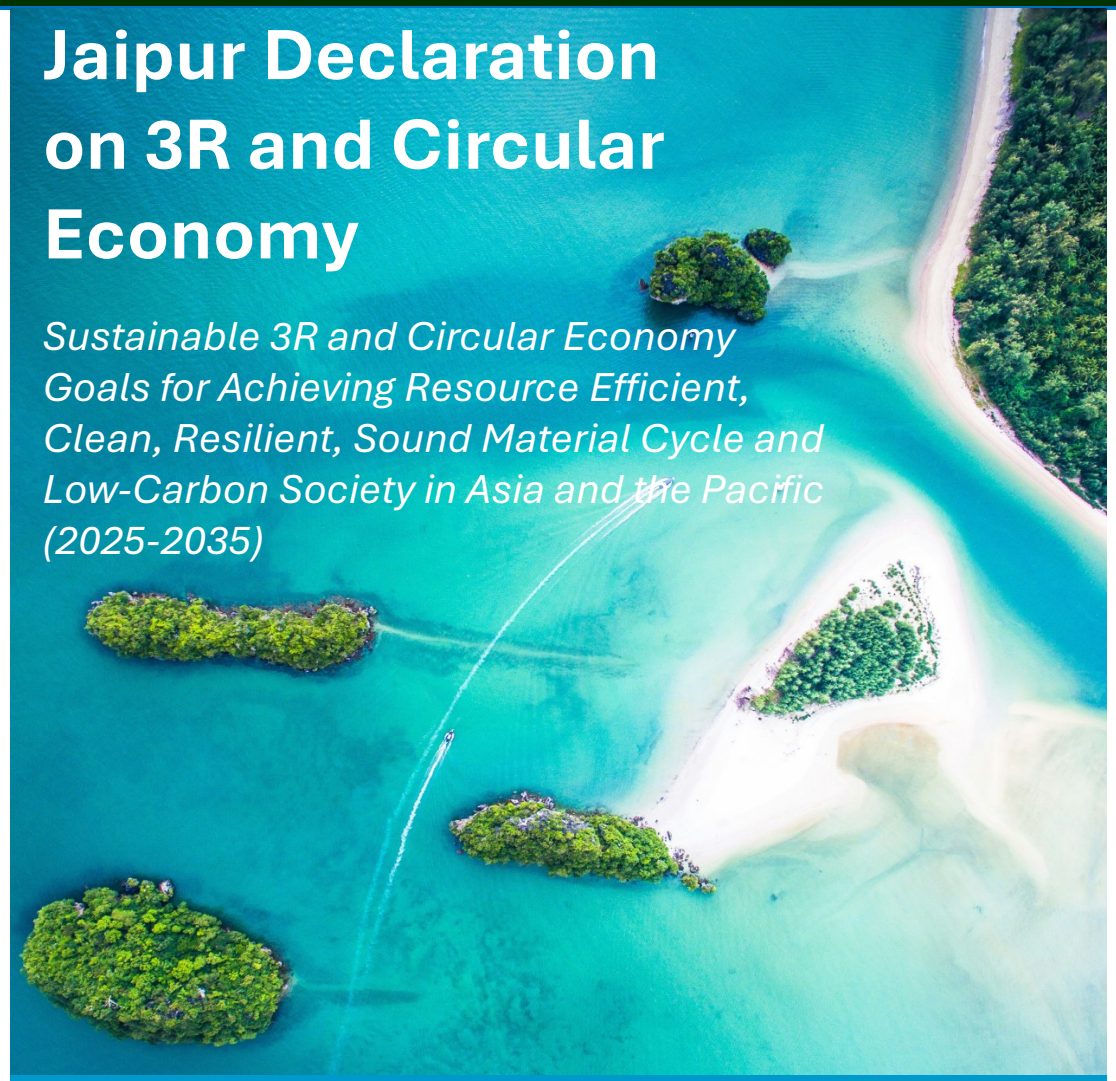
The Jaipur Declaration on 3R and Circular Economy: Relevance for Africa's Sustainable Development



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SUSTAINABLE DEVELOPMENT GOALS

3R & CE is a natural fit to AU's 2063 Agenda..

