



PLASTICS AND PLASTIC WASTE

POLICY CHALLENGES AND DATA GAPS

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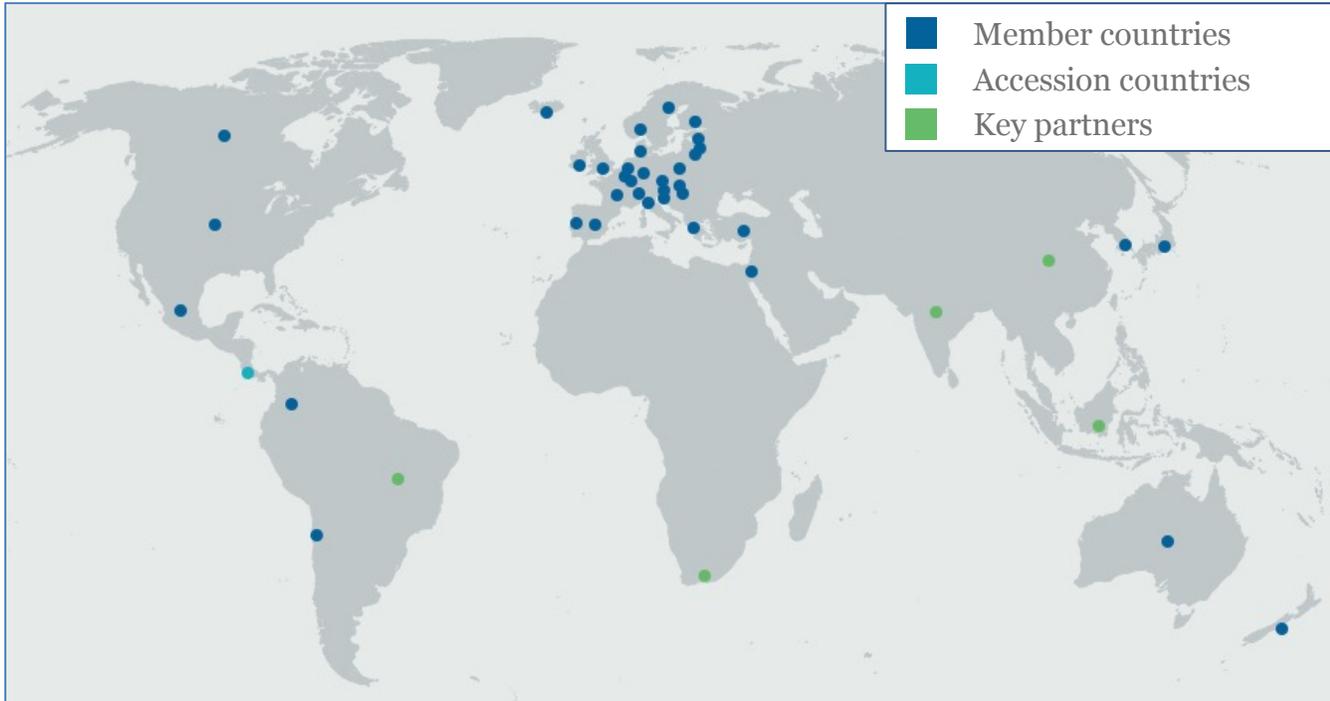
Outline

1. **OECD**
2. **Data gaps**
3. **Global Plastics Outlook**
4. **Preliminary policy messages**
5. **Research avenues**





1. OECD



- Unique forum for:
 - Data analysis
 - Information sharing
 - International standard setting



