

# Industrial Recycling Markets

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# Recycling and Materials Management

- Manage State's recycling grant programs – financial assistance to recycling businesses and local governments
- Coordinate outreach efforts to build public commitment to recycling and provide support to local recycling educational efforts



# RECYCLING MARKETS: THE GOOD NEWS

Statewide focus on contamination education.

Southeast has strong and growing domestic markets.

Recyclers and MRFs are investing in facilities and equipment.

Grants have been made available

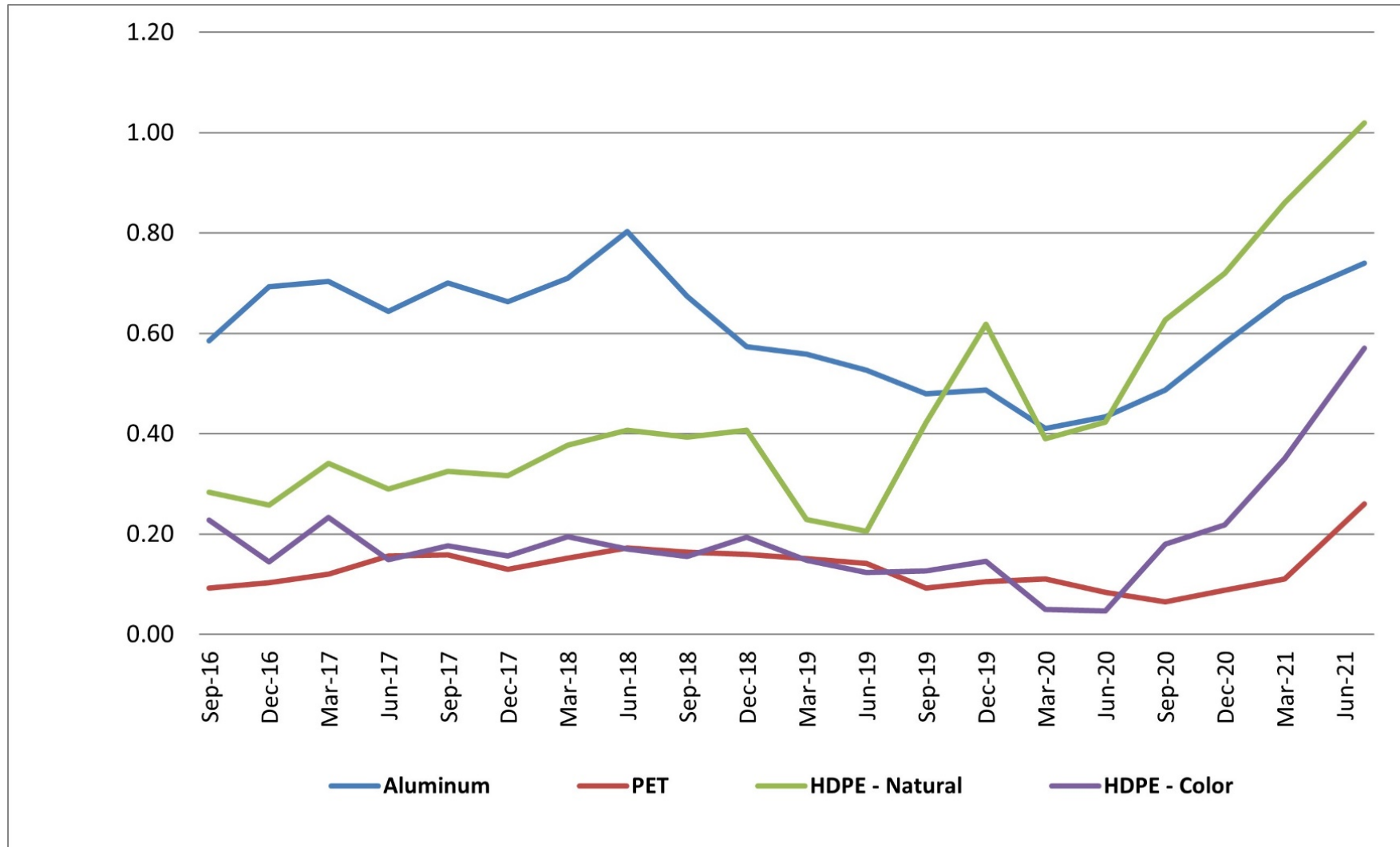
New fiber processing will be online soon.

New plastics processing will be online soon.

