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Forests between bio- and circular economy: *connecting sustainable management and use*

Helga Pülzl

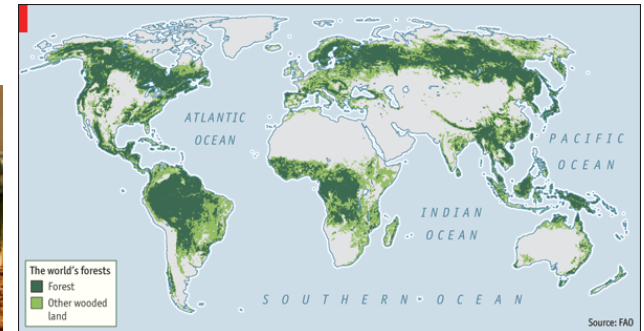
7th European Environmental Evaluators Network Forum: The impact of evaluating
environment and climate policies
(Brussels, 22-11-2018)

Bioeconomy – how does it mean (*for forest policy*)?



increasingly popular in the last decade => meaning differs

EU: based on the use of biomass resources



OECD/US: converting raw material into value added products/ biotechnology

Forest sector expected to provide substantial contribution to a so-called „bioeconomy“



Bioeconomy strategies exist, but do not prioritize same aspects



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Countries + EU => **no one general definition** for bioeconomy

- **Northern:** secure industry's competitiveness, acknowledge public access rights, valued added generated by nature tourism, hunting and need to care for forest biodiversity.
- **Mediterranean:** forest sector's relevance in relation to wood processing and paper industries + dependence on imported biomass.
- **Western European:** need for increase/ optimisation of bio-resource production & new production modes to protect forest biodiversity.
Role of forest adaptation to climate change and recreation

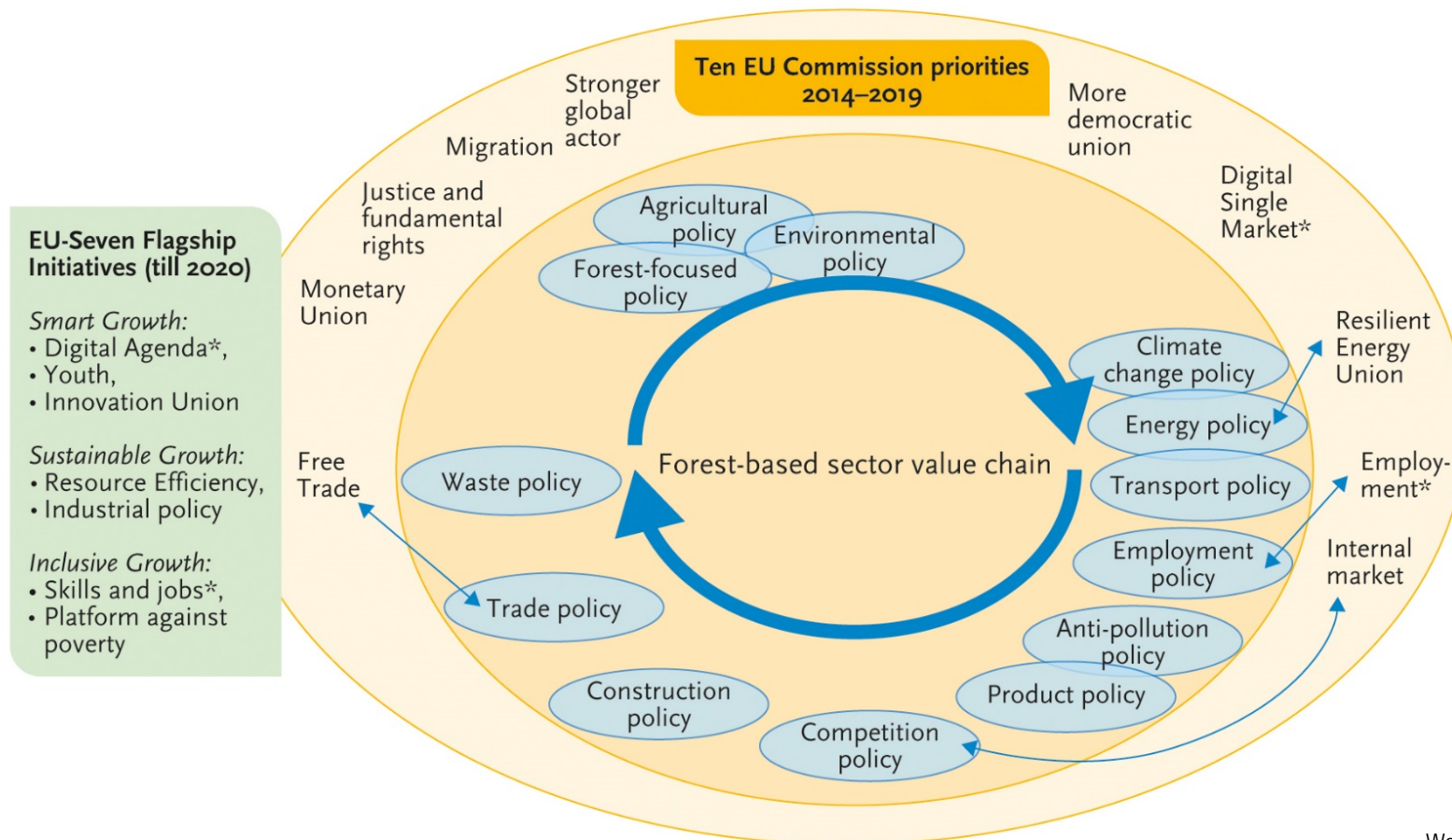
Pülzl et al. 2017,
Kleinschmit et al. 2017

Economic goals are better integrated than environmental and social objectives

(Forest) bioeconomy in a demanding EU policy environment



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Wolfslehner et al. 2016
Aggestam et al. 2017

Bioeconomy & Circular economy



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Bioeconomy strategies differ in their

- understanding
- prioritization of goals
- & how to achieve them Pülzl et al. 2017

Circular economy based on ideas:

- closed loop (*no waste*),
- benefits for environment
- only implicit social gains Geissdoerfer et al. 2017

Forests are more than wood producers...



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Ecosystem products & services bioeconomy potentials

- ⇒ Potential for development of new bioeconomy value chains
- ⇒ Jobs in rural areas
- ⇒ Social sustainability dimension in rural areas



Lambini et al. 2018

Forests are more than wood producers...



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Ecosystem products & services bioeconomy risks

- ⇒ Trade-offs between products and services e.g. biomass for energy vs nature conservation
- ⇒ Dislocation of resource use to other countries/continents
- ⇒ Resource security

Forests in a circular bioeconomy



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- (new) use of forest ecosystem products and services as opportunity /social dimension of sustainability
- sustainable forest *management + resource use* central (in- and outside the Union)

Need for....

- clearer vision of what bioeconomy means for forests
- coherence between bioeconomy strategies and existing legislation (national and EU)



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