1	2	3	4	5	6
Africa generates over 140 million tonnes of waste annually and only 11% of Africa's waste is currently recovered.	**In Africa, 90% of waste is dumped in unregulated sites,** with open burning releasing toxic gases and causing disease outbreaks.	**though ~ 70–80% of municipal solid waste in Africa** could be recycled, only ~ 4% is actually recycled ; roughly 50% of all waste remains uncollected & is dumped on streets or in waterways..	**Africa is responsible for only 5% plastic production and 4% consumption globally** and yet it is the region most severely affected by plastic pollution (WHO, 2023)	**Africa generated 3.6 million metric tons of** e-waste in 2022. Less than 1 percent of Africa's e-waste is formally recycled.	Africa throws away almost 40% of the food it produces. **Fruits and vegetables loss the most, reaching up to 50%, the highest in the world.**

According to WB, in 2020, Sub-Saharan Africa generated roughly 200-million tonnes of solid waste, which is going to be tripled by 2050.

3R & circular economy is a natural fit for the African Union's Agenda 2063 - "The Africa We Want", in particular the Goal 6 (*Blue/Ocean Economy for acerated economic growth* & Goal 7 (*environmentally sustainable climate resilient economies & communities*) that combinedly call for sustainable waste & resource management; designing out waste/pollution, phasing out open dumping/burning, building local value chains and cutting import dependence on virgin raw materials directly advancing prosperity & green industrialization (*Aspiration 1: A prosperous Africa based on inclusive growth & sustainable development*).

Photo source: https: wikiwand.com

Sources:

- https://www.unep.org/news-and-stories/press-release/world-must-move-beyond-waste-era-and-turn-rubbish-resource-un-report?utm_source=chatgpt.com
- https://wearevuka.com/insights/circular-economy/solid-waste-is-choking-african-cities-potential-circular-economy-can-mitigate-this/?utm_source=chatgpt.com
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- https://e4impact.org/recycling-and-enterprise-e4impact-entrepreneurs-changing-africa/?utm_source=chatgpt.com
- https://ghanacic.ashesi.edu.gh/wp-content/uploads/2024/12/Food-Waste-Management-Sustainable-Approaches-And-Africas-Way-Forward.pd
- 2024 Africa EnterpriseChallenge Fund.

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.

