

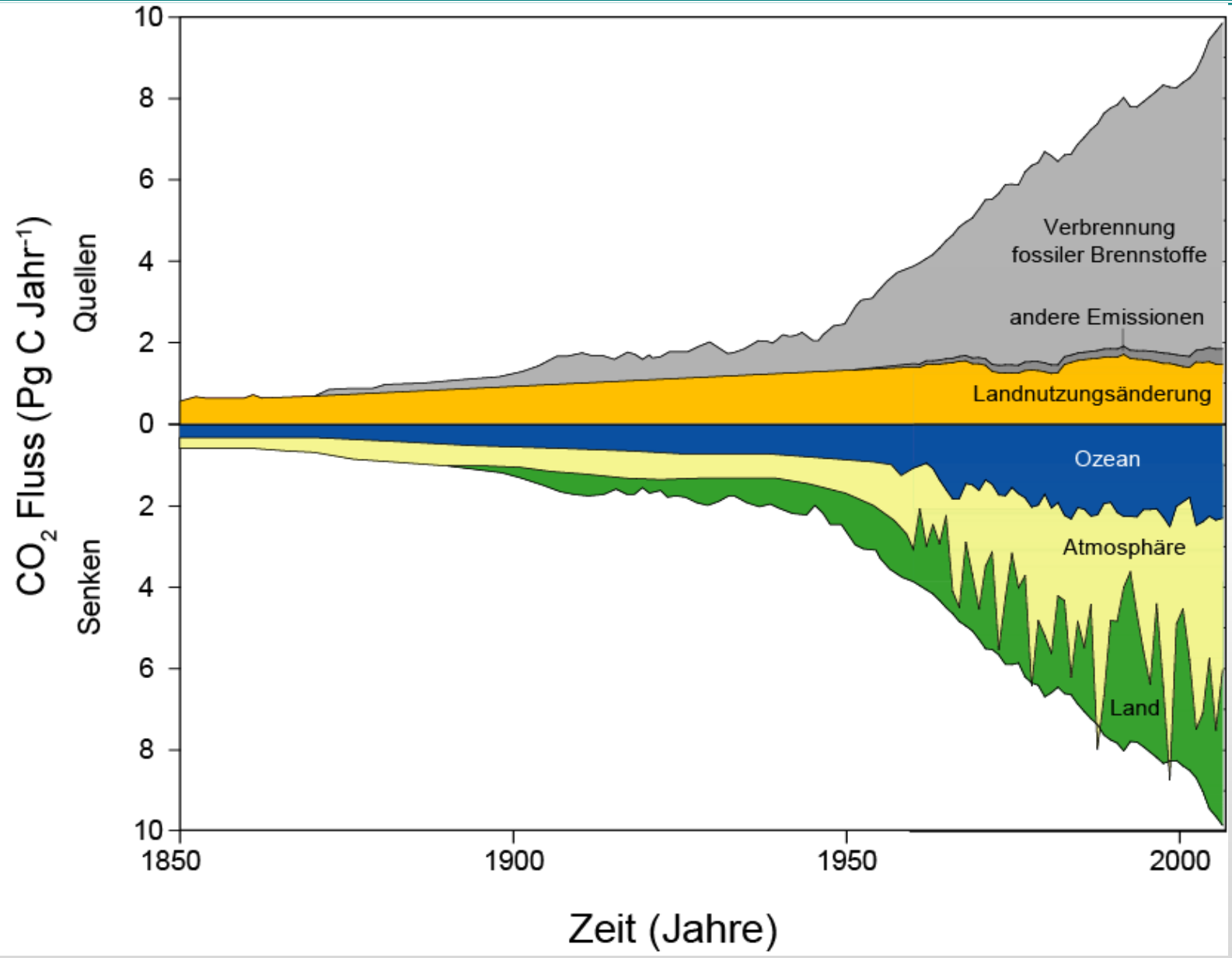
Bioenergie und Umweltschutz auf dem Holzweg?

