Initiatives for curbing plastic pollution within a circular economy approach in the Mediterranean Sea

The IUCN marine programme on plastics

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IUCN GMPP - TACKLING MARINE PLASTIC ISSUES

www.marplasticcs.org

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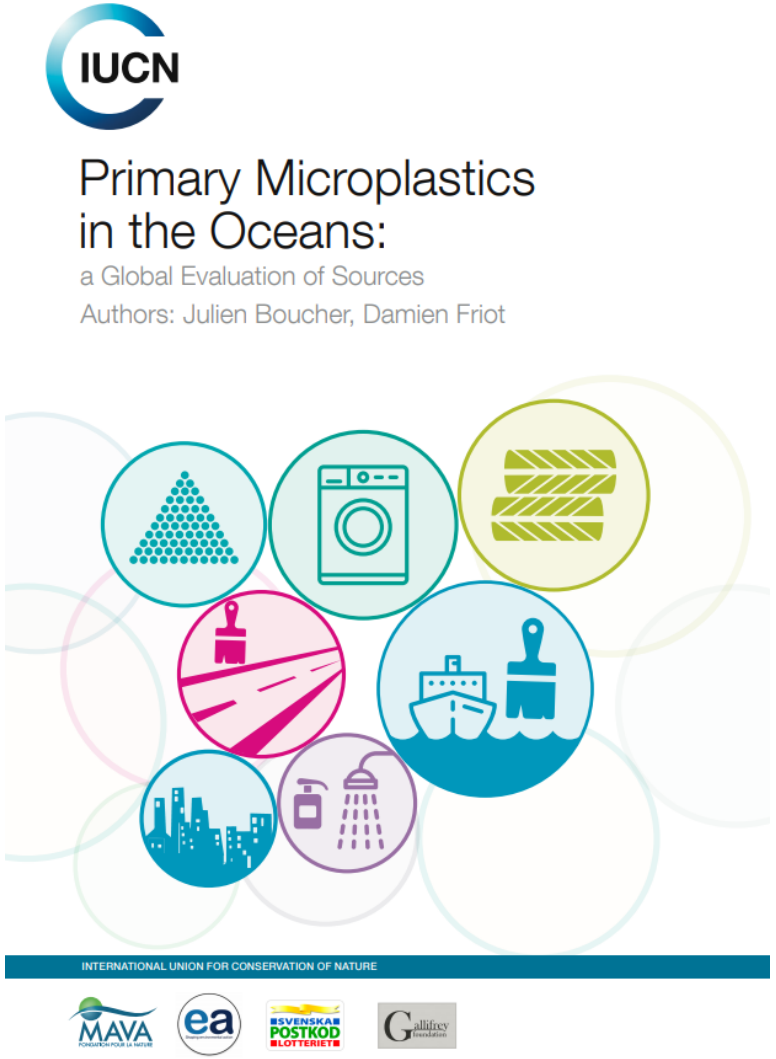
MARINE PLASTICS AND COASTAL COMMUNITIES

Initiative on Marine Plastics and Coastal Communities funded by the Swedish International Development Cooperation Agency

Primary Microplastics in the Oceans a Global Evaluation of Sources

a global estimate and mapping of the sources and quantities of primary microplastics – plastics that enter the oceans in the form of small particles directly released from household and industrial products.

This report concluded that invisible particles washed off ***synthetic clothing*** and ***car tyres*** are the two main contributors of microplastics from primary sources into our oceans.