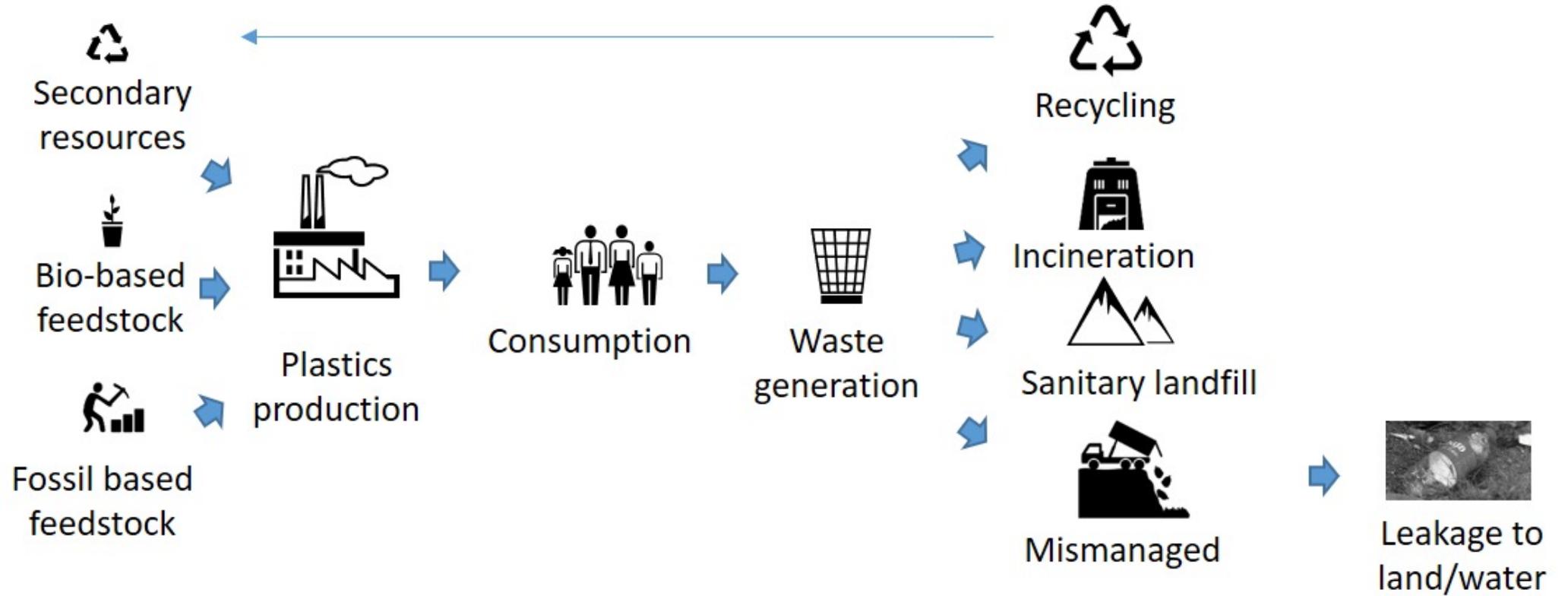
2. Perspectives



- Public perspective
- Policy maker's perspective
- Researcher's perspective

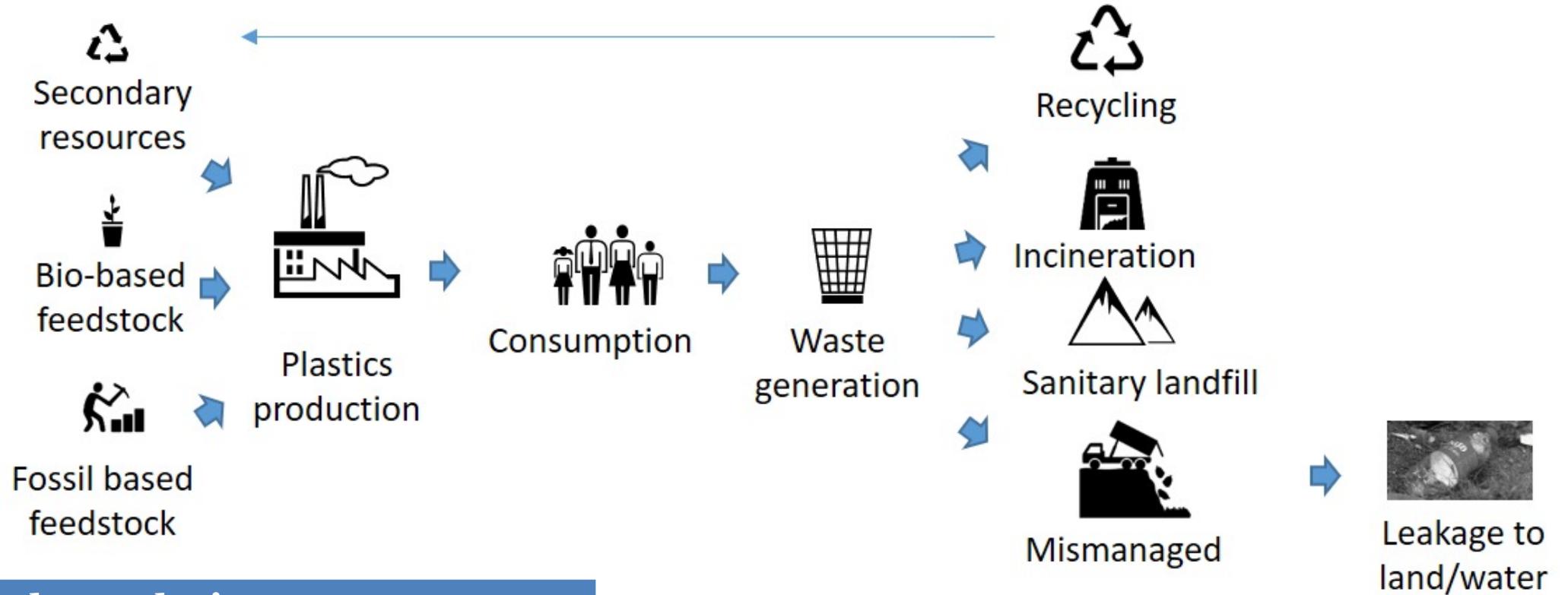


3. Data gaps





3. Data gaps