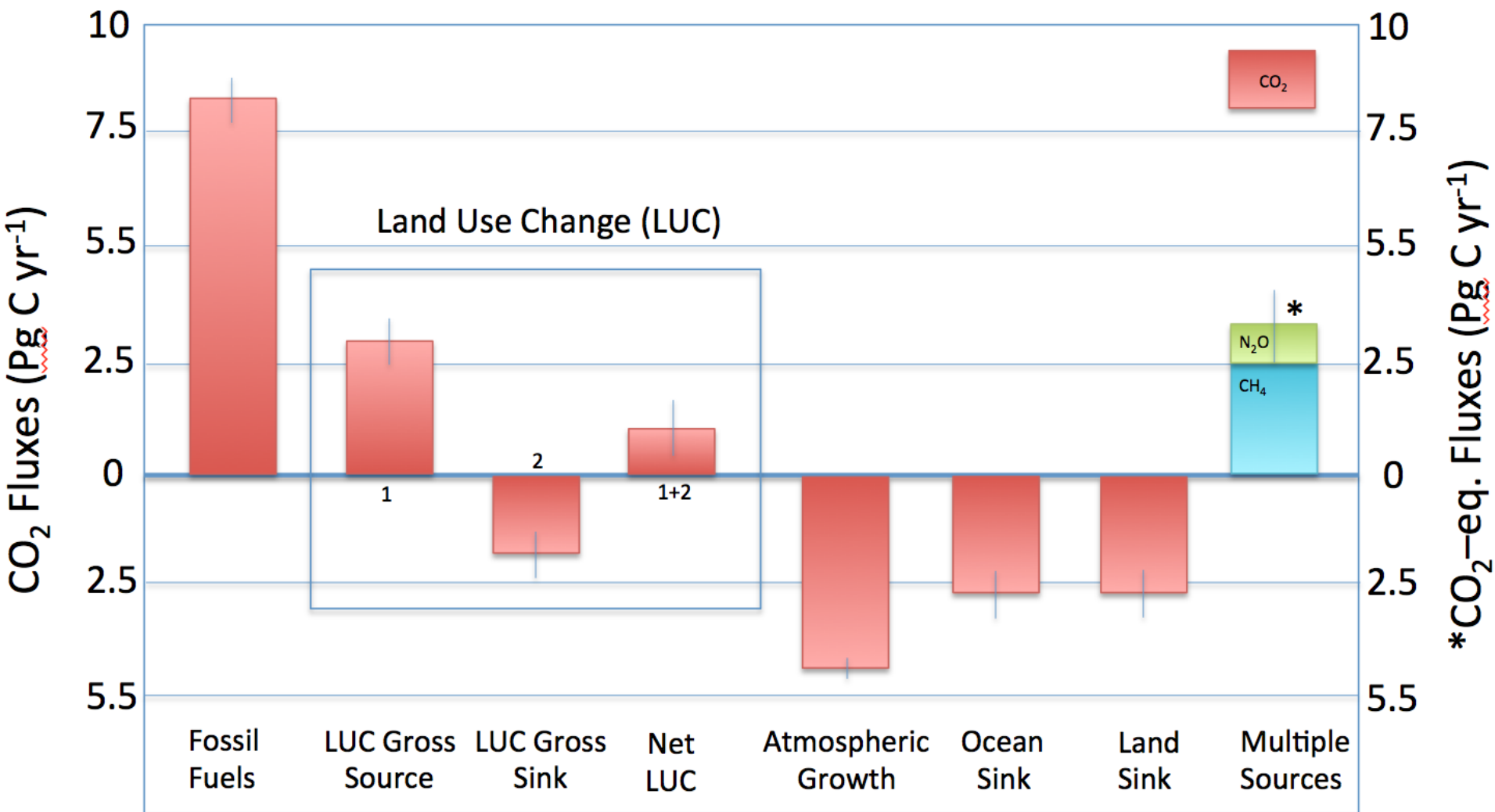
E D Schulze

MPI Biogeochemie

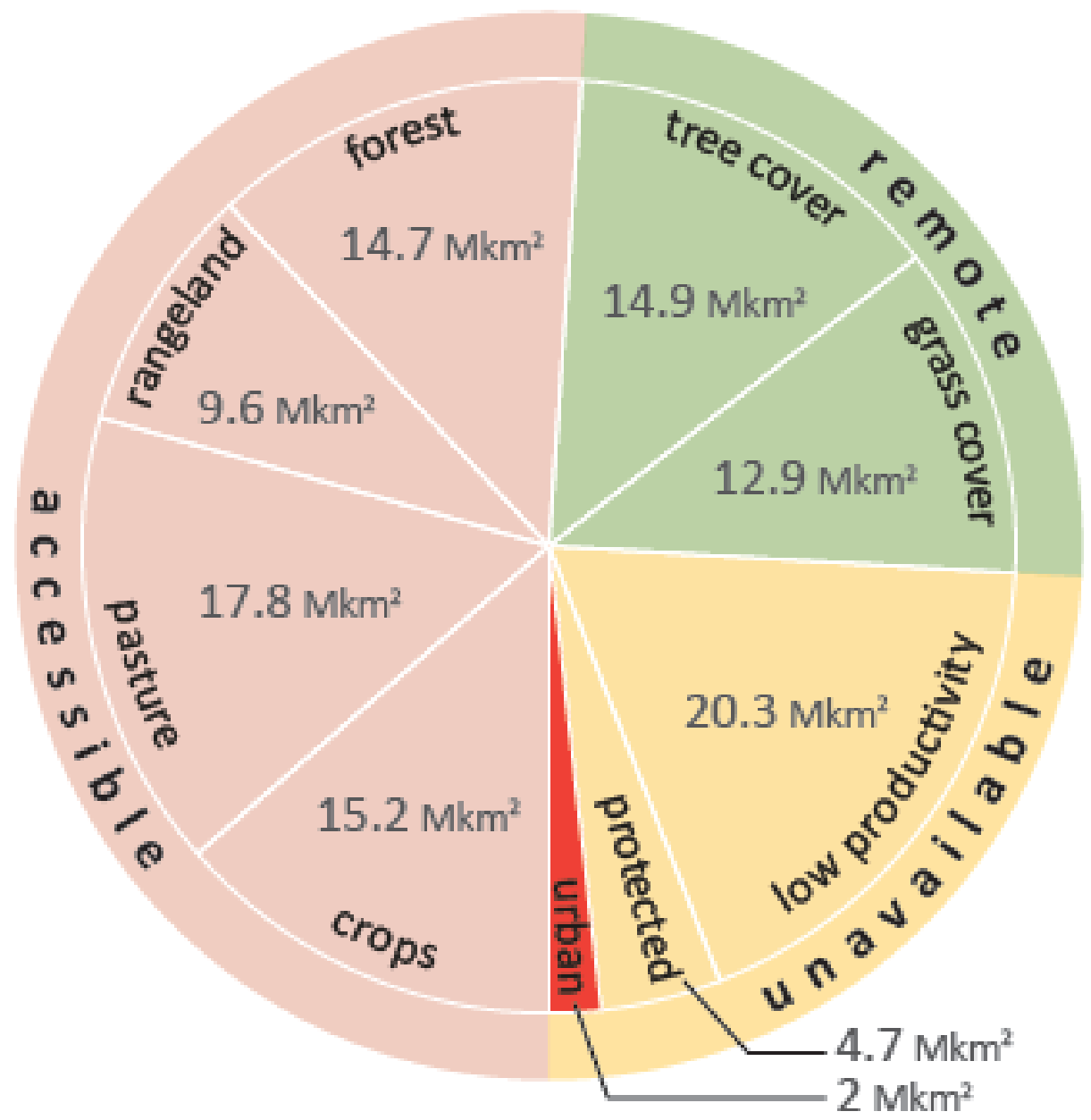
Osnabrück 19. Juni, 2014



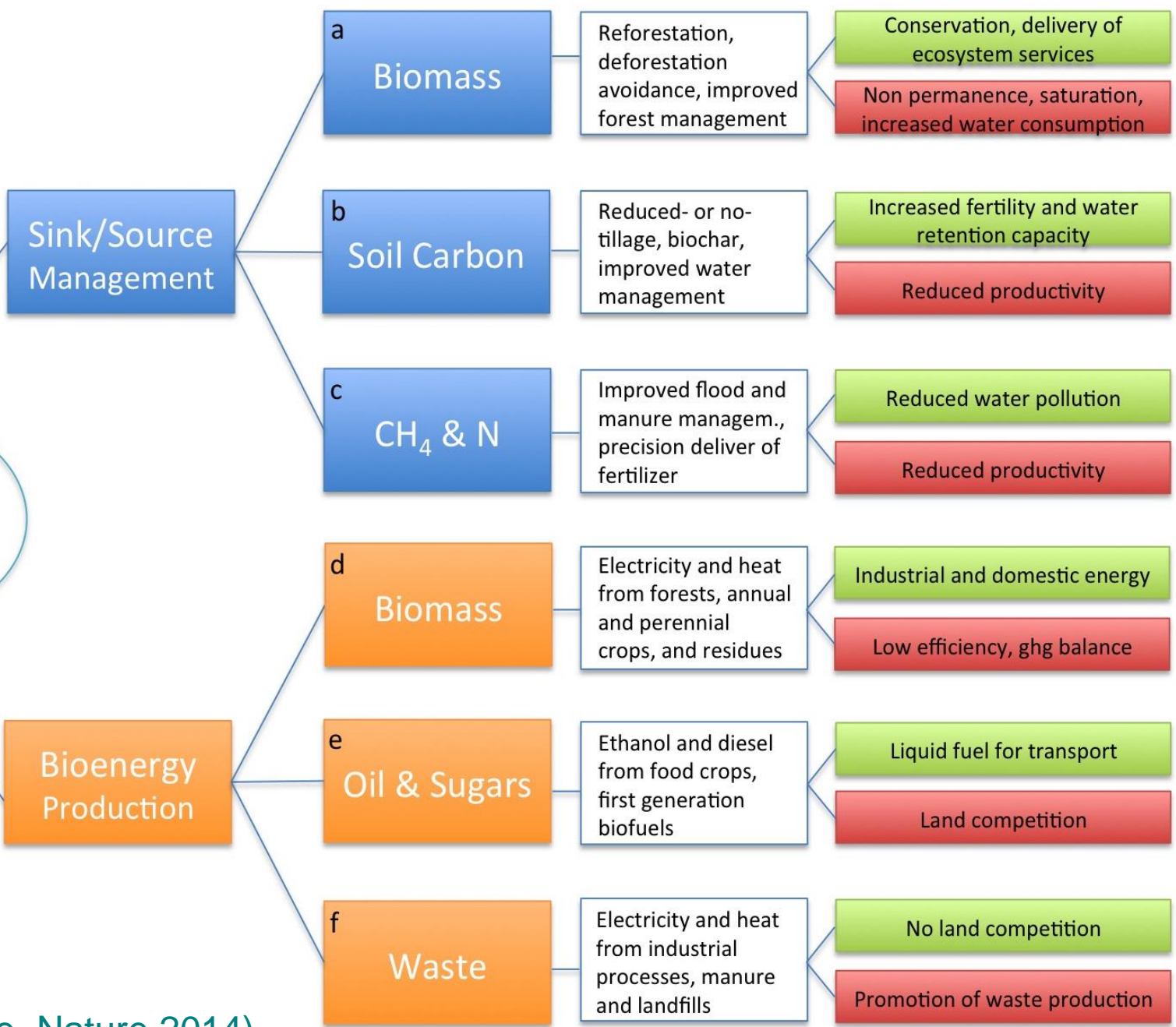


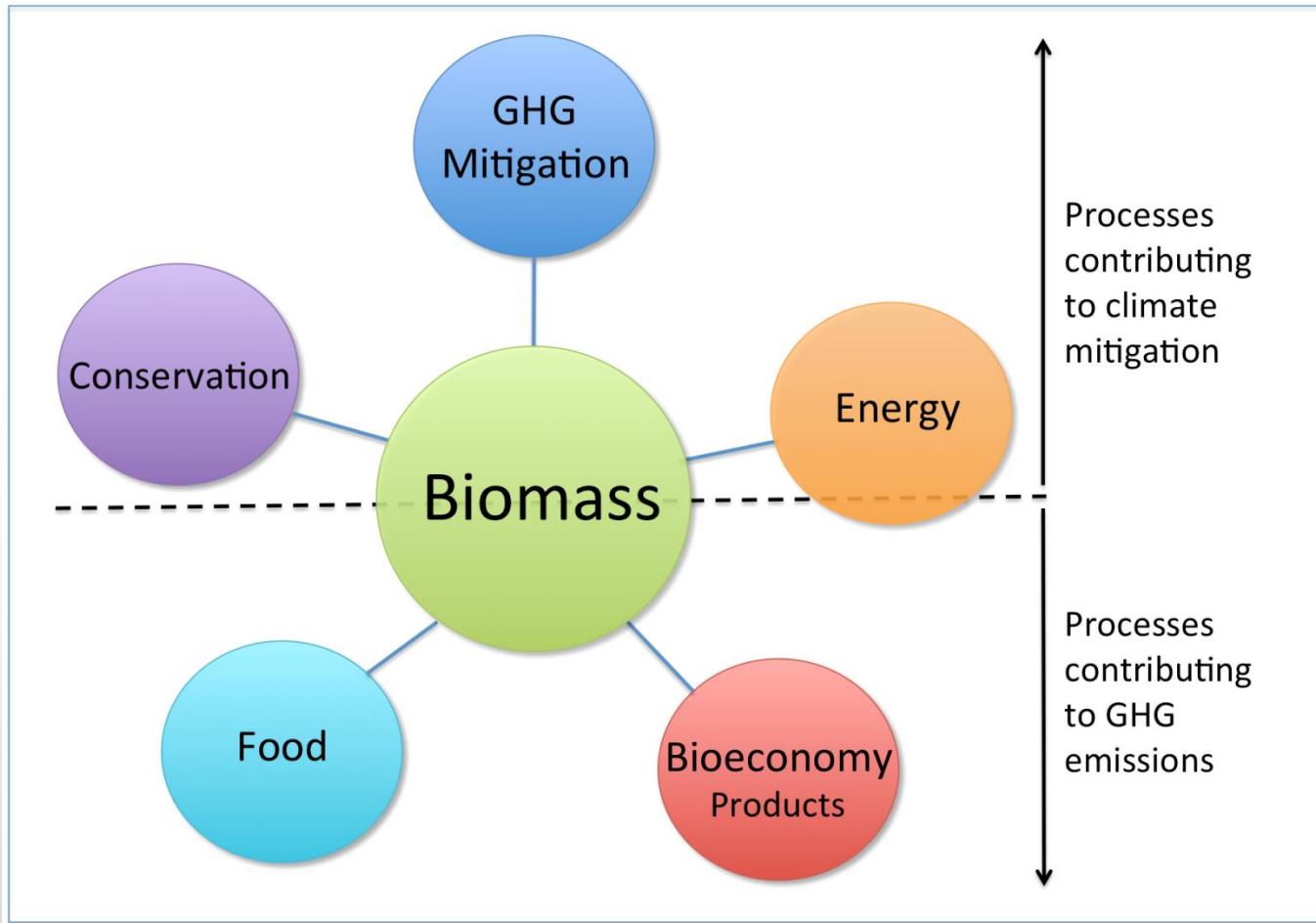


2000-2010 Land Cover



Climate Mitigation





- Die Situation in der Landwirtschaft

Rapsdiesel verfehlt den Sustainability Test der EU: Nature, 9. August 2012



- Agriculture causes
 - 50% of European CH₄,
 - 70% of European N₂O
 - 90% of European NH₃
 - 75% of the Global Warming Potentials of GHGs originates from agriculture

