SDG 12 - SCP and Circular Economy

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Overview and structure

- 1. SDG 12 SCP and circular economy linkages
- 2. Circular economy for SDGs and climate mitigation

What's in a name?



SDG 12 – Responsible Consumption and Production

Targets	Indicators
12.1 Implement the 10YFP on SCP, all countries taking action, with developed countries taking the lead, taking into account the development and capabilities of developing countries	12.1.1 Number of countries with SCP national action plans or mainstreamed as a priority or a target into national policies
12.2 By 2030, achieve the sustainable management and efficient use of natural resources	12.2.1 Material footprint, material footprint per capita and material footprint per GDP 12.2.2 Domestic material consumption, domestic material consumption per capita and domestic material consumption per GDP
12.3 By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses	12.3.1 Global food loss index
12.4 By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment	12.4.1 Number of parties to international multilateral environmental agreements on hazardous waste, and other chemicals that meet their commitments and obligations in transmitting information as required by each relevant agreement 12.4.2 Hazardous waste generated per capita and proportion of hazardous waste treated, by type of treatment

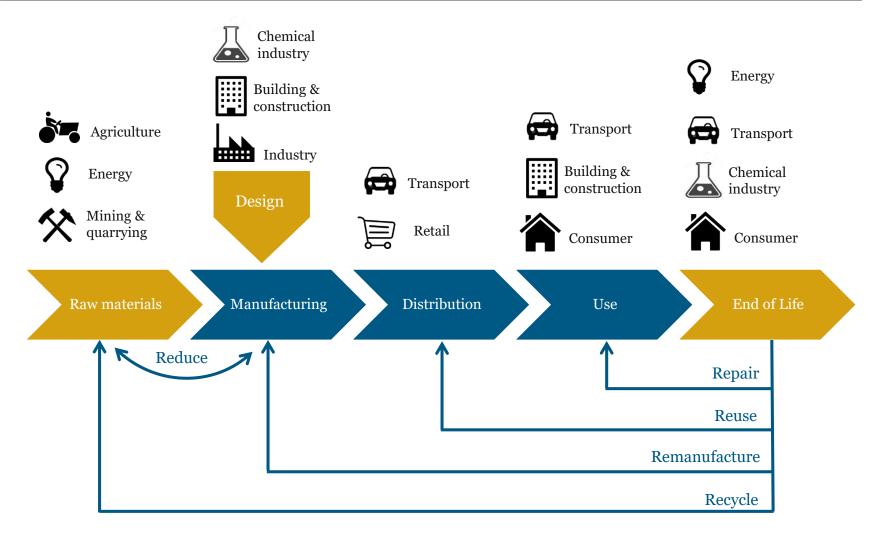
SDG 12 – Responsible Consumption and Production

12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse	12.5.1 National recycling rate, tons of material recycled
12.6 Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle	12.6.1 Number of companies publishing sustainability reports
12.7 Promote public procurement practices that are sustainable, in accordance with national policies and priorities	12.7.1 Number of countries implementing SPP policies and action plans
12.8 By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature	12.8.1 Extent to which (i) global citizenship education and (ii) education for sustainable development (including climate change education) are mainstreamed in (a) national education policies; (b) curricula; (c) teacher education; and (d) student assessment
12.A Support developing countries to strengthen their scientific and technological capacity to move towards more sustainable patterns of consumption and production	12.A.1 Amount of support to developing countries on research and development for sustainable consumption and production and environmentally sound technologies

SDG 12 – Responsible Consumption and Production

Targets	Indicators
12.B Develop and implement tools to monitor sustainable development impacts for sustainable tourism that creates jobs and promotes local culture and products	12.B.1 Number of sustainable tourism strategies or policies and implemented action plans with agreed monitoring and evaluation tools
12.C Rationalise inefficient fossil fuel subsidies that encourage wasteful consumption by removing market distortions, in accordance with national circumstances, including by restructuring taxation and phasing out those harmful subsidies, where they exist, to reflect their environmental impacts, taking fully into account the specific needs and conditions of developing countries and minimising the possible adverse impacts on their development in a manner that protects the poor and the affected communities	12.C.1 Amount of fossil fuel subsidies per unit of GDP (production and consumption) and as a proportion of total national expenditure on fossil fuels

Circular economy - new opportunities across many sectors



 $Adapted\, from\ a\ diagram\ by\ Innovate UK$

Circular economy – "Nuggets"

"... could generate a net economic benefit of **€1.8 trillion** for Europe by 2030." (McKinsey)