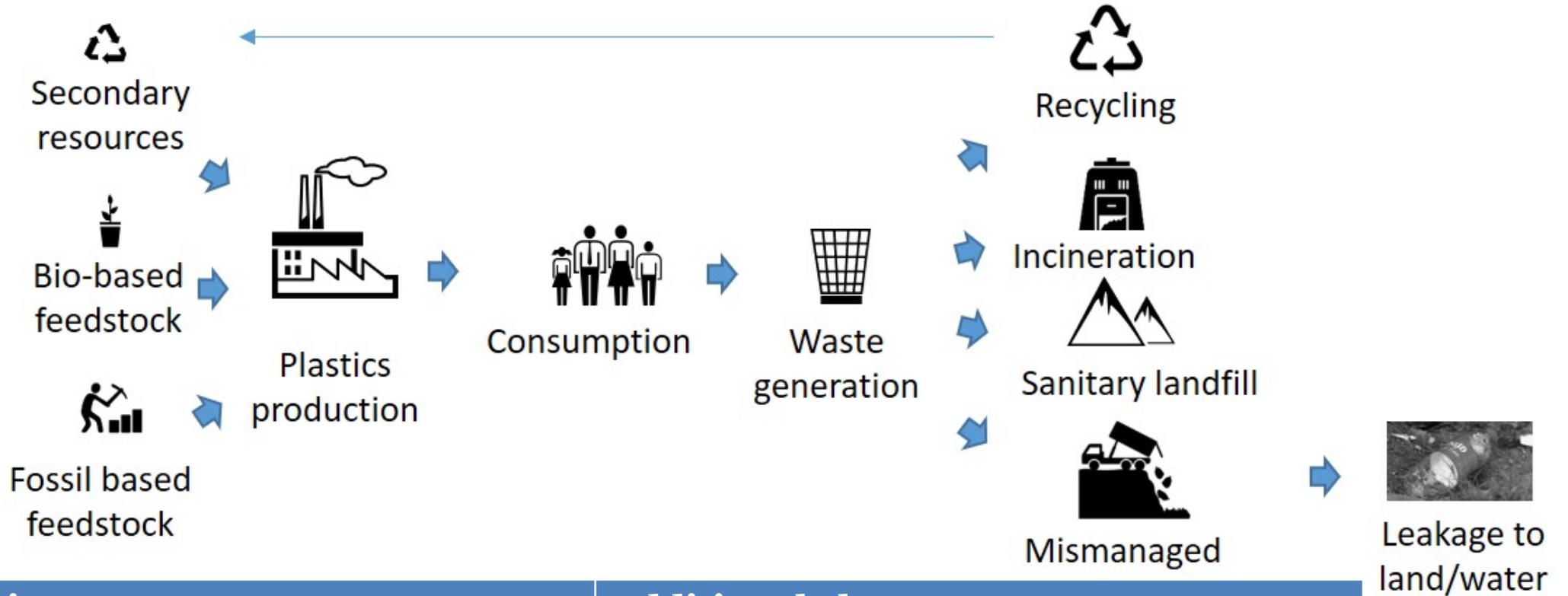


Additional complexity

- Different countries
- Trade (plastics and plastic waste)
- Economic flows (\$) vs volumes (tonne)
- Evolution over time
- Covid disruption



