

The Jaipur Declaration on 3R and Circular Economy: Relevance for Africa's Sustainable Development

Jaipur Declaration on 3R and Circular Economy

*Sustainable 3R and Circular Economy Goals
for Achieving Resource Efficient, Clean,
Resilient, Sound Material Cycle and Low-
Carbon Society in Asia and the Pacific (2025-
2035)*

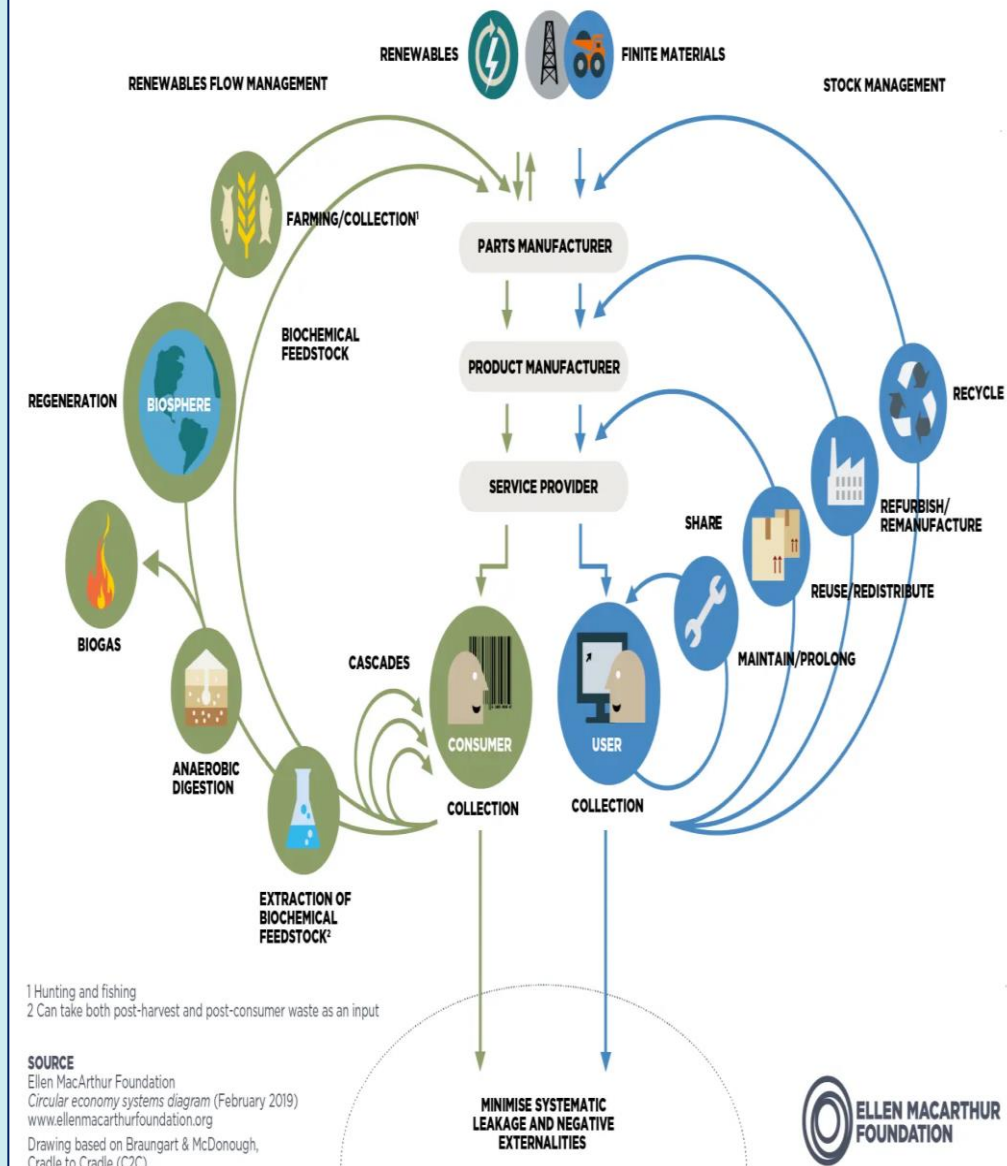
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**SUSTAINABLE
DEVELOPMENT
GOALS**

Key facts:

- Even if net-zero emissions by 2050 vis-a-vis 1.5°C climate goal target is met under the Paris Agreement, costs to the global economy relating to climate change are projected to reach **USD 54 trillion by 2100**.
- Applying circular economy strategies in just five key areas (**cement, aluminum, steel, plastics, and food**) can eliminate almost half of the emissions from the production of goods – **9.3 billion tonnes of CO2 in 2050**.
- Global material use may increase to between 170 and 184 billion tonnes by 2050 (IRP, 2017). In business-as-usual scenario, we could **see resource use up by 60% from 2020 levels by 2060** (Global Resources Outlook, 2024).
- As per UNEP, the Asia-Pacific accounts for approximately two-thirds to global growth, and **63 per cent of the global material use**, and under a business-as-usual scenario global plastic waste could almost triple, reaching around **1.2 billion tonnes by 2060**.
- The policy and scientific community have realized that farming, overfishing, mining and deforestation have now reached such a scale that they are reducing the resilience of the biosphere where life thrives, and also the need to become **net zero, zero waste and nature positive** in order to enhance the resilience of countries and societies by halting and reversing nature and biodiversity loss.
- Circular economy holds the promise for systemic transformation of our society as it fundamentally aims to design out waste & pollution, keep products and materials for extended use and regenerate and restore natural ecosystems.
- Closing circularity gap serves the higher objective of preventing further and accelerated environmental degradation (The Circularity Gap Report, 2021)

