

Global Plastics Outlook: Policy scenarios to 2060

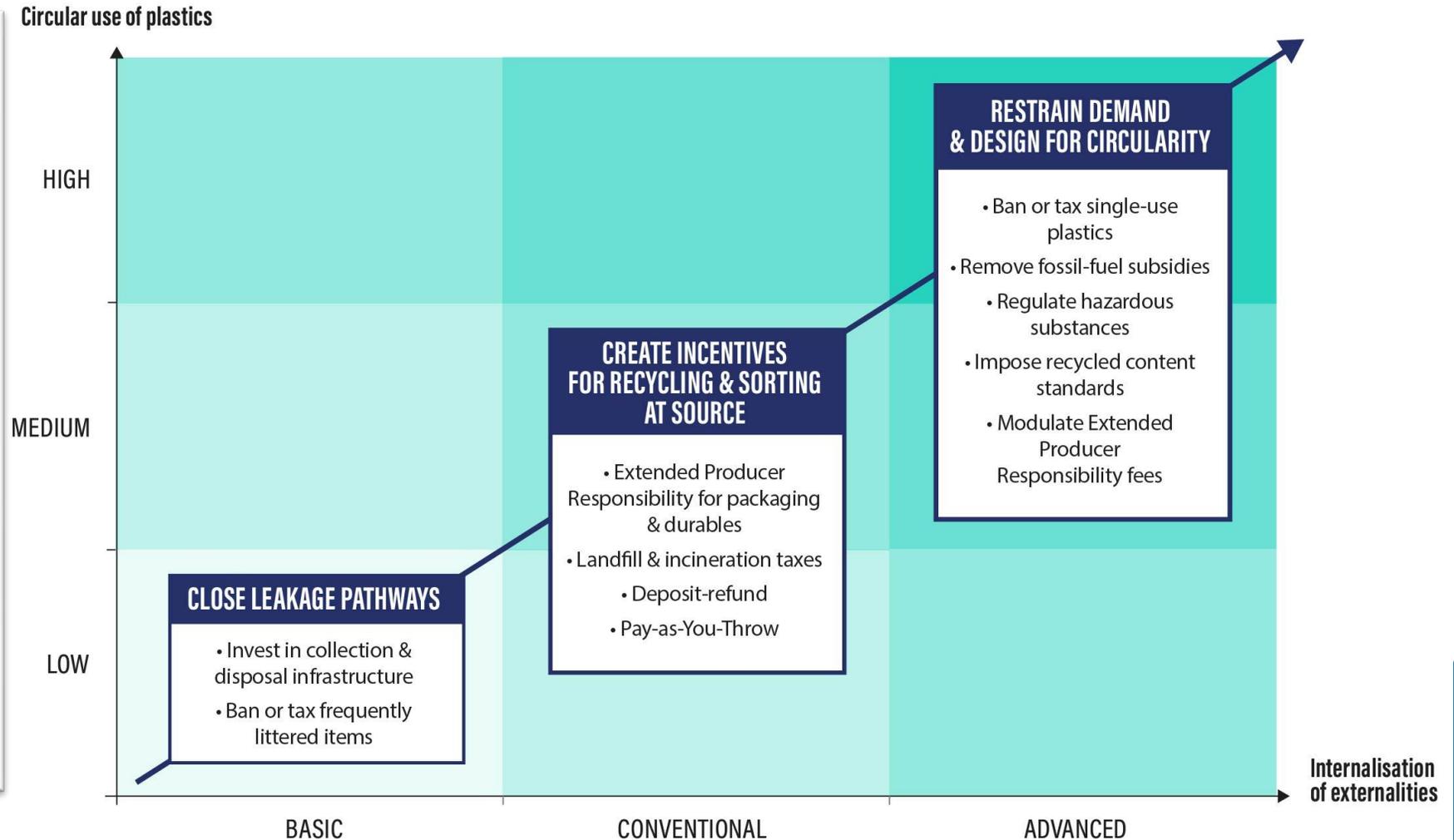


Rob Dellink
Environment Directorate
OECD

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The first GPO: a roadmap for increasing policy ambition





