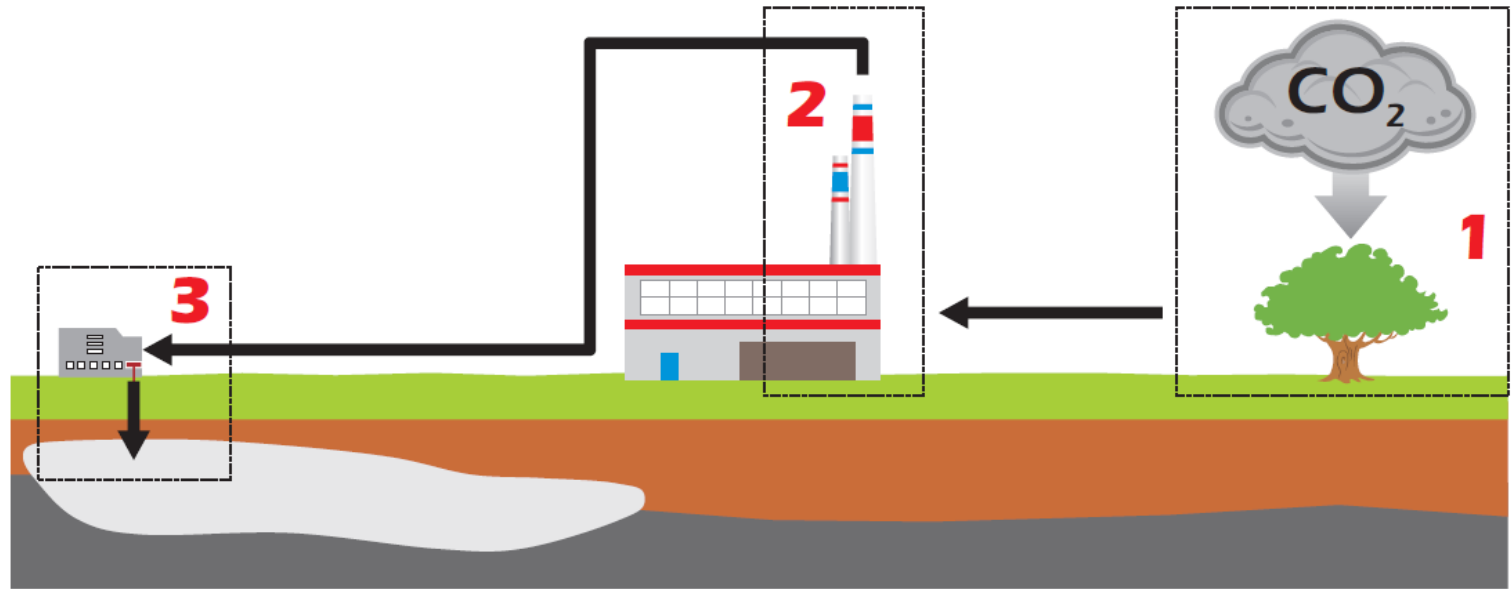


# Why are we here?

Dr Wolf Heidug

*Bioenergy, CCS and BECCS: Options  
for Indonesia, Jakarta, 21-23 September 2012*