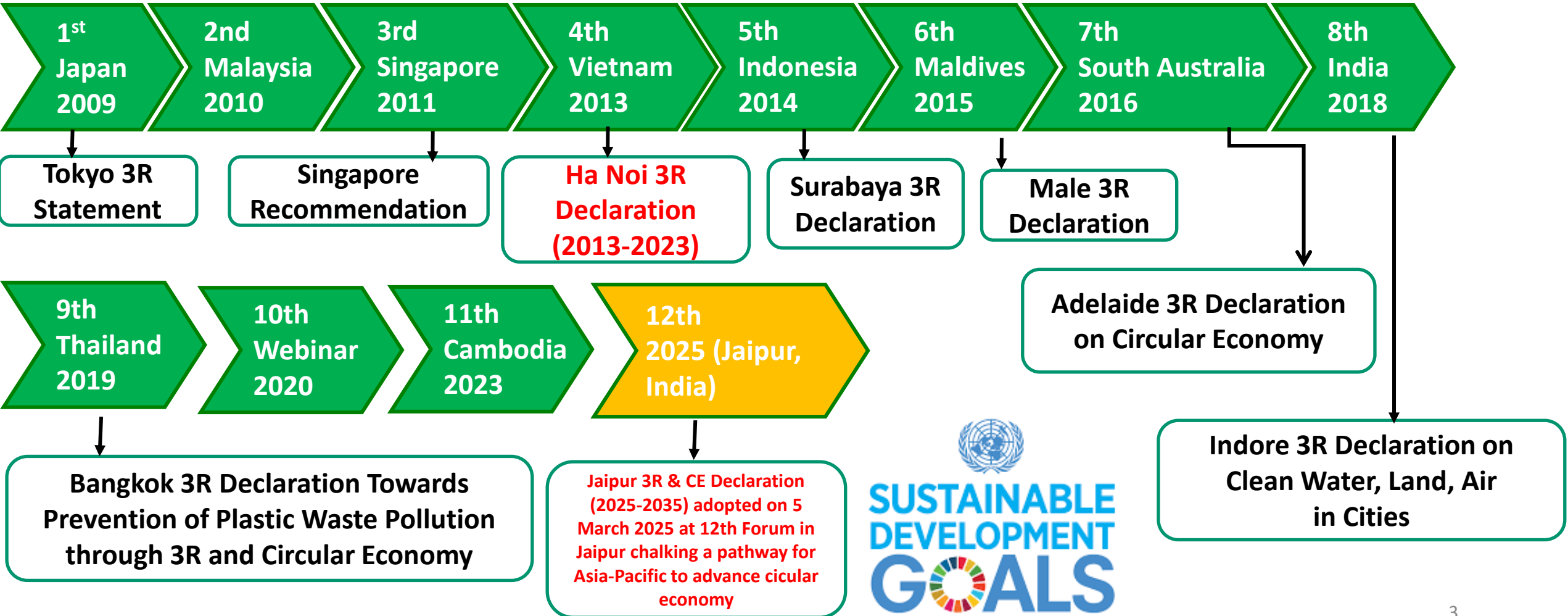


Source: Completing the Picture: How the circular economy tackles climate change (2021).

