



2nd International Workshop "CO₂: CCS and CCU in Germany, Norway, The Netherlands, Poland, and Scotland – Challenges and Chances"

9th and 10th November, 2011

Rheinterrasse, Düsseldorf, Germany

Invitation

Experts worldwide agree: With CCS the emissions of CO₂ can be reduced considerably. But for the implementation of that technology some countries and regions in Europe stay in front of some challenges: What is the technological »state of the art« in CCS? What are the first results of the demonstration projects? How can the different industry sectors participate on that technology? What are the possibilities to use the captured CO₂ besides the storage? How is the public acceptance now? And how much will it cost?

The workshop deals with the global agreements, the European legal frameworks, and the specific conditions in five European countries. Besides this, the processes as such and the implementation of the technical solutions in power plants and other industries are in focus. In addition, some new application technologies in reusing Carbon Dioxide will complete the workshop.

In a matchmaking transnational synergies can be developed. There will be the opportunity to establish new contacts and discuss current issues directly. Market players along the value chain will be able to expand their activities and pursue concrete co-operations.

Prof. Dr. Manfred Fishedick, Wuppertal Institute for Climate, Environment, Energy Ltd.

Prof. Dr. Klaus Görner, LUAT, University of Duisburg-Essen

Margit Thomeczek, Power Plant Technology Network, EnergyAgency.NRW

Programme

Wednesday, 9th November, 2011

10:00 a.m. Opening and welcome addresses

Dr. Frank-Michael Baumann, EnergyAgency.NRW

Dr. Heinz Baues, Ministry of Climate Protection,
Environment, Agriculture, Nature Conservation
and Consumer Protection NRW

Dr. Henk Voskamp, Consul General of the Kingdom
of The Netherlands

10:20 a.m. Actual perspectives for worldwide power supply – today and in future

Uwe Remme, International Energy Agency

10:50 a.m. Challenges for future power supply

Prof. Dr. Manfred Fishedick, Wuppertal Institute

Prof. Dr. Klaus Görner, University of Duisburg-
Essen

11:20 a.m. Coffee break

11:40 a.m. CCS: International strategies and projects

Bob Pegler, Global CCS Institute

12:10 a.m. The future of CCS in Europe

Kai Tullius, European Commission

12:40 a.m. Lunch

Programme

2:00 p.m. Costs of fossil power plants with and without CCS

Peter Erich Arnold, Alstom Carbon Capture GmbH

2:30 p.m. Energymix 2050: 100% renewable energy

Dr. Stephan Singer, WWF

3:00 p.m. Discussion: A world without coal – how to achieve?

Kai Tullius, European Commission,

Dr. Frank-Detlef Drake, RWE Power AG,

Dr. Wolfgang Benesch, STEAG GmbH,

Dr. Stephan Singer, WWF,

Prof. Manfred Fishedick, Wuppertal Institut

Moderation: Thomas Reisener, Rheinische Post

4:00 p.m. Coffee break

4:30 p.m. Parallel Sections

Section A Workshop of Regions

Section B Matchmaking

Section C Students-forum:

Brauchen wir die Kohle auch in Zukunft?

Students of Otto-Hahn-Gymnasium, Monheim,

Dr. Markus Doll, RWE Power AG,

Dr. Wolfgang Benesch, STEAG GmbH,

Prof. Klaus Görner, University of Duisburg-Essen,

Dr. Stephan Singer, WWF

Moderation: Thomas Reisener, Rheinische Post

6:30 p.m. End of the 1st Day

7:00 p.m. Dinner

Thursday, 10th November, 2011

9:00 a.m. Parallel sections

Section 1: PCC Scrubbing Processes

Moderation: Dr. Christian Bergins, Hitachi Power Europe (GER)

PCC-sorbents

Prof. Klaus Görner, University of Duisburg-Essen (GER)

Pre-combustion CO₂ capture: Trends in, and Potentials of Future Technologies

Daan Jansen, Co-ordinator CAESAR (NED)

PCC with low energy consumption and best environmental performance

Dr. Hermann Kremer, Siemens AG (GER)

Oxy-combustion

Uwe Burchardt, Vattenfall Europe Generation AG (GER)

Discussion

Section 2: CCS Projects

Moderation: Dr. Tore Torp, Statoil ASA (NOR)

Introducing the CO₂ Hub Terminal concept

Cees van der Ben, Vopak LNG Holding B.V. (NED)

PCC-pilot plant at Niederaussem

Dr. Peter Moser, RWE Power AG (GER)

Building the pipeline together: CCS in Yorkshire and the Humber

Hugh Goulbourne, CO₂sence Ltd (UK)

Belchatów

Peter Erich Arnold, Alstom Carbon Capture GmbH (GER)

