The role of bioeconomy in the future of sustainability

MSc Ladeja Godina Košir

Circular Change

European Circular Economy Stakeholder Platform

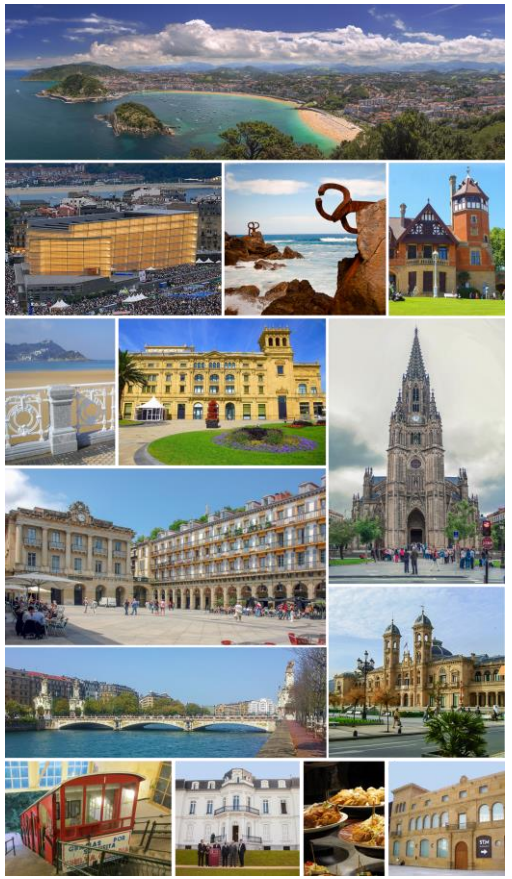
#CEStakeholderEU

Coffee time - well deserved

Circular Change

Welcome - some touchpoints for today

- Circular Change – connecting circular dots
- EU - addressing bioeconomy
- Let‘s start with the wood
- Endless opportuntities in bioeconomy
- The power of network governance



The best entry point

for your circular economy journey

- We realize that the **TRANSITION FROM A LINEAR TO A CIRCULAR ECONOMIC MODEL** is not a choice, but a necessity.

- As experienced navigators, we are empowering you to **DEFINE YOUR OWN CIRCULAR JOURNEY.** Our strong international network is enabling us to jointly **EMBRACE CHANGE and INNOVATION.**

- We are specialized in **ESTABLISHING** and **NOURISHING DIALOGUE** between different stakeholders particularly in the process of creation of national and local CE roadmaps. We are promoting **NEW NARRATIVES**, orchestrating interests, exchanging knowledge and enabling innovation.

Circular Change

Circular Change

EXPO 2020 DUBAI UAE

#CEStakeholderEU

We're part of ECESP Coordination

CIRCLE ECONOMY
reuse
ENEA
Agenzia nazionale per le nuove tecnologie, l'energia e lo sviluppo economico sostenibile
THE PRODUCT-LIFE INSTITUTE 1982 - Geneva
Institut de réconomie circulaire
wbcsd
SITRA
Circular Change
ecopreneur.eu
ecoembes
mwe MUNICIPAL WASTE EUROPE
SAMEN MAKEN WE MORGEN MOOIER OVAM
industriAll EUROPEAN TRADE UNION
CEC4EUROPE CIRCULAR ECONOMY COALITION FOR EUROPE
EUROCITIES
CIOS
copa cogeca european farmers european agri-cooperatives
FEAD
ELLEN MACARTHUR FOUNDATION
BUSINESSEUROPE
cscp COLLABORATING CENTRE ON SUSTAINABLE CONSUMPTION AND PRODUCTION
Klaster Gospodarki Odpadowej i Recyklingu
ACR+
EEB European Environmental Bureau

Circular Change

European circular economy stakeholder platform (ECESP)

- **The European Circular Economy Stakeholder Platform is a stakeholder-led platform supported by both the EESC and the European Commission**
- **"Stimulus to civil society, public authorities and private organisations to exchange best practices across countries and sectors - through meetings and an annual conference, via the Platform and social media"**
- **A "network of networks": Coordination Group of 24 Members strengthening and expanding national platforms"**
- **Virtual one-stop shop providing library of knowledge and forum for interaction**

Good Practices (GPs):

- Search for existing GPs
- Submit your GP directly

Policy dialogue:

- **Reach** out to CG members directly
- **Contact** the Secretariat (EESC)
- **Attend** the annual conference
- **Join** the conversation on the forum

Sharing Knowledge:

- **Search** for published reports
- **Browse** adopted strategies
- **Share** your knowledge directly

Exchange 4change Brasil
forum for the future
wrap
Circular Change
CIRCLE ECONOMY
INFLUENCIAR A TRANSIÇÃO PARA
A ECONOMIA CIRCULAR
NO BRASIL
Denmark
Netherlands
England
Switzerland
Slovenia
United States
China
Brasil
South Africa
17 PARTNERSHIPS FOR THE GOALS
THE GLOBAL GOALS
For Sustainable Development
ORGANIZAÇÃO INDEPENDENTE CONECTADA A UMA REDE DE ESPECIALISTAS INTERNACIONAIS.

