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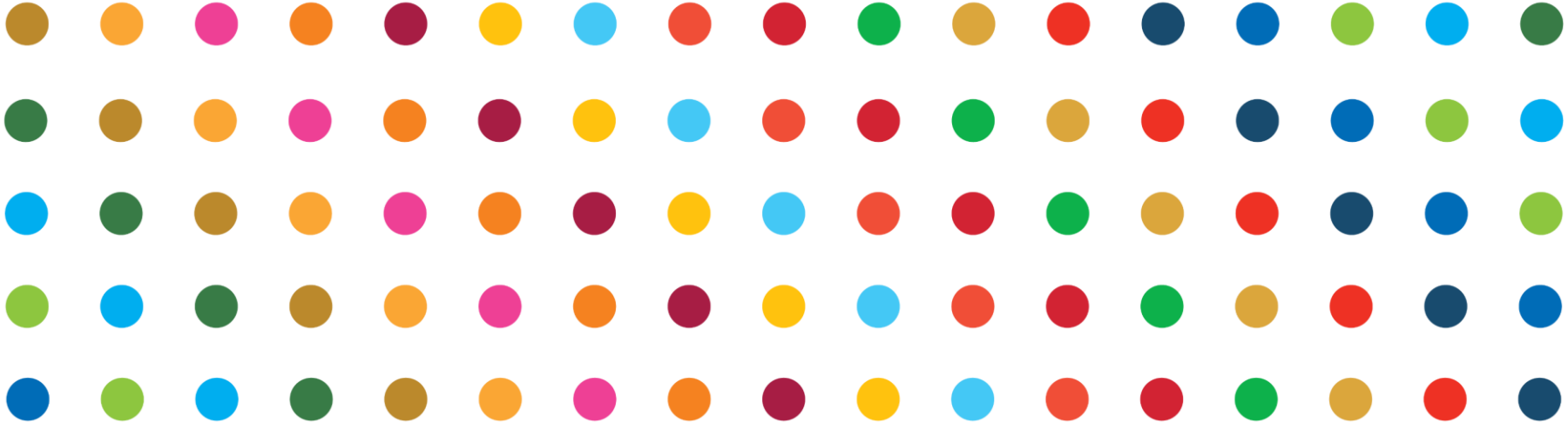
NEW ECONOMICS FOR SUSTAINABLE DEVELOPMENT

CIRCULAR ECONOMY



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I. Introduction – context key points

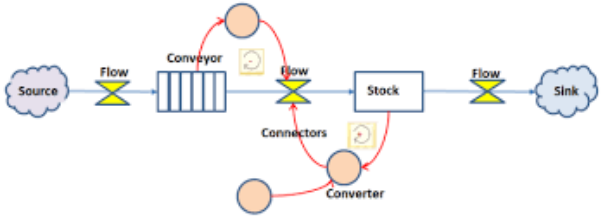
INTRODUCTION

At the macroeconomic level, a circular economy implies the decoupling of economic growth from the use of natural resources and inputs. Ideally, the rate of resource extraction ought to remain below the rate of resource consumption, and the rate of waste production ought to remain below the environment's ability to absorb and transform the waste. A circular economy can also be seen as a regenerative system in which resource input and waste, emissions, and energy leakages are minimized through long-lasting design, maintenance, repair, reuse, sharing, remanufacturing, refurbishing, and recycling activities.

"Global economic consumption and production does not exist within a vacuum but relies on **resource stocks and flows** in our **Earth System**, acting as a **limit to growth**."

Goal: Manage resource stocks and flows + preserve, restore and develop natural capital

Method: Circular economy advances **steady system state via resource efficiency**, minimizing risk from resource depletion

