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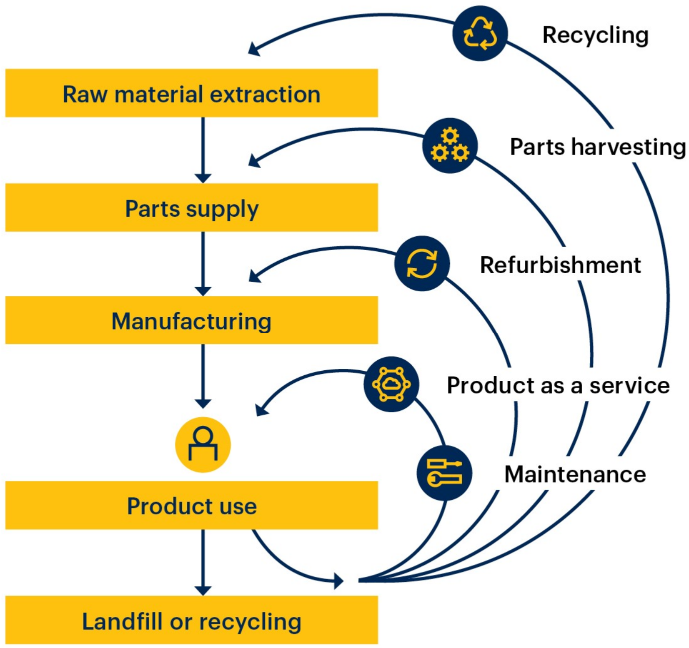
MP1



Linear versus circular economies

Debate as framed by manufacturers

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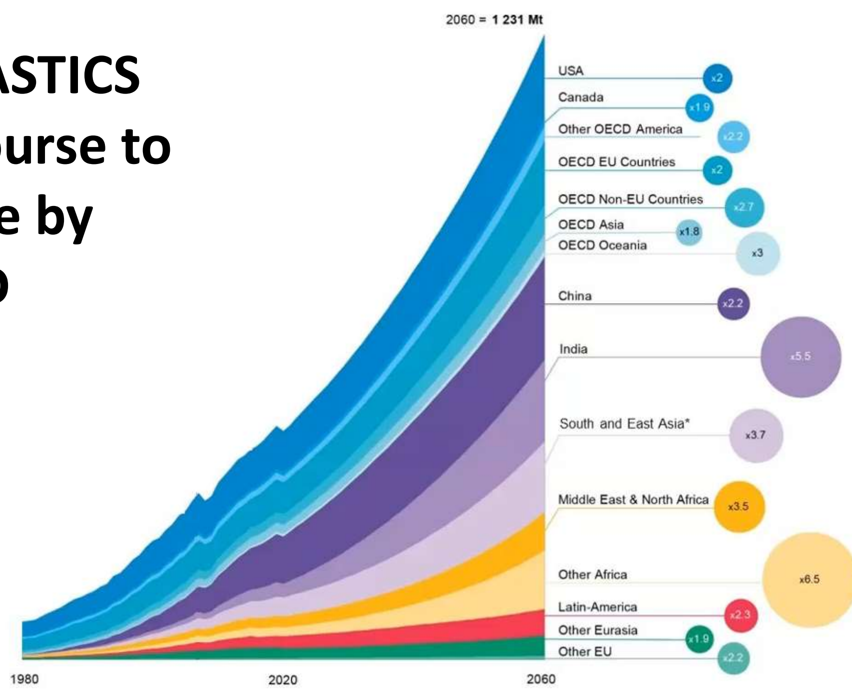
GLOBAL PLASTICS USE is on course to almost triple by 2060 - OECD



