#### TRONDHEIM CCS CONFERENCE

CO2 CAPTURE, TRANSPORT AND STORAGE

# Trondheim Conference on CO<sub>2</sub> Capture, Transport and Storage

Organised by

Gas Technology Centre

NTNU-SINTEF
in collaboration with the BIGCO2 project



#### **World outlook**







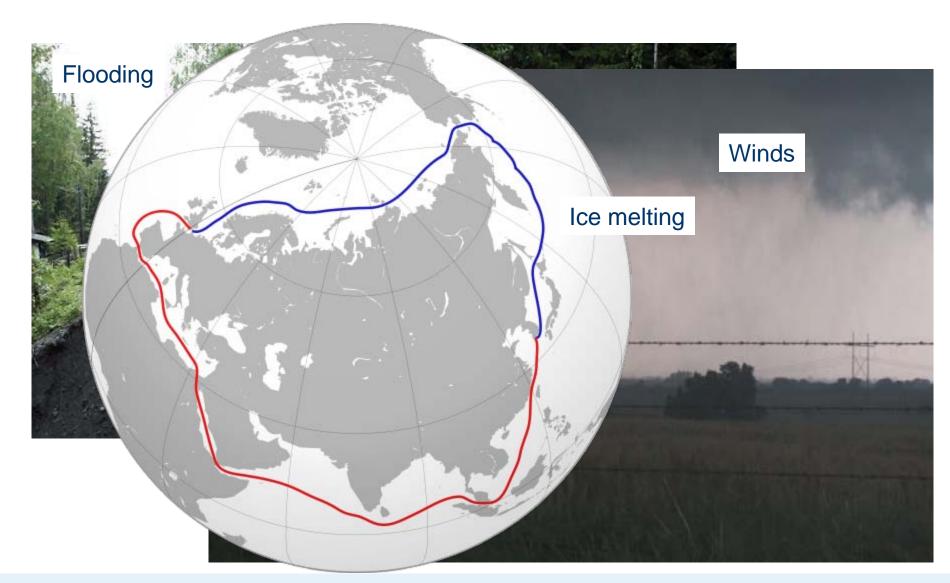
#### **World outlook**







#### **World outlook**









#### **Actions?**

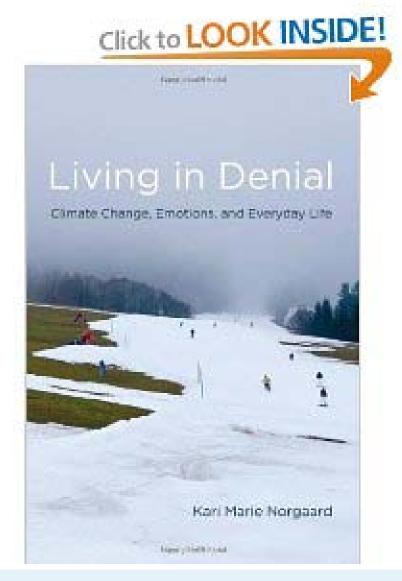






#### **Actions?**









#### **Action**

Demo





#### Living in Denial













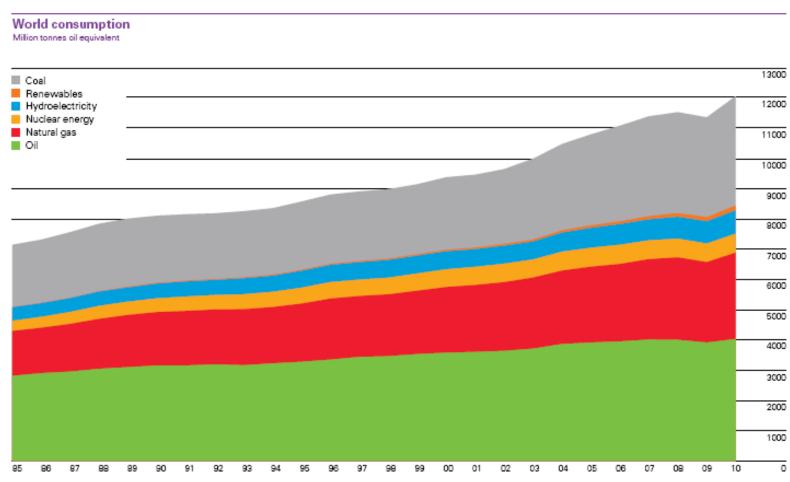
#### **Action**











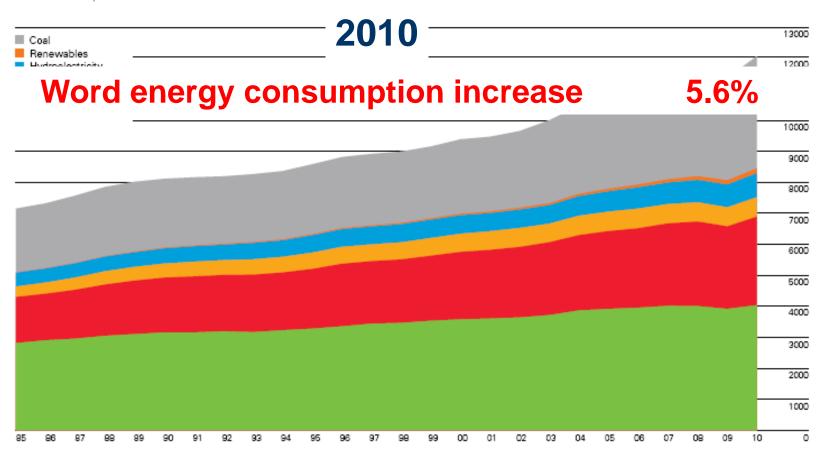
World primary energy consumption grew by 5.6% in 2010, the strongest growth since 1973. Growth was above average for oil, natural gas, coal, nuclear, hydroelectricity, as well as for renewables in power generation. Oil remains the dominant fuel (33.6% of the global total) but has lost share for 11 consecutive years. The share of coal in total energy consumption continues to rise, and the share of natural gas was the highest on record.