Ministry of the Environment Japan

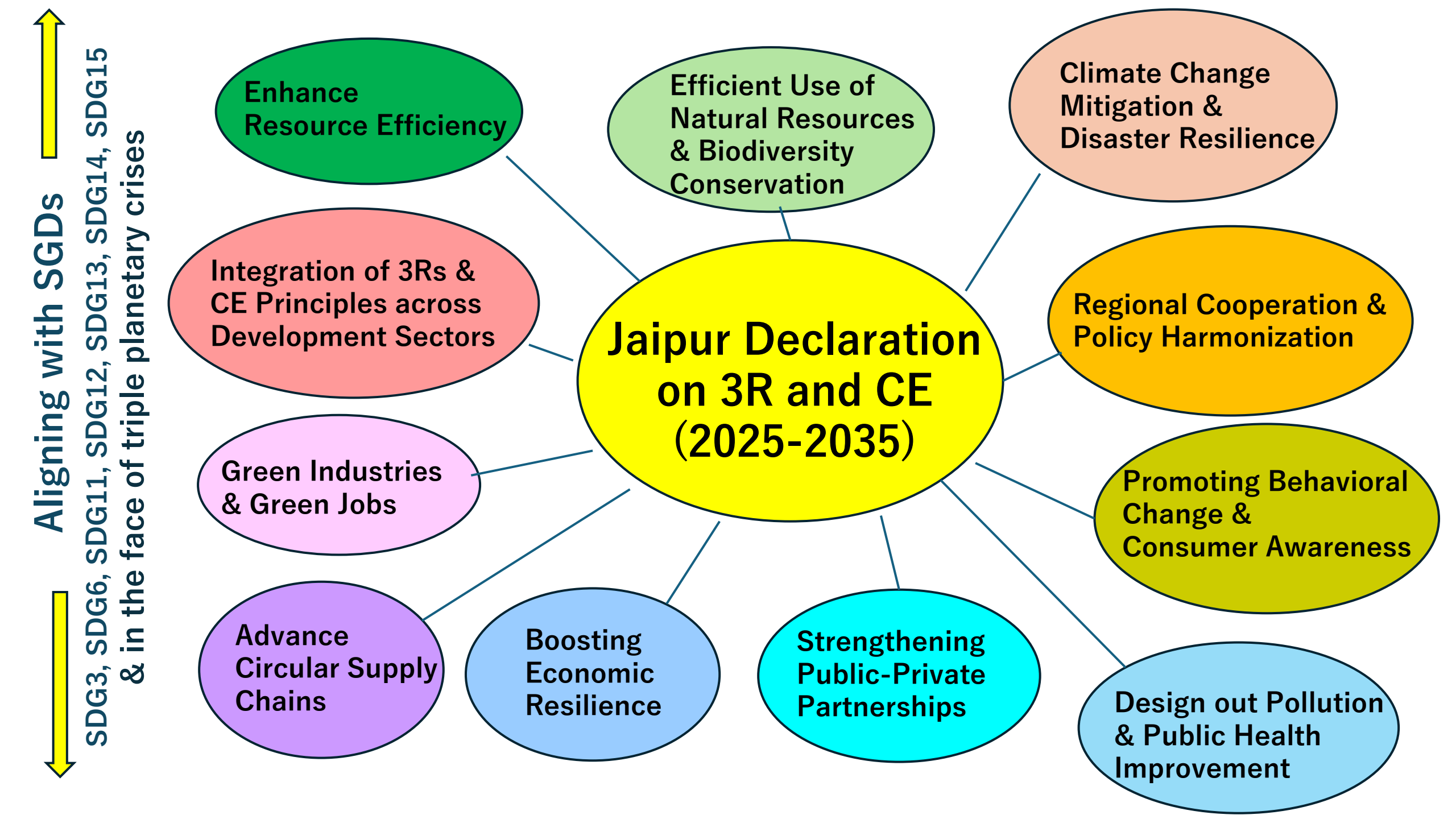
1st Japan 2009 → 2nd Malaysia 2010 → 3rd Singapore 2011 → 4th Vietnam 2013 → 5th Indonesia 2014 → 6th Maldives 2015 → 7th South Australia 2016 → 8th India 2018

- 1st: Tokyo 3R Statement
- 2nd: Singapore Recommendation
- 4th: Ha Noi 3R Declaration (2013-2023)
- 5th: Surabaya 3R Declaration
- 6th: Male 3R Declaration
- 7th: Adelaide 3R Declaration on Circular Economy
- 8th: Indore 3R Declaration on Clean Water, Land, Air in Cities

9th Thailand 2019 → 10th Webinar 2020 → 11th Cambodia 2023 → 12th 2025 (Jaipur, India)

- 9th: Bangkok 3R Declaration Towards Prevention of Plastic Waste Pollution through 3R and Circular Economy
- 12th: Jaipur 3R & CE Declaration (2025-2035) adopted on 5 March 2025 at 12th Forum in Jaipur chalking a pathway for Asia-Pacific to advance cicular economy

SUSTAINABLE DEVELOPMENT GOALS


Aligning with SGDs
SDG3, SDG6, SDG11, SDG12, SDG13, SDG14, SDG15
& in the face of triple planetary crises
Enhance Resource Efficiency
Efficient Use of Natural Resources & Biodiversity Conservation
Climate Change Mitigation & Disaster Resilience
Integration of 3Rs & CE Principles across Development Sectors
Jaipur Declaration on 3R and CE (2025-2035)
Regional Cooperation & Policy Harmonization
Green Industries & Green Jobs
Promoting Behavioral Change & Consumer Awareness
Advance Circular Supply Chains
Boosting Economic Resilience
Strengthening Public-Private Partnerships
Design out Pollution & Public Health Improvement