Global Plastics Outlook: Policy Scenarios to 2060



Forward-looking to 2060 with a multi-regional, multi-sectoral dynamic model

Presents **scenarios** for projecting future plastics use, waste and leakage

Quantifies **policy packages** towards eliminating leakage

Investigates synergies between plastics and **climate policies**

Calculates **costs** of policy packages at regional level

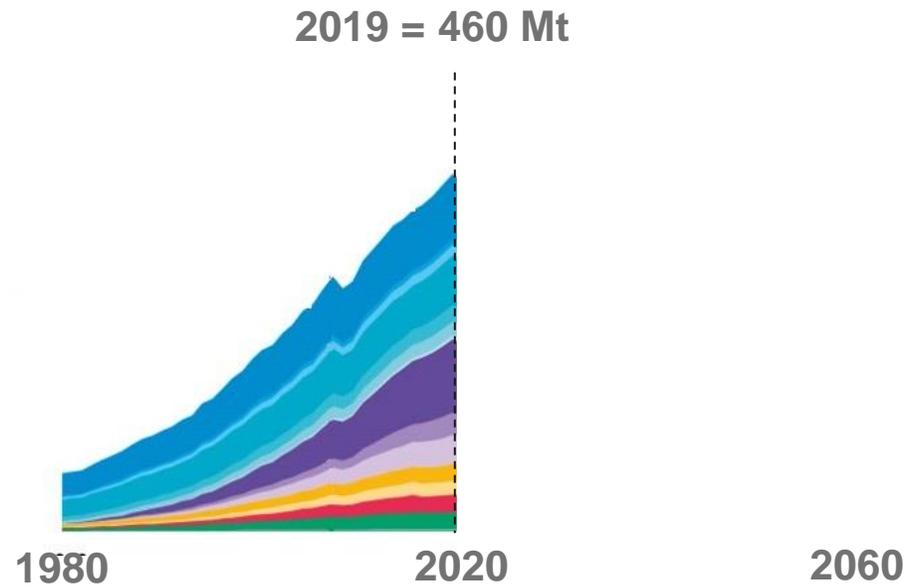


Under business as usual...