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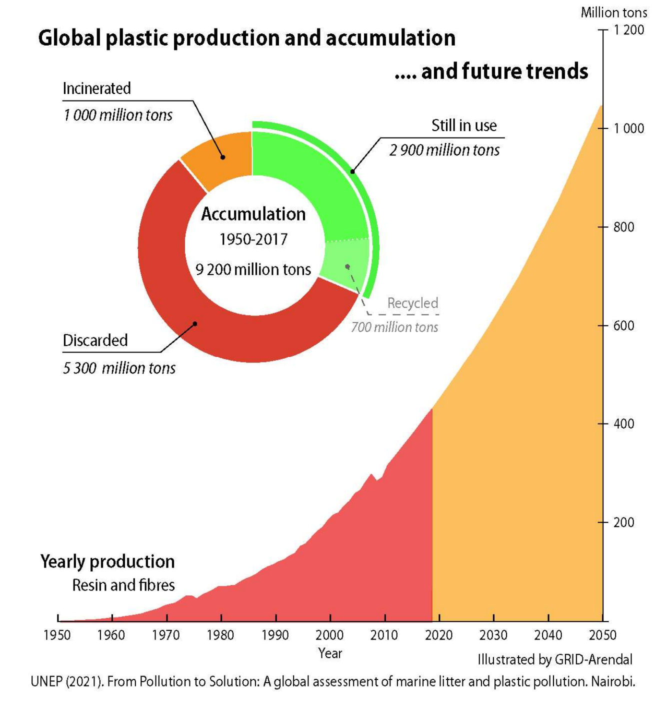
Slide 3

MP1 Michael Parsons, 6/18/2023



UNEP 2021: Global plastic production in 2050: 1.8 billion tonnes

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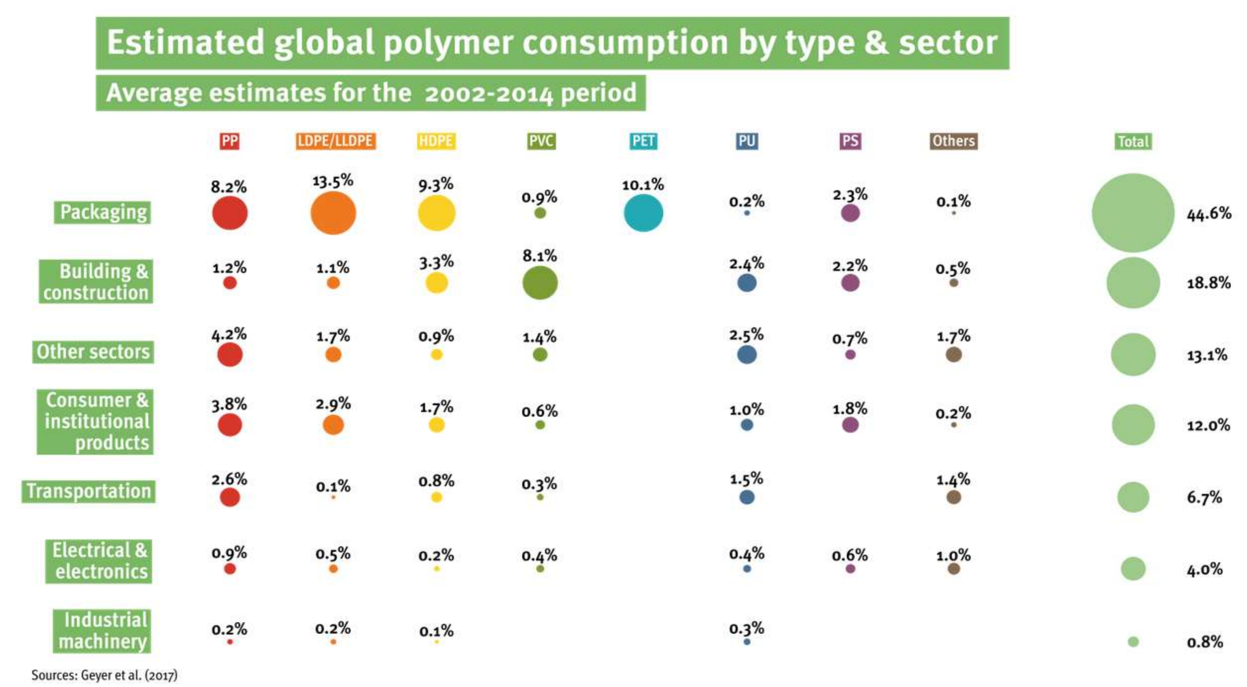

