Recycling Outlook: National Policy and Industry Trends

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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 industry trends and well as try to predict how policy issues may change in the coming months. Please note some of these trends are fairly certain, while others are not assuredly to occur exactly as we predict today. I offer these trends in no particular order.

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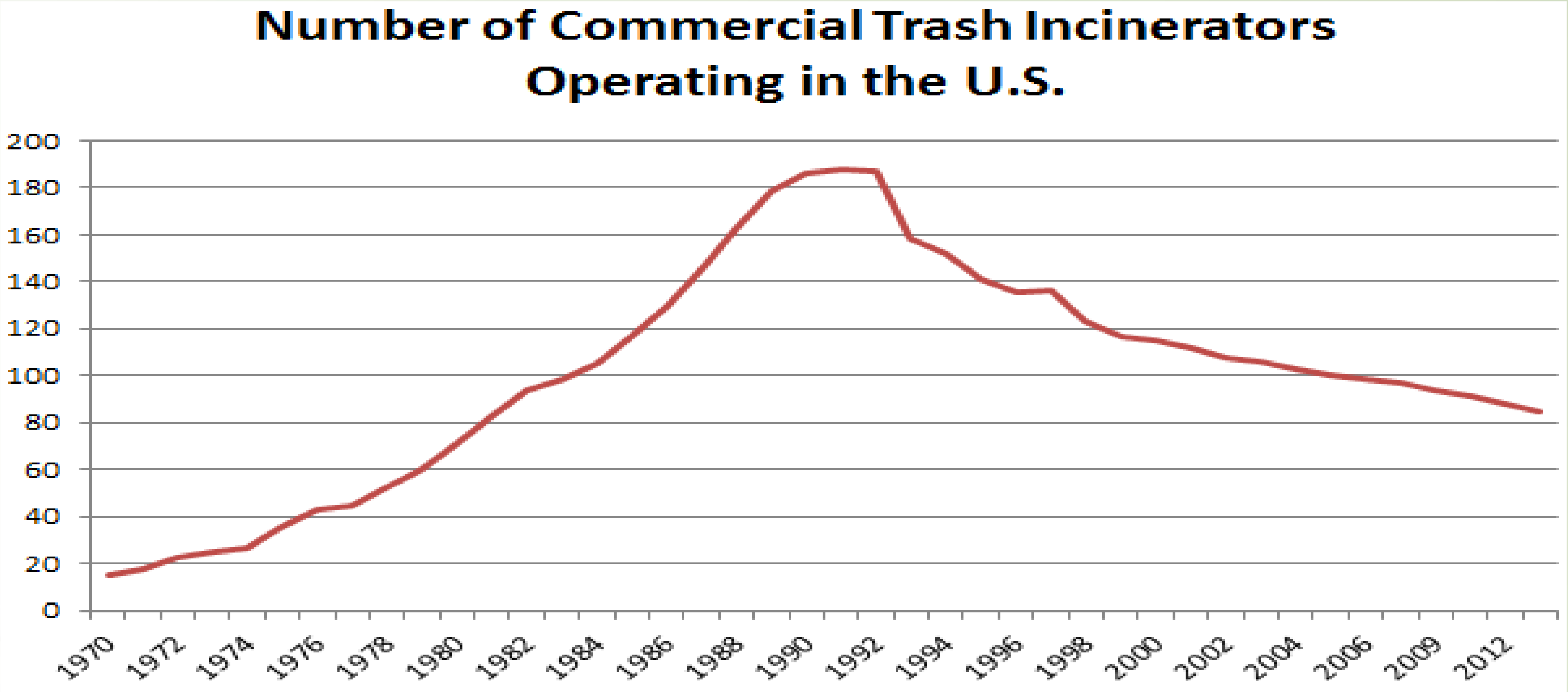
1: Energy will remain cheap

Nearly every energy analyst says shale oil and natural gas will remain cheap for a long time (say at about $50 per barrel). 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. We are already seeing this calming of market prices.