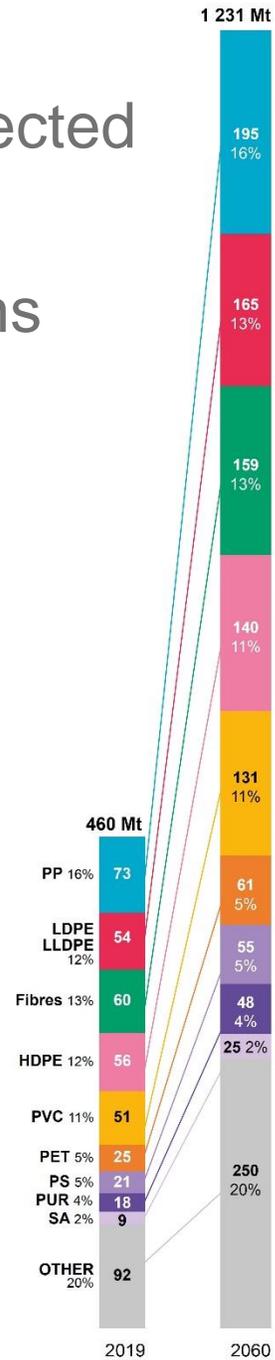


Global plastics use is on course to almost triple by 2060

2060 = 1231 Mt



All polymers are projected to increase...
...in all applications

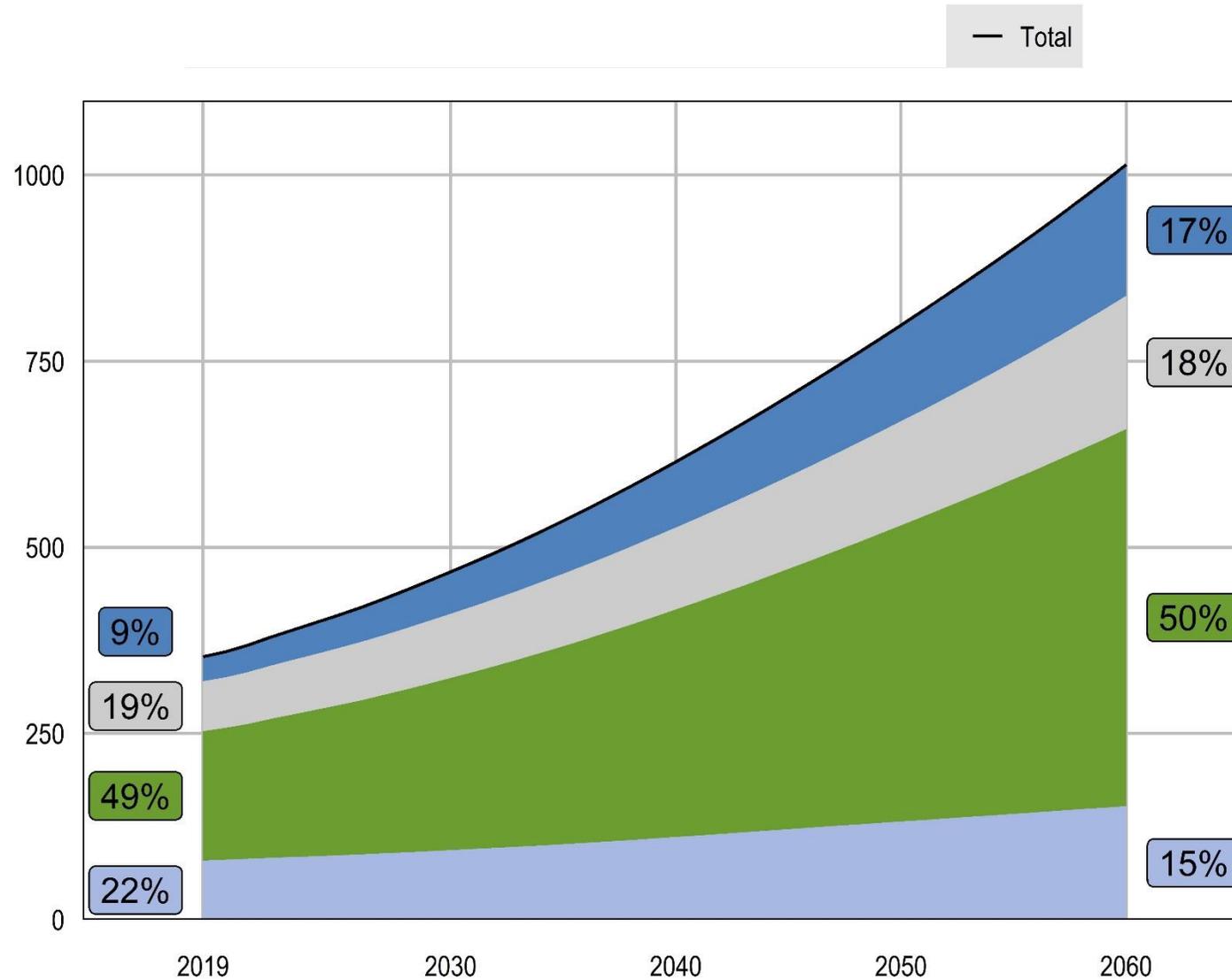


Packaging, construction and vehicles will be 2/3 of all use





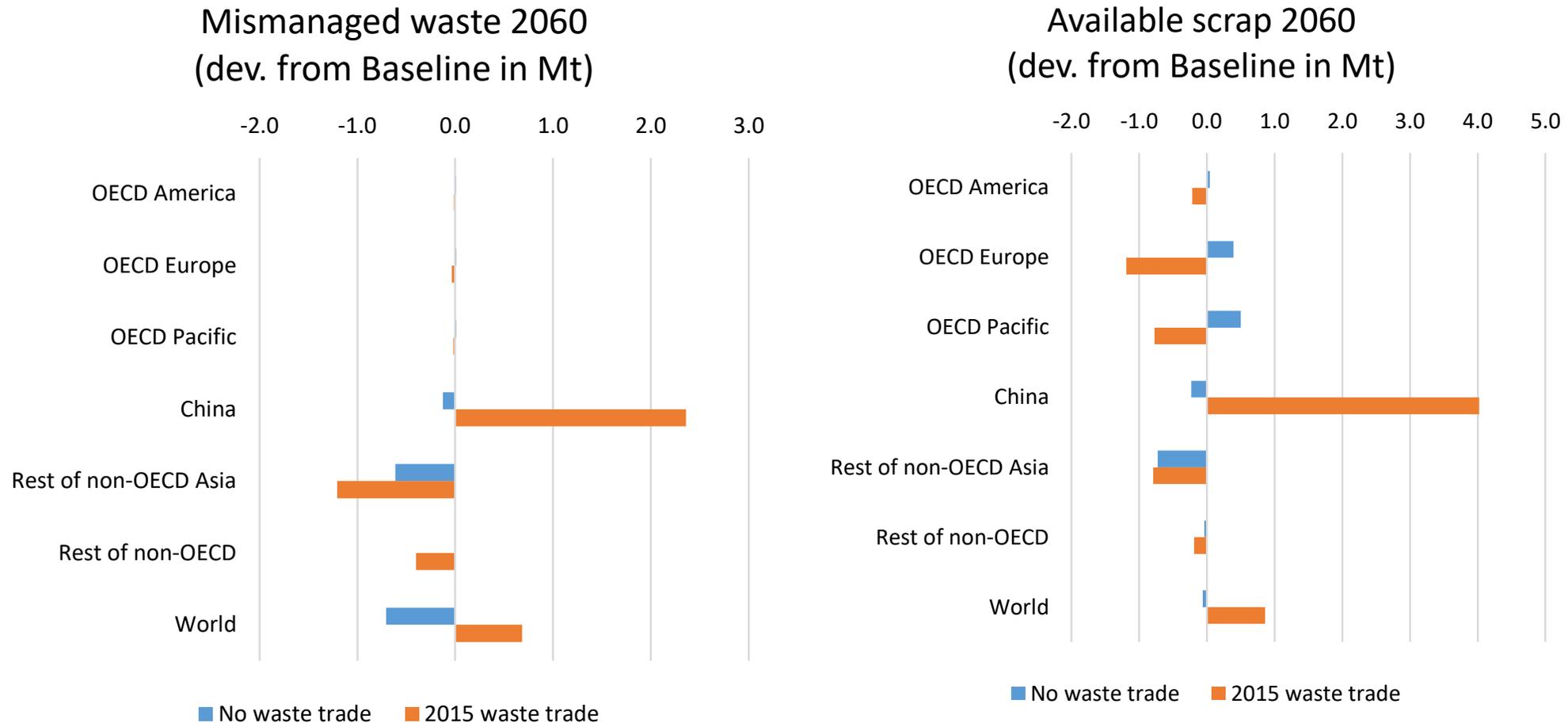
Plastic waste will also triple, half of it will still be landfilled





Trade in plastic waste affects regional recycling opportunities and plastic leakage into the environment

Two hypotheticals: *No plastic waste trade* and *Return to 2015 plastic waste trade*