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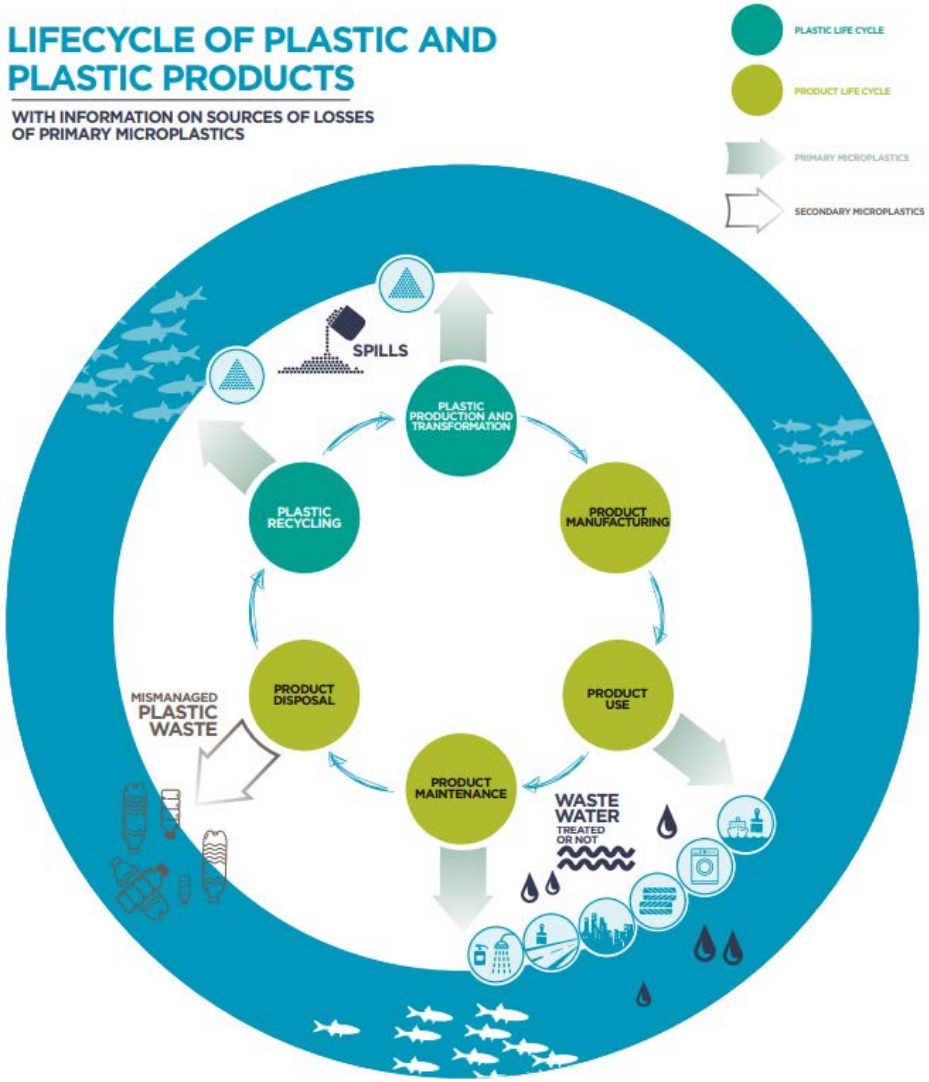
KNOWLEDGE

Building on the best available science, IUCN is developing various tools to better understand the state and impacts of plastic pollution and supporting governments and industries in their shift from a linear to a circular model for plastics



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CAPACITY BUILDING

IUCN is bringing together local and regional stakeholders to encourage national action to address plastic pollution based on an integrated lifecycle approach

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POLICY

IUCN is supporting national and regional policy frameworks and legislative reform processes, and facilitating the development of national programmes, including action plans and green economy roadmaps

IUCN initiated **a desk analysis of gaps and opportunities in current policies and regulatory frameworks**. Based on the results of this study, decision-makers will be provided with national reports which assess the impacts and effectiveness of legal instruments and tools available to address plastic pollution. The legal review and effectiveness assessment will in turn inform the development of national action plans and roadmaps.

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BUSINESS

IUCN is engaging and mobilising business actors to tackle plastic pollution. IUCN is also supporting the development of national private sector platforms to identify replicable solutions and drive circular economy innovations.

