

US EPA ARCHIVE DOCUMENT

Packaging Recycling Markets

Jerry Powell

Resource Recycling

Portland, Oregon

www.resource-recycling.com

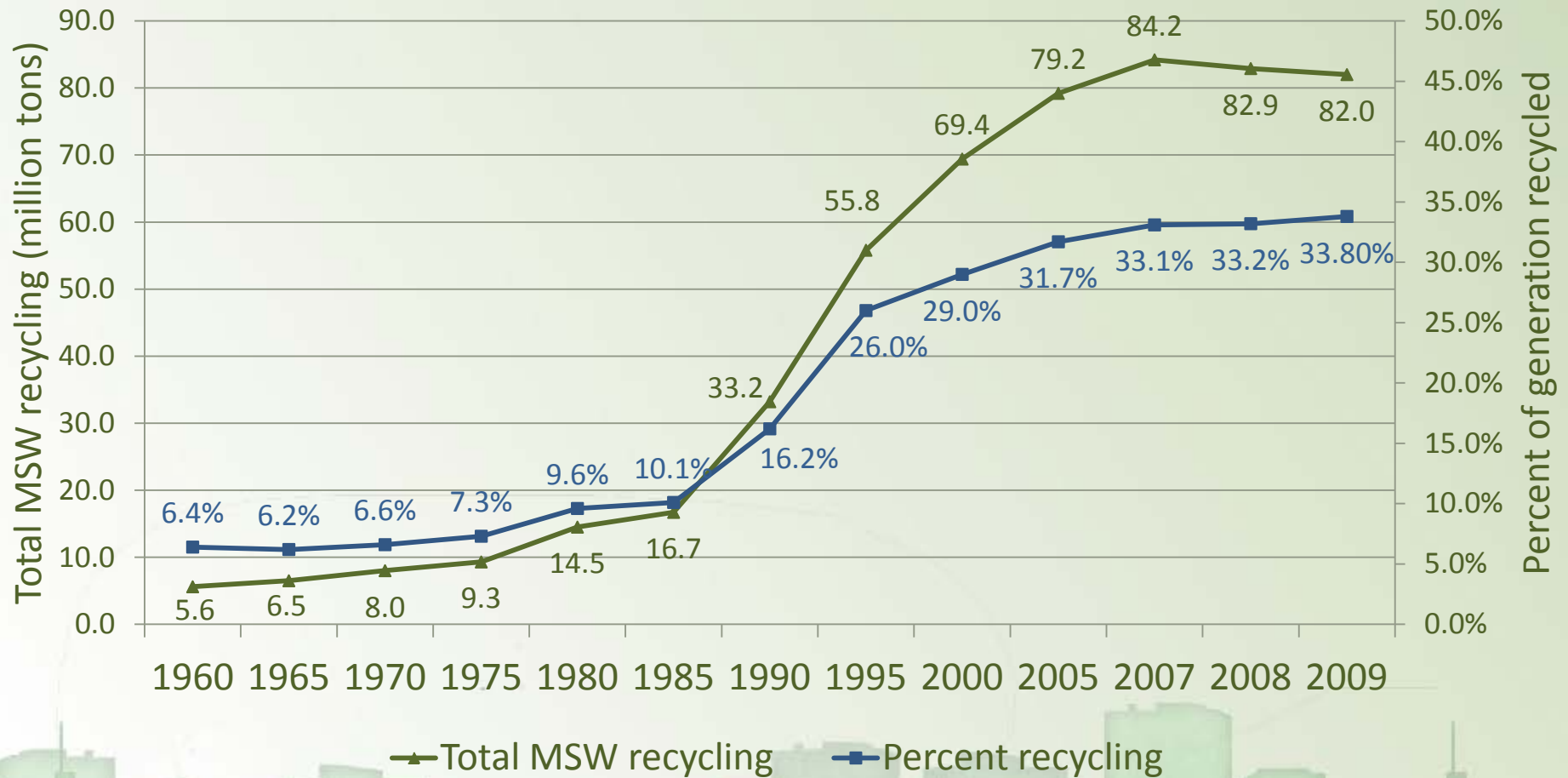
What we'll look at today

- A review of market conditions for plastics, glass and metal packaging. This will include transport packaging (corrugated boxes, etc.). Because of the amount and quality of the data, the analysis of plastics markets will receive the most attention.
- Answers to several key questions.

