

Track 1 - The bioresource transition in regions

Title

Governing towards a bioeconomy: Transition from what to where?
The case of marine biomass in Norway

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3 keywords

Bioeconomy, governance, transition

Text abstract (max. 300 words)

The transition towards a biobased economy has gained attention in policy strategies and academic literature during recent years, not least within the EU. The industrial potential is assumed to be enormous. This paper will address governance challenges associated with a transition towards bioeconomy in Norway.

Being aware of the biomass availability and possible, non-sustainable side-effects, it is crucial to develop resource-efficient and integrated value chains. This could be centred around a 'biorefinery concept', where refining processes separate complex materials into different valuable components, which then undergo further processing. This can include e.g. bioenergy for stationary purposes (heat and power) and transport (biofuels), as well as chemical and nutritional products. Cultivated seaweed is a large un-exploited resource, but the interest is increasing in many countries – not least given the perspective of developing 3rd generation biofuels. Seaweeds are considered to have less environmental side-effects than land-based biomass.

Norway has large amounts of marine biomass and an important marine-based industry. Hence, the empirical focus of the paper is the case of a seaweed-based value-chain, with a biorefinery concept, within a coastal region. This stands out as a new and innovative way of utilizing marine biomass in Norway. To what extent is the current policy framework prepared for planning, realization and management of this value-chain – including the challenges of sustainable development? What policy measures stand out as the most crucial ones given the specific regional context? What kind of cooperative efforts are needed, and to what extent are regional authorities willing to provide incentives?

Analytically the paper will employ theoretical perspectives on governance and policy analysis – as well as drawing on research literature on innovation systems and socio-technical transitions within a multi-level perspective. The empirical data employed are part of an ongoing multi-disciplinary research project.