

A large white circular arrow graphic with a 3D effect, curving around the central text.

# Circular Economy Principles for Addressing Marine Plastics

*A Systemic Approach*

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Conceptual diagram illustrating values and threats to Guanabara Bay in Brazil.

Diagram courtesy of the Integration and Application Network (ian.umces.edu), University of Maryland Center for Environmental Science. Source: Assessing the health of Guanabara Bay and its river basins.

[ian.umces.edu](http://ian.umces.edu)



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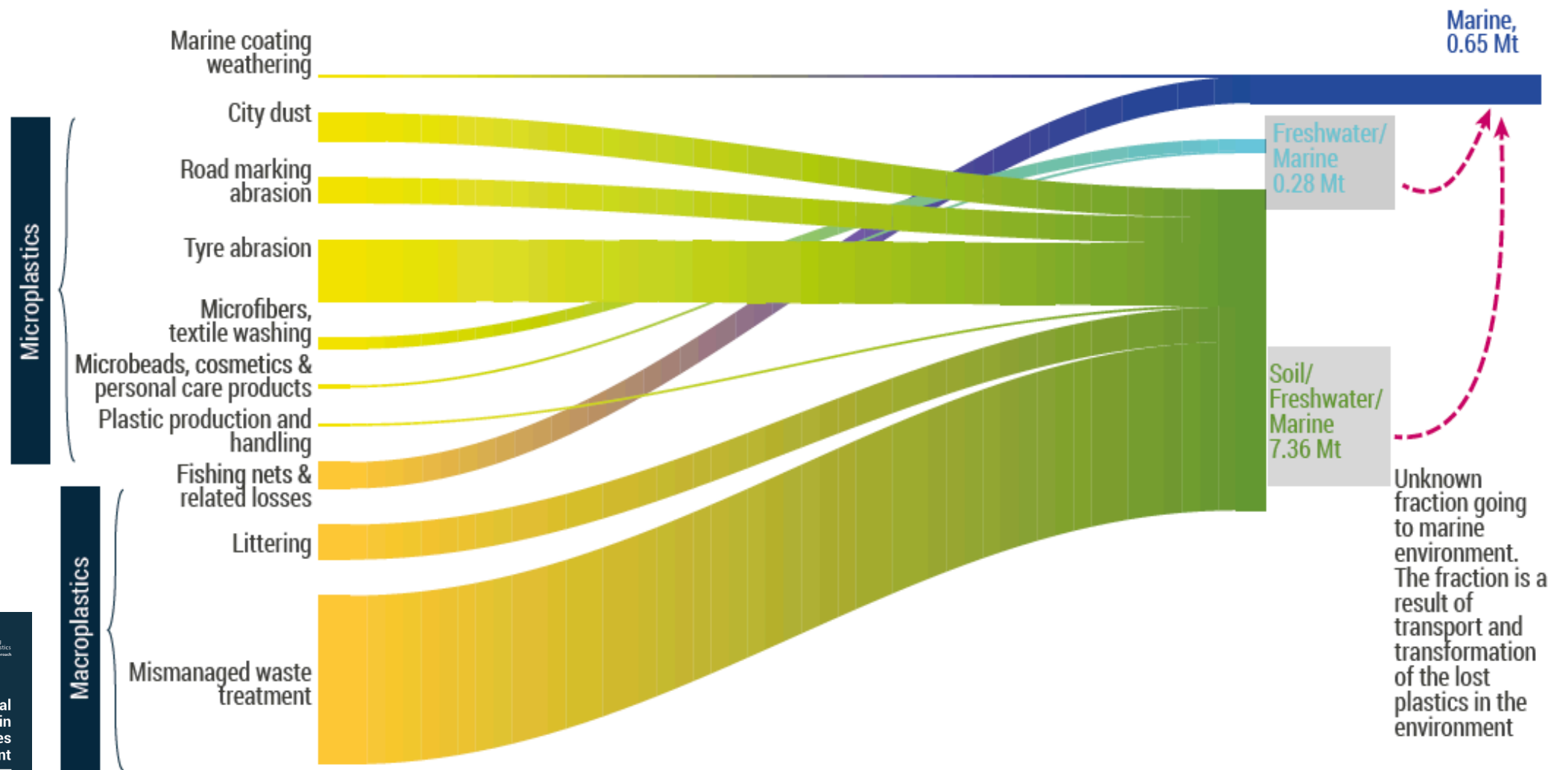
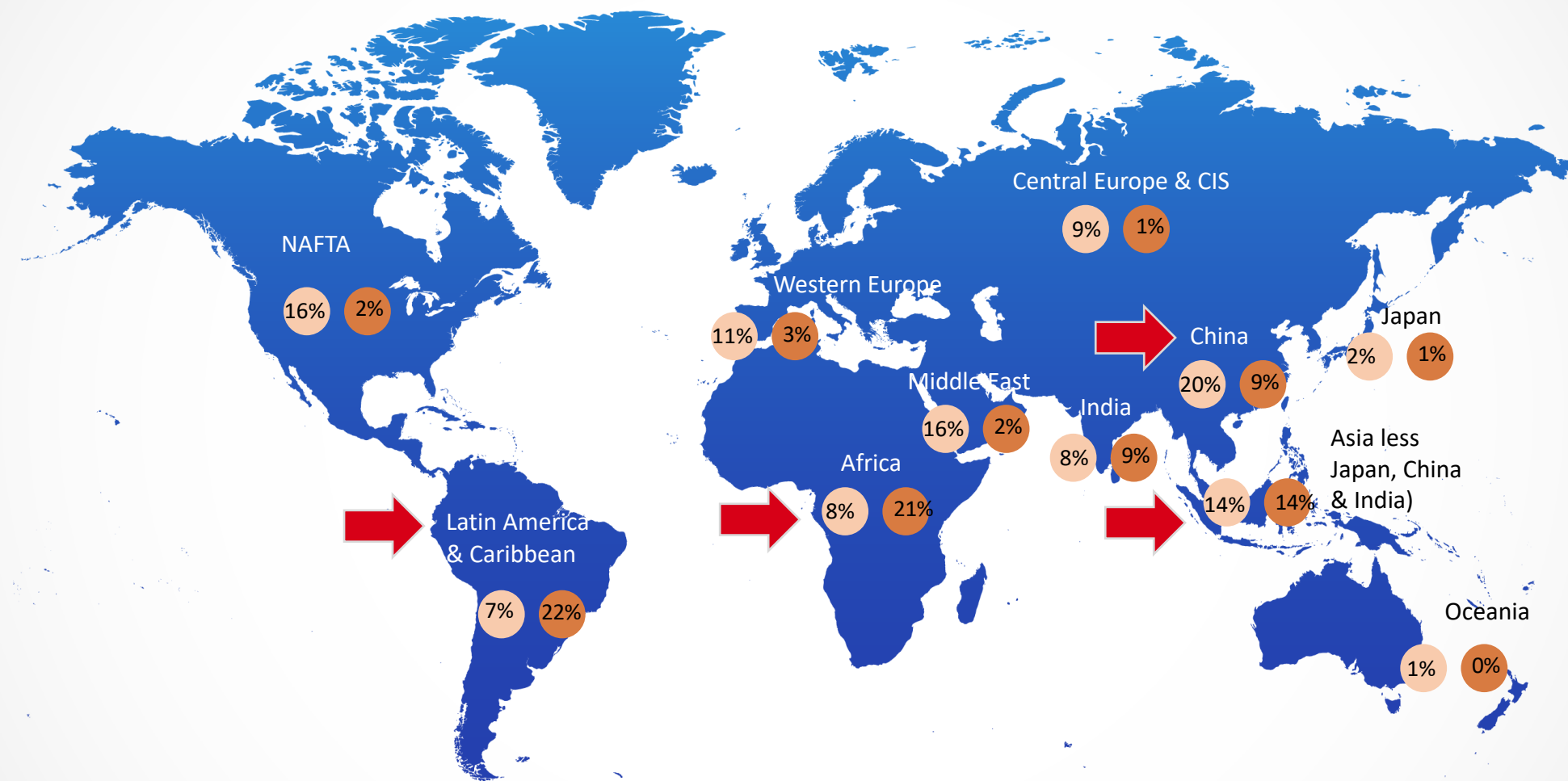


