

# Beating Contamination

## DEACS Introduction

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# DEACS Overview

Provide technical and financial assistance to public and private sector

- technical assistance
- grant making
- data analysis
- market development

Staff includes:

- technical assistance specialists
- outreach coordinator
- organics diversion expert



## CHINA WASTE IMPORT BAN

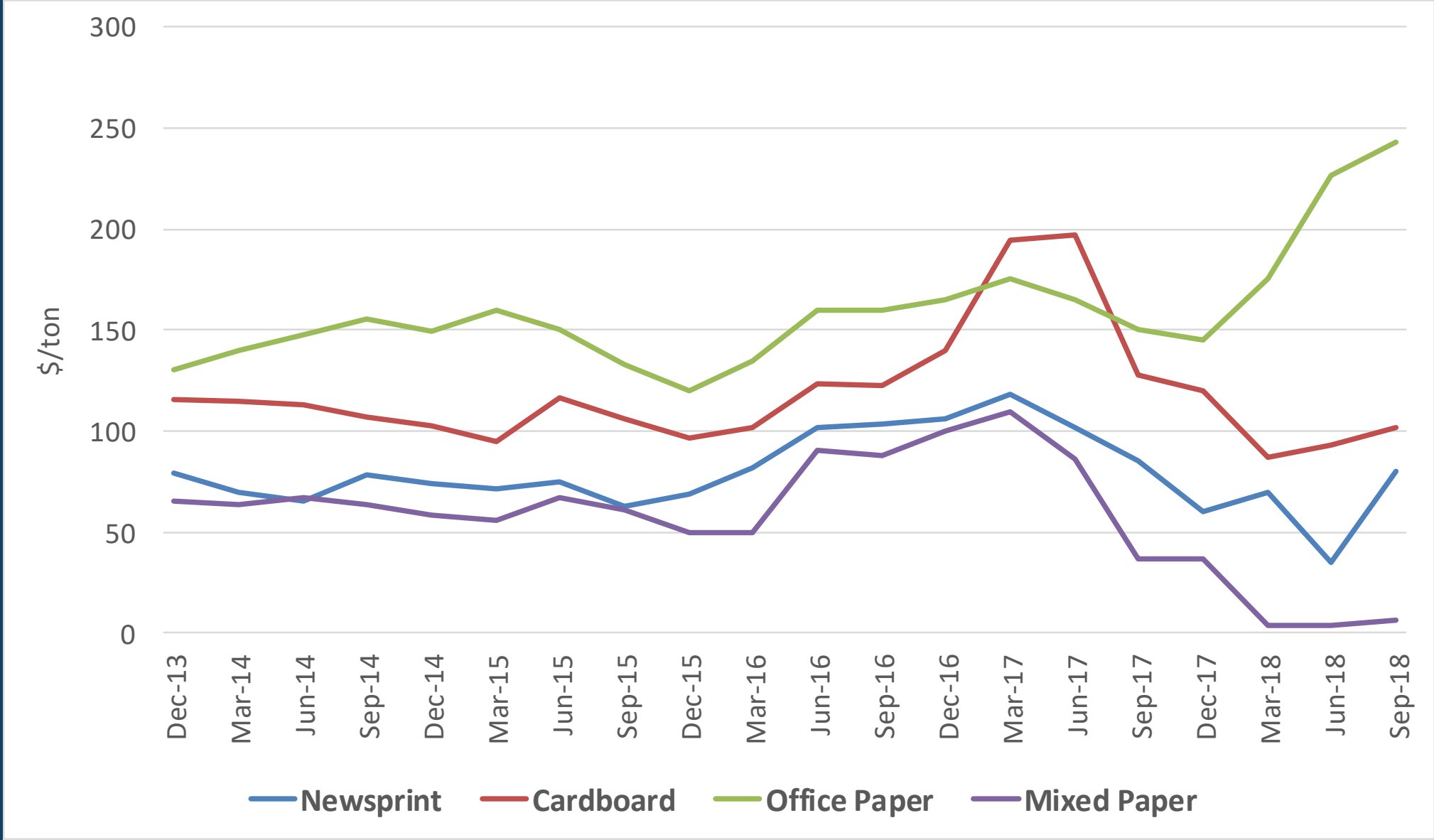


