

The Water Debate

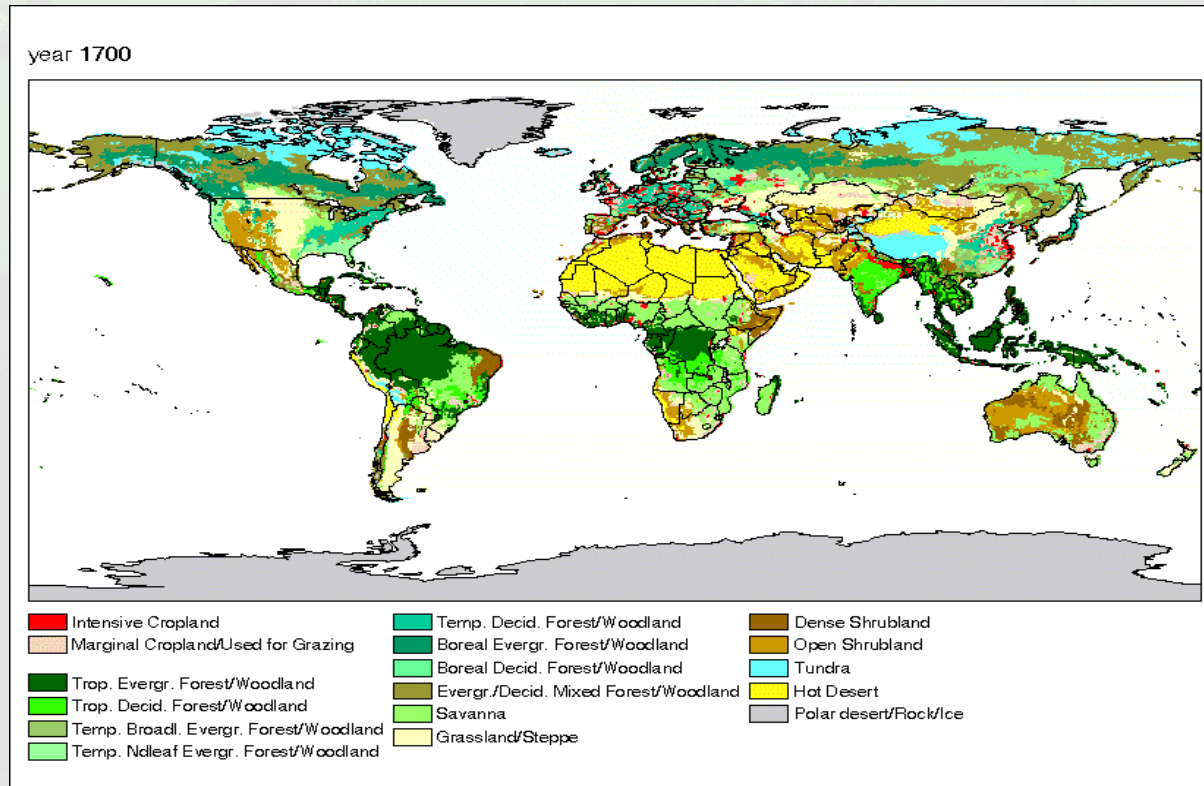
Chairman's opening remarks

Göran Berndes

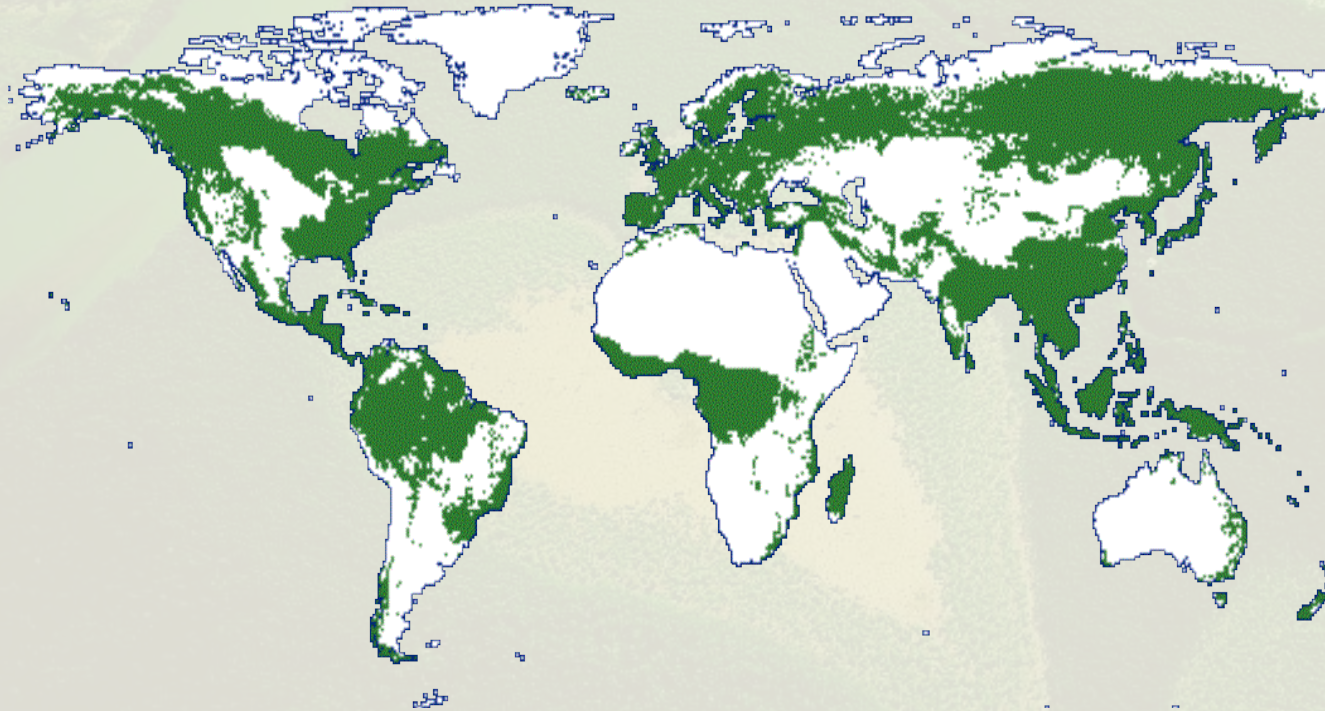
IEA Bioenergy Task 43

Chalmers University of Technology
Sweden

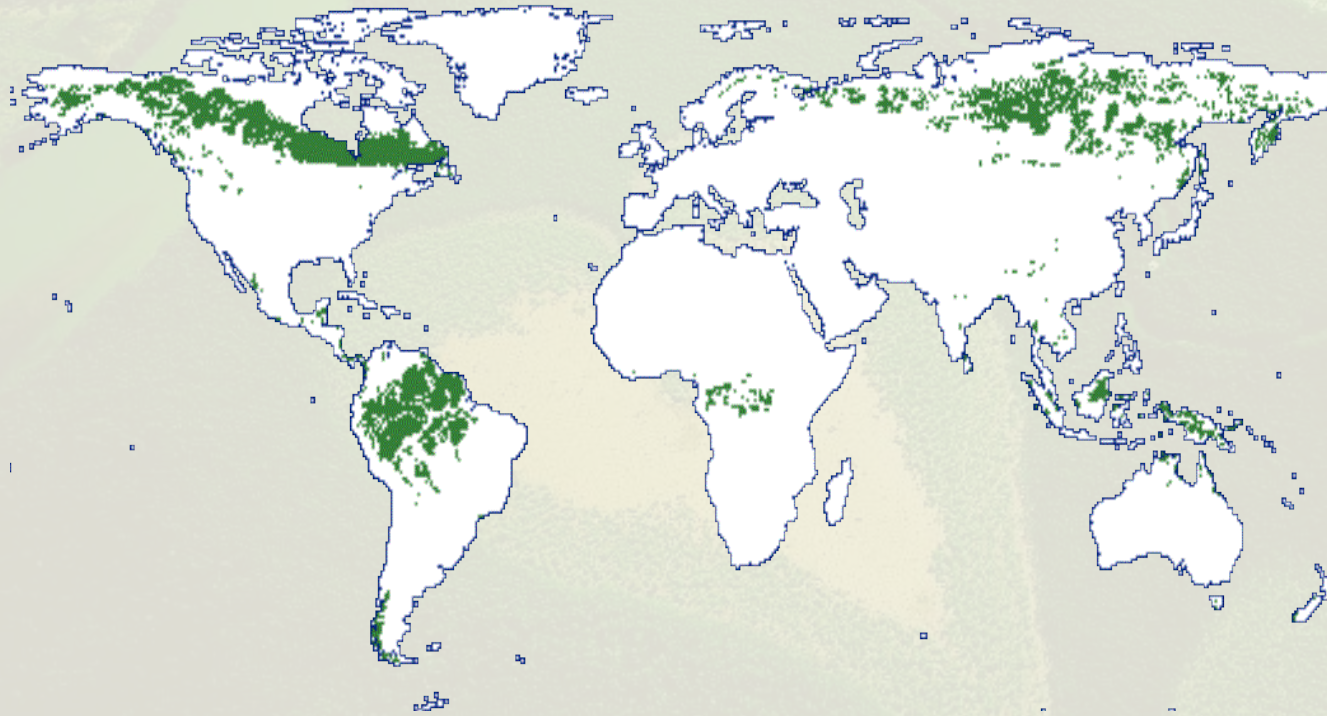
300 years of land use change

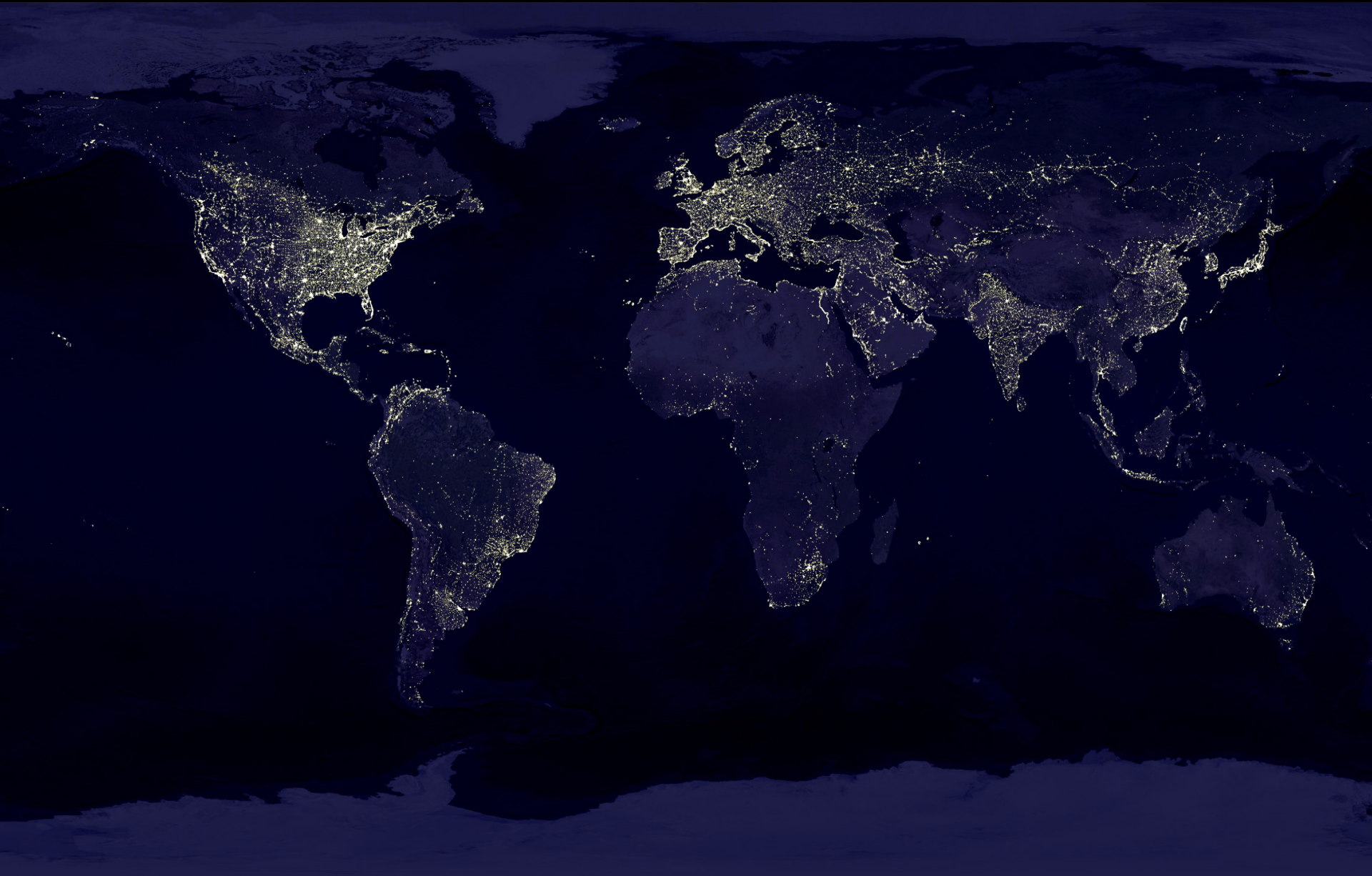


Frontier forests 8000 years ago



