Accelerating the circular economy transition

Bernard Crabbé
INTPA F2

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SWITCH to Green Facility

Agenda

- Going circular: building the case
- EU Circular Economy policy considerations: Implementing the EU CEAP
- Regional & National level processes: towards a circular economy
- Circular economy intervention areas: examples in priority value chains, and in cities
- Closing points

Q & A

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POLL

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Going circular:

building the case for a circular economy transition

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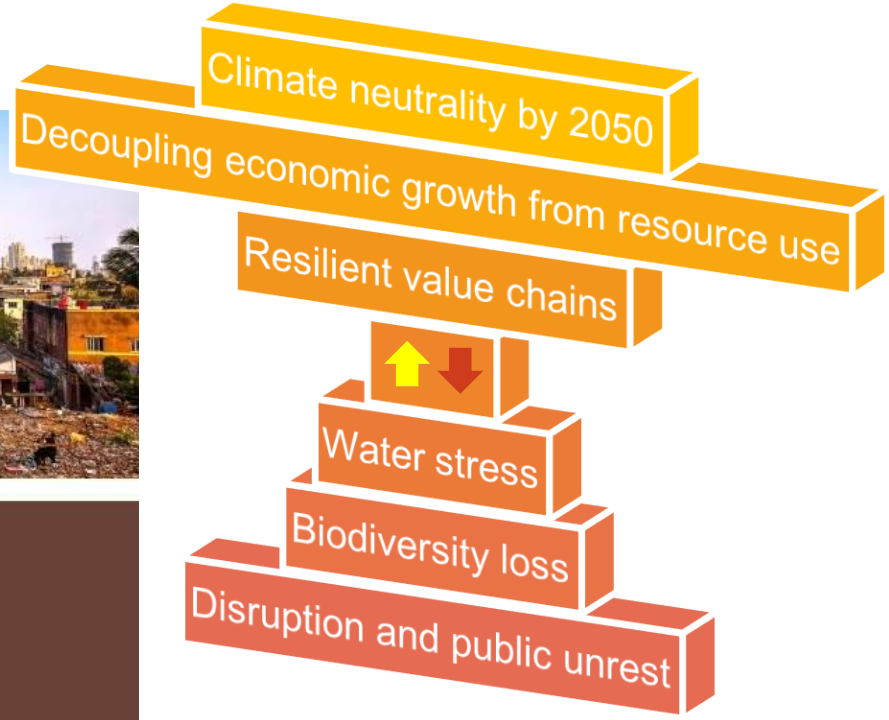
Why shifting to a circular economy?



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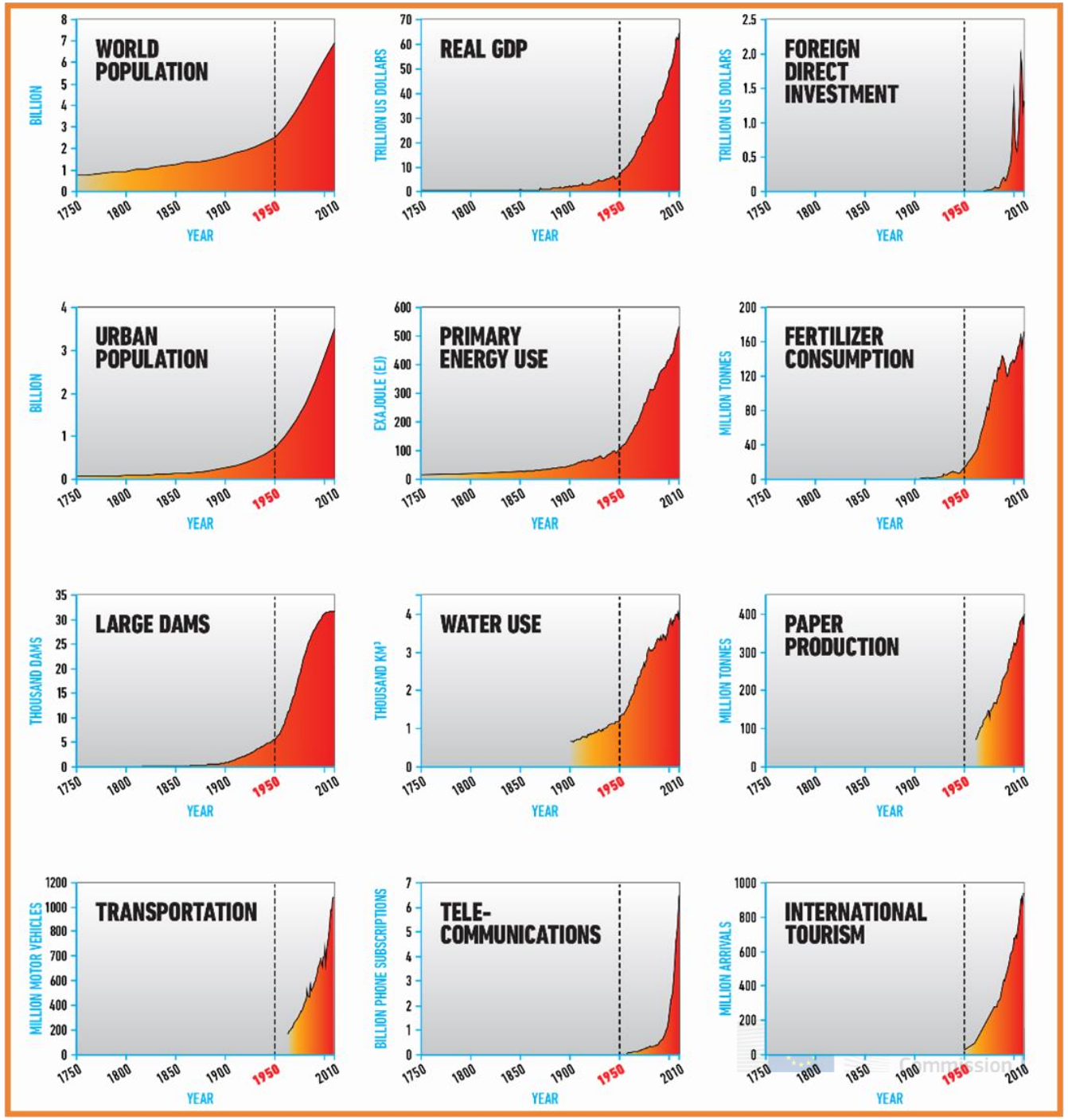
The Great Acceleration

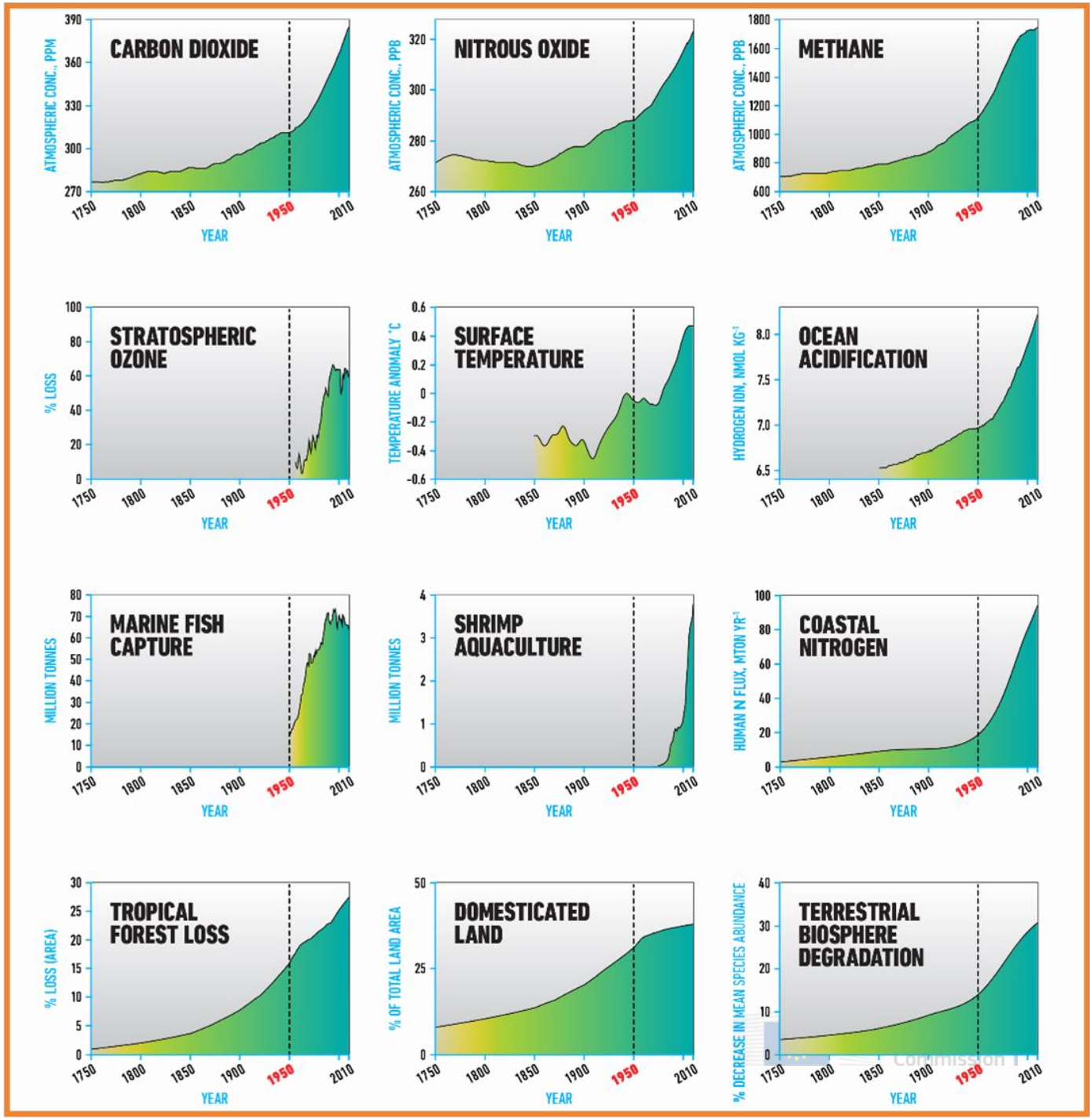
Socioeconomic trends



Source: The Great Acceleration (Steffen et al., 2015b, doi:10.1177/2053019614564785).