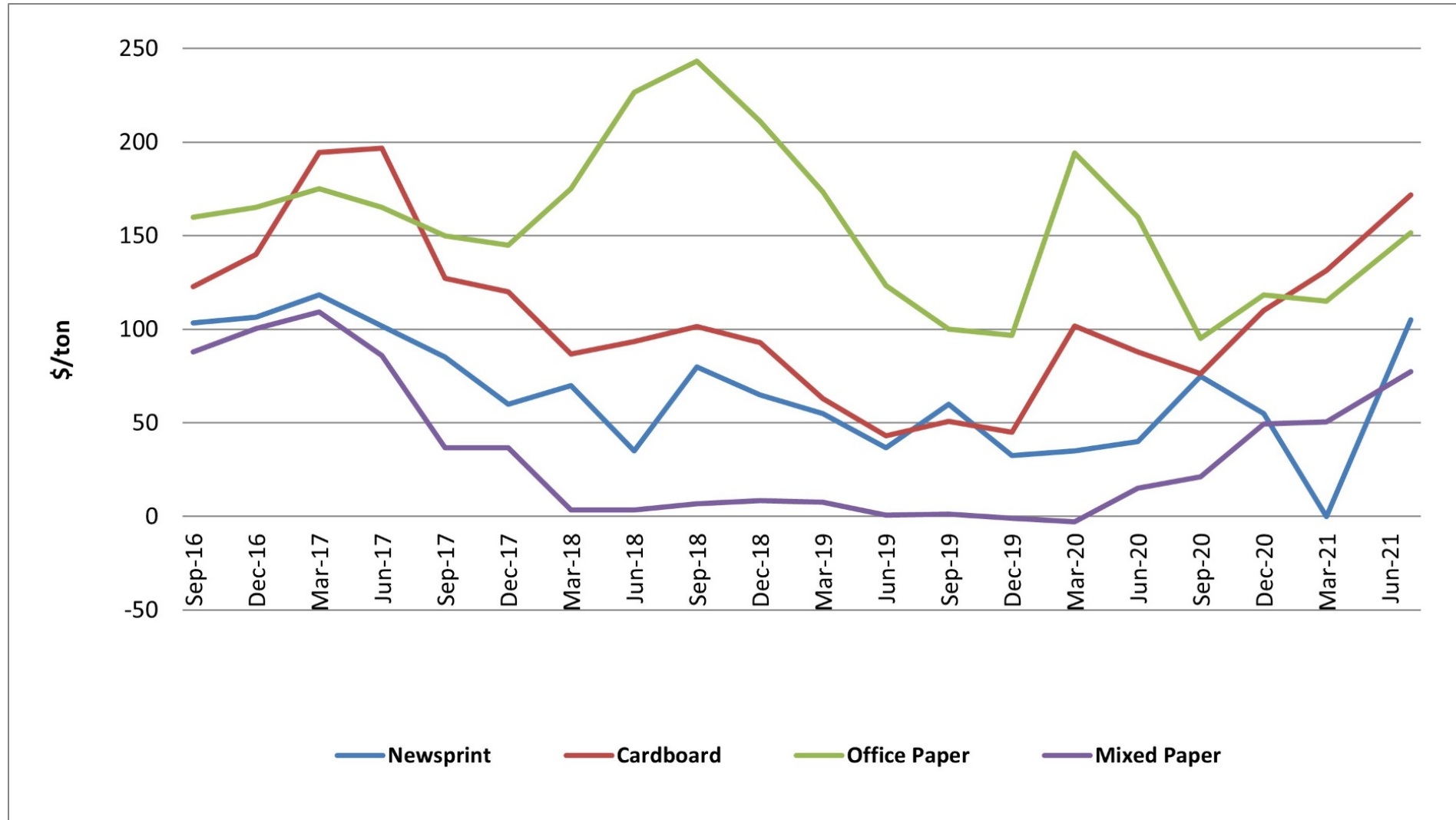
Demand will increase, pricing will improve.

Advances in tech will provide more recycling opportunities.