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PLASTIC FOOTPRINT: STATE OF THE ART AND WAYS FORWARD

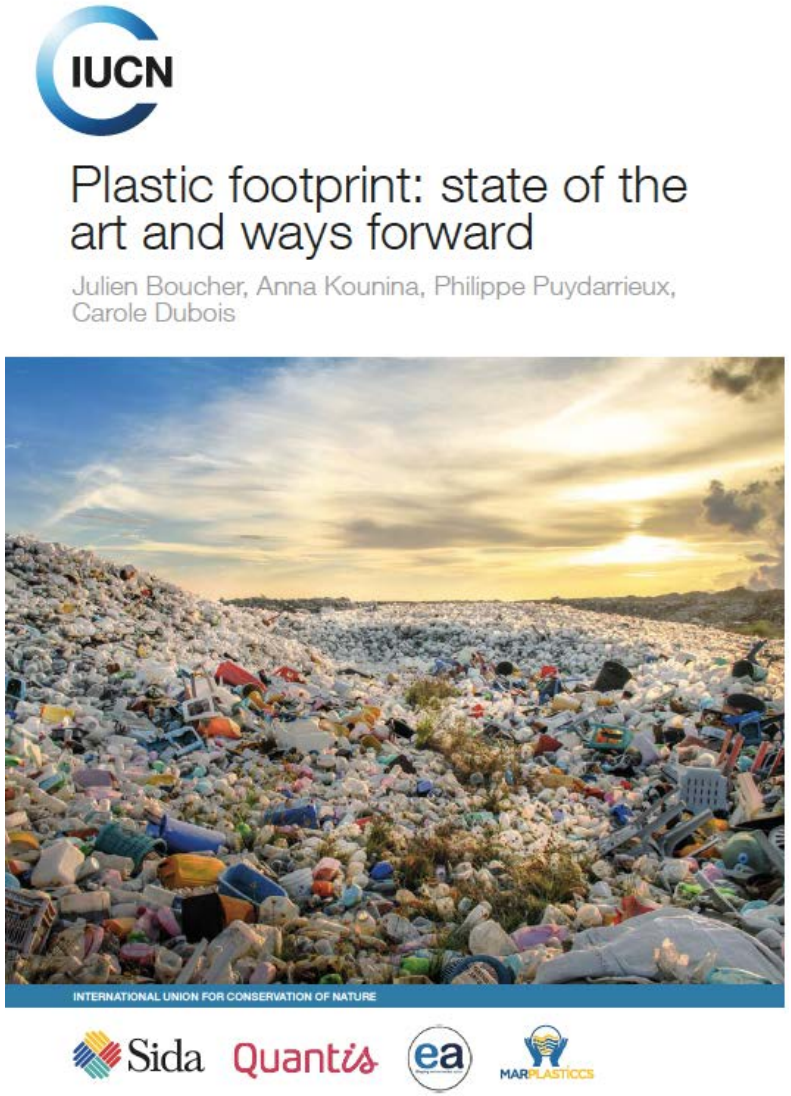
Decision-makers need reliable data, metrics and tools to monitor progress.

Benchmark of **existing footprint and life cycle impact assessment approaches for plastics**.
These can be improved by:

- Gathering better country level data on plastic waste management;

- Designing better models to assess micro- and macro- plastic leakages;

- Developing a standard set of indicators which highlight costs of inaction and identify investment opportunities for a more circular economy.