- Biological Emissionen are 30% of the GHG balance

Keine Anrechnung, da die Landwirtschaft der Ernährung dient
(Common Agricultural Practice der EU: CAP)

Accounting of Land use according to Artikel 3.4 (December 2006):

Table 13 EU-15 Member States of elections of activities under Article 3, paragraph 4

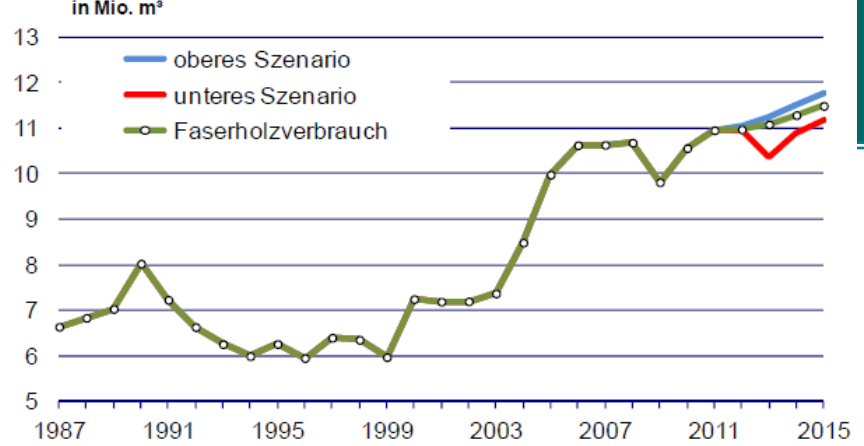
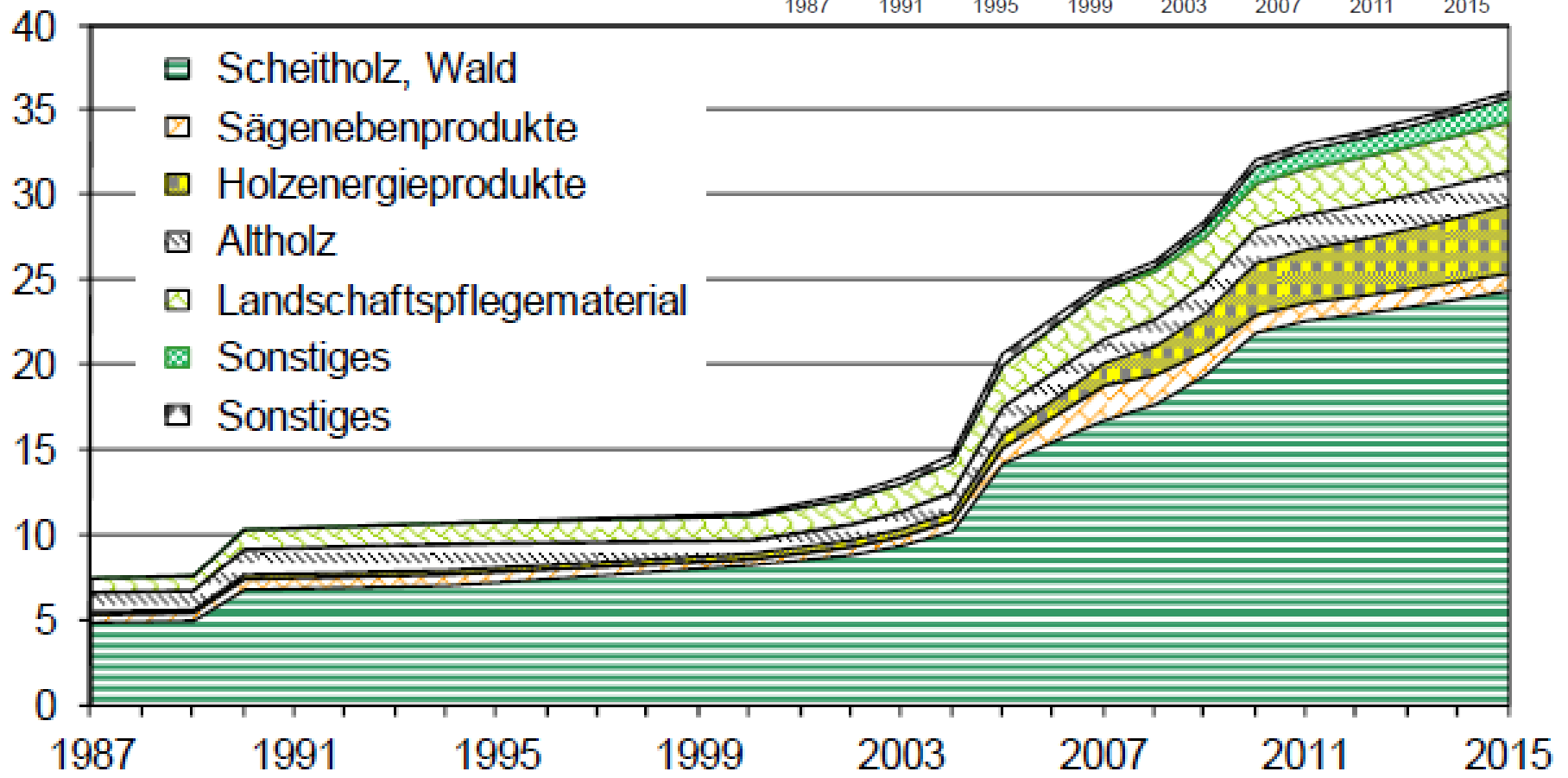
Member State	Forest management	Cropland management	Grazing-land management
Austria	Not elected	Not elected	Not elected
Belgium	Not elected	Not elected	Not elected
Denmark	Elected	Elected	Elected
Finland	Elected	Not elected	Not elected
France	Elected	Not elected	Not elected
Germany	Elected	Not elected	Not elected
Greece *)	Not decided	Not decided	Not decided
Ireland	Not elected	Not elected	Not elected
Italy	Elected	Not elected	Not elected
Luxembourg	Not elected	Not elected	Not elected
Netherlands	Not elected	Not elected	Not elected
Portugal	Elected	Elected	Elected
Spain	Elected	Elected	Not elected
Sweden	Elected	Not elected	Not elected
United Kingdom	Elected	Not elected	Not elected

