Global Plastics Outlook

Pathways to ending plastics leakage to the environment

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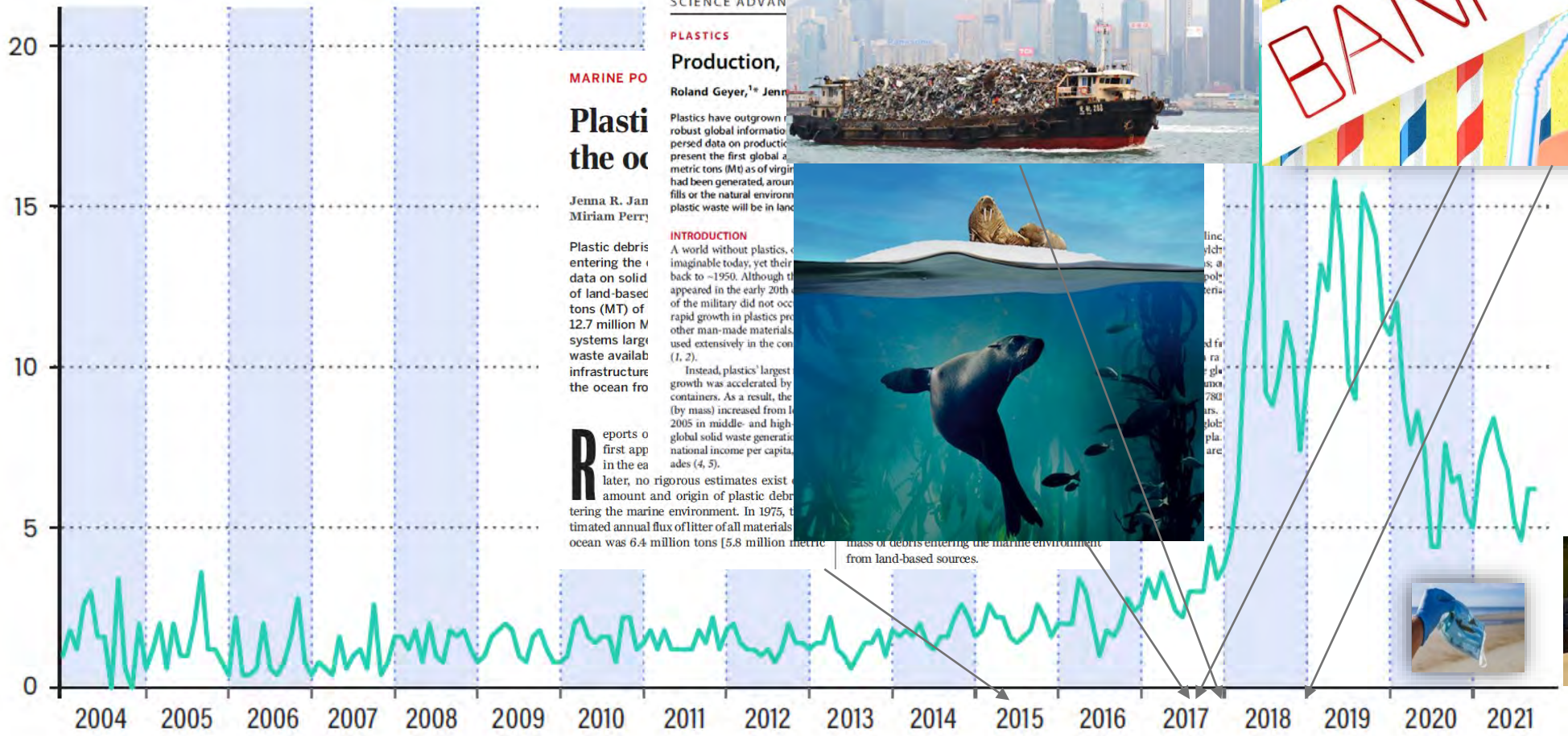
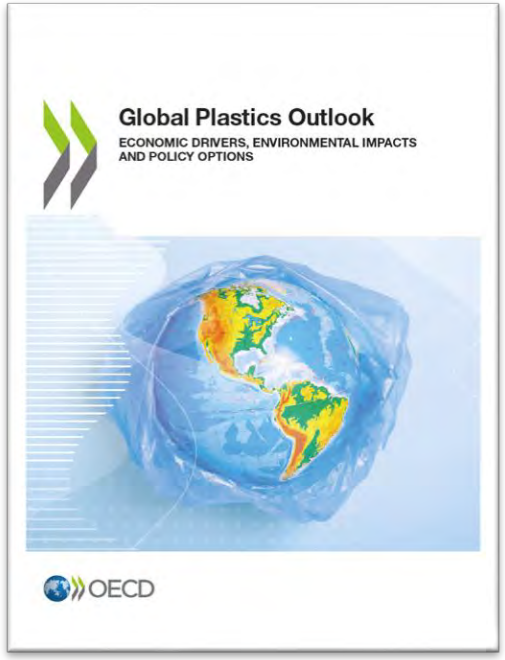
Growing interest for “Plastic pollution”



Search interest globally relative to the highest point on the chart.
Values are normalised to January 2004 values.

Source: Google trends

The OECD Global Plastics Outlooks



First **comprehensive mapping of the lifecycle of plastics globally**

High-level of granularity: primary and secondary production, 14 polymer categories, various applications.

Detailed insights on **leakage to land, water and air.**

Domestic plastics policy landscape covering 50 countries.

