



---

## **Climate Mitigation by Biomass**

### **Key Messages of the SRU Special Report**

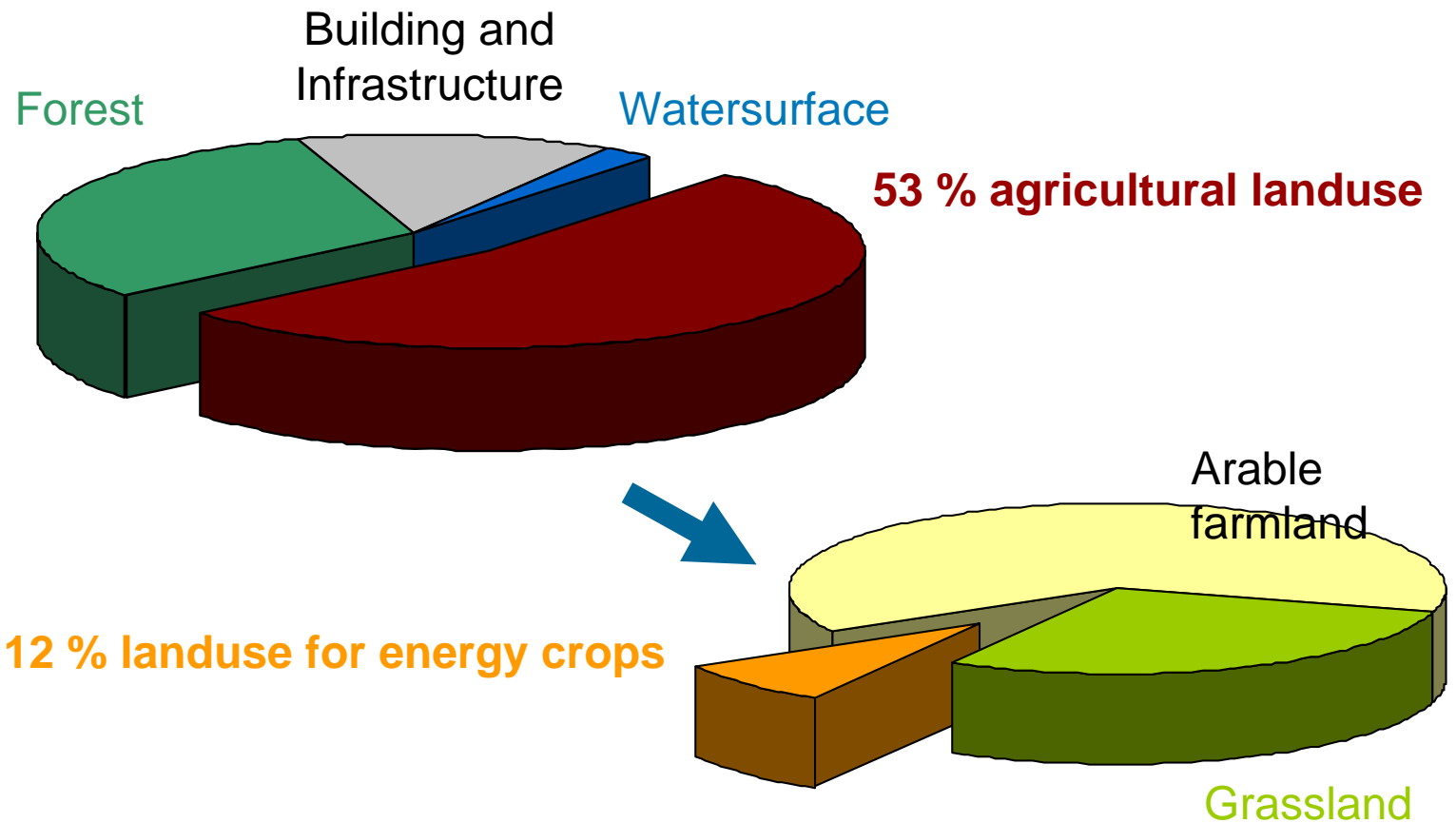
**Evora, 11.October 2007**

Christian Hey