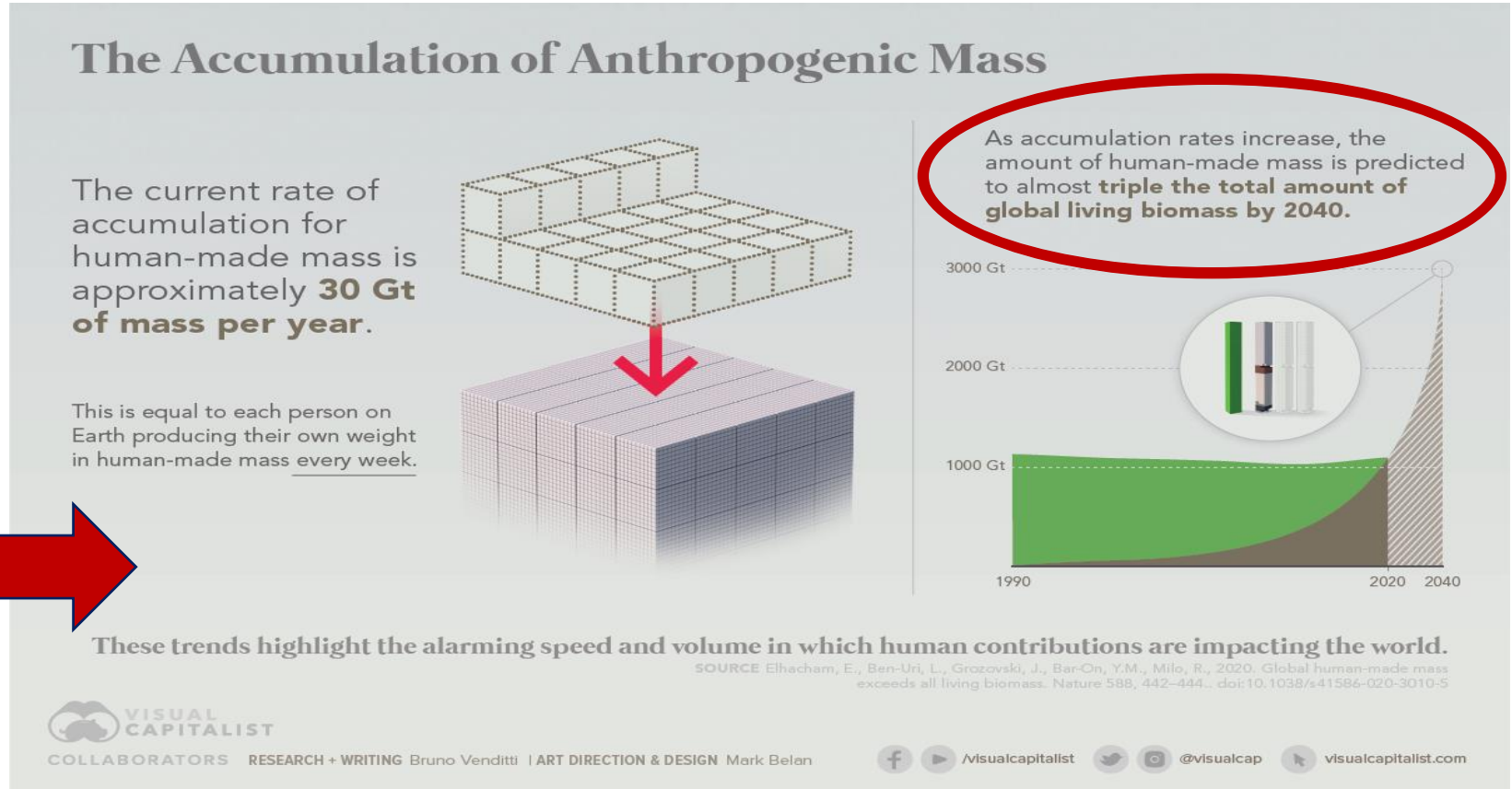
The Great Acceleration

Earth System trends



Source: The Great Acceleration (Steffen et al., 2015b, doi:10.1177/2053019614564785).

Trend antropogenic mass versus living biomass



Source: Visualcapitalist.com

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Why shifting to a circular economy?

More numbers…

In only 50 years, global use of materials –such as biomass, fossil fuels, metals and minerals, **has nearly quadrupled to exceed 100 billion tonnes**. It is projected to reach 167 billion tonnes in 2060.

OECD Global Material Resources Outlook 2060

- Less than **8%** of the materials used globally come from recovery, reuse, and recycling.

Circularity Gap Report

- Annual waste generation will increase by **70%** by 2050 compared to 2016 levels.

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Why shifting to a circular economy?

and some more numbers…

About **50%** of total greenhouse gas emissions come from resource extraction and processing

IRP (2019), Global Resources Outlook

More than

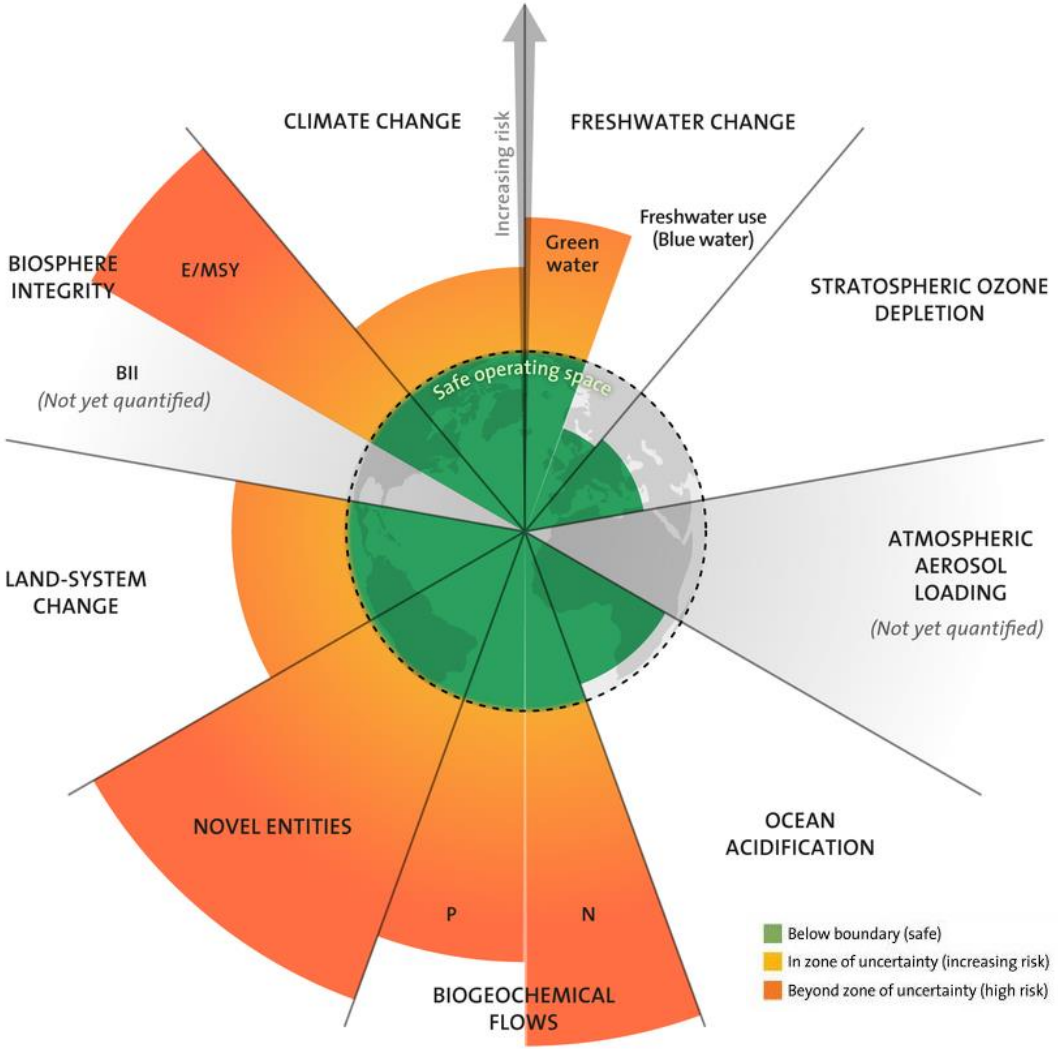
90%

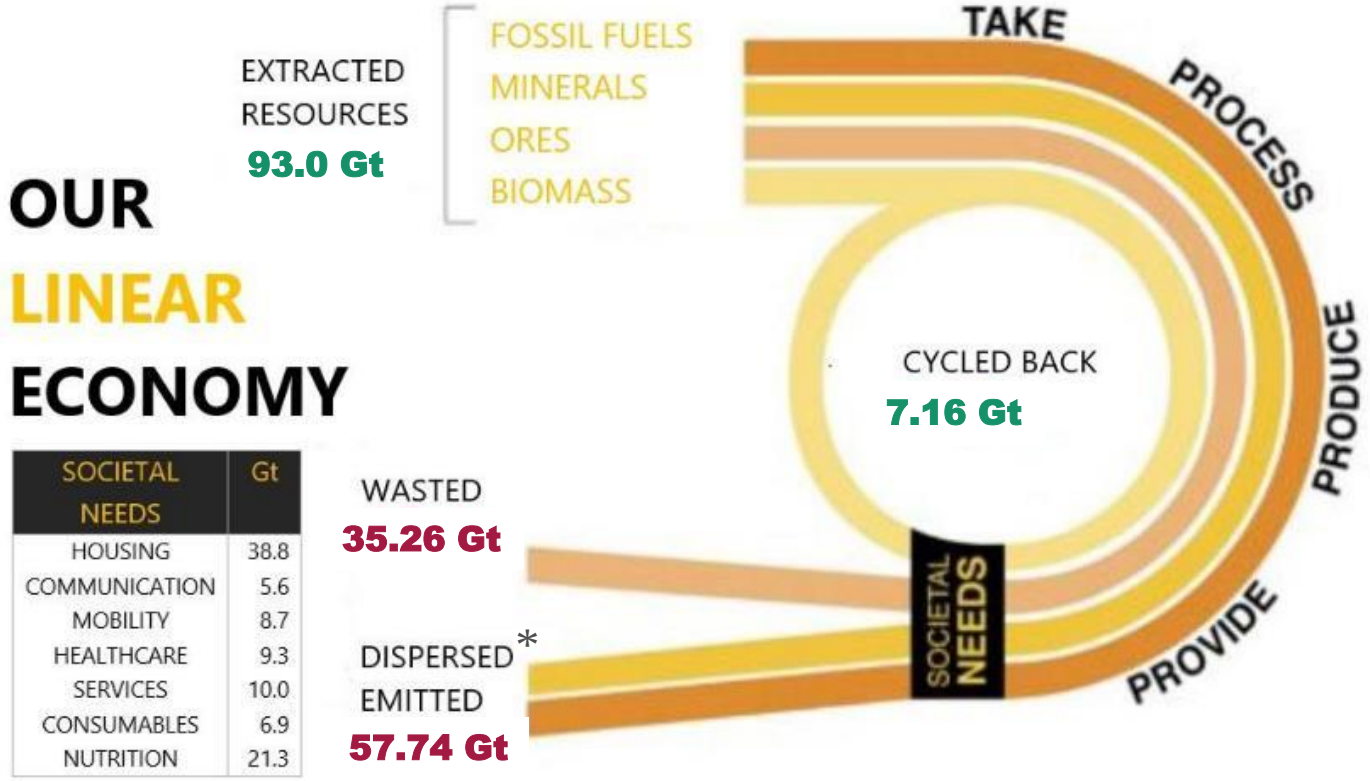
of biodiversity loss and water stress come from resource extraction and processing.