Circular Change

Green Recovery based on network governance

Make promisses and commitments a reality

Circular Change

Circular economy road mapping process

Co-creation, development and implementation of **CE roadmaps** on national or local level

Circular Change

ircular Insider publication - sustainable lifestyl

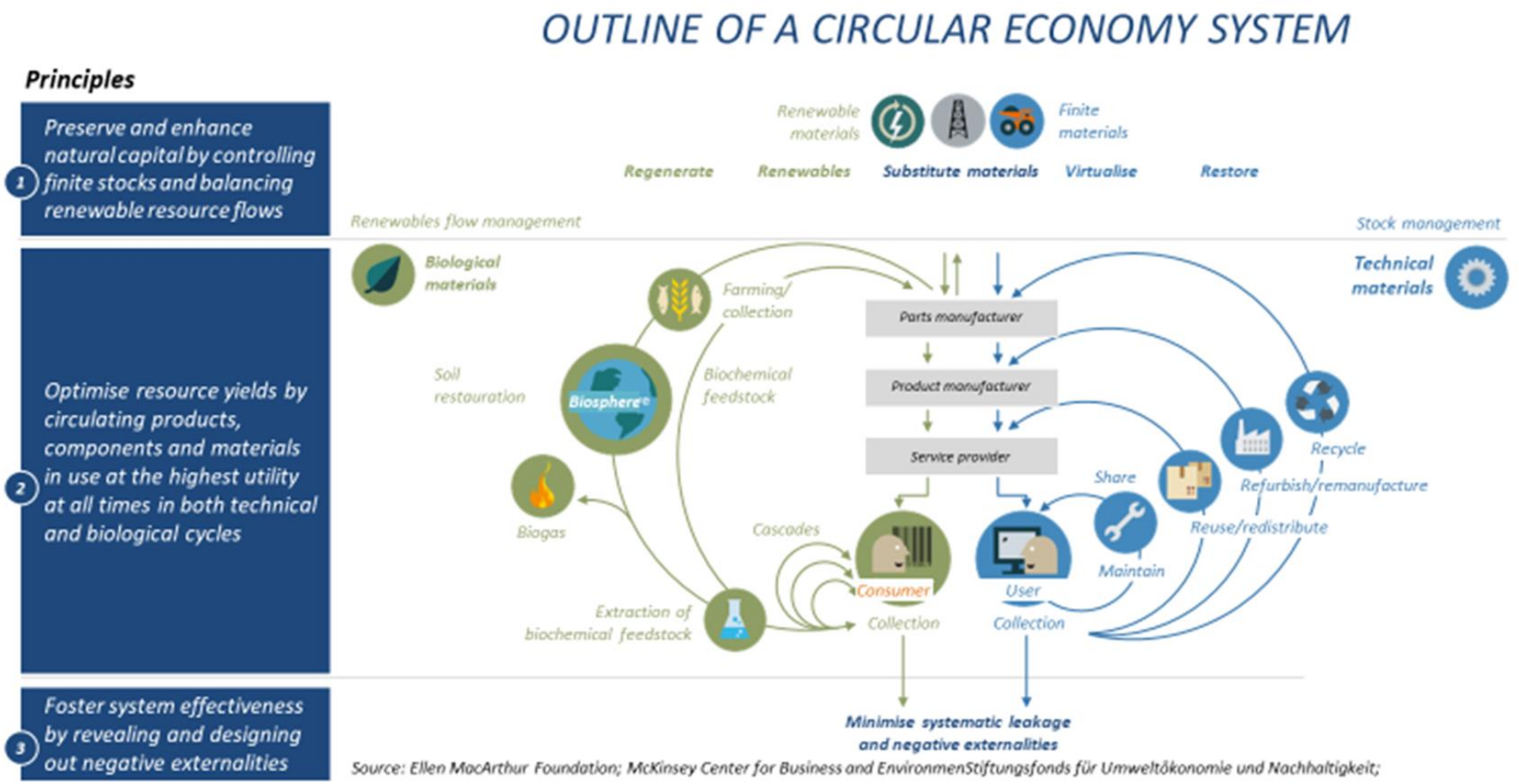
Source: https://www.circularchange.com/circular-insider

Circular Change

Sustainable bioeconomies foresight excercise

Source: https://bioeast.eu/wp-content/uploads/2021/10/BIOeast-Report-2021_FINAL_compressed-1.pdf

