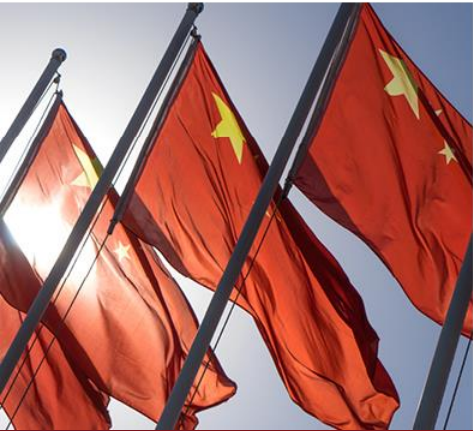
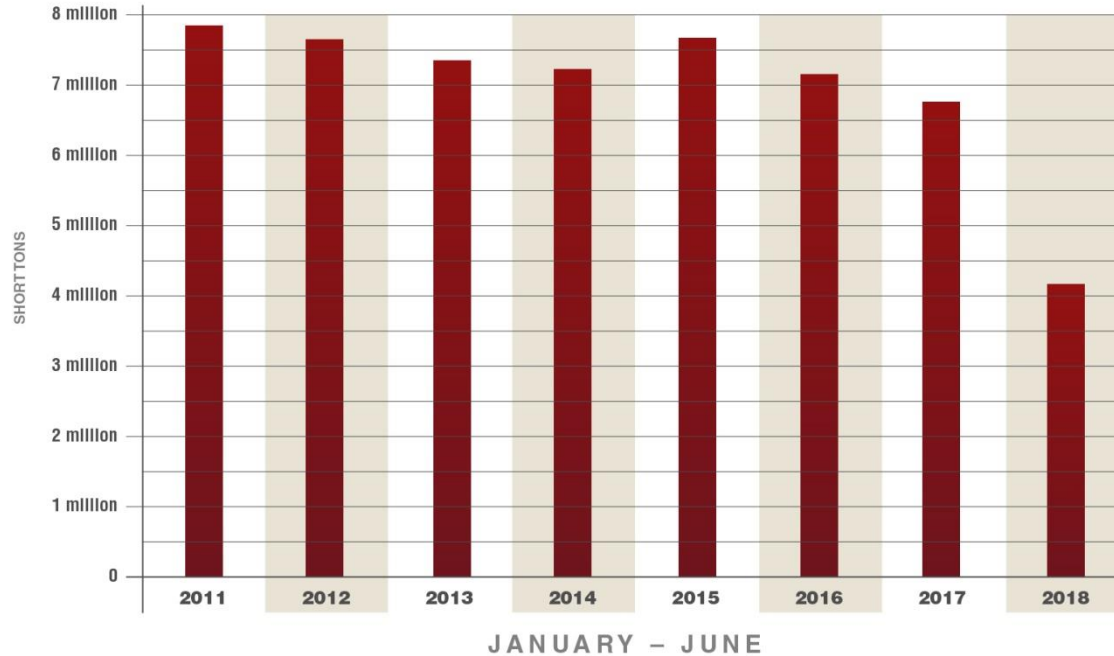


The Effect of Global Recycling Market Changes on Missouri's Recycling Efforts

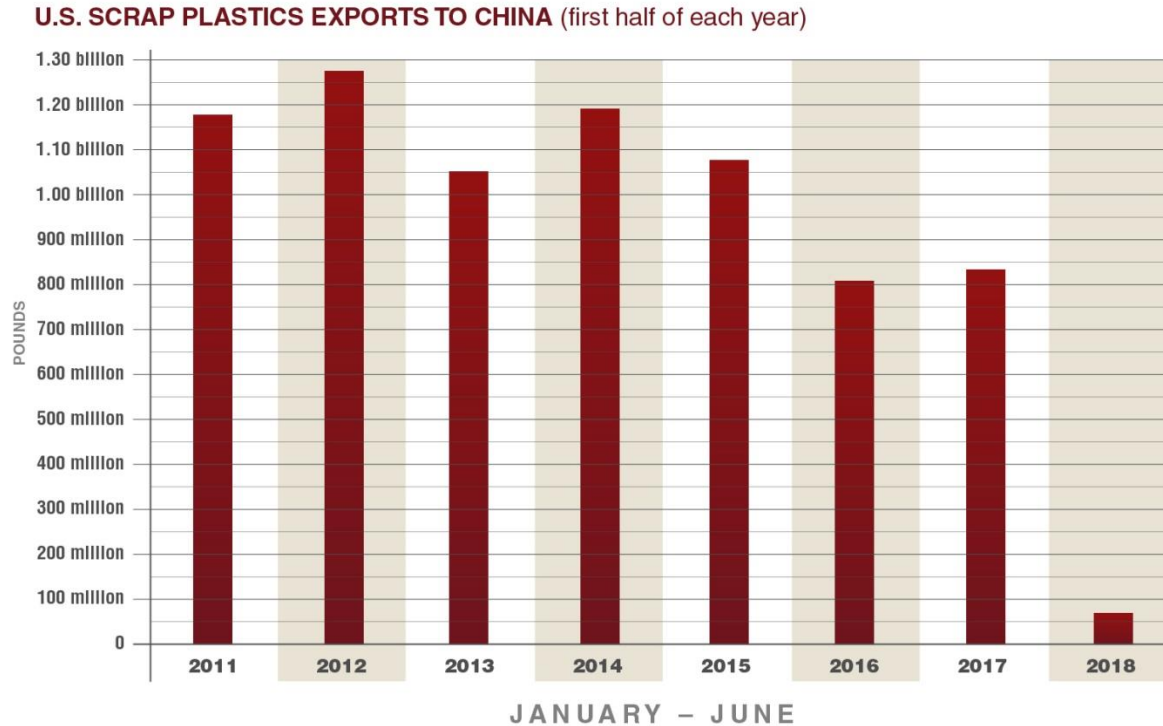


The Fallout

U.S. SCRAP PAPER EXPORTS TO CHINA (first half of each year)



The Fallout



The Fallout

In first of half of 2018, value of U.S. scrap sent to China was \$2.2 billion – down **24 percent** year-over-year.