IRP (2019), Global Resources Outlook

There is only one planet Earth, yet by 2050, the world will be consuming as if there were three

Why the urgency?





SOCIETAL NEEDS	Gt
HOUSING	38.8
COMMUNICATION	5.6
MOBILITY	8.7
HEALTHCARE	9.3
SERVICES	10.0
CONSUMABLES	6.9
NUTRITION	21.3

* Stock, Industries, Households

Source: https://www.circularity-gap.world/

Source: Potsdam Institute for Climate Impact Research, 2022 reassessment

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Circular economy transition opportunities

Fostering **greener and more resilient value chains**

Job creation: in waste management, digitalisation, materials innovation

Protecting nature: addressing **resource scarcity, biodiversity loss, climate change**

Eliminating Pollution / Waste to **avoid costs** and **create new revenue streams**

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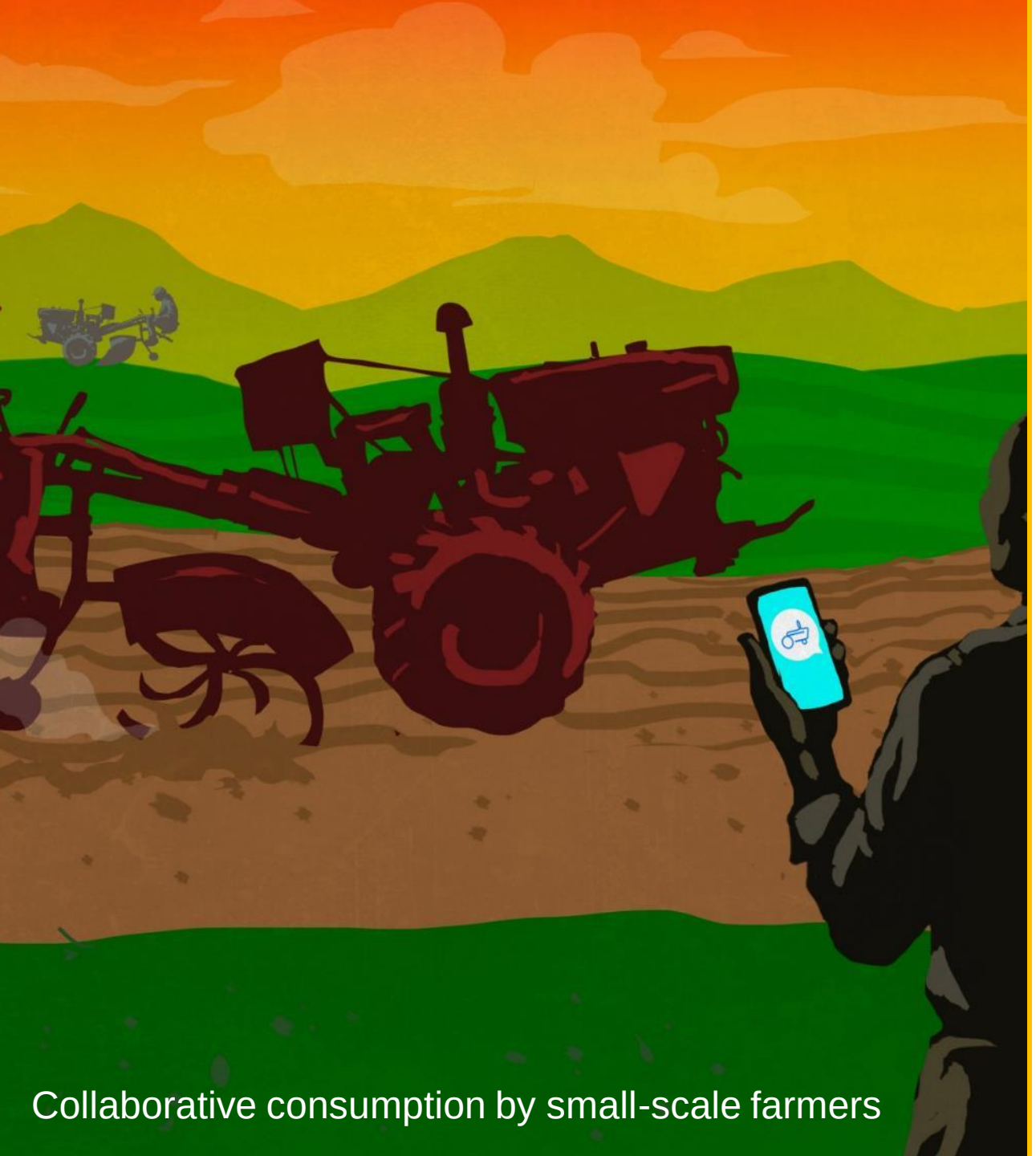

Collaborative consumption by small-scale farmers

Circular Economy in practice

Hello Tractor

- Farmers share the use of tractors
- App or Booking agents enable farmers access tractor services
- Improves **productivity**
- Reduces **investment costs**
- Offers **security** (asset tracking & virtual monitoring

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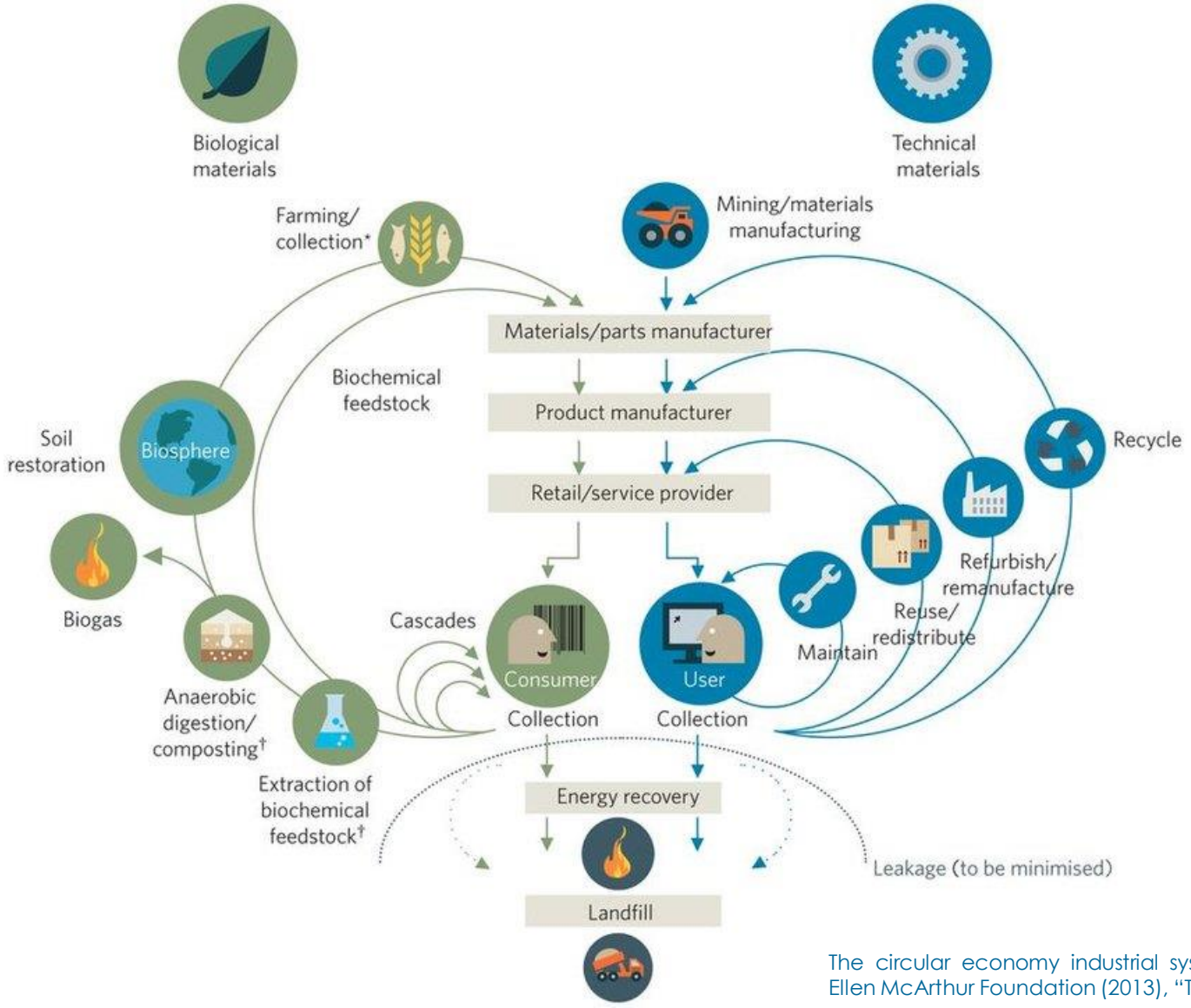
Understanding the circular economy:



Two **material** cycles:

a. ***biological cycle***: residues are returned to nature after use;

b. ***technical cycle***: products, components or materials are designed and marketed to minimise wastage

The circular economy industrial system diagram, adopted from the Ellen McArthur Foundation (2013), "Towards the circular economy"

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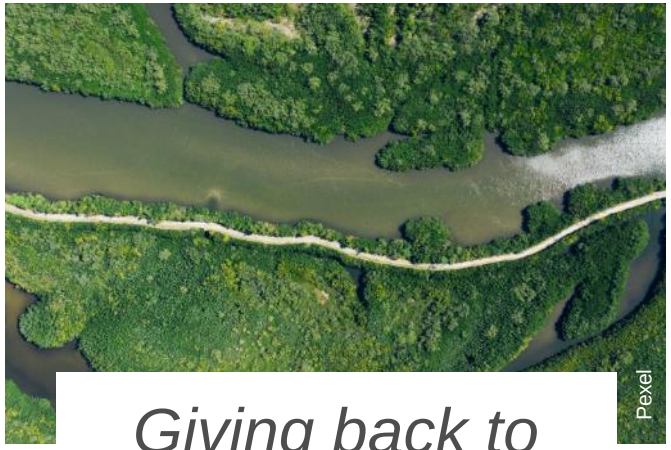
How to achieve circularity: The principles

Less Waste: Design out waste and pollution

Products and materials in use: Design long-lasting, easy-to-reuse products, change attitudes



Giving back to Nature: Regenerate natural systems

EU circular economy policy considerations:

Implementing the EU Circular Economy Action Plan

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The EU policy framework for the green/circular transition

A climate-neutral, resource-efficient and competitive economy

The European Green Deal

Global Gateway

The **Global Gateway**, a climate-neutral strategy to speed up sustainable development, strongly contributes to the transition to a cleaner and more circular global economy.