*„biomass is not an infinite resource“*

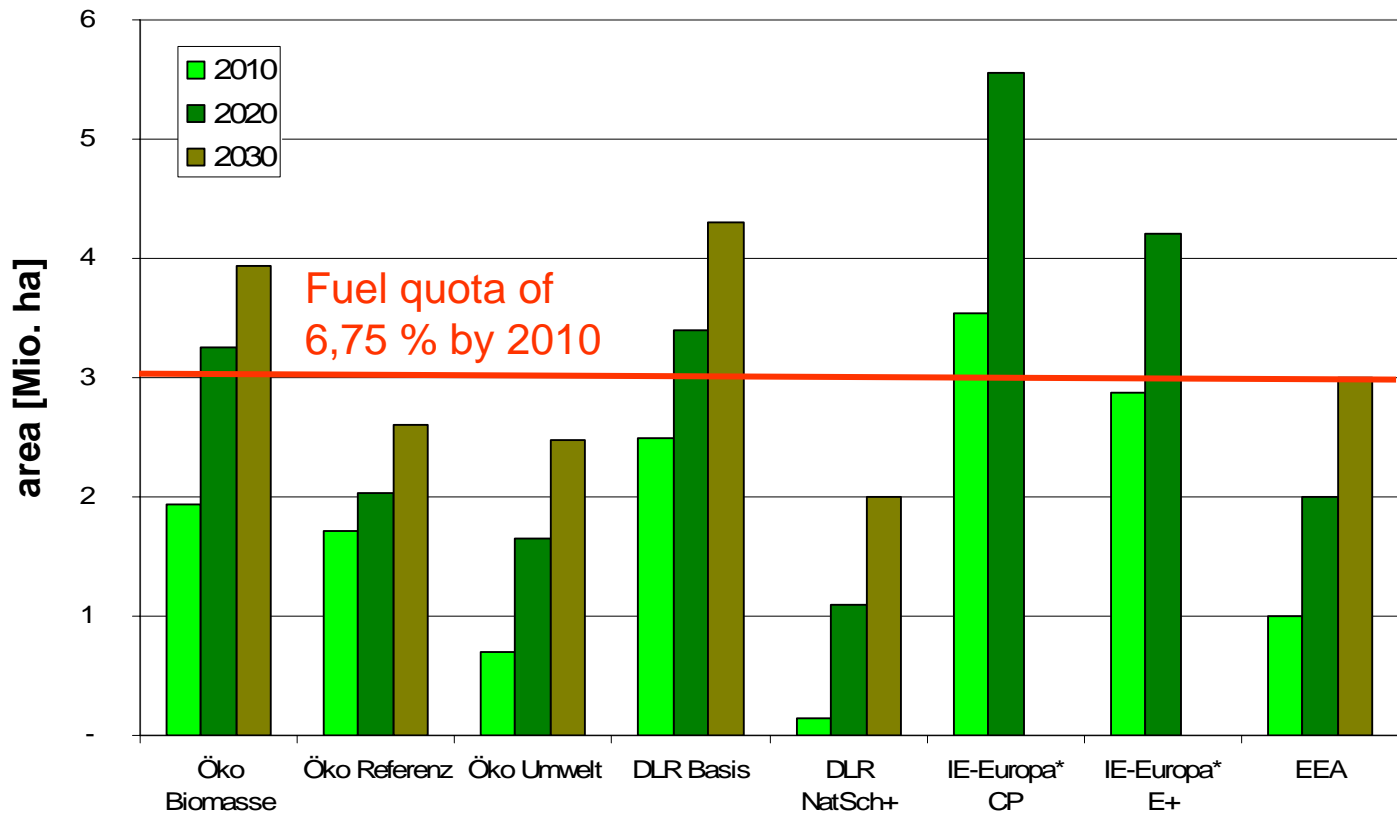
*Limiting Factor for domestic biomass is available land: In Germany only 3-4 m ha are available*

