

Impact of China National Sword

WasteMINZ Conference

6 November 2018

Duncan Wilson



Introduction

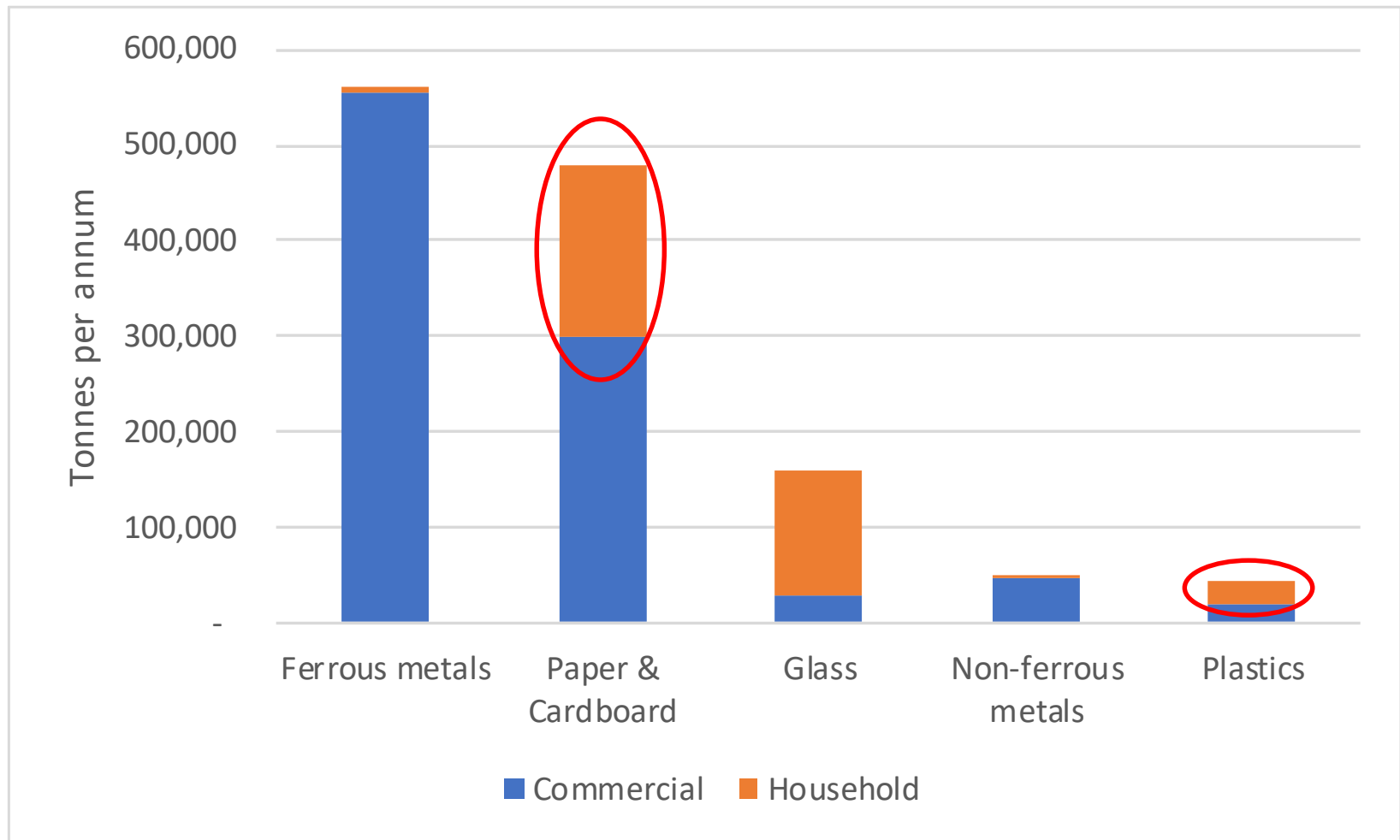
1. Household sources key impact
2. China seems serious this time
3. The impact is worldwide
4. Plastic and paper different dynamics
5. Is Indonesia our next China...?
6. Quick, let's do what we were doing
7. Short term fixes might not fix it