Circular Economy Action Plan

For a cleaner and more competitive Europe

The **European Critical Raw Materials Act** aims to increase our resilience by reducing dependencies, increasing preparedness and promoting supply chain sustainability and circularity.

Maintaining the value of products, materials and resources in the economy for as long as possible, & minimising the generation of waste

ZERO POLLUTION AMBITION

Reducing air, water and soil pollution to non-harmful levels within the boundaries with which our planet can cope

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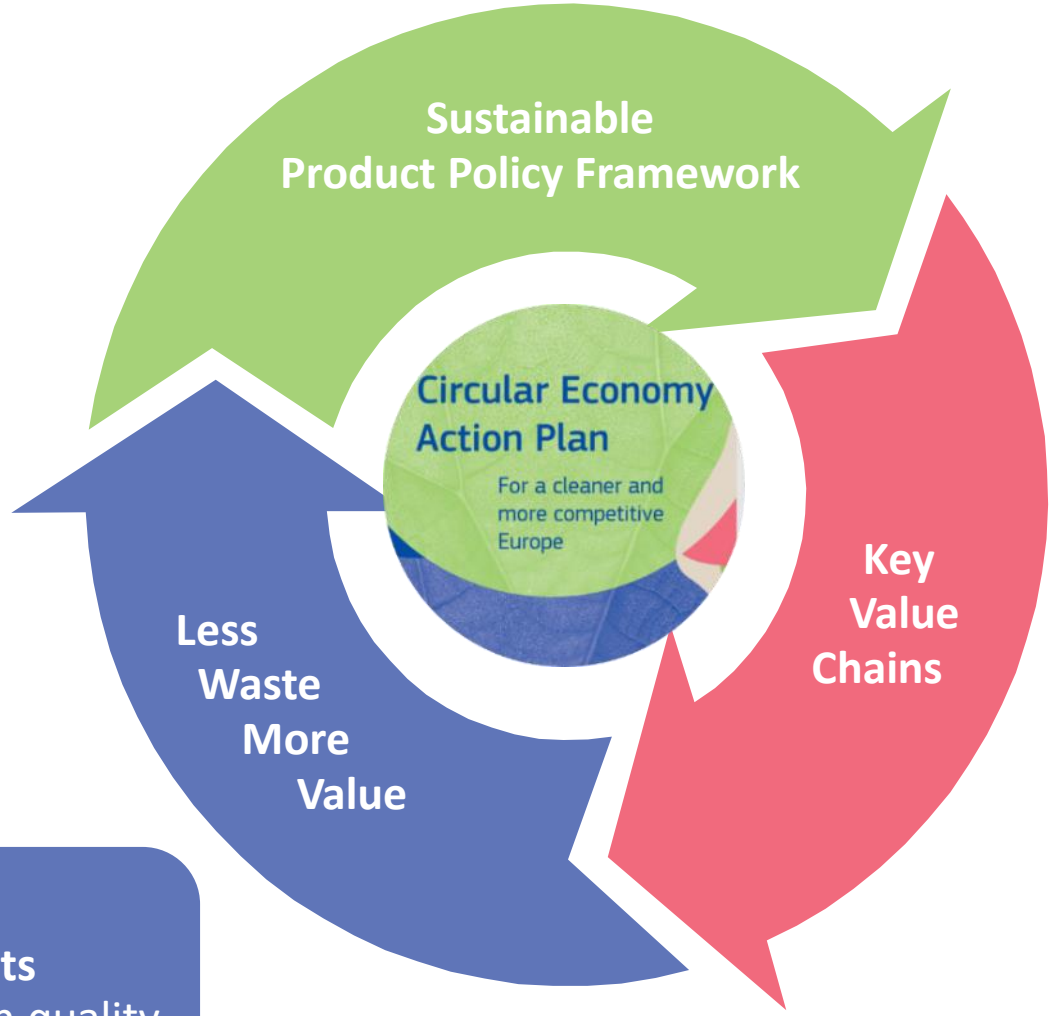
CEAP II: Changing the way Europe consumes and produces

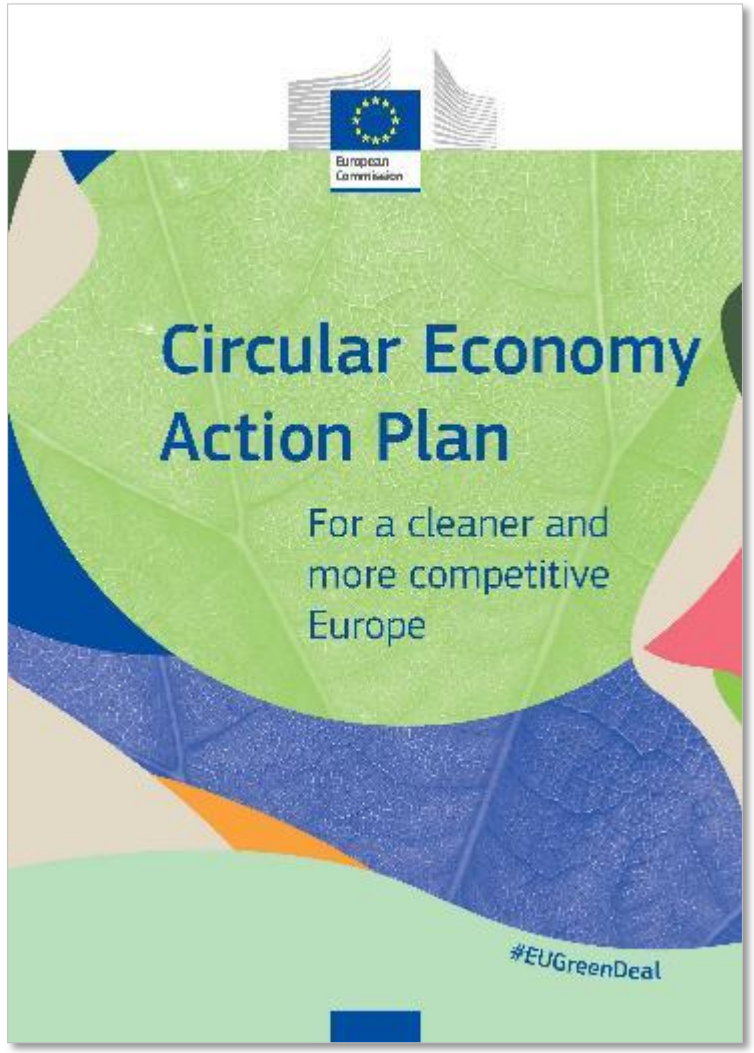
- Make sustainable products the norm in the EU
- Empower consumers and public buyers
- Sustainable production processes



- Electronics and ICT
- Batteries and vehicles
- Packaging
- Plastics
- Textiles
- Construction and buildings
- Food, water and nutrients

- Reduce Waste
- **Reduce Waste Exports**
- Boost market for high quality and **safe secondary raw materials**

EU Green & Circular Economy policy



Doing business in EU & partner countries: what to expect

€

Costs of the linear system are **passed on to producers**

Circularity is becoming a **requirement** for **EU market access**

Minimising landfill and **low-quality waste exports** to countries lacking **recycling infrastructure**

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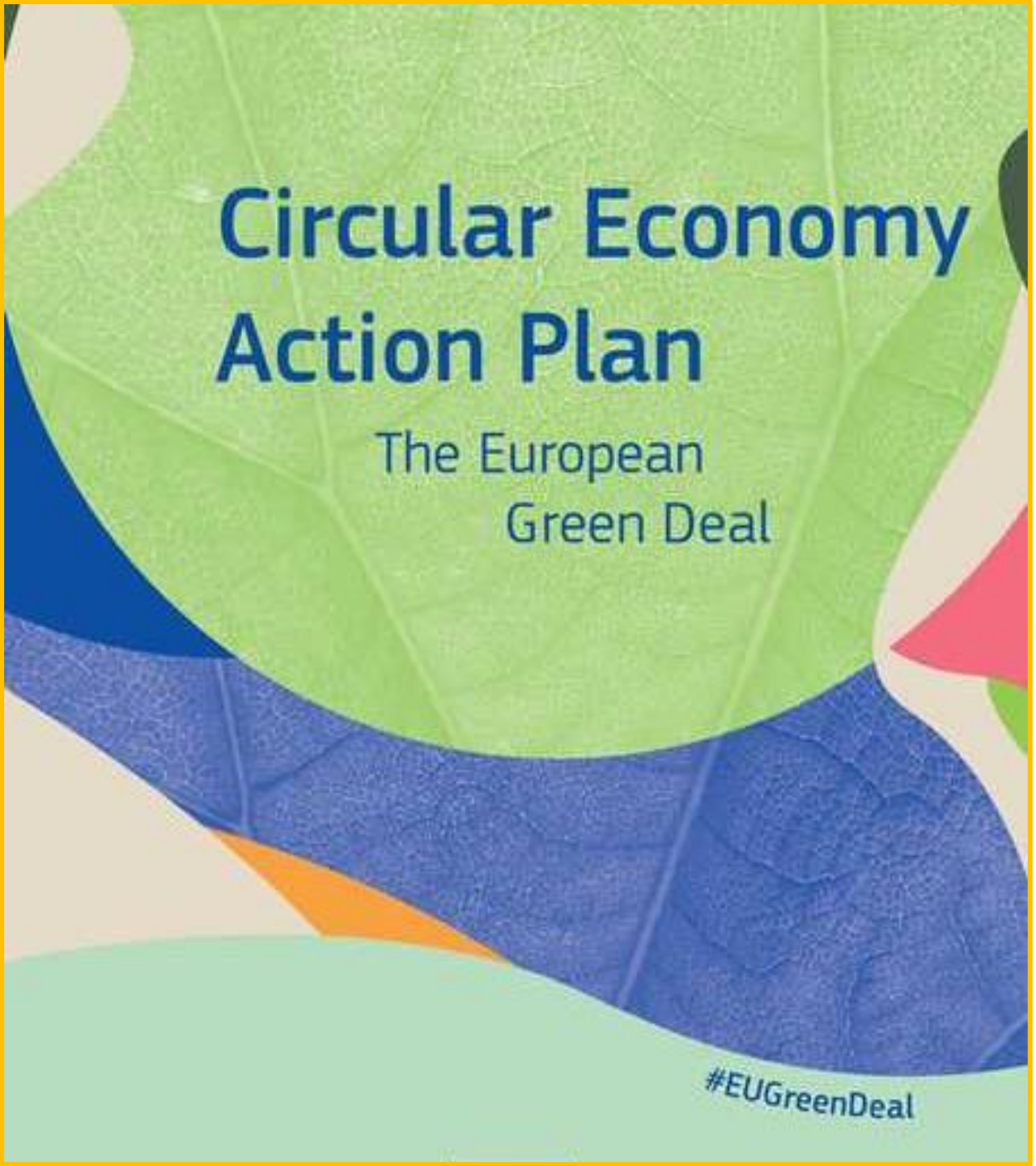