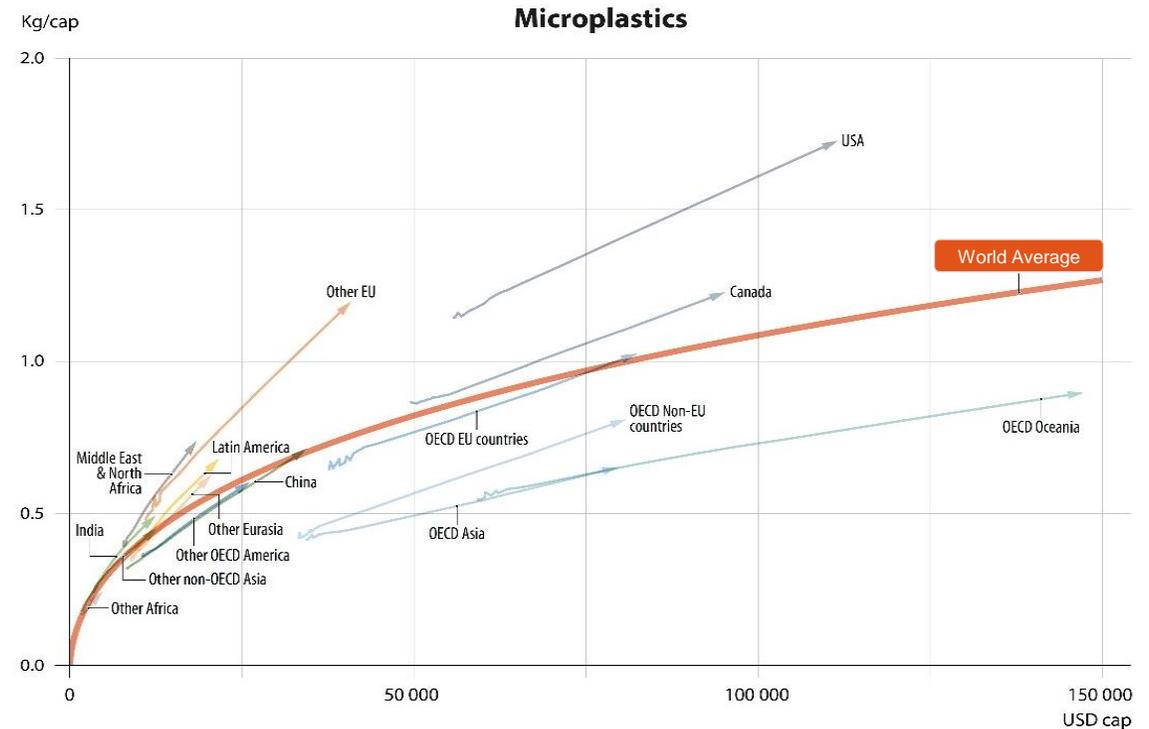
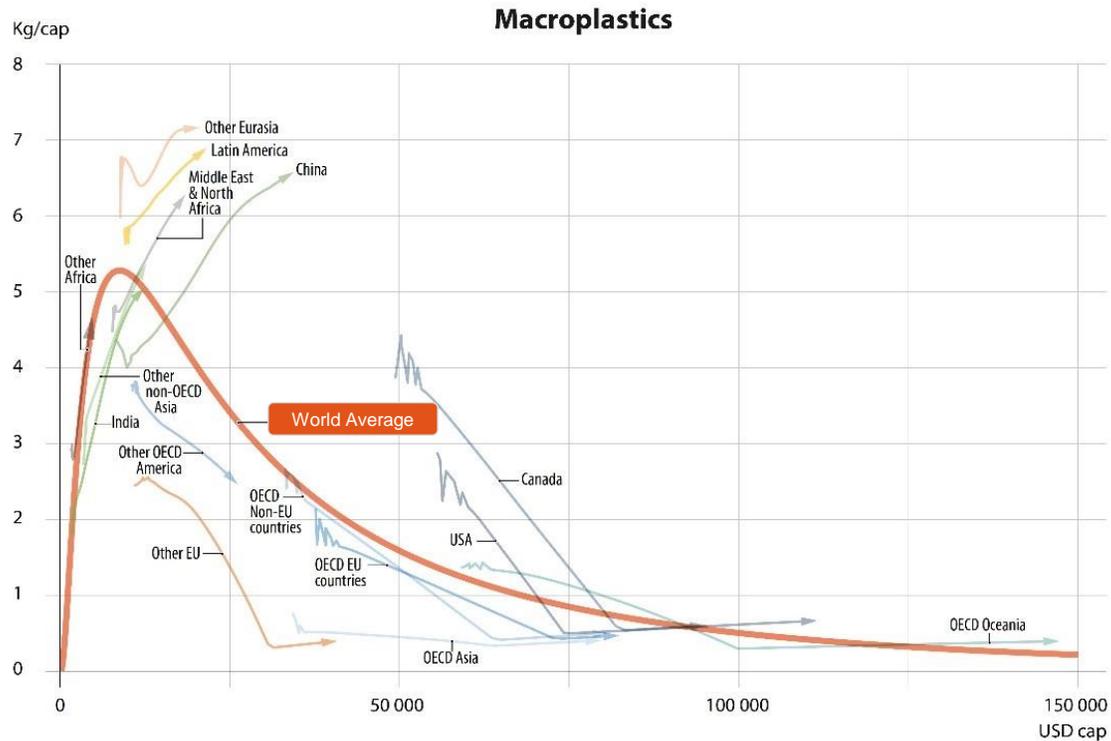




Macroplastic and microplastic leakage show different trajectories with rising incomes

Macroplastics leakage “Kuznets curve”:
from 19.4 Mt in 2019 to **38 Mt** in 2060

Microplastics leakage:
Doubling from 2019, to reach **6 Mt** in 2060





What policy packages can bend the plastics curve?



The vision behind two policy packages

Regional Action

Present situation
Current circumstances
and policy landscape



How to achieve
better environmental
outcomes?