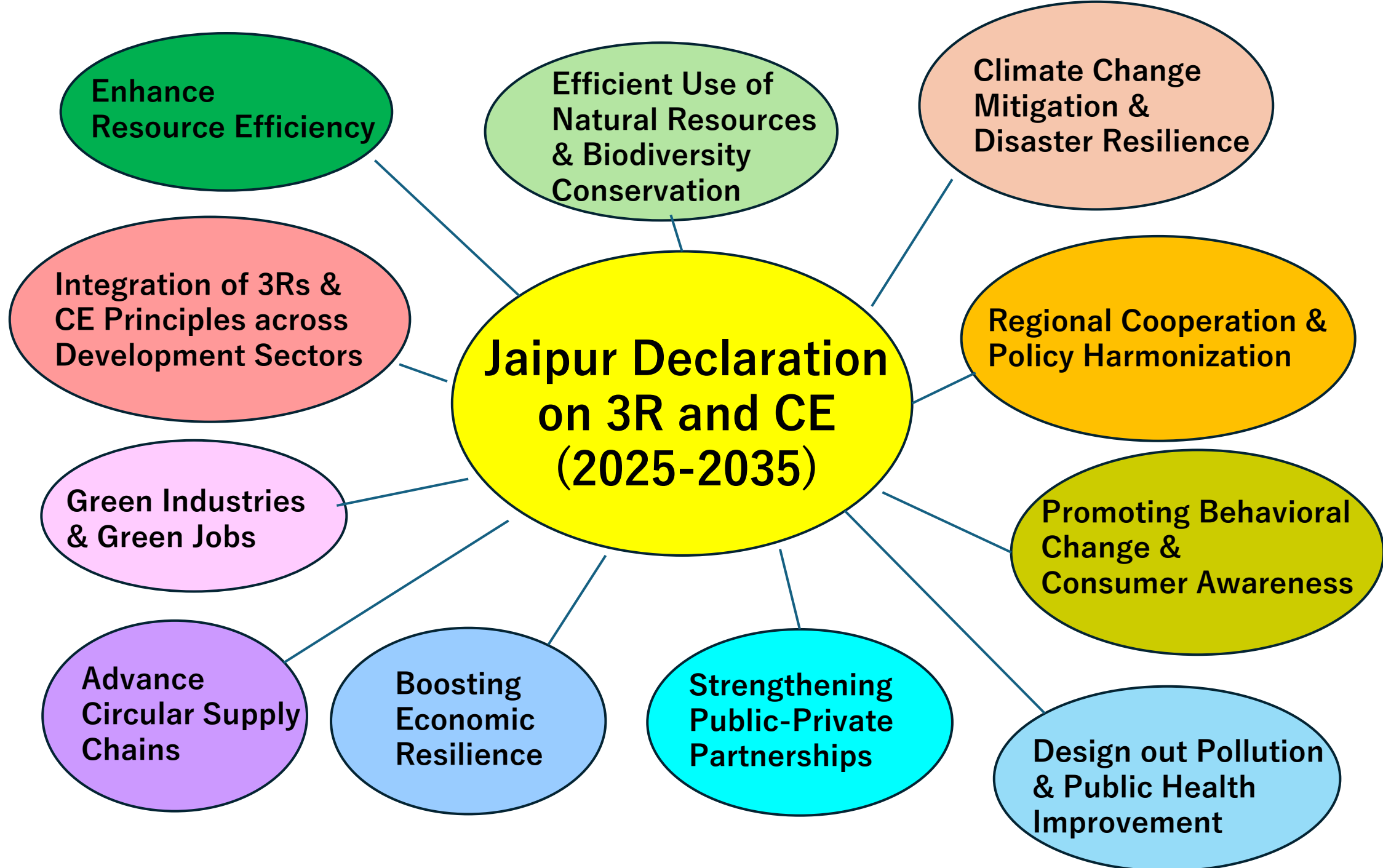
UNCRD/UN DESA High-Level Regional 3R and Circular Economy Forum in Asia and the Pacific



Aligned with SDGs and with support of MoE-Japan, UNCRD 3R & CE initiative calls for lasting supply security of resources as the basis for sustainable development. It aims to provide a policy framework to implement 3R & resource efficiency measures to achieve circular economic development – an alternative economic growth model which is not at the expense of finite natural resources and ecological assets, rather regenerative. UNCRD's 3R & circular economy initiative brings up both the policy, scientific & research community & private sector to convene on an annual basis the high-level Regional 3R & Circular Economy Forum in Asia-Pacific to strengthen the science-policy interface in addressing 3R & resource efficiency as the basic for economic growth, pollution prevention and strengthening resilience of cities & communities, and after all, to achieve the international agendas & agreements – SDGs, Paris Agreement, NUA, among others.



Aligning with SDGs
SDG3, SDG6, SDG11, SDG12, SDG13, SDG14, SDG15
& in the face of triple planetary crises



JAIPUR DECLARATION on 3R and Circular Economy (2025-2035)

Sustainable 3R and Circular Economy Goals for Achieving Resource Efficient, Clean, Resilient, Sound Material Cycle and Low-Carbon Society in Asia and the Pacific (2025-2035)

- **1.0 Introduction**
- **2.0 Declaration**
- **3.0 Common Vision & Goals on 3R and Circular Economy**
 - 3.0a Common Vision
 - 3.0b Sustainable 3R and Circular Economy Goals for Achieving Resource Efficient, Clean, Resilient, Sound Material Cycle and Low-Carbon Society
- **Cluster I-V – 3R and CE Goals**
 - **Cluster I:** Promote Sustainable Resource Management, Resource Efficiency and Low-Carbon Society (*Goals: 1, 2 & 3*).
 - **Cluster II:** Achieving Clean Environment (Land, Water, Air, Ocean and Mountains) through 3R and Circular Economy (*Goals: 4, 5, 6, 7 & 8*).
 - **Cluster III:** Sound Material Cycle Society and Resource Recirculation towards Zero Waste and Circular Society (*Goals 9*)
 - **Cluster IV:** Resilient Economies and Societies and Cross-cutting Socio-Economic Goals (*Goals: 10, 11 (11a, 11b, 11c) & 12*).
 - **Cluster V:** Means of Implementation - Partnerships, Technology Transfer, Research and Development, National and International Financing and Investments, Institutional Capacity Building and Information Sharing (*Goals 13: 13a, 13b, 13c*).
- **Guidance Notes 1 (Strategies), 2 (Indicators) and 3 (Reporting)**