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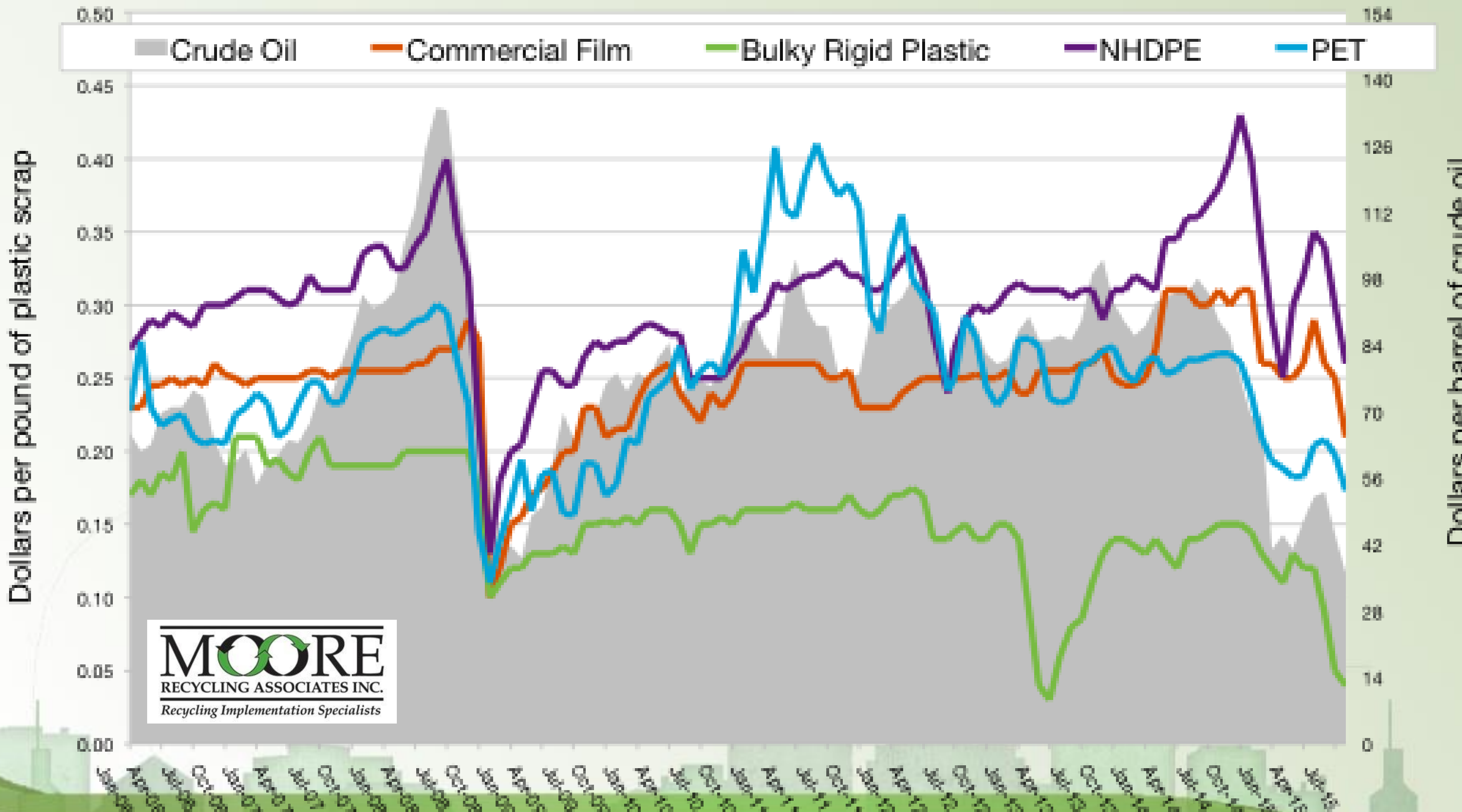
The value of oil versus recovered plastics (2006-2015)



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HDPE milk jug bale prices

PET bale prices

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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.

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

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Trend 2: Declining exports

More and more collected materials will remain onshore and we will need more new U.S. capacity, such as the Pratt recycled paperboard mill.

2016 recovered paper market

	Million Tons	Versus 2015	2016 Marketplace
Domestic	30.8	-1.2%	59%
Exports	21.8	+1.3%	41%
Total	52.6	+1.0%	