Gradually increasing
stringency of
measures

Global Ambition

Co-ordinated policy
action



How do we get there?

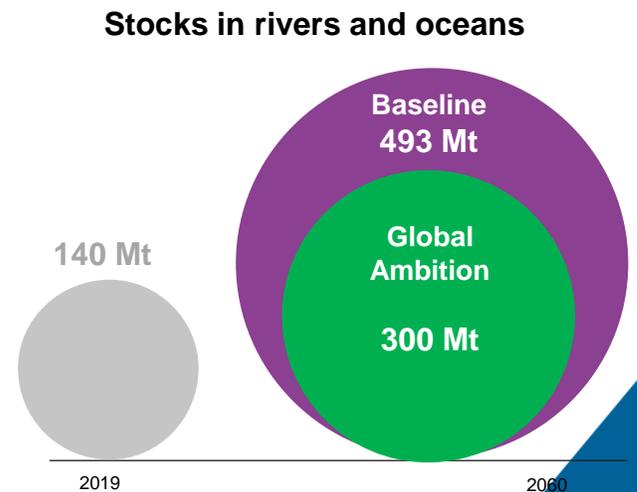
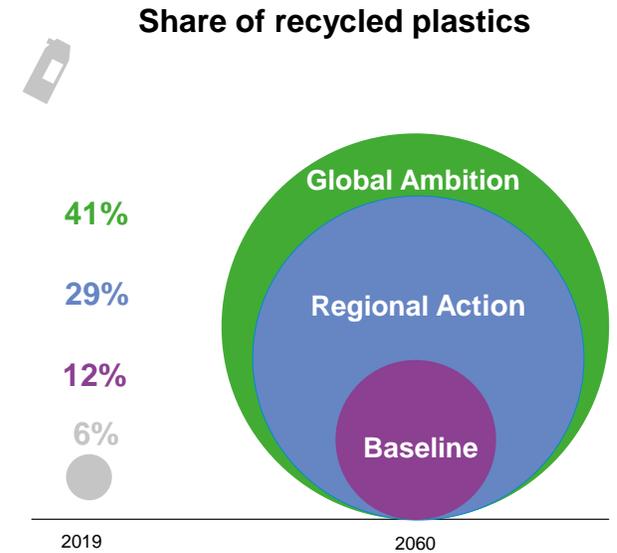
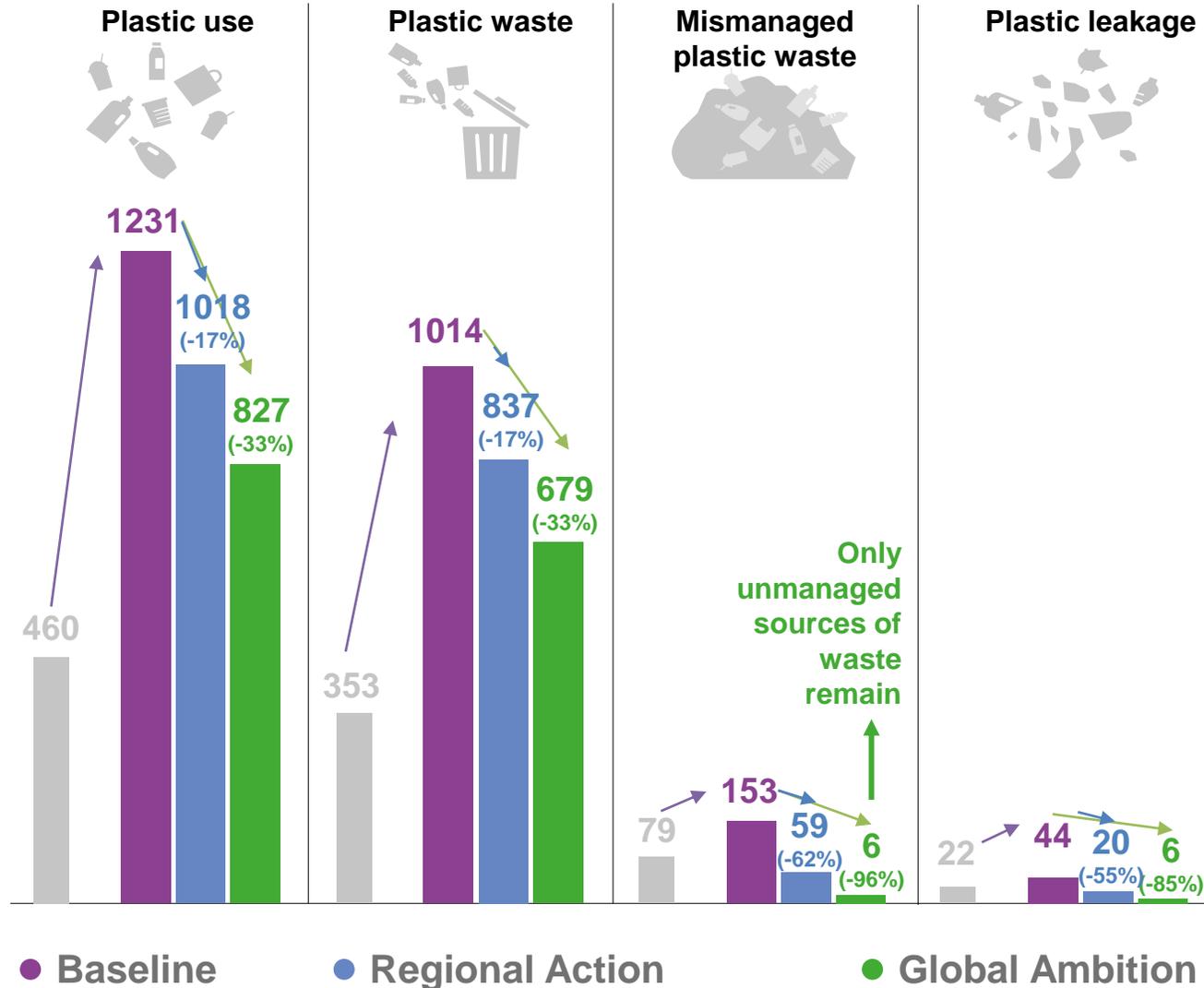