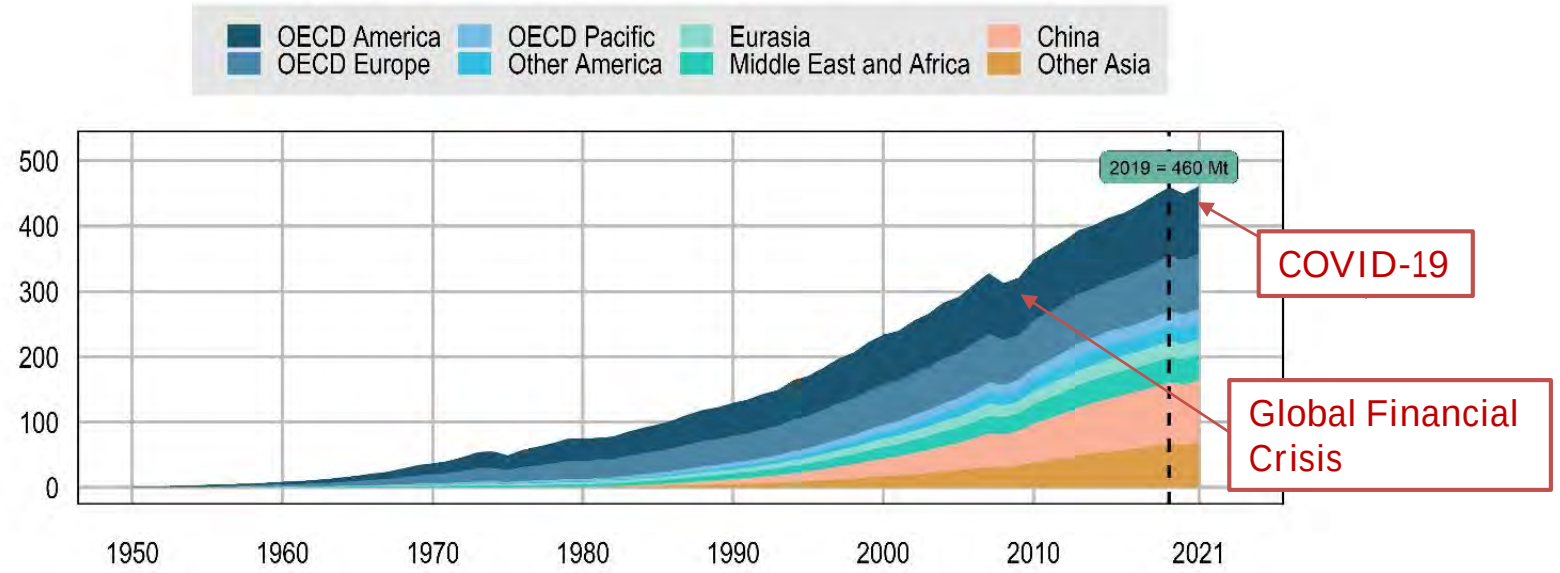
Projections of **plastics use, waste & leakage to 2060**

Policy scenarios to reduce and eliminate leakage

Key Findings

Global use of plastics is growing steadily…

In million tonnes (Mt), 1950-2021



45 500

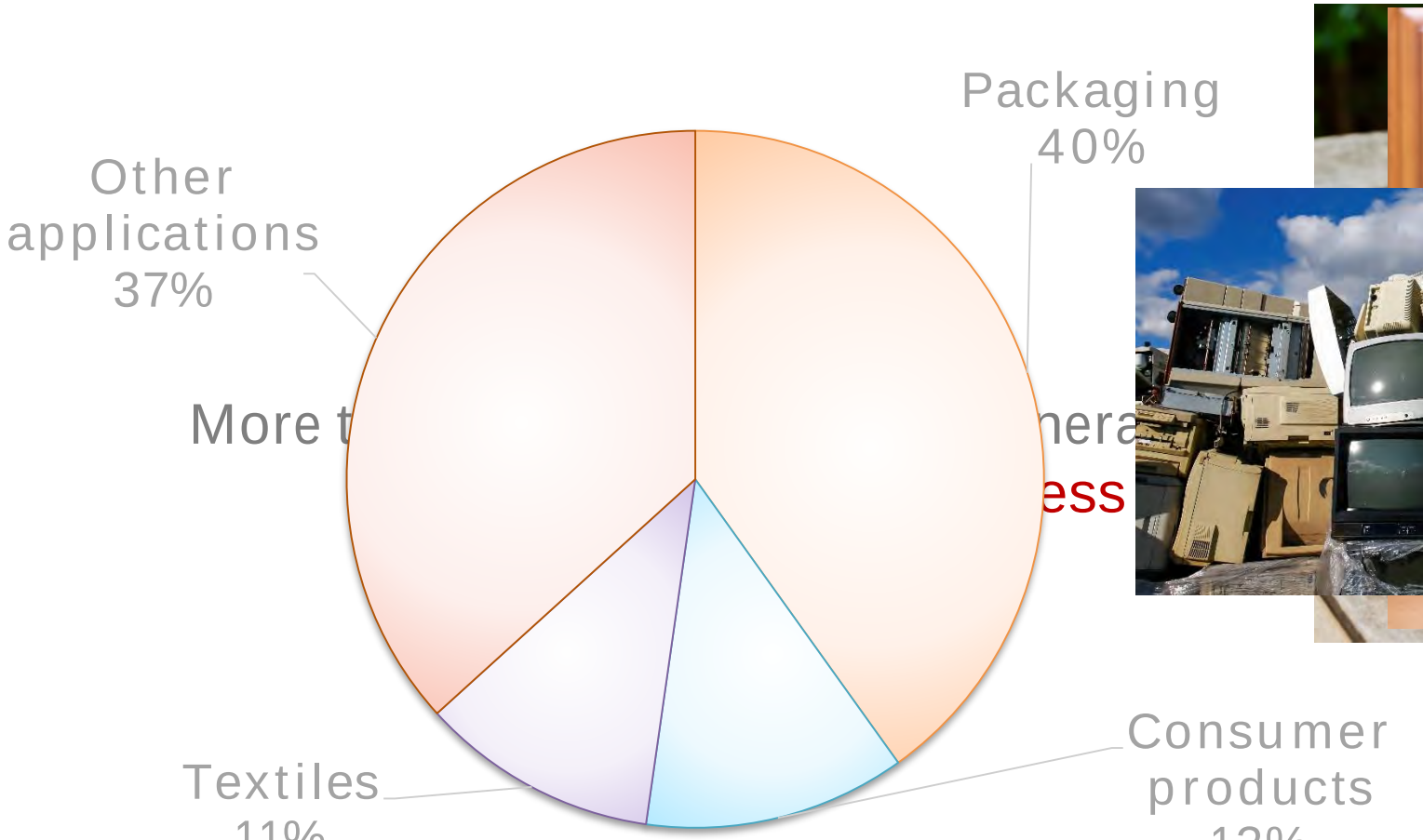
40%
quicker growth than GDP in 2000-2019