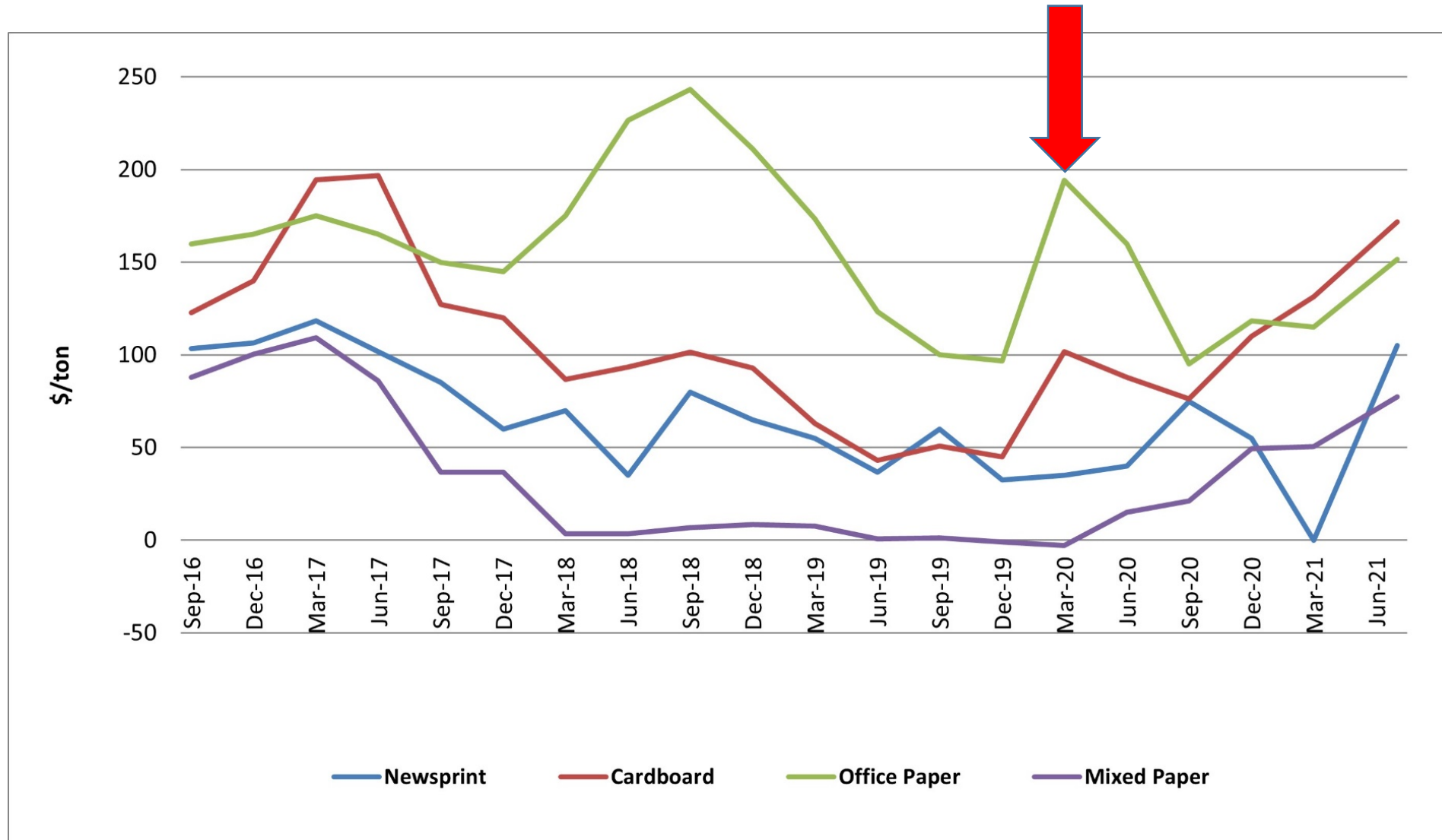
# Five Year Pricing Trend for Recyclable Container Commodities



