

## Carbon Capture and Storage\* - NGOs hope? and concern!



- NGO discussion on CCS\*
- ... as fast as we can?
- CSLF discussion on CCS
- ... sustainable?
- Where to store all the CO<sub>2</sub>
- Concerns
- ... confidence?
- Summary

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## NGO discussion on CO<sub>2</sub> storage

*The goal*

< 2°C

- 60/ 80%  
2050



## Climate Change

urgent need to reduce GHG, esp. carbon dioxide  
„stop temperature from increasing as fast as we can“

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**... reduce emissions as fast as we can**



**Means, act NOW:**

- reduce fossil fuel use
- increase renewable energy  
energy efficiency, saving (REE)
- demand management
- **R&D CCS**

... to reduce as much GHG emissions as we can (-60 to 80% in 2050)

... **CCS can become a bridging technology in the future (15 years) on the way to a carbon-free energy system based on renewables.**

**Reality however looks different!**

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## CSLF discussion on CCS



**The goal**

Continued  
use of fossil fuels  
as long as  
we can

Climate Change?

„... concerns persist ...“

urgent need „to make the continued use of abundant fossil fuel resources sustainable“.

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## *Sustainable?*



Is leaving future generations depleted oil and gas fields filled with thousands of millions of tonnes of carbon dioxide to be taken care of over long periods of time sustainable?  
Not at all!

If e.g. Germany would store CO<sub>2</sub> from all of its coal power plants - would mean storage of more than 345 million tonnes of CO<sub>2</sub> annually. Think of the emissions of the world then, the infrastructure, costs ...

## Where to store all the CO<sub>2</sub>?



Needed:  
Environmentally safe sites  
Permanence / retention times

- not in the oceans

Achieve CO<sub>2</sub>-reductions:

- not EOR / EGR

- no ECBM

Remains:

... Depleted oil and gas fields (risk of well bore failures, abundant wells)

... Deep saline aquifers (risk of water pollution / leakage)

## Concerns ...



Safe measures develop slow:

- lack of political will
- the „BAU“ thinking - money moves into „easy solution“

Idea of CCS develops fast:

- ahead of the IPCC SRCCS (fix a pro-position, block KP)
- lack of stakeholder involvement (something to hide?)

If industry and governments want CCS to become a technology to help prevent dangerous climate change ... public confidence, acceptance is needed.

[If industry is so confident about that technology - why not waiting with new coal power plants until technology can be delivered? - That would help the climate now]

## ... Confidence



Open and transparent discussion

Explain the problem (fossil fuel use and climate change)

CCS R&D (gaps in knowledge)

No shift of money / priorities away from REE

Proper site selection with public and NGO involvement

Liability - during and after injection stage, long-term monitoring and remediating possible leakage (polluter pays principle, insurance system?)

Reporting during all storage stages (open to public)



## Summary



NGOs are alarmed about climate change:  
use the whole basket

- reduce the cause of the problem, the use of fossil fuels by
- switching to renewables, energy efficiency, saving, demand management
- CCS as a bridging technology to help prevent earth from further heating

However,

As long as CCS is only meant to increase fossil fuel use, instead of a will to decrease the major cause of climate change, European NGOs must oppose. The risk of losing the „climate race“ would be too high.