Global Goal:
Eliminate leakage



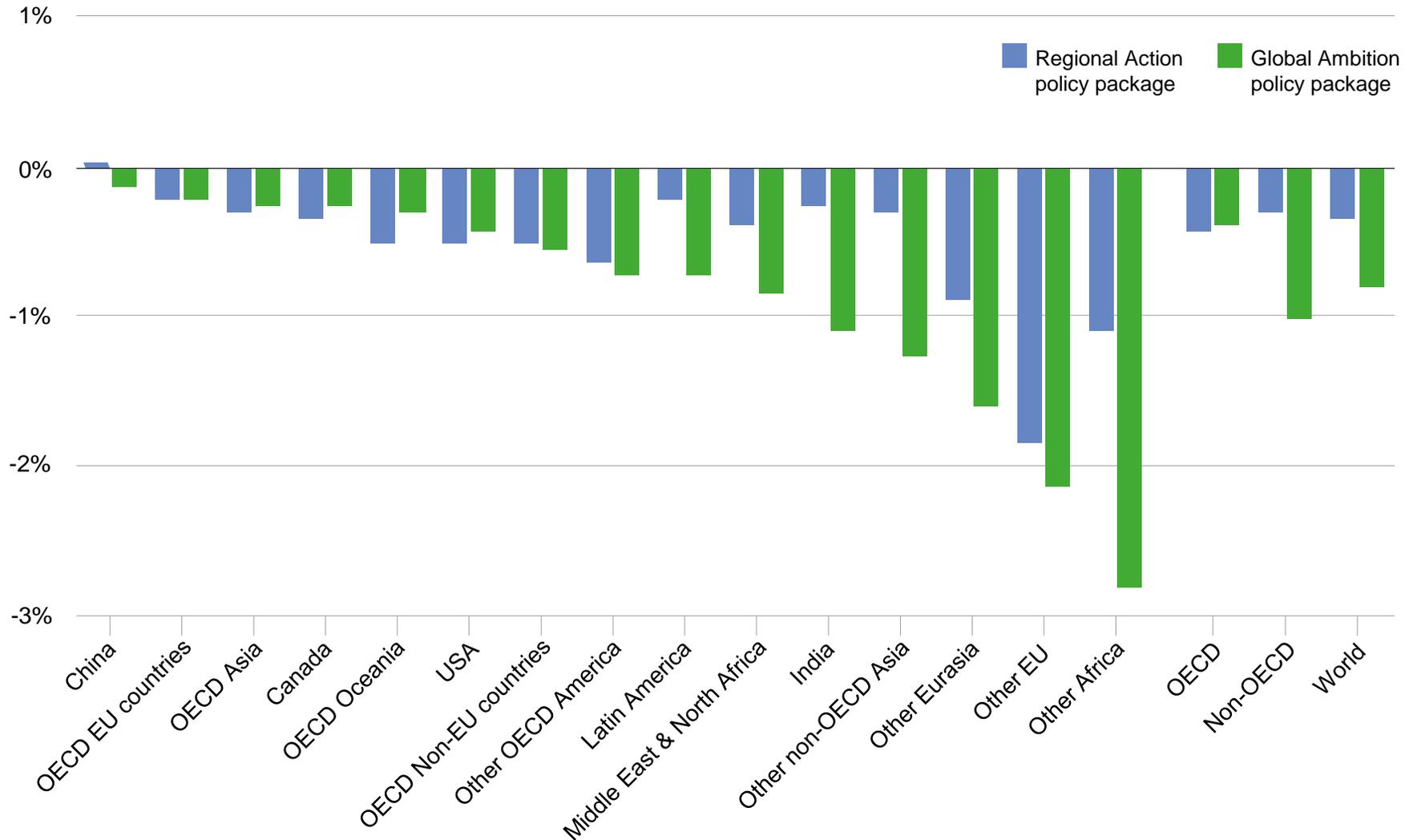
Combining policies that target different lifecycle stages can drastically reduce plastics leakage