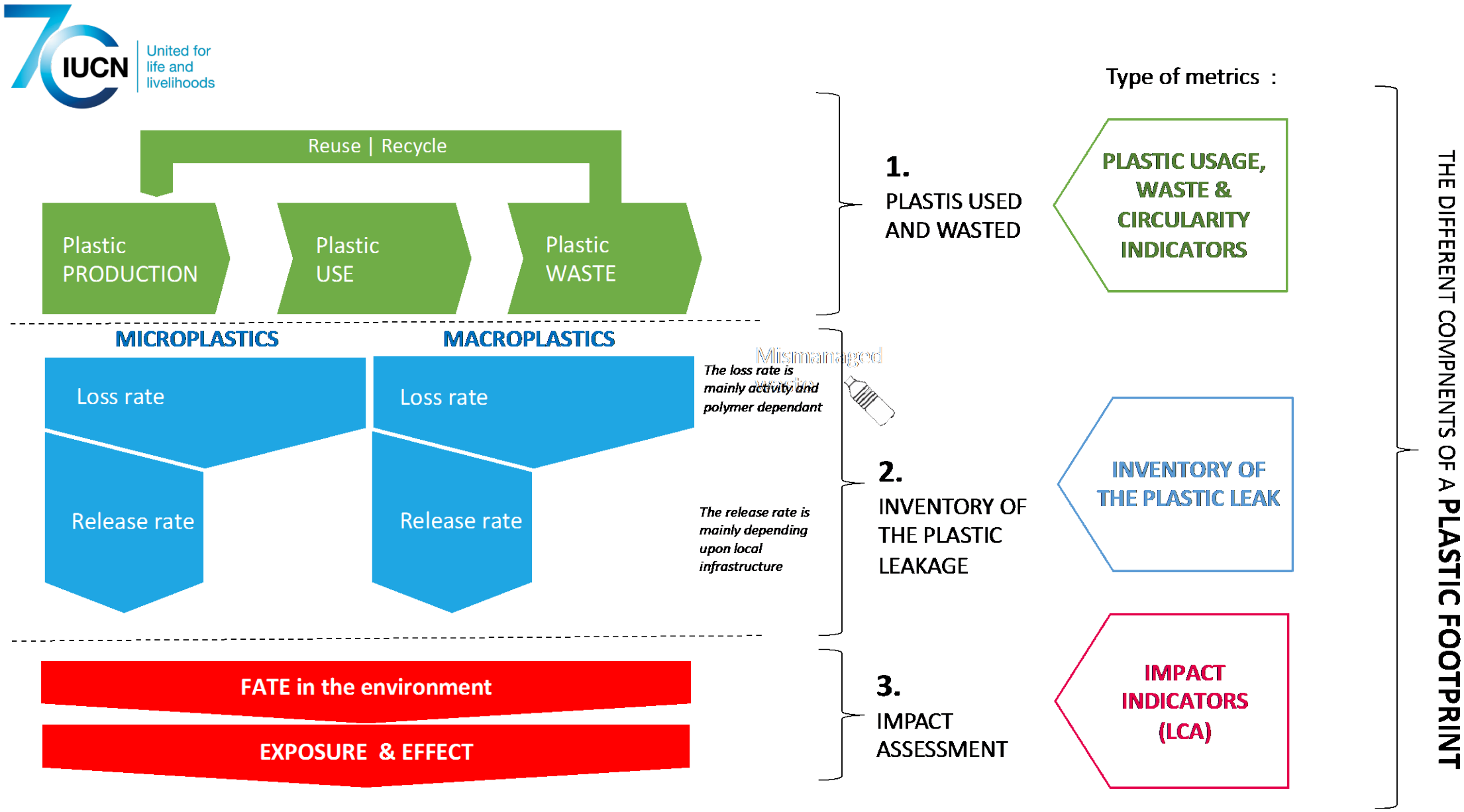