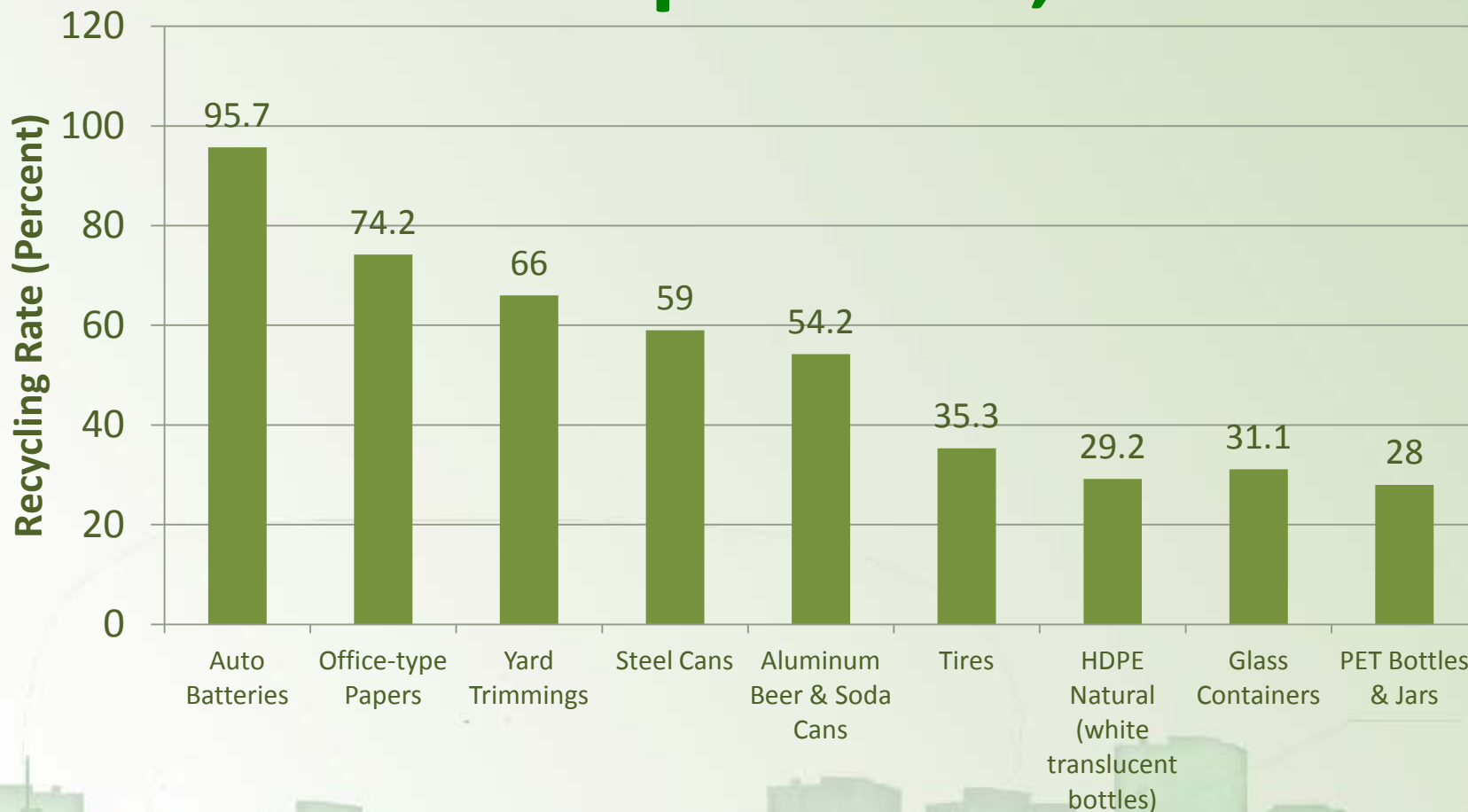
Recycling's progress

After two decades of important growth, packaging recycling's rate of increase has declined. We are capturing the easiest tons, thus making growth harder and more expensive than in the past.