1. Household sources impacted

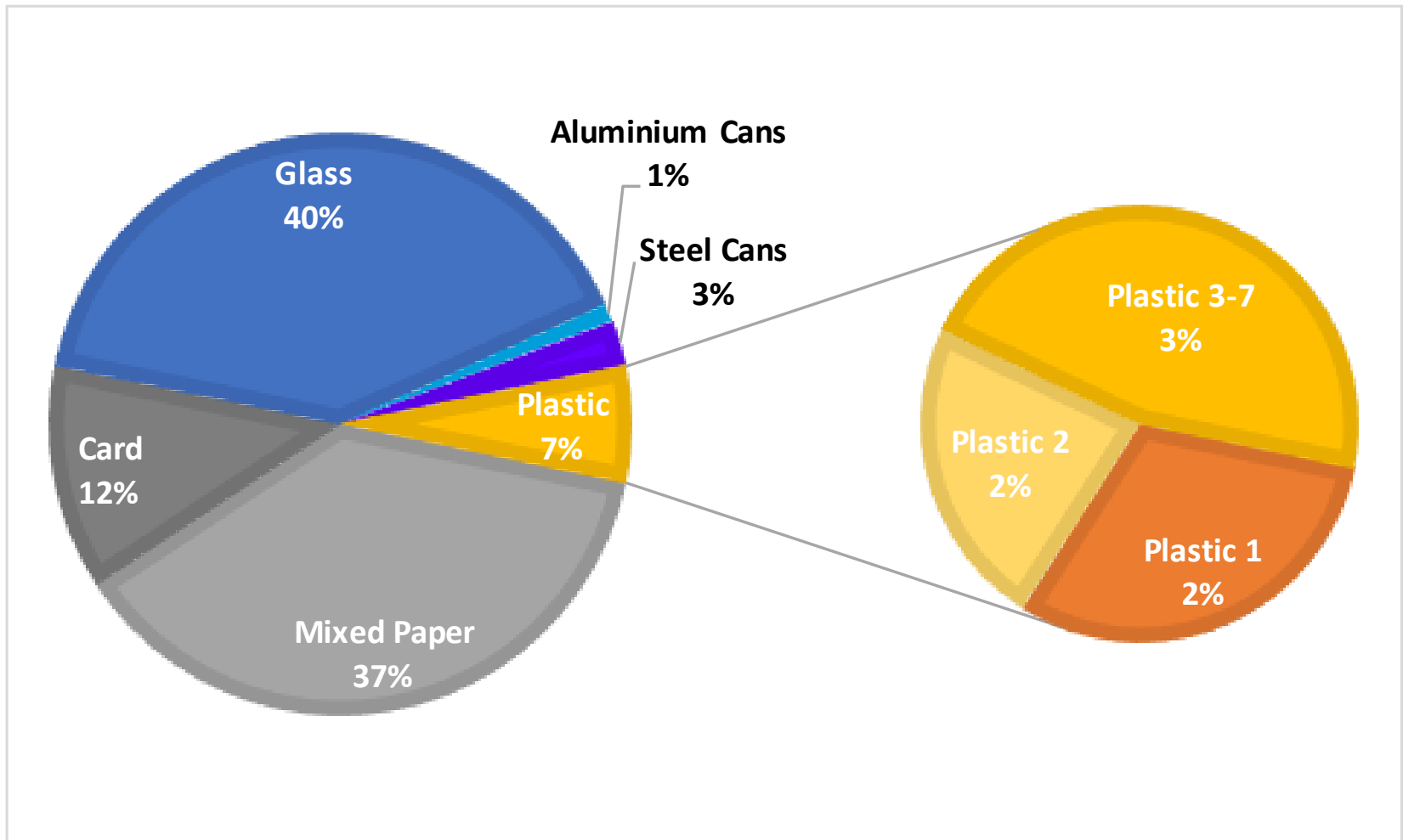
- From end of 2017 China banned 24 grades but main ones are:
 - Mixed paper grades
 - Plastics from households
- Other grades of commodities can still be imported but must meet 0.5% contamination
- Also delays/limits on issuing/renewing import licenses

Household
kerbside!

1. Household sources impacted



1. Household sources impacted



2. China is serious this time

- Not the first time (Green fence)
- Environmental impacts cited reason (real)
- Stimulate domestic recycling
- Intend to eliminate imports of any scrap materials that can be sourced domestically by end of 2019
- So far stuck to their guns – restrictions more likely to increase than decrease

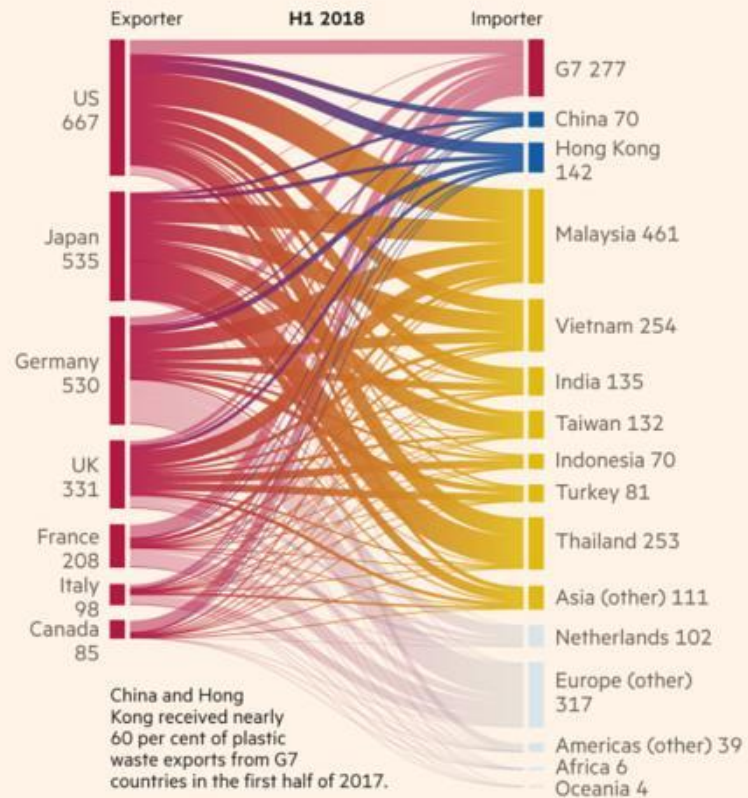
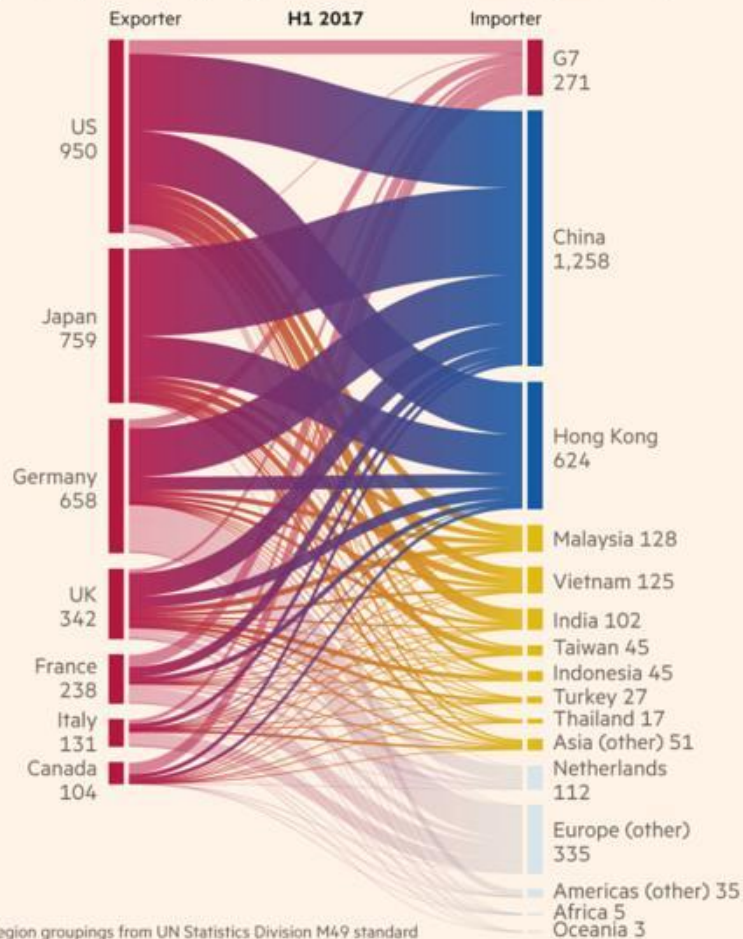
3. The impact is worldwide

