

SOLVING THE PLASTIC POLLUTION PROBLEM

Tackling Plastic
Pollution

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PLASTIC POLLUTION



Why reducing and reusing matter now more than ever

- **Global plastic production:** >430 million tons annually; forecasted to reach ~445 million tons by in 2025 and triple by 2060 if current trends continue. (1)
- **Mismanaged waste:** Over 22% of plastic waste is mismanaged; and 49% is landfilled, especially in low- and middle-income countries (LMIC). (2)
- **Recycling limitations:** The global recycling rate remains at only ~9% of all plastic ever produced. (3)
- **Environmental impact:** Plastic leakage into aquatic ecosystems could increase from 20Mt in 2020 to 30Mt by 2040 if not addressed. (4)

Globally, only 9% of plastic waste is recycled while 22% is mismanaged

Share of plastics treated by waste management category, after disposal of recycling residues and collected litter, 2019



Recycled plastic waste per country in 2019 (Source: OECD)

1 AKEPA, Environmental impact of plastic pollution, 2025

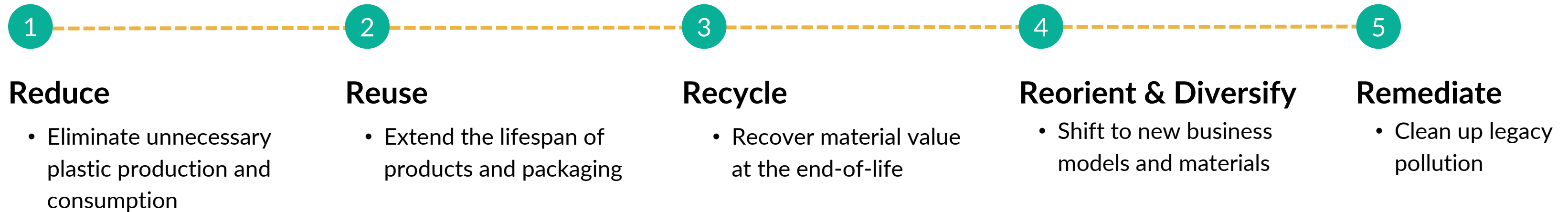
2 OECD, Development co-operation and the elimination of plastic pollution, 2025

3 EcoWatch, Global Plastic Recycling Rate 'Stagnant' at 9%: Study, 2025

4 OECD, Policy Scenarios for Eliminating Plastic Pollution by 2040, 2025

BEYOND CLEAN UP

Understanding the UNEP 5Rs Framework



Hierarchy matters. For greatest impact, there should be a prioritisation of *reduction* and *reuse*

GLOBAL PLASTICS TREATY

INC-5.2 Update



What is the INC?

- The Intergovernmental Negotiating Committee (INC) was established by UNEA 5/14 to develop a legally binding instrument on plastic pollution, including the marine environment.

Where are we now after INC-5.2?

- INC-5.2 was held in Geneva (August 2025), a continuation of INC-5 after delays in Busan, ROK,
- The session was meant to finalise the treaty, but key disagreements remain.



INC-5.1: Busan, South Korea (Source: UN)

GLOBAL PLASTICS TREATY

INC-5.2 Update (*cont'd*)



Key outcomes:

- No consensus yet on:
 - Binding global reduction targets vs. flexible national action plans
 - Controls on virgin plastic production
 - The role of reuse systems and product design standards
 - Financial mechanisms: global fund, plastic taxes, or voluntary options