## China

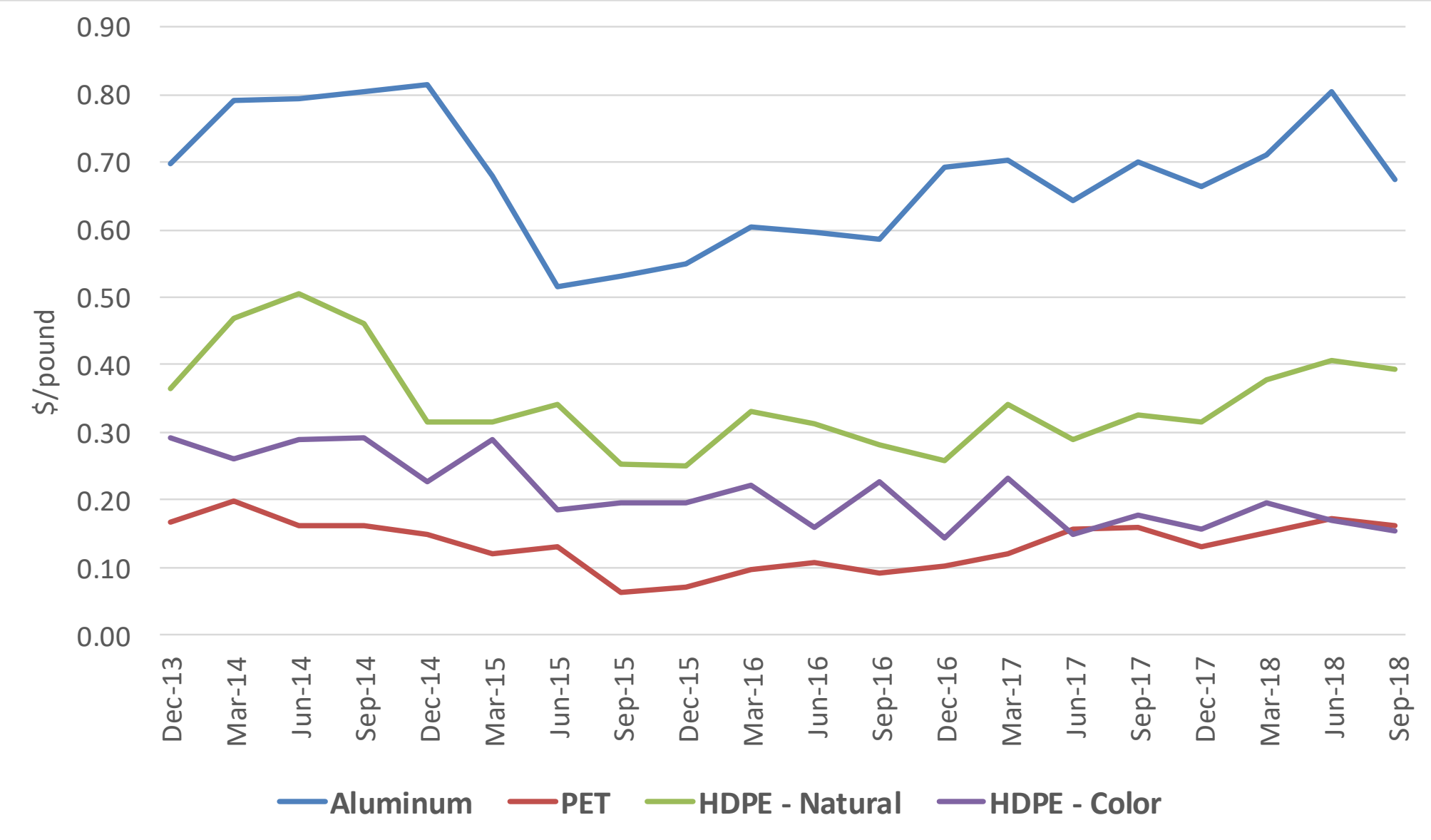


- 2017: China announces efforts to clean up the country. Files with WTO
- Unprocessed plastics are BANNED
  - effective January 2018
- Mixed paper is BANNED
  - effective January 2018
- Other recovered paper and plastic must not exceed 0.5% contamination
  - effective March 2018
- Other southeast Asian countries following suit

