



# The Limits to Growth: Sustainability and the Circular Economy

**Lecture 9: Circular Societies** 

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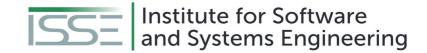


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- Updated versions of these slides will be available in our <u>Github repository</u>.

# **CIRCULAR ECONOMY VS. CIRCULAR SOCIETY**





# **Circular Society CE Recap**

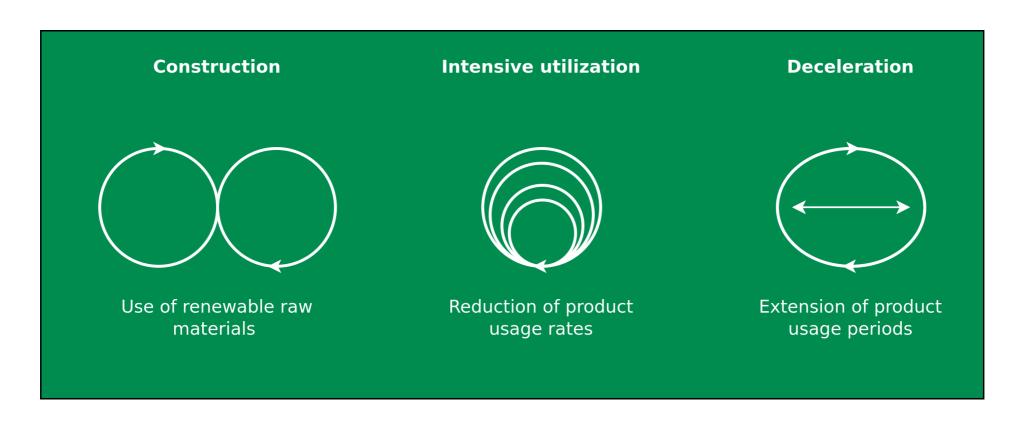
#### • Goals of the CF:

- Maintain natural resources and minimize the discharge of substances that are harmful to health and nature
- Ecological modernization of the economy to increase resource efficiency, e.g., by technical innovation and digital solutions
- Products/services designed and constructed in such a way, that they can be returned to the economic and material flows at any time with little financial and energetic effort
- Increase/maximize utilization of resources, e.g., Performance Economy

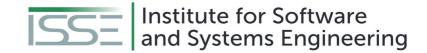




# **Circular Society CE Recap**



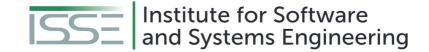




# **Circular Society CE Criticism**

- Replace the LE with circularly oriented forms of consumption and production
- CE focus mostly on earned value management ("Wertschöpfungsmanagement"), productservice systems, product/business model innovations within existing power asymmetries
- Decouple economic growth and consumption of natural resources





## **Circular Society CE Criticism**

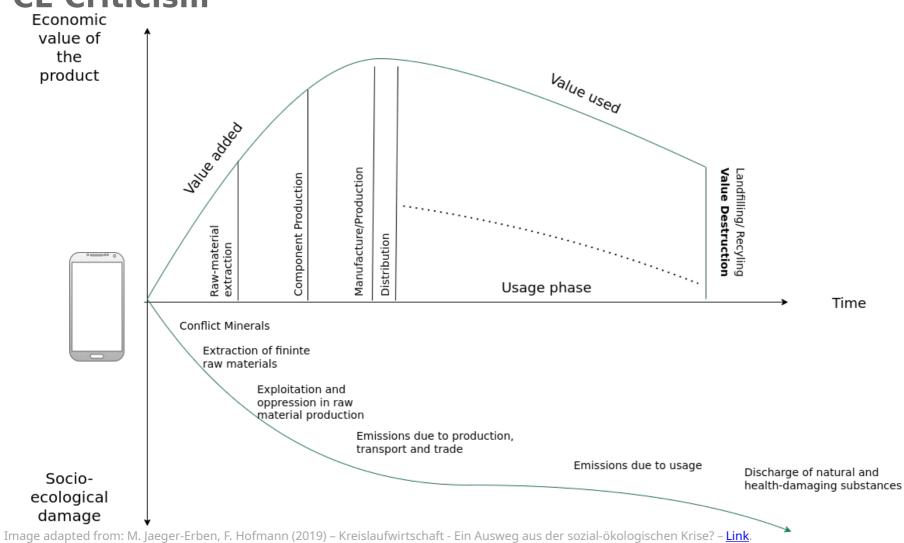
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- Decouple economic growth and consumption of natural resources
  - → But why do we need never ending economic growth and why is it good to consume as many goods and services as possible?

