



IEA Bioenergy

Technology Collaboration Programme



How can policies support the deployment of sustainable bioenergy towards its most effective uses

Developing a sustainable bioeconomy

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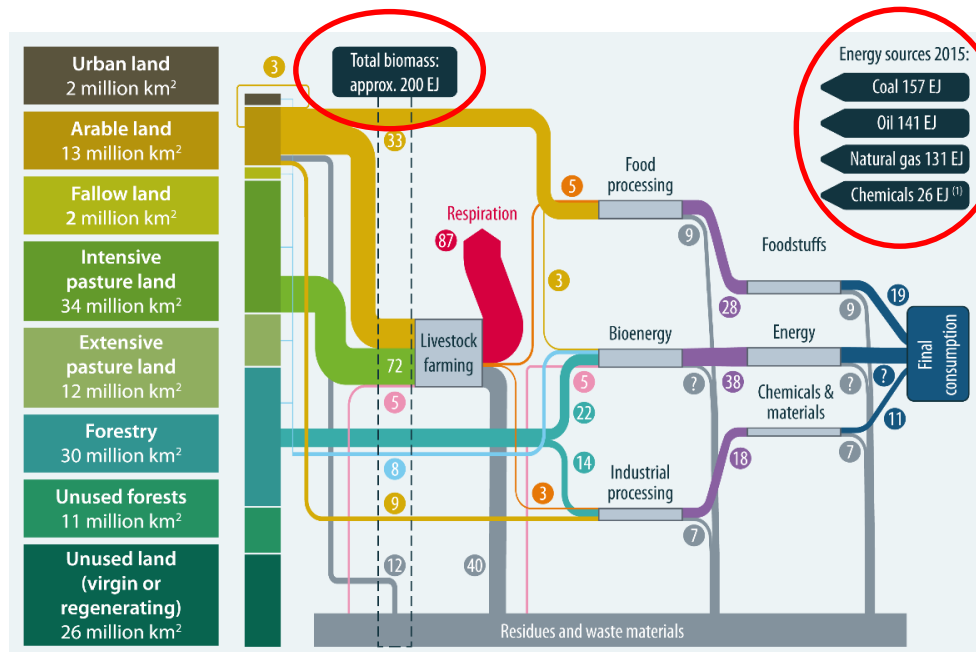
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A sustainable bioeconomy



- Nearly 60 countries around the world are pursuing bioeconomy-related policies.
- These strategies have in common that they combine regulatory, promotional, institutional and communication policy elements with varying degrees of intensity.
- Different understandings of the bioeconomy given

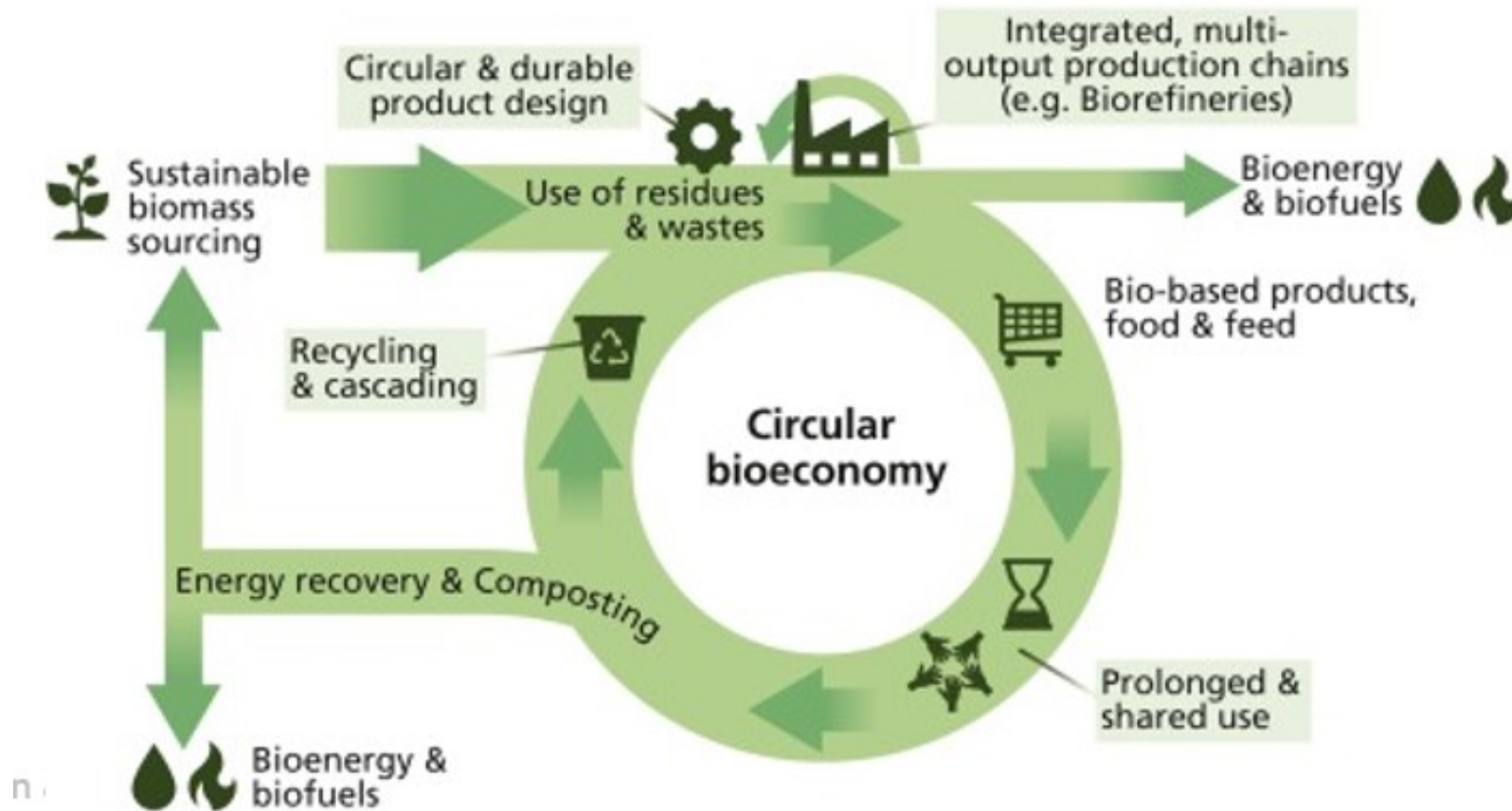


Simple calculation shows that a sustainable bioeconomy needs

- (1) other renewable sources, such as wind and solar
- (2) smart use of the biomass

Adapted from Thrän et al. (2020): The bioeconomy system

The concept of a circular bioeconomy



- Proposed in many bioeconomy strategies
- Implementation is necessary in many policy fields (from agriculture to waste policy)
- Realisation in regional clusters building on their specific strengths
- Bioenergy as (by)product is often an enabler

Circular bioeconomy
Source: [Stegmann et al. 2020]

Deployment of sustainable bioenergy towards its most effective uses

- The demand for biomass will increase in many sectors
- Using biomass in a more circular way can realise „more with the same“
- Bioenergy production from by-products and waste can accelerate a circular bioeconomy
- Application of bioenergy, as an carbon containing energy carrier, should focus on gaps - where wind, solar, and other renewables are not available

Thank you

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