A strong global dimension

- High ambition to drive the global transition through measures at global level
- Possible impacts on third countries through new sustainability requirements for products and services
- Contributions to Policy Coherence for Development

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CEAP 2.0: Measures at Global level

- Lead by example
- Use diplomacy, trade, development cooperation and other external policies
- Set standards for sustainable growth across global value chains

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Synergies: Circular economy & employment
Opportunities and challenges

The green & circular transition offers opportunities for decent work and social inclusion through:

- Job creation and opportunity for eco-innovation
- New enterprises due to circular business models
- More resilient supply chains and industrial renewal

Unabated environmental challenges risks compromising the ability to reach SDG 8 due to:

- Job losses
- Damage to infrastructure and business assets
- Impacts on heath and productivity
- Forced migration

Adapted from ILO

Practical examples of policy interventions

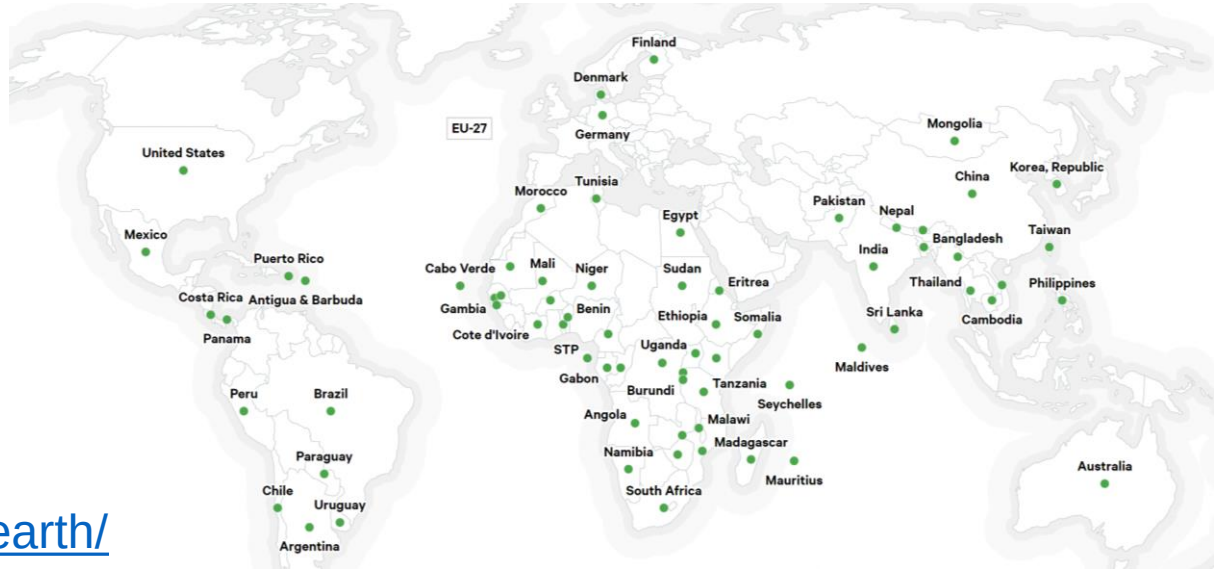
€ Fiscal Policy:

- tax exemption for machinery and premises intended for recycling / recovery operations (Uruguay lead-acid battery recovery)
- Plastic bag levy (Algeria tax per kilogram of plastic bags imported and / or locally produced)
- Eco-levy for imported goods (Ghana eco-levy / Guinea Ecotax for imported electronic goods and tyres)
- Bio-Circular-Green economic model incentives (Thailand tax breaks, renewable smart visas for international talent and investors in key sectors, and other incentives)

Practical examples of policy interventions

Product Policy:

- conditions and procedures for recycling / recovery operations (Tunisia - lubricant oils and used oil filters,)
- Ban or reduction on single-use and/or other plastics (several countries globally)



https://circulareconomy.earth/

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Regional and National level circular economy processes

How to work with partner countries in Circular Economy processes

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Partner countries go circular: the stories behind…

- Over 65 countries globally are currently pursuing green growth or green economy strategies
- A Circular Economy transition is being actively supported in an increasing number of partner countries

Available at:
www.switchtogreen.eu and Cap4Development

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Regional policy initiatives promoting circularity

Ms Christiane HAZIYO, EU Delegation to Zambia

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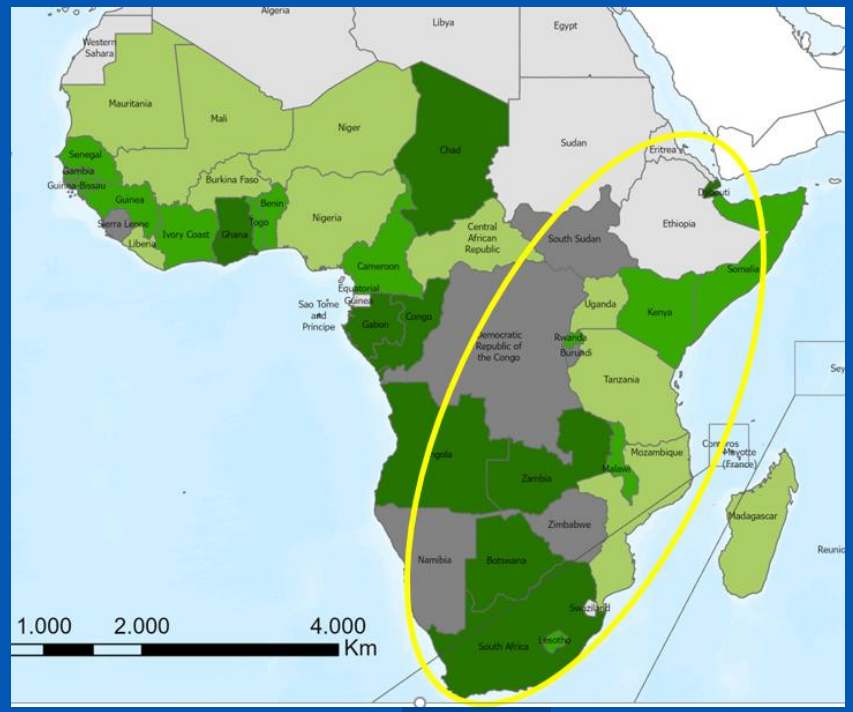
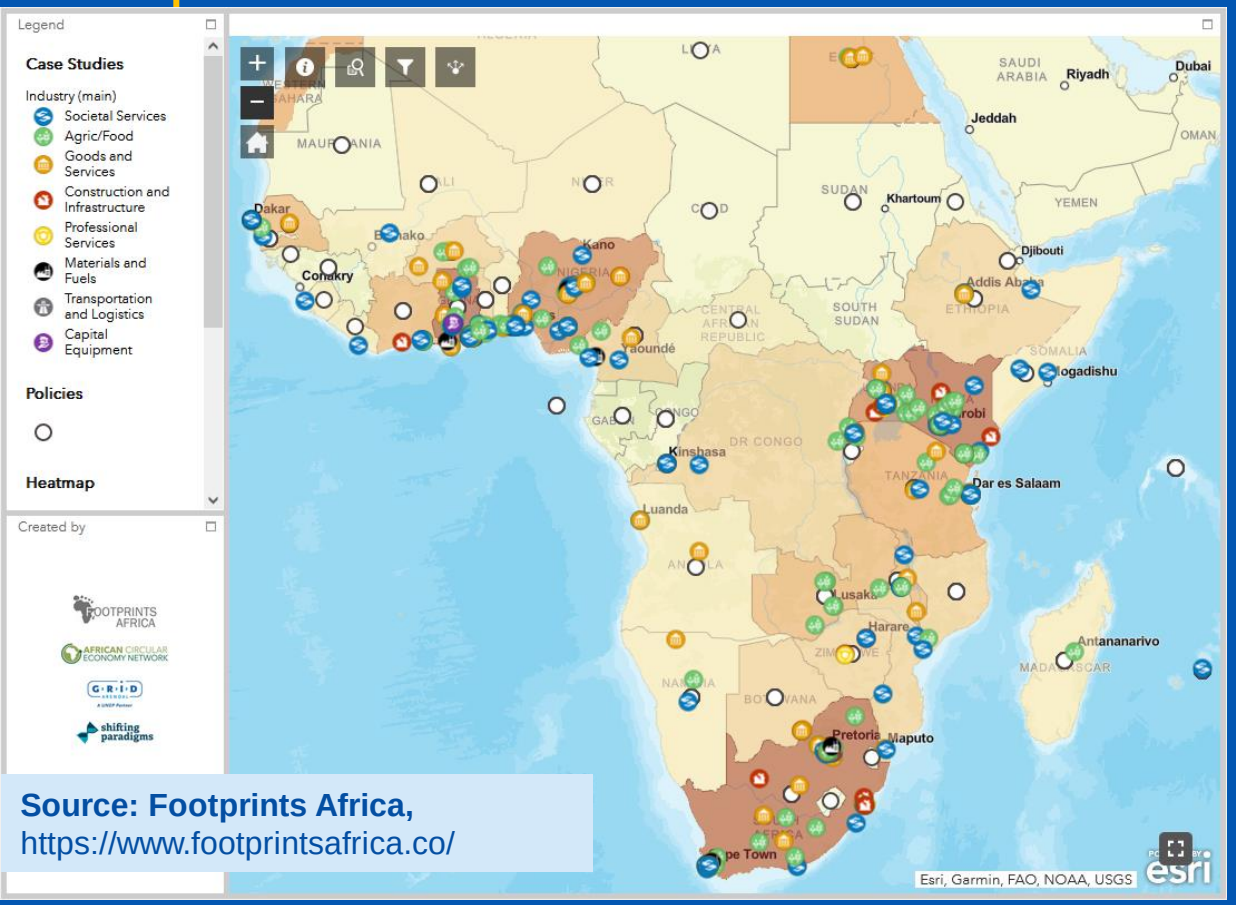
SWITCH TO CIRCULAR ECONOMY IN EAST AND SOUTHERN AFRICA