Partially based on: F. Hofmann, J. Zwiers (2018) – Circular Society – Eine pluralistische und emanzipatorische Alternative zur Circular Economy? – Link.

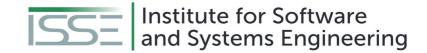


## **Circular Society**

#### **CE Criticism**







# **Circular Society CE Criticism**

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- CE focus mostly on earned value management ("Wertschöpfungsmanagement"), productservice systems, product/business model innovations within existing power asymmetries
- Decouple economic growth and consumption of natural resources
  - → But why do we need never ending economic growth and why is it good to consume as many goods and services as possible?
- Alternatives:
  - Sufficiency strategies and lifestyle changes
  - Question the prevailing entrepreneurial orientation towards the shareholder concept
  - Deconstruction of existing power and hegemonic relations





## **Circular Society Overview**

- Circular Society → CS
- Goals of the CS:
  - Not just "CE + social"
  - Socio-political transformation and reorganization
  - Replace intransparent and inequity-based value chains of the LE with democratic, transparent and cooperatively organized value chains

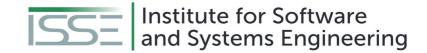




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  - Also → preserve the environment/resources for present and future generations and enable social participation and quality of life

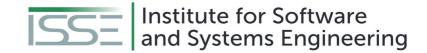




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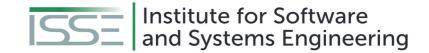
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  - Replace intransparent and inequity-based value chains of the LE with democratic, transparent and cooperatively organized value chains
  - Also → preserve the environment/resources for present and future generations and enable social participation and quality of life
  - All-encompassing change necessary if the CE is to be the subject of a socio-ecological transformation
  - Democratization of value creation processes and strategies for the activation and emancipation of different stakeholder groups





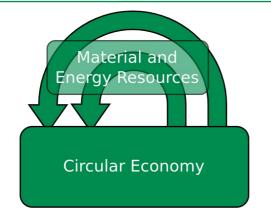
# **Circular Society Definition**

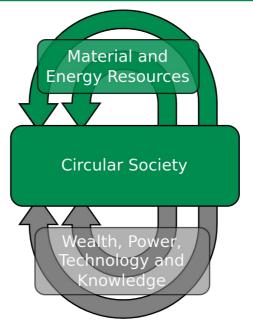
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# **Circular Society Definition**

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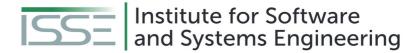


# **Circular Society CE vs. CS**

CE = market-based solutions and economic considerations

CS = Circularity as a holistic social transformation





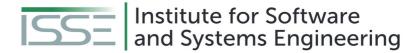
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## **Circular Society**

CE vs. CS

Circularity vision	Temporal scale	Spatial scale	Sustainability factors included	Perspective on the resource nexus	Views on capitalism and decoupling	Main goal/objective	Narrative
Circular Society	Very long term: multiple generatio ns (beyond 50 years)	Macro- scale: planet Earth	People, Planet, Prosperity	Changing consumption and production patterns to keep energy, biodiversity and aterial resources within safe planetary limits.	Sceptical regarding the possiblity of decoupling and the sustainabili ty of capitalism.	Maintaining socio-ecological health and wellbield for present and future generations of human and non-human life.	The earth is borrowed from future generations of living beingd, humans must preserve, respect, restore and share it in a fair maner, even if that entails changing lifestyles and consumption patterns.
	Long term: 1 to 2 generatio ns (20-50 years)	Macro- scale: planet Earth	People, Planet, Prosperity	Balancing trade- offs and synergies to keep energy, biodiversity and material resources within safe planetary limits.	Believe in the possibility of decoupling and the sustainabili ty of capitalism.	Preserving social well-being and the biophysical health of the Earch system in line with the SDGs.	Humans must ensure justice, fairness and participation in the sustainable stewardship of the Earth, even if that entails redistributing and changing consumption patterns.





