Circular Society – weil eine rein wirtschaftliche Betrachtung nicht ausreicht.

Dr. Christopher Kronenberg & Franziska Nemmer, MSc | FH des BFI Wien Sustainability Day 2023

Current challenges

- Since the 1950ies and the vast availability of unexpensive energy we saw a tremendous growth in our economies, with
 - Some actors could gain un-proportional income and wealth
 - An increasing pressure on our natural resources, biodiversity, climate, etc.
- A transformation of our existing practices is consequently necessary to avoid further challenges caused by global warming, loss of biodiversity.
- The focus of our research was therefore to understand this transformation from a holistic point of view, including all relevant systems involved and impacted by this change. Thus, the system level is the focus of our research.



Circular economy



CIRCULAR ECONOMY



Circular Economy

The concept of circular economy challenges linear business models and instead calls for circular flows that reduce the negative impact on the environment by improving the utilization of resources through "reduce, reuse, and recycle strategies".

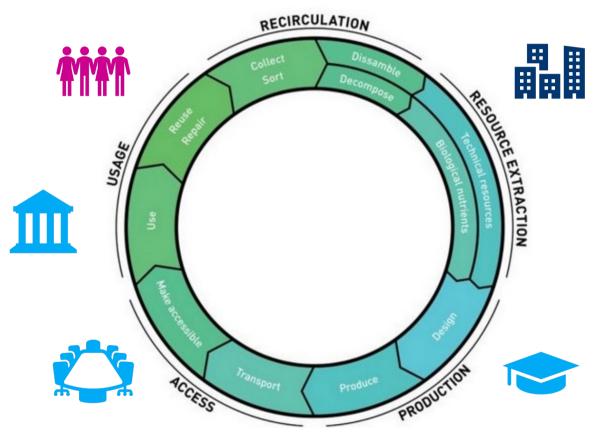
Source: Moreau et al., (2017), S. 498; Picture: Unterfraunhofer et al. (2017)





This transformation is more than an economy challenge

Circular society



Circular Society

The term Circular Society (CS) has been introduced to provide an alternative framing that is going beyond growth, technology and market-based solutions.

A common denominator of CS concepts is that CE transitions are not possible without the commitment and participation of all societal actors. CS frames transitions to circularity as a profound social-ecological transformation.

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Three systems

Business system (organizational system)

 Business organisations with their strategic management decisions/ business model innovations

> Representatives of companies with a high degree of CE implementation



Institutional system (political-economic system)

- · Political institutions
- Economic institutions such as chambers of commerce and other interest groups
- · Educational institutions

Representatives of the Chamber of Commerce, educational institutions and interest groups with CE focus



Consumer system (social system)

- Society with its formative norms and values
- Focus on consumers

Experts in sociology and participants in the Austrian Climate Council (randomly selected citizens ("Mini-Austria") who deal with questions of the country's climate future)