Butterfly & Biological Cycle



Bioeconomy „meeting" circular economy

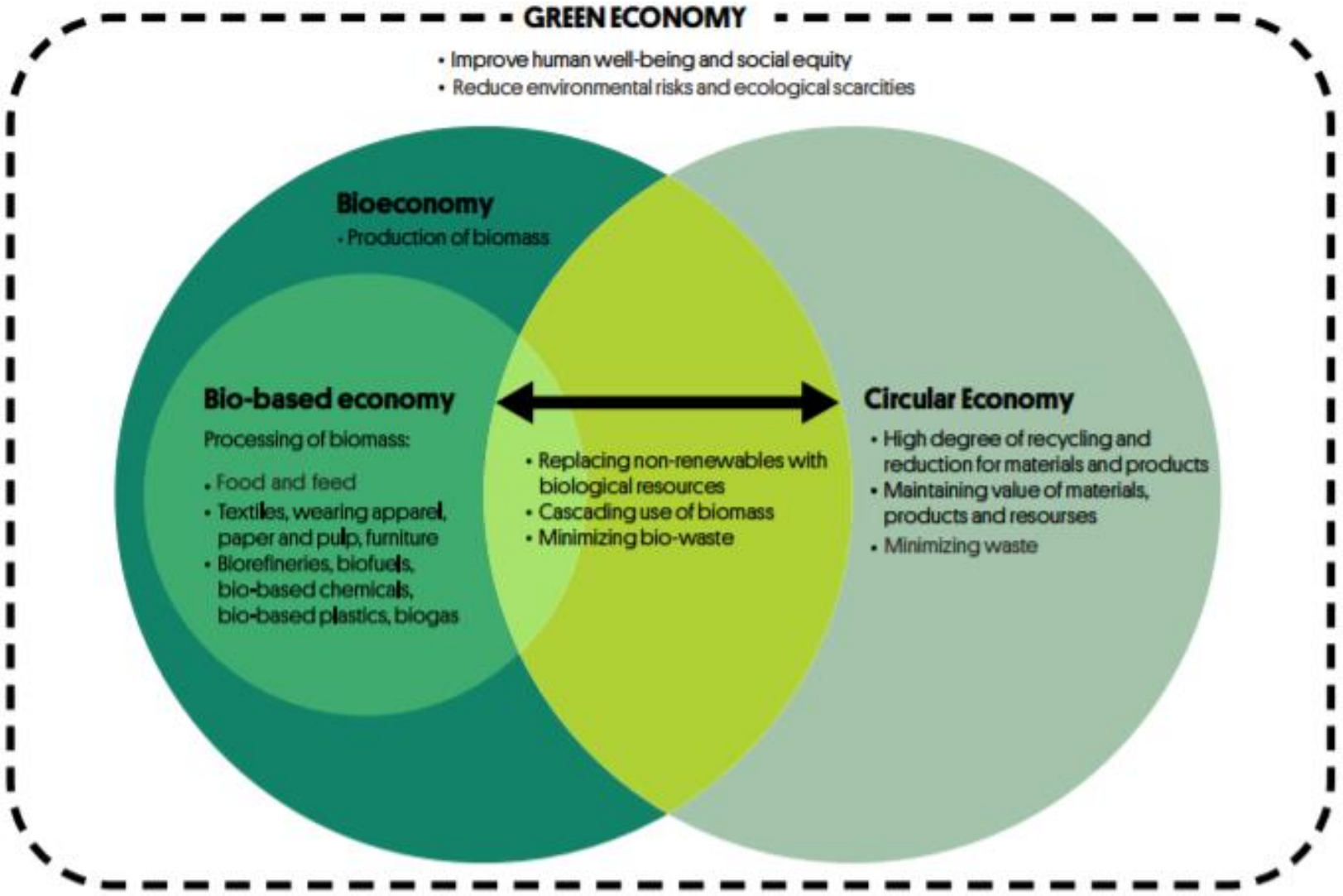


Figure 2: Relationships between the bioeconomy,bio-based economy, green economy, and circular economy [27].