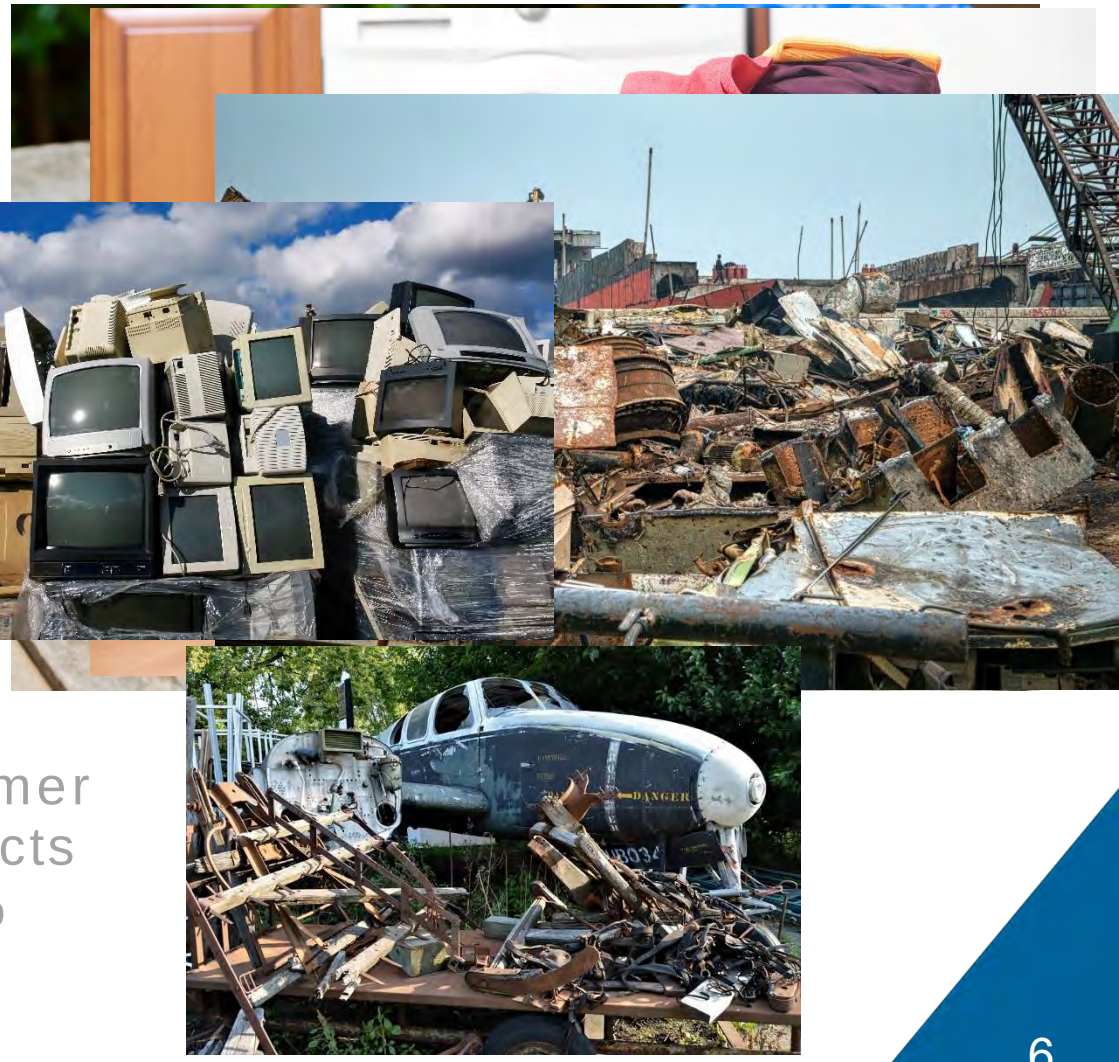
1.8 Gt
GHG emissions generated annually

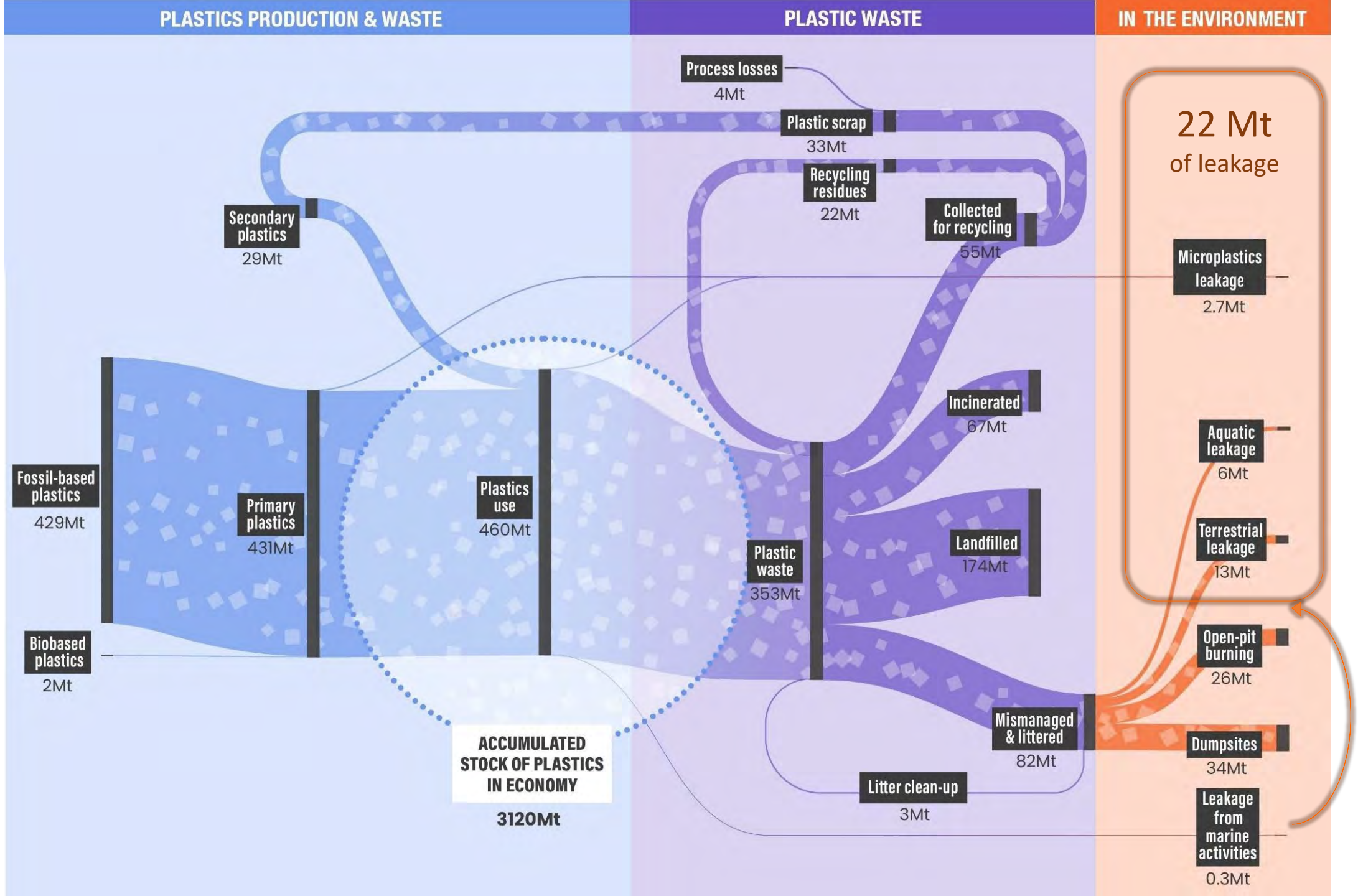
156 kg
per capita /year in OECD

