

Registration

Three Countries Workshop "CO₂: CCS und CCR"
24th and 25th November, 2009 in Philharmonie,
Huysenallee 53, 45128 Essen, Germany, RWE-Pavillon

Online by: www.kraftwerkstechnik.nrw.de
or
by Fax: +49 (0) 209 167-2822

Deadline: 31st October, 2009

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

Participant

Title: _____

Name: _____

Company: _____

Street/Postbox: _____

Postal Code/Town: _____

Country: _____

Phone/Fax: _____

E-Mail: _____

- I sign up for the workshop
 - I pay the complete fee
 - I am member of the Power Plant Technology Network
 - I am student, pensioner, member of public authorities
- Sorry, but I am not able to join the dinner
- I want to participate in the matchmaking

Address for the invoice (if different):

Company: _____

Street/Postbox: _____

Postal Code/Town: _____

Date: _____

Signature: _____

Conference fees:

- 390.00 EUR plus 19 % VAT
- 330.00 EUR plus 19 % VAT for members of the Power Plant Technology Network
- 190.00 EUR plus 19 % VAT for students, pensioners, members of public authorities

The conference fees include the conference documents, meals and beverages during the workshop. After the workshop a CD with the presentations will be send out.

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 up to the 14th November (postmark) we will calculate 25.00 EUR plus VAT. After the 14th November we will calculate the full attendance fee. Obviously, a representative of the registered participant is possible.

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

The workshop is presented by the Cluster EnergySector.NRW - Power Plant Technology Network

In Co-operation with



Supported by



Impressum:

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Power Plant Technology Network
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CO₂: CCS and CCR in Germany, Norway, Netherlands - Challenges and Chances
Three Countries Workshop,
24th and 25th November, 2009
at Philharmonie in Essen, RWE-Pavillon

Invitation

Worldwide it has been accepted that the emissions of CO₂ must be considerably reduced to reach the target of limiting the temperature rise by 2 K. In this context CCS plays a key role in the climate-friendly energy supply specially in coal fired power plants. North Rhine-Westphalia as an important coal and energy region has - especially in the European context - a particular responsibility in implementing climate protection goals.

Therefore, the Cluster EnergieSector.NRW with its Power Plant Technology Network warmly invites you to the workshop of WG3 on "CCS and CCR". The workshop is organized in cooperation with Norway and the Netherlands. All three countries have specific know-how in capture, transport, storage and reuse of CO₂.

The workshop deals with the legal European and specific conditions in the three countries and their impact on the economics of power generation. The key requirement in this context is the social acceptance. Furthermore, experts from the three countries will give an insight into the scientific basis and running projects. The processes as such and the implementation of the technical installations are in focus. In addition, CCR (carbon capture and reuse) will be addressed at the end of the workshop.

In a matchmaking transnational synergies can be developed. There will be also 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 pursuit concrete cooperations.

Prof. Dr. Klaus Görner, LUAT, University of Duisburg-Essen
Prof. Dr. Manfred Fishedick, Wuppertal Institute for Climate, Environment, Energy Ltd.

Programme

Tuesday, 24th November, 2009

9:00 a.m. Registration

10:15 a.m. Introduction

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

10:20 a.m. Welcome

Dr. Frank-Michael Baumann (Clustermanager Cluster EnergySector.NRW, DE)

10:30 a.m. The Role of CCS to achieve Europe's Climate Targets

Scott Brockett (European Commission)

National Frameworks

Moderation: Prof. Manfred Fishedick (Wuppertal Institute, DE)

11:00 a.m. North Rhine-Westphalia

Dr. Jens Baganz (Secretary of State in Ministry of Economic Affairs and Energy of the State of Nord Rhine-Westphalia, DE)

11:20 a.m. Norway

Secretary of State (Ministry of Petroleum and Energy, NO, to be confirmed)

11:40 a.m. The Netherlands

Bert Stuij, Head of Department Energy Strategy and Transition (SenterNovem, NL)

12:00 a.m. Lunch break

CCS - An Introduction

Moderation: Margit Thomeczek (Cluster EnergySector.NRW, DE)

1:15 p.m. The Technical Process Chain

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

1:35 p.m. Requirements for CCS

Prof. Manfred Fishedick (Wuppertal Institute, DE)

1:55 p.m. CCS - Assessing the Economics

Warren Campbell (McKinsey, SE)

2:15 p.m. Climate Protection with CCS - A NGO Perspective from Norway

Eivind Hoff (Bellona, NO)

2:35 p.m. Discussion

2:50 p.m. Coffee break

The Process Chain

Moderation: Prof. Klaus Görner (University of Duisburg-Essen, DE)

3:15 p.m. Challenges for the Plant Manufacturing

Dr. Klaus-Dieter Tigges (Hitachi Power Europe, DE)

3:35 p.m. CO₂-Pipelines in the Netherlands: Two Business Cases

Rene Brahlmann (Gasunie, NL)

3:55 p.m. CCS-Status in Norway - Focus Storage

Dr. Klaus Schöffel (Gassnova, NO)

4:15 p.m. North Sea Basin Task Force

Lydia Dijkshoorn (SenterNovem, NL)

4:30 p.m. Matchmaking

7:00 p.m. Dinner

Wednesday, 25th November, 2009

CO₂-Sequestration

Moderation: Prof. Klaus Görner (University of Duisburg-Essen, DE)

9:00 a.m. Pilot Plant Niederaußem

Dr. Bernd Holling (Linde-KCA, DE)

9:20 a.m. Pilot Plant Staudinger

Dr. Tobias Jockenhövel (Siemens, DE)

9:40 a.m. Chilled Ammonia: Status and Development

Dr. Ulrich Koss (Alstom, CH)

10:00 a.m. Aker's Post-combustion Technologies

Liv Monica Bargem Stubhold (Aker ASA, NO)

10:20 a.m. Discussion

10:40 a.m. Coffee break

CO₂-Transport

Moderation: Harry Schreurs (SenterNovem, NL)

11:00 a.m. Implementation of Future CO₂-Pipeline Routes

Bas Weenink (VROM Ministry of Environment, NL)

11:20 a.m. CO₂-Transport as Part of the IGCC-CCS-Project

Ulrich Behrla (RWE DEA, DE)

11:40 a.m. Potential for CO₂-Storage in Depleted Gas Fields in Relation to Existing Infrastructure

Jaap Breunese (TNO, NL)

12:00 a.m. Discussion

12:20 p.m. Lunch break

CO₂-Storage

Moderation: Dr. Heinrich Dornbusch (Innovation Norway, NO)

1:50 p.m. The Sleipner Experience

Kai Bjarne Lima (StatoilHydro, NO)

2:10 p.m. Storage Projects in Germany

Prof. Andreas Dahmke (University of Kiel, DE)

2:30 p.m. CO₂-Storage: Best Practice Guide

Hans Axel Bratfos (Det Norske Veritas, NO)

2:50 p.m. Discussion

3:10 p.m. Coffee break

CCR - Carbon Capture and Reuse

Moderation: Prof. Manfred Fishedick (Wuppertal Institute, DE)

3:30 p.m. Reuse of CO₂

Dr. Florian Ausfelder (DECHEMA, DE)

3:50 p.m. CO₂-Reuse: Energetically Reasonable?

Dr. Daniela Kruse (Evonik Science-to-Business Center Eco2, DE)

4:10 p.m. CO₂-Inventarisation in Aquatic Biomass

Prof. Koenraad Muylaert (K.U.Leuven, BE)

4:30 p.m. Discussion

4:50 p.m. Closing of the Workshop