

Abstract for Special Session:

Exploring Transformation to a Radical Alternative Gesellschaft: Economy, Ecology, Ethics

This paper is part of the special session called: "Exploring Transformation to a Radical Alternative Gesellschaft: Economy, Ethics, Ecology" (RAGE). All papers in this session will be 10 minutes and presented in the first hour of the session. They are split between introductory and topic based presentations. Presentations are meant to guide the discussion of the following five questions in breakout groups that will take place in the second hour of the special session.

1. Drivers: What is driving the current system?
2. Objectives: What needs to change?
3. Barriers: What are the barriers to transforming the current system to a more social ecological economy?
4. Means: How can change be achieved?
5. Actors Role: Who needs to take action and what action should they take?

The overall aim is to explore whether the degrowth community can form a synthesis for a radical alternative world view and how to achieve this.

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Components of the energy system for a degrowth transformation

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Energy as the basis for daily activities on an individual level and for economic activities on a societal level gives fundamental importance to our lives. As already widely recognized, the ongoing (over-)use of non-renewable energy sources is a major threat to the climate on earth. The hope of energy efficiency turned out that efficiency improvements are not far-reaching enough to reduce energy and material use in absolute terms. The second hope, renewable energy sources, are unable to fulfil current energy demand and although the worldwide share is about 3% their use, especially of biomass, causes severe ecological and social problems such as the ongoing *food versus fuel* debate shows. Efficiency improvements in energy consumption and the use of renewable energy sources are only two components of an energy system that has to undergo a radical transformation towards sustainable levels.

Changing a whole system is more than just changing some of its elements. As the purpose of current economic system is to grow it drives also the need for increasing energy use. Hedonistic lifestyles combined with consumerism enforce resource consuming activities to a large extent which would not have been possible if the availability of energy would have been limited by ecological or even financial constraints. Energy is still taken for granted which can be considered as one of the main barriers of change. In many research studies it could be shown that energy is inevitably connected to economic growth. This poses one of the reasons why within our current economic system there is only an attempt to reduce ecological impacts of energy use as long as business interests can be fulfilled. Without the need of a growing economy also the need for energy consumption could be reduced.

Components that have to be considered for a successful change of the energy system include energy technologies, policy framework, behavioural changes, changes of institutional settings, and system dynamics. Critical issues in the field of energy technologies may cover governing large infrastructure systems for energy supply when using renewable energy

sources or the self-organisation of energy supply by enforcing the self-construction of energy technologies. One of the clues to less environmental damage is seen in less production and consumption to decrease the level of energy demand. Further direction goes into more community based living where sharing of goods and services is a fundamental objective.

Changing a whole system is a challenge for a whole society. As every single person has its responsibility in its role as consumer, worker, owner of goods, citizen, and many more it is inevitable to raise awareness on the potential power that this imposes. Institutional frameworks such as political systems or legal frameworks promote and lead certain political goals to large extent which gives them a powerful position in every transformative process. What sometimes is overlooked is that transforming a system or a whole society takes long periods of time. Any abrupt change will cause social losers, therefore a smooth transformation path is needed.

The aim of the contribution is to give an input about the challenges of the change of the energy system. Topics included address energy consumption, energy production, energy users, energy policy, institutional settings and political frameworks. The contribution wants to draw attention on system dynamics and their relation to other areas of interest for a degrowth transformation to gain a more holistic picture of what we really have to tackle with.