39 kg
per capita /year in non-OECD

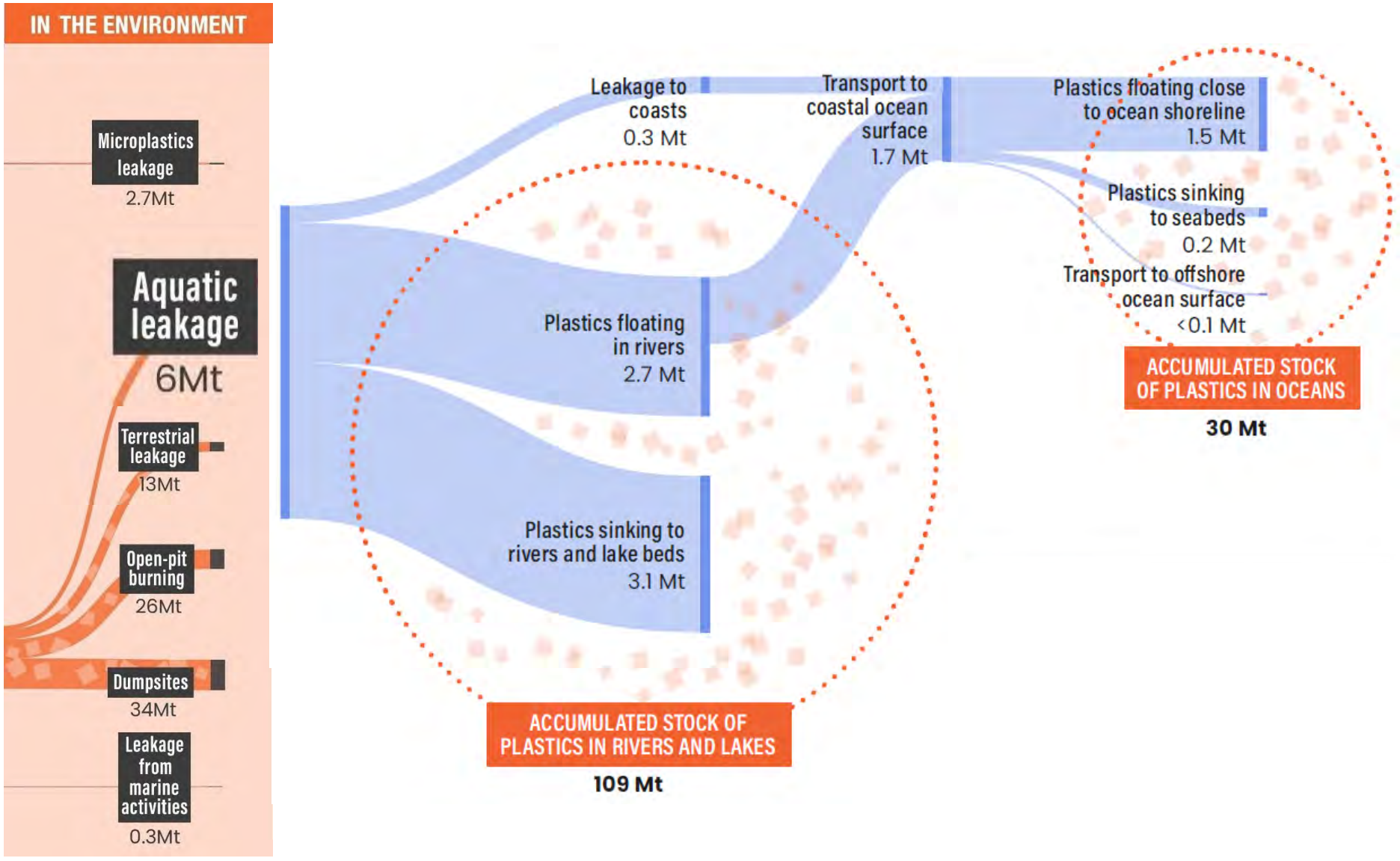
In 2019, plastic waste generation amounted to **353 Mt**