Note: *) At the time of publishing this report, the election of activities under Article 3(4) was not decided.

- Die Situation in der Forstwirtschaft

Abbildung 3-22: Brennholzverbrauch

in Mio. m³ - kumulativ





2008/4/18 17:41

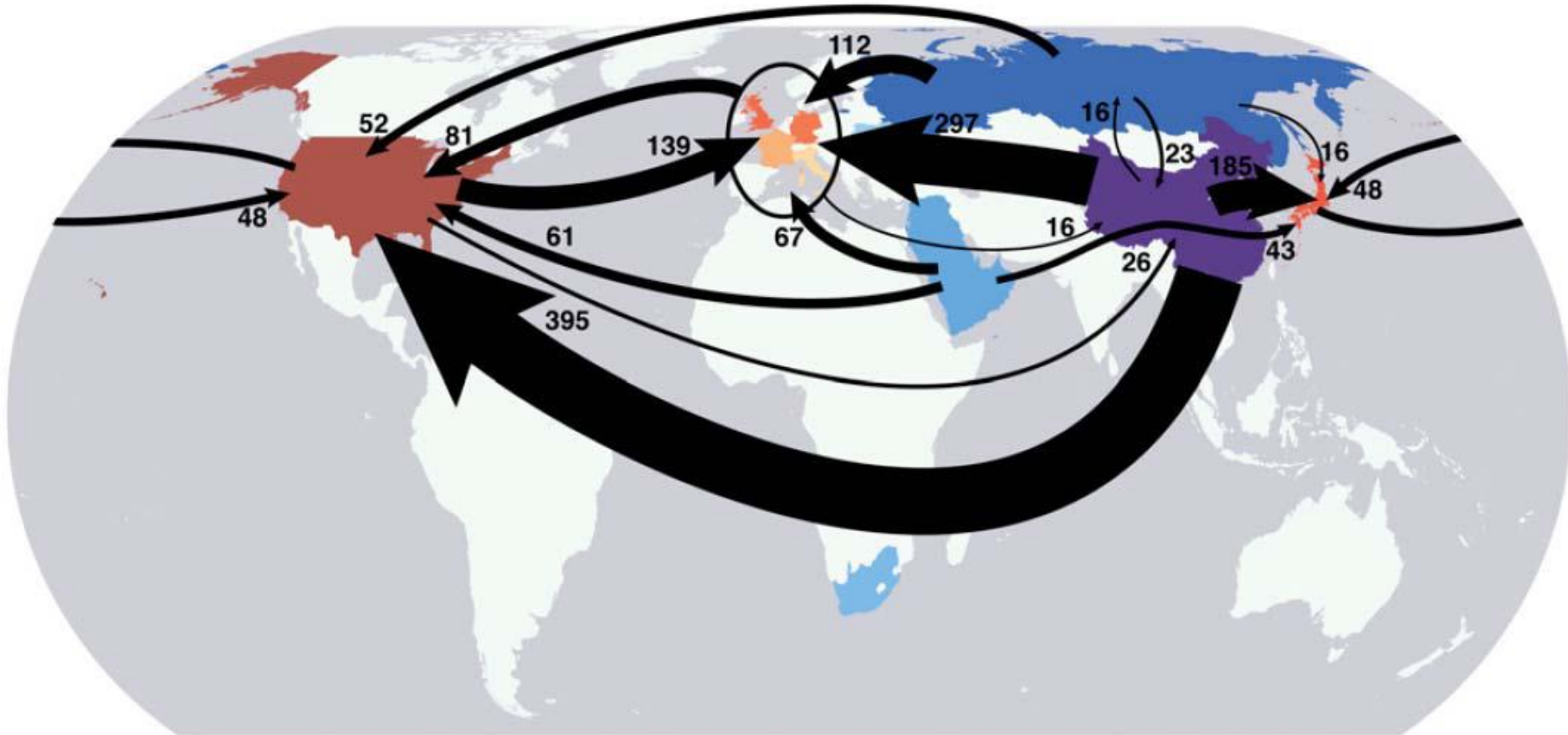
Ökostrom ist ökologisch nicht vertretbar