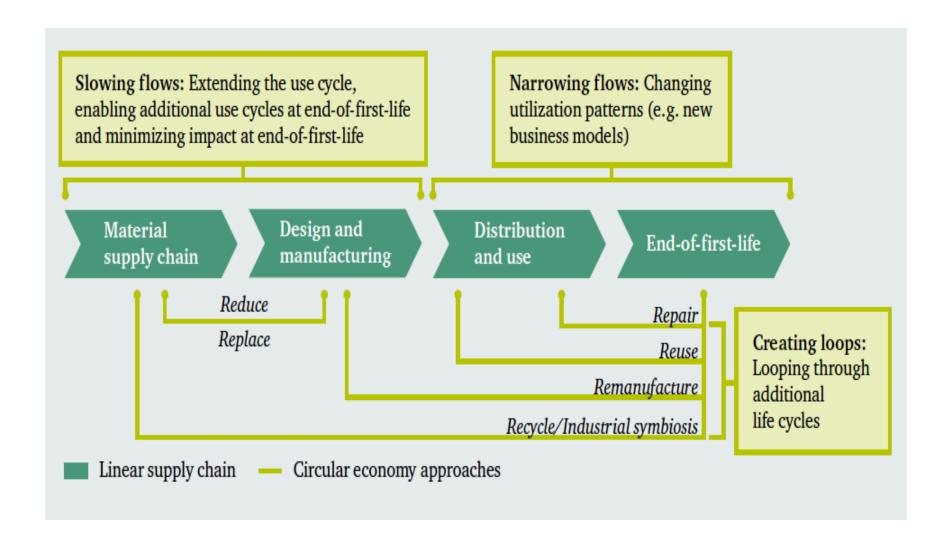
"...could save European manufacturers **\$630 billion a year** by 2025." (Ellen MacArthur Foundation, 2014)

"...could create **3 million extra jobs** by 2030 and reduce unemployment by 250,000" (WRAP, 2015)

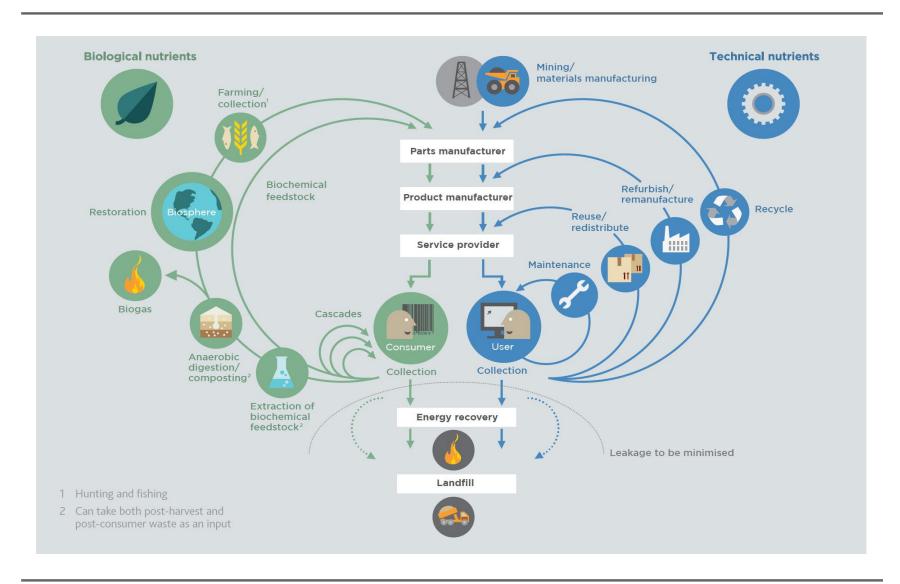
EU 2050 Long Term Strategy – CE is treated as the key to a competitive EU industry and the circular economy as a key enabler to reduce GHG emissions – approx. **50% of needed emissions reductions from industrial sector** (Material Economics / Sitra)

Circular economy business models are attracting big investments: the EIB launched a **10 billion EUR initiative in July 2019.**