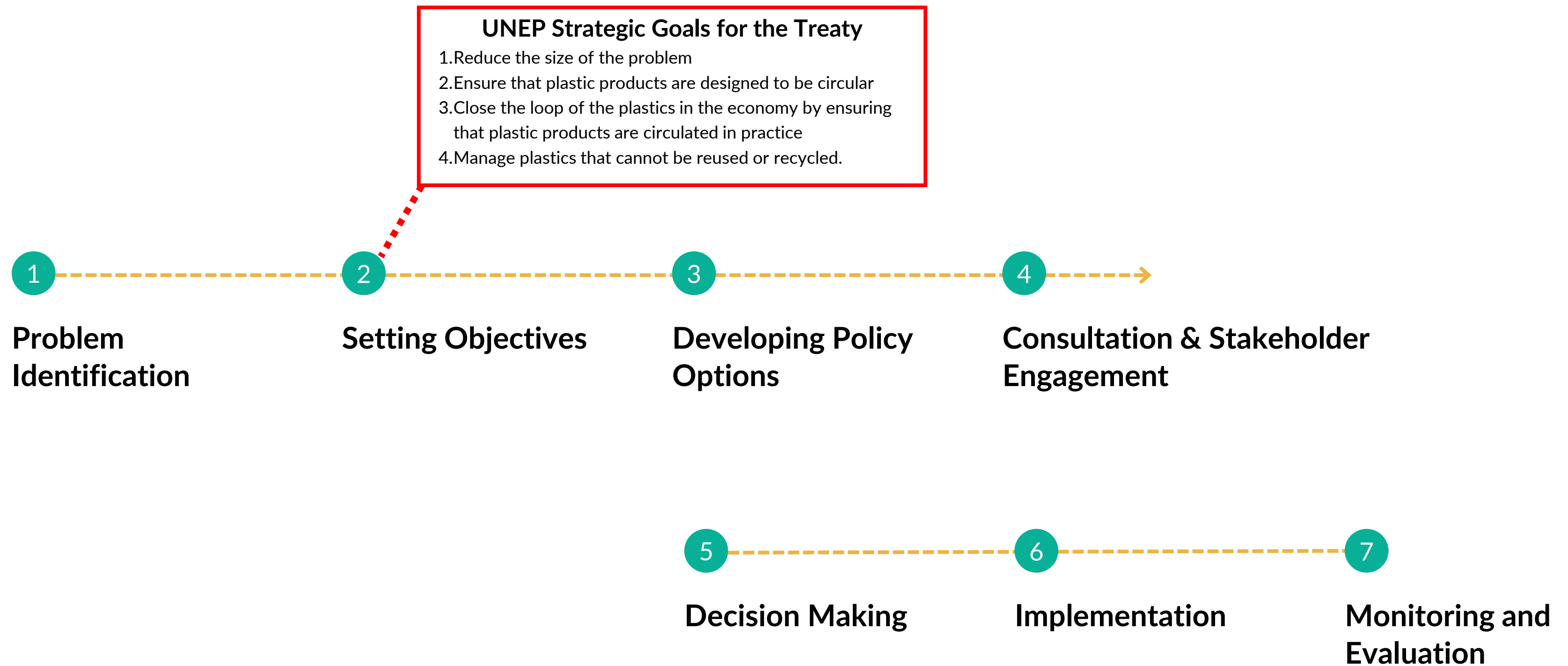
Whats next?

- The treaty is still expected to be adopted by the end of 2025
- Implementation details- including EPR, reduction, and reuse- are still being negotiated.



INC-5.2: Geneva, Switzerland (Source: CBC)