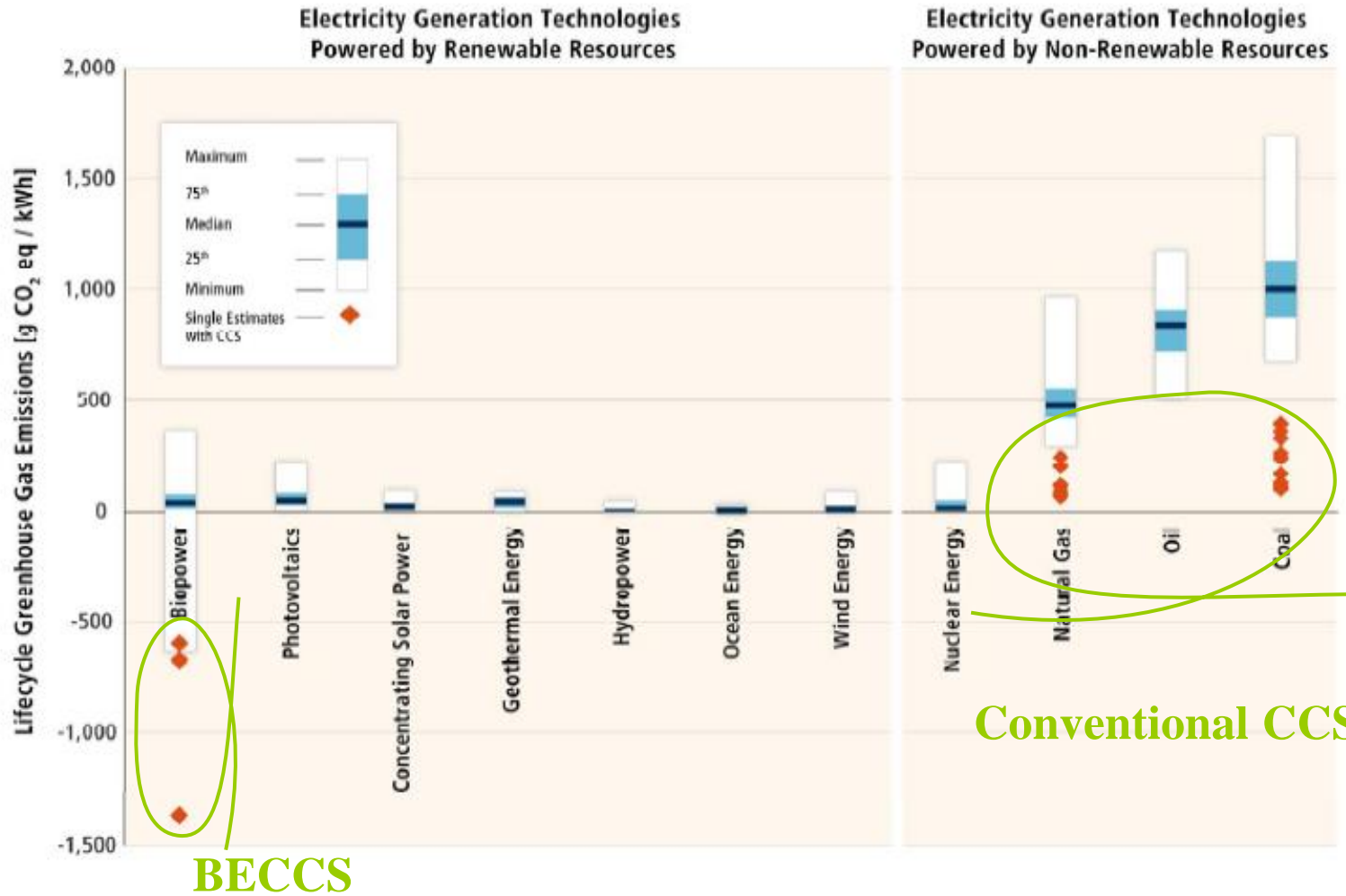
# BECCS technology chain



1. Biological sequestration
2. Capture
3. Storage

# What BECCS can deliver

CARBON CAPTURE AND STORAGE



2011 IPCC Special Report on Renewable Energy



# BECCS Work Programme

- **Increased relevance of BECCS for climate change - but limited action**
  - No industrial champion
  - Lack of awareness among policy makers
  - Tendency to 'fall between chairs' in terms of markets, institutions, and know-how
- **Collaborate with IIASA's Ecosystem Services and Management Programme to complement in-house expertise**
  - IEA/IIASA Expert Workshop, November 2011
- **Focus on bottom-up approach – as opposed to top-down**
- **Country-specific studies**
  - Indonesia – 2012
  - Brazil – 2013
  - China, US, Sweden

**CARBON CAPTURE  
AND STORAGE**

## ■ Objectives

- Explore fit of BECCS with energy and climate policy strategy of target countries
- Analyze opportunities, understand gaps
- Capacity building

## ■ Deliverables

- Synthesis report with policy recommendations – 2014 (hopefully)
- Others – to be defined through workshops

## ■ Exploit synergies with IEA's other CCS activities

- CO<sub>2</sub>-EOR for storage  
*Kick-off workshop with OPEC in Kuwait City, February 2012*
- Guidelines for storage capacity estimation  
*To be published beginning 2013*
- Economic analysis of long-term liability arrangement for storage  
*Scoping study starting October 2012*

# This Workshop

- Exploring relevant issues
- Based on climate, biomass and CCS policy in Indonesia
  - Status, plans, targets
- Potential, cost of capture and emission reductions achievable
  - Biomass availability and supply side issues
  - Accounting and quantifying emissions reductions from BECCS
  - Sustainability/ LULUCF issues
  - Subsurface storage potential
- Policy for BECCS
  - Policy framework
  - International/bilateral funding options
  - Role of development institutions
- Next steps
  - Framing a dialogue on BECCS
  - Actions

*Background material +  
further info:*  
[www.iea.org](http://www.iea.org) → workshops