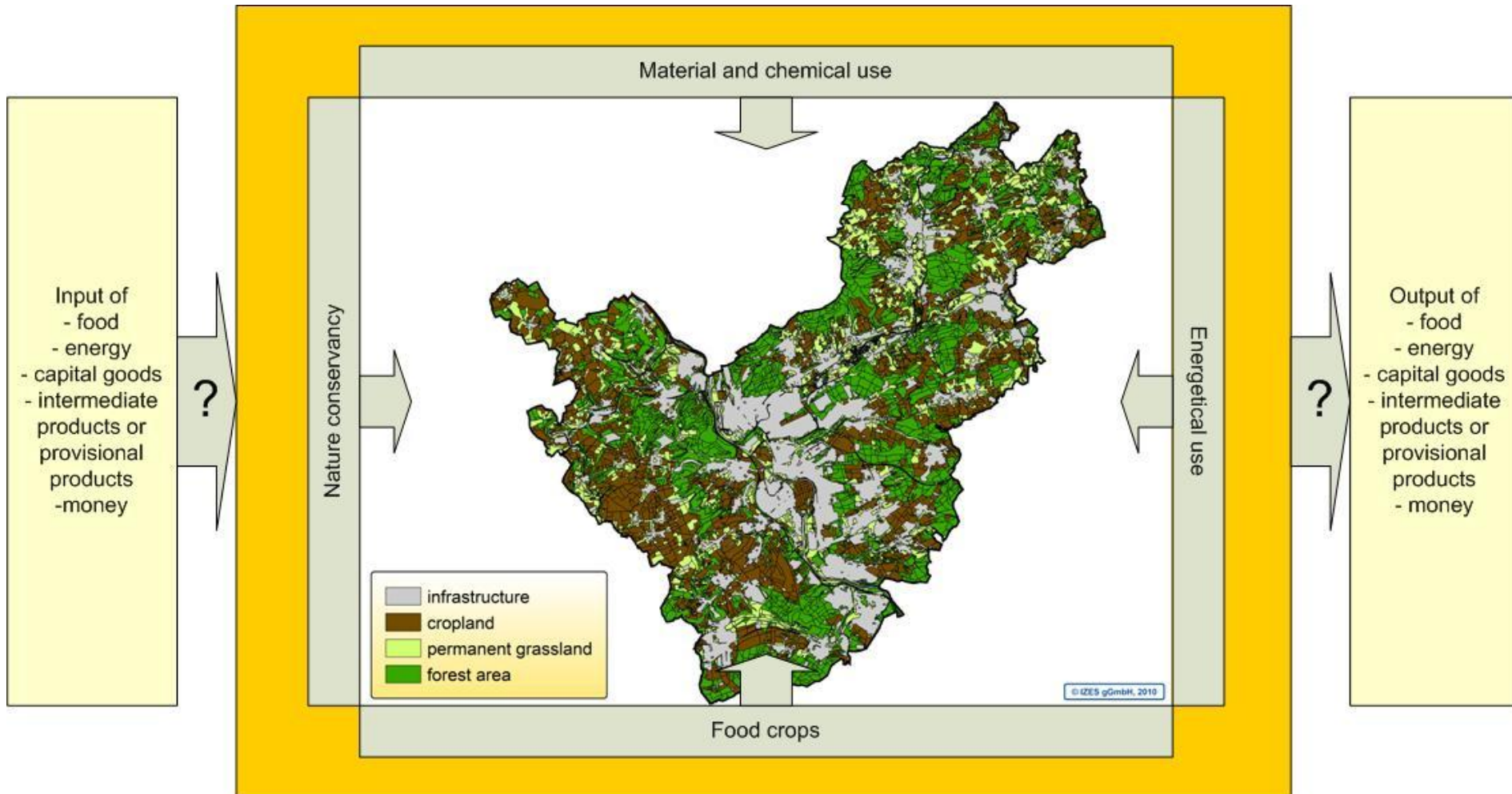


>> ***Methods for planning wood energy projects – assessing the wood energy potential***

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 (biomass-facility)

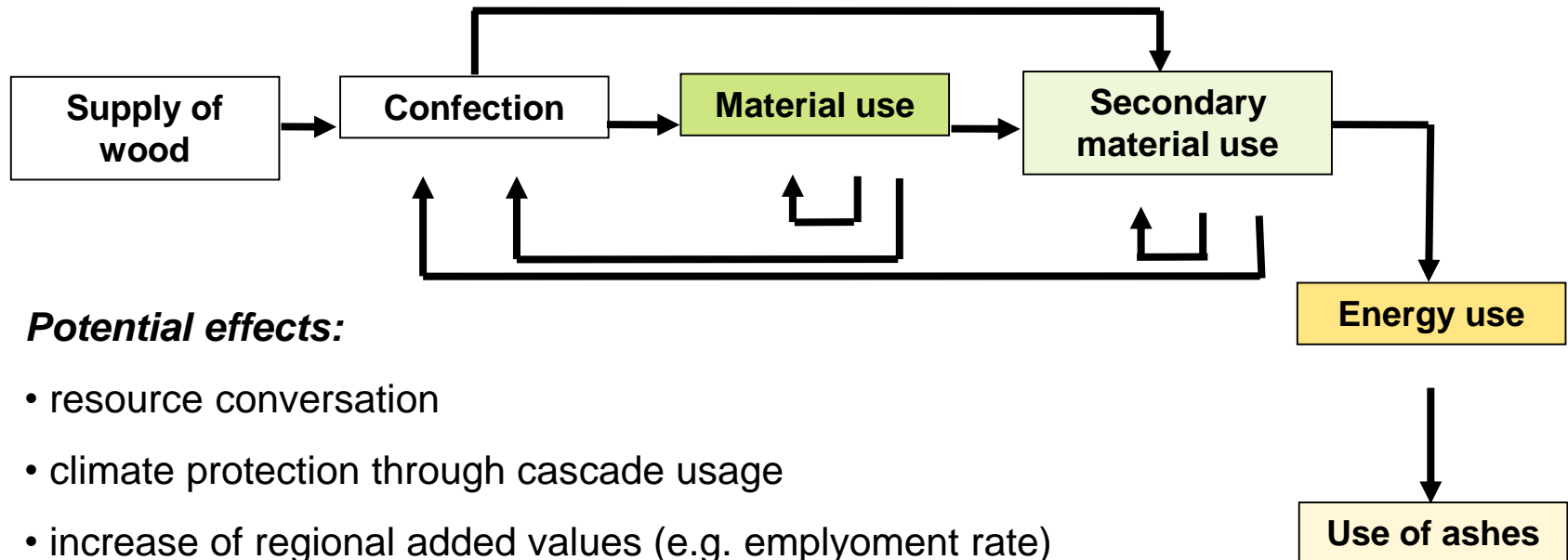
- Chipping or shredding (partly sieving) on collecting point/ biomass facility
- Drying
- Storage
- Distribution and transport of user-optimized fuelwood products

## Conversion plant

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

### **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).*



#### **Potential effects:**

- resource conversation
- climate protection through cascade usage
- increase of regional added values (e.g. employment rate)

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“



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

International demands  
Higher greenhouse reduction  
potential with wood cascade  
usage



## 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

## 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 ordiances 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.



**Thank you for your attention!**

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