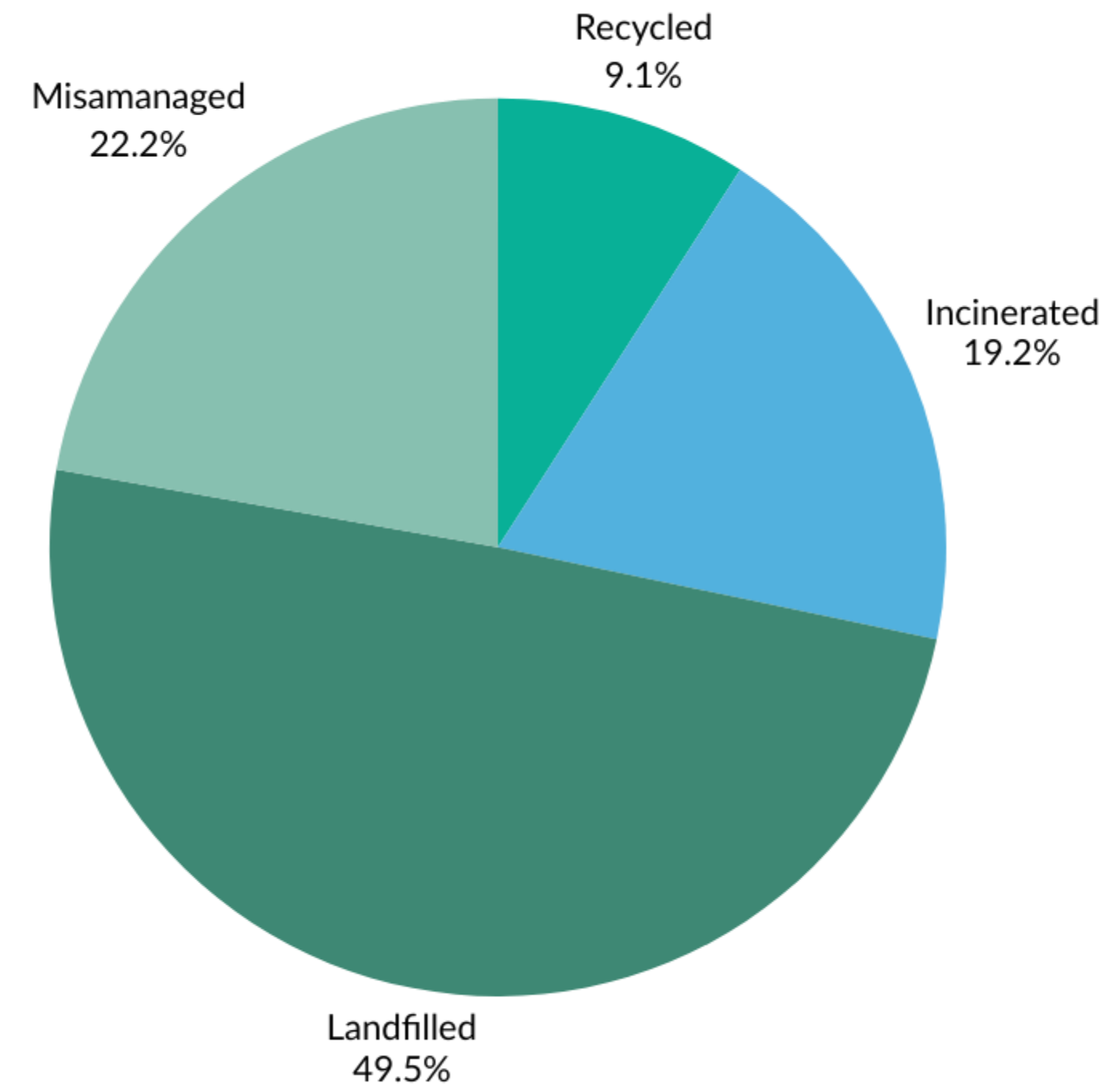
POLICY FORMULATION PROCESS



WHY RECYCLING ISN'T ENOUGH

The limits of recycling as a standalone solution

- As of 2025, just 9% of plastic produced has been recycled globally; most ends up down-cycled or lost. (5)
- **Common obstacles:**
 - contamination,
 - expensive processing, and
 - poor infrastructure (particularly in LMICs)
- Single-use plastics (like multi-layer plastic packaging) are in some ways, designed to be unrecyclable.