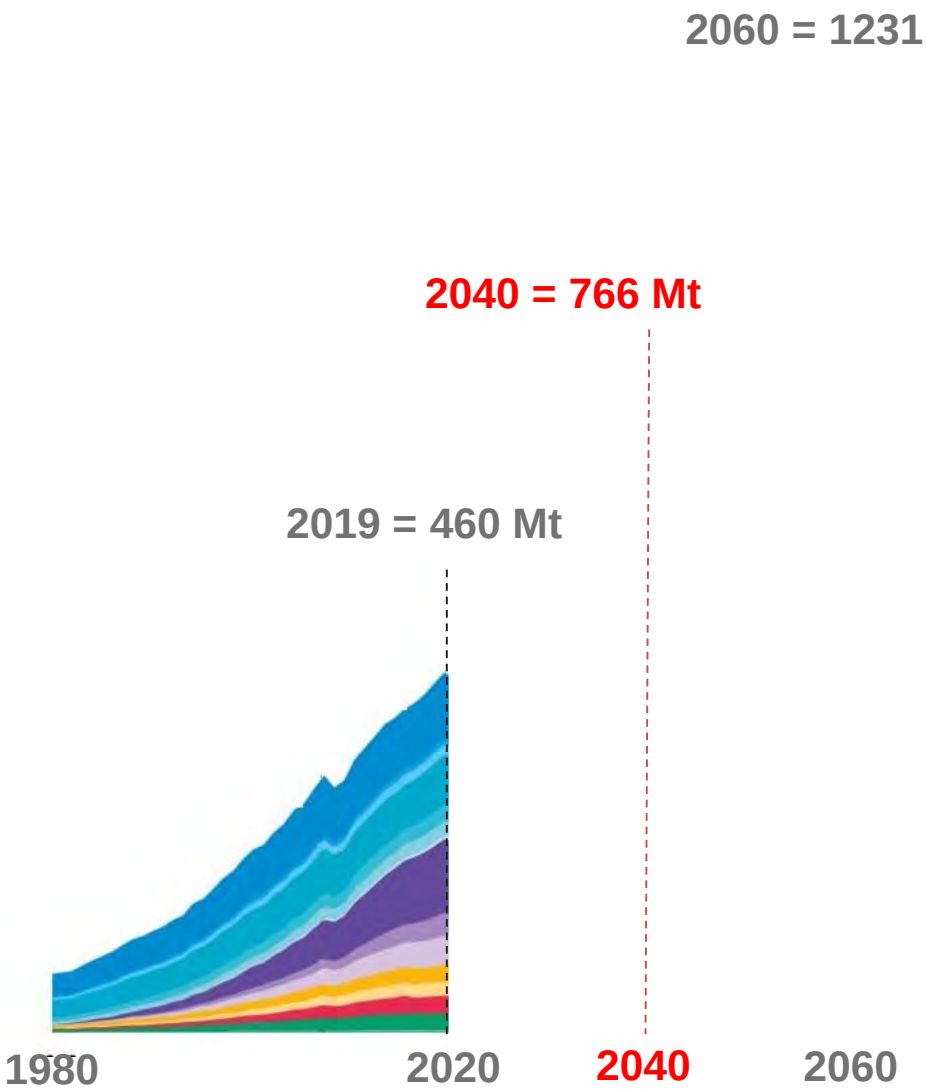



PLASTICS PRODUCTION & WASTE
PLASTIC WASTE
IN THE ENVIRONMENT
Process losses
4Mt
Plastic scrap
33Mt
Recycling residues
22Mt
Collected for recycling
55Mt
Secondary plastics
29Mt
22 Mt
of leakage
Microplastics leakage
2.7Mt
Incinerated
67Mt
Aquatic leakage
6Mt
Fossil-based plastics
429Mt
Primary plastics
431Mt
Plastics use
460Mt
Plastic waste
353Mt
Landfilled
174Mt
Terrestrial leakage
13Mt
Biobased plastics
2Mt
Open-pit burning
26Mt
Mismanaged & littered
82Mt
Dumpsites
34Mt
ACCUMULATED STOCK OF PLASTICS IN ECONOMY
3120Mt
Litter clean-up
3Mt
Leakage from marine activities
0.3Mt