Discussion

10:40 a.m. Coffee break

Programme

11:10 a.m. Parallel sections

Section 3: Infrastructure and Whole Value Chain

Moderation: Hans Knippels, Rotterdam Climate Initiative (NED)

CO₂-transport - technology and safety

Christian Engel, TÜVNord (GER)

CCS-infrastructure in Scandinavia

Ragnhild Skagestad, Tel-tek (NOR)

Roadmap for CCS in Poland

Eivind Hoff, Bellona Europa (NOR)

QUEST - actual projects status

Tim Bertels, Shell (NED)

Discussion

Section 4: Storage and Whole Value Chain

Moderation: Vivian Scott, Scottish Carbon Capture and Storage (SCO)

CO₂-storage: Projects in Poland

Prof. Grzegorz Pienkowski / Adam Wójcicki,
Polish Geological Institute (POL)

Storage Catalogne of Germany

Dr. Christian Müller, Bundesanstalt für
Geowissenschaften und Rohstoffe (GER)

CCS-projects in Norway

Dr. Klaus Schöffel, VP Technology Gassnova
(NOR)

RISCS and ECO₂ - environmental effects of CO₂-storage

Dr. Tore Torp, Statoil ASA (NOR)

Discussion

12:50 a.m. Lunch

Plenary Session

2:00 p.m. Section 5: CCS in Industrial Applications

Moderation: Marie Lindberg, ZERO (NOR)

The CO₂ challenge in cement production. Can CCS be part of the solution?

Per Brevik, Heidelberg Cement, Norcem Europe (NOR)

Iron and Steel

Prof. Dr. Andreas Igelbüscher, ThyssenKrupp Steel Europe (GER)

Discussion

3:00 p.m. Coffee break

3:30 p.m. Section 6: Carbon Capture and Usage (CCU)

Moderation: Manfred Fishedick, Wuppertal Institute (GER)

CCU: Introduction and overview

Dr. Florian Ausfelder, Dechema e.V. (GER)

Chemical usage of CO₂

Dr. Martina Peters, Bayer Technology Services (GER)

OCAP

Fred Hage, Linde AG (NED)

Discussion

4:50 p.m. Conclusions

5:00 p.m. End of conference programme

Registration

2nd International workshop "CO₂: CCS and CCU" Wednesday, 9th November, 2011 and Thursday, 10th November, 2011, in Rheinterrasse Düsseldorf, Josef-Beuys-Ufer 33, 40479 Düsseldorf, Germany

Online: www.ccs-ccu-workhop-2011.de
or
per Fax: +49 (0) 209 167-2822

Deadline: 28st October, 2011

Please apply early, because the number of participants is limited!

Conference fees

470.00 EUR plus 19 % VAT

430.00 EUR plus 19 % VAT for members of the Power Plant
Technology Network

250.00 EUR plus 19 % VAT for members of universities,
public authorities

190.00 EUR plus 19 % VAT for students, pensioners

The conference fees include the conference documents, meals and drinks during the workshop. After the workshop the presentations will be allocated to the participants.

After your notification you will get the invoice with the confirmation.

Cancellation

For cancellation before the start of the workshop the following fees will be due (cancellation must be made in writing):

For the cancellation after the 28th October (postmark) we will calculate 30.00 EUR plus 19 % VAT.

After the 1st November we will calculate the full attendance fee.

The transfer of your registration to another person of your company/institution is possible.

Participant

Title: _____

First Name: _____

Name: _____

Company: _____

Street/Postbox: _____

Postal Code: _____

City: _____

Country: _____

Phone/Fax: _____

E-Mail: _____

I sign up for the workshop CO₂: CCS and CCU

- I pay the complete fee
- I am member of the Power Plant Technology Network
- I am member of an university, a public authority
- I am student, pensioner

I want to join the dinner on 9th November, 7:00 p.m.

- yes
- no

I want to participate in the matchmaking

- yes
- no

I want to participate in the excursion on 11th November to the RWE Coal Innovation Centre

- yes
- no

Address for the invoice (if different):

Company: _____

Street/Postbox: _____

Postal Code/Town: _____

Date/Signature: _____

Organisation

The workshop is presented by the EnergyRegion.NRW – Power Plant Technology Network

Organized by



In Co-operation with



Abteilung für Handel und Investitionen
Generalkonsulat der Republik Polen
in Köln



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GmbH

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More Information

The workshop speeches will be held in English and will be translated simultaneously in German.

See **www.ccs-ccu-workshop-2011.de** for

- Actual Programme
- Matchmaking
- Dinner
- Location
- Excursions
- Exhibition
- Hotels
- Sponsoring

Impressum:

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