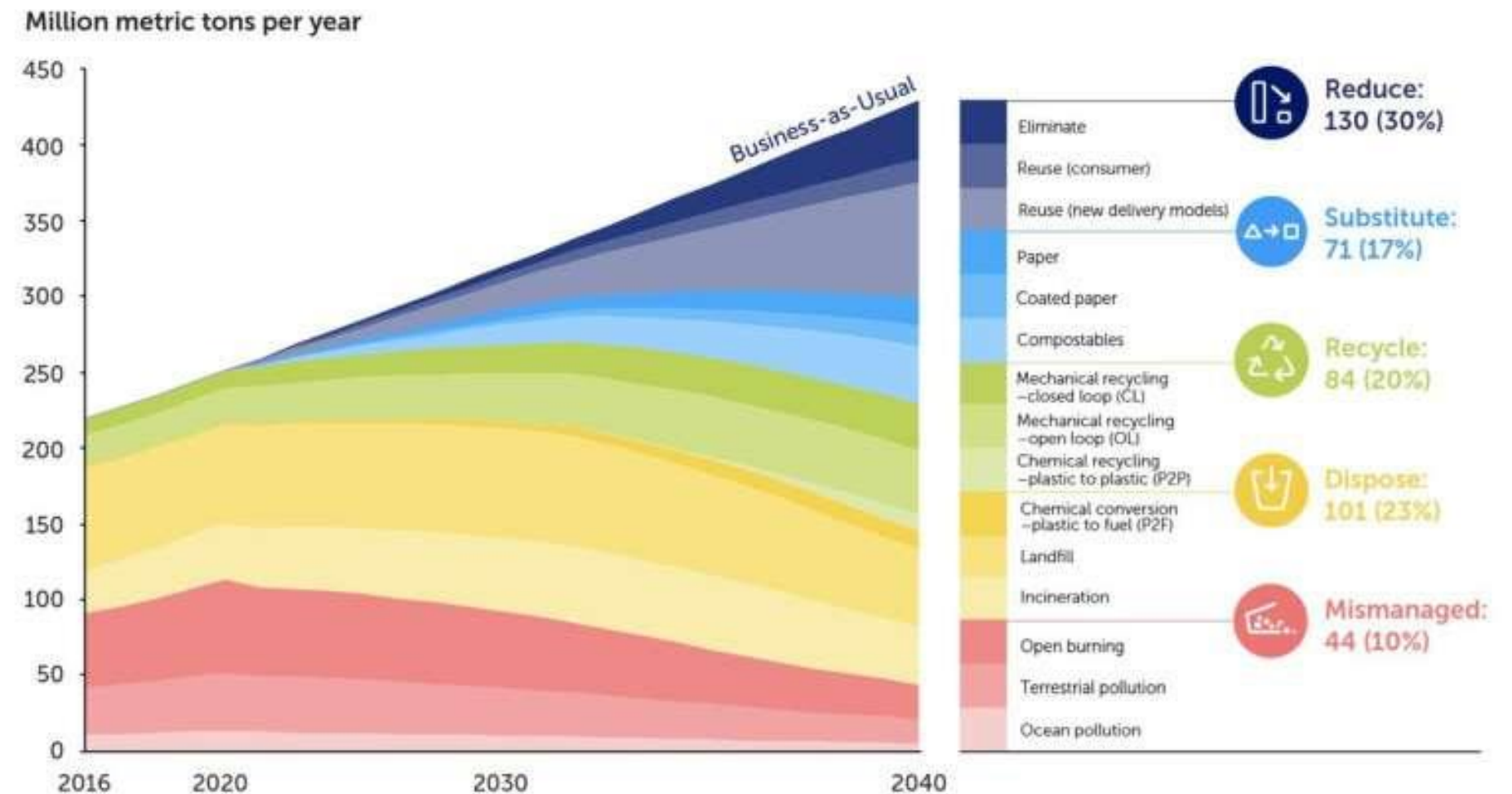
REDUCE

Designing for Prevention

- **Elimination of avoidable plastics** (ex. straws, cutlery, micro-beads)
 - France's produce bag ban removes 1 billion plastic packages annually. (6)
 - India's single-use plastic ban led to the seizure of 775,000kg of banned items in 3 years and penalties of over INR 58 million. (7)
- **Product redesign:** Companies switching to single-material, recycled content packaging or alternative materials increases recyclability and market value.
 - Minimal packaging is also encouraged.
- **Policy Levers:**
 - Taxes,
 - bans, and
 - procurement reforms.