3. Data gaps



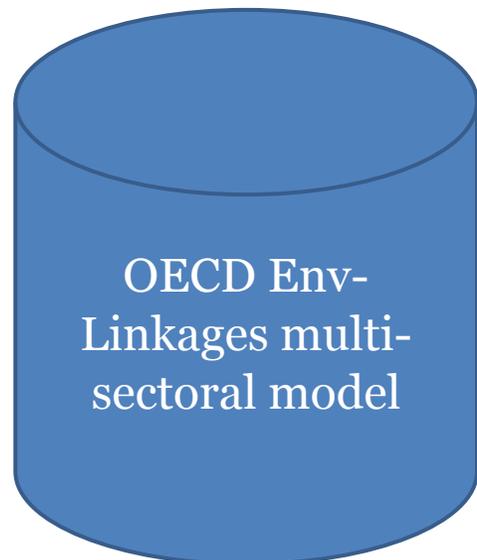
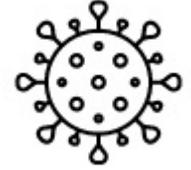
Complexity	Additional elements
<ul style="list-style-type: none">- Different countries- Trade (plastics and plastic waste)- Economic flows (\$) vs volumes (tonne)- Evolution over time- Covid disruption	<ul style="list-style-type: none">- Mobility of leaked plastics- Other macroplastic leakage: e.g. fishing gear- Microplastics: e.g. brake and tyre wear particles- Carbon emissions- Other environmental impacts



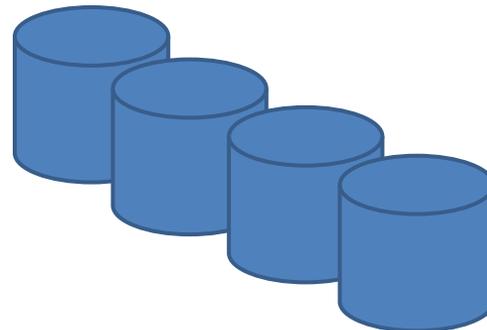
Global Plastics Outlook

- Highlights

- Comprehensive database of plastics use, GHG emissions, waste and leakage in 2019
- Assessment of impact from Covid-shock
- Quantification of global plastics innovation using patents and trademarks
- Global overview of policy instruments in 50 countries
- Projections to 2060 and assessment of different policy packages



Collaboration with external scholars to leverage dedicated models for specialized topics



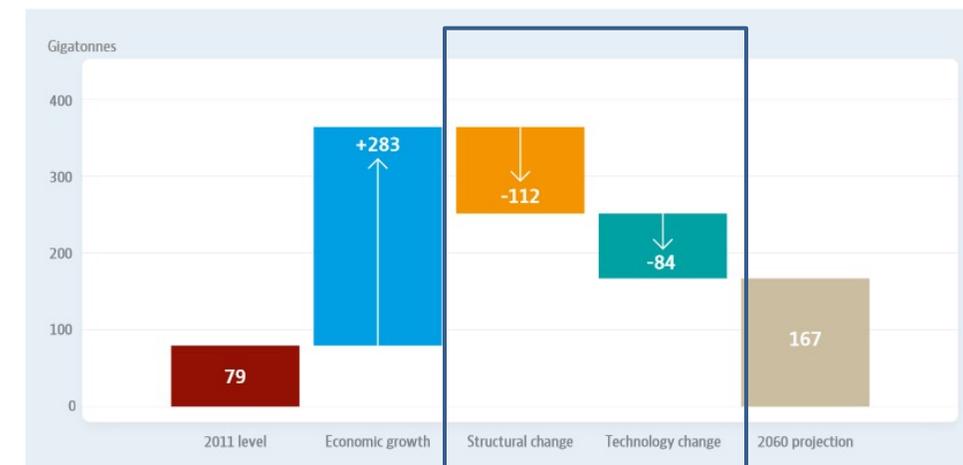
e.g. Biobased, macro-plastics, micro-plastics, air emissions, water dynamics, LCA, recycling losses



Preliminary policy messages

- Plastics
 - Sustained growth of plastics use globally, with main growth outside OECD
 - Innovation somewhat slows down plastics intensity
- Environmental impacts
 - Explosion of leakage projected in Africa and South East Asia related to immature waste management systems
 - Steady growth of microplastics globally
 - Carbon and other emissions closely related to production stage
- Policy scenarios
 - Frozen policies, moderate ambition, Net-zero leakage
 - Critical elements: upstream focus and buy-in emerging markets
- Policy instruments
 - More economic incentives to change behavior needed
 - More innovation for upstream policy instruments required

OECD (2019) Global Materials Outlook





Research avenues

- Fill remaining data gaps around the material flows of plastics
 - Recycling losses, polymer and additive level, ...
 - Empirical analysis that checks analytical estimations
 - Country-level analysis
 - Degradation of plastics in aquatic environments
 - Microplastics
- Deepen the understanding of health and environmental impacts
- Innovation on materials and applications
- Analysis of policy instruments
 - Upstream policy instruments
 - Effectiveness of policy instruments



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Thank you for your attention

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