

The background of the slide is a collage of financial and scientific imagery. It includes a bar chart with green bars, a line graph with a green line, a pie chart with green segments labeled with percentages like 7.61%, 14.73%, and 15.73%, and a close-up of a calculator's numeric keypad with dark blue buttons. A green semi-transparent box is overlaid on the left side of the slide, containing the title and speaker information.

Too Valuable To Waste:

Strategies for Extracting Value from Food & Packaging Waste

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American Chemistry Council (ACC)
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Overview

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- A decorative graphic in the top right corner consisting of several 3D cubes of varying sizes. Some cubes are white with orange outlines, while others are light blue with orange outlines. They are arranged in a cluster, some overlapping, creating a geometric pattern.
- ACC's Plastics Division
 - CPG Challenges
 - Plastics & Sustainability
 - Recycling
 - Energy Recovery

ACC's Plastics Division

BASF Corporation

Bayer Material Science

Braskem America, Inc.

Chevron Phillips Chemical Company

The Dow Chemical Company

DuPont

ExxonMobil Chemical Company

LANXESS Corporation

LyondellBasell Industries

SABIC Innovative

Solvay America, Inc.

Styron LLC

Total Petrochemicals & Refining USA

Vinyl Institute



Challenges for the CPG Industry

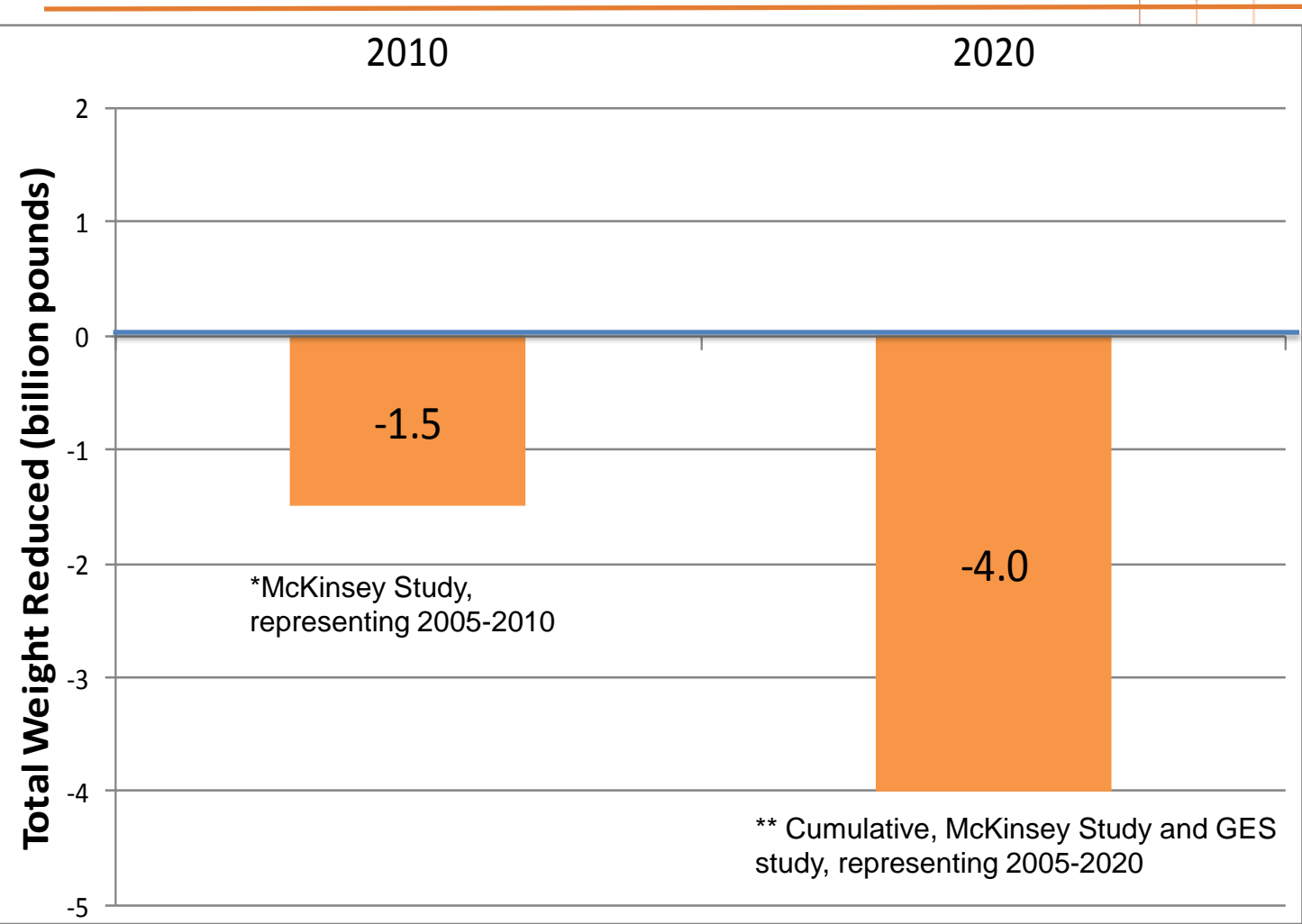
Pressure to:

- Reduce carbon footprint of packaging and distribution/logistics
- Minimize food waste and increase recovery/recycling of food waste
- Recycle/recover more packaging

NGOs pushing mandated “Extended Producer Responsibility” (EPR).



GMA Estimates 4 Billion Pound Packaging Weight Cumulative Avoidance (2005-2020)



19%
Average weight
reduction for
2005-2020

2005 Baseline



Plastic's contribution to packaging reductions

Environmental impact versus glass jars

- oGHG - 93% ↓
- oEnergy - 87% ↓

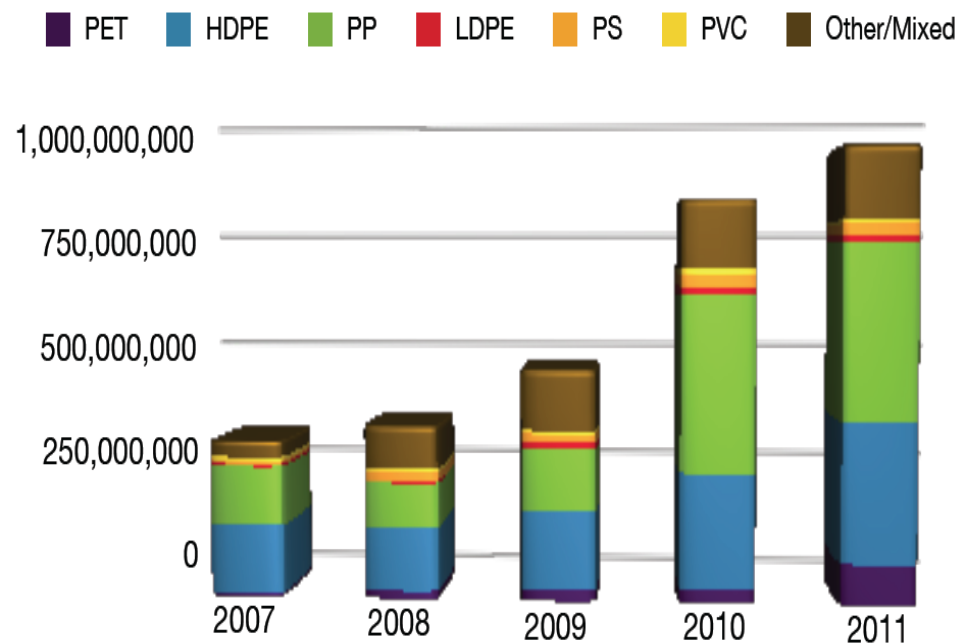
Rapid market growth

Yet, complexly engineered and multi-layer means very difficult to recycle economically

Plastics Recycling is Growing in U.S. (2011)

- Bottles: 2.6 billion lbs
- Bags and Film: 1 billion lbs
- Non-Bottle Rigid Plastics: 934 million lbs
- Significant increase in comm
 - 2007: 25% of large cities; 20
 - ~60% access to all plastic bo containers

Non-Bottle Rigid Plastic Recovered Year over Year (by Resin)



Recycle clean, dry, plastic bags and film packaging

Look for this label on film products like these...