- Huge impact on the industry worldwide
- Fibre: Global market in the order of 40m tonnes. In 2016 55% was going to China.
- Plastics: Global market in the order of 14m tonnes. In 2016 China (plus Hong Kong) accepted 65%

3. The impact is worldwide

How the global river of plastic waste changed course in just 12 months

Exports of plastic waste, parings and scrap from G7 countries ('000 tonnes)



China and Hong Kong received nearly 60 per cent of plastic waste exports from G7 countries in the first half of 2017.

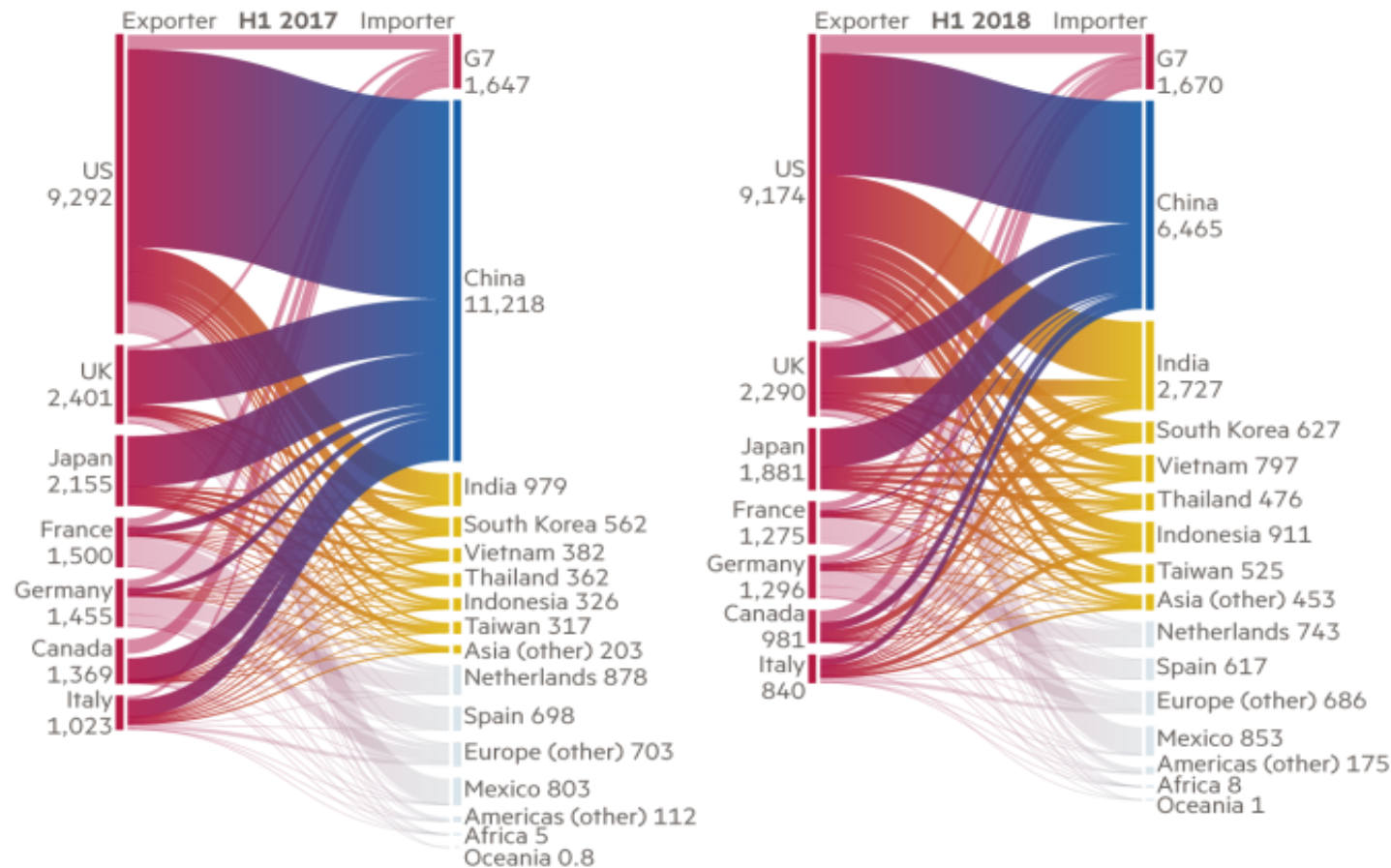
Following a Chinese crackdown on imports of plastic waste, which came into effect at the beginning of 2018, exports from the G7 fell by more than 20 per cent overall. The share of the remaining exports that went to China and Hong Kong fell below 10 per cent, with other Asian countries – particularly Malaysia – making up much of the shortfall.

