

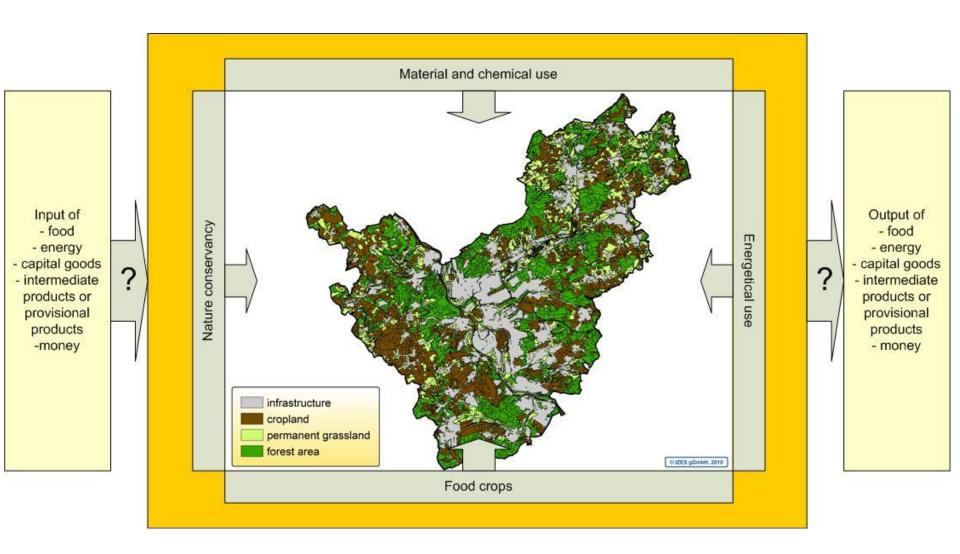
>> Methods for planning wood energy projects – assessing the wood energy potential

Bernhard Wern (IZES gGmbH)

Promotion of Sustainable Wood Energy Value Chains in Development Cooperation, Frankfurt, 02 of March 2016

Wood energy potential – a systemical view





Wood energy potential - stakeholders



Production and Marketing

- Forestry
- Agriculture
- Landscape management / nature protection
- Woody fractions from private, municipal and industrial greenery cuttings

Harvesting and Transport

- Harvest or maintenance measures carried out in own efforts or by service companies
- Provider of chipping and shredding services
- Delivery and conditioning of waste wood
- Transportation by local (forestry and agriculture) contractors or transregional transport sector

Assembly and Distribution (biomassfacility)

- Chipping or shredding (partly sieving) on collecting point/ biomass facility
- Drying
- Storage
- Distribution and transport of user-optimized fuelwood products

Conversion plant

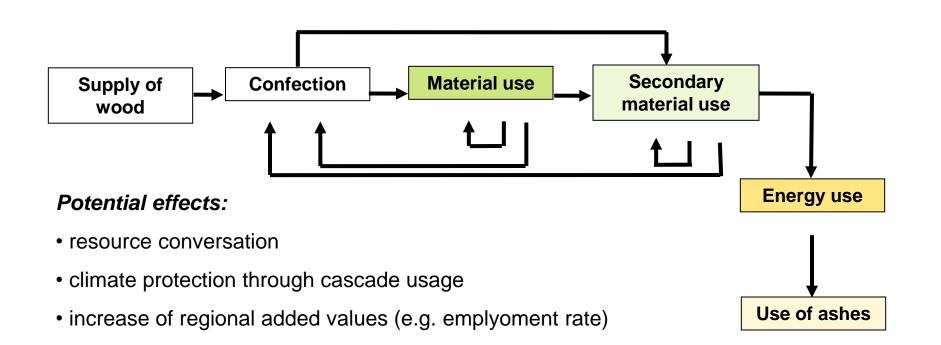
- Planning and construction of conversion plant
- Heat production (or CHP) by plant operator
- Maintenance and residues disposal

Taking into account - wood cascading use



Understanding of wood cascade

Using wood in cascades means: A long-lasting utilisation of wood in the economy. Basis is an ecological assessment and the highest possible added value of the rare material wood (social, ecological and economical).



Taking into account - regional vs international markets



Regional claims "The mayor has to provide firewood for the people and not for the wood panel industry!"

Microeconomical
meaning
Regional supply for
wood energy means no
cash drain for oil and
gas out of the region
"higher regional added
value"



International demands
Higher greenhouse reduction
potential with wood cascade
usage

Makroeconomical meaning concerning employment: 4 – 100 times more jobs are placed in the wood panel industry compared with wood energy systems (EPEA 2009)

Wood energy potential - a strategy approach



Guiding principles

Wood as a fuel exhausts the regional potentials taking into account the competition of use concerning the three forestal functions usage, protection and recreation on the base of efficient biomass using concepts.

Field of actions

- Efficient land / soil use
- Efficient using of the resource wood
- Sustainable extension of the raw material pool

Wood energy potential - a strategy approach



Approaches to Measurements

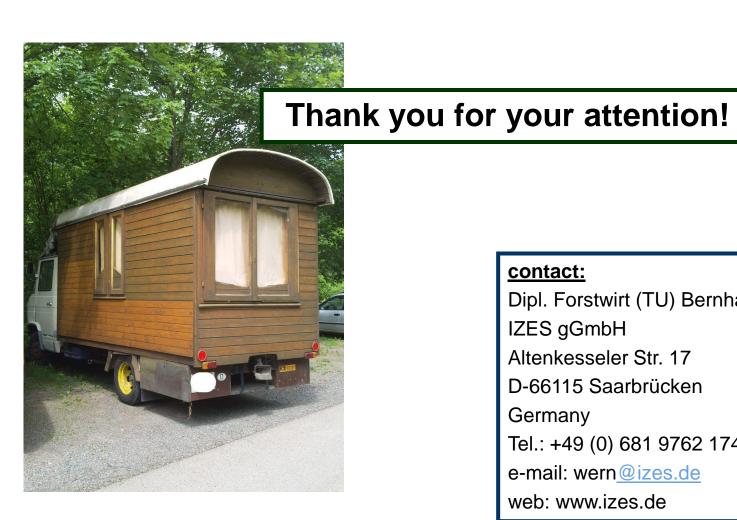
A regional approach is obvious for mobilizing the potentials!

- Definition of regional barriers: Concerning resources, technics, economy, administration, social aquiriements, supply related issues, energy demand related issues
- Stakeholder based analysis to overcome the barriers
- Set up of measures together with stakeholder

National ordinaces are important to frame the regional context (e.g. improvements of separation waste wood)!

In Saarland region: 40 % of the existing wood resources should be mobilized additionally until 2020.





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