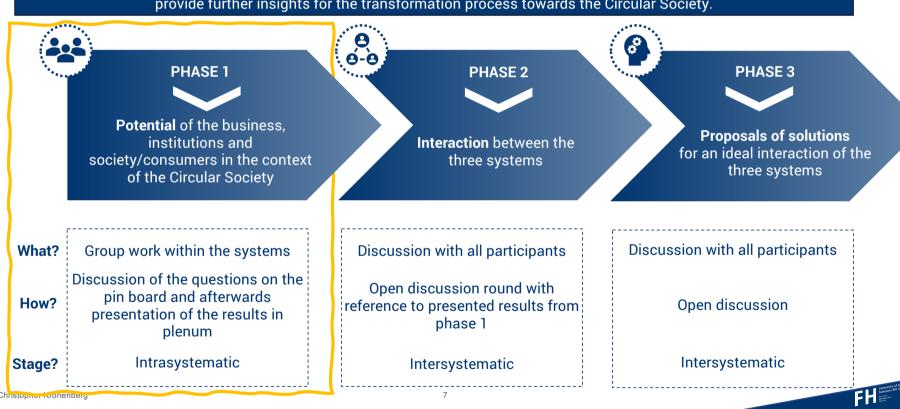
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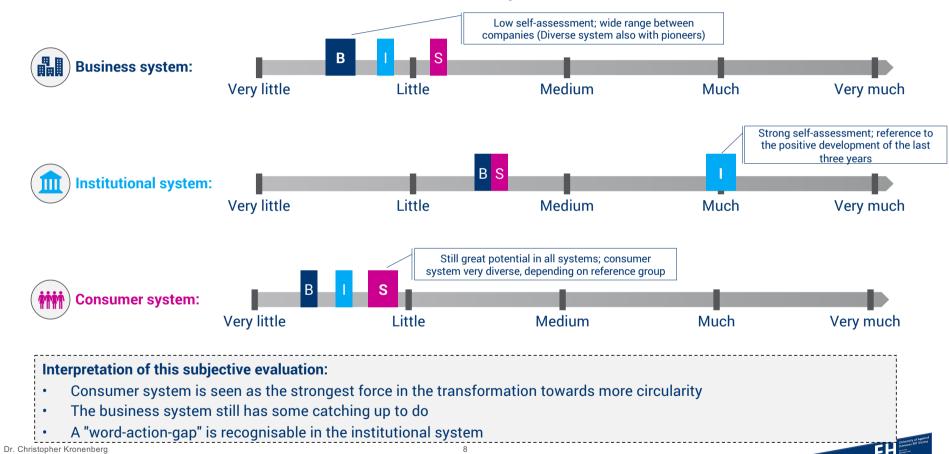
Three phases of focus group

Aim of the focus group:

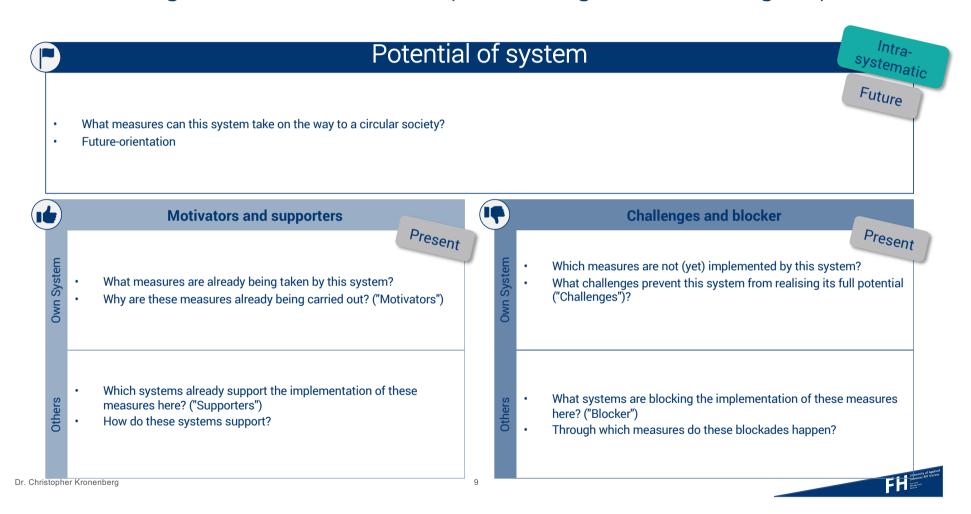
To explore the dynamic interplay of the three systems (business, institutions and society/consumers) and provide further insights for the transformation process towards the Circular Society.