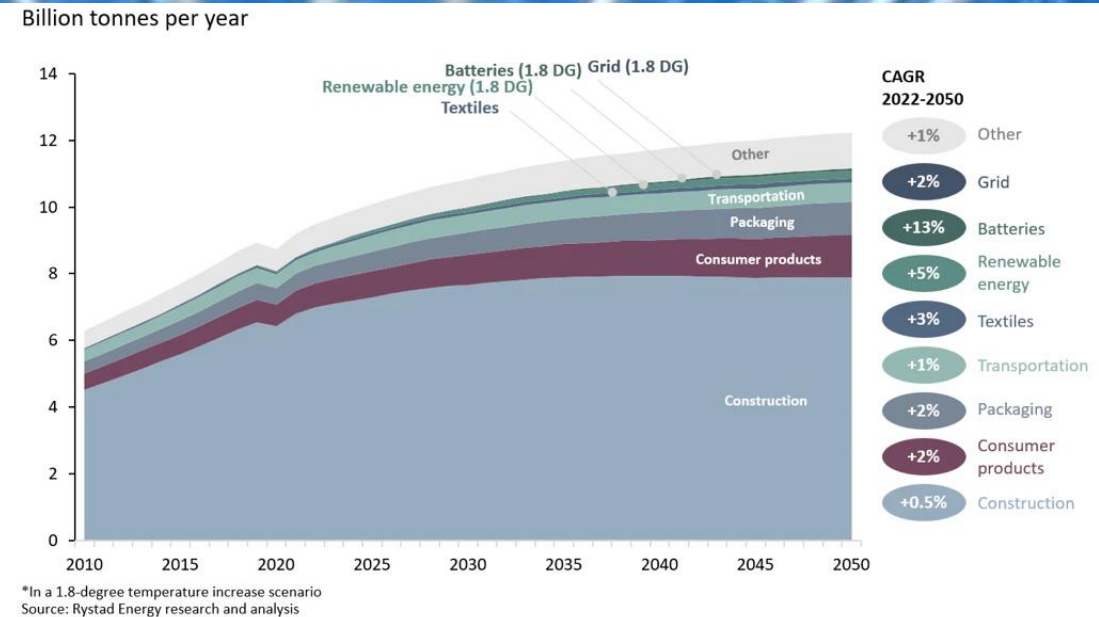


Photo: indianexpress.com

3.0 (b). Sustainable 3R and Circular Economy Goals for Achieving Resource Efficient, Clean, Resilient, Sound Material Cycle and Low-Carbon Society

- **Cluster I:** Promote Sustainable Resource Management, Resource Efficiency and Low-Carbon Society (*Goals: 1, 2 & 3*).
- **Goal 1:** Achieve significant improvement in materials, energy, and water efficiency through 3R and circular economy
- **Goal 2:** Maximize utilization of biomass, including agriculture waste, as a resource, not waste (bio-economy) through 3R and circular economy
- **Goal 3:** Maximize resource efficiency in micro, small and medium enterprises (MSMEs) through 3R and circular economy

Expected material demand by sector (2010 to 2050)



Source :<https://www.rystadenergy.com/insights/materials-demand-article>

Materials use increase



	2011	2060
Metals	8Gt	20Gt
Fossil fuels	14Gt	24Gt
Biomass	20Gt	37Gt
Non-metallic minerals	37Gt	86Gt

Source :<https://www.rystadenergy.com/insights/materials-demand-article>

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Cluster II: Achieving Clean Environment (Land, Water, Air, Ocean and Mountains) through 3R and Circular Economy (*Goals: 4, 5, 6, 7 & 8*).

Goal 4: Achieve significant improvement in water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse

Goal 5: Reduce adverse environmental impacts in cities by paying special attention to land and air quality and municipal and other waste management as well as sand, coral and other construction materials

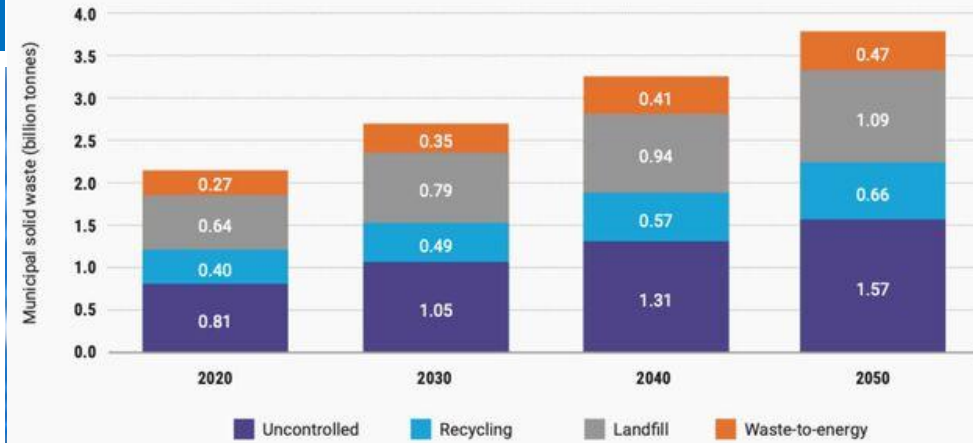
Goal 6: Reduce adverse environmental impacts of mining operations by greening the entire supply chain focusing on resource efficiency and ecosystem restoration