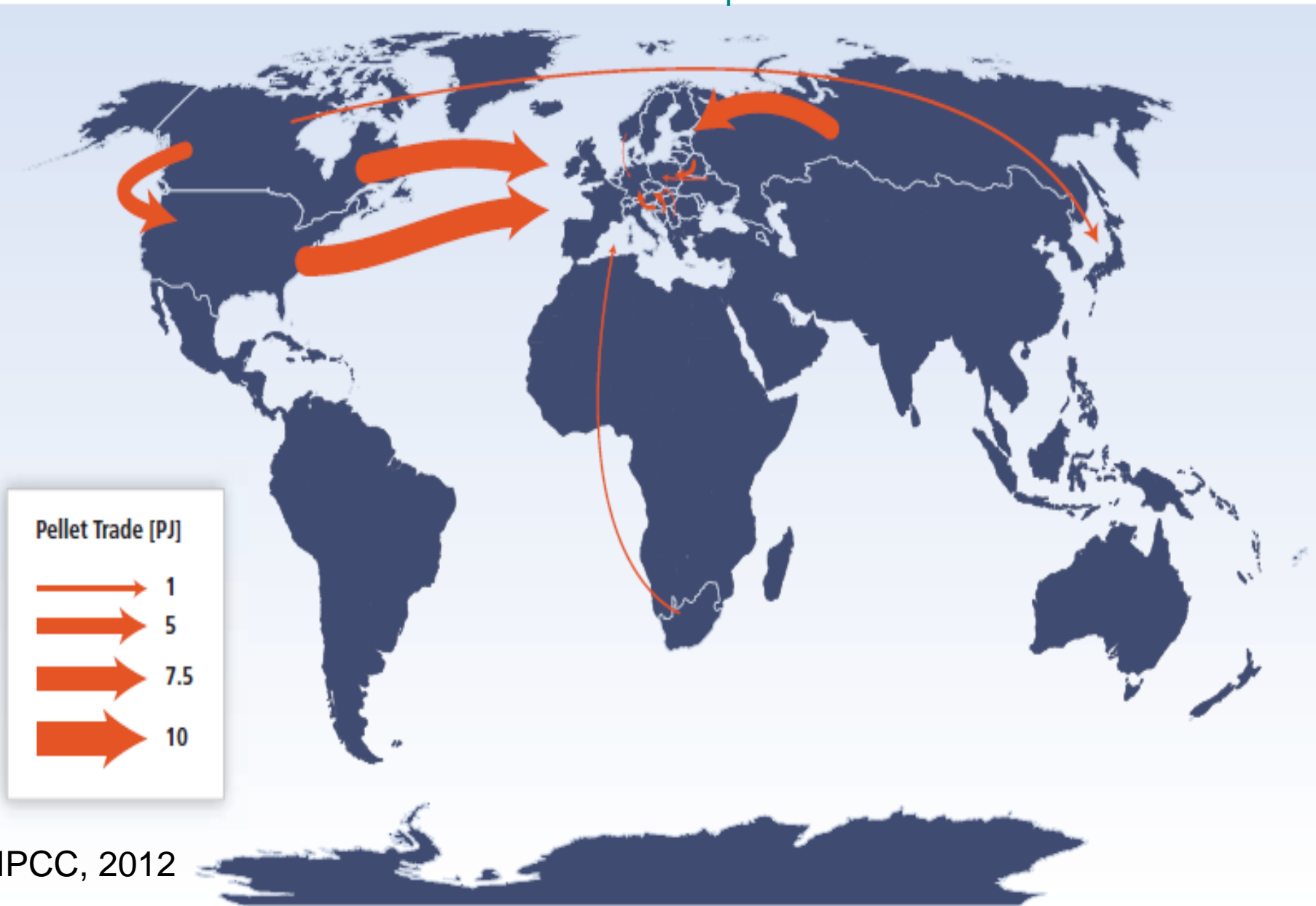
Die Forderung des Umweltschutzes:
10 % des Waldes als Wildnis,
Aber:
Der Umweltschutz vor Ort kostet
Waldfläche an anderer Stelle