There is a credible path to significantly reduce plastic leakage into the ocean but only if all solutions are implemented concurrently, ambitiously, and starting immediately



This "wedges" figure shows the share of treatment options for the plastic that enters the system over time under the System Change Scenario. Any plastic that enters the system has a single fate, or a single "wedge." The numbers include macroplastic and microplastic.

(Source: Pew Charitable Trust)

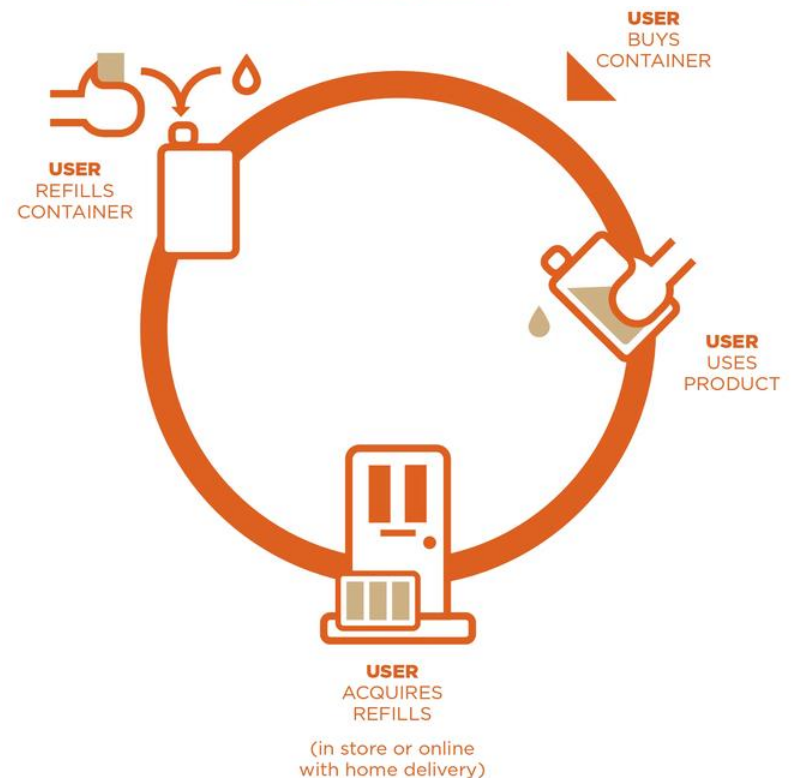
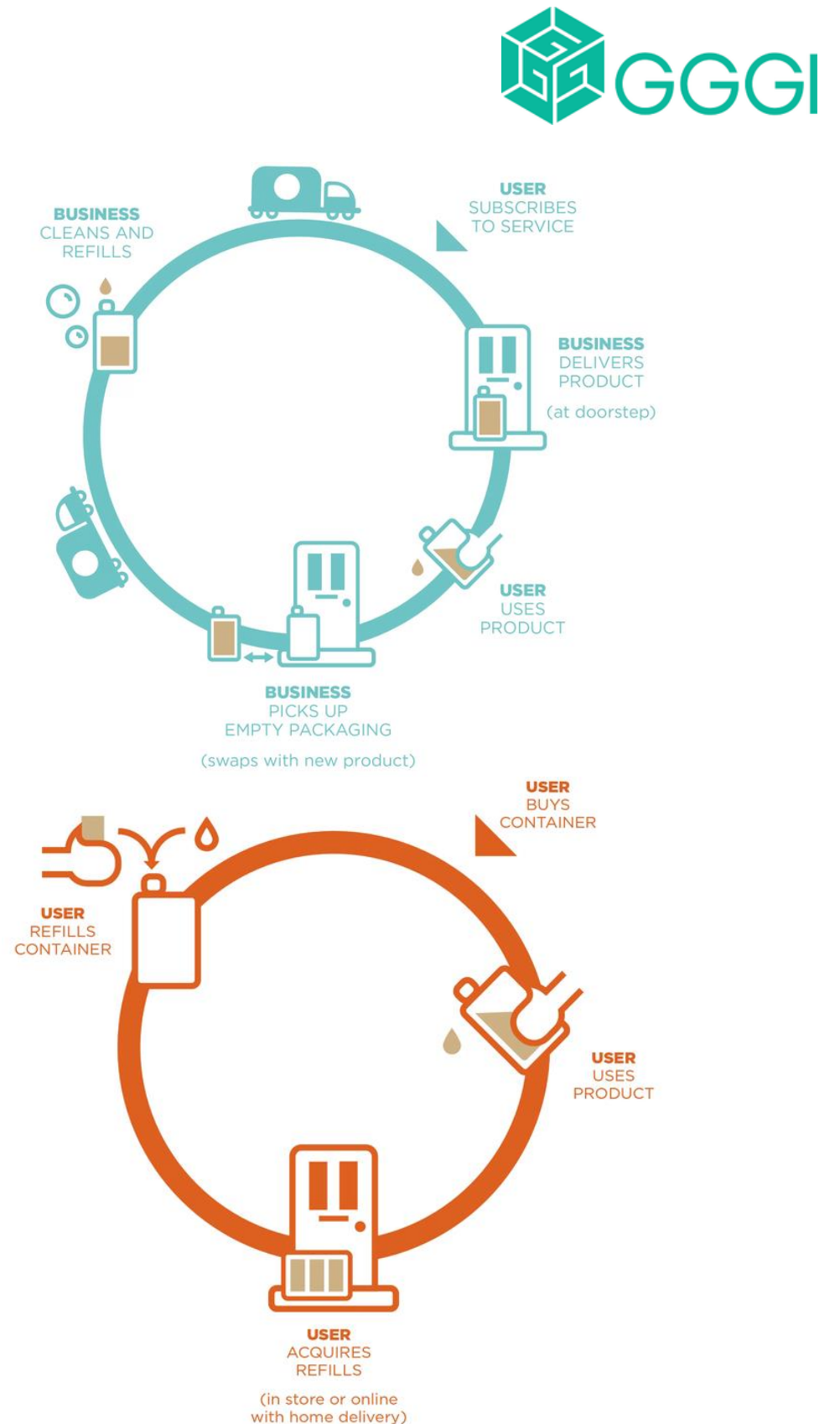
6 Packaging Gateway, Understanding France's ban on plastic packaging for fruits and vegetables, 2023

