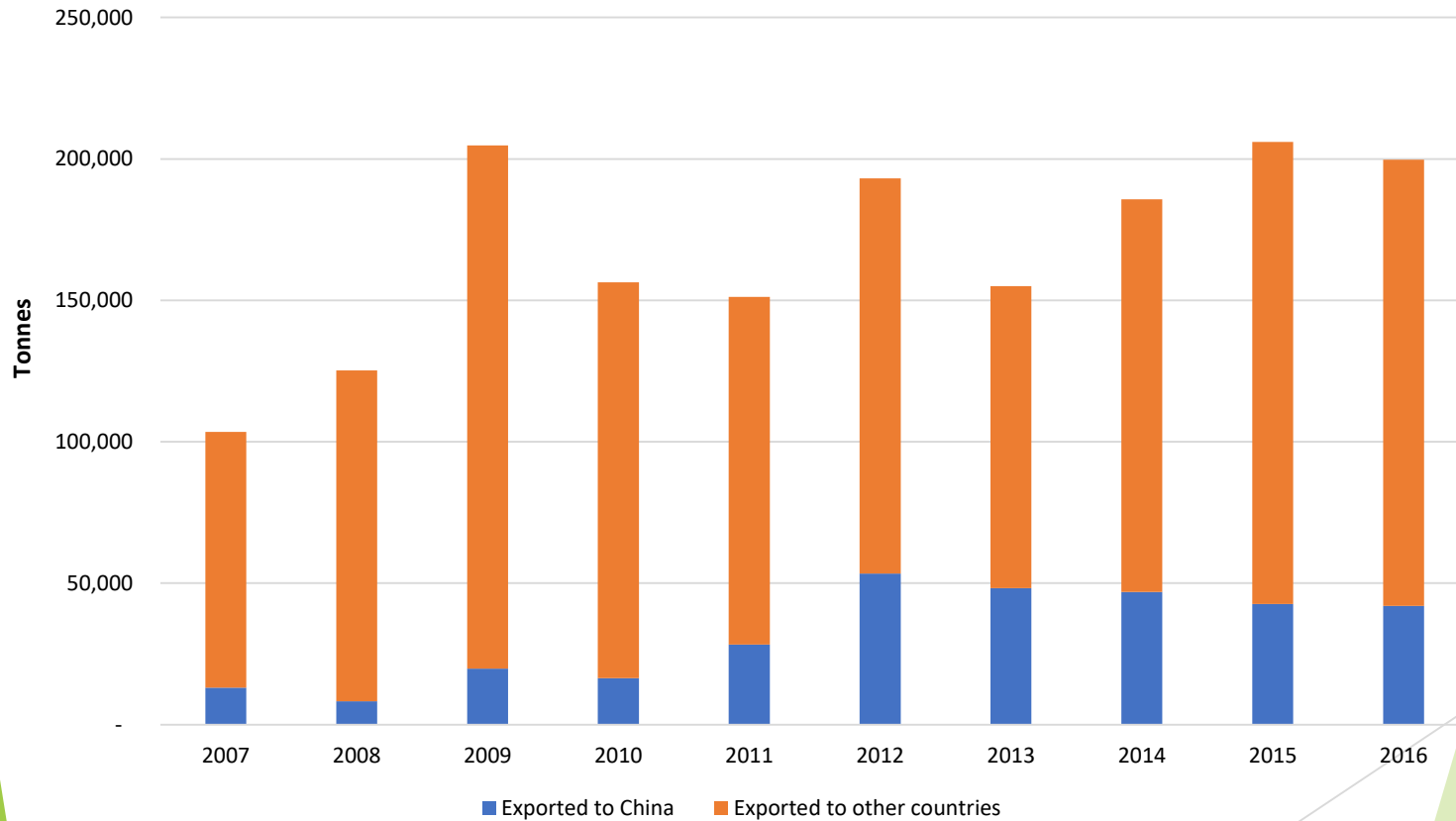
“Imports of solid waste that can be substituted by domestic resources will be phased out by the end of 2019” – State Council of China

- it is NOT about contamination. It is about industry policy.

