

2S1 What kind of circular society

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A circular society has many potential benefits and is one of the most promising pathways to a more sustainable economy. But pitfalls exist as well. A careful examination of such pitfalls is required in order to take the right decisions. Without doing so, circularity may not always lead to more sustainable outcomes. In this session we aim to learn from past mistakes, so that we can gear towards sustainable forms of circularity.

Issues to be discussed may include:

- Sometimes a waste stream turns into a primary resource, once a certain production scale is achieved. Wood pallets are an example: they were once no more than the by-product of forestry, but now that they are needed to keep powerplants running, they have become the primary purpose of production. The same can be said about 1st generation biofuels: it was initially meant to be grown on 'waste land', but soon started to occupy high quality soils. We invite contributions that elaborate these and other examples of instances where the waste- or by-product became the primary product, and what that meant for sustainability.

- In some case the process of recycling waste consumes more resources than what is saved by it, especially in combination with the mechanisms that people start using more of it (the rebound effect). For example paper coffee-cups: although they are recycled, the recycling process is water- and energy consuming, a harmful product such as PFAS is used, and people no longer bother to re-use their cups since the disposed cups will be recycled anyhow. We invite contributions that elaborate these and other examples of instances where the recycling itself is very resource-consuming, and what that means for sustainability.

- It is sometimes argued that technological solutions prevent more structural solutions such as a change in consumption patterns. This is the debate between 'the wizard and the prophet'. Where does circularity stand in this debate? Could it be that circularity is a form of technological solution that is – in the end – not the best way towards a more sustainable society? We invite reflections on this question supported by examples.

Keywords: sustainability, competition, rebound effect, prioritisation, perverse triggers, biofuels, renewable energy.