Frontier forests today



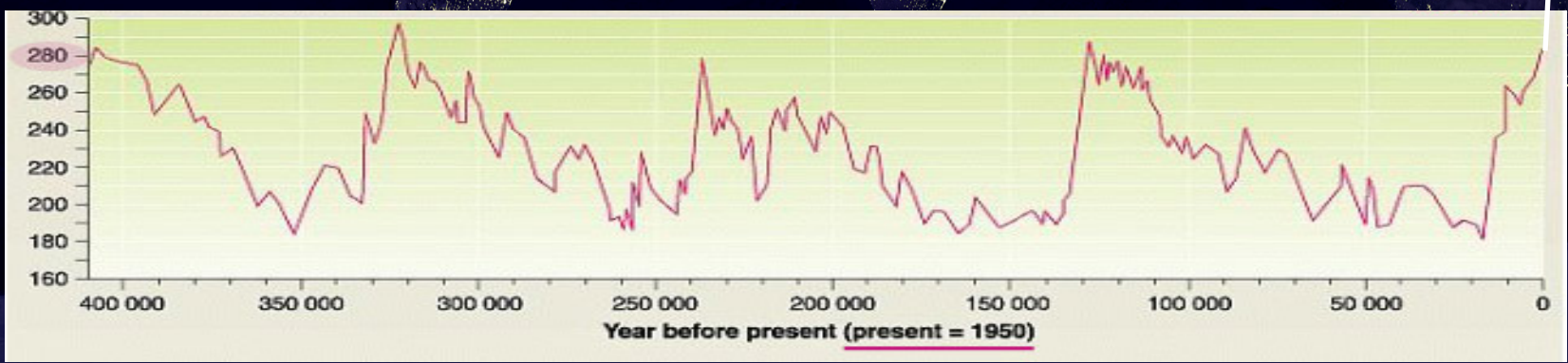




(Vostok Ice Core)

Year 2100 if business as usual

Today



Bioenergy in the Anthropocene

A world map where the landmasses are outlined by a dense network of yellow and white lights, representing city lights or population density. The background is a dark, deep blue, suggesting a night view of Earth from space. The text "Bioenergy in the Anthropocene" is overlaid in white, centered horizontally across the map.

Bioenergy in the Anthropocene

A world map where the landmasses are dark blue and the oceans are black. The map is illuminated with a dense pattern of small, bright yellow and white dots, representing city lights or population density across the globe.

Food

A solid yellow circle containing the word "Food" in black text.

Source: FAO

Bioenergy in the Anthropocene

A world map showing city lights at night, with the continents of North America, South America, Europe, Africa, Asia, and Australia visible. The lights are concentrated in major urban centers and along coastlines.