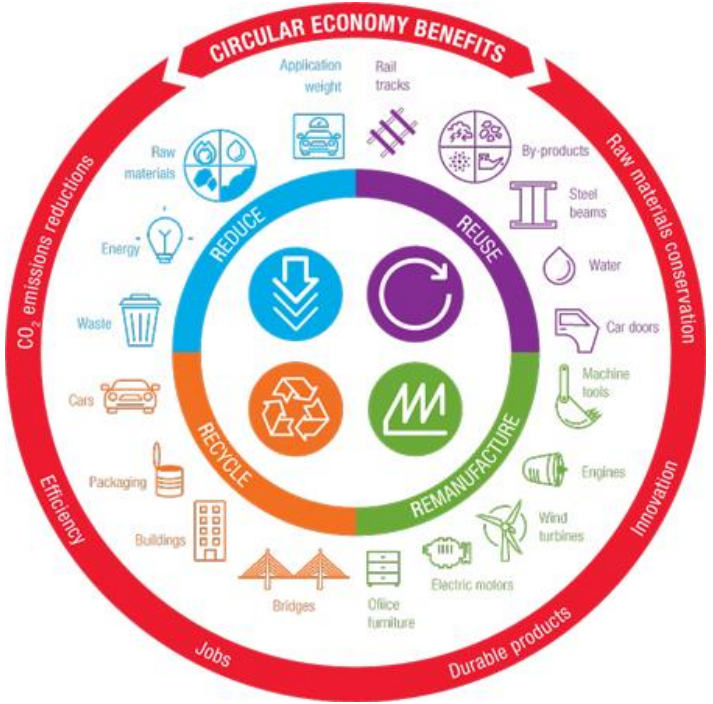


I. Introduction – definition key points

1. **No internationally agreed definition** of a circular economy.
2. Current **definitions have gaps** in relation to system perspective, business models and consumer behaviour.
3. Policy brief presents circular economy as
   "one of the current sustainable economic models, in which **products and materials** are designed in such a way that they can be **reused, remanufactured, recycled or recovered (4-R)** and thus **maintained in the economy for as long as possible**, along with the resources of which they are made, and the **generation of waste, especially hazardous waste, is avoided or minimized, and greenhouse gas emissions are prevented or reduced"** - *UNEA (UNEP/EA.4/ Res.1)*
4. **Open to closed loop** - Need to ensure that **producer and consumer behaviours** support circularity at the macro and micro levels, e.g. stopping "programmed obsolescence".

II. Relevance of a CE

- Macro and micro level structural change - Investment, employment, capital depreciation and sectoral growth
- As attention shifts towards end-of life resource management, design-for-durability and services play a larger role in the economy
- Brings production and consumption sites closer, managing material loops and production inputs e.g. **CLUSTERS** - Lower input-based imports towards greater regionalization or localization of supply chains.
- Local impact - services such as collecting and processing of materials, and repair and reconditioning
- Jobs: “Investing in the green and circular economy could create 100 million jobs, both by 2030” - SDG Progress Report 2023



UNCTAD, 2023

III. Synergies – Positive feedback loops with nearly all SDGs

Table 2. Synergies between Circular Economy and the Sustainable Development Goals.

LINKS WITH SDGs	CIRCULAR ECONOMY
SDG 1	Target 1.5 (build resilience to shocks and disasters)
SDG 2	Target 2.3 (double the agricultural productivity and incomes of small-scale food producers) Targets 2.1 (end hunger and ensure access by all people to safe, nutritious and sufficient food), 2.2 (end all forms of malnutrition and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons), 2.4 (ensure sustainable food production systems, resilient agricultural practices, strengthen climate adaptation and improve land quality), 2.a (international cooperation for rural infrastructure, research & technology) and 2.b (correct and prevent trade restrictions and distortions in world agricultural markets).
SDG 3	Target 3.9 (reduce air, soil and water pollution).
SDG 4	Target 4.7 (foster education and skills for sustainable lifestyles, gender equality and culture).
SDG 5	Targets 5 (ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life) and 5.b (enhance the use of ICTs to promote women's empowerment).
SDG 6	Targets 6.3 (improve water quality) and 6.4 (water-use efficiency).
SDG 7	Target 7.1 (ensure universal access to affordable, reliable and modern energy services) Targets 7.2 (increase the use of renewable energy) and 7.3 (double global rate of improving energy efficiency).
SDG 8	Targets 8.1 (sustain per-capita economic growth at 7% for LDCs), 8.2 (achieve higher levels of economic productivity), and 8.3 (support productive activities). Targets 8.4 (global resource efficiency in consumption/production and decoupling economic growth from environmental degradation), 8.5 (productive employment and decent work for all, including for young people and persons with disabilities, and equal pay for work of equal value).
SDG 9	Target 9.4 (increase resource-use efficiency and resilient industrial processes).

III. Synergies – NESD Concepts positive feedback loops

Table 1. How a Circular Economy can complement and intersect with other NESD concepts.