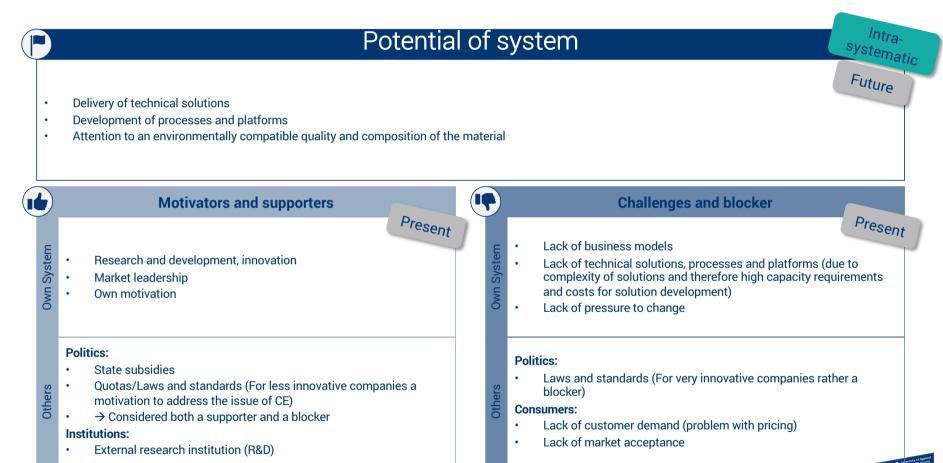
(Self-)Evaluation: What contribution do the systems make to the transformation towards more circularity?



Phase 1: Logical structure of the questioning in the focus group



Phase 1: Business system



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Phase 1: Institutional system



Potential of system

Intrasystematic

Future

- Reconciliation of interests (core function)
- Promotion of an independent critical debate (Austria being very consensus-oriented; social partnership)
- Function as multiplicator for social-ecological system change
- Education and further training in the direction of social-ecological transformation
- Development of appropriate framework conditions and regulations
- If necessary: System change (new forms of cooperation and relationships within a state)



Motivators and supporters

Present

Challenges and blocker

Present

- R&D, advisory services, knowledge transfer
- Design (policy design, but also service design)
- Interchange and networking/building connections, e.g. good location agencies as distributors, already existing clusters

Politics:

• ers

Support at European level (e.g., Green Deal; European Circular Economy Stakeholder Platform)

Consumers:

Rethinking among the population towards more sustainability

- Long coordination, due to numerous stakeholders
- Distinction of particular interests (at the same time general challenge and core task of the institutional system)
- · Legal requirements and standards: Many not fit for circularity
- Optimal quotas instead of maximum quotas (KPIs in the political sphere) → all institutions prefer to achieve maximum quotas, which in turn leads to conflicting goals.

Business:

Linear economic system

Politics:

Political interference at conflicts of interest: Socio-political discussions in public, but also in the background; can slow down/impede the institutional system

Consumers

Lack of openness to new models (e.g., ownership vs. user models)

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Phase 1: Consumer system

Potential of system

Intrasystematic

Future

- Consumption: Sharing, second-hand, repairing, separating waste
- Transport:
 - Avoidance of resource-intensive transport
 - use of public transport
- Exertion of influence:
 - Exerting political pressure for more sustainability
 - Communicating values in terms of sustainability to the next generation

Motivators and supporters

Cross-generational thinking

Commitment to the environment

- Convenience → structures built so that it is easy to behave circularly
- Status recognition of referent group; coolness factor
- Health factor
- Frugality/modest life, exit from surplus society;
- Social control; Conformity (if there's a law, you obey it).
 Business: Collection systems (Recycling)

Politics: Politically binding targets (issue of conformity) and laws

Institutions: Education

Consumers:

- Social influencer
- Social inequality (Lack of money: modest lifestyle; Wealth: wide dispersion in people's behaviour/CO2 footprint)
- Environmental discourses in the public sphere

Present

Challenges and blocker

Present

- Convenience
- Lack of rethinking in the direction of "non-consumption" --> the overabundance of the consumer society is not thought through from from the beginning; Generally, more willingness to recycle than to refuse

Business:

- Growth as a paradigm (biophysical vs. economic growth)
- Availability (e.g., can people buy recycled products?)
- Economic interests; Price system as incentive system

Politics:

Entire societal structures and incentive systems are actually based on waste → "rules of the game" not beneficial for CE

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Discussion of the classification of the systems

High diversity of the individual systems leads to discussions about the classification of the systems:

Business system:

- Different sectors
- different degrees of innovation,...

Institutional system:

- Diversity already through representation of actors from the business system and the consumer system.
- Additional education and other interest groups
- Political institutions
- --> Idea: break up institutional system and introduce politics as a fourth system

Consumer system:

- Different reference groups (e.g. Sinus Milieus)
- No continuous exchange between actors of this system









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