Concepts and terms in the circular economy



Butterfly diagram - Ellen MacArthur Foundation



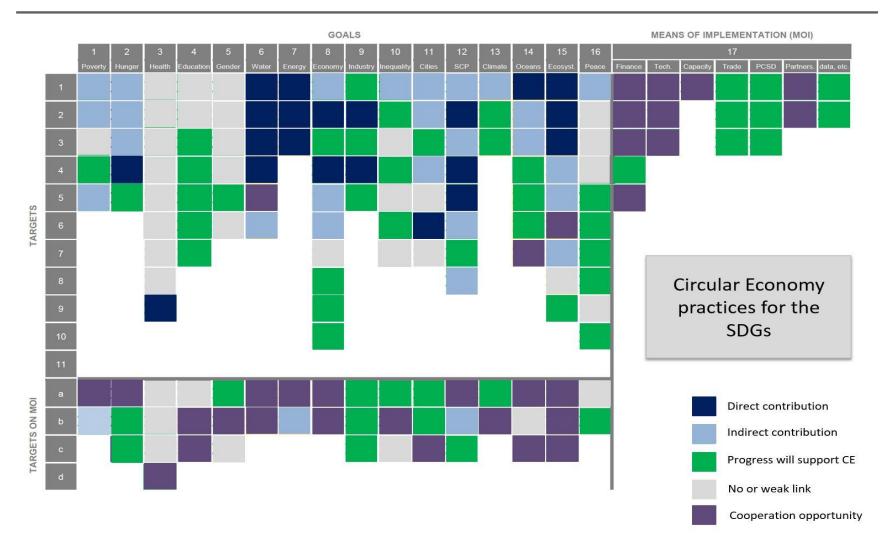
Circular economy is gaining traction worldwide



Sources: Authors' own analysis, multiple sources.

Including an increasing number of developing countries

Circular economy contributions to achieving the SDGs



Source: Schroeder et al. 2018

Circular Economy in the EU

EU Circular Economy Package (adopted in December 2015)

The proposed actions will contribute to "closing the loop" of product lifecycles through greater recycling and re-use, and bring benefits for both the environment and the economy.

- •A common EU target for recycling 65% of municipal waste by 2030;
- •A common EU target for recycling 75% of packaging waste by 2030;
- •A binding landfill target to reduce landfill to maximum of 10% of municipal waste by 2030;
- •A ban on landfilling of separately collected waste;
- Promotion of economic instruments to discourage landfilling;
- •Simplified and improved definitions and harmonised calculation methods for recycling rates throughout the EU;
- •Concrete measures to promote re-use and stimulate industrial symbiosis turning one industry's by-product into another industry's raw material;

Circular economy & Green New Deal

Circular economy erected as 'number one priority' of European Green Deal

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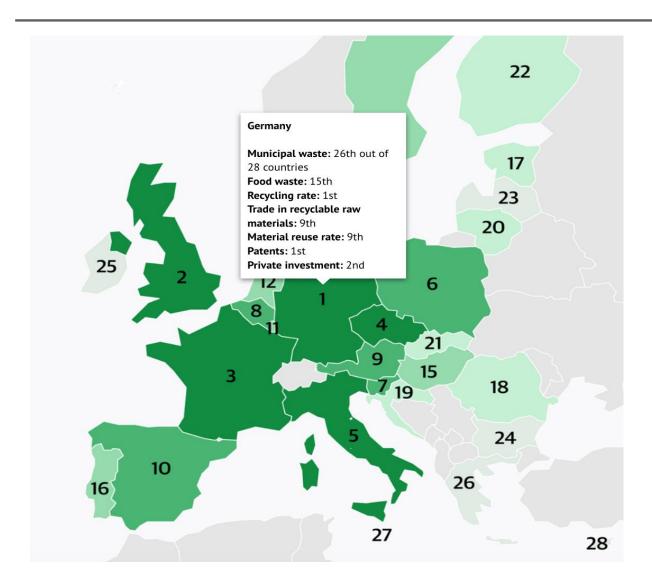
The circular economy, including new waste and recycling laws, will represent "half" of the EU's effort to achieve net-zero carbon emissions by 2050, and will be erected as "the number one priority" of the upcoming European Green Deal, officials have said.

The EU's 2015 circular economy action plan – which included a ban on single-use plastics and new recycling targets

- has "paved the way for something new, something bigger," according to a senior official overseeing the policy area at the European Commission.

https://aclima.eus/en/circular-economy-erected-as-number-one-priority-of-european-green-deal/