Rivers are a key pathway and sink for aquatic leakage

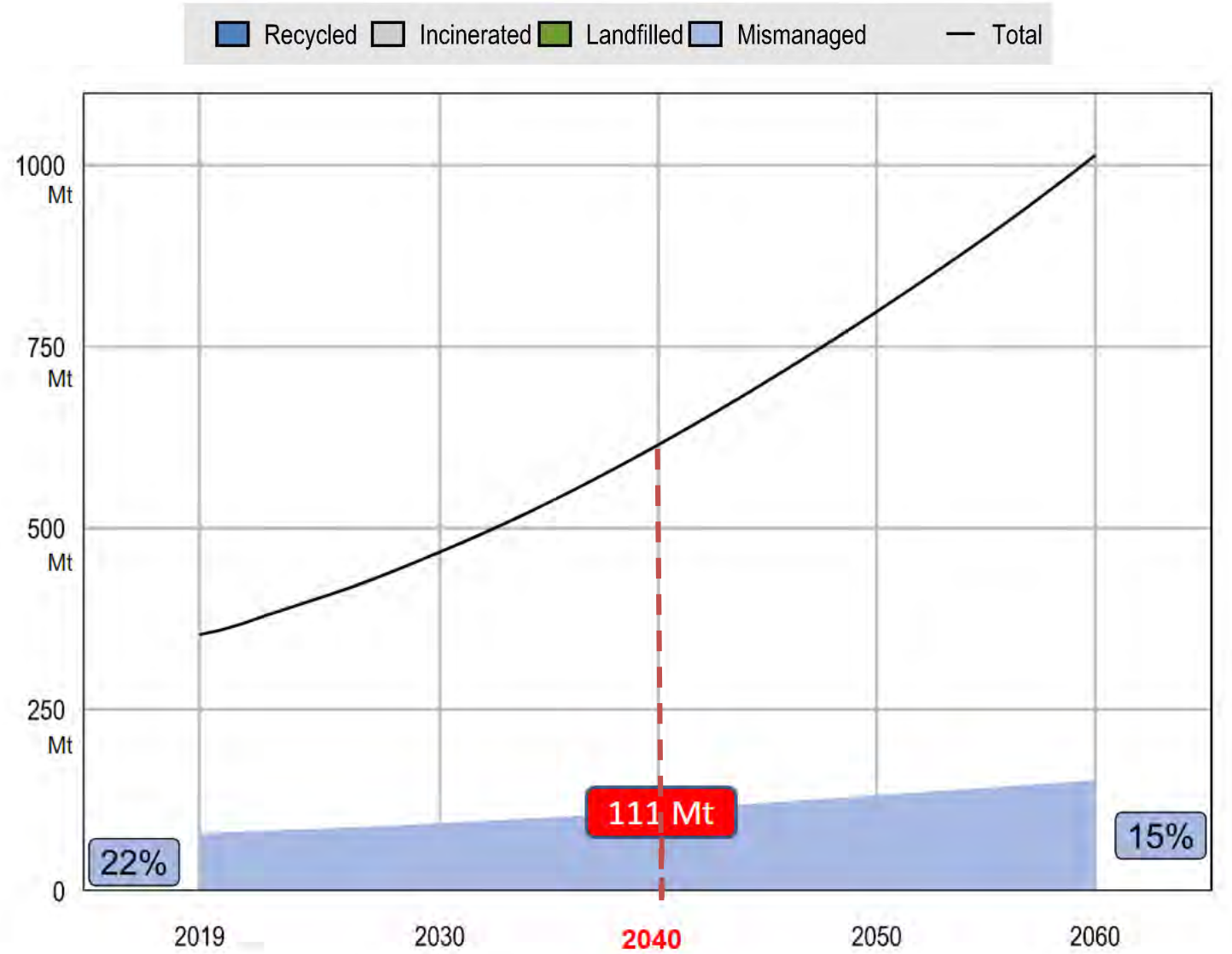


Global plastics use is on course to almost triple by 2060



Global Plastics Outlook (OECD, 2022b)

Plastic waste will also triple, half of it will still be landfilled



Global Plastics Outlook (OECD, 2022b)

How far would we be in 2060 from zero plastic pollution?

Doubling from 2019 levels

4.3 Gt /year

493 Mt by 2060

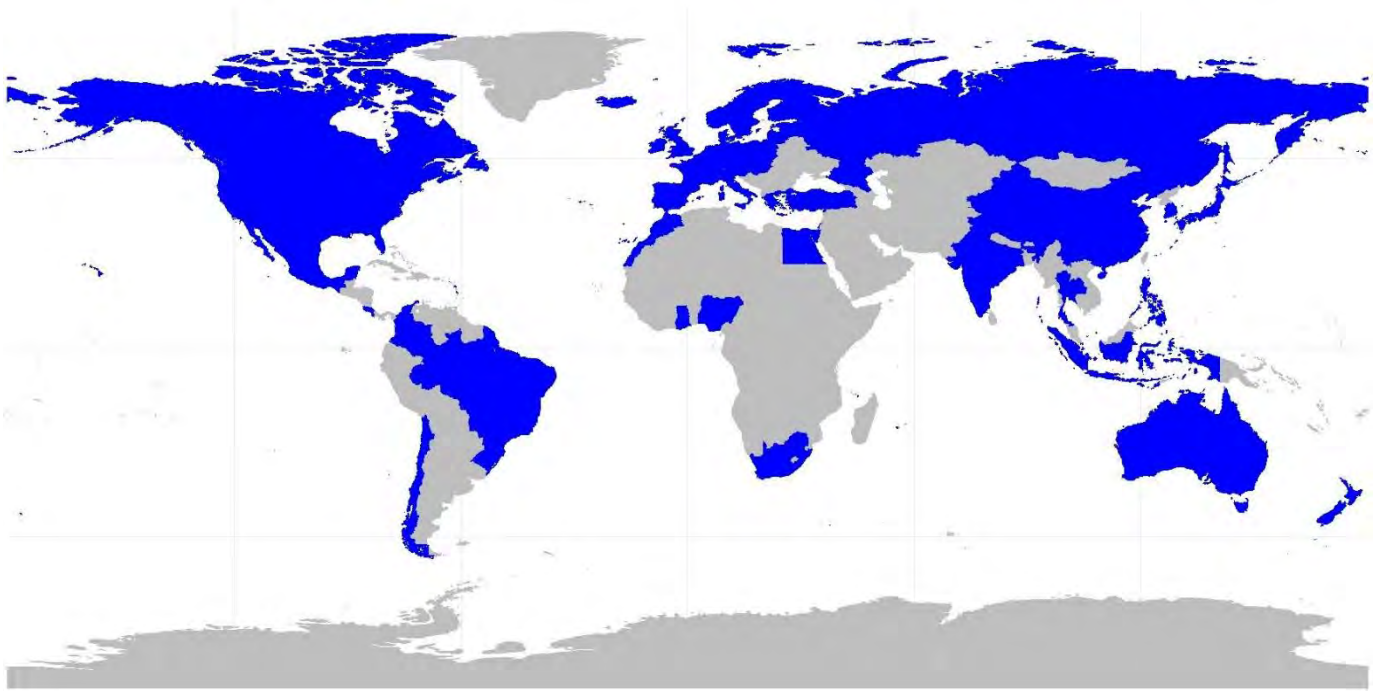
115 Mt /year

44 Mt /year

Global Plastics Outlook (OECD, 2022b)

