

## 3S1 Modeling the circular economy with sectoral and macro-economic models

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To what extent is a circular economy consistent with economy growth? We need to rethink economics that ensures prosperity for all within the boundaries of our planet. Economic development is measured by the narrow metric of economic growth (GDP) and new metrics of welfare, happiness or wellbeing are needed. A circular economy could decouple economic growth from environmental degradation. However, can an inclusive and sustainable economy be achieved with continuous economic growth or do we need degrowth? This requires a new economic framework and within this framework the new circular bioasks for drastic changes in our economy. The transition from a linear (i.e., produce, use, discard) towards a circular economy has to be mirrored by a transition in modelling, including the modelling of new and emerging biobased sectors, address circularity, measure sustainability and welfare\wellbeing. From a macro-economic perspective avenues to explore might be opening the black box of consumer preferences, rebalancing work and leisure, shifts from private to public investment, private to public ownership, short-term to long-term investment focus based also on non-economic criteria, and a focus from labour-saving tech change to tech change directed. In this session we invite paper on the specification and measurement of new economic growth or wellbeing indicators. Furthermore we invite theoretical economic growth papers dealing with a circular economy and economic growth or degrowth.