MSW recycling volumes and rate



Recycling rates for selected products, 2009



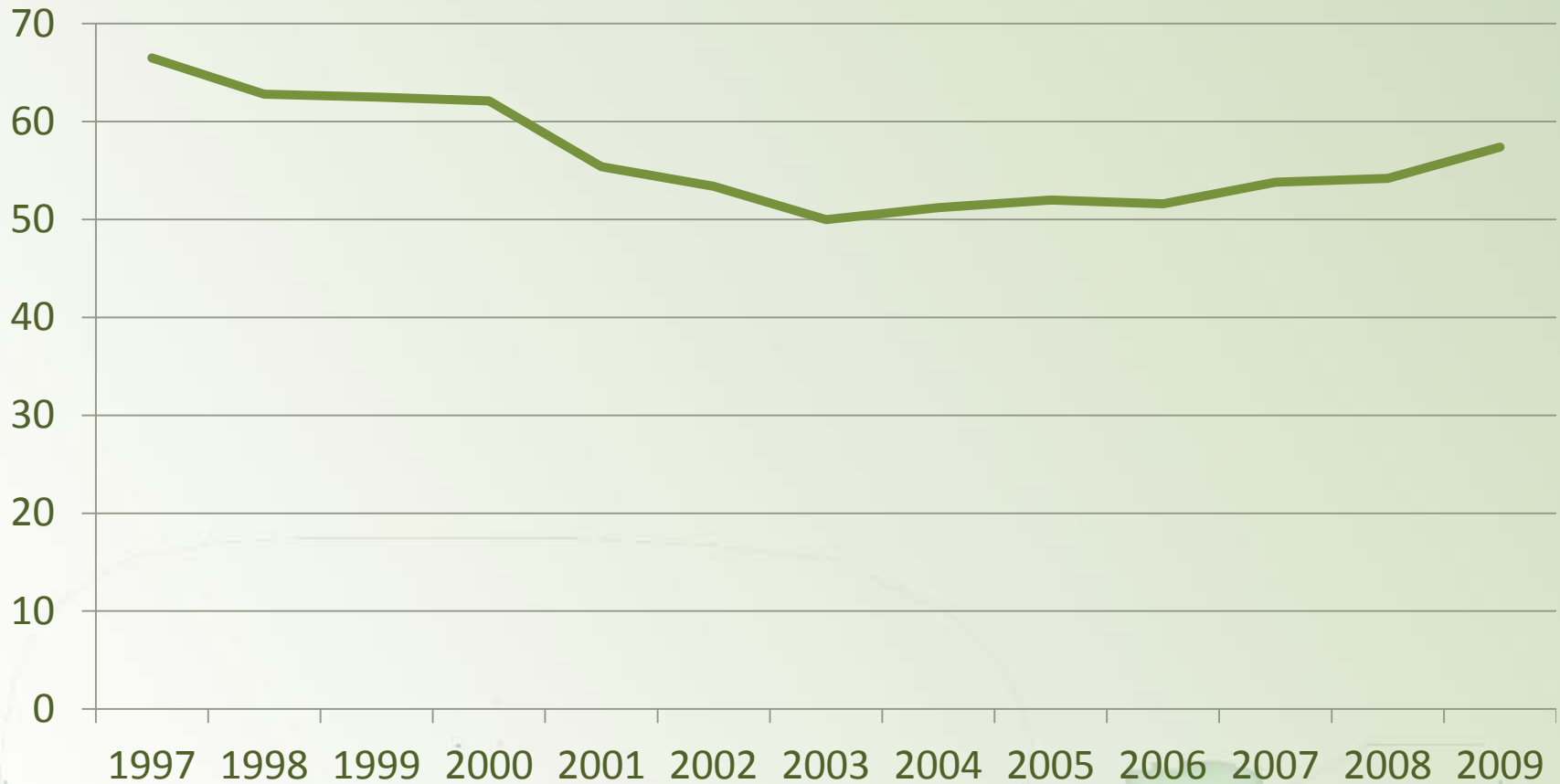
Recycling's progress

Yes, more than 10,000 communities, where 63 percent of Americans live, now collect recyclables curbside. Yes, 193 million Americans can set out recyclables weekly.