Retail Bags



Newspaper Bags



Case Wrap
(e.g. snacks, beverage cases)



Produce Bags



Bread Bags



Napkin, Paper Towel, Bathroom
Tissue and Diaper Wrap
(packaging)



Air Pillows



Dry Cleaning Bags

- ❌ NO frozen food bags
- ❌ NO prewashed salad mix bags
- ❌ NO degradable bags



Recycled plastic bags and wraps can become new packaging or durable home building products.

plasticfilmrecycling.org



ACC Flexible Film Recycling Group

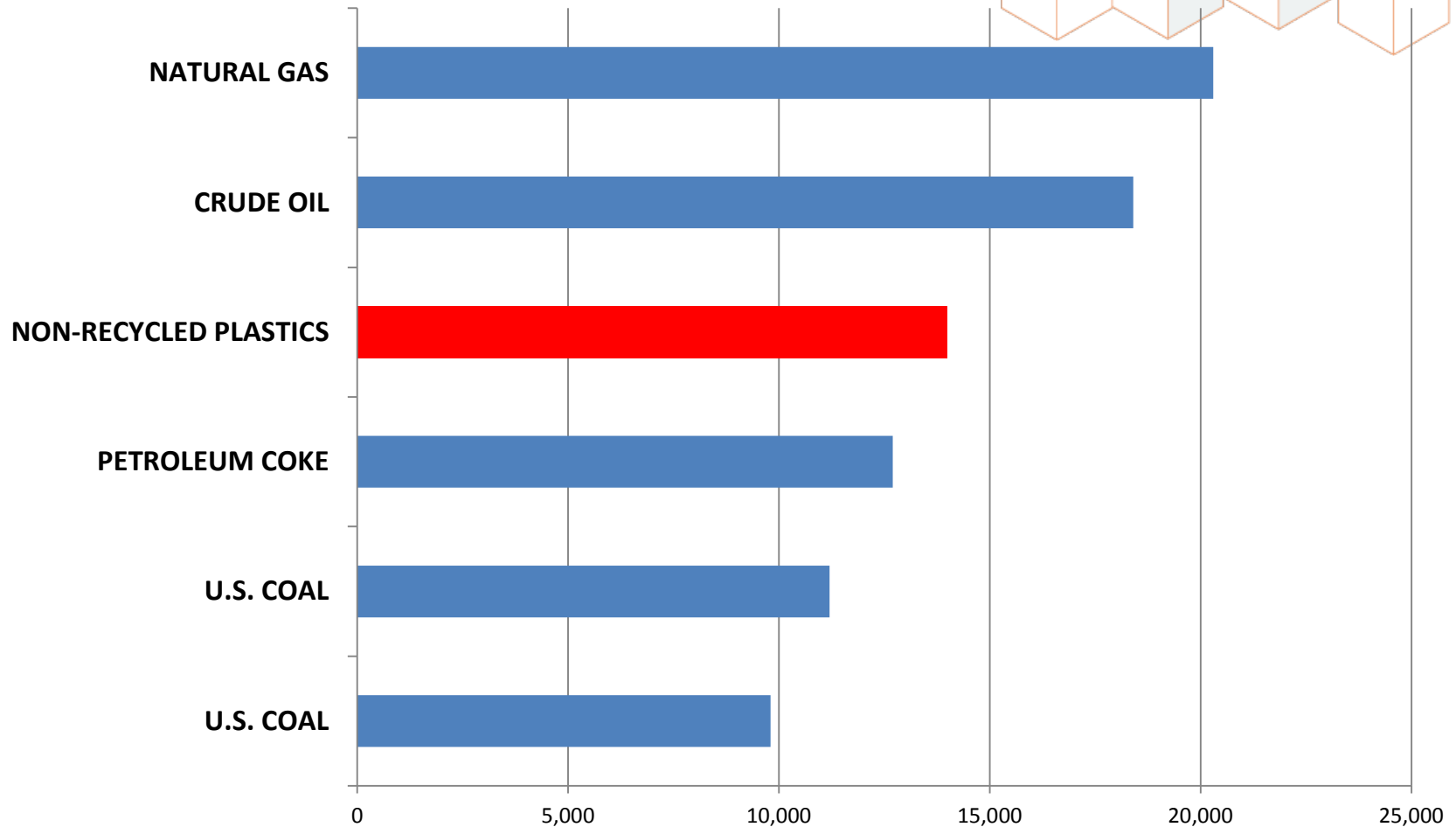
- Garnering broad participation from PE film value chain to demonstrate sustainability of plastic film packaging through increased recycling.
- Goal: *Double PE film recycling in five years*
- Success depends on more involvement from retailers and CPG companies.