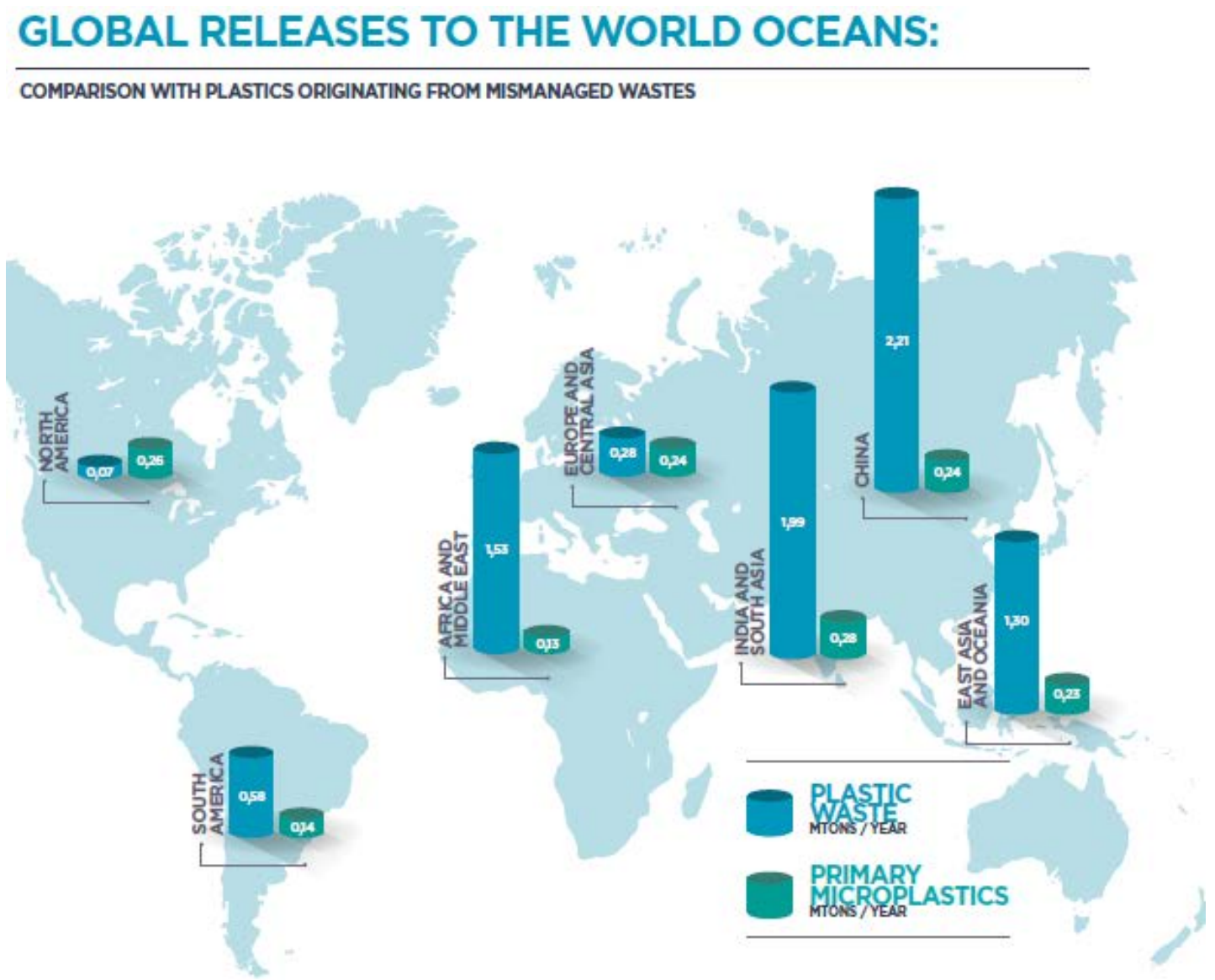