Current policies are far from adequate to stop leakage

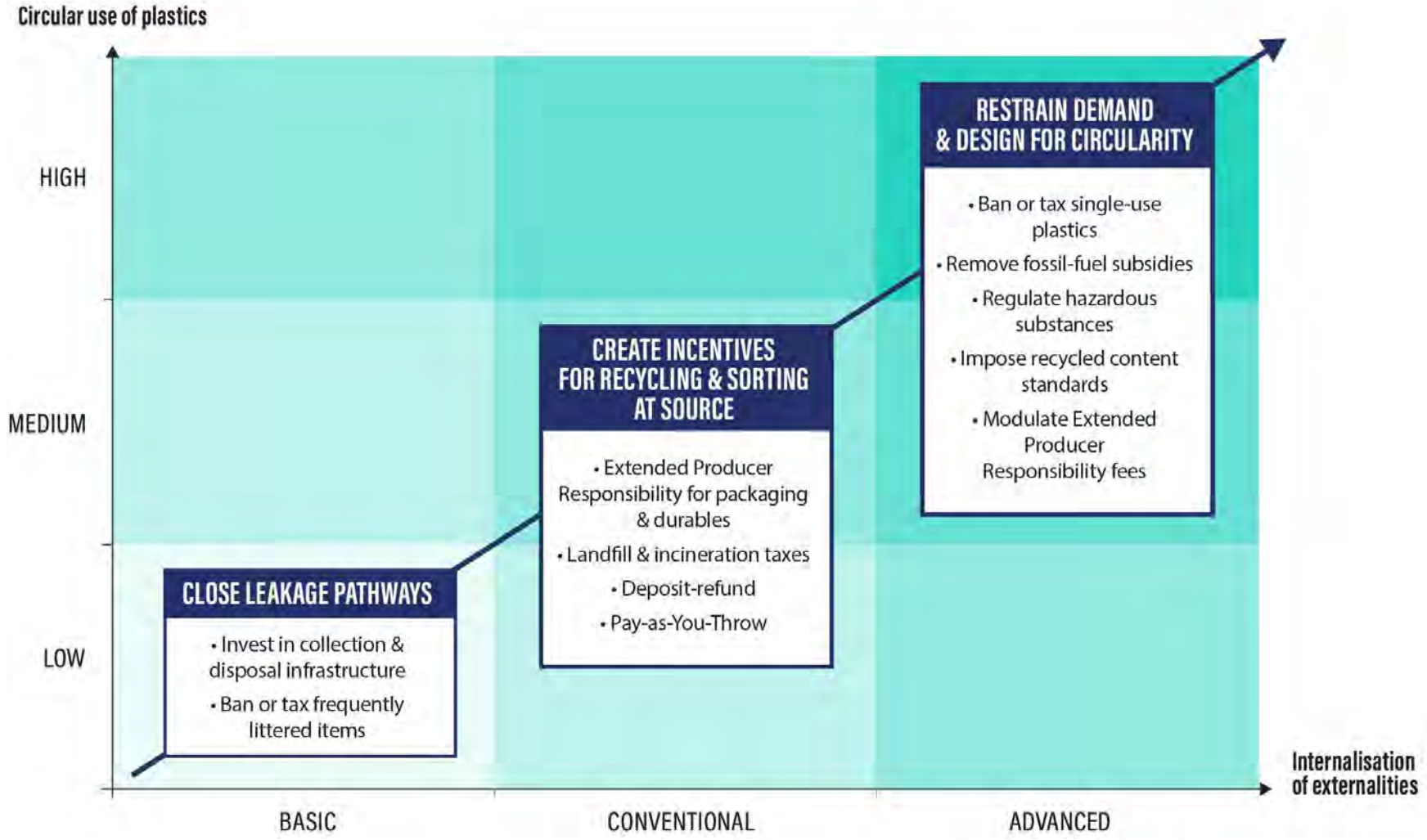
stocktake of 50 countries



- Only 13 countries incentivise **waste sorting at source**
- 25 have policy **instruments to incentivise recycling**
- 33 have national regulations and operational schemes for **Extended Producer Responsibility**
- Several countries have **bans and taxes on single-use plastic items** but they cover very small waste streams
- Most countries **do not have adequate incentives** in place to reduce plastics demand and improve product design.

Global Plastics Outlook (OECD, 2022a)