## Landuse in Germany 2005



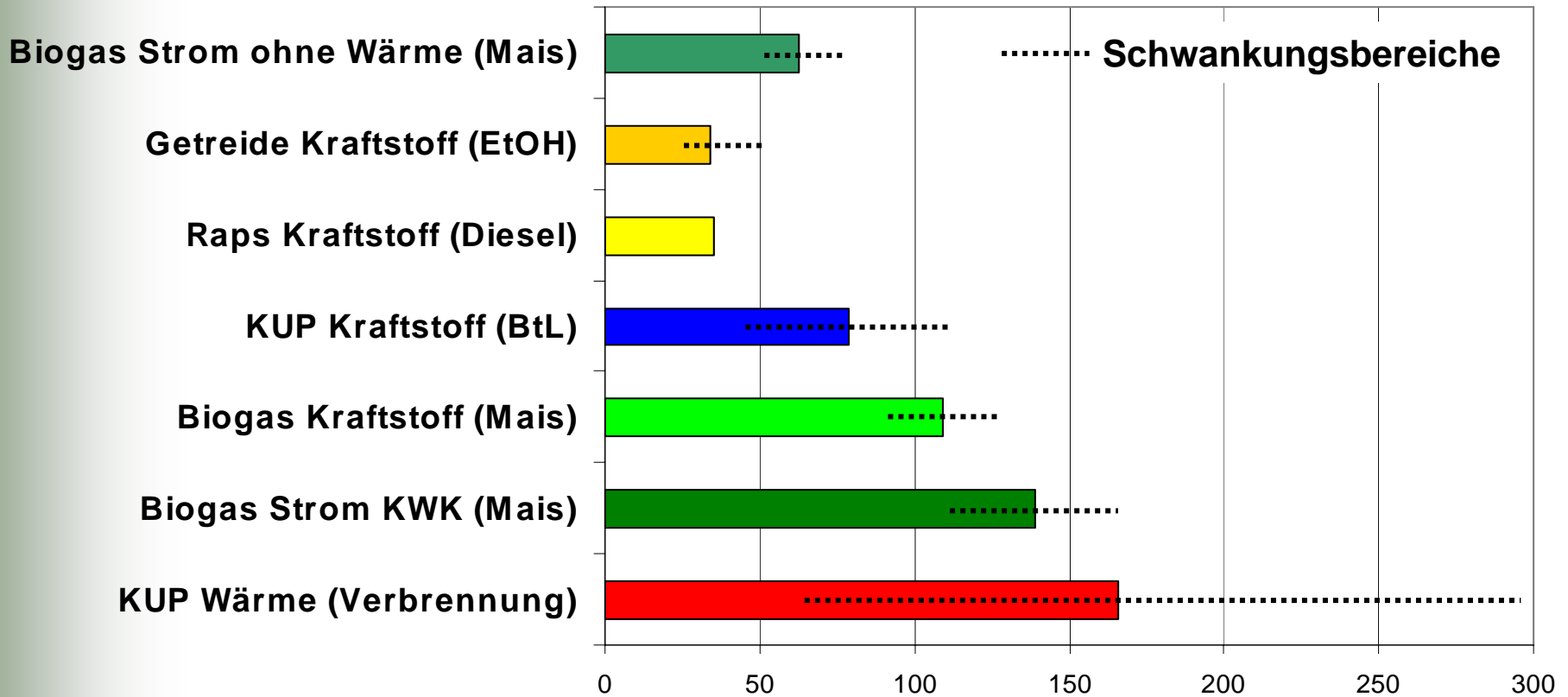
„Ambitious targets induce high imports“  
 No even official targets for biofuels by 2010 may be achievable  
 with domestic biomass