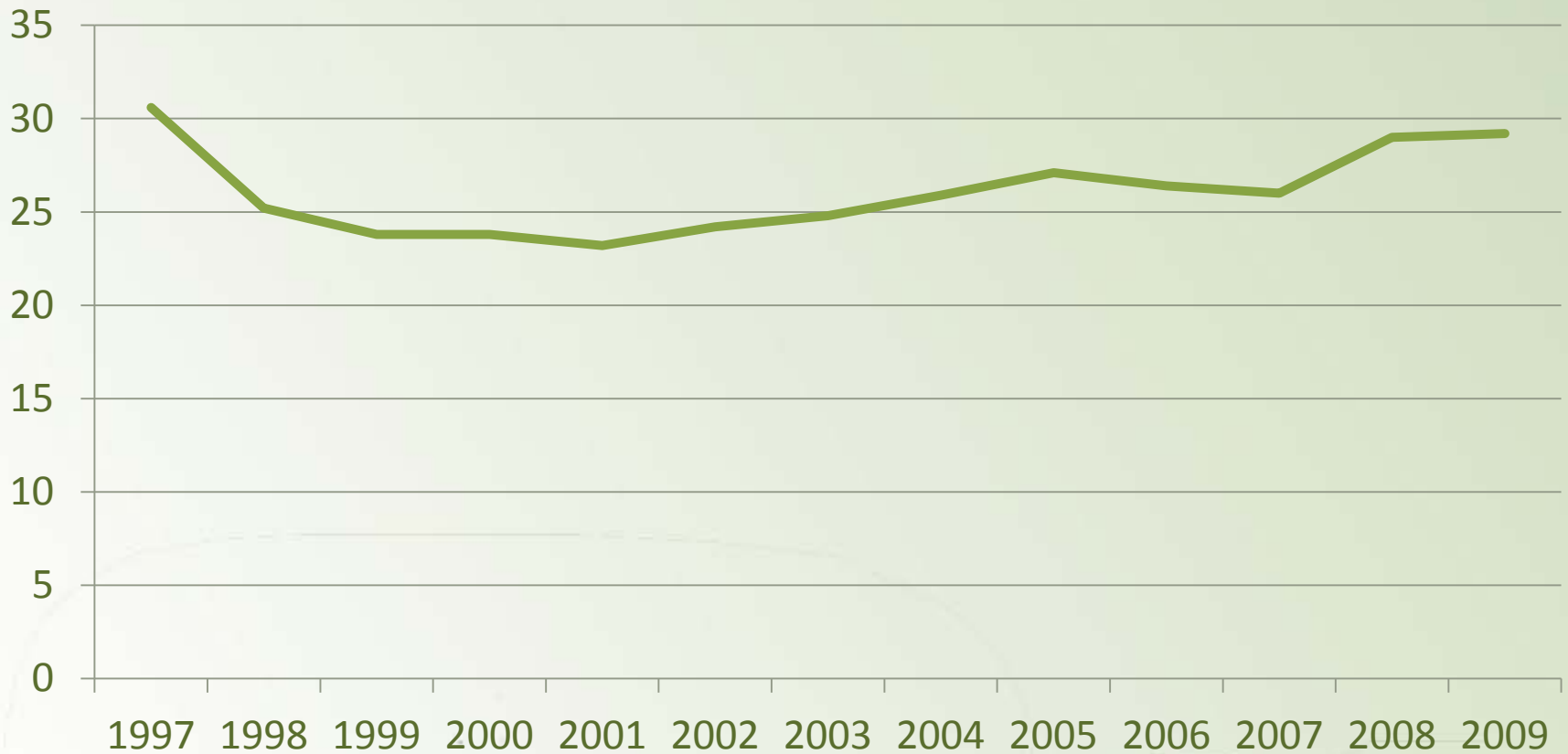
But our progress has slowed.

Packaging recycling rates have flattened out.