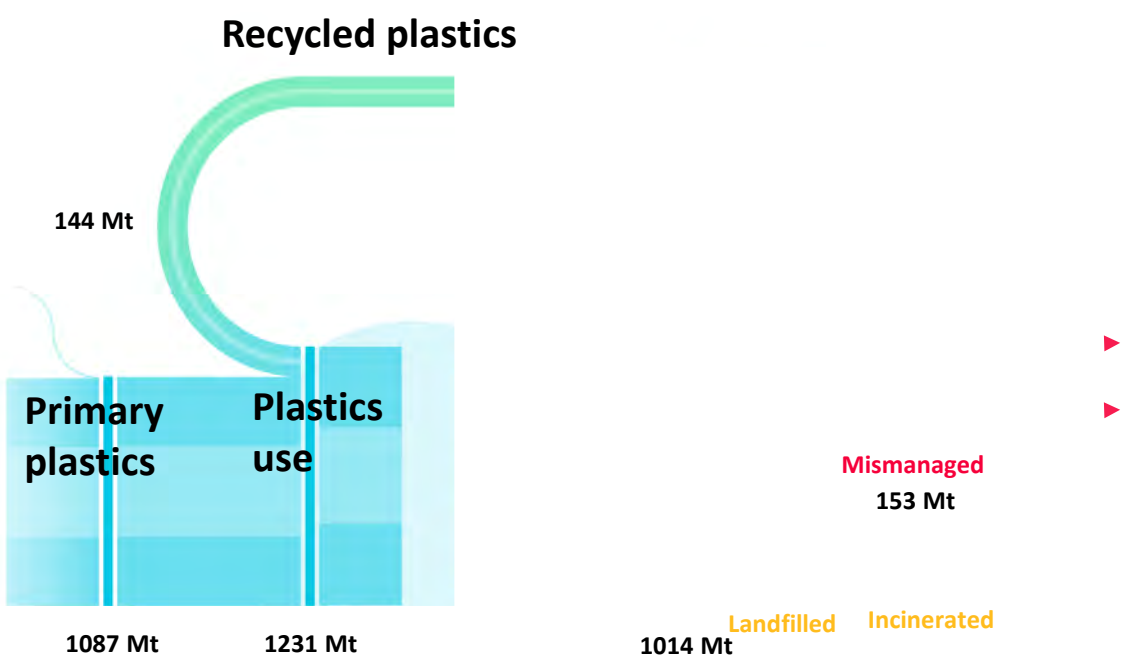
A roadmap for ending plastic leakage



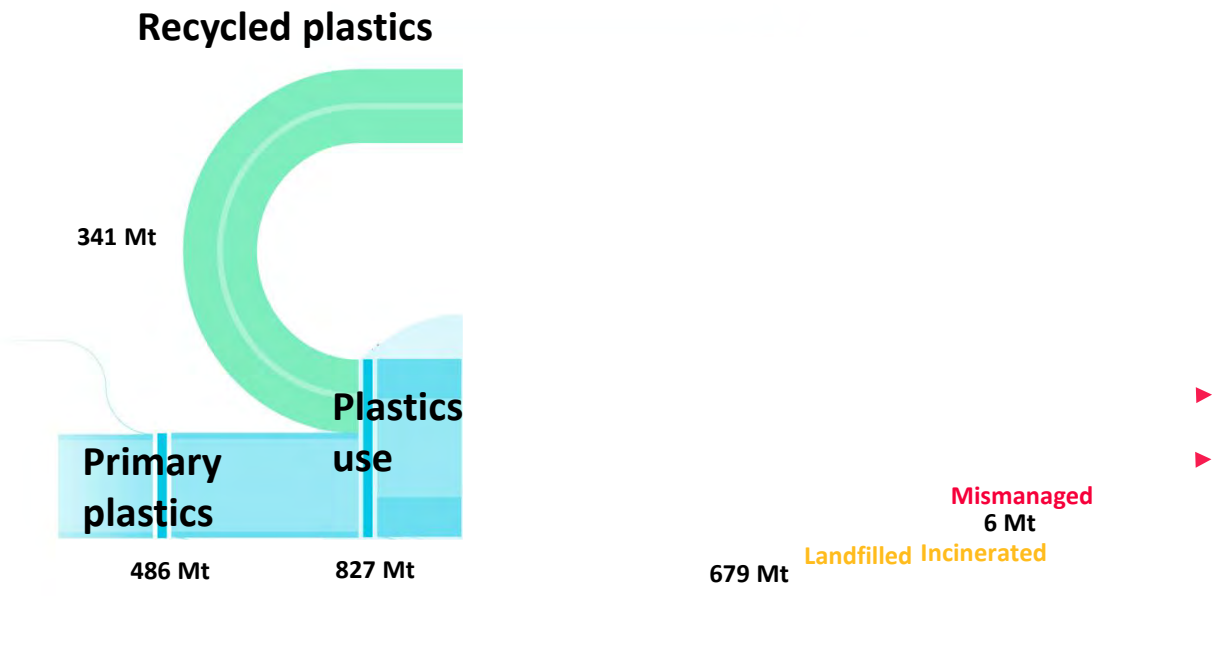
Global Plastics Outlook (OECD, 2022a)

Globally Coordinated Ambitious Action Can (Virtually) Eliminate Leakage by 2060

Baseline



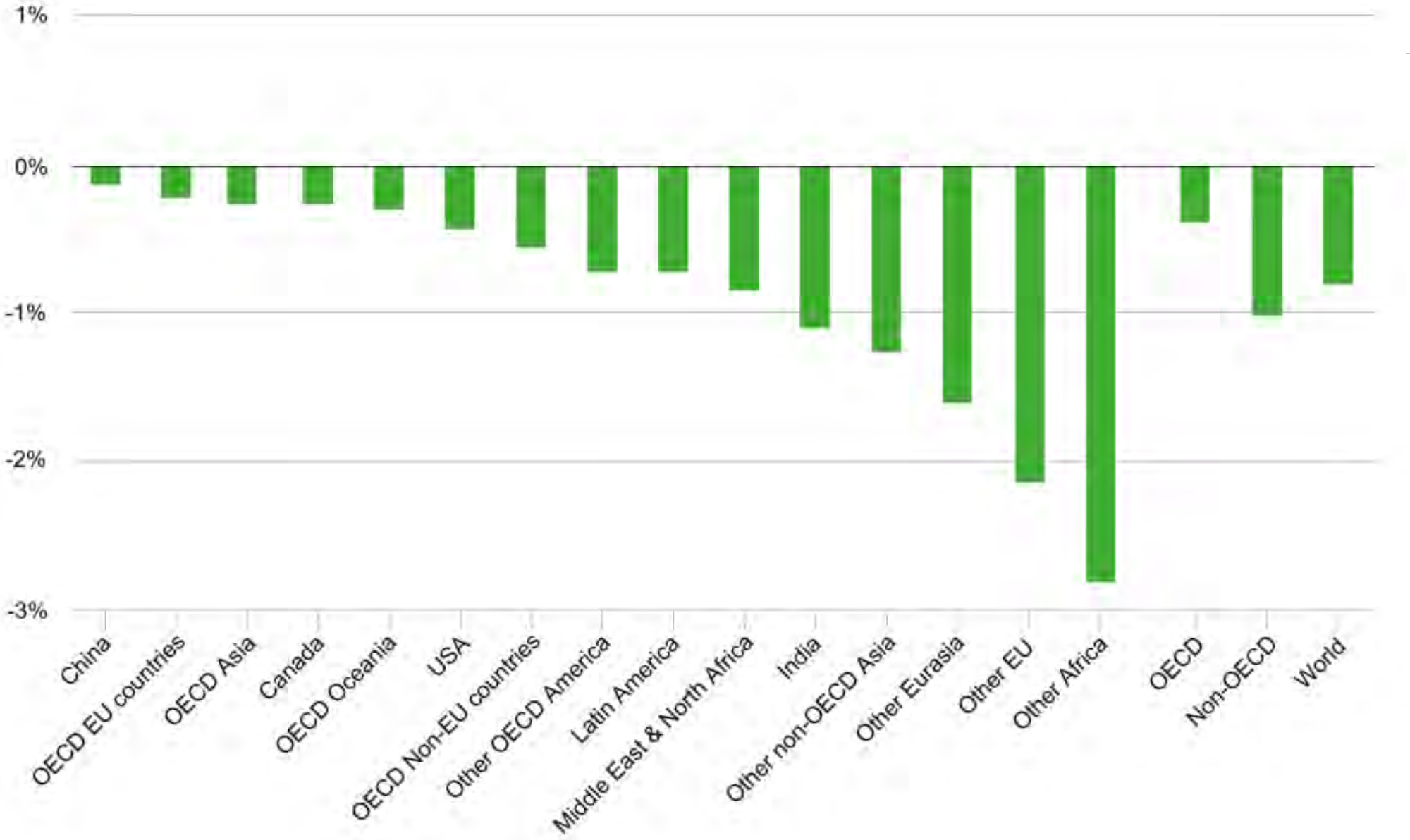
Global Ambition



Requires policies to reduce demand, increase recycling, extend useful life, and eliminate mismanaged waste

Global Plastics Outlook (OECD, 2022b 2022b)

Annual costs are less than 1% of global GDP in 2060, with significant regional differences



Global Plastics Outlook (OECD, 2022b)

Some final takeaways

- Plastic leakage to the environment can be drastically reduced, at modest costs overall
- But eliminating leakage requires global action on all aspects of the plastics life-cycle to restrain demand, enhance circularity and close leakage pathways.
- And costs as a share of GDP will be higher for many developing countries.
- Even if leakage is eliminated, stocks of accumulated plastics in rivers and oceans will still double. Flanking efforts are needed to tackle clean-up as well.
- We need more granularity in policy discussions on “plastics” looking at applications, polymers, stages of the life-cycle
- At the same time we need to broaden the locus of “plastic pollution” – not just marine litter, but also rivers, pollution on land, air quality and ghg emissions.

Thank You

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https://www.oecd.org/environment/plastics/