Goal 6 (a): Reduce adverse environmental impacts on mountain ecosystems from mining, farming and tourism activities

Goal 7: Reduce hazardous chemicals and persistent organic pollutants (POPs) in materials, products and wastes, including plastics

Goal 8: Prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris, abandoned, lost or otherwise

Projected global MSW destinations from 2020 to 2050 under a business-as-usual approach



Source: The Global Waste Management Outlook 2024



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Food loss and waste account for 8-10% of annual global greenhouse gas emissions; cost USD 1 trillion annually (Source: unfccc)

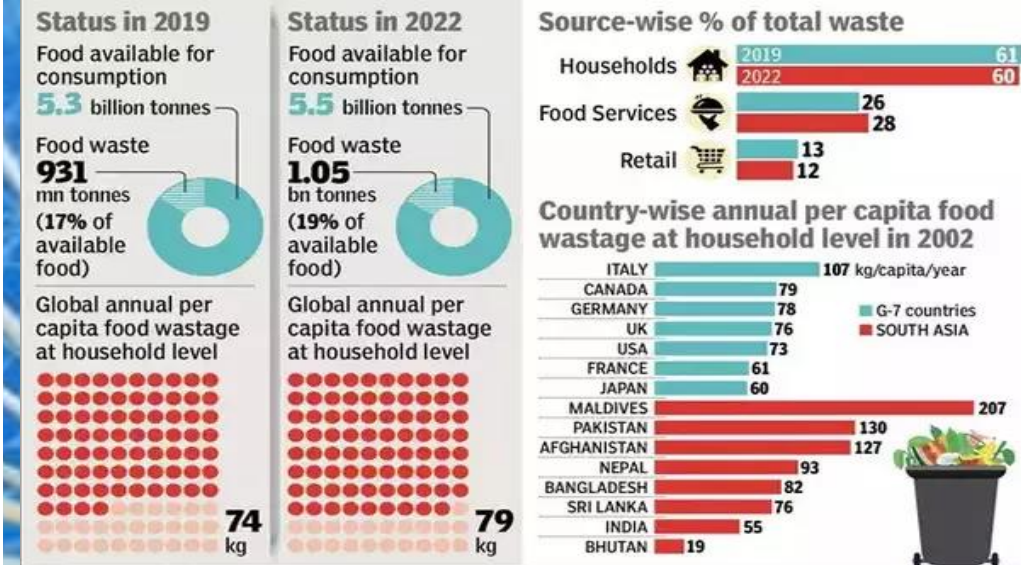
- Cluster III: Sound Material Cycle Society and Resource Recirculation towards Zero Waste and Circular Society (Goals 9: 9a, 9b, 9c)**

Goal 9. Minimize demand and pressure on virgin raw materials and avert resource constraints by implementing 3R and circular economy for all waste streams

Sub Goal 9 (a). Mainstream circular economy in all forms of municipal waste (solid and dry waste, wet waste, wastewater and sewage sludge) and industrial waste

Sub Goal 9 (b). Achieve circularity and minimize food loss and food waste at every stage of the food supply chain, promoting sustainability and resource efficiency

Sub Goal 9 (c). Enhance 3R and circular economy policies and programmes, including technological innovations, for construction & demolition (C&D) waste



Source: UNEP Food Waste Index Report, 2024



Source: UNEP Food Waste Index Report, 2024

3.0 (b). Sustainable 3R and Circular Economy Goals for Achieving Resource Efficient, Clean, Resilient, Sound Material Cycle and Low-Carbon Society

Cluster III: Sound Material Cycle Society and Resource Recirculation towards Zero Waste and Circular Society (Goals 9d, 9e, 9f, 9g, 9h).

Sub Goal 9 (d). Advance circular economy approaches in rural sector with an objective to reduce ecological impacts, create new employment opportunities and alleviate poverty