Food
2050

Source: FAO

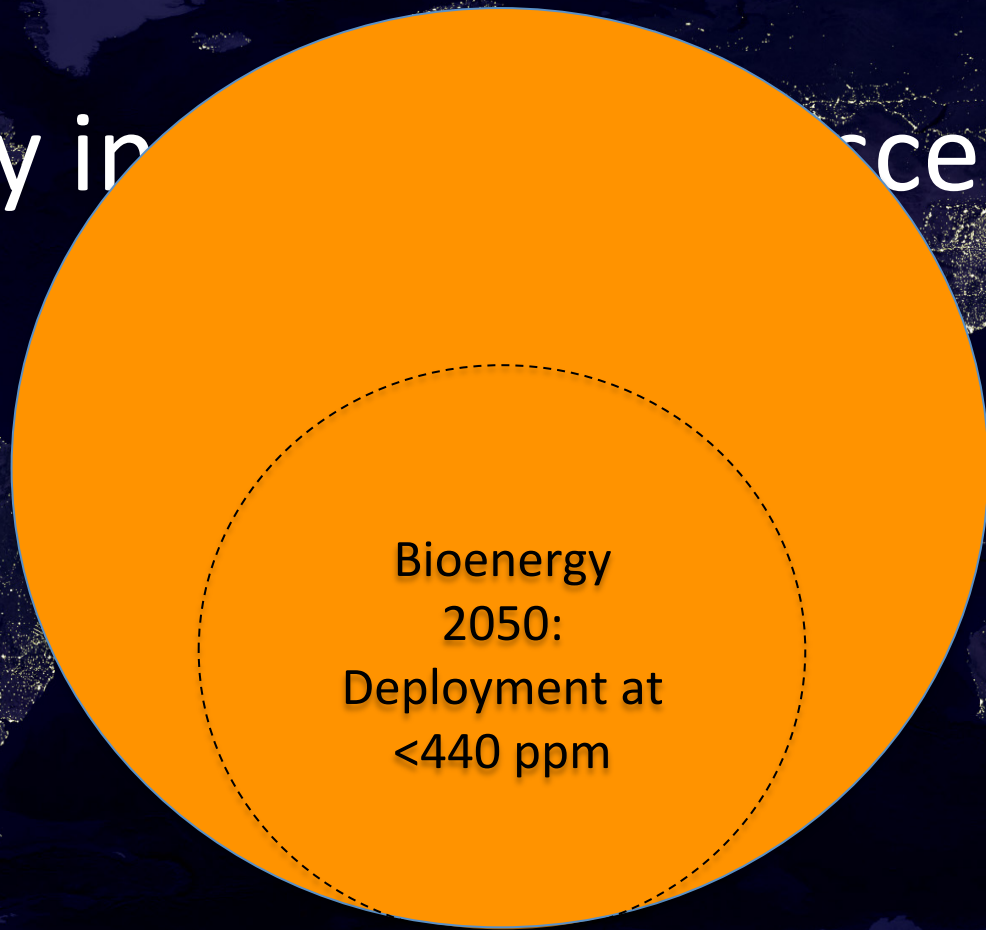
Bioenergy in the Anthropocene



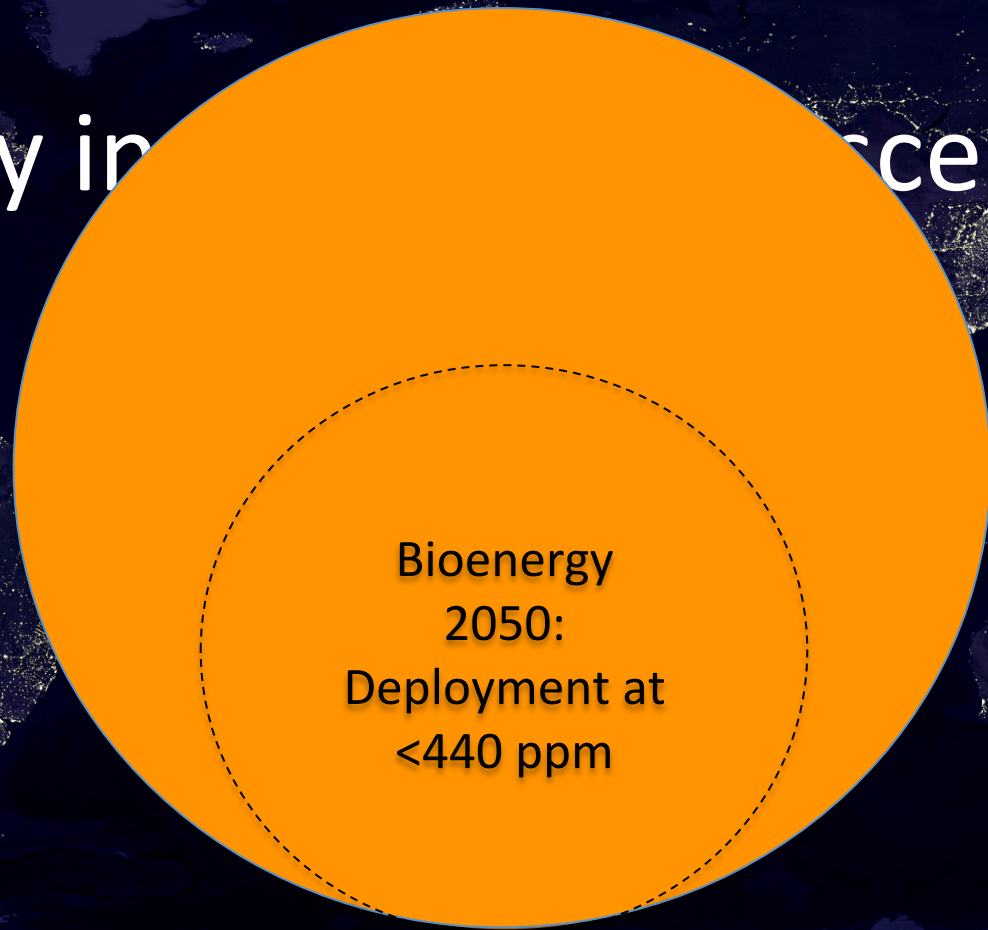
Food
2050

Bioenergy
2050:
Deployment
at 440-600
ppm