Australian exports of Cardboard

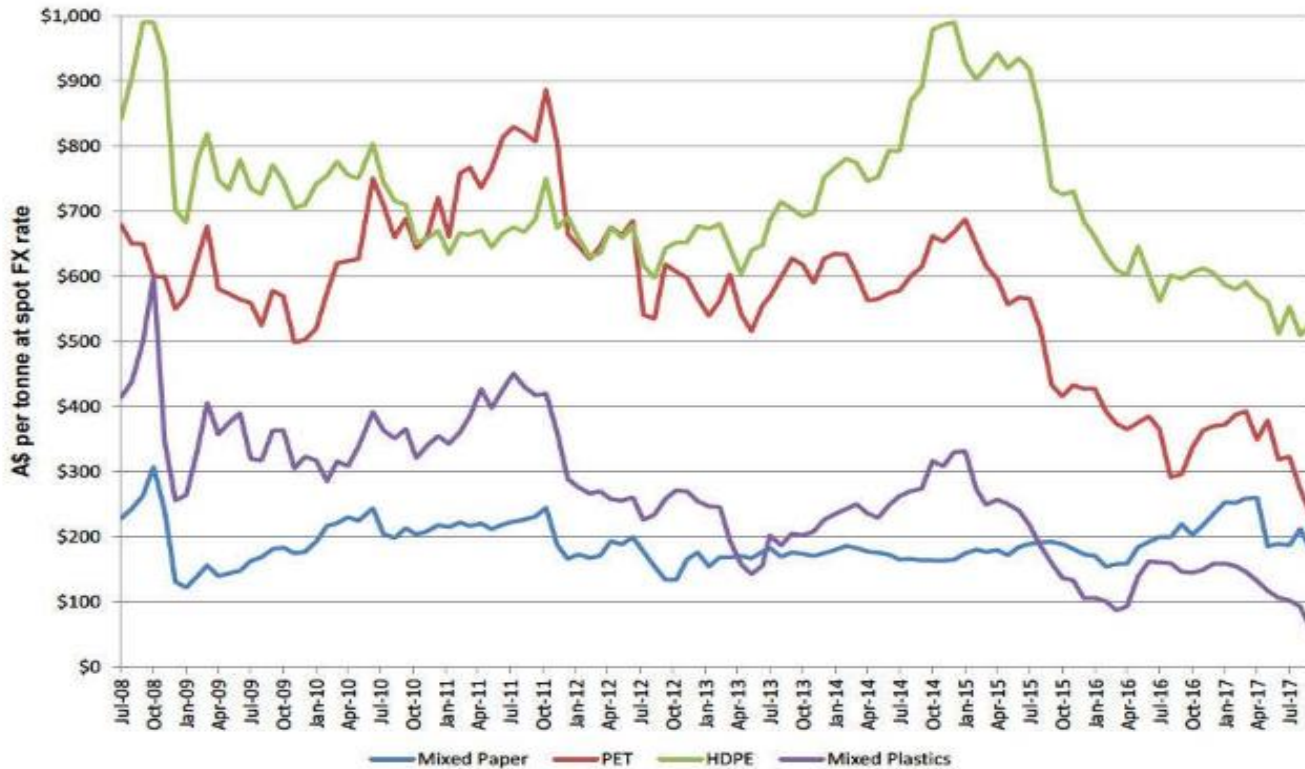


Australian exports of Plastics

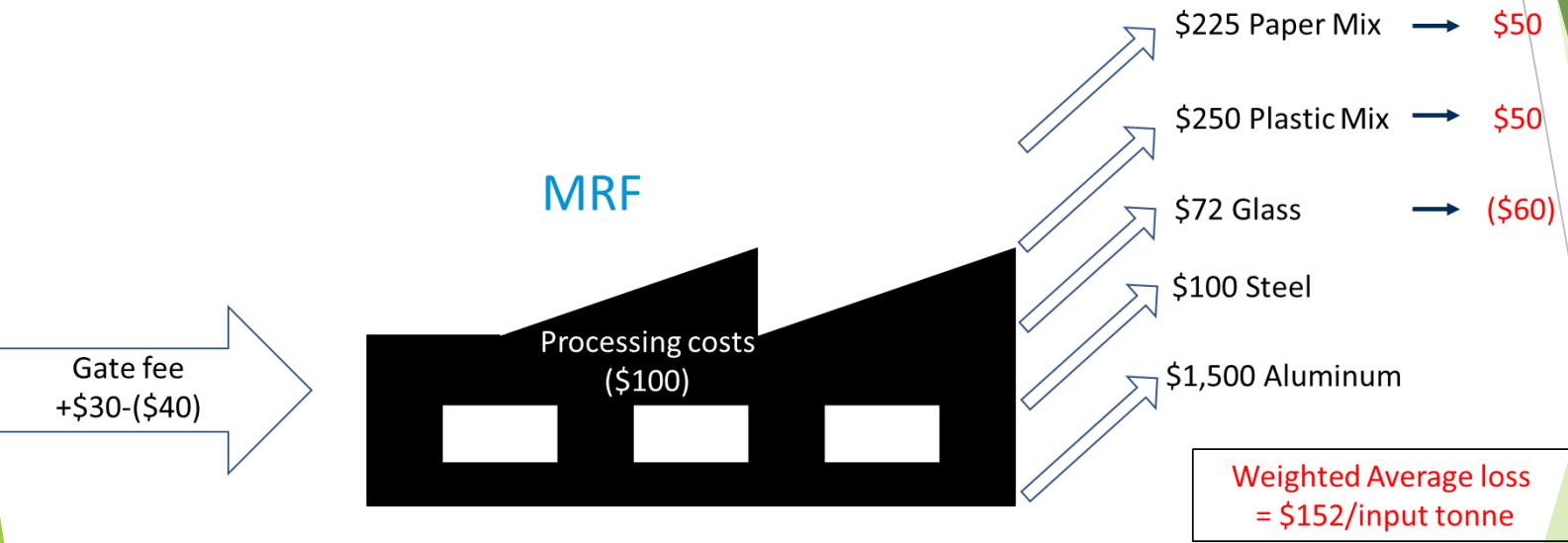


Recycling commodity values have dropped

Figure 2, Commodity sell prices history



The Impact on Material Recovery Facilities (MRF's)