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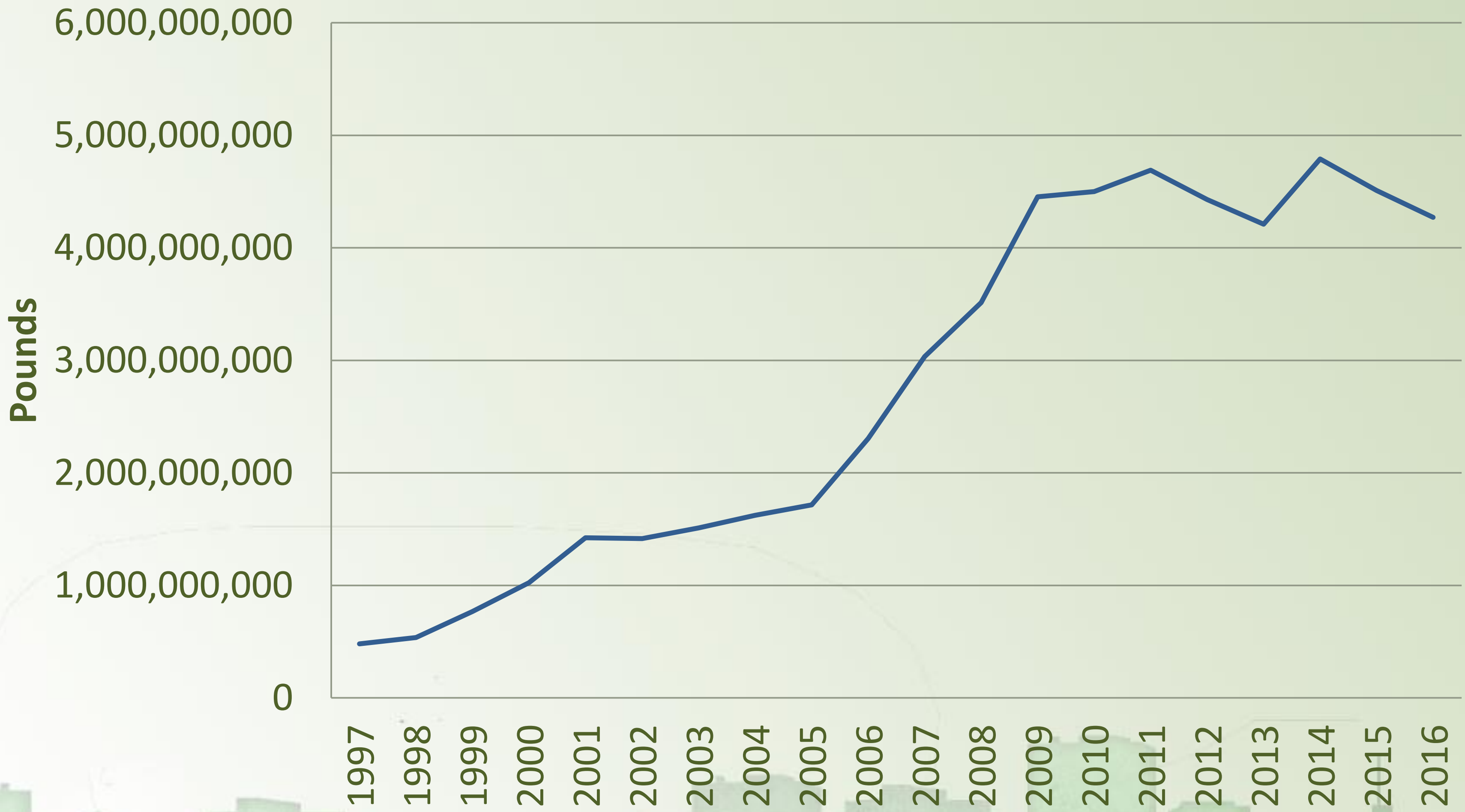
Plastics exports