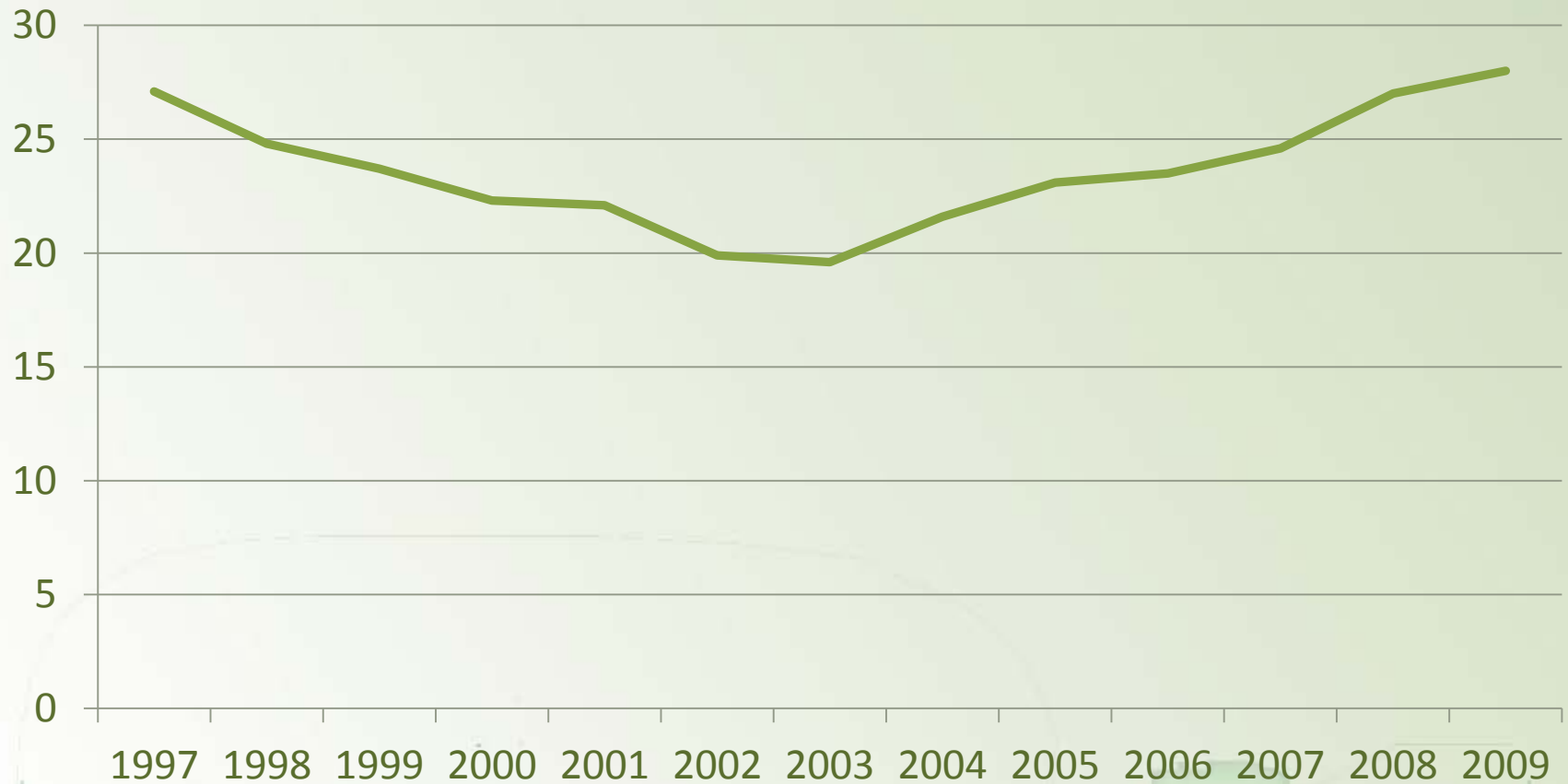
UBC recycling rate



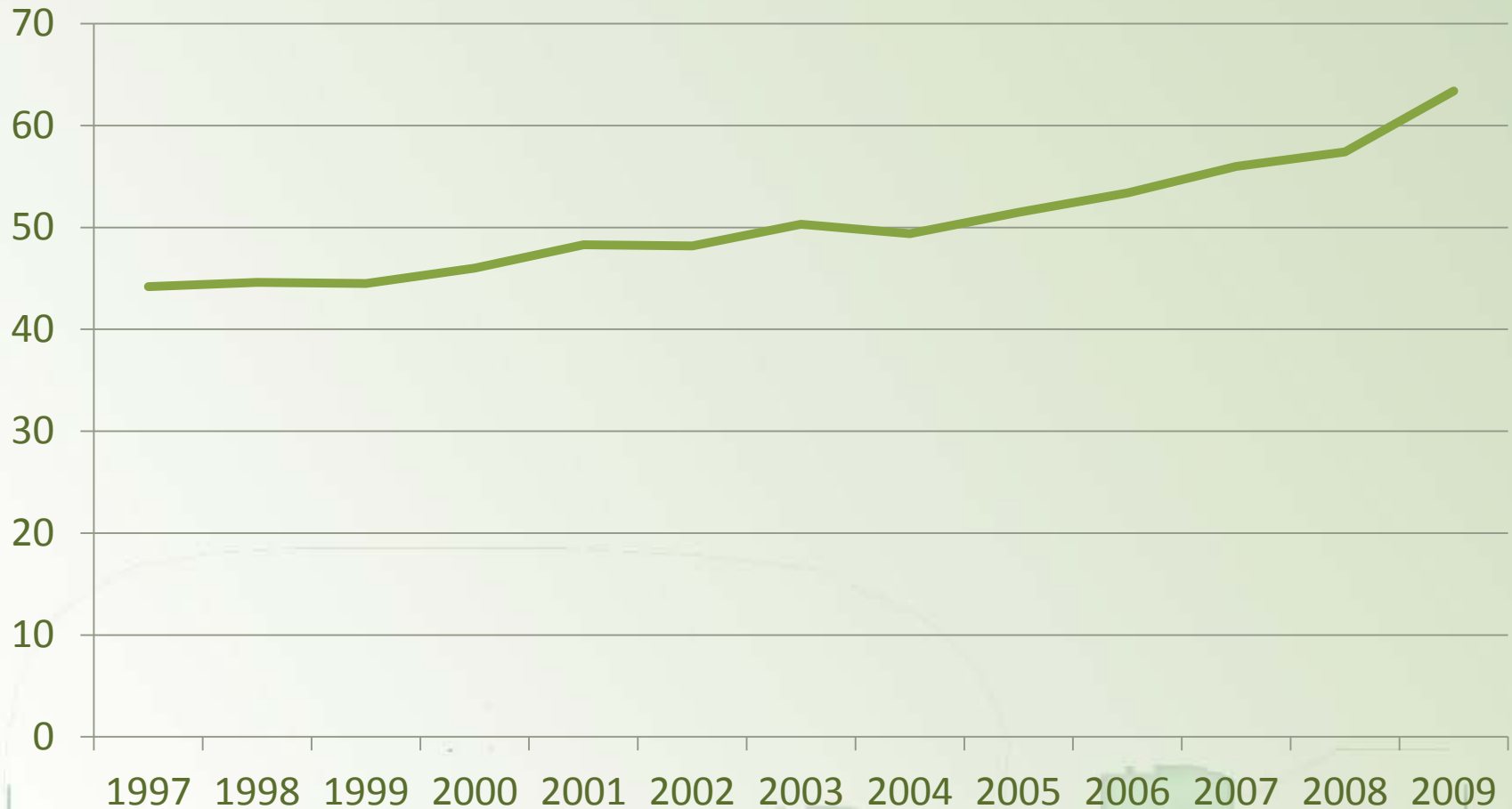
HDPE recycling rate



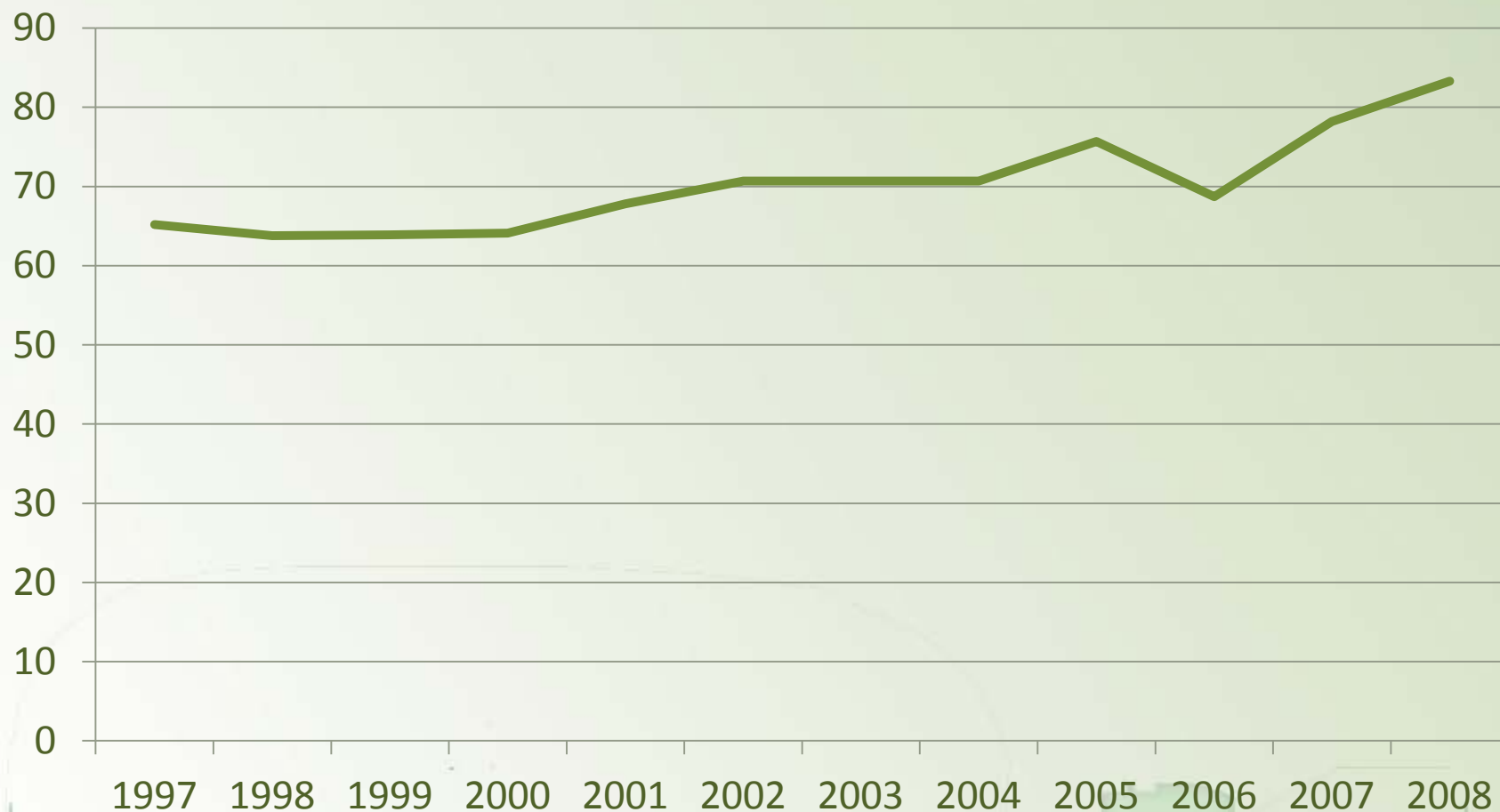
PET recycling rate



Paper recycling rate



Steel recycling rate



And yet, we have record prices

We have learned there is little correlation between the value of recovered packaging and the amount collected. Recycling rates have remained flat while prices have soared.

Aluminum can prices



Homopolymer HDPE bale prices



PET bale prices



Recovered paper prices (18 grades combined)



And domestic reclaimers have lost market share

PET recycling market share by U.S. firms

2006	49%
2007	54%
2008	58%
2009	56%

Plastics exports

Plastics Total Weight (pounds)