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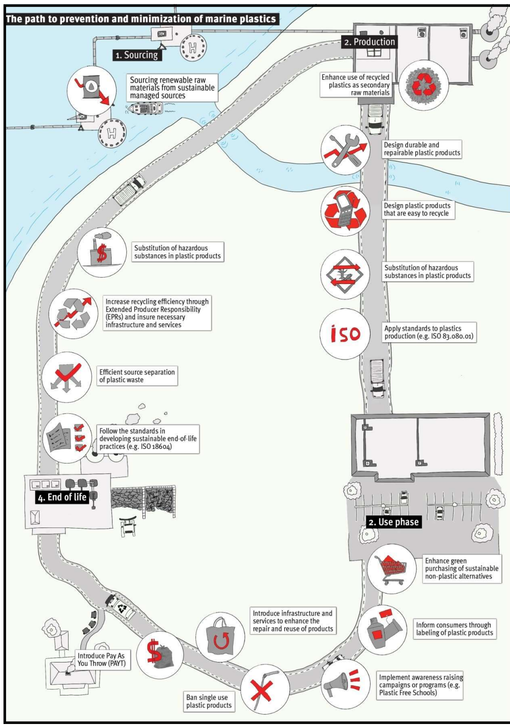

Less plastic or less mismanaged plastic?

Full life-cycle of plastics in a circular economy - guided by the waste hierarchy

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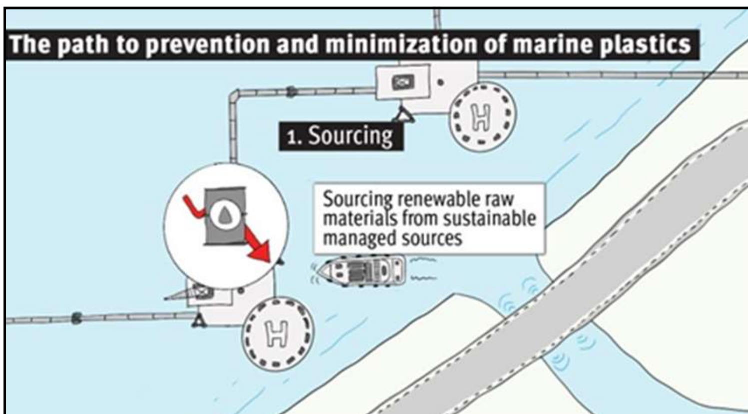
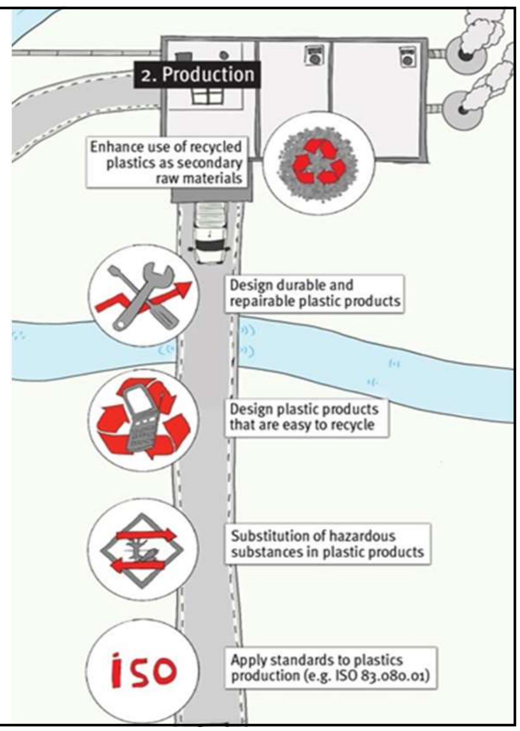


1. Sourcing renewable raw materials and using recycled plastic as secondary raw materials
2. Design for recycling
3. Substitution of hazardous substances
4. Applying international standards



