



REINVENTING PLASTICS

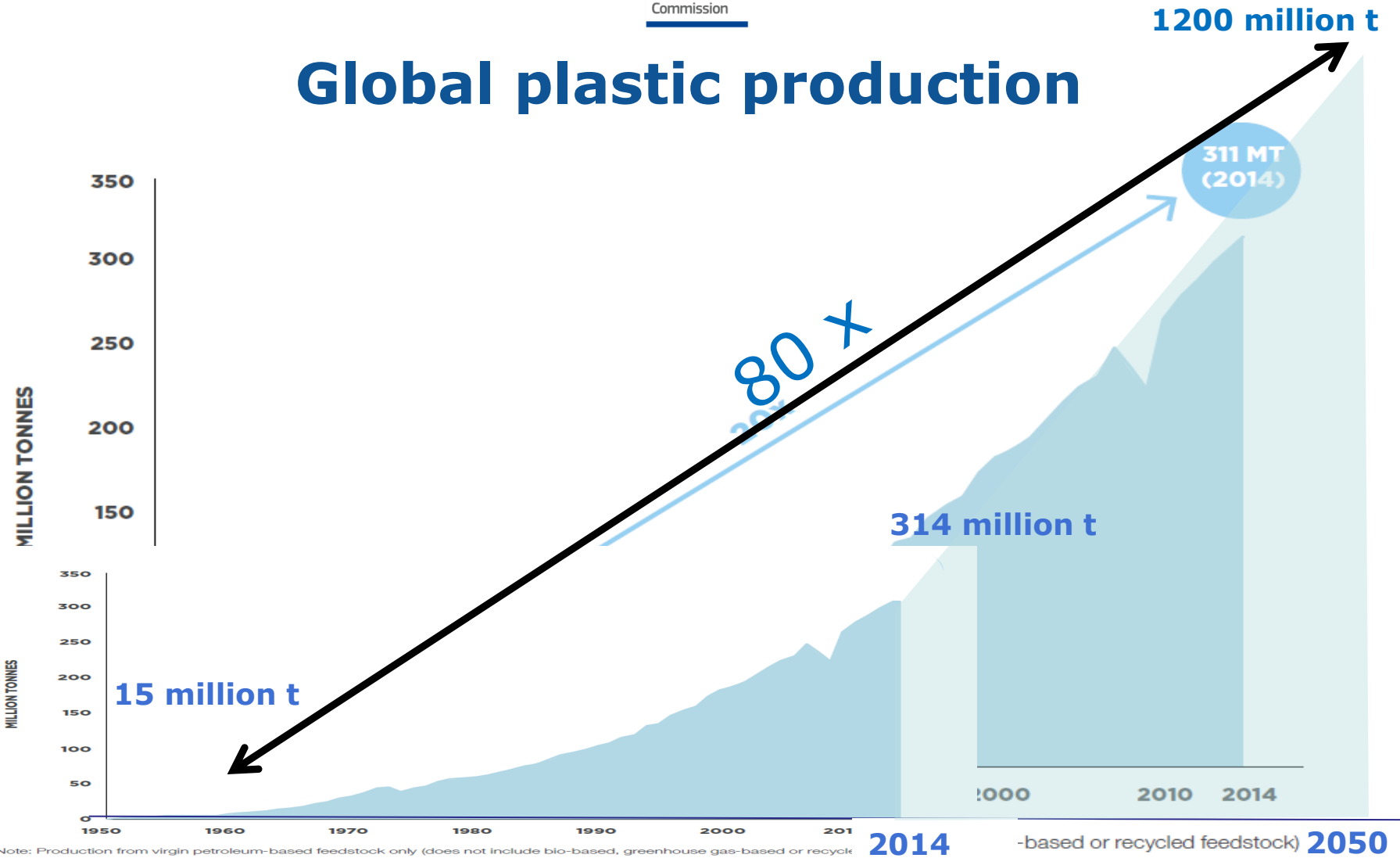
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[#PlasticsStrategy](#)



European Commission

Global plastic production



Note: Production from virgin petroleum-based feedstock only (does not include bio-based, greenhouse gas-based or recycled feedstock)

Source: PlasticsEurope, Plastics – the Facts 2013 (2013); PlasticsEurope, Plastics – the Facts 2015 (2015); PlasticsEurope, Plastics – the Facts 2013 (2013); PlasticsEurope, Plastics – the Facts 2015 (2015).



