

# BioEconomy Options and Sustainability

Maximilian Kardung and Justus Wesseler, Wageningen University, The Netherlands

---

## **Abstract**

The development of the bioeconomy is driven by innovation for alternative uses of biomass. The sustainability of using different forms of conversion is widely debated. We propose to use the genuine investment framework for assessing the sustainability of the bioeconomy. We first introduce the concept based on the seminal paper by Arrow et al (2012) and advance their model by including uncertainty and irreversibility explicitly and link the model with the EU bioeconomy strategy and discuss the implications for measuring and monitoring the development of the EU Bioeconomy.

Keywords: EU, bioeconomy, irreversibility, uncertainty, sustainability

---