How to get involved

- Partner with ACC in public education campaign using new signage
- Use SPC film recycling label on CPGs

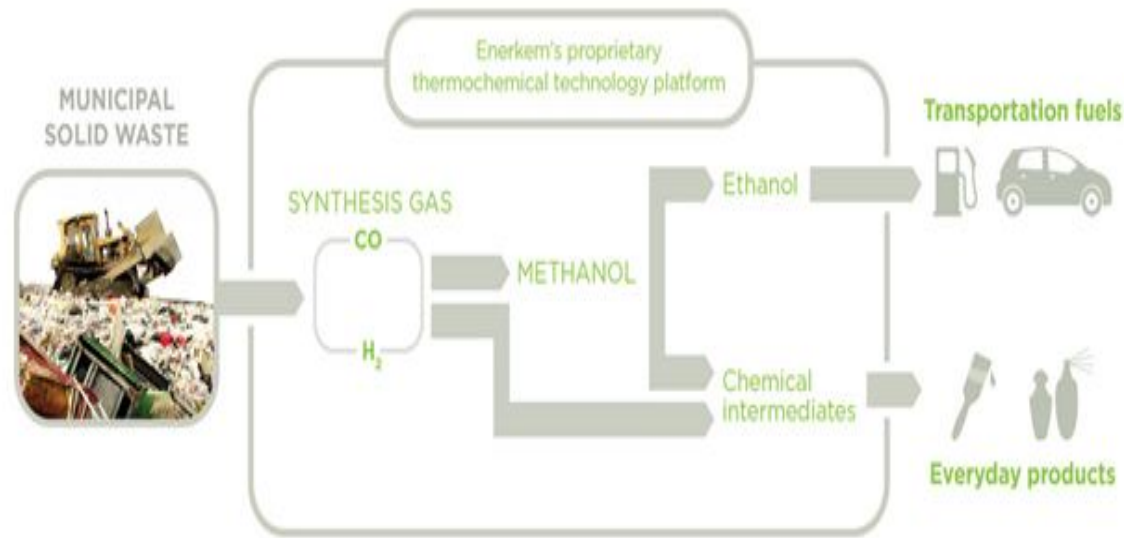
plasticfilmrecycling.org

Plastics are Captured Energy



Natural Gas = 20,300 Btu/lb Crude Oil = 18,400 Btu/lb **NRP = 14,000 Btu/lb** Pet Coke = 12,700 Btu/lb Coal (High) = 11,200 Btu/lb Coal (Low) = 9,800 Btu/lb

Integrated Approach to Waste Management



- ACC Partnership w/ the City of Edmonton and Enerkem.
- Robust recycling
- North America's largest composting facility
- Conversion (via gasification) of post-recycled MSW to chemicals and biofuels
- Driving towards 90% diversion

Converting Hard-to- Recycle Plastics to Oil



- ACC Partnership w/ Toy Industry Association and Agilyx
- Project to determine what toys can and should be mechanically recycled
- And, what toys are suitable for conversion to oil

What can
we do to
work
together
more
effectively
?



- Partner on a collection pilot concept for non-recycled plastics?
- Or other recycling/recovery pilots?
- Coordinate on advocacy and communications opportunities?
- Sponsor joint tours for NGOs and government officials of energy recovery facilities?



<http://plastics.americanchemistry.com/energyrecovery>

<http://chemistrytoenergy.com/>

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