Commission Communication: "Closing the loop - An EU action plan for the Circular Economy"

- **Plastics:** *one of the 5 priority areas of intervention*
- *"The Commission will adopt a strategy on plastics in the circular economy, addressing issues such as recyclability, biodegradability, the presence of hazardous substances of concern in certain plastics, and marine litter"*



**A new
plastic economy**
↓
Plastic Strategy

Issues

- 1. Plastic production relies on** fossil fuel with high life-cycle GHG impacts
- 2. The full potential** of plastic **reuse and recycling** is yet to be used
- 3. Plastic leaks** into the environment

1. High dependence on fossil feedstock

- Raw material is cheap (> 90% from virgin material)
- 400 mln T of GHG (2012)
- By 2050 plastic production can represent:
 - **20% of global oil consumption**
 - **15% of global GHG**



2. Low reuse and recycling of plastics

A wasteful society

- 26 million tons of plastic wastes generated;
- 10 million tons – **landfilled**;
- 8 million tons – **incinerated**;
- 8 million tons are **collected** (+-/ 30% of plastic waste with big disparities between Member States) **only half are recycled**,
- in packaging recycling can imply loosing almost 95% of plastic material value.

Options

- DESIGN for durability, reusability, reparability, recyclability
 - ⇒ Study: reuse, recycling & marine litter
 - ⇒ Product policies, EPR, deposit
- REUSE
 - ⇒ Fostering other business models
- TO ADDRESS TOXIC PLASTIC
 - ⇒ Interface waste, chemicals & product policy
 - ⇒ Traceability
- INNOVATIVE TECHNOLOGIES
 - ⇒ Research & innovation for reuse, sorting & recycling, Horizon 2020

Options (2)

- **LEGISLATION AND INCENTIVES TO SUPPORT**
 - ⇒ **Proposal waste legislation: separate collection of plastics, targets for recycling packaging, 55% in 2025**
- **SECONDARY PLASTIC MATERIALS AS ALTERNATIVE FEEDSTOCK**
 - ⇒ **Promote market for recycled plastics**
 - ⇒ **Standards: recycled plastics (quality) & recycled content**
 - ⇒ **Support industrial fora & platforms**

Options (3)

Alternative feedstock: Biomass, CO₂, Chemical recycling?

⇒ **Conduct a LCA of the use of alternative feedstock**



3. Leakage into the environment

- 5-13 mln T a year of plastic waste end up in the oceans
- Problem is global
- Cheap and disposable material that is a driver for early obsolescence
- Microplastics (<5 mm) = threat to animal & human health

Options

- Marine litter
 - ⇒ Aspirational 30% reduction target in CEAP / SDGs;
 - ⇒ Deposit or EPR Schemes for fishing nets?;
 - ⇒ Address single use plastics (10 most found items);
 - ⇒ Monitoring.
- Reduce microplastics
 - ⇒ Interdiction / REACH / EU Ecolabel.

Options (2)

- Sustainability criteria for biodegradable plastics
 - ⇒ Study: develop EU-harmonised criteria / standards for biodegradability (composting) where appropriate
 - ⇒ Assessing the use of oxo-degradable plastics
- Consumers' awareness
 - ⇒ Raise the awareness through better information



Steps Taken

- Studies:
 - **"Microbeads intentionally added to products"** (DG ENV) due July 2017
 - **"Reduction options of microplastics resulting from but not intentionally added in products"** (DG ENV) due November 2017 (open public consultation running from June to August)
 - **"Plastics: reuse, recycling and marine litter"** (DG ENV) due November 2017
 - **Life cycle assessment (LCA) of alternative feedstock (DG GROW), with JRC. ToRs in preparation.**

Steps taken (2)

Conferences:

- **8th June: by Env. Protection Agencies**
- **26th September: Stakeholder conference**

Targeted consultations with stakeholders

ENV

Single use items (16 June)
Packaging (19 June)
Construction (27 June)
Marine litter (25 July)
Recyclability and EPR (8 Sept);
Single use - legal instrument (14 Sept);
Deposit Schemes (14 Sept);
Traceability (28 Sept).

GROW

Value Chain' and 'Sustainable Feedstock (23 June)
Bio-based and biodegradable plastics (18 October)

⇒ **Strategy to be presented by the end of 2017 (6th of December?)**



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