Visual journalism: David Blood, Liz Faunce, Aendrew Rininsland

3. The impact is worldwide

The rest of Asia overtakes China as the main importer of G7 paper waste

Exports of paper or paperboard waste and scrap from G7 countries ('000 tonnes)



3. The impact is worldwide

Mixed Paper Market Prices 1988 – 2018 (US\$ FOB)



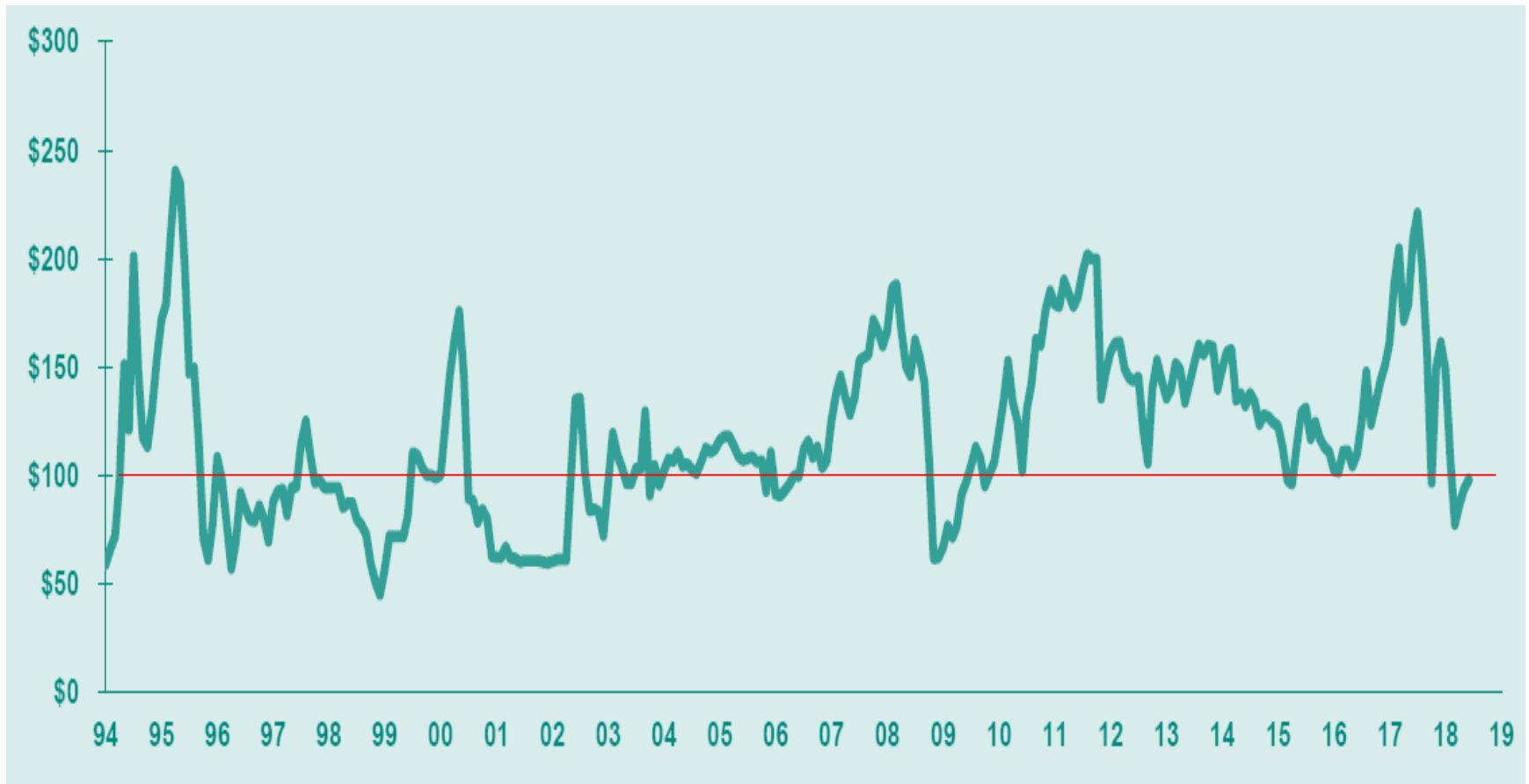
3. The impact is worldwide

Mixed Plastic Sales Values (Export from UK) (GBP)