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

Clusters	Goals	Actions/Measures
Cluster I : Promote Sustainable Resource Management, Resource Efficiency and Low-Carbon Society *(Goals: 1, 2 & 3).*	G 1: Improve materials, energy, and water efficiency G 2: Promote bioeconomy G 3: Maximize resource efficiency in MSMEs	• **Sustainable resource management** is crucial for securing finite natural resources and improve resource efficiency, which are central of the circular economy and the SDGs. As Africa faces biodiversity loss, water scarcity, pollution, and over-extraction of natural resources, policymakers need to enhance resource efficiency by implementing appropriate policies and regulations grounded in circular economy principles; • **Bio-economy involves** treating biomass- including agricultural waste as a valuable resource through 3R and circular economy strategies, while enhancing energy and water efficiency, expanding sustainable infrastructure, and leveraging advanced technologies to create renewable and circular products. For instance, Tanzania utilizes sisal plant waste to generate biogas, turning agricultural by-products into renewable energy for cooking and electricity. • **Key measures include** reducing biomass waste and minimizing waste at the source, improving product lifespan and repairability, eliminating hazardous chemicals, enhancing energy and resource efficiency, recognizing waste as an economic asset, enforcing design-for-environment standards, promoting responsible production and consumption, advancing green energy adoption in the MSME sector, and strengthening resource recovery through the implementation of 3R principles, circular technologies, and robust recycling industries. • **Examples & cases:** Several African countries are leading innovative sustainability efforts: ***Kenya*** generates 45% of its electricity from geothermal energy, reducing fossil fuel use and emissions. ***South Africa*** promotes private investment in solar, wind, and biomass to cut greenhouse gases and shift from coal. ***Ethiopia*** combats desertification by planting billions of trees through its Green Legacy Initiative. **Botswana** improves water efficiency with smart meters and leak detection technology.