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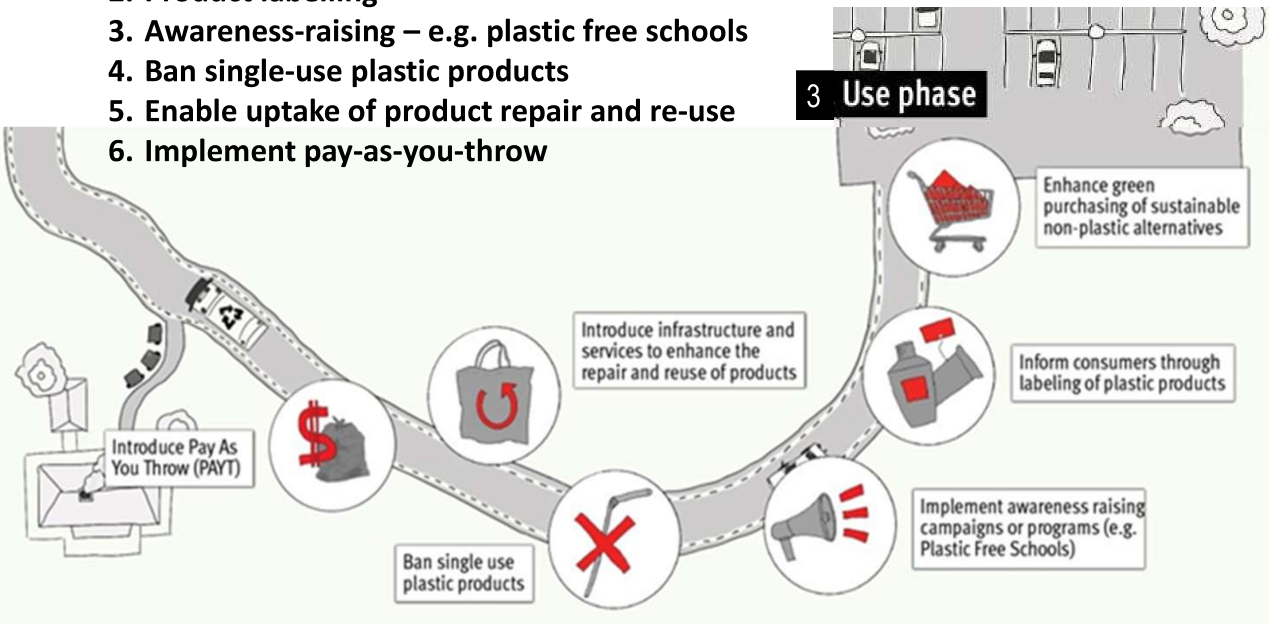
1. **Promote purchasing of non-plastic alternatives**
2. **Product labelling**
3. **Awareness-raising – e.g. plastic free schools**
4. **Ban single-use plastic products**
5. **Enable uptake of product repair and re-use**
6. **Implement pay-as-you-throw**



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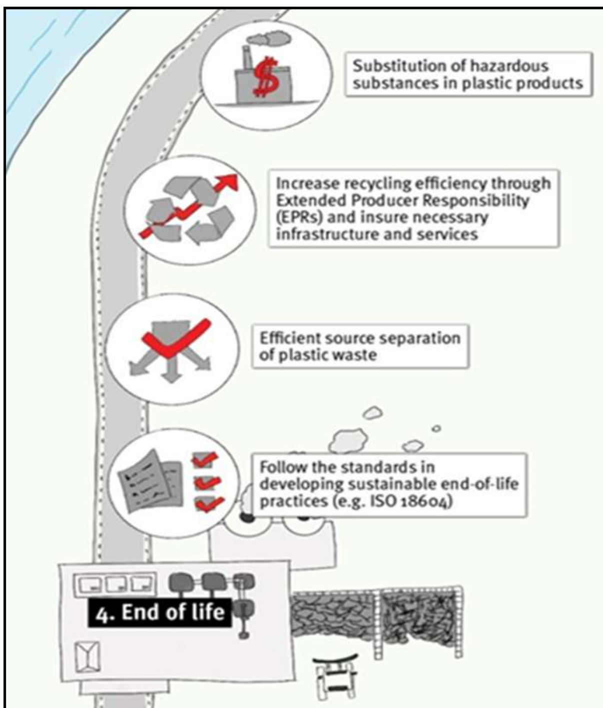