Bioenergy in the energy scene



Bioenergy in the energy scene



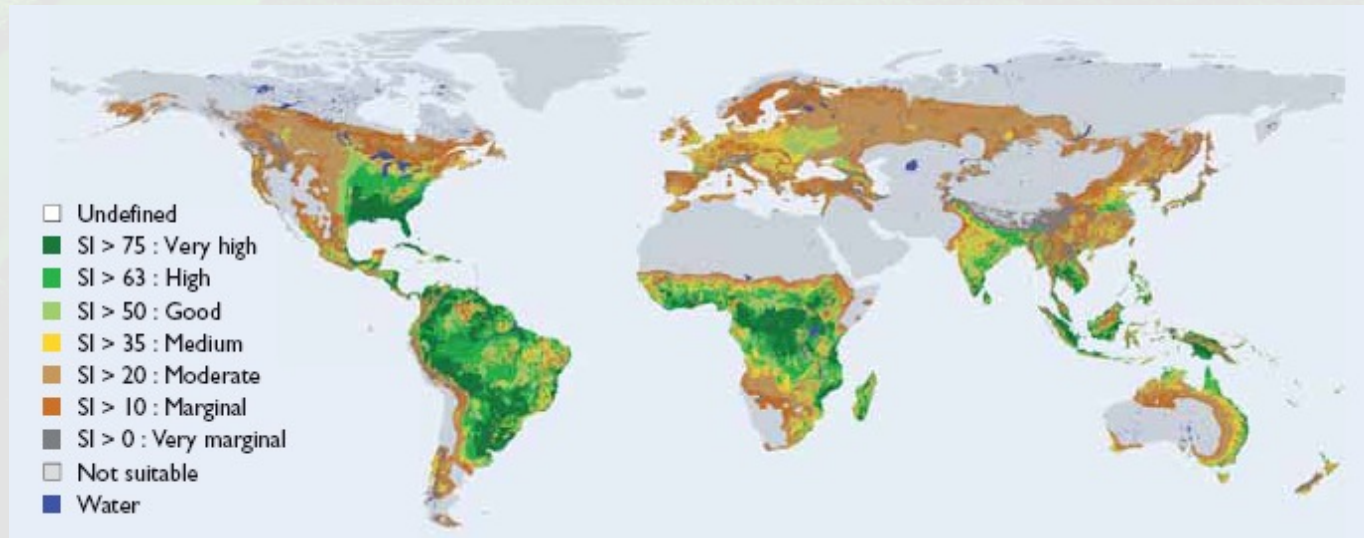
Global industrial roundwood

Sources: FAO & IPCC SREN

Room for bioenergy plantations?