Figure 7. What is included in a plastic footprint

Releases from primary microplastics are equivalent or outweigh that of secondary microplastics from mismanaged waste for Europe



PLASTIMED BEMED: CLOSING THE PLASTIC TAP 2019-2021

Implementing partners

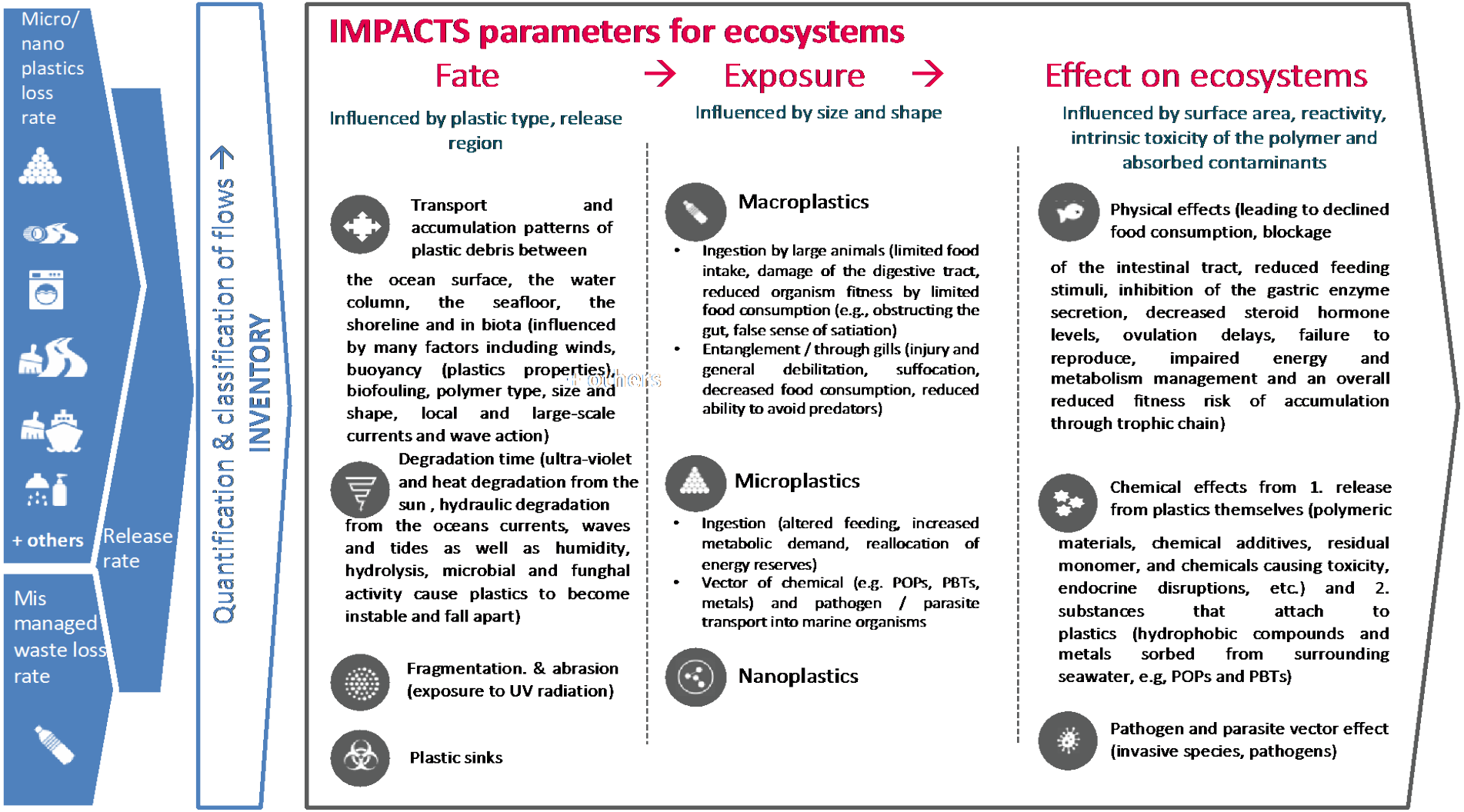
Funding partners

Metrics to inventory **plastic flows** leaking into the environment:
"How much plastic is leaking and from where?"

Metrics to assess **environmental impacts** resulting from this leakage:
"What are the environmental impacts resulting from plastic pollution?"

Metrics to **monetize the consequences of the leakage and impacts/ measure the action**:
"How do the environmental impacts of plastic rank with regard to other environmental issues?"

Figure 11. Potential framework developed by Quantis to assess the impacts of plastics on marine ecosystems



THE APPLICATION OF **LIFE CYCLE ASSESSMENT** IN CIRCULAR ECONOMY

Figure 19. LCA and circularity may lead to different actions (Aoustin et al., 2015)

Circular economy offers an alternative by reducing raw material input and waste to a minimum through designing products for circularity – **reuse, repurpose, recycle**.
Only a **cross-sectoral systemic approach** can drive significant and lasting change

>> **reduce the negative environmental and social impacts of products**

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A clearer picture of plastics

Humans have created about 8.3 billion metric tons of plastics to date, outgrowing all man-made materials other than steel and cement.

How heavy is 8.3 billion metric tons?

822,000 X
THE EIFFEL TOWER
(10,100 metric tons)

25,000 X
EMPIRE STATE BUILDING
(331,000 metric tons)

80 MILLION X
BLUE WHALE
(104.5 metric tons)

1 BILLION X
ELEPHANTS
(7.5 metric tons)

The rapid rise of plastics

A world without plastics seems unimaginable today, yet their large-scale production and use only dates back to around 1950.

GLOBAL PLASTIC PRODUCTION ESTIMATES

1950 **2M** METRIC TONS

2017 **8.3B** METRIC TONS

2050 **34B** PROJECTED METRIC TONS

9% Recycled

12% Incinerated

79% Accumulated in landfills

Plastic waste can be recycled, incinerated or discarded where it accumulates in landfills.

