MARINE DEBRIS
Plastics Industry’s Work on Solutions

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Marine Debris Overview

Our View

Why Use Plastics?

Latest Science on Sources

Our Declaration & Prevention Efforts

Partnerships
Plastics Division Members
Our View

Plastic and other litter in the environment is unacceptable.

Plastics deliver significant societal benefits, including:

• Energy, GHG and resource savings
• Innovations that improve health care, reduce food spoilage and improve quality of life

These benefits are lost if plastic litter harms our natural environment.
“Reduce” via Plastics Packaging

Greenhouse gas

Steel Can: 4377
Plastic Canister: 3310
Plastic Brick: 1051

Source: Franklin Associates, September, 2008
Plastics and Sustainability

The environmental cost to society of plastic use in the consumer goods sector is 3.8 times less than alternative materials.

Business as Usual

$139 Billion

For every million of consumer goods sector revenue, $4,886 of environmental costs are created.

Plastic Alternatives

$533 Billion

For every million of consumer goods sector revenue, $18,773 of environmental costs are created.

Trucost, Plastics and Sustainability: A Valuation of Environmental Benefits, Costs and Opportunities for Continuous Improvement, July 2016.
Plastic Packaging Helps Reduce Food Waste

Source: Packaging in Perspective, Advisory Committee on Packaging
Supported by INCPEN

Bunches of identical bananas stored for 7 days loose and in a modified atmosphere bag

Grapes in-store wastage DOWN by 20%

New potatoes in-store wastage DOWN to <1%

Fresh for 14 days
Latest Science
8 MMT Plastic Enters Ocean/Year from Mismanaged Waste

Leakage by Country

Millions of Metric Tons

<table>
<thead>
<tr>
<th>Rank/Country</th>
<th>Millions of Metric Tons</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 China</td>
<td>5</td>
</tr>
<tr>
<td>2 Indonesia</td>
<td>1.5</td>
</tr>
<tr>
<td>3 Philippines</td>
<td>1</td>
</tr>
<tr>
<td>4 Vietnam</td>
<td>0.5</td>
</tr>
<tr>
<td>5 Sri Lanka</td>
<td>0.5</td>
</tr>
<tr>
<td>20 US</td>
<td>0.05</td>
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Source: Science Magazine, Feb 2015, Jambeck et. al.
Marine Debris Solutions
Declaration for Solutions on Marine Litter

- Announced at UN/NOAA Marine Debris Conference, March 2011
- Six-point strategy for industry action
- Advocates close cooperation with range of stakeholders to create solutions
- 65 associations from 34 countries
- 260 projects since launch in 2011
We will:

• Contribute solutions through **partnerships** to prevent marine debris;

• **Research** to understand scope, origin, impacts;

• Promote **enforcement** of existing laws to prevent marine litter;

• **Spread knowledge** of efficient waste management systems;

• Enhance **recycling/energy recovery** opportunities; and

• **Steward plastic pellets** from supplier to customer.
Improving Waste Management is Key to Prevention!
Partnerships for Litter Prevention

• Added +700 bins in coastal and other locations

• Expanded to California coastal highway rest stops with Caltrans

• Divert about 45 tons of plastics and over 105 tons of other recyclables
Ongoing Projects

• **Hawaii**
  - Partnership between ACC and the City and County of Honolulu
  - Installing 16 single and 8 double Victor Stanley steel trash bins at Ala Moana Park

• **Trinity River**
  - Partnership with Texas State University’s Meadows Center
  - Supporting EPA’s Trash Free Waters project to enhance the region’s capability to track, remove and prevent trash from entering waterways that supply the Trinity River
Supporting Essential Research

Stemming the Tide:
Land-based strategies for a plastic-free ocean

REPORTS AND STUDIES

SOURCES, FATE AND EFFECTS OF MICROPLASTICS IN THE MARINE ENVIRONMENT: A GLOBAL ASSESSMENT
Promoting Policy

• Supported “Microbeads Free Waters Act of 2015”

• Supported Reauthorization of the Marine Debris Act

• Supporting added NOAA research funding
Enhance Recycling & Recovery
Promoting Recycling

Recycling campaign with KAB, the Ad Council
- “I Want to Be Recycled”
- Over $115M in donated advertising

America Recycles Day
- 2,000 registered events
- 2M participants
- 45,000 individuals to pledge to recycle more
Enhanced Recycling

Plastics recycling increased by 3 million pounds per year.
Growing Wrap & Bag Recycling

80% Increase since 2005!
Goal: Double film recycling to 2B lbs. by 2020

Wrap Recycling Action Program (WRAP) -
National multi-stakeholder public outreach & education initiative

- Forging partnerships with stakeholders
- Increasing adoption of How2Recycle Label
- Educating on importance of recycling/sharing tools
- Benchmarking data & establishing best practices
Increasing Non-Bottle Rigid Plastic Recycling

Pounds

- 2007
- 2008
- 2009
- 2010
- 2011
- 2012
- 2013
- 2014

- PET
- HDPE
- PP
- LDPE
- PS
- PVC
- Other/Mixed
Stewarding Plastic Pellets

- Best practices designed to contain plastic pellets, flakes and powder (plastics’ basic raw material form) from manufacturing through transportation and end use
- Now an international model
- Reduction in pellets found in the Atlantic
Thank you!

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