Embedded C in industrial products

Mt CO₂/y

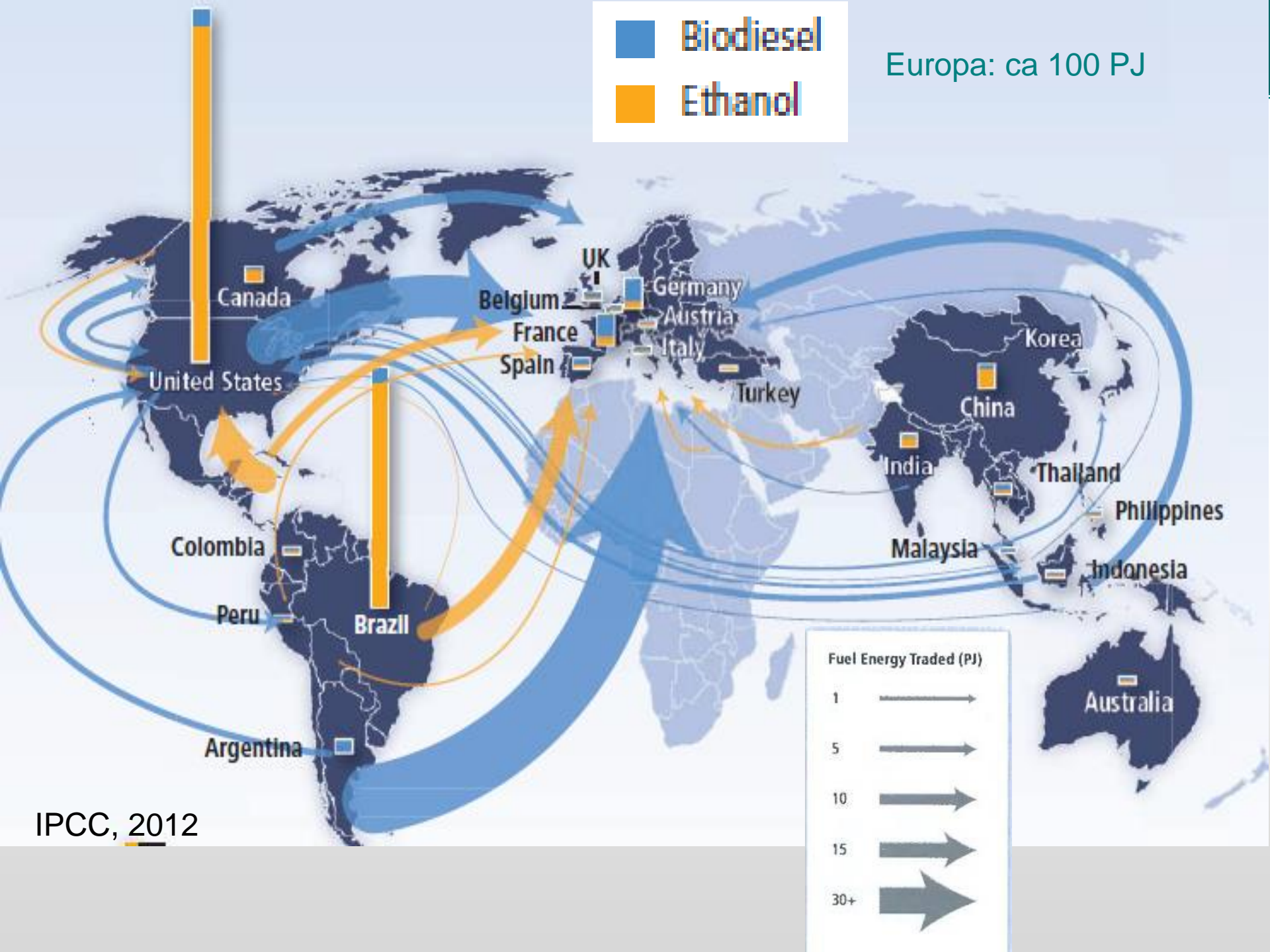
Bilanz Europa: 422 MtCO₂/yr)