7 Ecolastic, 3 Years After India Banned Single-Use Plastics, 2025

REUSE

Extending Product Life

- Reuse involves system design
 - Collection,
 - Cleaning, and
 - Redistribution
- Reuse systems can reduce demand for **virgin plastics** and associated GHG emissions by up to 60%. (8)
- Successful reuse models rely on coordinated logistics

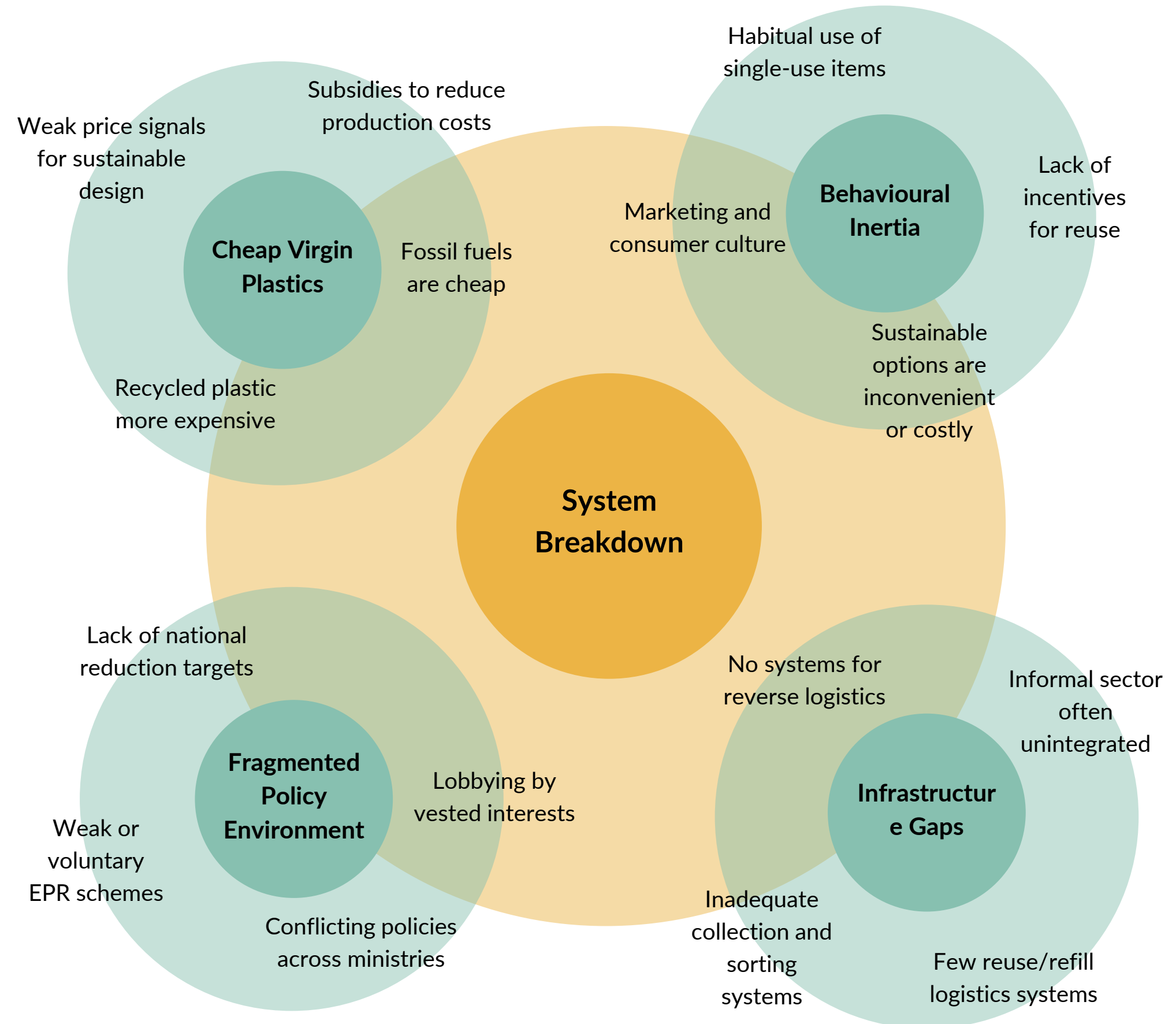


(Source: Ellen MacArthur Foundation)

WHERE SYSTEMS BREAK DOWN

Key Barriers

- **Cheap virgin plastics:** 98% of new plastics derive from fossil sources; pricing policies and subsidies make virgin plastics cost-competitive. (9)
- **Behavioural inertia:** Convenience often wins over sustainability for most consumers.
- **Fragmented policy:** Producer accountability is often unclear; industry resistance is common. (10)
- **Infrastructure gaps:** Many regions lack systems for reuse logistics and modern waste management. (11)



9 Houssini, Li, & Tan, Complexities of the global plastics supply chain revealed in a trade-linked material flow analysis, 2025

10 OECD, Policy Scenarios for Eliminating Plastic Pollution by 2040, 2024

11 OECD, Development co-operation and the elimination of plastic pollution, 2025

EXTENDED PRODUCER RESPONSIBILITY

Policy Mechanism



- **Extended Producer Responsibility (EPR):** Legally obligates producers to finance the post-use management of plastics, shifting the burden from governments to the supply chain. (12)
- Includes differentiated fees (eco-modulation, obliged reporting, investment in improved systems.

