

CCS is the solution for GREEN INDUSTRY



THE EUROPEAN FUTURE IS GREEN

If there is one future trend that is absolutely certain, it is the growing importance of being green to survive on the European marketplace. Regulations will be tighter, the cost of CO₂ emissions will be higher. The industry jobs of tomorrow will be in those industries and businesses that are best capable of adapting to a more climate conscious future.

WE NEED CCS

A large part of the greenhouse gas emissions from manufacturing industries are not caused by energy use that can be replaced by renewables or removed in other ways. There is no easy fix to cut process emissions from refineries, cement production and steel production. That is why CCS is so important to make industry green.

The case for industry CCS is a very good one. Just 2000 emission sources globally account for *almost half of all CO₂ emissions*. Developing the technology and the solutions that can capture and store these emissions will be a green revolution. Europe can lead this revolution.

CCS SEMINAR IN BERLIN

In this context, ZERO is hosting a seminar in Berlin on March 20, 2012, where we focus on challenges and possibilities for CCS in the industry sector. We hope that this will contribute to the long-term effort of establishing several CCS-projects in Germany.



The Norcem cement factory at Brevik in Norway (Photo:Norcem)



Illustration of capture of CO₂ with off-shore storage (Source: Bellona.no)



The CCS test center at Mongstad, Norway (Photo: TCM)

About ZERO

Zero Emission Resource Organization is an environmental organization dedicated to reducing climate change by demonstrating and gaining acceptance for zero emission solutions. We believe a zero emission solution exists for all emission sources. Our mission is to work continuously for these solutions. Visit us at www.zeroCO2.no



CCS is the solution for **GREEN INDUSTRY PROGRAMME**



OPENING

08:30 Registration and coffee

09:00 Welcome and introduction to the topic

09:15 Short presentation of ZERO

Our agenda and why we are in Germany.

The role ZERO plays in the debate on CCS and oil- and gas production in Norway.

INDUSTRY-CCS: CHALLENGES AND POSSIBILITIES

09:30 Presentation of the report: "Technology Roadmaps Carbon Capture and Storage in Industrial Applications"

Juho Lipponen, Head of CCS Unit, IEA

10:00 Technological possibilities for CCS in energy intensive industry.

What is German industry's attitude towards CCS today?

Dr. Jörg Rothermel, Association of the German Chemical Industry

10:30 Break with coffee and snacks

STATUS FOR DIFFERENT SECTORS

10:50 Potential for reduction of greenhouse gas emissions in German industry

Matthias Kopp, WWF

11:20 Steel industry: The ULCOS project

Niklas Eklund, LKAB (invited)

11:50 Ongoing capture and storage of CO₂ from ethanol production

Robert Finley, IGS (invited)

12:20 Carbon Capture and Storage in the Skagerrak/ Kattegat region

Ragnhild Skagestad, Tel-Tek

12:50 Lunch

ALTERNATIVES AND POSSIBILITIES

13:45 Alternatives to CCS for emission reductions within the industry

Uwe Athmann, Decentec

14:15 Storage of CO₂ outside of Germany (North Sea): Potential and transport costs

Sigve Apeland, Gassco.

14:45 Break with coffee

COSTS AND FINANCING

15:00 Costs – Results from study

Hauke Hermann, Öko-institut

15:30 Cost aspects related to on- and offshore storage of CO₂

Prof. Dr. Christian von Hirschhausen, Technical University Berlin

16:00 Financing of industry CCS – financial measures and framework

Camilla Svendsen Skriung, ZERO.

PANEL DISCUSSION

16:20 What kind of regulative framework is necessary for realization?

Is there a way to make CCS commercial feasible?

Panelists:

Rebecca Collyer, ECF (invited)

Dr. Jörg Rothermel (VCI)

Dr. Peer Hoth, BMWi,

Franz-Josef Schafhausen, BMU (invited)

Marius Gjerset, ZERO

Moderation: Camilla Svendsen Skriung, ZERO

17:00 Summing up

Venue:

Neue Promenade 6, Berlin

Price: 50 Euros

(students, NGO's, R&D, and politicians: no charge)

SIGN UP HERE: WWW.ZERO.NO/GREENINDUSTRY