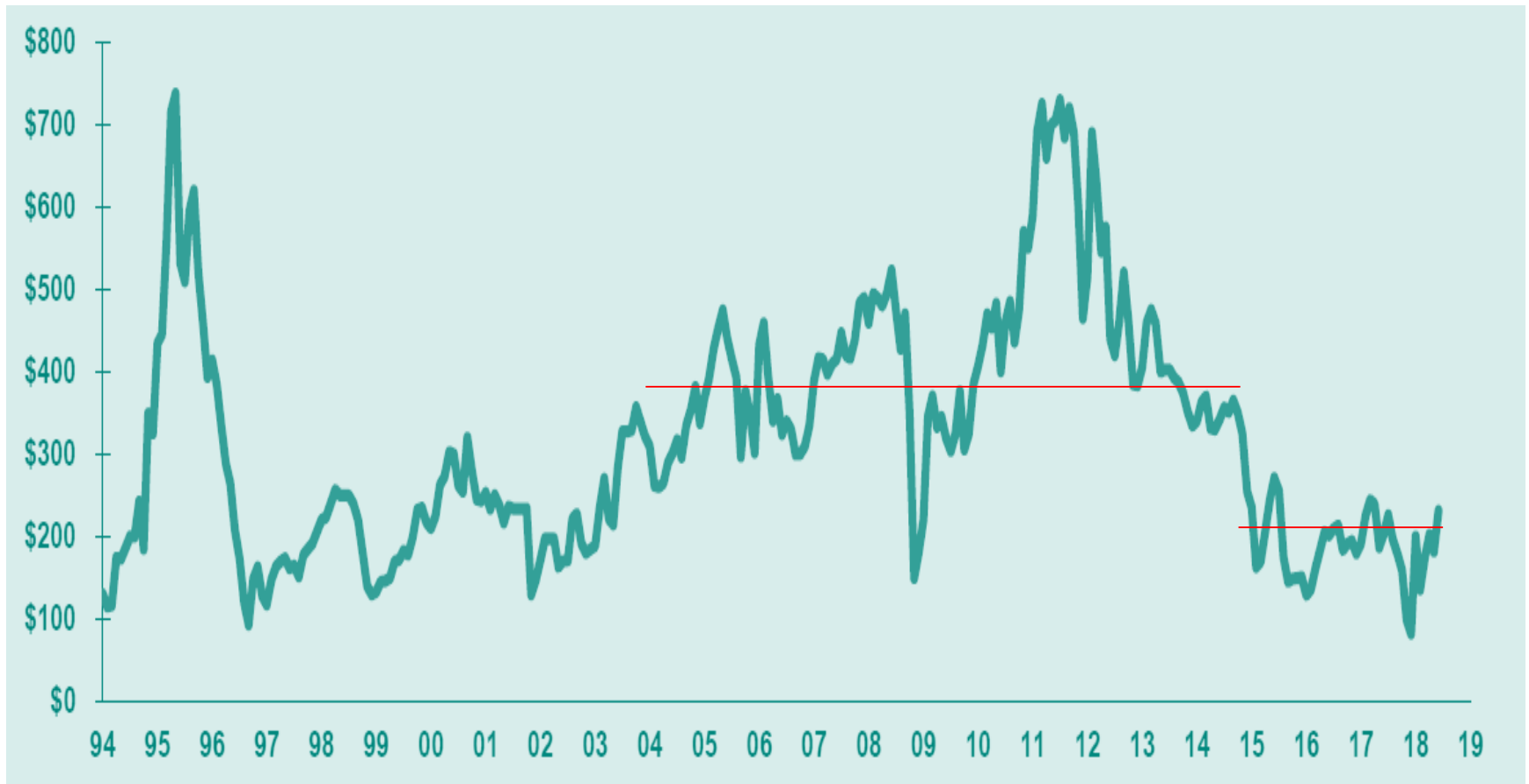
3. The impact is worldwide

OCC (Cardboard) Market Prices 1994 – 2018 (US\$ FOB)



3. The impact is worldwide

PET Bottles Market Prices 1994 – 2018 (US\$ FOB)