12 OECD, Policy Scenarios for Eliminating Plastic Pollution by 2040, 2024

13 BBC, Has Kenya's plastic bag ban worked?, 2019

14 OECD, Policy Scenarios for Eliminating Plastic Pollution by 2040, 2024

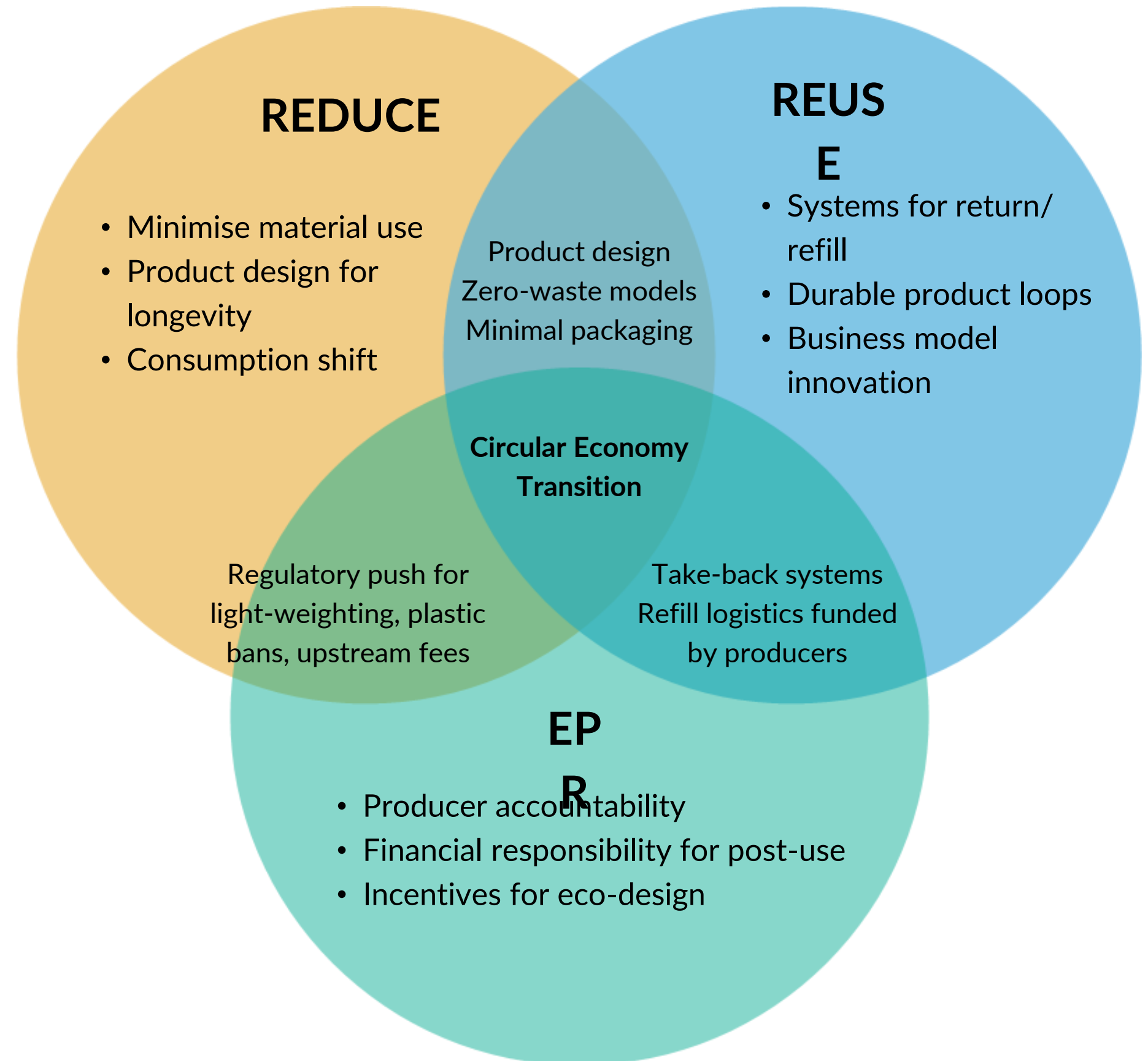
15 Ferronto, N, et al., A review of plastic waste circular actions in seven developing countries to achieve sustainable development goals, 2023

What Makes EPR Work?	
Legally Binding Mandates	With strong enforcement (ex. France, Korea)
Eco-modulated fees	Producers pay less for recyclable/ reusable packaging, incentivising better design (13)
Producer responsibility Organisations (PROs)	Manage compliance, investment, and reporting
MRV Systems	Data-driven monitoring, reporting, verification to ensure accountability and accuracy (14)
Equity Safeguards	Formal inclusion of the informal sector (waste pickers improve recovery rates by as much as 30% in pilot projects) (15)

BUILDING COHERENT SYSTEMS

System Integration

- EPR is policy mechanism; reduce/ reuse are core goals
- EPR fees can fund reuse infrastructure; reduction targets can be hardwired into EPR mandates (19)
- Alignment needed across producer design, consumer incentives, policy obligations for “circular economy” effectiveness.



YOUTH AS CATALYSTS FOR CHANGE

What role can you play?

- **Behaviour change:** Peer education and norm influence - surveys show youth campaigns drive 70%+ shifts in local communities.
- **Innovation:** Youth-led startups, digital tracking apps, and campaign design.
- **Accountability:** Waste audits, brand mapping policy advocacy.



MINI ACTIVITY

Designing Your Campaign Strategy

Who Matters, and Why?

1. Choose a plastic policy or issue with your group - relevant to your campaign topic
2. List key stakeholders (ex. government agencies, private sector, waste workers, students, NGO, media, etc.)
3. Map your stakeholders:
 - **Power-Interest Grid** - Who has the most power/ influence over the issue? Who does it impact the most? Who has the most interest in particular outcomes?
 - **Ecosystem Map** - What are the relationships and roles between your stakeholders? And are they positive, negative, neutral?

Access the Template:



<https://shorturl.at/7m5Cm>

PLASTIC POLLUTION POLICY TOOL MATRIX



Review of Policy Tool Instrument Effectiveness | Alignment with Plastic Pollution Challenge Areas

	Regulatory	Economic	Voluntary	Information-Based
1 Plastic Production				
1.1 Virgin plastic production	✓	✓	✓	
1.2 Toxic additives	✓		✓	✓
2 Plastic Use & Consumption				
2.1 Single-use plastic items	✓	✓	✓	✓
2.2 Reuse & refill adoption	✓	✓	✓	✓
3 Waste Collection & Recycling				
3.1 Collection & segregation	✓	✓	✓	✓
3.2 Recycling infrastructure	✓	✓		
4 Plastic Leakage & Environmental Impact				
4.1 Open dumping & mismanagement	✓	✓	✓	✓
4.2 Marine & riverine leakage	✓	✓	✓	✓