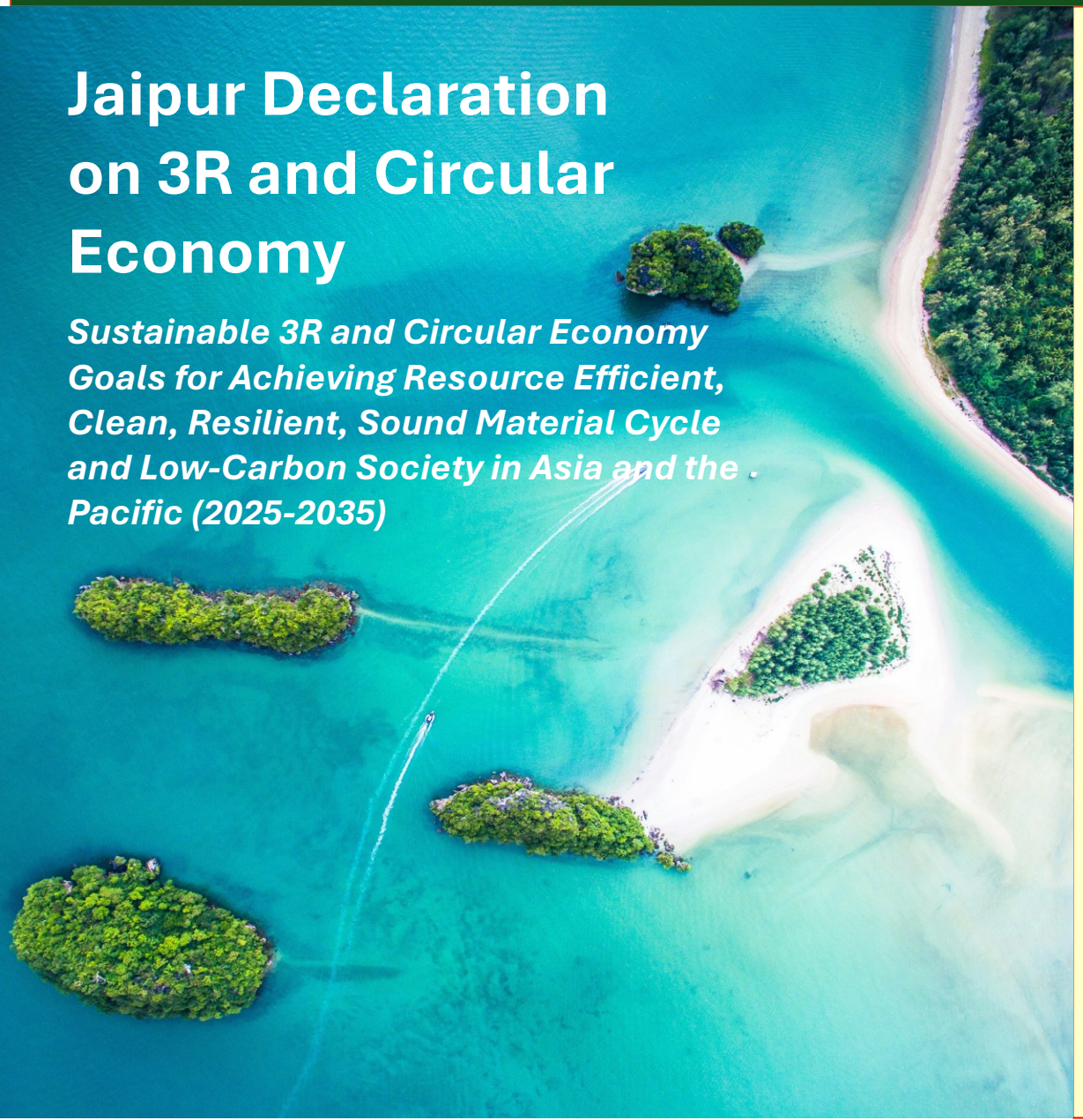
Clusters	Goals	Actions/Measures
Cluster II: Achieving Clean Environment (Land, Water, Air, Ocean and Mountains) through 3R and Circular Economy	G 4. improvement in water quality by reducing pollution G 5. Reduce adverse environmental impacts in cities G 6. Promote responsible mining and mountain resource protection G 7. Reduce hazardous chemicals in materials, products and wastes, including plastics G 8. Prevent and significantly reduce marine pollution of all kinds, including nutrient pollution	• **Achieving a clean environment is vital for Africa,** where poor waste management practices, plastic pollution, unsustainable mining, and contamination threaten public health, natural ecosystems, and effecting safety and livelihoods of millions. As natural resources are under increasing pressure, adopting circular economy strategies and 3R principles is essential to reduce environmental degradation, improve resource efficiency, and ensure long-term sustainability across land, water, mountains & oceans; • **African countries could adopt 3R principles (Reduce, Reuse, Recycle) and embedding circular economy strategies** into all development sectors through sustainable consumption and production, resource-efficient urban and mining practices to minimize pollution and hazardous wastes; • **African countries** should promote eco-design innovations to reduce pollution, protect air, water, land and coastal-marine ecosystems, and ensure a clean environment for all; • **Examples & cases:** ***Ethiopia's*** massive tree-planting campaign, which has restored degraded land, natural ecosystem, strengthened biodiversity, ***Ghana*** is leveraging advanced technologies to monitor coastal plastic pollution while supporting local recycling enterprises, and ***Rwanda*** is implementing sustainable forestry and watershed protection in mountain regions to preserve clean water and vital ecosystems.