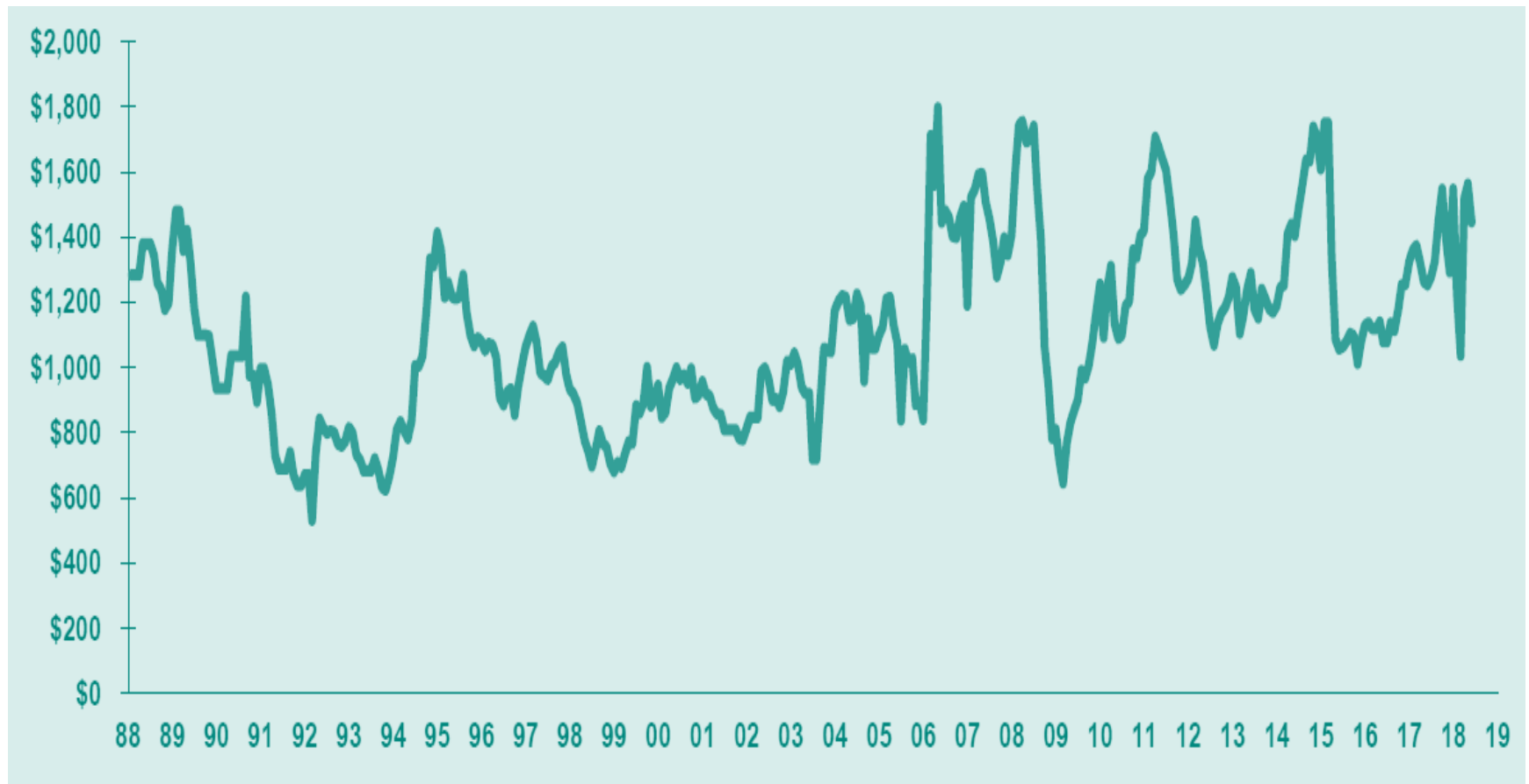
3. The impact is worldwide

HDPE Bottles Market Prices 1993 – 2018 (US\$ FOB)



3. The impact is worldwide

Aluminium Can Market Prices 1988 – 2018 (US\$ FOB)



3. The impact is worldwide

Steel Can Market Prices 1988 – 2018 (US\$ FOB)



3. The impact is worldwide

- Seen big changes in global flows
- Recycled commodity prices fallen mainly just for the banned grades – not a normal market situation
- These are the ones from households

4. Plastic and paper different

- Plastic has all the headlines
- Processing less capital intensive and easier to shift
- A lot of the processing capacity that has emerged outside of China is Chinese owned
- Import restrictions will limit ability to expand any further
- Possibility of onshore processing to sort and upgrade plastics before export – less capital required than for fibre
- Moves by producing countries to reduce plastic use