NESD Concepts	Key contributions	Complementary	Intersecting
Blue Economy	Reduction of dispersion of pollutants to waterways and oceans.	x	x
Green Economy	Less carbon intensity through higher reuse and recovery of secondary materials.	x	x
Orange/Creative Economy	Design-thinking for resource-efficient production and processes, and use of resource-efficient digital technologies.	x	
Purple/Care Economy	Valuing the innovation and productive capacities of labour and improved living conditions (environmental, health);	x	
Social & Solidarity Economy	Opportunity for using human innovation capacities in recycling, recovery and repair activities, including solidarity economy models conducive to upgrade working conditions from informal to formal sectors.	x	x
Yellow/Attention Economy	Norms setting to shift from goods-ownership to delivery-as-a-service models, highly driven by digital infrastructure and sustainable consumption behaviour.	x	x
Frugal/Innovation Economy	Reduction of inputs and natural resources; higher traditional/natural material usage; and emphasis on product and systems design to minimize waste. A CE also improves efficiency by aggregating resources through	x	x

V. Policy Tools + Cases

POLICY TOOLS

DOMESTIC

National public investment & public procurement strategies

Market-based instruments (e.g. fiscal policy)

Public-private partnership instruments (e.g. PPPs for R&D or investment)

Regulatory or legal instruments (e.g. EPR laws)

Voluntary commitment measures (e.g. compacts or action plans)

INTERNATIONAL

Trade agreements

International standards

International agreements on monitoring and evaluation indicators

PUBLIC INVESTMENT AS A TOOL FOR SOCIETAL TRANSFORMATION DRIVEN BY A CIRCULAR ECONOMY.

of Environment of the Republic of Korea announced a plan to foster hydrothermal energy as the flagship project of the Green New Deal in June 2020. The plan introduces a pilot project to build Gangwon Hydrothermal Energy Convergence Cluster in Chungcheong, Gangwon

MARKET-BASED INSTRUMENTS USING FISCAL POLICY CAN BE POWERFUL INCENTIVES FOR CIRCULARITY

agencies. In the case of Chile, the Production Development Corporation (CORFO) is a Chilean governmental organization founded in 1939 to promote economic growth through entrepreneurship and innovation and competitiveness. In 2021, CORFO launched an initiative on the circular economy and sustainable consumption and production, through the program *"Transforma Economía Circular"*. CORFO provides

APPLYING THE POLLUTER PAYS PRINCIPLE TO ENSURE MARKET TRANSFORMATIONS FOR A CIRCULAR ECONOMY

An increasing number of countries are adopting EPR laws at national and local level levels. Between 1991 and 2011, US states enacted more than 70 EPR laws[11]. In Sweden, EPR is both a policy and law supported by a 1994 European Union Directive for a more circular waste

"What cannot be measured, cannot be regulated."

1. Prices – not fully costed
2. Subsidies > market distortions and perverse incentives for the overuse of natural resources and pollution, e.g., fossil fuel subsidies.
3. Multilateral coordination failures (political will)
4. Economies relying on commodity intensive growth models = need to localize secondly and tertiary stages to capture more circularity value
5. Data gaps…

IV. Policy Opportunity - GLOBAL COOPERATION ON METRICS FOR EVIDENCE-BASED POLICYMAKING

Table 3. National to global indicators for a circular economy.

Indicator type	Metric description
Number	Number of national policies and laws on the circular economy.
Value	National budget dedicated to enabling a circular economy.
Number	Number of national circular economy clusters implemented.
Percentage	Sustainable Development Goal 12 targets — e.g. SDG 12.5 national recycling rate.
Number	Number of business reporting engagement in circular economy clusters, resource capture or value chains.
LCA/Mass	Material metabolism and material efficiency indicators.
Index	Productive capacity (such as UNCTAD's productive capacity index).
Number	Number of decent jobs created through circular economy measures.
Number	Number of standards adopted for the circular economy (such as circulareconomy earth policy mapping.
Value/Volume	Trade and logistics flows related to key goods to enable circular economy transition (e.g. energy, minerals, etc.)
Percentage	Share of cycled materials as a proportion of the total material inputs into the global economy every year (e.g. Circularity Gap Report).

Source: UNEN

Table 3 above summarises key indicators in use, while also consolidates suggestions on additional metrics based on national and global initiatives to advance on a circular economy. It should be noted that relevant indicators can move in opposite directions, e.g., an improvement in the circularity rate can be accompanied by an increase in the overall demand for resources if such improvement is insufficient to meet a growing demand. To this end, a suggested global metric on cross-country comparisons for a circular economy could build on existing metrics.

VI. Key takeaways

1. Policy innovation needed to realise CE resource efficiency potential
2. Circularity can yield value – services sector key to close loops, reduce material impact
3. Macro economic policies are key enabler – WoG and WoS plans, taxation reforms, Extended Producer Responsibility regulation
4. Global metric is required to assess cross-country comparisons – UN resolution on advancing CE and measurement needed
5. Social side of CE can enhance impact and recovery, decent jobs – SP policies needed to reduce friction in transition from informal to formal
6. Financing circularity requires multi-sector dialogue and agreement – new financial tools to de-risk investments
7. International trade has a key role to play – global agreements needed

THANK YOU!

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