In 2060,
million tonnes





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





Some final takeaways

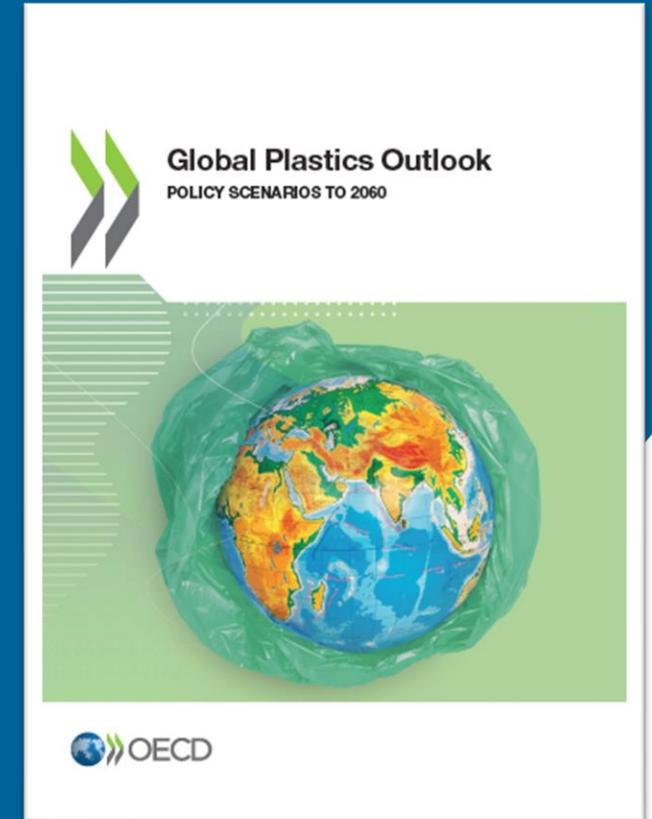
- Eliminating leakage requires global action on all aspects of the plastics life-cycle to restrain demand, enhance circularity and close leakage pathways.
- Plastic flows to the environment can be drastically reduced, at modest costs overall. However costs as a share of GDP will be higher for many developing 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.
- Trade scenarios highlight how policies on the transboundary movement of plastic waste can drastically divert trading patterns and thus have important implications both for regional recycling opportunities and plastic leakage into the environment.
- To achieve a more circular use of plastics, trade policies and environmental policies need to go hand-in-hand, so that any asymmetries do not result in reduced recycling rates or increased pollution.



Thank you

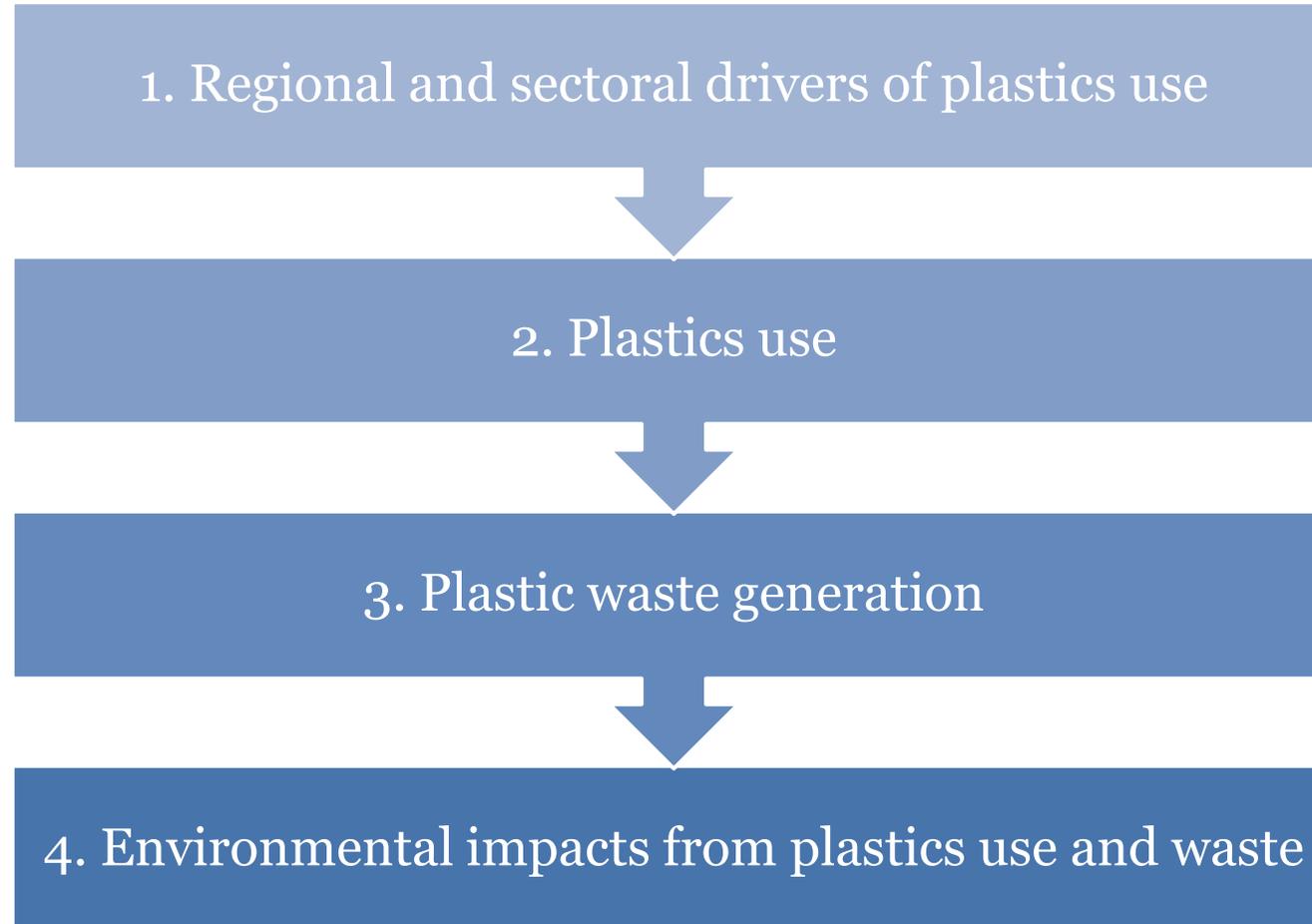
Find out more about our work at:
www.oecd.org/environment/plastics