Sub Goal 9 (e). Achieve resource efficiency and circularity in metal sector

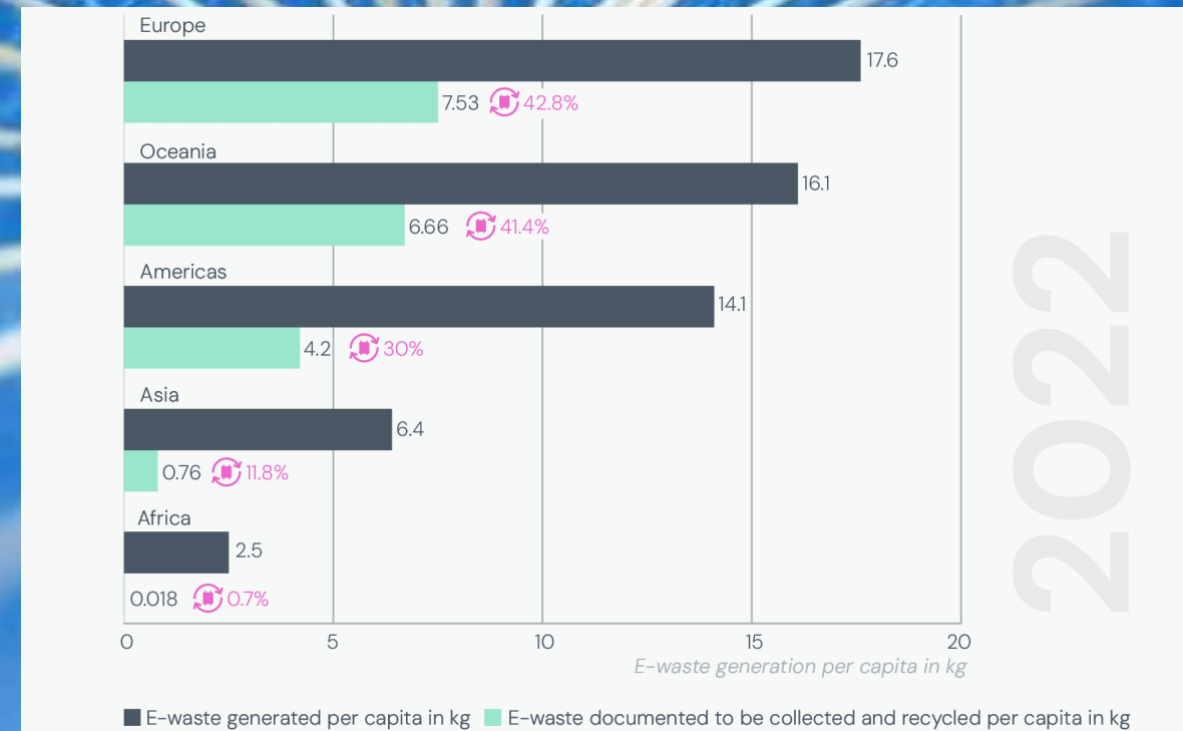
Sub Goal 9 (f). Achieve resource efficiency and circularity by optimizing the use of single use plastics

Sub Goal 9 (g). Achieve resource efficiency and circularity for waste electrical and electronic equipment (WEEE)

Sub Goal 9 (h). Promote safe and sustainable medical and healthcare waste management with a focus to waste-prevention and reduction actions for healthcare organizations

In 2022, 62 million tonnes of e-waste (82% more compared to 2010) was generated globally, with projections reaching 82 million tonnes by 2030.

Just 1% of rare earth element demand is met by e-waste recycling. (Source: <https://unitar.org>)



Cluster III: Sound Material Cycle Society and Resource Recirculation towards Zero Waste and Circular Society (Goals 9i, 9j, 9k, 9l, 9m, 9o, 9p).

Sub Goal 9 (i). Promote safe and sustainable hazardous waste management with a focus to waste-prevention and reduction actions for industries, including MSMEs

Sub Goal 9 (j). Achieve resource efficiency and circularity for solar wastes, in particular panels, photovoltaic cells and related equipment

Sub Goal 9 (k). Achieve circularity for end-of-life batteries

Sub Goal 9 (l). Achieve circularity for end-of-life vehicles

Sub Goal 9 (m). Promote safe and sustainable used oil waste management with a focus to waste-prevention and reduction actions for both domestic and industrial sector

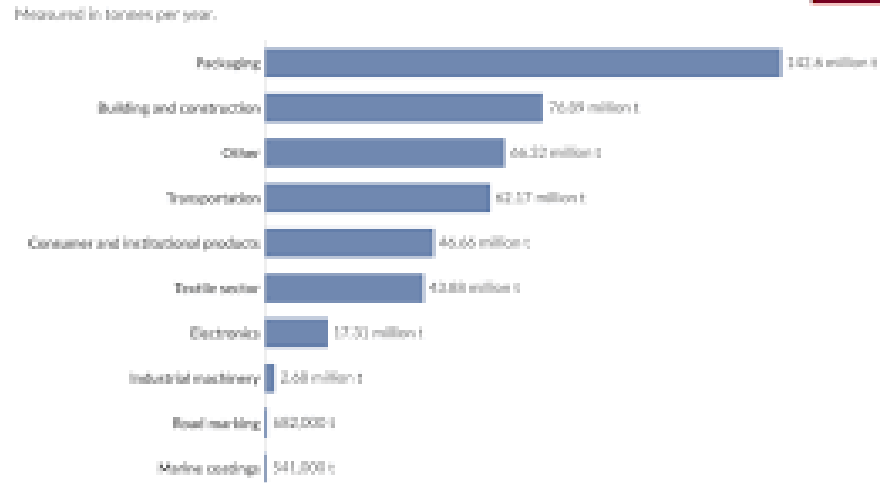
Sub Goal 9 (n). Sub Goal 9 (n). Achieve resource efficiency and circularity for waste tyre and rubber

Sub Goal 9 (o). Significantly improve disaster waste management and resource recovery and response through circular economy

Sub Goal 9 (p). Achieve resource efficiency and circularity for textile waste (fashion industry)