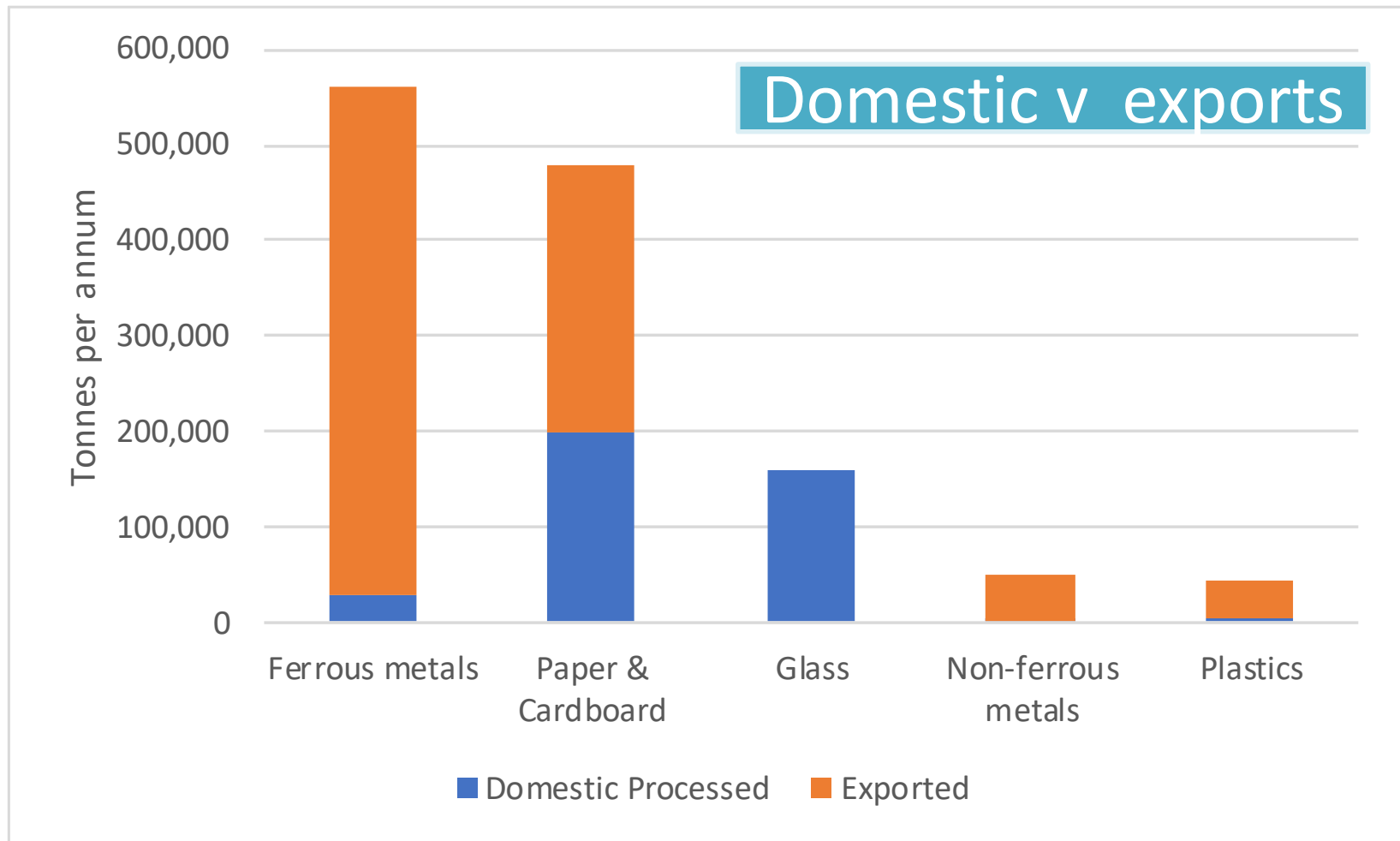
4. Plastic and paper different



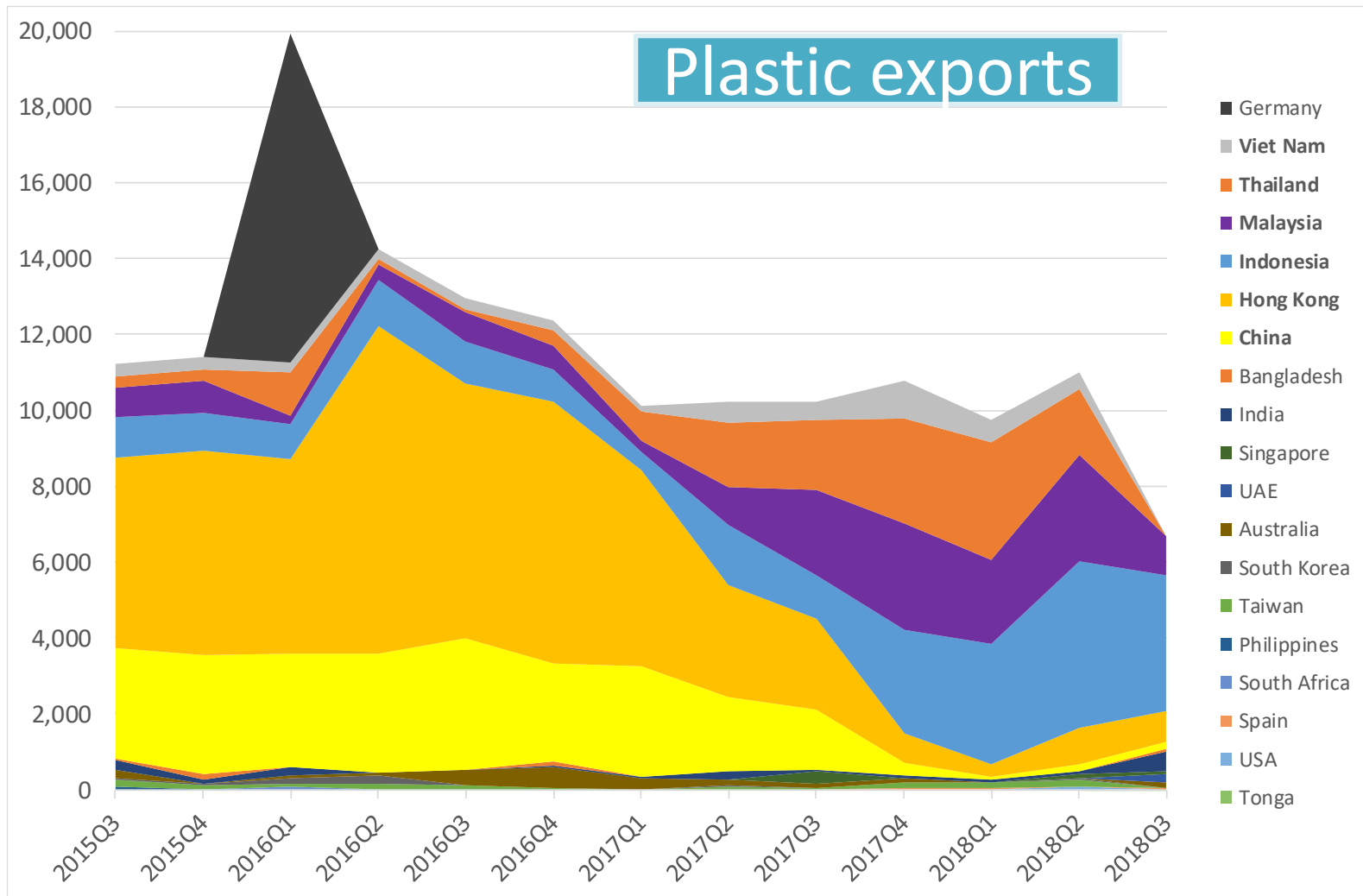
4. Plastic and paper different

- A lot of recycled paper processing capacity lost out of China
- Will take 5-10 years to replace
- Other markets are now saturated with mixed grades and import restrictions are coming onstream
- Demand will focus on higher grade materials
- Demand for mixed fibre likely to get worse before it gets better

