

# Trends Affecting Nebraska's Recycling Systems

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# What we'll look at today

These are interesting times, with sizable trends affecting how we will manage wastes in the future. We'll look at where we're at, then I'll lay out industry trends as well as try to predict how policy issues may change in the coming months.

**A quick summary of where we're at**

The background of the slide features a light green gradient with a faint, stylized city skyline at the bottom. A thick, curved green line sweeps across the lower portion of the image, framing the logo. The logo itself consists of the word "RESOURCE" in a bold, black, sans-serif font, with a circular arrow icon integrated into the letter "O". Below "RESOURCE", the word "RECYCLING" is written in a smaller, green, spaced-out, sans-serif font.

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# A quick summary of where we're at

Seismic change is underway

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But calm down

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# A quick summary of where we're at

Seismic change is underway

But calm down

We remain very, very successful

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Recycling systems are flexible and resilient

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# A quick summary of where we're at

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Recycling systems are flexible and resilient

But landfilling remains too cheap

# A quick summary of where we're at

Nebraska's low disposal cost is a barrier to recycling:

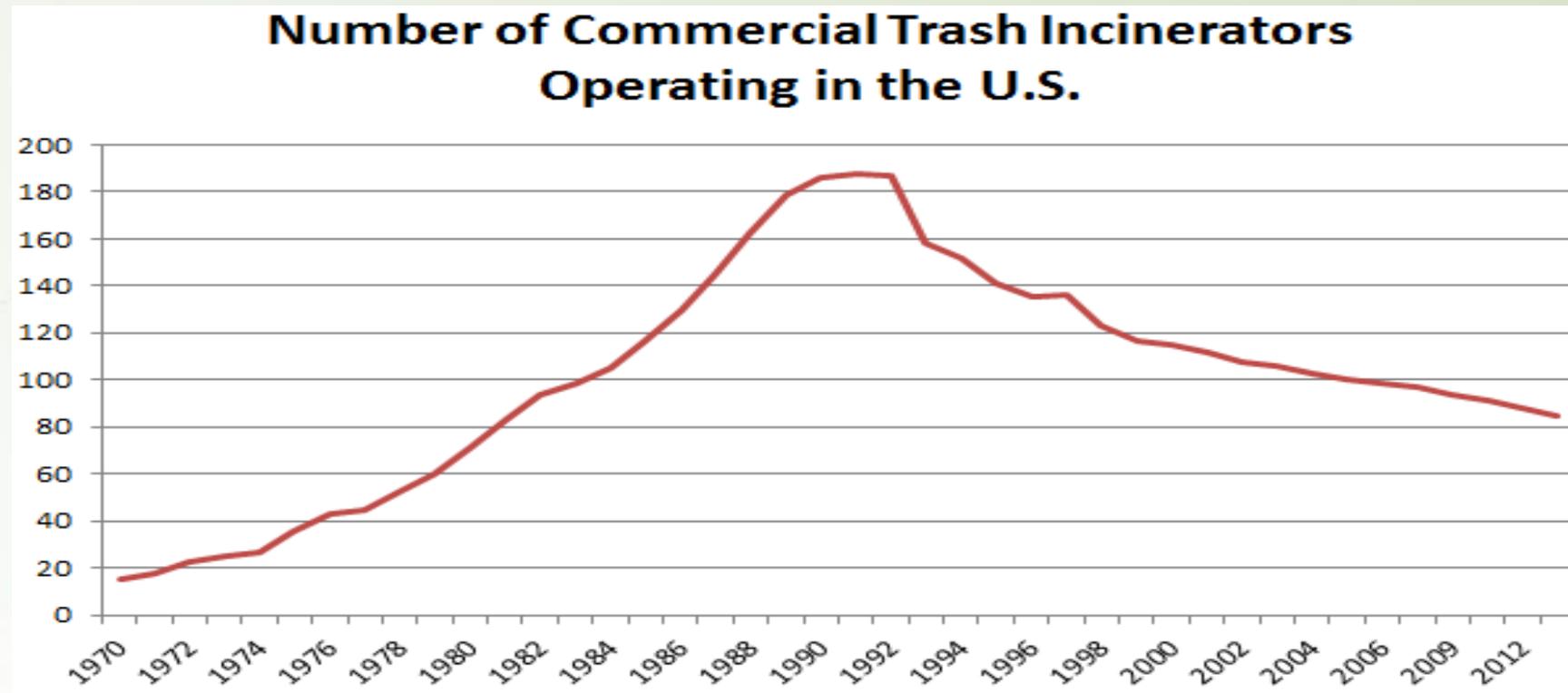
- Nebraska \$40 per ton
- U.S. average \$55 per ton
- Washington Twice as high as Neb.
- Massachusetts 2.3 times higher than Neb.