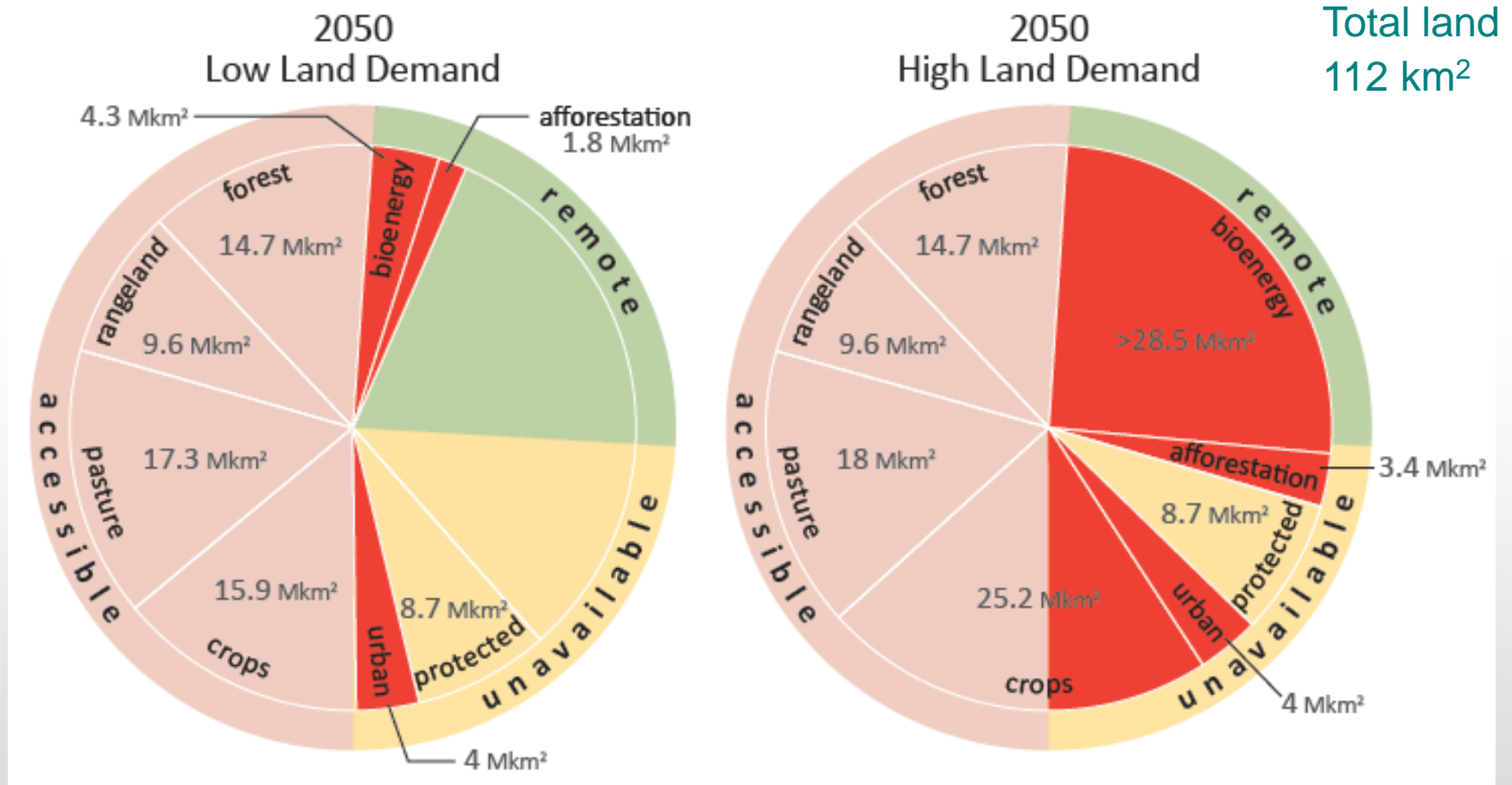




■ Biodiesel
■ Ethanol

Europa: ca 100 PJ

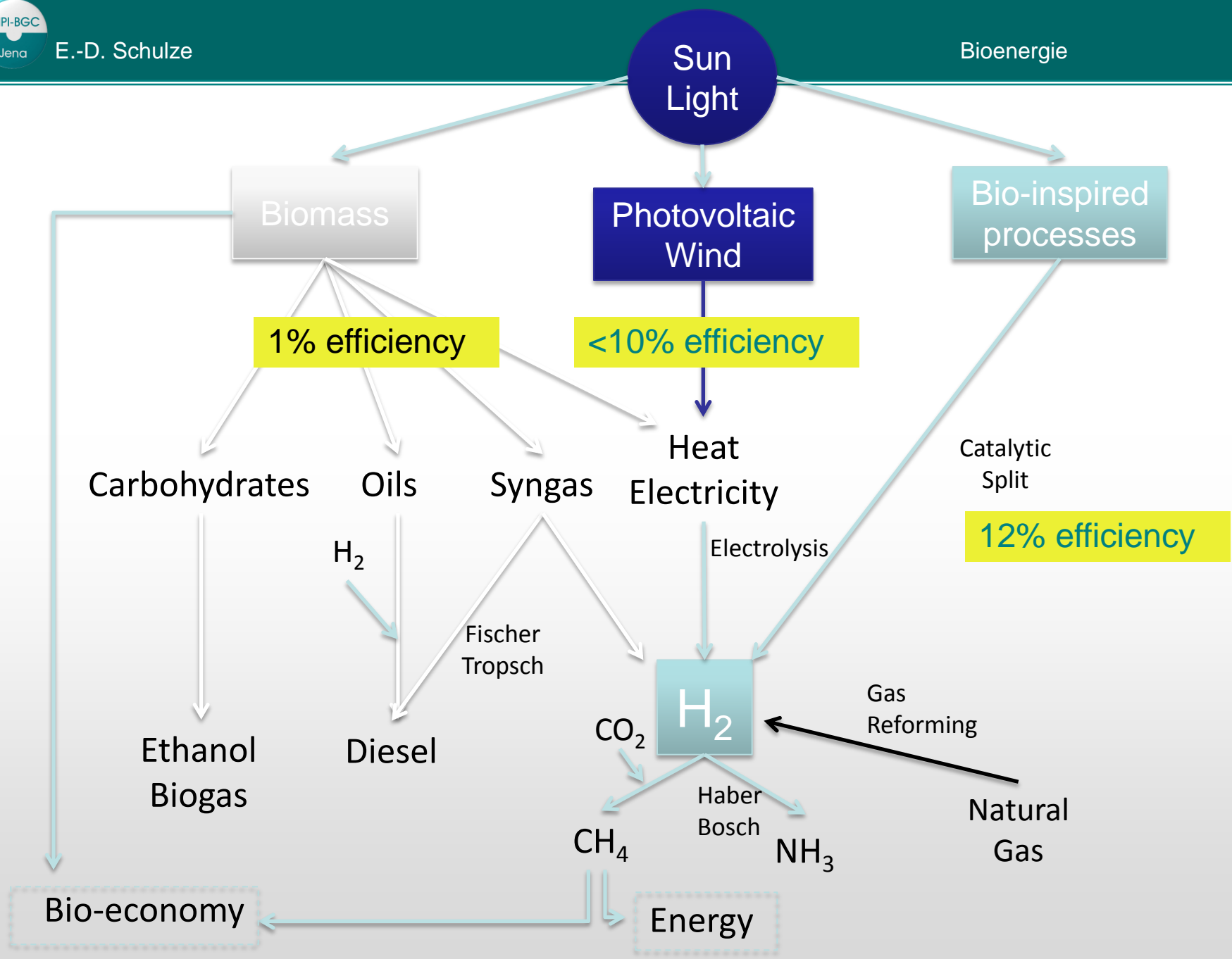




Beitrag der Bioenergie bis 2050

Maximal 3-6% des Energiebedarfs

- Holz ist nachwachsend aber nicht unbegrenzt verfügbar
- Steigendes Umweltbewußtsein in der Bevölkerung:
 - „man“ zahlt zusätzliches Geld für Grüne-Elektrizität,
 - „man“ verbaut Holz (e.g. Douglasie), und
 - „man“ heizt mit Scheitholz.
- Gleichzeitig fordert „man“
 - mehr Freiraum für Erholung,
 - mehr Fläche für Naturschutz,
 - einen höheren Anteil an Laubwald und
 - mehr Totholz am Waldboden.
- In der Realität führt das Streben nach umweltgerechtem Leben zu einer Erhöhung forstlicher Nutzung, und zur Verknappung des Rohstoffes Holz.
- Der Lebensstil relativiert die Forderungen nach Erhalt von Biodiversität und freier persönlicher Entfaltung in der Natur
- Pierre Vergniaud: „Die Energiewende ist wie Saturn, sie frißt ihre eigenen Kinder“



Vielen Dank