EU Circular Economy Monitoring Framework

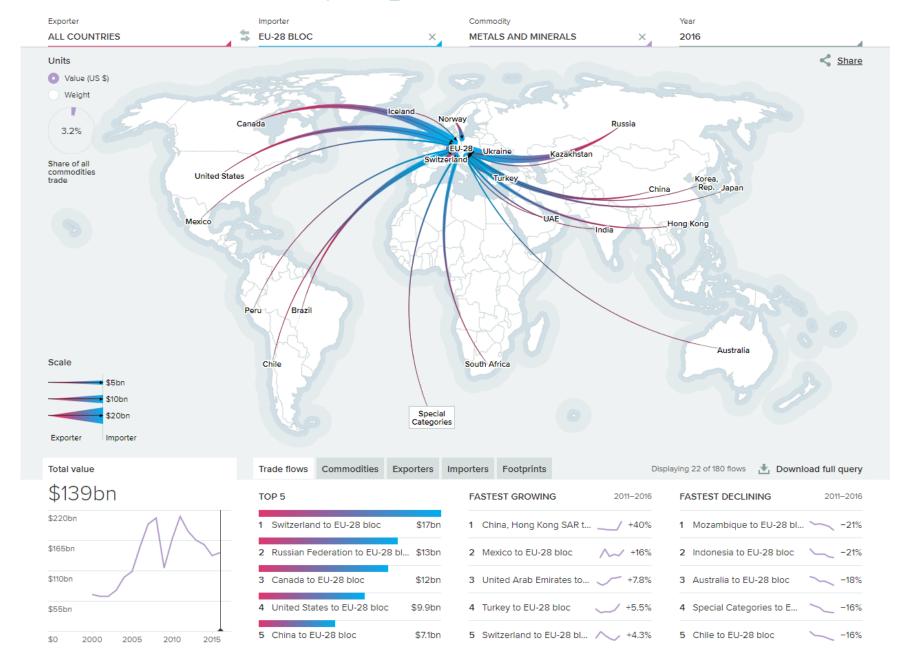


The EU monitoring system to measure progress towards the circular economy consists of four categories with ten indicators.

Thank you for your attention

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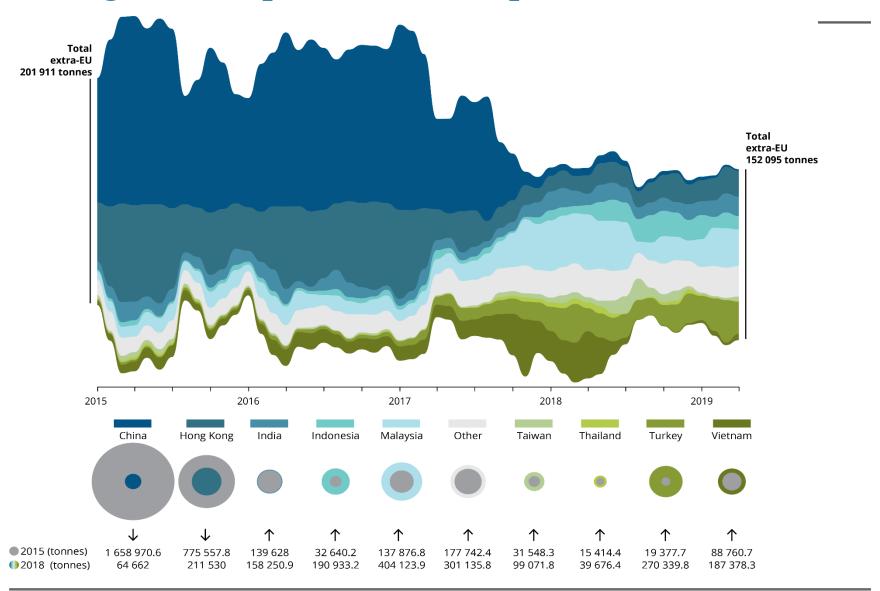
The world economy depends on trade in resources...



...and trade in waste products



Changes in EU plastic waste exports



Circular economy as new development model?

El Salvador – a housing NGO partnered with the government to use more durable earthquake-resistant building technologies in social housing.

In Brazil,
Procomposto, an
SME start-up,
provides waste
collection and
composting services
to generators of
organic waste in
cities.xix

Fiat cars exported to Brazil contain polyurethane seat foams with 5 per cent soy polyol.*

In Nigeria, about

70 per cent of all

imported e-waste is

sold to consumers

after testing.iv

functional – it is now

In Nigeria, tractor sharing among smallholder farmers is being used to improve agricultural productivity. vii In India, new digital platforms such as Airbnb and OYO are allowing users to share rooms and homes.xiii

ISWA and the Dutch government have given technical and financial support to municipal governments to improve municipal waste-management processes.**

In Tanzania, BORDA,

In Tanzania, the government is working with the World Bank to develop more water-efficient practices among smallholder farmers.*v In Vietnam, building materials from rice husks are used in Ho Chi Minh City to build more fire-resistant, heat-insulated and sound-insulated buildings.ix

An entrepreneur in Indonesia is experimenting with bioplastic food packaging to reduce plastic waste in Jakarta.^{xi}

In India, a new e-waste Extended Producer Responsibility system requires companies to set targets for collection and repairs. viii

Shelter Food Waste Mobility 20