# 1: Energy will remain cheap

Nearly every energy analyst says shale oil and natural gas will remain cheap for a long time. This will have a profound continuing effect on solid waste management.

First, waste-to-energy as a management option will be little used, and the amount of waste which is burned will continue to decline.

# But incineration is slow to grow



# 1: Energy will remain cheap

Second, cheap energy means cheaper materials. This is especially the case for plastics, and you can expect a long lull in resin pricing in the next few years, as polymer pricing is directly linked to the value of oil and natural gas.

# HDPE milk jug bale prices



# 1: Energy will remain cheap

Third, low-cost energy means a key attribute of recycling – the saving of energy in making new products – will be lessened. It's easier to promote new recycling policies in periods of high energy costs.

## Trend 2: Declining exports

China has reduced its role in the marketplace, and that's bad news for many North American recycling processors. No longer will we see vast amounts of recyclables heading west across the Pacific. This has raised national attention.

# Trend 2: Declining exports

National Sword '17: Recycling just got harder in Oregon, US, thanks to China decision

TOP STORY

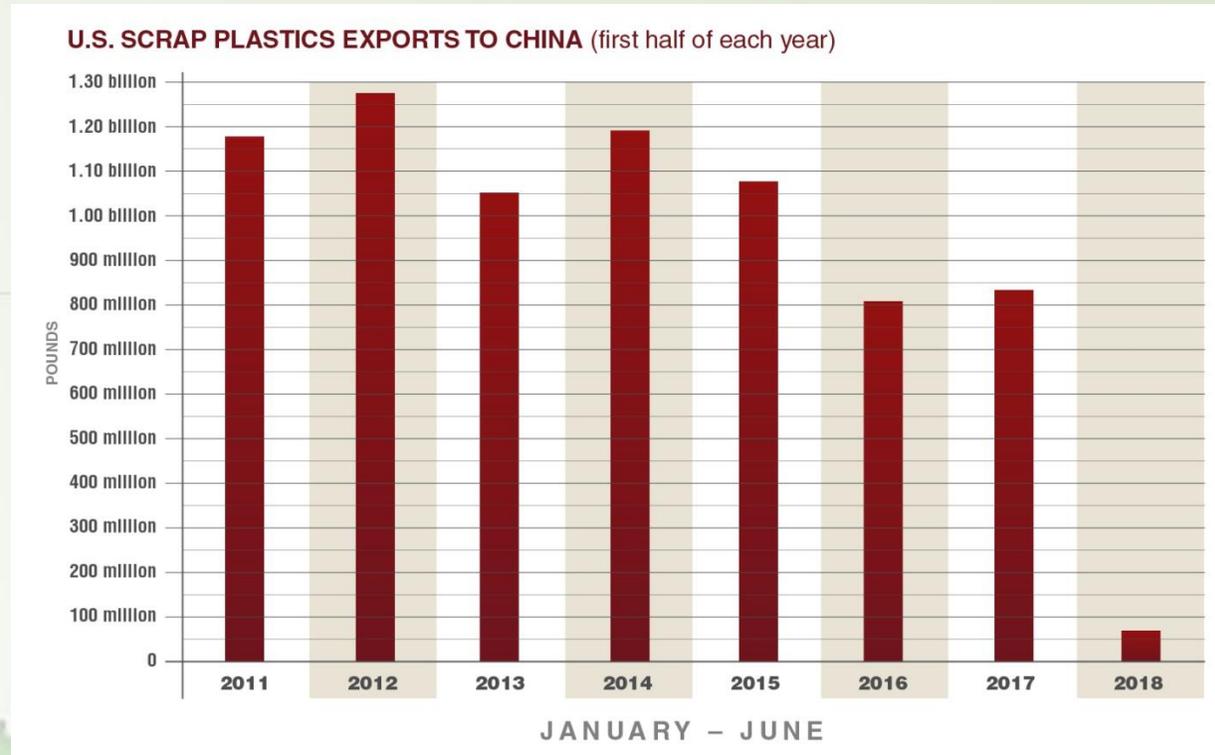
Recycling hits a snag

**Recyclables may hit Chinese wall**

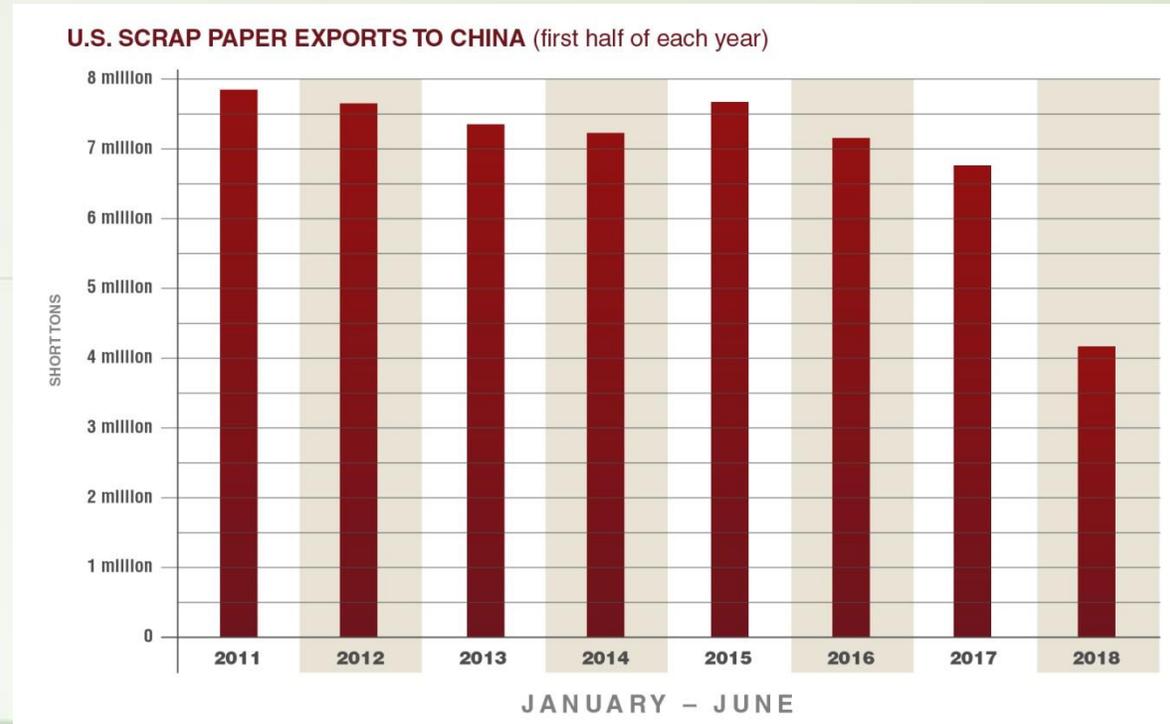
**Recycling Corner: A Dear John Letter from Xi Jinping**

**What comes next after China's scrap ban surprise?**

# Trend 2: Declining exports



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# Trend 2: Declining exports

China may no longer be the world's factory:

- rising wages
- increasing labor actions
- growing environmental concerns
- high literacy
- role of social media

# Trend 2: Declining exports

What's going to happen:

- focus on market development
- focus on material quality
- rising investments here by Chinese recycling firms

# Trend 2: Declining exports

## Investments by paper mills

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



## **Trend 3: Economic changes will affect some recyclables**

The new economy will change recycling markets. The “Amazon effect” on recovered paper markets is receiving extensive attention, and all the news isn’t good.

# Trend 4: The evolving ton

Per capita waste generation is down eight percent since 2000, thus affecting recycling, landfilling and waste incineration. We are seeing:

- less paper
- more plastics (up 25 percent)
- no growth for metals

## Trend 4: The evolving ton



## Trend 4: The evolving ton

And we'll see more efforts to reduce the materials intensity in existing products. For example, between 2000 and 2011, the average weight of a half-liter PET bottle declined 48 percent. And aluminum cans have gone from an original eight per pound to 33 per pound now.

## Trend 4: The evolving ton

As a result of the evolving ton, we're seeing a surge in MRF rebuilds, with old paper screens being replaced and more optical sorters being added.

## **Trend 5: More stewardship programs**

**Extended product stewardship will become the prevailing waste management model in the coming years, except for paper and packaging. However, current EPR initiatives require remodeling if they are to become truly sustainable.**

## Trend 6: Food discards

Look for more and more North American communities to add food discards – both commercial and residential – to organics collection and composting systems. As a result, we'll see more programs picking up trash every other week.

# Trend 7: Continued consolidation

More and more recyclables will be collected and processed by fewer and fewer players. Too, the number of end users will decline but the size of these firms will rise. Mergers and acquisitions will continue.

## **Trend 8: Sustainability actions will continue**

**We will see significant governmental and corporate involvement in sustainability in terms of recycling. Numerous examples exist of effective corporate action (APR's packaging guidelines, the Closed Loop Fund, The Recycling Partnership, etc.). And we have states moving to sustainable materials management.**

## **Trend 9: Washington may help recycling**

**General bipartisan support exists for the passage of a large infrastructure bill to rebuild our roads, airports, piers, etc. As a result, demand will increase for aluminum for railings, steel for bridges, large-diameter plastic pipe for water, etc.**

# Trend 10: Systems are changing

Communities here and elsewhere are making important changes:

- efforts to boost recovery, such as Lincoln's OCC landfill ban
- efforts to reduce contamination
- bans on certain products (bags, straws, etc.)

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# Drop me a line

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