Circular Change

Principles of the circular bioeconomy

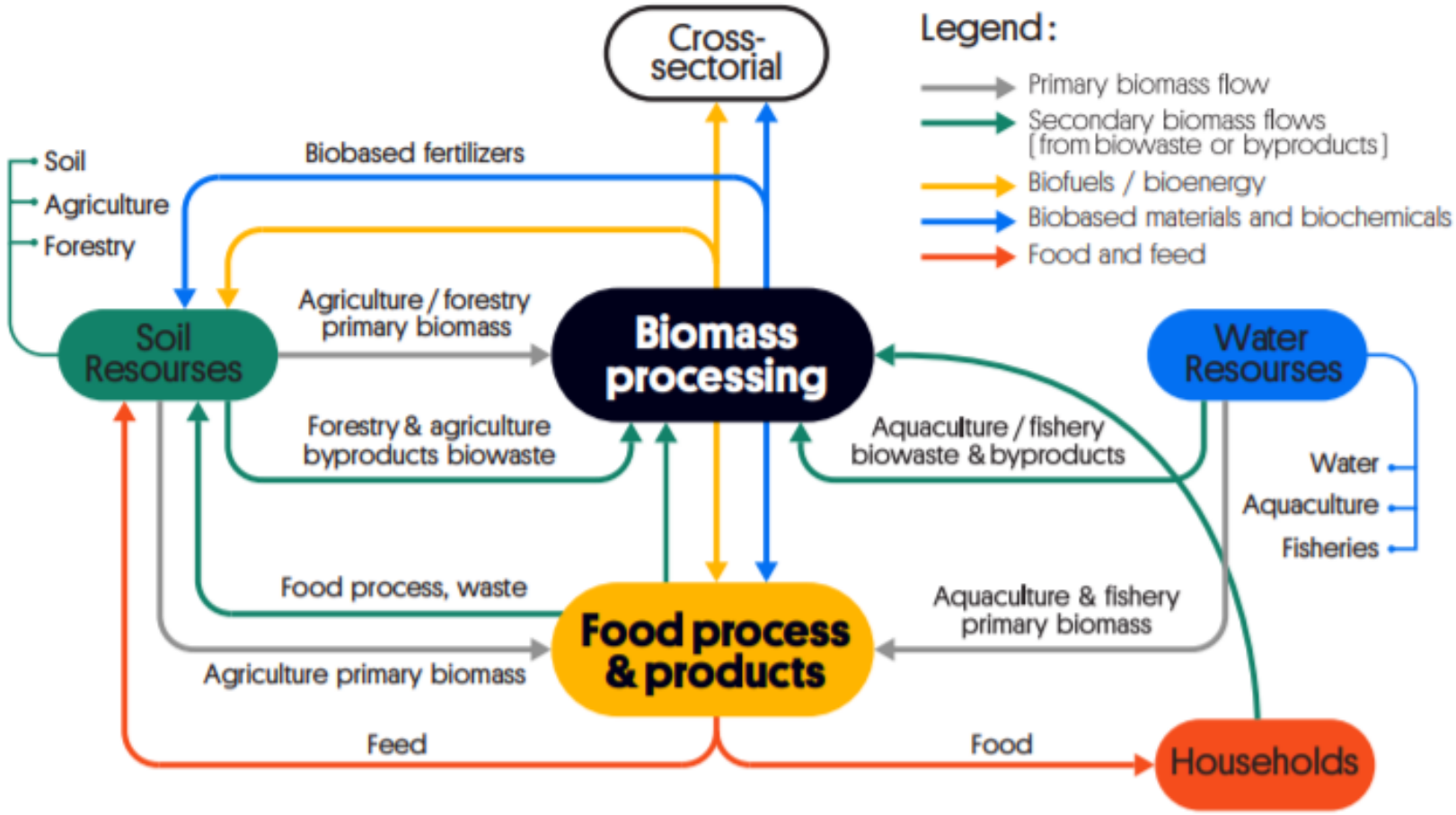


Figure 4: BIOEAST Circular Bioeconomy Model (CBEM) – the outcome of expert group interaction

Principles of the circular bioeconomy

PRINCIPLES OF THE CIRCULAR BIOECONOMY :

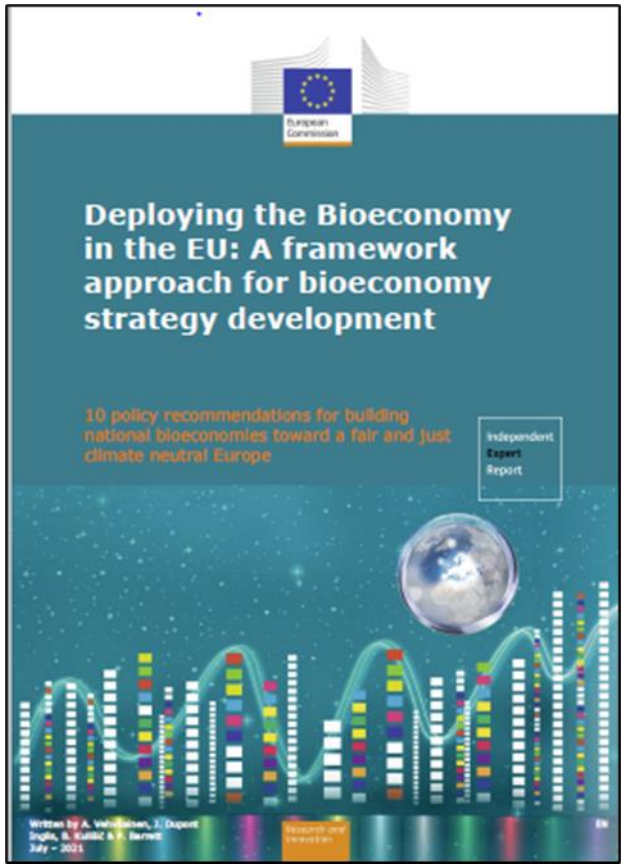
- Biomass that is derived from water and soil must be managed sustainably
- Closing the loops: circular flows should be established by harnessing the potential of biowaste and byproducts with high value from different industries
- Industrial symbiosis enhancing bio-circularity
- Fostering food security
- Implementing the use of the biomass cascade, reducing waste production
- Enhancing resilience in our economies
- Resource efficiency and value chain optimization