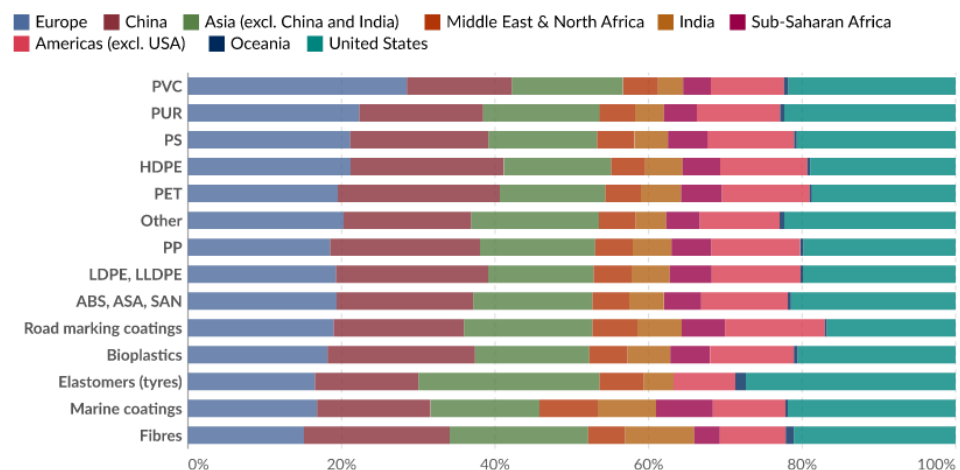
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Annual global plastic use, 2019



Plastic waste generation by region and polymer, 2019

Polymer types are as follows: Acrylonitrile Butadiene (AB), Acrylonitrile Styrene Acrylate (ASA), Styrene Acrylonitrile (SAN), Polyurethane (PUR), Polyvinyl Chloride (PVC), Polystyrene (PS), Linear Low-Density Polyethylene (LLDPE), Polypropylene (PP), Polyethylene Terephthalate (PET), High-Density Polyethylene (HDPE).



Data source: OECD (2022) OurWorldinData.org/plastic-pollution | CC BY

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Cluster IV: Resilient Economies and Societies and Cross-cutting Socio-Economic Goals (Goals: 10,11 (11a, 11b, 11c) & 12).

Goal 10. Strengthen resilience to climate change, natural disasters, and health emergencies and pandemics through 3R and circular economy, including nature-based solutions

Goal 11. Achieve Social Empowerment and Security

Sub Goal 11 (a). Ensure decent, safe working environment, and personal protective equipment for all waste workers by formalizing informal waste workers with appropriate legal waste management framework and achieve sustainable transition for them to become key waste management actors in a circular economy

Sub Goal 11 (b). Complete elimination of illegal engagement of children in the informal waste sector

Sub Goal 11 (c). Ensure adequate social protection such as life insurance, health insurance and other support mechanisms for all waste workers by formalizing informal waste workers with appropriate legal waste management framework including such support mechanisms.

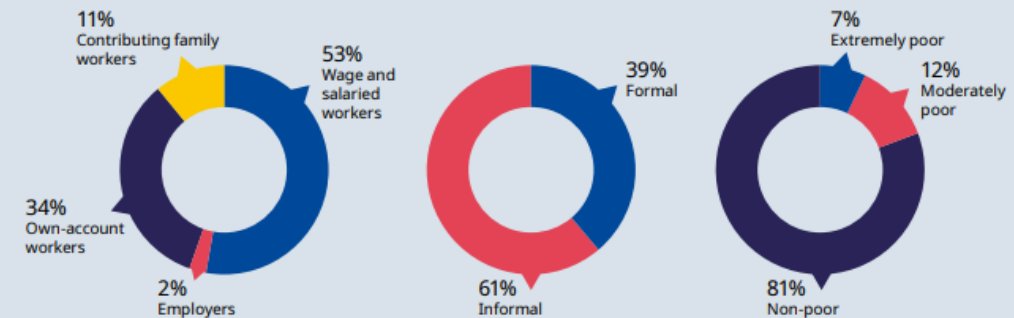
Goal 12. Create green jobs towards new employment generation, including women and youth empowerment ensuring just transition

Half billion people struggle to find decent work

(Source: World Employment and Social Outlook: Trends 2020)

Figure 1.2

Characteristics of global employment, 2019 (percentages)



3.0 (b). Sustainable 3R and Circular Economy Goals for Achieving Resource Efficient, Clean, Resilient, Sound Material Cycle and Low-Carbon Society

Cluster V: Means of Implementation - Partnerships, Technology Transfer, Research and Development, National and International Financing and Investments, Institutional Capacity Building and Information Sharing (Goals 13: 13a, 13b, 13c).