Figure S2. Sources of plastic losses and the environmental compartments to which the plastics are lost



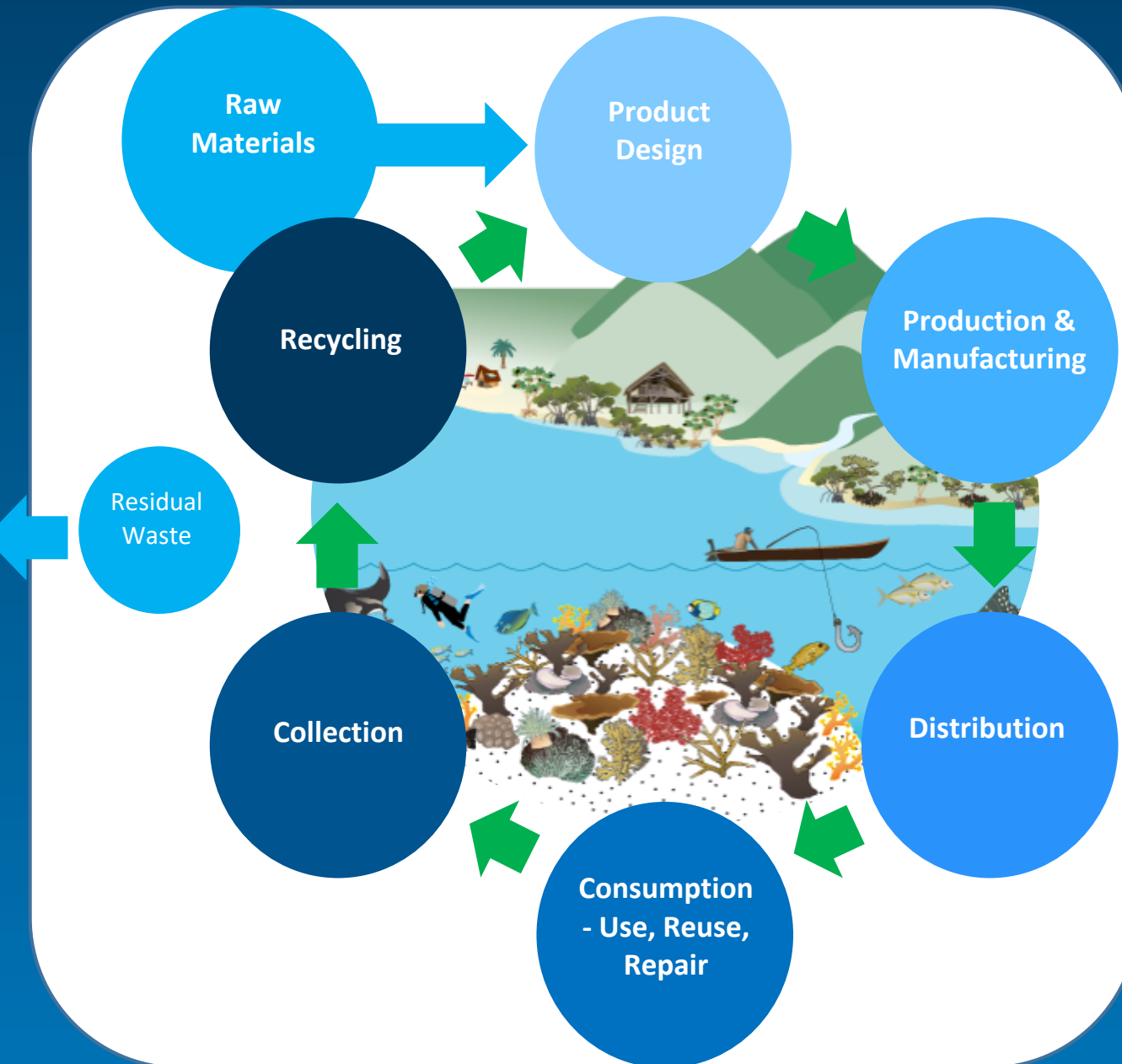
● Losses of micro-plastics (< 5mm)    ● Losses of macro-plastics (≥ 5mm)