Circular Change

Bioeconomy in the context of EU policy

The Bioeconomy

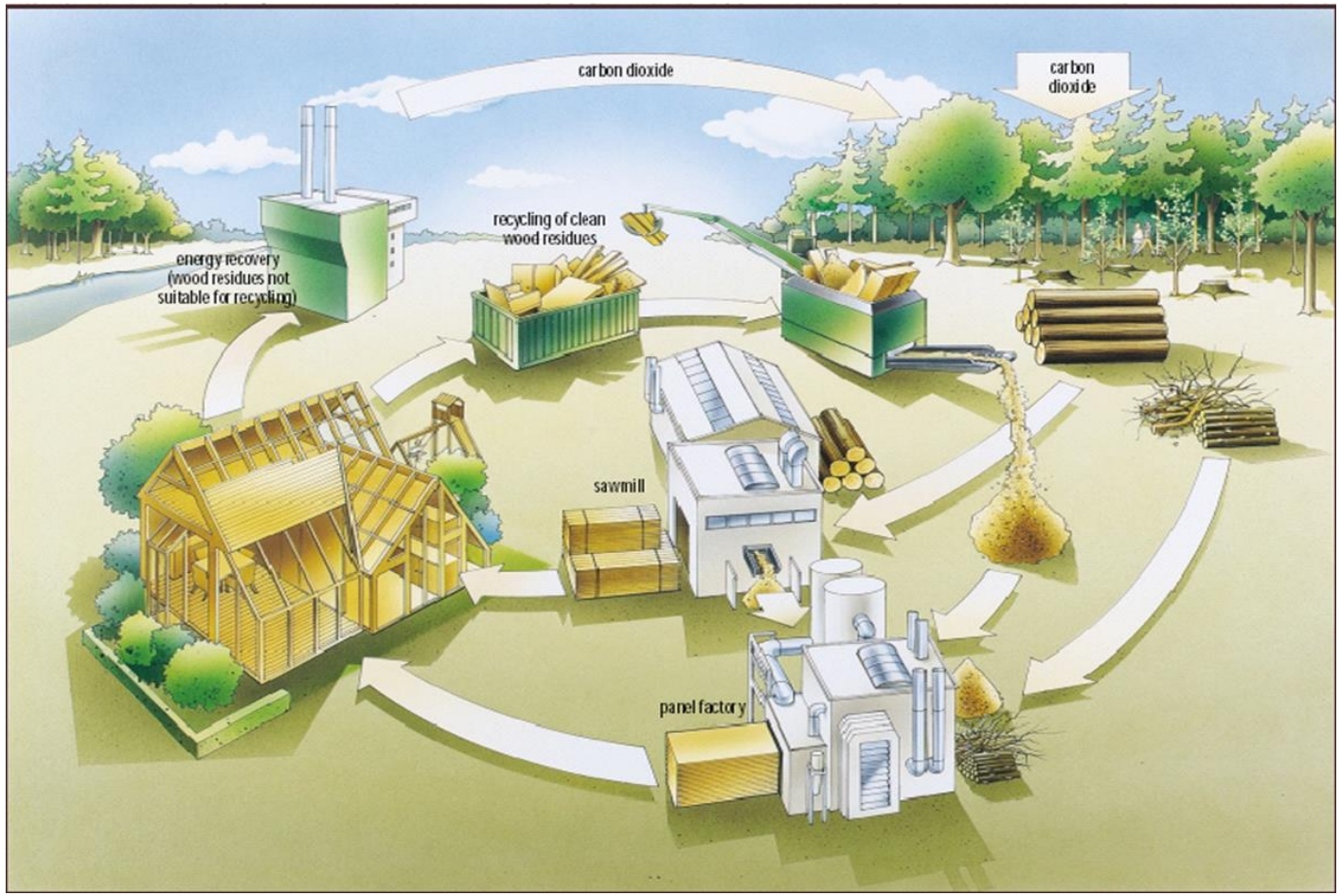
- catalyst **for sustainable systemic change** and transition for EU & its MS
- support **interactions** among multiple actors
- **based on** searching, experimenting, reflecting and learning
- **align with national challenges and missions** and aiming at enabling innovation, experimentation, diffusion and networking



Wood & Cascading System

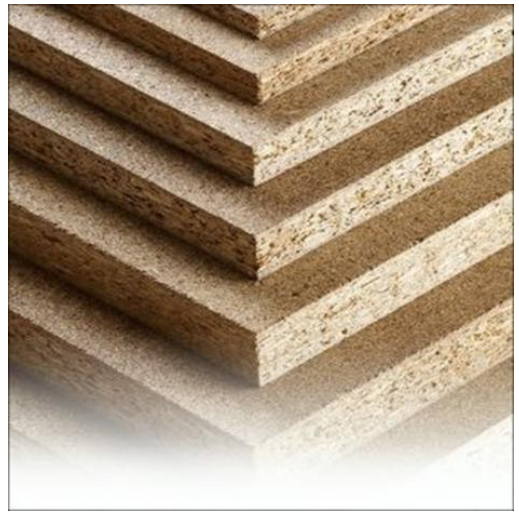
Wood

One of materials where the principles of the **circular economy** were established



Waste hierarchy & Fit for 55 approach

Wood – reuse, recycle, energy & alternatives



Sustainable Furniture factory Vestre

Source: https://www.archdaily.com/942723/big-designs-worlds-most-sustainable-furniture-factory-in-norway

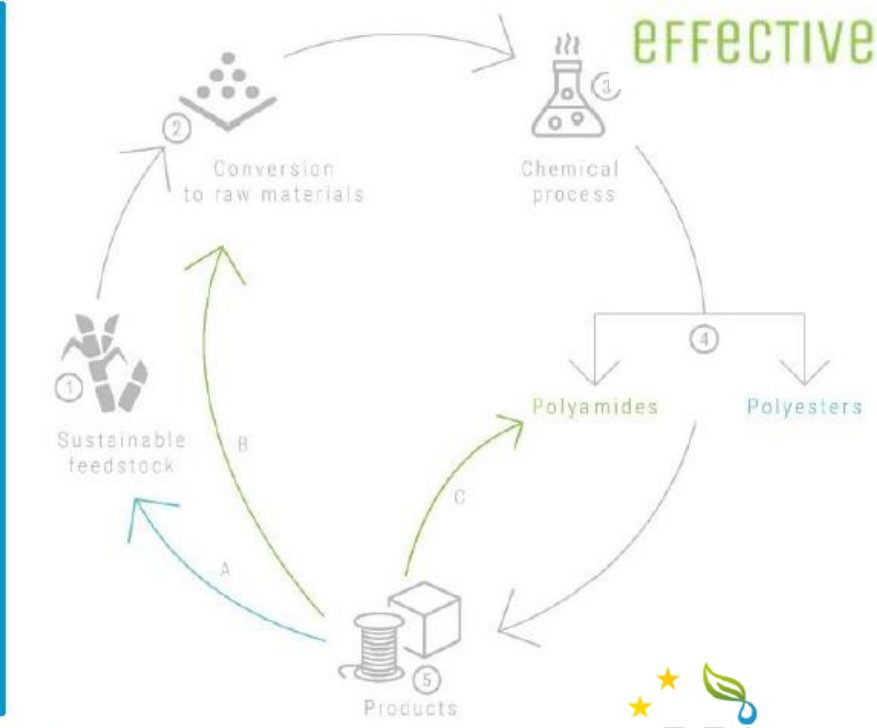
InnoRenew Independent Research Institute Slovenia