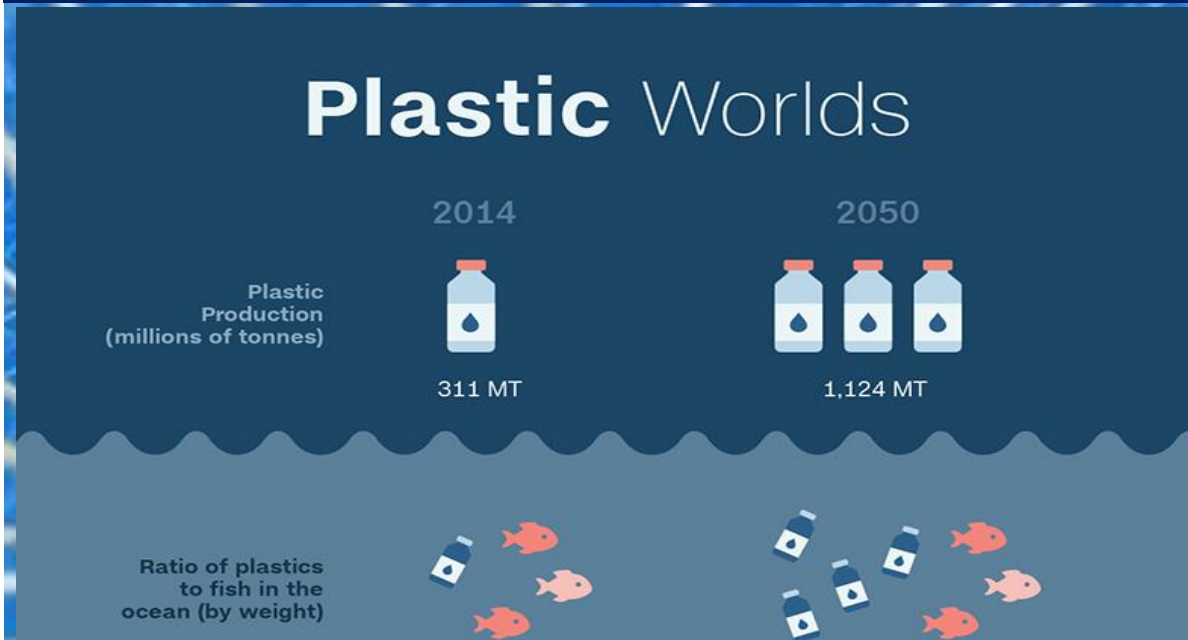
Goal 13. Strengthen means of implementation

Sub Goal 13 (a). Promote multi-layer partnerships, including public-private-partnerships (PPPs) as the basis for advancing circular economy in all development sectors

Sub Goal 13 (b). Foster traditional knowledge and innovation and technology transfer and collaborative research and development (R&D) programmes on circular economy appropriate to different sub-regions

Sub Goal 13 (c). Enhance international and public and private partnerships and cooperation for building an enabling environment in SIDS, LLDCs and other countries in need to promote environmentally-sound waste management and recycling domestically and internationally to increase their circularity

Escalation of plastic waste around the world 1950 to 2050



BY 2050 THERE COULD BE

MORE PLASTIC THAN FISH

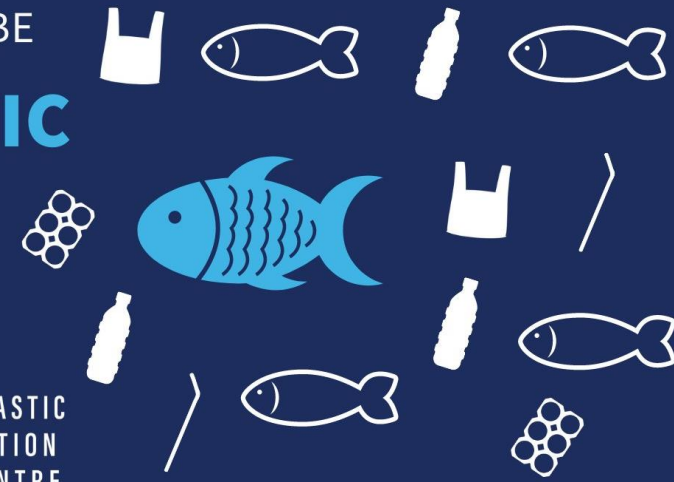
IN THE OCEAN.



WASTE
REDUCTION
WEEK
IN CANADA



PLASTIC
ACTION
CENTRE



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Cluster V: Means of Implementation - Partnerships, Technology Transfer, Research and Development, National and International Financing and Investments, Institutional Capacity Building and Information Sharing (*Goals 13d, 13e, 13f, 13g, 13h*).

Sub Goal 13 (d). Identify relevant funding mechanisms including means to access, and mobilize national and international financing and investments towards circular economy

Sub Goal 13 (e). Information sharing and capacity building programmes targeting key government institutions and agencies and industrial authorities and private sector including MSMEs

Sub Goal 13 (f). Strengthen policy and regulations, including green public procurement, for integrating circular economy principles in all development sectors

Sub Goal 13 (g). Strengthen public awareness and integrate 3R and circular economy in formal education, including empowering consumers, producers and traders

The Partnership Enabling Ecosystem, The SDG Partnership Guidebook, UN DESA & TPI, 2020



Source: desapublications.un.org

Appendix:

- **Guidance Note 1:** Reference and Indicative List of examples of Strategies to Support the Voluntary Implementation of the Jaipur Declaration on 3R and Circular Economy (2025-2035)
- **Guidance Note 2:** Reference Set of Indicators for Assessing the Progress of Implementation of the Jaipur Declaration on 3R and Circular Economy (2025-2035)
- **Guidelines for Sharing Country Progress on Implementation of Jaipur Declaration on 3R and Circular Economy (2025-2035)**
- **Guidance Note 3:** Guidelines for Sharing Country Progress on Implementation of Jaipur Declaration on 3R and Circular Economy (2025-2035)