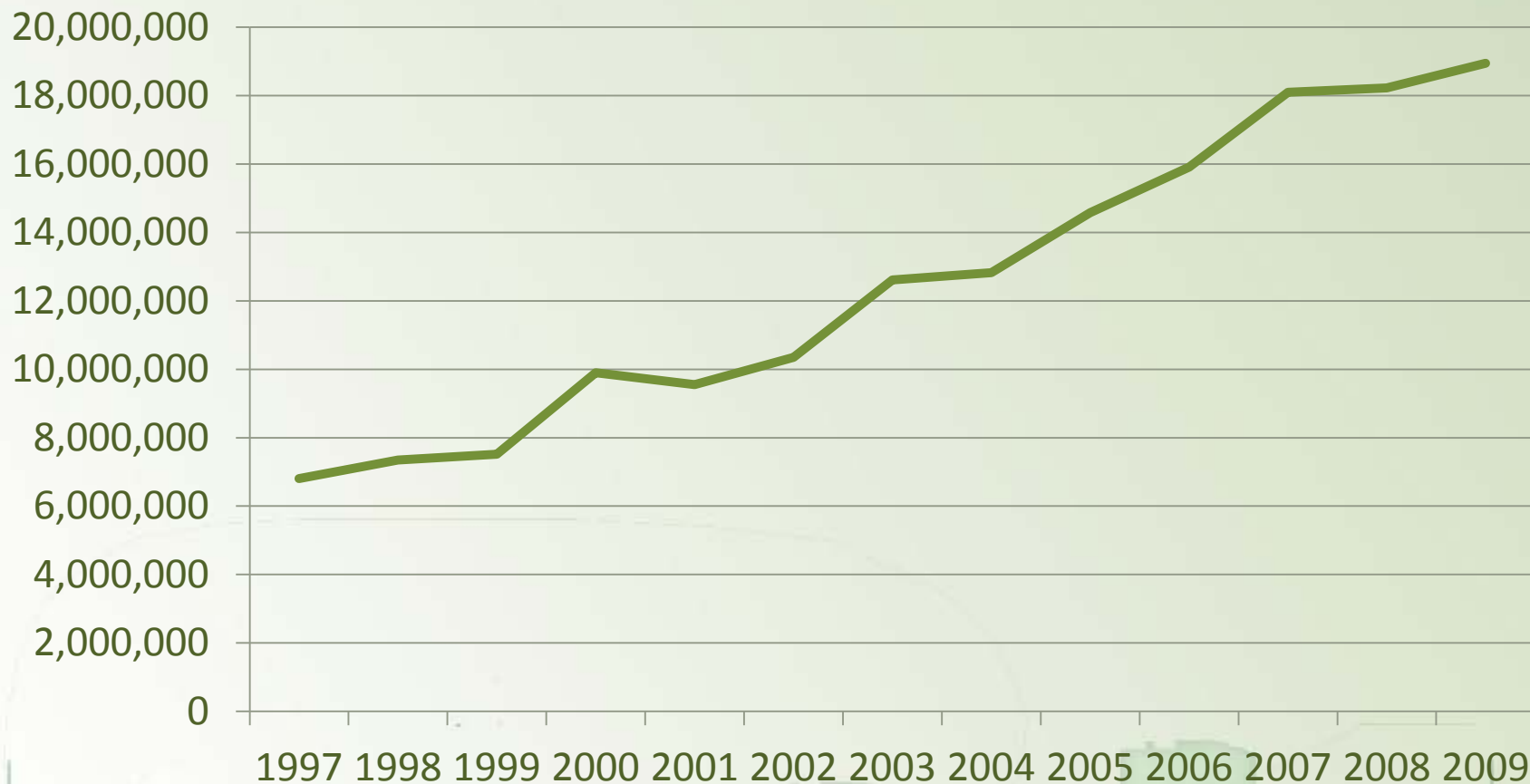
Ferrous scrap exports

Ferrous Total Weight (million metric tons)



Recovered paper exports

Paper Total Weight (in million metric tons)



Key packaging recycling questions

Are the packaging wars over? Packaging share volatility is far less today than in previous decades, with several materials (glass, steel cans, aluminum) having essentially reached market maturity.

Key packaging recycling questions

Do we see large amounts of nonrecyclable packaging on the store shelf? Not really. Brand owners have improved their practices, and groups such as the Association of Post Consumer Plastic Recyclers have developed design-for-recycling testing protocols.

Key packaging recycling questions

Are domestic reclaimers operating at capacity? No. Our annual plastics reclaimer survey last year showed domestic processors operated at 68 percent of capacity in 2009. For PET, this will only worsen, as four new reclamation plants are under construction and seven existing plants are expanding.

Key packaging recycling questions

As a result, PET reclamation capacity will increase 50.3 percent in the next three years. These new investments are directly linked to increase recycled-content levels in new bottles. Twelve of the current 20 PET reclamation plants in the U.S. and Canada produce RPET for use in new containers.

Key packaging recycling questions

What do reclaimers say about current conditions? Some 60 percent say bale quality is declining, with bale yields being just 71 percent for PET. Of various barriers to business, plastic bottle reclaimers say PCR demand is the lowest problem, while bales costs is the highest, as they scramble to secure a sufficient supply of bottles.

Key packaging recycling questions

Does the packaging recycling industry have recommendations regarding the lack of supply? All packaging recycling sectors have launched supply-growth initiatives (Aluminum Association, APR, Glass Packaging Institute, Steel Recycling Institute, etc.).

Key packaging recycling questions

For example, 83 percent of plastics reclaimers believe EPR should be pursued and 85 percent believe deposits on beverage bottles should be used. The following graph from our survey shows when reclaimers were asked what needs to be done, expanded collections is the key issue.

Focus on the future

What do you think should be the focus of the broader recycling industry?



Key packaging recycling questions

And finally, what are the consequences of our not addressing this lack of supply? In the short term, we'll see weak profits and little new investment due to the current excess of operating capacity. In the long term, we will not attain sustainability goals and we'll see little new innovation.

Disclaimer

Any resemblance to real persons, living or dead, is purely coincidental. Some assembly required. Batteries not included. No warranty is made as to the accuracy of any prediction, opinion or conclusion. Contents may settle during shipping. Use only as directed. No other warranty expressed or implied. Do not use while driving a motor vehicle. No trans-fats. This is not an offer to sell or buy securities. Apply only to affected area. May be too violent for some viewers. For recreational use only. If condition persists, see your physician. Freshest if consumed before date on the carton. No postage necessary if mailed in Canada. For off-road use only. Colors may fade. One size fits all. Many suitcases look alike.

Drop me a line

Jerry Powell

Resource Recycling

jpowell@resource-recycling.com