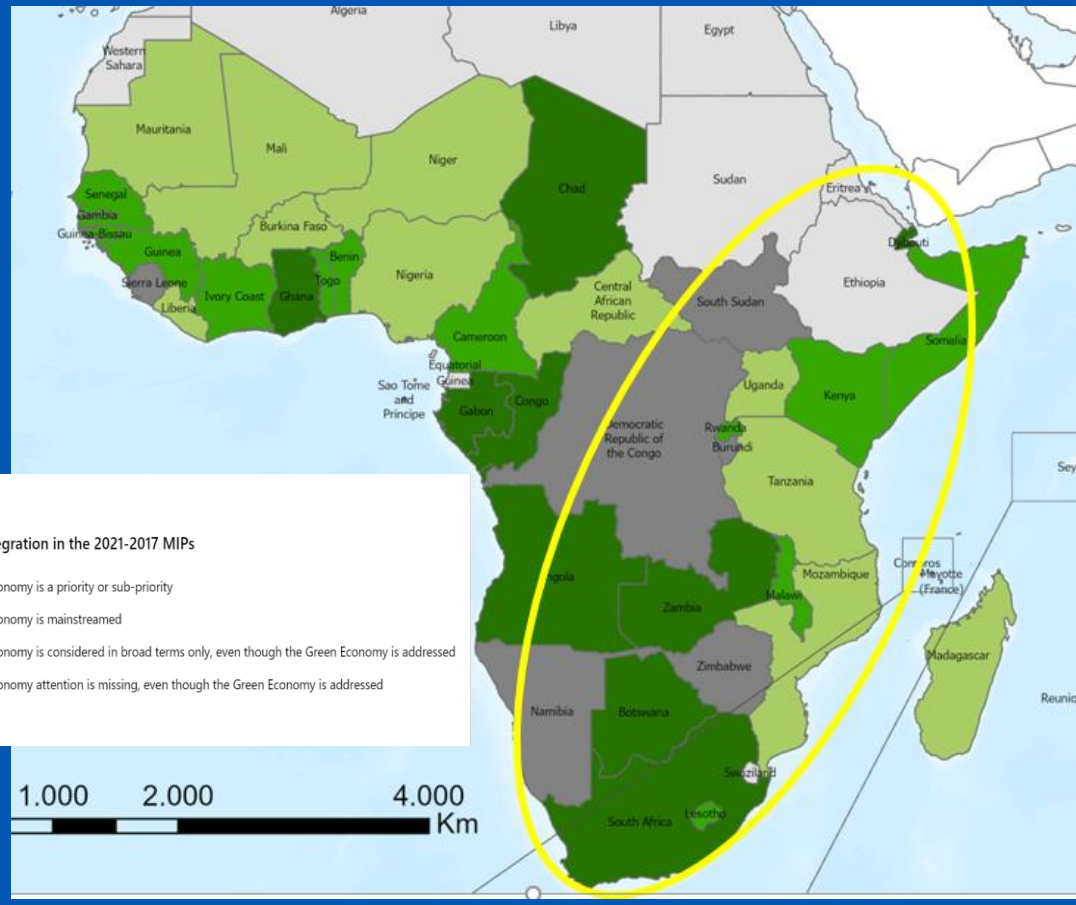
(SWITCH 2 CE IN ESA)



Why East and Southern Africa



Source: Footprints Africa,
https://www.footprintsafrica.co/



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I. The identification Phase(1)

- **Switch 2 Green** experts to undertake the identification work.
- **Identify key areas of focus**, including selecting the product value chain(s) that the regional CE programme should target.
- Provide the necessary knowledge base for the identification of possible EU funded interventions for the **selected product value chain(s)** under the regional CE programme.

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I. The identification Phase(2)

- Identification of a set of possible EU interventions for 2 product value chains that were prioritised, **i.e., plastics and electronics.**

II. The formulation phase(1)

- Through the **EU-Africa Rise facility**, a team of experts undertook the formulation phase. The formulation built on the recommendations from the identification mission.
- **Field missions** in some of the ESA countries: Kenya, Rwanda, South-Africa, Tanzania, Zambia and Uganda.
- A succinct **context and situational analysis of CE programme** that takes into account the current trends in the region was developed.

II. The formulation phase(2)

- A comprehensive **problem analysis** bringing out the key challenges faced in the area of circular economy in the ESA region.
- Clear **priority areas of focus** under the programme linked to the problem analysis
- Ensure **mainstreaming of gender, youth and social inclusion** agender as a cross-cutting theme.

Stakeholder consultations and co-creation…

INTPA A.2 & F.2

EU Delegations

Regional Economic Communities (REC)

DG ENV

Governments

International Organizations

Consulting Firms

EIB, AfDB & EFDIs

NGOs / CSOs

EU Member States

Private Sector

European Union
EXTERNAL ACTION

III.The Programme
SWITCH 2 CE IN ESA
3,2,1..

3 Components

1)Business Enabling Environment, 2)Skills development, 3) Access to Finance

2 Value Chains

Packaging/Plastics & Electronics/E-waste

1 Contract

One pillar assessed entity

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Objectives and Programme Components

Overall Objective (impact): To promote sustainable growth and job creation in Africa

Specific Objective: To foster an inclusive transition to circular economy in East and Southern Africa.

SO 1: To establish an enabling policy framework for circular economy across the ESA region

Promote South-South Cooperation & Twinning, across countries within the ESA region.

SO 2: To enhance the participation of formal and informal workers and SMEs, including women and youth, in circular economy models

Peer-to-peer learning / South-South & North-South cooperation, including through e-learning platforms.

SO 3: To improve access to and use of financing by circular economy businesses

Annual calls for sustainable and circular business plans, targeting PVCs across the region.

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SO 1: To establish an enabling policy framework for circular economy across the ESA region

- **Improved access to information** and learning materials on best practice policies, strategies and legislation for governments in the ESA region;

- **Increased awareness and knowledge of circular economy principles**, characteristics and benefits among educators, students, consumers, the private sector, financing institutions, formal and informal workers and wider population, with particular attention to gender sensitive approach;

- **Public capacities strengthened** for supporting circular economy models through extended producer responsibility (EPR) schemes across the region;

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SO 2: To enhance the participation of formal and informal workers and SMEs, including women and youth, in circular economy models

- **Topics related to circular economy are piloted**, refined and integrated into the regional Higher Education and TVET system, with gender sensitive approach;

- **Improved availability of inclusive circular economy training modalities** in suitable format to wide range of participants including women, youth and informal workers;

- **Knowledge sharing, best practice learning materials** and support services related to the circular economy are available via on-line platform(s)and accessible by firms in the region;

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SO 3: To improve access to and use of financing by circular economy businesses

- **Increased availability of financial services** to circular economy start-ups and SMEs with regional scalability, replicability and social inclusion potential, particularly those owned by youth and women are able to access risk sharing finance;
- **Increased availability of essential incubation and advisory services** related to financial readiness, business planning and business model development, technology and management systems;

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IV. The Implementation part

- **Indirect Management** through **Contribution Agreement** with one (max. two) pillar-assessed entity;
  - International organisations
  - EU MS agencies
  - RECs
- **Strategic partnerships with Circular Economy players.**

Global Gateway Europe – Africa Investment Package:

- Mobilize additional loans for SMEs through **Financial Instruments** under the **European Fund for Sustainable Development (EFSD+);**

- **Our potential partners:**
  - European Investment Bank (EIB);
  - European Finance and Development Institutions (EFDIs);
  - African Development Bank (AfDB);

  …and local banks within the ESA region

European Investment Bank The EU bank

Nordic Development Fund

AFD Agence Française de Développement

FMO Entrepreneurial Development Bank

KFW

AFREXIMBANK

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V.The Budget

- EU NDICI funds under regional AAP 2023 for SSA: **EUR 40 million**
- Hope to secure additional co-funding from EU MS

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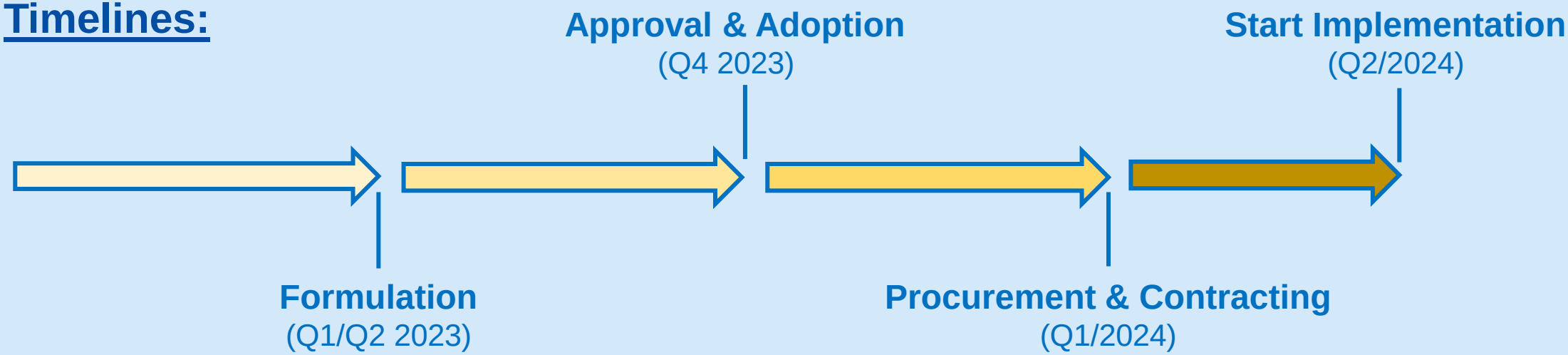
TIMELINE