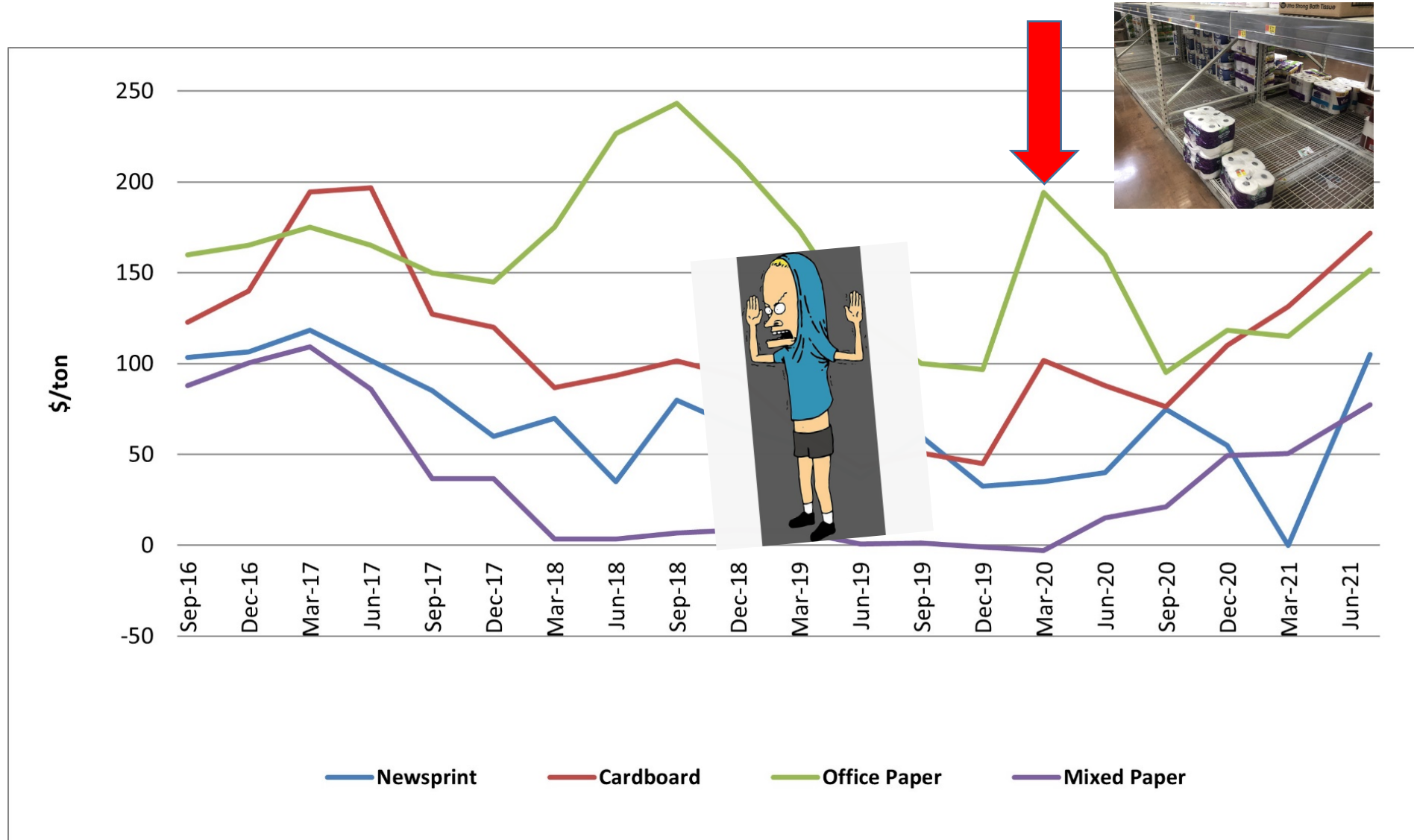
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## CHINA WASTE IMPORT BAN