1. **Follow international standards**
2. **Efficient source separation**
3. **Increase recycling**
4. **Substitution of hazardous substances in products to enable easy recycling**

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UNCTAD 2020: VOLUME OF PLASTIC IN THE GLOBAL PLASTIC SUPPLY CHAIN

Figure 1. Proportion of total plastics trade in volume

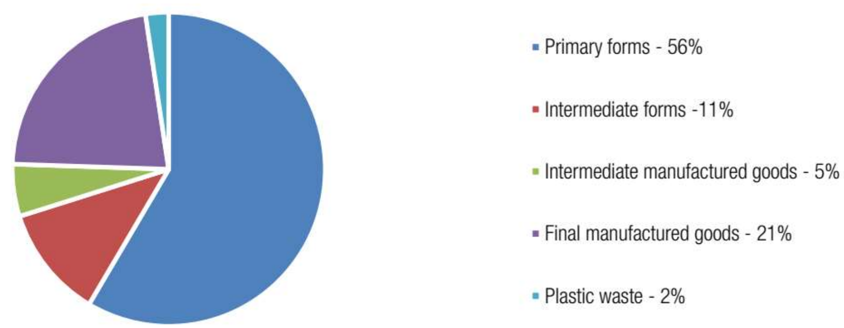

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Table 3. Top ten importers by volume and category (Rank 1-10, 2018)

Rank	Feedstocks	Additives	Primary Plastics	Intermediate Forms of Plastic	Intermediate Manufactured Products	Final Manufactured Products	Plastic Waste	Packaging	Synthetic Textiles
1	China	China	China	USA	Vietnam *	USA	Malaysia	USA	USA
2	Belgium	India	Germany	Germany	USA	Germany	Thailand	Germany	Vietnam *
3	Netherlands	USA	USA	France	China	United Kingdom	Hong Kong	Japan	Germany
4	USA	Germany	Italy	China	Indonesia	France	Germany	United Kingdom	Turkey
5	Germany	Netherlands	India	United Kingdom	Turkey	Netherlands	Vietnam *	France	China
6	Chinese Taipei	Belgium	Belgium	Belgium	Germany	Japan	Netherlands	Netherlands	Indonesia
7	Rep. of Korea	Rep. of Korea	Turkey	Italy	Bangladesh	Belgium	USA	Belgium	Brazil
8	India	Spain	Vietnam *	Turkey	Mexico	Canada	Chinese Taipei	Spain	United Kingdom
9	Mexico	Italy	France	Vietnam *	India	Spain	Turkey	Poland	Mexicoy
10	France	Indonesia	Mexico	Poland	Brazil	Italy	Indonesia	Italy	Japan

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Table 2. Top ten exporters by volume and category (Rank 1-10, 2018)

Rank	Feedstocks	Additives	Primary Plastics	Intermediate Forms of Plastic	Intermediate Manufactured Products	Final Manufactured Products	Plastic Waste	Packaging	Synthetic Textiles
1	Rep. of Korea	Saudi Arabia	USA	China	China	China	Germany	China	China
2	Japan	USA	Saudi Arabia	Germany	Rep. of Korea	Germany	USA	Germany	Rep. of Korea
3	USA	Rep. of Korea	Rep. of Korea	Italy	Chinese Taipei	Thailand	Japan	France	India
4	Netherlands	Belgium	Germany	USA	India	Poland	United Kingdom	Vietnam *	Chinese Taipei
5	Germany	Indonesia	Belgium	Rep. of Korea	Indonesia	USA	Belgium	Poland	Vietnam *
6	Saudi Arabia	China	China	India	Thailand	Belgium	France	Netherlands	Indonesia
7	India	Chinese Taipei	Chinese Taipei	Chinese Taipei	USA	Japan	Netherlands	Italy	USA
8	Chinese Taipei	Malaysia	Netherlands	Turkey	Germany	France	Hong Kong	Belgium	Thailand
9	Belgium	Germany	Thailand	Belgium	Vietnam *	BItaly	Mexico	Turkey	Germany
10	Singapore	Canada	Singapore	Poland	Turkey	Rep of Korea	Italy	Thailand	Belgium