Million tonnes oil equivalent



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#### World consumption

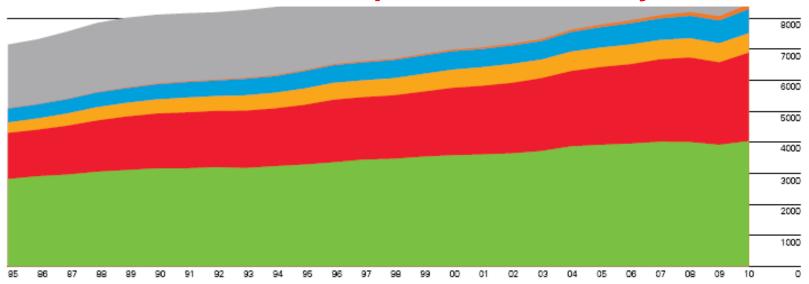
Million tonnes oil equivalent

Coal 2010 13000 Renewables 12000

#### Word energy consumption increase

5.6%

#### Global coal consumption increased by 7.6 %



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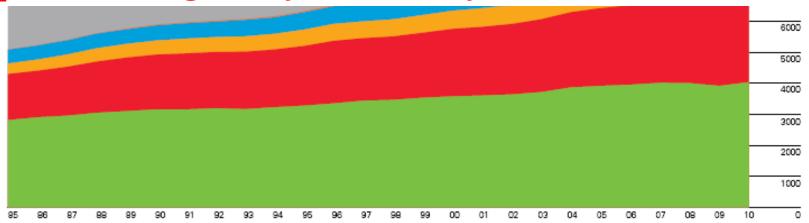
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#### CO<sub>2</sub> emissions grew by 5.8 % last year to 33.16 billion tonnes



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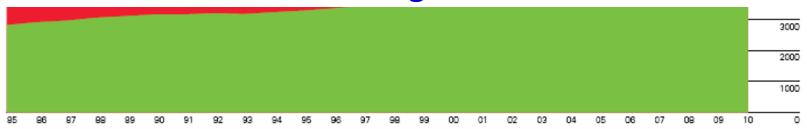
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Million tonnes oil equivalent

Coal

2010

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Renewable power generation grew by 15.5 %, driven by robust growth in wind energy, which was up 22.7 % Renewable energy accounted for 1.8 % of global energy consumption, up from 0.6 % in 2000.

...ne 2011









#### Having a conference





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Storage: Brilliantly summed up by Andy Chadwick





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**Background studies needed** 





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Membranes: Great progress during the last years.





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Membranes: Great progress during the last years.

Absorption: Leveling off at 2.4-2.5 GJ/ton CO<sub>2</sub> regeneration heat





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Membranes: Great progress during the last years.

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## To make it happen: Economic incentives must be put in place We must bring facts into the debate





#### TCCS6 in brief.....

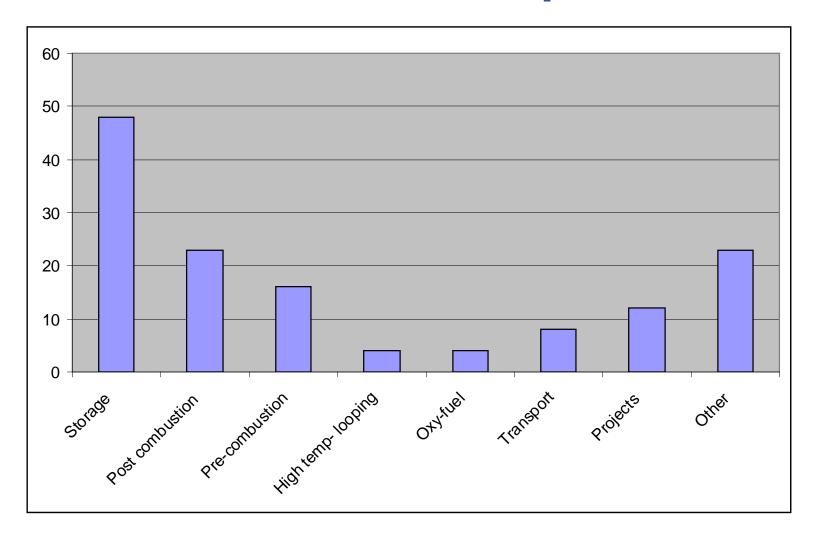
- ► 425 delegates
- 8 keynotes
- ▶ 138 oral presentations
- ► 110 posters
- Networking
- ▶ Dinner, lunches...

Personal impression: Very good quality oral and poster presentations





#### TCCS-6 - distribution of presentations







### TCCS6 - publishing

- The presentations will be put on the TCCS6 website www.ntnu.no/tccs6
- Powerpoint-files will be converted to pdf-format
- Those who want to change their presentation send an update (as pdf) to the conference email address:
  - Trondheim\_CCS.conf@sintef.no
- Poster abstracts will be uploaded on the website
- TCCS6 publishing: Energy Procedia
  - All are invited to submit papers based on their presentation at the TCCS6, (to Trondheim\_CCS.conf@sintef.no)
  - Deadline August 31<sup>st</sup>, 2011
  - Guidelines on the net will be updated after the conference
  - Possible publication date December 2011





#### Thanks to:

**Organizing committee** 

Scientific committee

Session chairs and technical assistants





#### **Next event**

#### 7th Trondheim Conference on CO<sub>2</sub> Capture, Transport and Storage TCCS7

Medio June 2013, Trondheim

Welcome back!!