Clusters	Goals	Actions/Measures
Cluster III: Sound Material Cycle Society and Resource Recirculation towards Zero Waste and Circular Society	G 9. Minimize demand and pressure on virgin raw materials and avert resource constraints by implementing 3R and circular economy for all waste streams ○ Municipal & industrial waste ○ food loss and food waste ○ construction & demolition waste ○ metal and mining sector ○ single use plastics ○ electrical and electronic waste ○ medical waste ○ hazardous waste ○ solar wastes ○ end-of-life batteries and vehicles ○ waste tyre and rubber ○ disaster waste ○ textile waste	• **Africa faces mounting challenges** in minimizing demand for virgin raw materials due to rising global demand for natural resources-metals, critical minerals, agricultural products and construction materials. At the same time, the region suffers from food loss and food waste, growing plastic pollution, electronic and hazardous waste and end-of-life vehicles, batteries and tyres. • **Achieving sound material-cycle society, circular and zero waste society requires** comprehensive strategy that emphasizes reducing waste at its source, reusing materials, and recycling as a final option while maximizing resource efficiency and minimizing environmental harm across the entire product lifecycle. This approach includes mandatory source segregation, encouraging sustainable consumption, designing products for longevity and recyclability, establishing and accelerating appropriate EPR frameworks/schemes, and building strong resource recovery mechanisms, and enhanced public awareness, etc. • **Key measures include** conserving natural capital including forests, farms, aquifers, and ecosystems, preventing food waste, improving building material standards, and regulations for effective waste management. Africa should also promote sustainable agriculture and agroforestry, strengthen material life cycle monitoring, and implement sound policies and technologies for resource recovery, especially for end-of-life vehicles/batteries, while prioritizing EPR, redesign, regeneration, repurposing, partnerships, etc. • **Examples & cases:** ***Rwanda*** enforces a strict ban on single-use plastics and promotes national policies for reuse and recycling; ***Nigeria's*** FREEE Recycle repurposes used tyres through zero-waste methods and EPR frameworks; and ***South Africa*** drives circularity through e-waste recycling and sustainable fashion initiatives that reduce textile waste and encourage responsible consumption.

Clusters	Goals	Actions/Measures
Cluster IV: Resilient Economies and Societies and Cross-cutting Socio-Economic Goals (10,11,12)	**G 10.** Strengthen resilience to climate change, natural disasters, and health emergencies and pandemics, through 3R & CE, including nature based solutions (NbS) **G 11.** Social empowerment and security (decent and safe working environment, elimination of illegal engagement of children in informal sector, health & life insurance, etc. **G 12.** Generate green jobs, new employment opportunities for youth and women ensuring just transition	• **Africa faces intertwined challenges in building resilient economies and societies,** including economic dependence on vulnerable sectors, high youth unemployment, climate change impacts, weak institutional capacity, and social inequality. These issues hinder progress toward inclusive growth, sustainable development. • **Africa can strengthen resilience to climate change, disasters, and health emergencies** by integrating climate-smart policies across sectors, investing in resilient health systems and nature-based urban planning, promoting green jobs in renewable energy and sustainable agriculture, and empowering communities—especially women and youth—through inclusive governance and education. Coordinated action and ecosystem restoration and preservation will enhance social security and unlock sustainable economic opportunities, and effective adaptation, and cross-sectoral strategies promote diversification, climate resilience, and social empowerment. • **To strengthen resilience across sectors,** governments should integrate circular economy strategies within all ministries and agencies, focusing on reducing demand for virgin raw materials (finite natural resources) towards alternatives such as renewable resources and energy, minimizing ecosystem pressure, and enhancing climate adaptation. Key actions include NbS, promoting agroforestry for ecosystem restoration and income diversification, and building urban resilience through nature-based solutions, circular business models, environmentally sound management of chemicals and all wastes, etc. • **Examples & cases**: ***Ghana*** has expanded economic inclusion via digital finance; ***Kenya's*** climate-smart agriculture supports rural resilience; ***Botswana*** ensures stability through strategic diamond revenue use; ***Mauritius*** diversified to weather global shocks; ***Ethiopia's*** safety net aids vulnerable communities and ecosystems; Morocco advances climate