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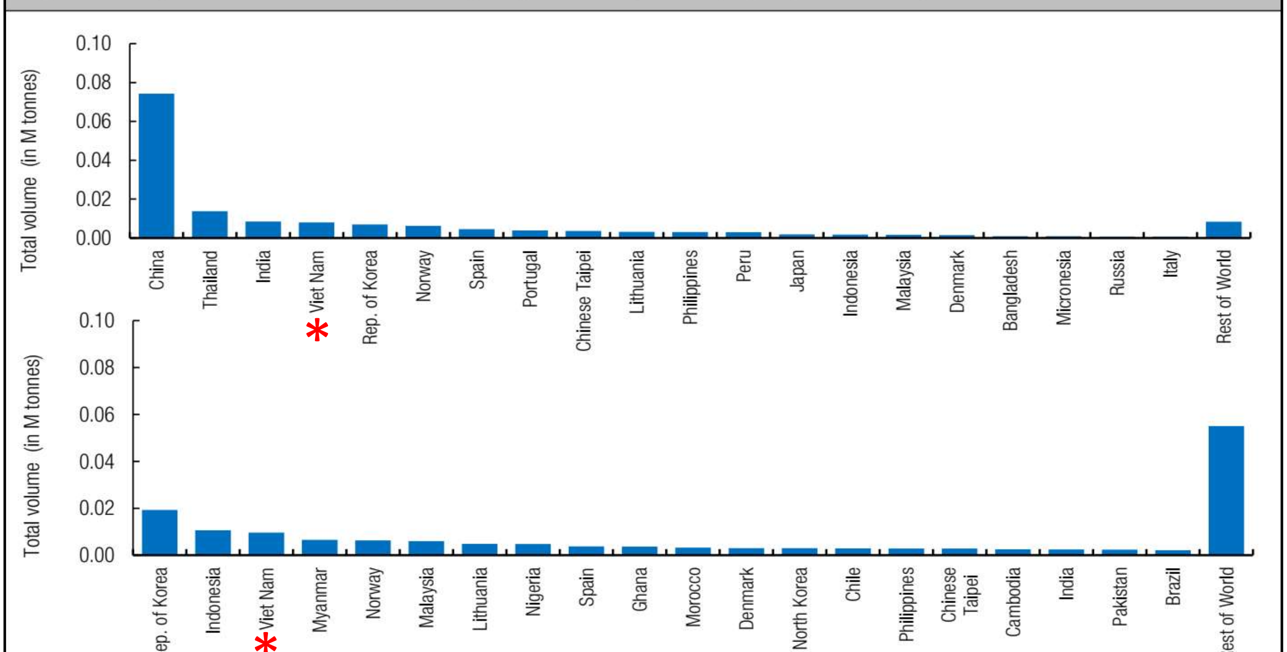
Figure 10c, 10d. Volume exports (left) and imports (right) in fishing nets – 2018



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CONCLUSIONS
Options for achieving a circular economy for plastics

Global Plastic Treaty negotiations - 3 groups of solutions offered:

1. **Upstream solutions** that focus on phasing out or reducing the supply of, demand for or use of primary plastic polymers, problematic and avoidable plastic products, and chemicals and polymers of concerns, as well as microplastics.
2. **Midstream solutions** that foster design for circularity; encourage the reduction, reuse and repair of plastic products and packaging, and promote the use of safe and sustainable alternatives and substitutes.
3. **Downstream solutions** that strengthen waste management, elimination of release and emissions of plastics to water, soil and air, address existing plastic pollution already in the environment, facilitate a just transition and protect human health.

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