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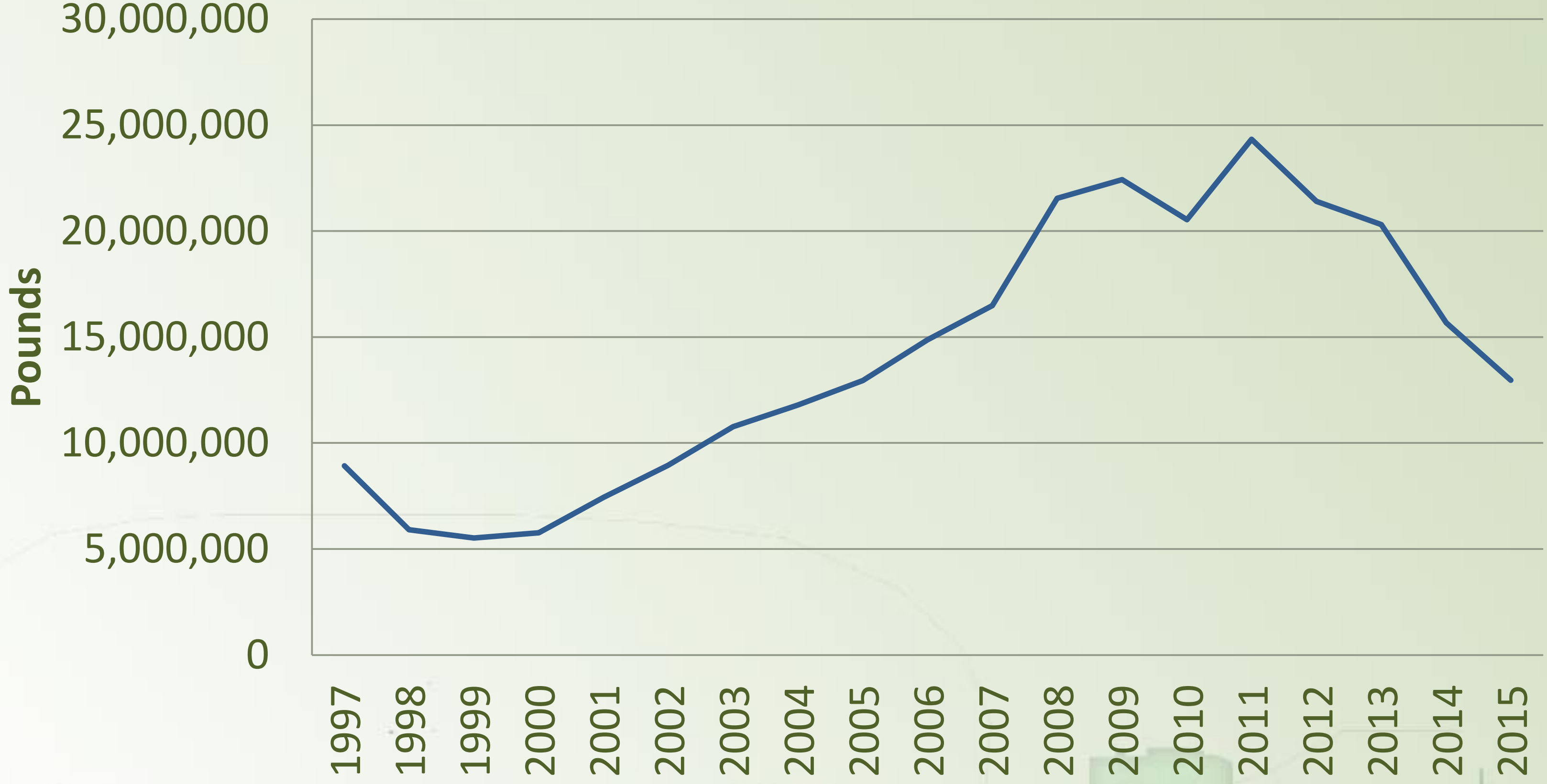
Ferrous scrap exports



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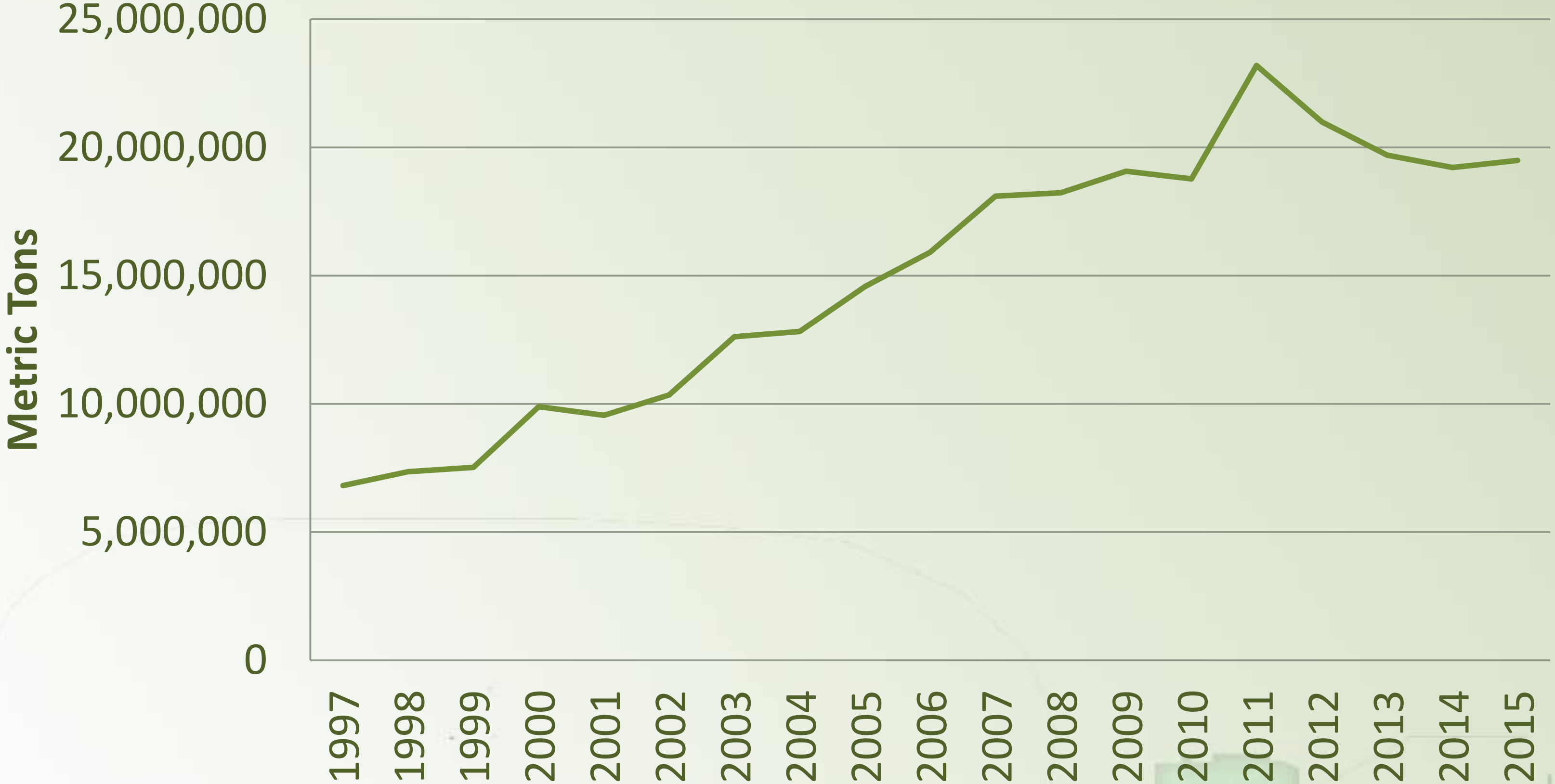
Recovered paper exports