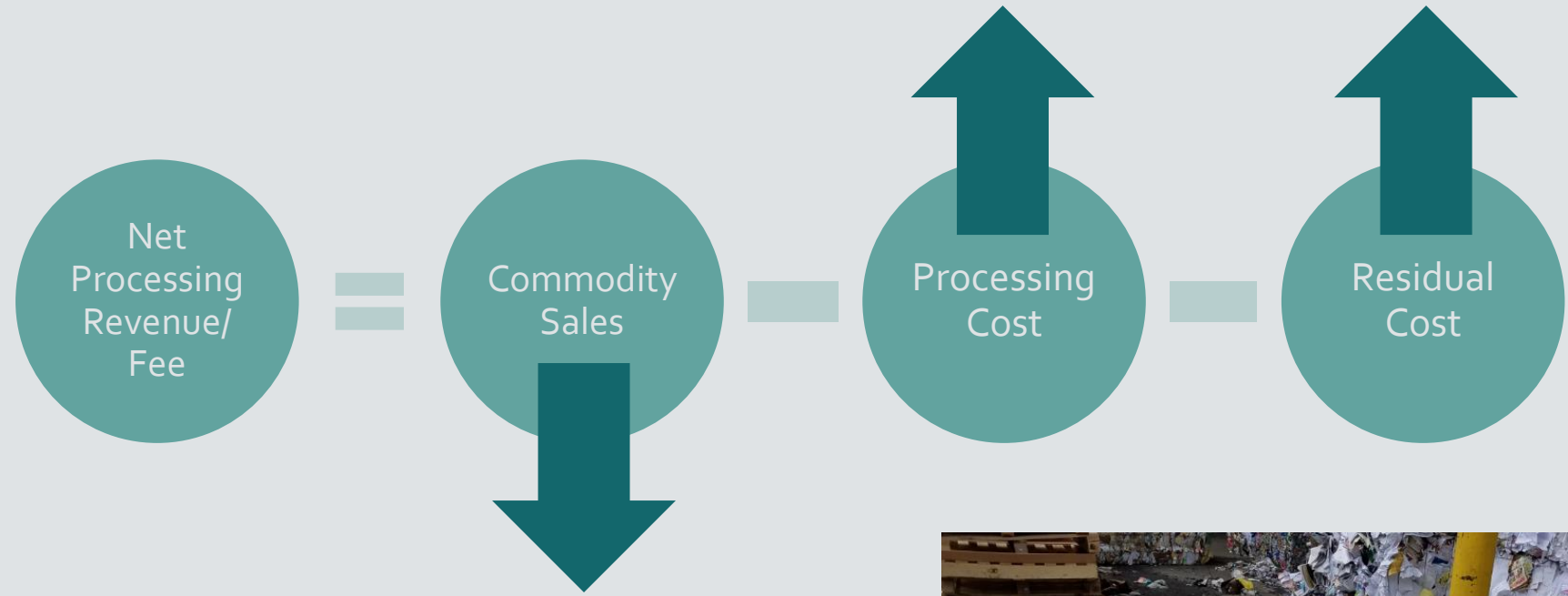
# NC Fiber Pricing – 5 years



# NC Container Pricing – 5 years

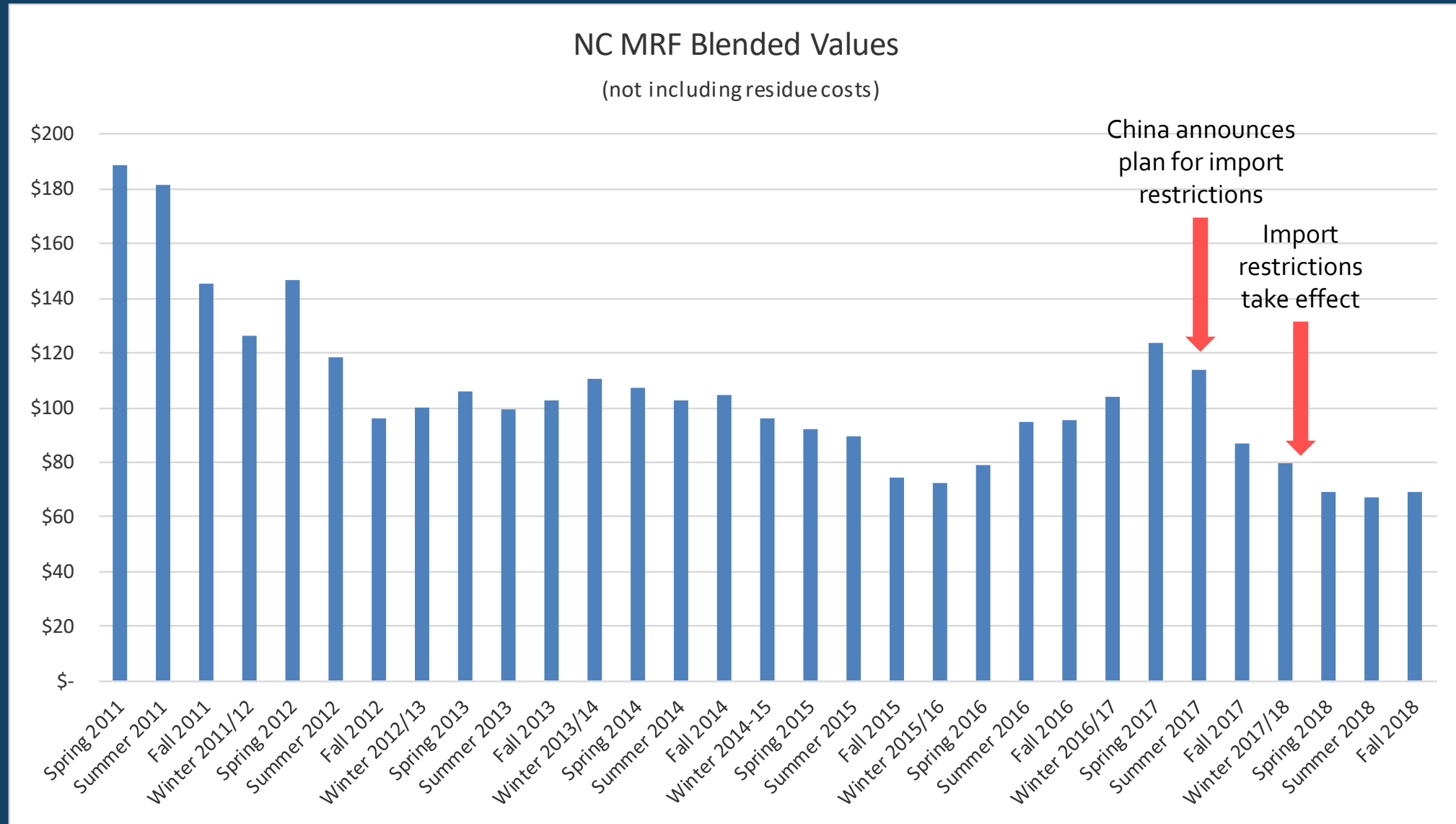


How is this impacting MRFs?





# Value of a commingled ton



# Value of a commingled ton

<u>Material</u>	<u>% of 1 MRF ton</u>	<u>Price/ton</u>	<u>Value</u>
<b>Fiber Materials</b>			
ONP	13.0%	\$ 80.00	\$ 10.38
Mixed Paper	29.8%	\$ 6.67	\$ 1.98
OCC	19.1%	\$ 101.33	\$ 19.38
<i>Fiber Sub-total</i>	<i>61.9%</i>		\$ 31.75
<b>Container Materials</b>			
Glass	25.8%	\$ (23.00)	\$ (5.93)
Aluminum Cans	1.3%	\$ 1,340.00	\$ 16.88
Steel Cans	2.7%	\$ 130.00	\$ 3.48
PET	4.5%	\$ 320.00	\$ 14.43
HDPE (colored prices)	2.6%	\$ 320.00	\$ 8.26
Mixed Plastics	1.3%	\$ -	\$ -
Cartons/aseptics	0.0%		\$ -
<i>Container Sub-total</i>	<i>38.2%</i>		\$ 37.12
<b>TOTAL</b>	<b>100.0%</b>	<b>TOTAL</b>	<b>\$ 68.87</b>



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Are we forgetting anything?