TOTAL PLASTIC WASTE

2015 → **6.3B** METRIC TONS

2050 → **12B** PROJECTED METRIC TONS

UNIVERSITY OF GEORGIA | Janet A Beckley

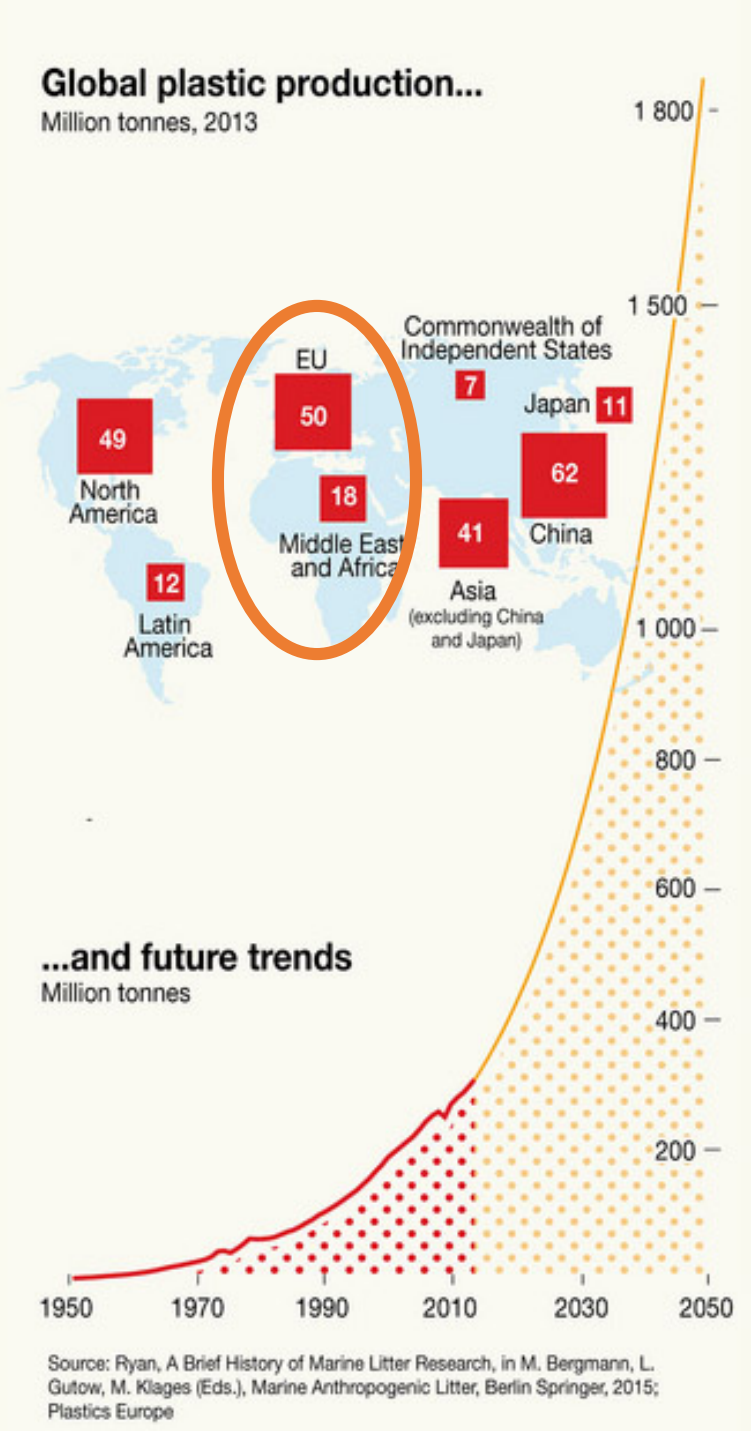
WHAT'S NEXT?

- **Focus on reducing the total consumption of plastic**, not just recycling plastics and their role within a circular economy

>> As it's require energy, water

- Plastics are a global problem, they **demand regional and local solutions** that are tailored to the different sources and pathways of plastic to the ocean.

- Circular economy: pay attention to **social criterias**



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THANK YOU!

AMAN Alliance of Mediterranean News Agencies

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