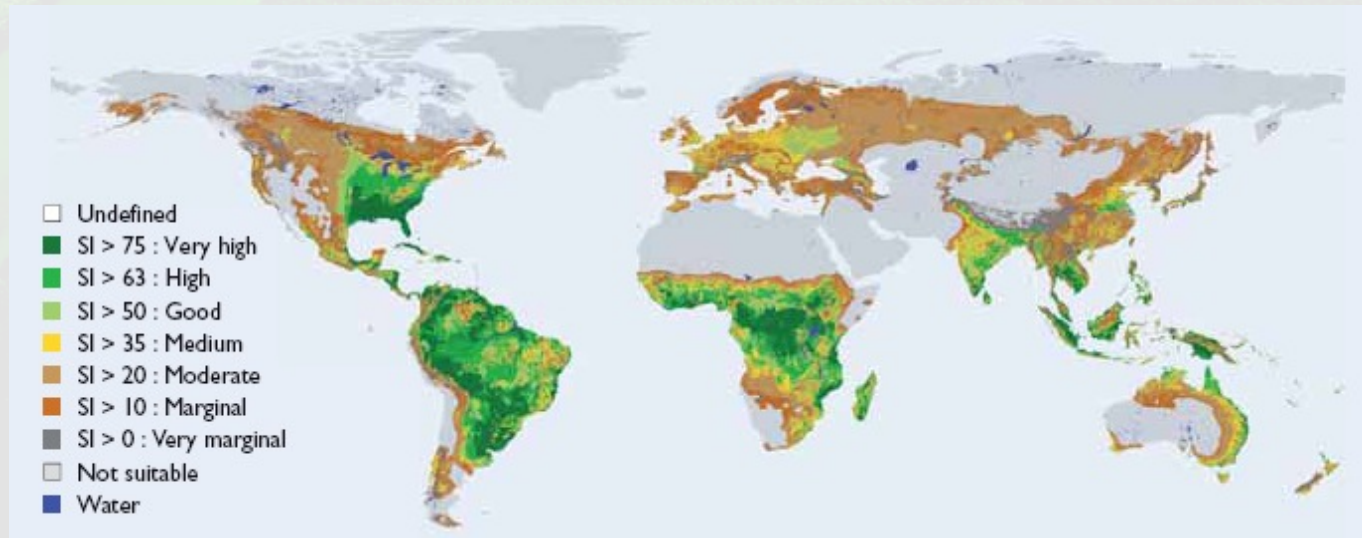


Biophysical assessments indicate considerable bioenergy supply potentials



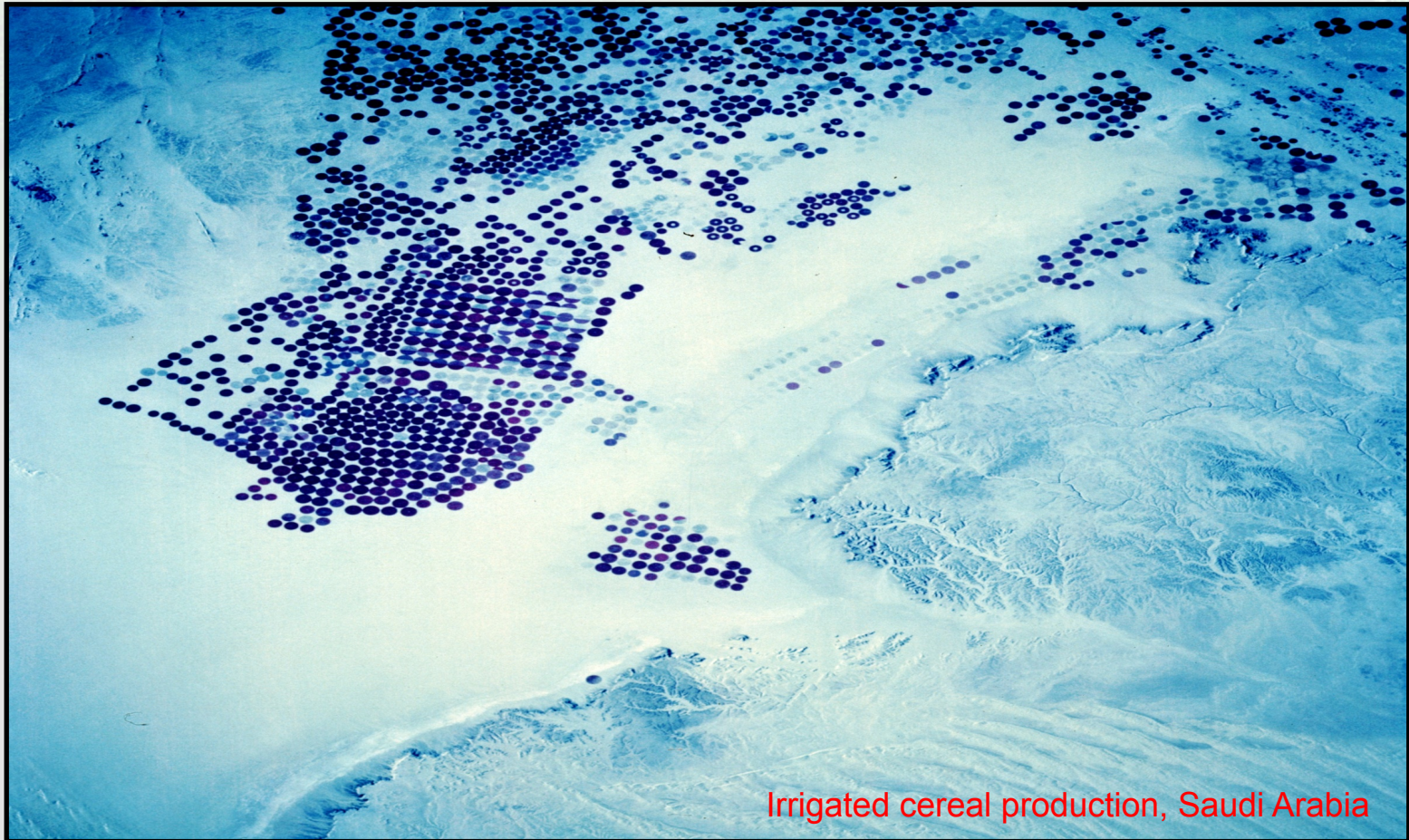
Map: land suitability for herbaceous and woody lignocellulosic plants (Fischer et al 2009)

...but bioenergy expansion needs to be guided in attractive directions



Map: land suitability for herbaceous and woody lignocellulosic plants (Fischer et al 2009)

...water related aspects have so far been less considered than some other “hot issues”



Irrigated cereal production, Saudi Arabia

Will water be the next hot topic?

**Fight the
iLUC!!!**

Do they really
make ethanol
instead of food?

**Stop the
land grab!!**

C payback
time?



Today: three sessions covering water related aspects

1. Water Implications in Biofuel Scenarios at Different Scales
2. Understanding and Managing the Effects of Biofuel Schemes on Water
3. Moving Forward: Business, Governance and Innovation Addressing Water Challenges

More info supporting constructive responses to concerns about water