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Trend 2: Declining exports?

We're again seeing import restrictions by China, because they no longer want to be the world's dumping ground. Recycling practices of the past no longer suffice. However, it is a bit too early to be able to gauge the full impact of the current National Sword import restriction initiative.

Trend 3: Economic changes will affect some recyclables

Global economic growth will be the primary determinant, especially in Asia.

A strong dollar will continue to be an impediment to U.S. recycling market prices.

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

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Trend 4: The evolving ton

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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.

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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.

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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 no longer need significant governmental 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.).

Trend 8: Sustainability actions will continue

However, while more and more brand owners will only put out new packaging which is technically recyclable, they are leaning on local programs to handle all this new packaging. Are you ready to recycle coffee pods and Ziplock bags?

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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: Washington may hurt recycling

Many in the recycling industry have raised concerns about the new administration. These issues include:

-- decline in anaerobic digestion projects if tax credits for renewable energy are eliminated.

-- slashing of EPA's recycling assistance program.

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Trend 10: Washington may hurt recycling

-- gutting of EPA's office of research and development

-- approval of new Department of the Interior regulations which will favor mining and lumber harvesting

Campaign rhetoric versus political reality

History shows no president ever gets everything requested. A key reason we can expect some national calmness is that industry is invested in the current system. A small example in waste management is the Subtitle D RCRA landfill regulations. If they were repealed, nothing would change.

Campaign rhetoric versus political reality

A larger example is the responses by industry and many state and local governments to the abandonment of our participation in the Paris climate accord. Over half of *Fortune* 500 firms have pledged to cut emissions. Nothing will change for these firms, and for government agencies. In fact, more will likely be done. Here is a major example:

Project Gigaton™

Walmart Sustainability Milestone Summit

Campaign rhetoric versus political reality

Some of the current momentum cannot be stopped. Already we have twice as many solar-energy jobs as those in coal. Many economists say the coal industry's decline will only continue, no matter what Washington does.

To many of us, we see this as a new president, same economy.

Political prognosis

And remember, there is little consensus on many parts of Trump's platform. Many in industry love NAFTA, with trade totaling $525 billion annually. Also, a complete revision of the tax code will generate immense opposition from some companies and communities. The current difficulties in passing the healthcare bill will be replicated over and over.

Political prognosis

The dysfunction in Washington will result in added pressure for local and state governments to be the leaders in recycling. We’ve always said “all recycling is local,” and in the coming years, this will be even more true as we continue to move ahead.

Political prognosis

And a good example is to the north in Michigan, where Republican Governor Rick Snyder has developed a statewide recycling plan, and attended the state's recycling conference last month.

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Drop me a line

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