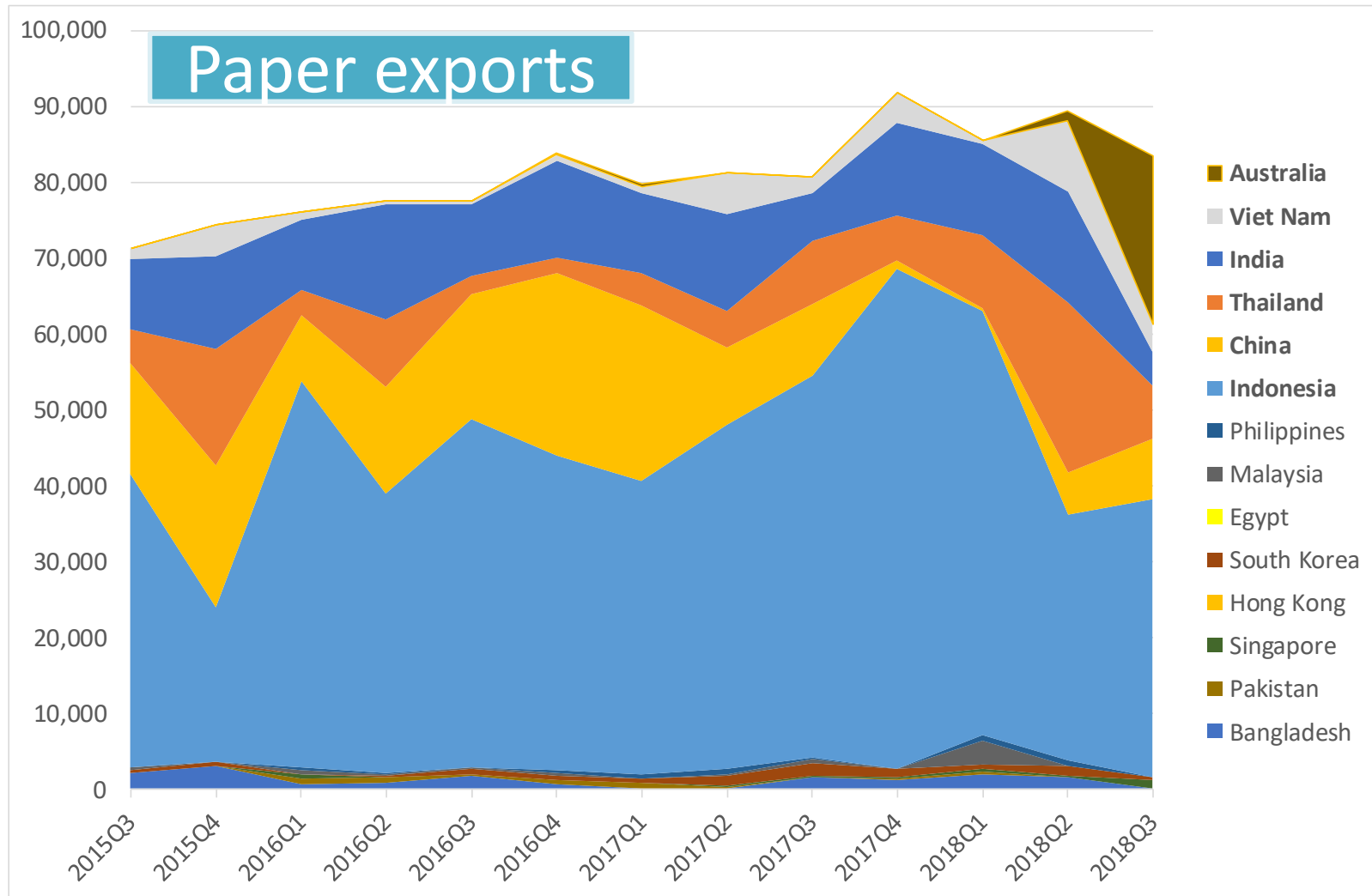
4. Plastic and paper different



5. Is Indonesia our next China?



5. Is Indonesia our next China?



6. Quick, let's do what we were doing...

- Impact in NZ:
 - Net: \$70-100/tonne loss
 - \$10-\$20 per household
 - All operators affected to some degree but small community sector groups least affected

6. Quick, let's do what we were doing...

- Initial responses
 - Suck up the losses
 - Stockpile
 - Improve quality (better price/market access)
- Second level responses
 - Contract renegotiation
 - Stopping collection of certain materials (3-7)
- Third level responses
 - Control flows of materials

7. Short term fixes won't fix it

ISSUE

Packaging and products can be placed on the market with no responsibility for what happens to it

Councils provide recycling as a public service – it is a cost as there is not enough value in the materials

Householders think putting recycling in the bin is enough

Contracting model doesn't foster collaboration

We have poor information about what happens so responses are delayed and/or not fully informed



WAY FORWARD

Whole system approach. Circular economy, product stewardship, packaging and labelling standards

Focus on quality (e.g. source separation), local processing, if no value then producers should have responsibility

Highlight need for value – more sorting by households, local processing, engagement

Pooling of materials, chain of custody, infrastructure planning, guidance

Establish a standard approach to data (Waste Data Framework), for appropriate local, regional and national data access.

Thank You

duncan@eunomia.co.nz

www.eunomia.co.nz