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TOTAL	100.0%	TOTAL	\$ 68.87
Marketable commodities	90%	\$ 68.87	\$ 61.98
<b>Residue</b>	<b>10%</b>	<b>\$ (70.00)</b>	<b>\$ (7.00)</b>
Value of incoming ton to MRF			\$ 54.98

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<i>Container Sub-total</i>	<i>38.2%</i>		\$ 37.12
TOTAL	100.0%	TOTAL	\$ 68.87
Marketable commodities	80%	\$ 68.87	\$ 55.09
<b>Residue</b>	<b>20%</b>	<b>\$ (70.00)</b>	<b>\$ (14.00)</b>
Value of incoming ton to MRF			\$ 41.09

## Mini Poll

### Survey says...

- Value of commingled ton: \$55
- Processing cost: \$70
- Residue rate: 14<sup>0</sup>%

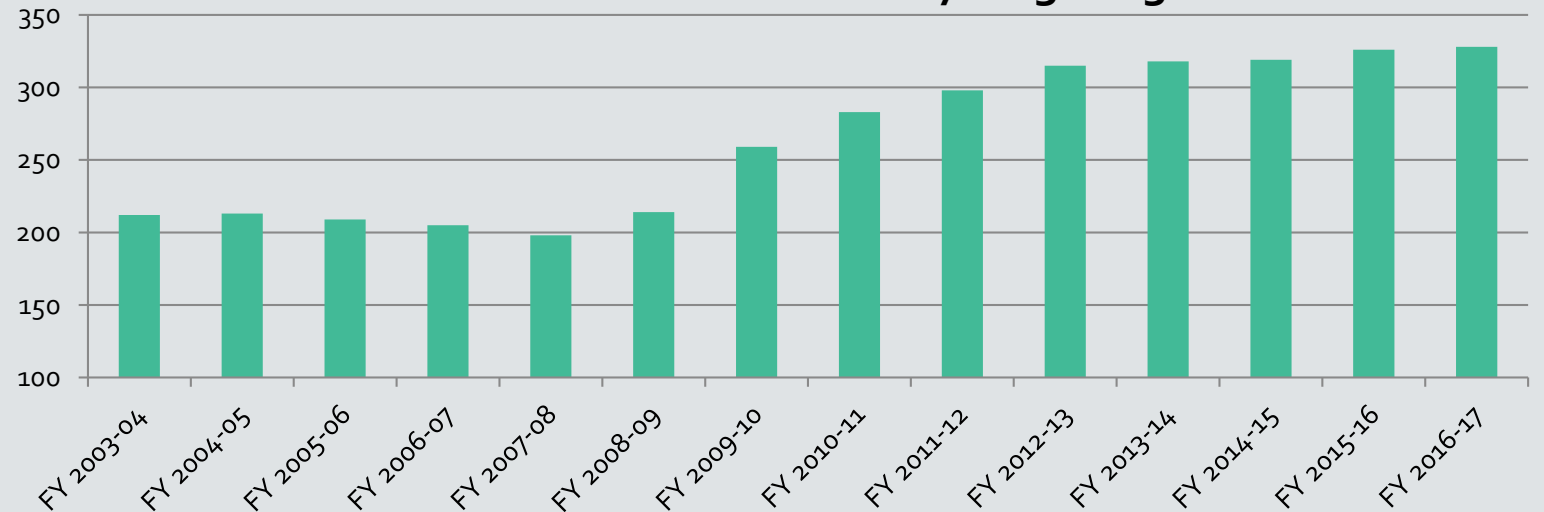
**Bottom line: cost of processing exceeds value of material**



There is good news...

- Residents want to recycle
- NC has strong public curbside infrastructure
- Recyclers are investing in facilities and equipment
- Southeast has domestic markets that rely on residential recycling programs for feedstock
- We can improve quality

**Local Government Curbside Recycling Programs**



## Suitable Grant Projects

- Equipment, infrastructure, or outreach
- Improve quantity of recyclables
- Or improve *quality* of recyclables



# Community Waste Reduction & Recycling Grant

- 20% match
- \$20,000 for standard projects
- \$30,000 for priority projects





# Standard Projects

- Curbside Carts
- Convenience center equipment
- Away-from-home bins
- Food scrap compost
- School recycling
- Multi-family recycling
- HHW collection and management





# Priority Projects

- Contamination reduction
- Hub-and-Spoke model



# Technical Assistance

- Market connections
- Operational assistance
- Contract administration