## Land use potential for energy crops



Quelle: FRITSCHKE et al 2004, NITSCH et al. 2004, THRÄN et al. 2005, EEA 2006

## Energy Yields/ha

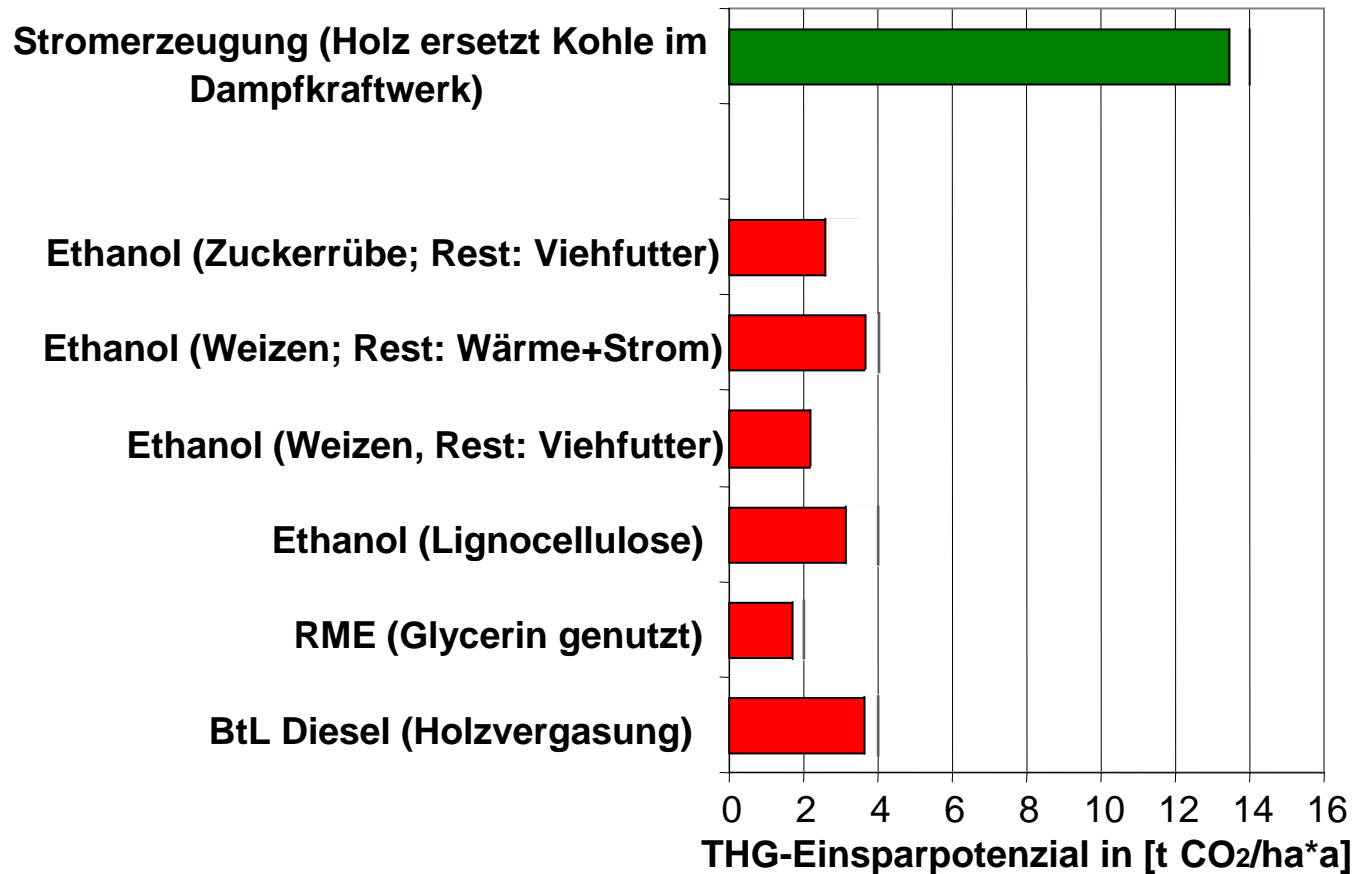


KUP = Kurzumtriebsplantagenholz

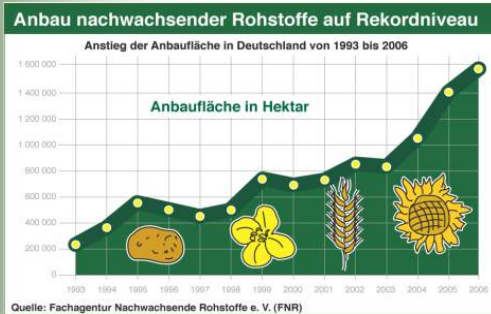
Quelle: verschiedene Studien

*... Even more distinct are the performance differences related to greenhouse gas reduction*

## Potenziale zur Reduktion der Treibhausgasemissionen bei verschiedenen Biokraftstoffen

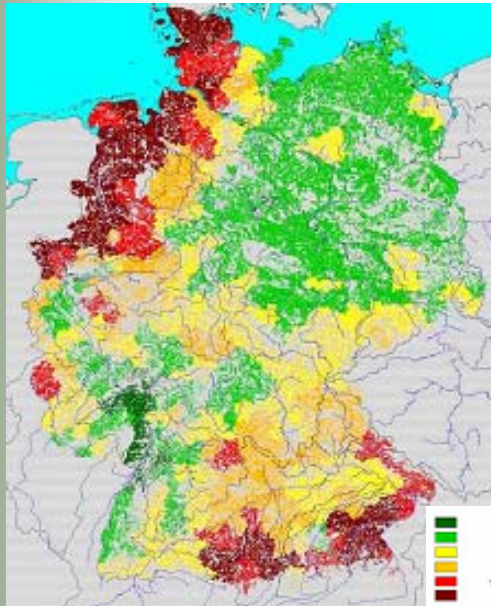


Quelle: Concawe 2004/2006



## Derzeitige Entwicklungen:

- ⇒ Intensified landuse
- ⇒ Increased rapeseed and maize cultures)



## Gefahren:

- ⇒ Increase use of pesticides
- ⇒ N-surplus in soil and water

*.. This applies especially to grassland conversion, which also is a source for greenhouse gases*

⇒ Increased grassland conversion even in natura 2000 habitats



Dauergrünlandumbruch in FFH-Gebieten in der Eifel. Fotos: NABU, Gerd Ostermann

## *Principles of a support scheme*



-Prioritize climate protection over energy security and agriculture support



-Overcome segmented support systems by an integrated biomass strategy



-Maximize biomass contribution to greenhouse gas reduction step by step:

⇒ Transition from technology orientation to emission trading



Aim: Efficient greenhouse gas reduction and maximized mitigation effects by biomass



Strategic Instrument: Reformed and broadened up-stream model of emission trading

*or:*



Longterm certificate price for CO<sub>2</sub> as benchmark for level of support



Charges for methane and N<sub>2</sub>O-emissions from agriculture