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## Vision: Ecosystems are plastic free



### Four systemic objectives:

- Eliminate plastics we don't need
- Innovate plastics we do need
- Circulate all usable plastics keeping them in the economy, out of ecosystems
- Activate financially smart waste management solutions

### Gold standards of circularity:

1. Maximize reuse and recycling
2. Minimize residual waste
3. Maintain high net environmental, social and economic benefits



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Actions	Global	Regional	National	Local
Eliminate single use and unnecessary plastics	Global brands, UNE, GEF, Global CSOs, ←	Extended Producer's Responsibility, National and Regional Policies →		
Innovate safely usable plastics (100% recyclable/ compostable)	Global brands, Global CSOs, UNE, GEF ←	Extended Producer's Responsibility, National and Regional Policies →		
Circulate high-value safe reusable plastics within economy	Global brands, Global CSOs, UNE, GEF ←	Distributors, UN Regional Bodies, CSOs	Governance; Distributors; Consumers, →	
Activate smart waste management	UNE, GEF, Global CSOs ←	Recyclers, UN Regional Bodies, CSOs	Governance; Waste Collectors, Waste Managers, Consumers, Recyclers →	

# Global & Regional Systemic Actions



1

Companies and governments to commit to have 100% reusable, recyclable or compostable plastic packaging by 2025.



1

Brings together innovators to develop systemic solutions that prevent plastic from becoming waste in the first place.



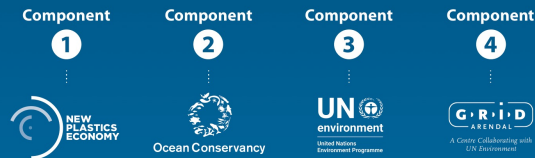
2

Recommends actions offered to Canada and the G7 ministers to support their ambitious goals for reducing marine plastics.



3

Stock-take existing knowledge & actions, and map plastic leakages to identify hotspots along global value chain.



3

Network via the UN Environment Global Partnership on Marine Litter & UN Regional Seas Programme on marine litter issues.



1 2 4

Formulate a strategic roadmap that enables a transition to a circular plastics economy.



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**UN environment**  
United Nations  
Environment Programme



# National & Local Systemic Actions



1

*Unites local stakeholders to create systems where plastics remain in the economy*



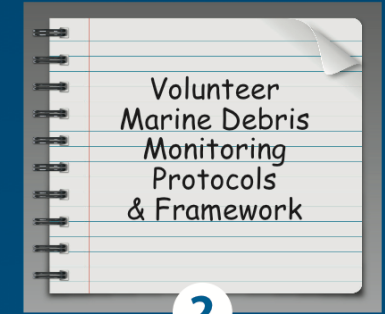
2

*Finances local waste management solutions through an independent investment firm*



2

*Identifies available vs necessary budget to implement a waste management strategy and mechanisms to bridge the gap*



2

*Implements volunteer marine debris monitoring protocols*

Component

1



Component

2



Component

3



Component

4



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