Contact me at:
rob.dellink@oecd.org





Modelling framework

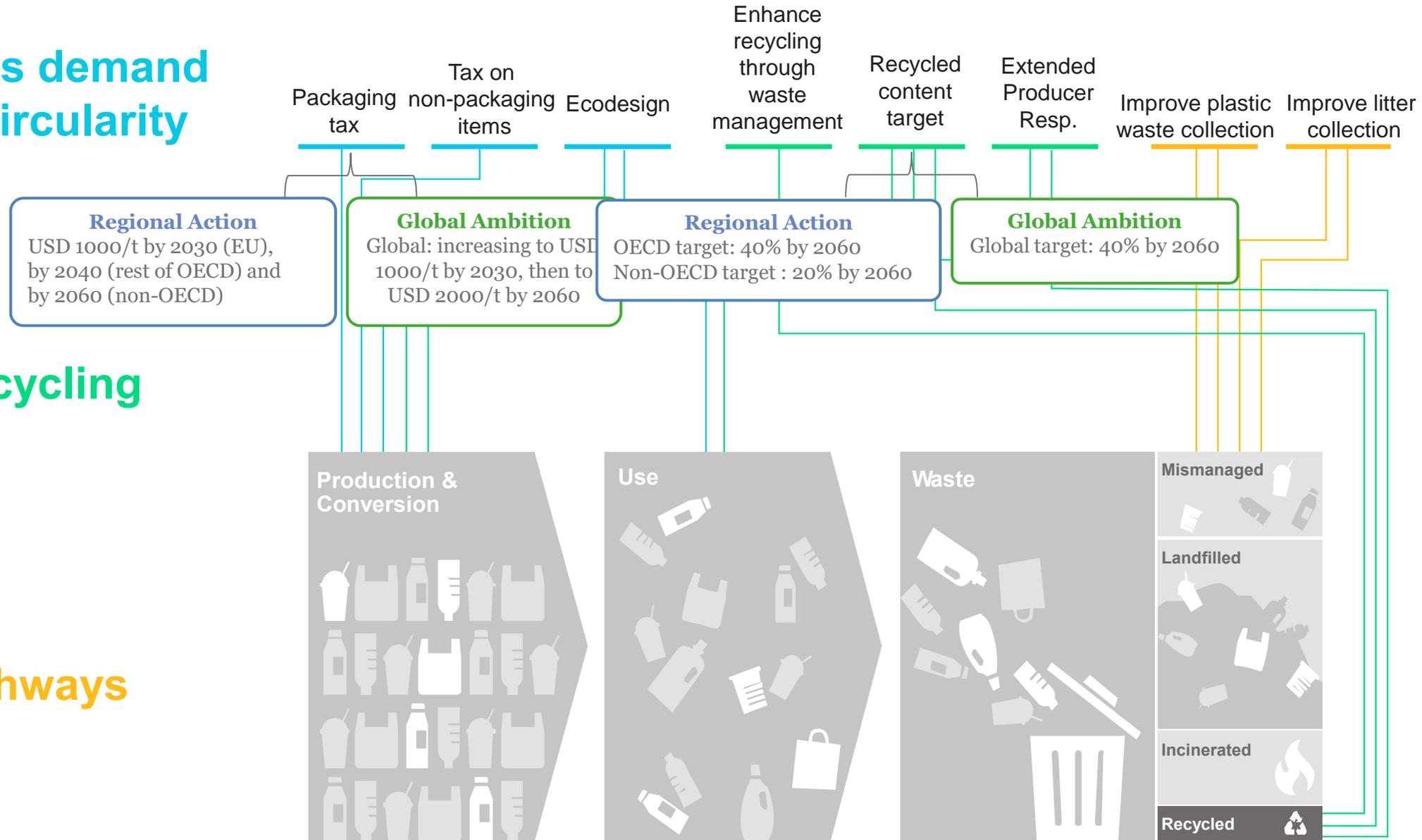


Both policy packages target the entire plastics lifecycle

Restrain plastics demand and enhance circularity

Enhance recycling

Close leakage pathways





Trade in plastics waste

- Incorporated trade in plastic waste per application and polymer type
- Volumes of plastic waste exports and imports are calculated based on UN Comtrade data:
 - Total exports of plastic waste per country and polymer are estimated using the share of plastics exports (Comtrade) to plastic waste (output of ENV-Linkages).
 - Exports are split into partner countries and polymers using the country and polymer weights in 2019 for projections, and historical data for the years before
 - $\text{Imports}(r,rr) = \text{Exports}(rr,r)$
- The end-of-life fates of plastic waste traded flows differ from the domestically treated waste: 50% of traded plastic waste is recycled, and the remaining is distributed across the other waste streams following the same proportions of end-of-life fates as domestically treated waste excluding littering.