Clusters	Goals	Actions/Measures
Cluster V: Means of Implementation - Partnerships, Technology Transfer, Research and Development, National and International Financing and Investments, Institutional Capacity Building and Information Sharing	**G13. Strengthen means of implementation .** ○ Strengthen public-private partnerships (PPPs) ○ Transfer traditional knowledge into new business models ○ Foster education, awareness ○ Financial inclusion for circular transitions ○ Capacity building	• **Africa's path toward a circular economy and resilient societies is hindered by** barriers such as limited infrastructure, inadequate financing, policy and regulatory gaps, weak institutional capacity, slow digital transformation, and inadequate information sharing, low-public awareness, and insufficient capacity for innovation and technology adoption. • **Africa can accelerate circularity and sustainable development** by strengthening the means of implementing 3R and the circular economy, South–South and Triangular and North–South cooperation and partnerships, and strengthening links among governments, the private sector, academia, and research institutions (triangular cooperation); embed circular principles into national plans and policies; enhance regulatory and institutional frameworks; promote demand-driven technology transfer and joint R&D; combine traditional knowledge with innovation; mobilize innovative financing; build institutional and technical capacity; open data sharing, and evidence-based policymaking; and run broad public and industry-wide awareness campaigns, embed CE practices across all development sectors, among others. • **Examples & cases**: Africa's circular economy is gaining momentum bring together governments, businesses, and communities, blending innovation with traditional practices to create jobs and sustainable enterprises. From public–private ventures like the African Circular Economy Alliance, Namibia Craft & Textile Cooperatives, ICLEI Africa City Campaigns, Climate Finance for West African SMEs, Green Bonds & Microfinance in **Ethiopia**, these initiatives are laying the foundation for CE development in the region. • **Recommendations:** In this context, convening a **High-Level Regional 3R and Circular Economy Forum in Africa** would be both timely and valuable, driving progress towards CE implementation and fostering circular & zero waste societies.

Circular Economy in the context of African economy:



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)

- **Massive Social, Economic & Environmental Potential:** A transition to a circular economy in Africa could unlock an estimated **US $350 billion in new economic opportunities by 2030**, across sectors like renewable energy, green manufacturing, and waste-to-value services Businessday NG.

- **Job Creation:** The United Nations Environment Programme (UNEP) projects that a well-structured circular economy could **create 11 million jobs in Africa and unlock a $500 billion global circularity market** reducing Africa's unemployment by 12%. https://www.devdiscourse.com/

- **According to the Ellen MacArthur Foundation, by 2030, Africa's combined GDP is projected to be 2.2% higher in the CE scenario than in a business-as-usual situation.**

- **Cost saving:** projections show that a circular economy model, where waste generation and economic growth are decoupled by adopting waste avoidance, sustainable business practices and full waste management, could lead to **a considerable reduction in costs to $108.5 billion per year.** https://www.wastetodaymagazine.com/news// unep-waste-recycling-report-2024-circular-economy-benefits

Summary: Jaipur Declaration on 3R and Circular Economy & Its Relevance to Africa

Jaipur Declaration provides technical pathways, policy measures, and sectoral practices that Africa can adapt under Agenda 2063's Aspirations and the AU's Continental Circular Economy Action Plan (2024–2034).

- **Jaipur Declaration (2025-2035) commits Asia-Pacific to a resource-efficient, low-carbon, sound material-cycle society, fully aligned with SDGs/Paris/Kunming-Montreal—outcomes that mirror African Union's Agenda 2063's Aspirations on prosperity, environment, and resilience;**

- **African policymakers can mirror in Jaipur's recommendations into African Union's priorities in the context that the AU's new Continental Circular Economy Action Plan (CEAP), 2024–2034 provides the African vehicle, and Jaipur Declaration offers detailed sector roadmaps/3R measures that could plug straight into CEAP programs and actions towards achieving the SDGs;**

- **Jaipur Declaration levers AU's 2063 Agenda and Goals:**

  - **Green industrialization & prosperity (Aspiration 1 & 2) <–> eco-design, durability/repairability standards, remanufacturing, high-quality recycling markets; sector specific guidance and standards for plastics, e-waste, and C&D, can inspire continental harmonization under the AfCFTA; organics and local natural resources (bio-circular economy) → helps localize supply chains; MSME, green jobs, women & youth empowerment, economic resilience, etc,;**

  - **Healthy environments & climate (Aspirations 1 & 7) <-> phase-out open dumping/burning, separate collection, organics-to-fertilizer/biogas, methane capture; align NDCs with circular measures to cut emissions and pollution in cities, etc.;**

  - **People driven development, women and youth potential (Aspiration 6) <-> repair/refurb hubs, reverse-logistics MSMEs, municipal CE services;**