Plastic waste inputs from land into the ocean in 2010

The 192 countries with a coast bordering Atlantic, Pacific, and Indian oceans, Mediterranean and Black seas produced a total of 2.5 billion metric tons of solid waste. Of that, 275 million metric tons was plastic, and an estimated 8 million metric tons of mismanaged plastic waste entered the ocean in 2010.

Mitigation options:
- Reduce plastic in waste stream
- Improve solid waste management infrastructure
- Increase capture

Generated by 2 billion people within 50 km (30 miles) of the coast

6,350-245,000 metric tons**

*Plastics Europe; "Plastics—the Facts 2013" (2010 data)
**Cózar et al., 2014; Eriksen et al., 2014

Graphs by Lindsay Robinson/University of Georgia
The rapid rise of plastics
A world without plastics seems unimaginable today, yet their large-scale production and use only dates back to around 1950.

GLOBAL PLASTIC PRODUCTION ESTIMATES

<table>
<thead>
<tr>
<th>Year</th>
<th>Metric Tons</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950</td>
<td>2M</td>
</tr>
<tr>
<td>2017</td>
<td>8.3B</td>
</tr>
<tr>
<td>2050</td>
<td>34B</td>
</tr>
</tbody>
</table>

How heavy is 8.3 billion metric tons?

- 822,000 X THE EIFFEL TOWER (10,100 metric tons)
- 25,000 X EMPIRE STATE BUILDING (331,000 metric tons)
- 80 MILLION X BLUE WHALE (104.5 metric tons)
- 1 BILLION X ELEPHANTS (7.5 metric tons)

Plastic waste can be recycled, incinerated or discarded where it accumulates in landfills.

TOTAL PLASTIC WASTE

<table>
<thead>
<tr>
<th>Year</th>
<th>Metric Tons</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>6.3B</td>
</tr>
<tr>
<td>2050</td>
<td>12B</td>
</tr>
</tbody>
</table>

Geyer, Jambeck and Law, Science Advances, 2017
Plastic Pollution Intervention Framework

1. Reduce Plastic Production
2. Innovative Materials and Product Design
3. Reduce Waste Generation
4. Improve Global Waste Management
5. Improve Litter Capture
   Reduce input concentrations (Zero Goal)

What does this entail?
1. Industry-led or reduce demand for plastic
2. Green Engineering, Sustainable Chemistry, Circular Economy
3. Reusable items, sharing/collaborative economy
4. Context sensitive solid waste management infrastructure design
5. Litter capture and cleanup efforts
Can I Recycle This
San Francisco to Toughen a Strict Recycling Law

Thanks to a new rule in Ada County, you may not be able to recycle these plastics.

Emerging Changes to Recycling

Will an exit from the EU change recycling laws in the UK?

Plastics Pile Up as China Refuses to Take the West’s Recycling

China’s Import Policies Are Affecting U.S. Recycling Companies
Using artificial intelligence image and voice recognition technologies, we're informing the everyday citizen about what is and isn’t recyclable through existing social media and virtual assistant platforms.
YES! Please Recycle.
Investing in a Sustainable Future

01: Municipalities have it available for their citizens.

02: Plug-in available for E-Commerce to inform consumers about packaging and products.

03: “Green Data” is generated, contamination decreased and targeted campaigns can be developed.
To all of the people working to address this issue around the world... Thank You.

Can I Recycle This
@CanIRecycleThis
Canirecyclethis.ai

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