Source: https://innorenew.eu/

Effective Bio-based solutions

AQUAFIL SLO
AQUAFIL synthetic fibres and polymers
SÜDZUCKER
NOVAMONT
Carvico
H&M
BALSAN
VAUDE
LIFE CYCLE ENGINEERING
bio-mi
Circular Change
circe

effective



A. Composting
B. Regeneration (chemical recycling - depolymerization)
C. Mechanical recycling

BBI JU

Source: https://www.effective-project.eu/

Video: https://www.effective-project.eu/TheEFFECTIVE_Video/

Public & Network governance

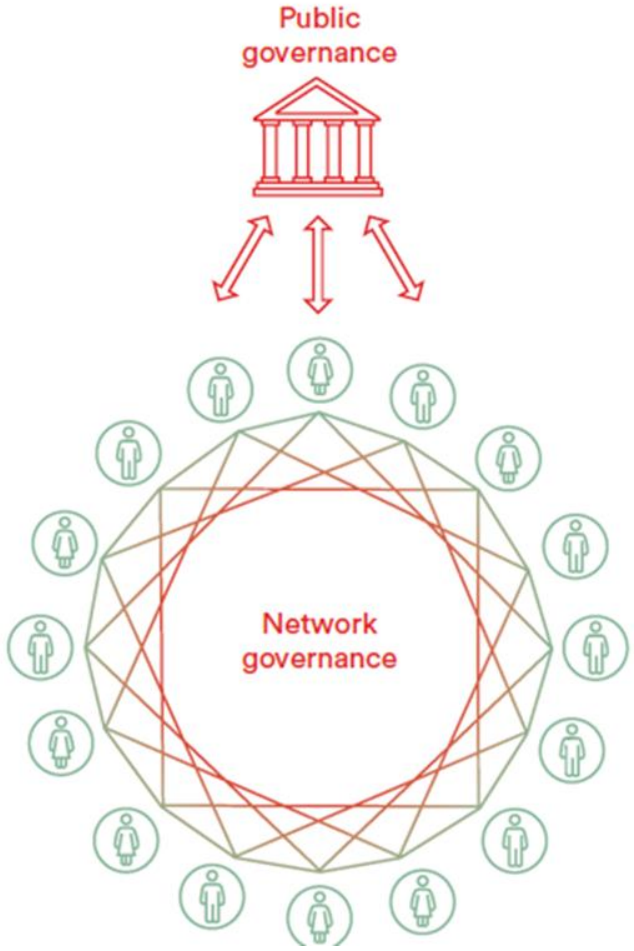
Network governance

Network governance is needed to get everybody on board, thereby helping put a circular economy into practice.

In a growing number of countries, a bottom-up movement includes all kinds of germs of renewal, which generate an inspiring environment to reconsider our current consumption and production patterns.