Timelines:



Contacts: Matthias.Reusing@eeas.europa.eu
Christiane.Haziyo@eeas.europa.eu

National policy initiatives promoting circularity

Mr Ludovic CIECHANOWSKI, EU Delegation to Sri Lanka

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1) Rationale for a CE intervention in food industry

- Circular Economy identified as a priority in MIP and part of TEI on Green Economic Recovery, limited previous experience (SWITCH Asia)
- 2022 economic and financial meltdown, led to multiple crisis and shortages (food produced locally and imported products)
- Circular Economy is disruptive, expect push back from established industries, require significant technological investment and behavioural changes

➢ Starting point: based on existing support strong focus on plastic (recycling and waste management) but CE is more than that, other sectors also considered (electronics, construction,…)

➢ Pivot towards: focus on emerging food crisis but with strong approach on sustainable consumption and production (food waste and plastic packaging)

➢ Main focus on the first “R”-educe of the 3R policy and on some low hanging fruits related to second “R”-use

2) Design, scope and logic of the intervention (1)

Identify existing processes (locally and globally)

- Too expensive to start from scratch, proper scoping (with support of the S2G Facility)
- Get inspired by our EU policies (green deal) and by European/Global tech&innovation trends (WCEF)
- Find the right and already active implementing partners

Identify cross-cutting issues (multi-dimensional approach)

- Production: Access to technology and innovation
- Financial market: Access to finance
- Labour market: Technical skills development (TVET)
- Consumption: Education and Behavioural change

Identify targets, work on local value/supply chain

- Need to work on Demand and Supply, Multi-stakeholder approach (consumers/producers)
- Trying to close the loop as close as possible to specific nodes of the value chain (localisation vs. globalisation)
- Multi-dimensional approach and closing loops require geographical concentration (localisation)

Missing EU instruments in LK:
NO EFSD+ (for scaling up large and transformative investment)
NO budget support (for strong policy advocacy)

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2) Design, scope and logic of the intervention (2)

Response to the food crisis and improve food security

- Vulnerable consumers have increased their access (food stock management systems and redistribution) to safe and nutritious food.
- Food producers (farmers, food processors, etc...) have increased access to productive inputs that originate from recovering and re-processing food waste (i.e. composting, fertiliser and animal feed).

Enhancing the ecosystem for transformative and innovative sustainable business processes

- Micro, Small and Medium Enterprise (MSME) startups, social enterprises and cooperatives have increased access to sustainable and gender sensitive business models and practices that utilize new technologies and innovations
- MSME, startups, social enterprises, cooperatives have increased access to finance and BDS related to sustainable and gender sensitive business models and practices.

2) Design, scope and logic of the intervention (3)

Enhancing the ecosystem (2)

- Enhanced technical capacity of workers and business staff related to sustainable and gender sensitive business models that integrate waste reduction.

- Increased awareness (and behavioural change) among the general public, economic operators, consumers and civil society about public incentives, sustainable products, solutions and services on the market.

https://international-partnerships.ec.europa.eu/document/download/97222032-edae-424c-94c6-92d1f4b803eb_en?filename=aap-2022-c2022-9314-sri-lanka_en.zip

3) Preparing for implementation

Implementing partners selected based on:

- Team Europe approach (GIZ, Expertise France)
- Pre-existing work/support in the areas of intervention (FAO, GIZ)
- Contribution to the design of the action (all)

Current work with IPs:

- Refining the activities and re-testing the assumptions (existing technologies, financing models,..)
- Confirming the main stakeholders/co-partners, consultation with ecosystem stakeholders, private sector etc…)
- Selecting different geographical areas of concentration (food insecurity, key stakeholders present in proximity across the value chain, critical mass for business viability…)

3) Preparing for implementation (2)

Challenges and opportunities:

- **Coordination with three different entities ensure focus**
  - Many cross-cutting activities + multitude of value chains, product and stakeholders
  - Ensuring respect of the multi-dimensional approach (market based, technology, behavioural changes,…)
  - How to properly monitor the key impact indicators? food/plastic waste reduction
- **Developing an effective access to finance component**
  - Macro-financial situation is difficult, how to attract (European) investment and/or finance technology transfer (TT)?
  - Finding the best solutions to blend/leverage EU financing to attract investment and TT (matching grant schemes e.g. GIZ develoPPP)

3) Preparing for implementation (3)

Challenges and opportunities:

- **Working on consumer behavioural change**
  - Behavioural change has a cost… the cost of convenience, finding the right incentives, e.g. cost of food and packaging, waste reduction through more efficient dosage or change in diet
  - Lack of infrastructure to enable behavioural change (e.g. waste management not part of the intervention) + first “R”-eduction is conflicting with our economic/liberal models (abundance/consumerism vs. scarcity/sustainable consumption)
- **The general business and investment environment**
  - Still a lot of administrative red tapes (not covered by this intervention), to be supported by another EU funded intervention, Green Policy Dialogue Facility (Expertise France)
  - Economy in survival mode, lack of investment but opportunities to introduce technologies/ business models to reduce cost (waste).

Circular economy intervention areas

Thinking circular in EU cooperation sectors - examples in priority value chains, and in cities

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Circular economy intervention areas

Inspiring and learning

Enabling

Financing

Implementing

INSPIRING & LEARNING

Building the case for the circular economy

Improve **awareness and understanding** of the **CE potential** by **businesses** and **policy makers**

Enhanced **dialogue** and **learning mechanisms** on CE

Improved **awareness of consumers** on the environmental and social impact of the products they buy

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Circular Economy policy frameworks

ENABLING

favourable **investment climate**

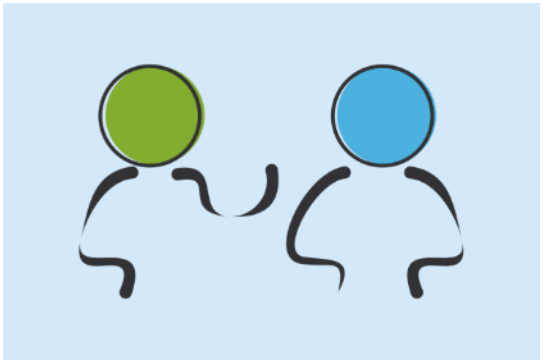
Waste policy frameworks

inclusive **market access**

trade policy for circular products

institutional coordination

CE in **TVET policy**



stakeholder participation

Sustainable consumption policies

Sustainability standards

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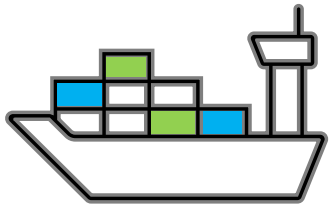
Trade as an example
Leveraging the EU market requirements

EU Policies have an **impact on partner countries**. CEAP includes a number of new proposals that **impact trade and value chains**:

- Requirements on packaging and packaging waste in the EU
- Sustainable Products Initiative and digital passport
- News rules on waste shipments
- EU Trade Facilitation Mechanisms / Trade Agreements
- Carbon Border Adjustment Mechanism
- EU Directive on Corporate Sustainability Due Diligence
- Directive on green claims
- Common rules promoting the repair of goods

How to best assist partner countries **to meet requirements?**



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Costs of the linear system are **passed on to producers**

Circularity is becoming a **requirement** for **EU market access**

Minimising landfill and **low-quality waste exports** to countries lacking **recycling infrastructure**

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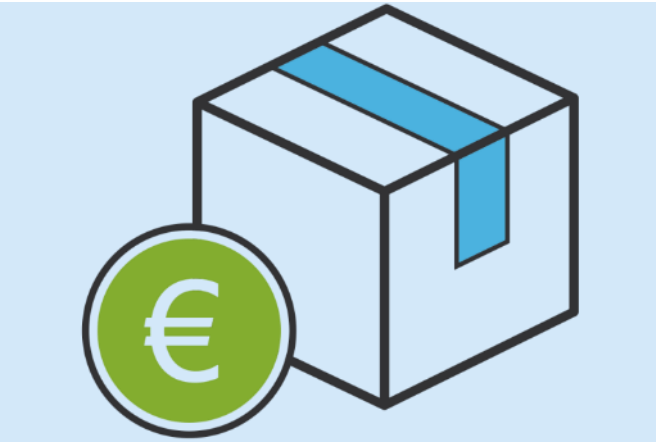
Financing circular economy investments

FINANCING

financial assessment of **CE projects**



availability of **CE-related financial products and services** for MSMEs / regions and cities

quality of bankable CE projects

Circular economy in key value chains and in regions & cities

IMPLEMENING

Uptake of **CE business models** by **the private sector** in **key value chains**

Uptake of **CE practices** in **regions & cities**

Improved **competitiveness** and **sustainability** of **companies** adopting **CE business models**

Increased **market demand** for **recycled/re-used goods**

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SWITCH to Circular Economy Value Chains Project

EU funded action with EU multinational companies as entry points

switch to Circular Economy Value Chains

EU multi-national value chain

SWITCH2CE
Circular Value Chain Pilots
(designed and led by applicants, bearing in mind SWITCH aims)

Designed and implemented in parallel

SWITCH2CE Support
(actions focused on improving enabling environment, led by implementers*, bearing in mind pilot aims)

*UNIDO, EIB, Chatham House, Circle Economy

In a nutshell

Duration: 2021-2025

Targeted value chains:
Textile & Garments
Plastic packaging
ICT & Electronics

Total Budget:
€20,870,000

Plastic Packaging: SWITCH to CE VCs pilot in Morocco

- ✓ efficient and scalable bottle-to-bottle collection and recycling scheme
- ✓ assess business case of rPET integration into preforms
  - → Collection of PET waste through sales network and informal waste pickers
  - → Business plan for sorting plant
  - → Traceability architecture developed
  - → Link to policy on bottle-to-bottle recycling