KEY FOCUS AREAS



1. Policy & Institutional

- Align national policies and laws with global treaty requirements
- Introduce bans/phase-outs for single-use plastics
- Establish Extended Producer Responsibility and product standards

2. Financing & Resource

- Identify sustainable financing sources for waste and circular economy projects
- Mobilise domestic and international resources (GEF, GCF, MDBs)
- Explore plastic credit markets and blended finance solutions

3. Data, Monitoring, &

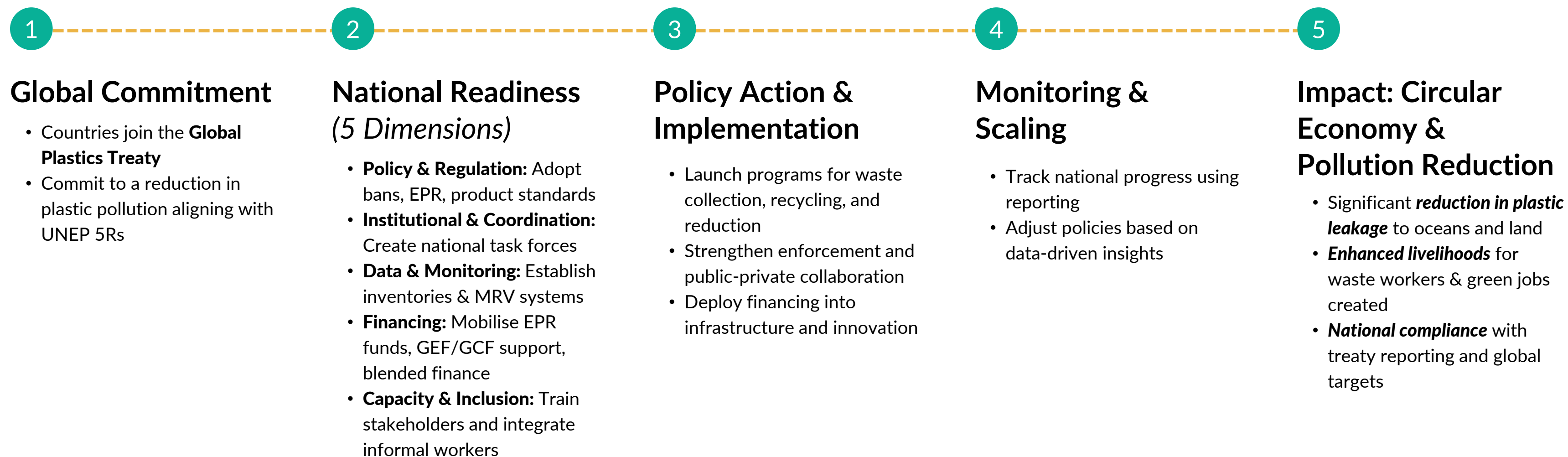
- Conduct national plastic flow inventories and leakage assessments
- Develop MRV systems for treaty compliance
- Enable transparent public reporting

4. Capacity & Inclusion

- Build capacity of government agencies, SMEs, and local communities
- Integrate the informal waste sector and ensure just transition measures
- Promote public awareness and behavioural change initiatives

FROM POLICY TO IMPACT

Turning Commitments into Action and Measurable Results



PLASTIC POLLUTION | PROBLEM ANALYSIS TREE



Key Issues | Plastic pollution as a global crisis → ecosystem damage, human health risks, and climate impact

Key cause | Insufficient integrated plastic management systems (production → consumption → collection → recycling/ disposal)



Main Cause



Detailed Cause



RESULTS & IMPACT



Time-Phased Mapping of Policy Implementation, System Changes, & Environmental Results

Action Area	Short-Term (1-2 yrs)	Medium-Term (3-5 yrs)	Long-Term (5+ yrs)
1 Ban/Phase-Out Problematic Plastics	Adopt national ban or phase-out policies; publish regulatory roadmap	Enforcement begins; local alternatives & compliance mechanisms are developed	Measurable reduction in single-use plastic production and leakage
2 Establish EPR Schemes	Draft EPR legislation; conduct stakeholder consultations	EPR system operational with producer registration and fee collection	Producers finance waste management; sustainable funding flows established
3 Plastic Inventories & Reporting	Conduct baseline plastic flow study; identify data gaps	National plastic registry and annual reporting in place	Transparent monitoring; enables compliance with treaty obligations
4 Waste Collection & Recycling Infrastructure	Prepare investment plans and secure initial funding	New sorting/ recycling facilities operational; coverage expanded	Significant increase in recycling rates; reduction in landfill & leakage
5 Informal Sector Integration / Just Transition	Map informal waste workers; design inclusion strategies	Pilot integration programs; training and protective measures provided	Formalised and protected workforce; improved livelihoods and social equity
6 Public Engagement & Behaviour Change	Launch national awareness campaigns; social media initiatives	Behaviour change observed in urban centres; increased participation in sorting/ recycling	Culture shift toward reuse, reduced plastic demand, and sustained public participation