The Fallout

U.S. paper companies take advantage

- “Domestic mills ... realize export’s down so they can control the price better, and they’re driving the price down.”

-Advanced Disposal CEO Richard Burke

The Fallout

- Recyclables head to disposal
- Some local programs alter lists of what they accept

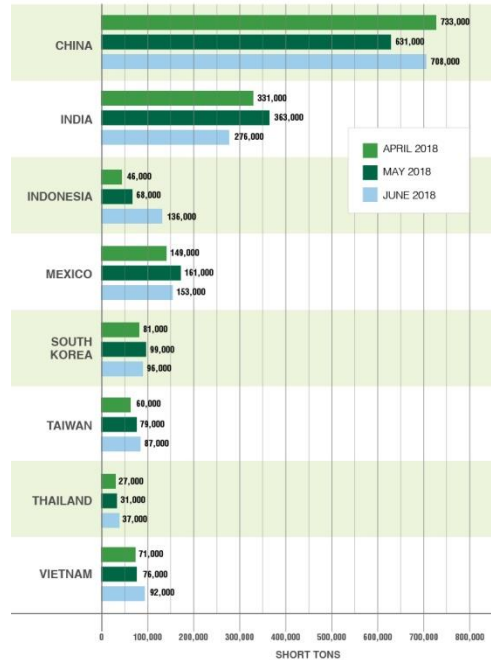


The Fallout

Exporters shift to SE Asia:

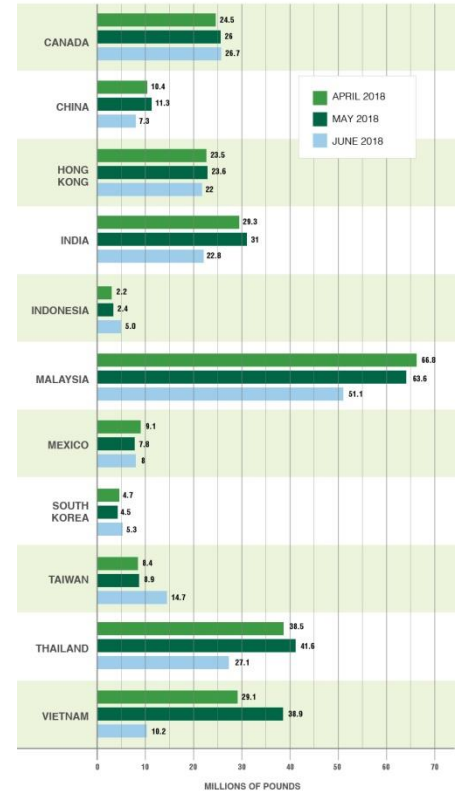
- Thailand
- Vietnam
- Indonesia
- Malaysia
- Others?

U.S. EXPORTS OF RECOVERED PAPER
BY DESTINATION COUNTRY, Second Quarter 2018



© Resource Recycling, Inc.

U.S. EXPORTS OF RECOVERED PLASTIC
BY DESTINATION COUNTRY, Second Quarter 2018



© Resource Recycling, Inc.

The Fallout



Southeast Asian countries enact regulations of their own

- Thailand to ban scrap plastic / e-scrap imports within two years
- Taiwan announces plastic and paper restrictions
- Vietnam cuts import permits



Lead Up to Ban – China Takes Action – The Fallout – **The Future**

The Future

A push for domestic solutions

- NRC, NERC market development summits
- Lawmakers getting involved (Blumenauer, Wyden in Oregon; Cuomo in New York)
- More recycled-content mandates?



The Future



Chinese plastics processors look to set up in U.S.

- Produce flake/pellet to send overseas
- Partnerships with Chinese equipment makers
- Help needed in e-plastics sector
- Strategy threatened by tariff war

The Future

Investments by paper mills

- Green Bay Packaging (Wisc.)
- Cascades (Virginia)
- Pressure on West Rock (Oregon)



The Future

“China’s got a dynamic economy. It’s going to need fiber in the long term.”

-Mark Sutton, CEO of International Paper

The Future



Ongoing pressure at the curb

In first half of 2018, hauler recycling revenues fall

- WM down 17 percent
- Republic down 5 percent
- Waste Connections down 47 percent
- Casella down 40 percent
- Advanced Disposal down 44 percent

The Future

“We believe these market conditions will serve as the catalyst needed to transform recycling into a durable, sustainable business model, a model in which companies can continue to invest for the benefit of their communities without undue risk.”

-Donald Slager, Republic CEO, on July 2018 earnings call

The Future

We can expect:

- Tougher contamination limits
- Program cutbacks and/or higher service fees
- More skepticism from public
- Greater brand owner involvement
- Ongoing market development momentum



Stay in contact

We'd love to learn about your market experience:

Jerry Powell

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