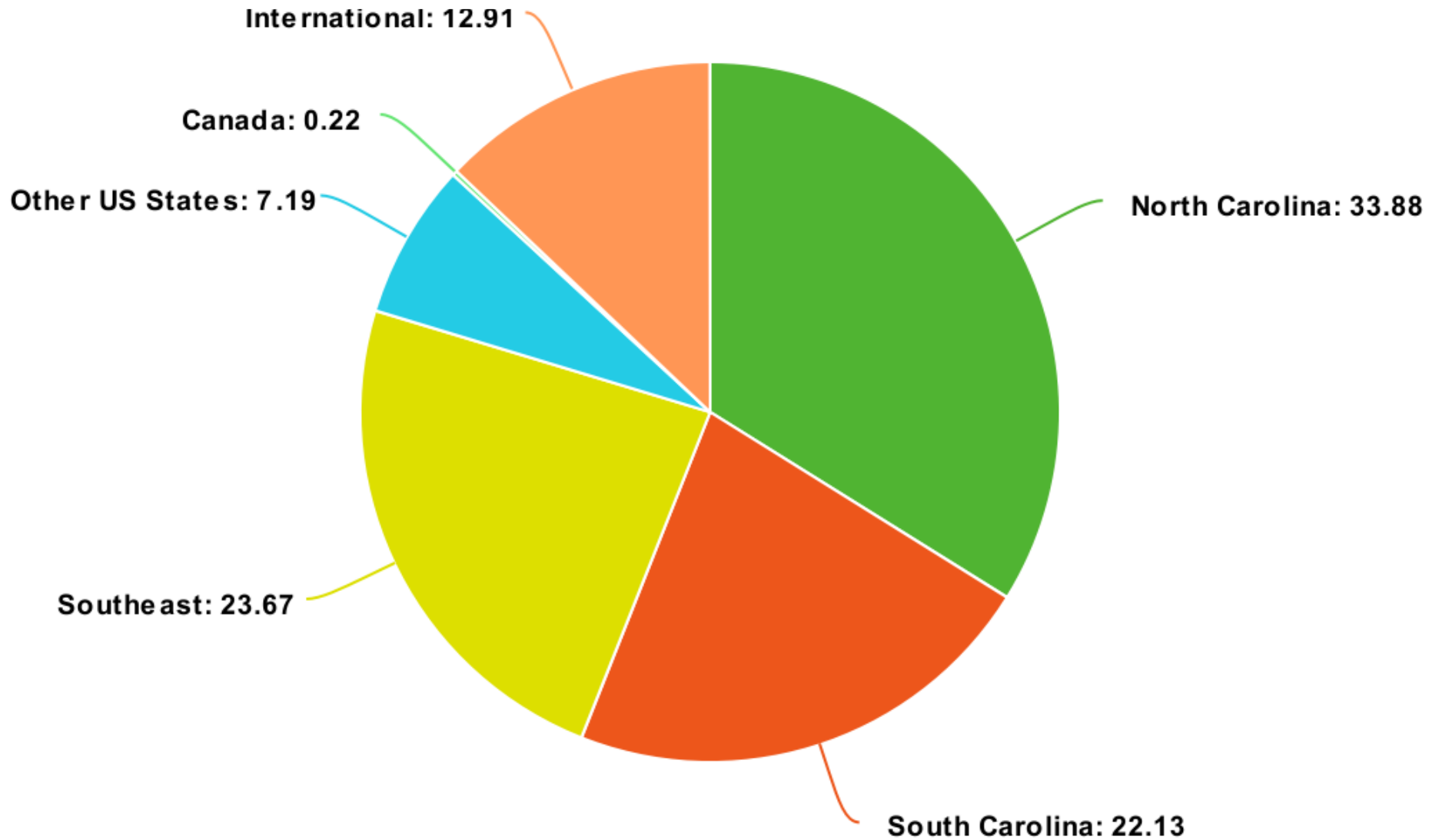
## China



- 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
- China's goal to ban all fiber imports by 2021



# Where Does My Recycling Go?



# NC Recycling Infrastructure



# Market Challenges

**Your problem recyclables are most likely not a high value material**

- Markets fluctuate
- Your problem material is not worth what it may have been in the past
- It's a “buyers market”
- China (less of an issue than before – new normal)
- Cost avoidance
- Best case scenario is a cost neutral solution
- You will likely have to pay to have material recycled

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# Market Challenges

## **You will likely need more than one recycling vendor**

- Truckload quantities
- Storage
- Aim for mixed loads

## **Communication and Time Challenges**

- Recycling may not be your only job
- Vendors may have a million questions or,
- Vendors can be unresponsive

# What Do Your Recycling Vendors Need You To Know

- What item do you have?
- How much do you have?
- How frequently do you have it?
- How is it prepared?
- Is the item free from contamination?

# RECYCLING MATERIAL INFORMATION SHEET

## Recycling Material Information Worksheet

Instructions: Fill out one sheet per item for each vendor.

### MATERIAL INFORMATION

Material Type \_\_\_\_\_

Item Description \_\_\_\_\_

Location of Generation \_\_\_\_\_

Current Disposal Method      Landfill       Recycle       WTE

Current Disposal /Recycling Company \_\_\_\_\_

Frequency of Accumulation      Ongoing       Seasonal       One-Time

Estimated Amount (per month/per season) \_\_\_\_\_

Current Storage Method \_\_\_\_\_

Can Material Be Baled or Boxed      Yes       No

Level of Risk \_\_\_\_\_

Regulatory Impact \_\_\_\_\_

Additional Info \_\_\_\_\_

Include Pictures Below \_\_\_\_\_

# What Does Your Recycling Vendor Need You To Know

- May need more item separation than before
  - Example: Plastics that used to be sold in a mixed bale now need to be separated in order to be marketable
- Less room for sorting errors
- Zero tolerance for contamination
- Need more education and enforcement



# What Does the Main Office Need To Know

**Recycling is not free**

**Recycling should not be counted on as  
revenue**

**Recycling is a utility like water, power,  
internet**

## CONSOLIDATION

Brewery Waste Consolidation

9 breweries – 4 county region

Consolidate hard to recycle items in 1 place

**Quantity creates markets for  
hard to recycle items**

## National Policies and Trends

More domestic recycling capacity

Extended Producer Responsibility

Brand commitments on recycled content



# Emerging Technologies

Chemical Recycling

Pyrolysis

Robotics



To attract new recycling businesses, we need to have accurate data on the available plastics for recycling. Take the survey linked below to provide estimates on how many pounds of plastics and other recyclables your company generates:

<https://www.surveymonkey.com/r/FBSWCNC>

Questions?

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