Key indicators (selection)	**Target**
Tonnes of PET collected from households / points of sale	5,268 / 4,168
% rPET in ECCBC primary packaging in Morocco	20%
Number of waste pickers trained or upskilled	900
Number of waste cooperatives supported	6
Employment created FTE	100+
Investment leveraged MEUR	2,25

Plastic baler at a sorting centre in Oum Azza, Morocco.
Photo: SWITCH2CE

switch to Circular Economy Value Chains
Funded by the European Union
Ministry for Foreign Affairs of Finland
European Commission

Circular Economy in practice

Recycling Buildings

- **Technology**: Construction materials from demolition waste
- **Policy**: Construction & Demolition Waste Management Regulation
- **Economy**: profitable C&DW products
- **Society**: Sustainable Housing

switchasia

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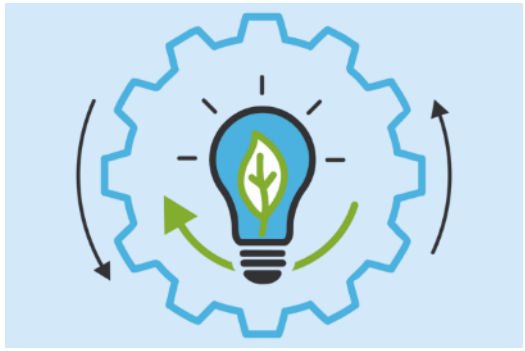
Circular economy outcome and impact

a <u>just</u> transition to a climate neutral and circular economy

Awareness and **understanding** of the **CE potential**

Enabling policy **frameworks**

CE investment financing



Uptake of **CE business models** and **practices**

in **key value chains, regions & cities**

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Wrap up and Final Conclusions

Summary, additional resources and lessons learned

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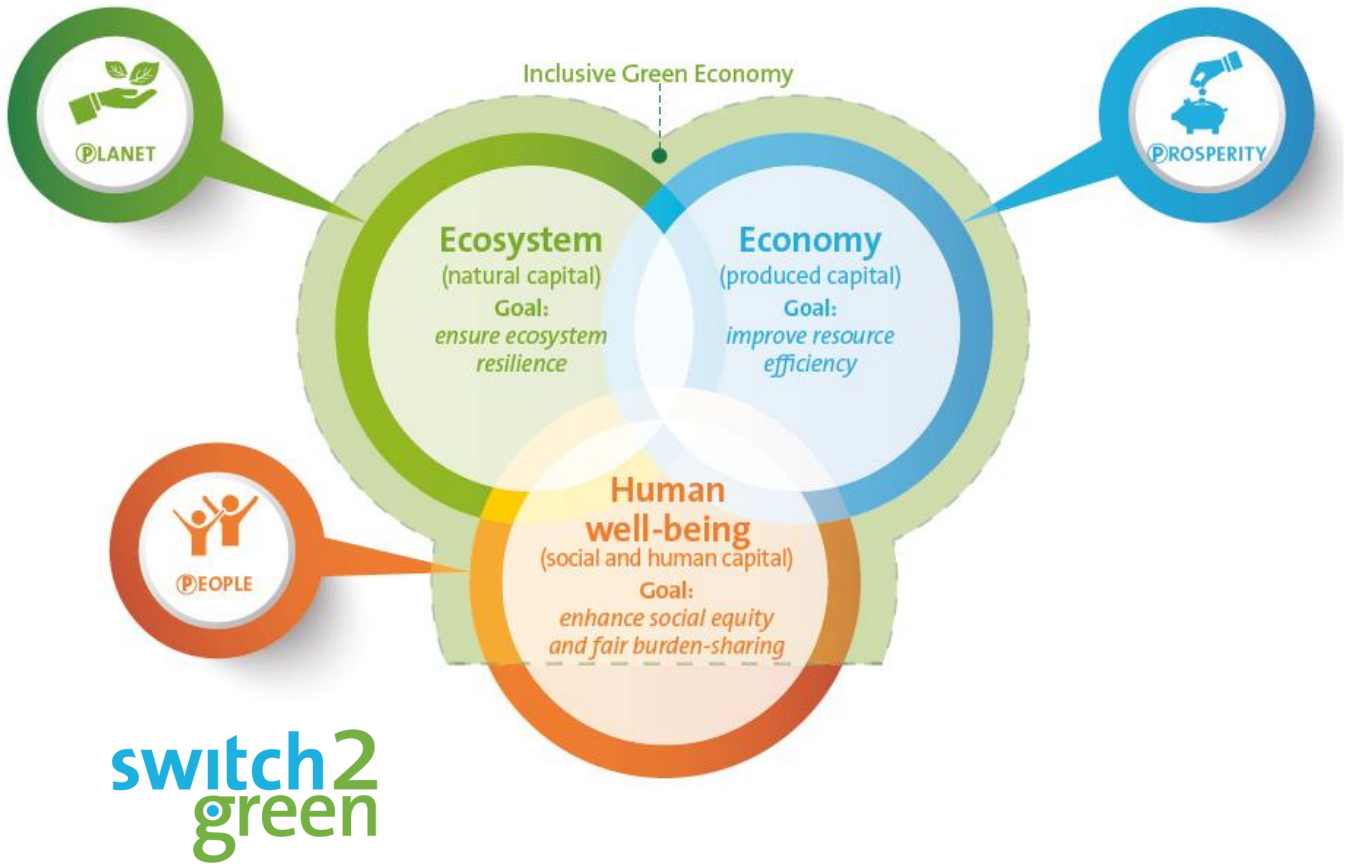
Key take-outs



switch2green

Graph adapted from European Environment Agency, 'Resource efficient green economy and EU policies', Report No. 2/2014.

- ✓ **Systematic integration**
- ✓ **Resources vs waste**
- ✓ **Inspire & learn, enable, finance, implement**
- ✓ **Measure impact**
- ✓ **EU experience**

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Further information

www.switchtogreen.eu

Guidance documents also available in:

capacity4dev.eu (public group on Environment, Climate Change and Green Economy)

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Results and Indicators for Development

CE Results chain and indicators guidance

- **Inspiring and Learning**
- **Enabling**
- **Financing**
- **Implementing**

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Technical Assistance

Short-term technical assistance, including through country missions

Quality support, technical backstopping and quality reviews

Capacity building and know-how development and sharing

Awareness raising and information sharing

Support to policy dialogue and programme coordination

Development of tools and methodological support

www.switchtogreen.eu

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Global - AAP2023:

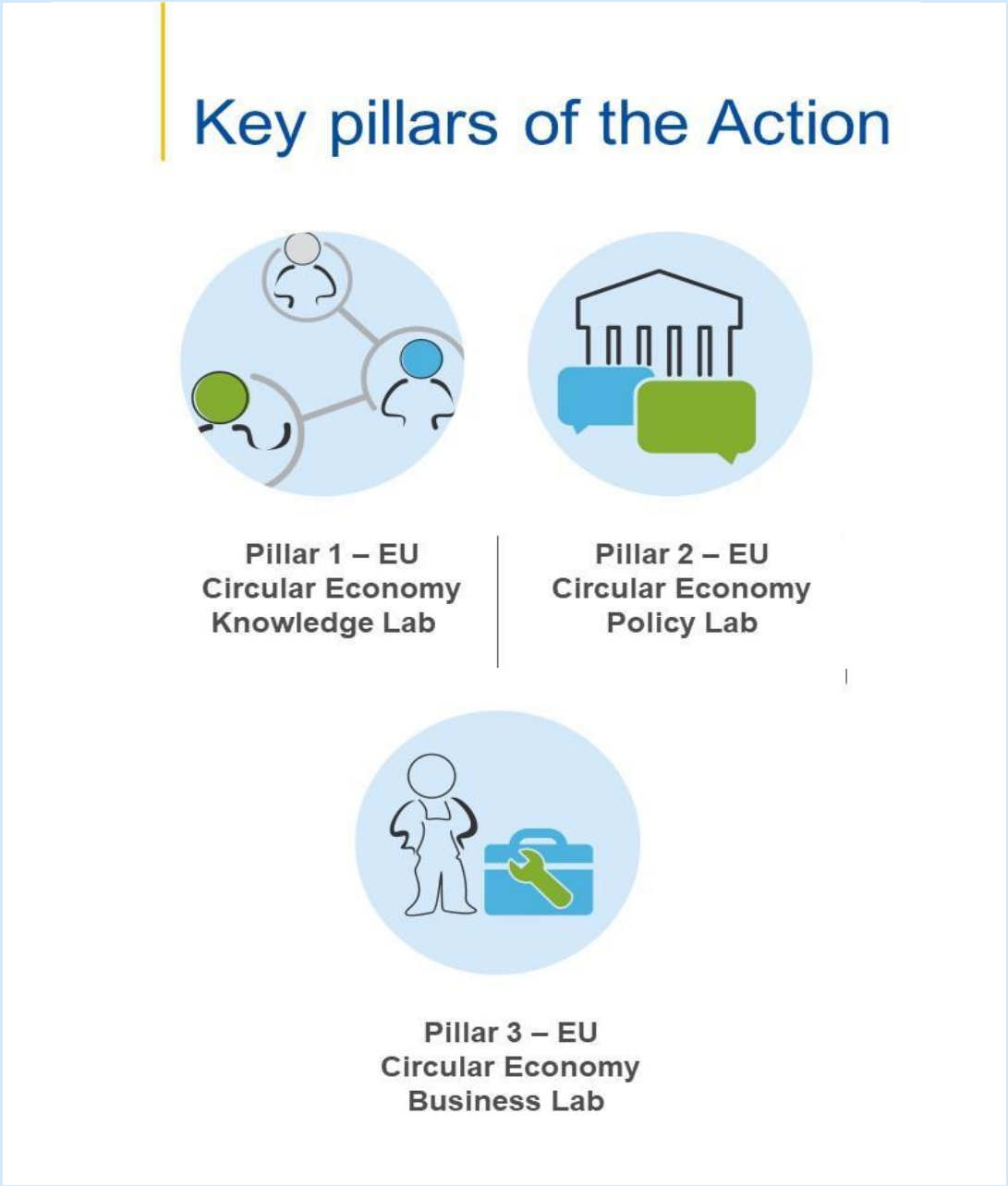
EU CIRCULAR ECONOMY RESOURCE CENTRE

The proposed action aims at

establishing an **EU CE resource centre** to support the **uptake of sound CE policies and business models** based on **partnerships between EU and third country stakeholders.**

Duration: 2024-2027

Total Budget:
€15 million



Thank you

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