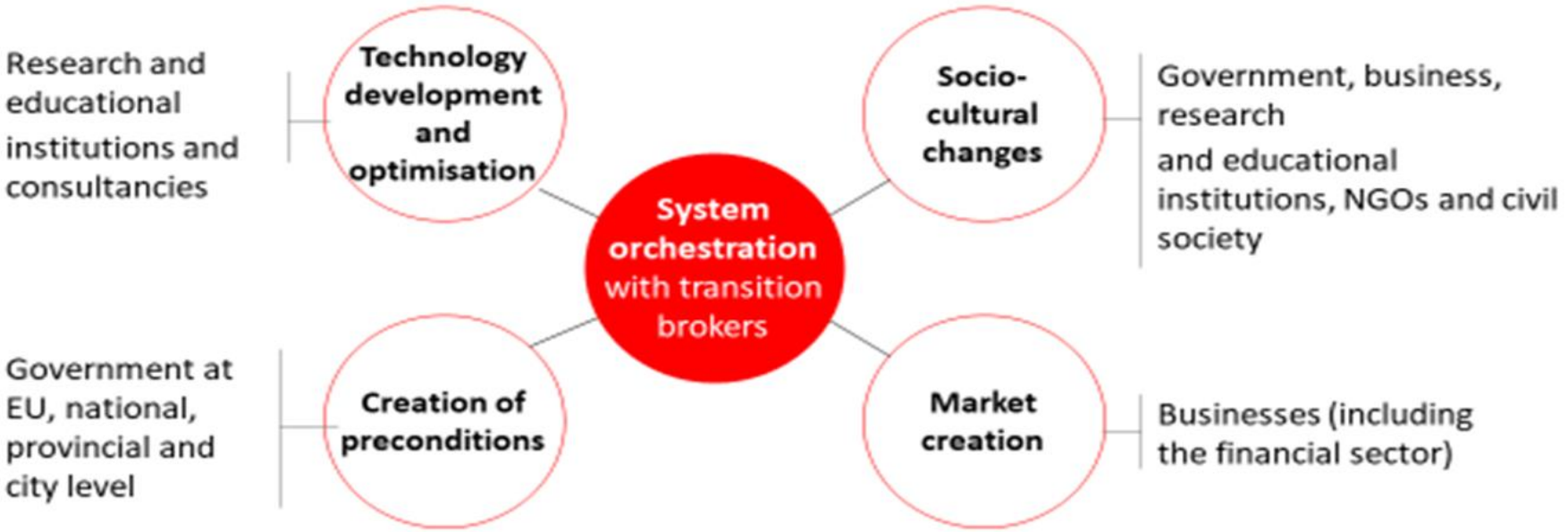
Prof. Dr. Jacqueline Cramer

Source:
Network_governance_for_Circular_Economy_web_version.pdf



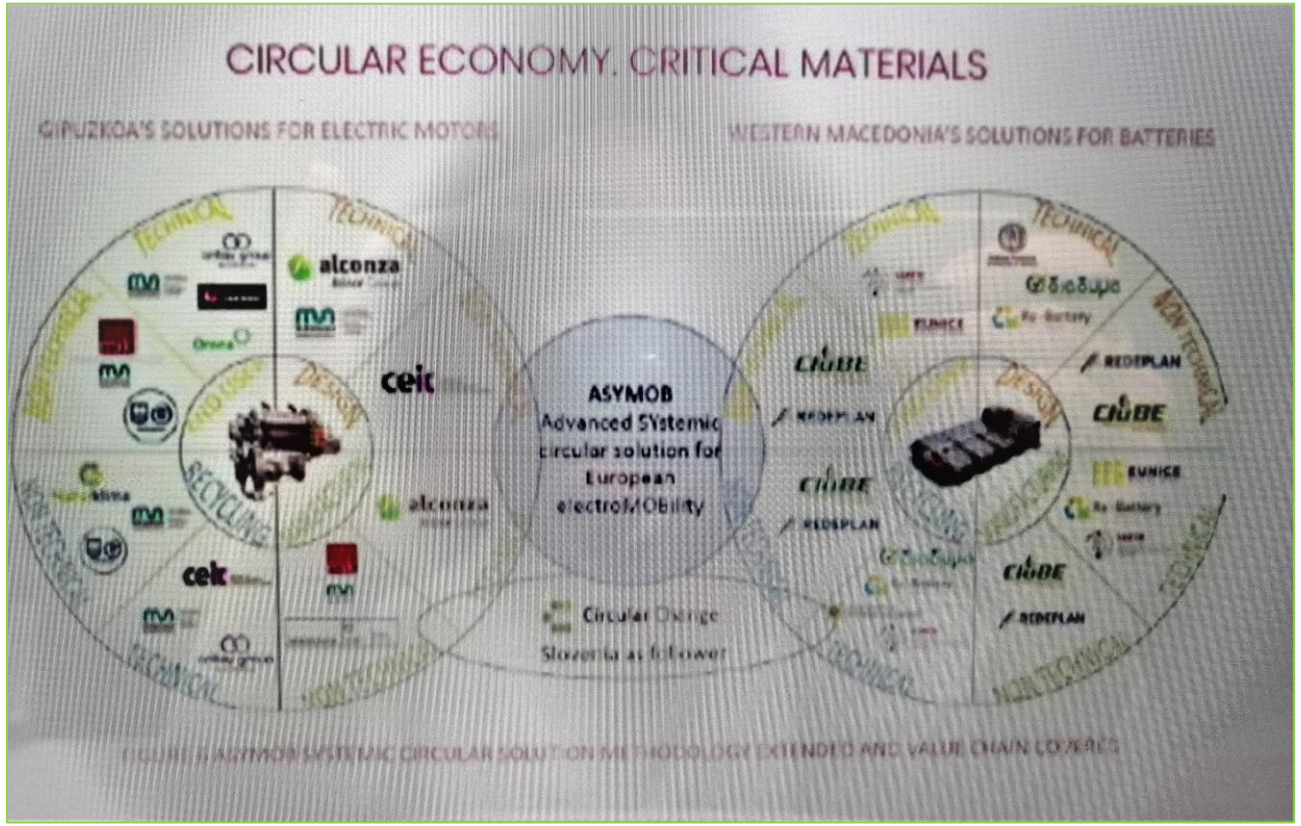
amsterdam economic **board**

10. Build a consortium of relevant network partners and agree upon division of labour

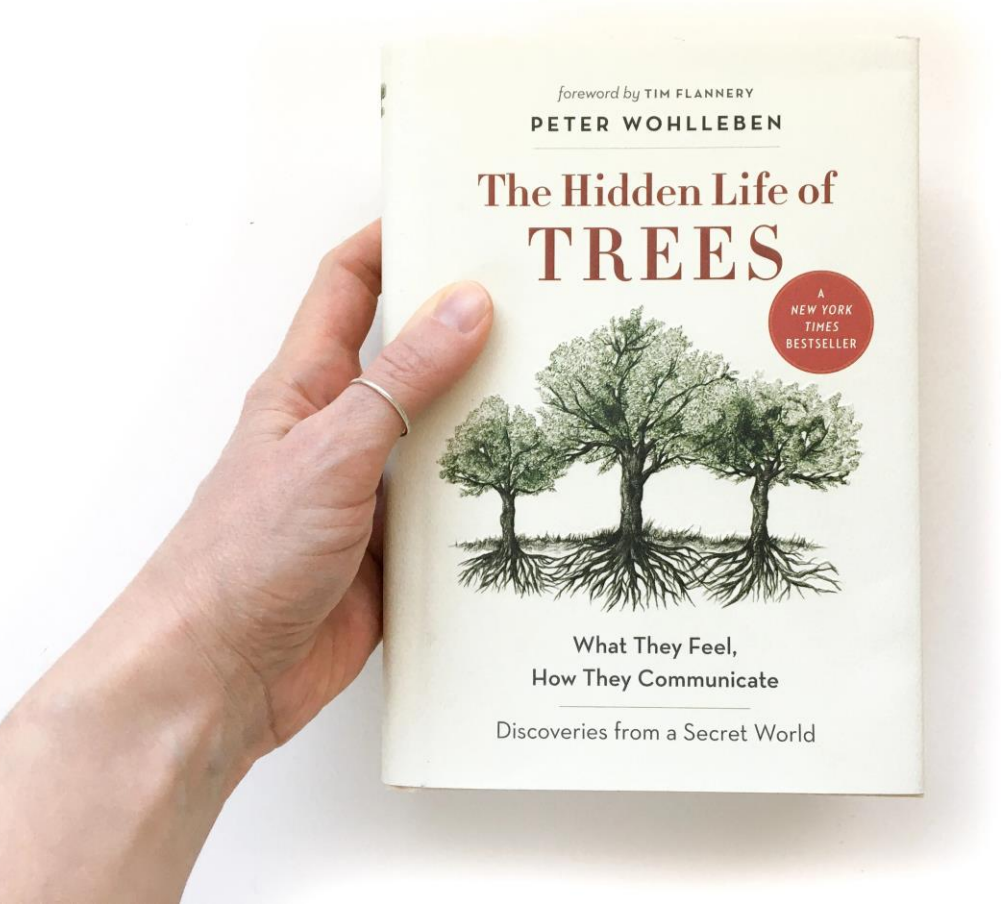


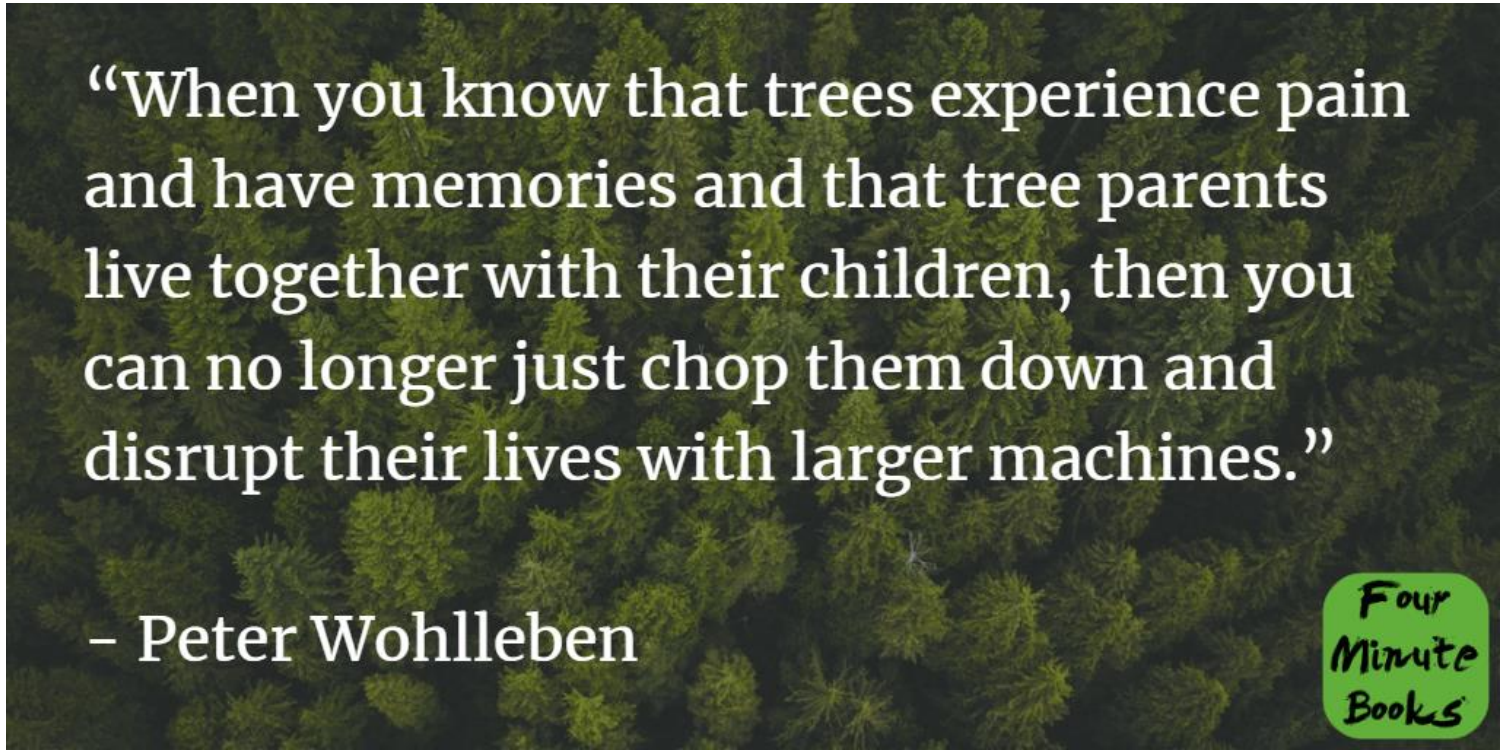
New form of 'network governance'

Collaboration & Networking in action



Circular Change


foreword by TIM FLANNERY
PETER WOHLLEBEN
The Hidden Life of
TREES
A NEW YORK TIMES BESTSELLER
What They Feel,
How They Communicate
Discoveries from a Secret World


"When you know that trees experience pain and have memories and that tree parents live together with their children, then you can no longer just chop them down and disrupt their lives with larger machines."
– Peter Wohlleben
Four Minute Books

Visit us here →

www.circularchange.com

Circular Change

THANK YOU !

For being a part of our joined circular journey