- MRFs are no longer profitable at new commodity prices and existing gate fees

Glass in Australia

- Closed 3 furnaces
- Cheaper to import green bottles from Mexico
- Price collapse \$72/t → -\$60
- Glass now being recovered for road base, drainage etc



Impact of China Sword on Local Government

- First there was confusion
- Then anger
- Then look to State Government for \$
- Then a realisation that things had to change
- Then a resolve to keep recycling going
- Now policy wheels are moving
- More local responsibility being taken
- In the end it will be a more sustainable outcome
- People may have to pay more

The impacts on Australian Councils and households

- Increased MRF costs
 - Estimated to be ~\$112/t (National Sword)
 - Estimated to be ~\$152/t (National Sword + Glass)
Average household generates 5.4 kg/wk¹ or 280kg/yr
- Rate increase to cover the increased MRF cost:
 - ~\$31/hh/year (National Sword)
 - ~\$43/hh/year (National Sword + Glass)
- Approx 4% NOT including on-shore costs or future falls



Government responses

- **NSW Gov't**

- \$47 m - grants and Council costs to 1 July
- \$2.5 non-levy area, \$35m ERA/RRA, \$9 contestable
- Advisory Committee established



- **Vic Gov't**

- \$13m "rescue package"
- cover extra costs to Councils to 1 July
- \$70/tonne
- Task Force established



- **SA Gov't**

- Feb 2018 -\$300k support secondary reprocessing



QLD Response



NSW Response

- In March 2018, the NSW Government announced a support package of up to \$47 million to help local government and industry to respond to China Sword.
- The package includes \$4.5 million to support co-investment in infrastructure projects to improve the quality of recycled materials produced by MRFs and reduce the amount of unrecyclable material left at the end of the recycling process, and \$5 million to fund grants and programs that identify new uses for recyclable materials and increase the production and use of recycled products
- The support package is being funded by the *Waste Less, Recycle More* initiative (short, medium and long term) to ensure kerbside recycling continues and to promote industry innovation.
- The funding enable councils to:
 - off-set some extra costs associated with kerbside recycling collections
 - improve council tendering processes to increase the production and use of recycled products
 - fund community education initiatives to reduce kerbside recycling contamination.

What is happening now

- Recyclables ARE still being exported, albeit at lower prices
- Recycling gate fees ARE increasing but they remain lower than landfill gate fees due to landfill levies

What do we think we need to do?

Short Term

- contract discussions (cost shifting, risk sharing, etc)
- review of license conditions, eg increased allowance of stockpiling
- funding assistance for MRF upgrades/ secondary processing
- sustainable procurement by government – eg lets get on with getting glass sand into road base (Green Public Procurement)

Medium/ Long Term

- Review Model Recycling Processing Contracts (esp risk)
- Circular economy in Australia, we need to create secondary markets for these products, that is Green Public Procurement, specification and design for sustainable procurement, EPR, invest in research and development

Now is the opportunity

DON'T THROW THE BABY OUT WITH THE BATHWATER

Don't argue to incinerate recyclables

Improve what we have today:

- National campaign to reduce contamination
- Improve MRF capture
- Improve secondary reprocessing “on-shore”
- Embed Circular Economy principles into Government policy
- Improve procurement and contracts
- Keep the pressure on Govt for support!!



**KEEP
CALM
Pressure
Makes
Diamonds**

An update on Container Deposit schemes

CDS SCHEMES IN AUSTRALIA



CDS schemes

- Been in SA for 40 years
- Introduced by conservative govt in NSW
- Now being adopted on a state by state basis
- Supported by Local Government
- Paid for by beverage producers
- Designed as a litter reduction strategy
- Generally involves 10c refunds
- Limited to containers between 150ml and 3 litres
- Combination of reverse vending machines and deposit depots
- Councils share in MRF windfalls (Agreement by 1 Dec in NSW)
- Some contractors trying to offset losses of China Sword with gains by CDS

Acknowledgements



And while I am here.....



waste 2019

The industry's leading waste management conference

- Held 14-16 May 2019
- Attended by over 630 delegates
- About 85 exhibitors and sponsors
- Located at a resort on the east coast of NSW
- Field trip starting from Sydney beforehand
- Cost is similar to this event
- Great networking event
- We are currently looking for delegates, speakers and sponsors

www.coffswasteconference.com.au

THANK YOU

Greg Freeman
Managing Director
Impact Environmental Consulting Pty Ltd
greg@impactenviro.com.au
www.impactenviro.com.au