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## **Circular Society**

CE vs. CS

Circularity vision	Temporal scale	Spatial scale	Sustainability factors included	Perspective on the resource nexus	Views on capitalism and decoupling	Main goal/objective	Narrative
Circular Economy	Long term: one generation (19-25 years)	Macro- scale: planet Earth	Planet, Prosperity	Balancing trade- offs and synergies to keep energy, biodiversity and material resources within safe planetary limits.	Believe in the possibility of decoupling and the sustainability of capitalism.	Maintaining the biophysical health of the Earth system.	Reducing humanity's overall ecological footprint and balancing resource limits and constraints is key to ensure the stability of the biosphere and long-term economic prosperity.
	Mid-term: 1 to 2 governmen t planning cycles (5- 10 years)	Meso- scale (country, region, industria I park, city)	Planet, Prosperity	Optimizing and securing material, natural and energy resources, especially for critical raw materials.	Believe in the possibility of decoupling and the sustainability of capitalism.	Securing and preserving critical resources and materials.	Strategically maximising scoefficiency and balancing resource use is necessary to maintain resource security and ensure geopolitical stability.
	Short-term: single product life-cycle(1 to 2 years)	Micro- scale (single product, service, or firm)	Planet, Prosperity	Optimizing material and energy resource flows in product design.	Believe in the possibility of decoupling and the sustainability of capitalism.	Capturing oppostunities to lower both environmental impacts and economic costs.	Ensuring optimium resource efficiency through eco-innovation leads to win-win solutions that reduce ecological harm and increase economic value.



## **Circular Society** CE vs. CS - Typology

#### Holistic

#### **Segmented**

# Optimist

#### **Reformist Circular Society**

- · Assumptions: reformed form of capitalism is compatible with sustainability and socio-techincal innovations can enable eco-economic decoupling to prevent ecological collapse.
- Goal: economic prosperity and human well-being within the biophysical boundaries of the earth.
- Means: technological breakthroughs, social innovations and new business models that improve ecological health, resource security, and material prosperity for all.

#### **Techcentric Circular Economy**

- Assumptions: capitalism is compatible with sustainability and technological innovation can enable eco-economic decoupling to prevent ecological collapse.
- · Goal: sustainable human progress and prosperity without negative environmental
- Means: economic innovations, new business models and unprecedented breakthroughs in CE technologies for the closing of resource loops with economic value creation.

Sceptical

#### **Transformational Circular Society**

- Assumptions: capitalism is incompatible with sustainability and socio-technical innovation cannot bring absolute eco-economic decoupling to prevent ecological
- Goal: a world of conviviality and frugal abundance for all, while fairly distributing the biophysical resources of the earth.
- Means: complete reconfiguration of the current socio-political system and a shift away from productivist and anthropocentric worldviews to drastically reduce humanity's ecological footprint and ensure that everyone can live meaningfully, and in harmony with the earth.

#### **Fortress Circular Economy**

- Assumptions: there is not alternative to capitalism and socio-technical innovation cannot bring absolute eco-economic decoupling to prevent ecological collapse.
- Goal: maintain geostrategic resource security and earth system stability in global conditions where widespread resource scarcity and human overpopulation cannot provide for all.
- Means: innovative technologies and business models combined with rationalized resource use, imposed frugality and strict migration and population controls.

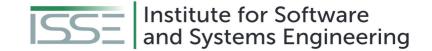
## **CONCLUSION**





## **Conclusion**

- Circular Economy (CE):
  - Maintain natural resources and minimize the discharge of substances that are harmful to health and nature → Increase/maximize utilization of resources, e.g., Performance Economy
  - Ecological modernization of the economy to increase resource efficiency, e.g., by technical innovation and digital solutions



## **Conclusion**

- Circular Economy (CE):
  - Maintain natural resources and minimize the discharge of substances that are harmful to health and nature → Increase/maximize utilization of resources, e.g., Performance Economy
  - Ecological modernization of the economy to increase resource efficiency, e.g., by technical innovation and digital solutions
- Circular Society (CS):
  - Not just "CE + social" instead socio-political transformation and reorganization
  - Replace intransparent and inequity-based value chains of the LE with democratic, transparent and cooperatively organized value chains
  - Democratization of value creation processes and strategies for the activation and emancipation of different stakeholder groups

## **EXERCISE E08**





# **Exercise E08 Circular Economy vs. Circular Society**

**Task:** In the lecture, we presented a typology of the circular economy vs. circular society discourse (CE vs. CS – Typology). Which of the four categories (*Reformist Circular Society, Transformational Circular Society, Techcentric Circular Economy, Fortress Circular Economy*) do you prefer and/or deem to be more likely and why?

Explain your choice.

Submit your submission according to the instructions in the <u>exercise sheet</u>.





## **Additional Resources**

- Circular Societies (German) <u>Link</u>
- David Graeber. Debt: The First 5000 Years (2011).
- David Graeber. On the Phenomenon of Bullshit Jobs Essay (2013) <u>Link</u>.
- David Graeber. Bullshit Jobs Book (2018).





## **Questions?**