

## PROGRAM NORDIC CCS SUMMER SCHOOL AUGUST 9<sup>th</sup>-14<sup>th</sup>, 2015

Changes to the program might occur.

### Sunday August 9th, 2015

### Quality Hotel & Resort, Skjærgården, Porsgrunn

- 18:30 – 19:00      **Welcome to the summer school and Introduction to the Group Work**  
- Marit Mazzetti, SINTEF Energy Research and Ragnhild Skagestad, Tel-Tek  
  
-Aperitif
- 19:00 – 22:00      *Dinner at Quality Hotel & Resort Skjærgården, Stathelleavn. 35 3970  
Langesund , Norge*
- 22:00 – 23:00      Introductory group work

### Monday August 10th, 2015

### Porsgrunn/Trondheim

- 07:00 – 08:00      *Breakfast at Hotel*
- 08:00 – 12:00      **Field Trip to NORCEM Brevik**  
08:00      Meet up for the bus at the Hotel's front desk 08:00, checked out.  
08:45      Arrive at NORCEM  
09:00      **CLIMIT – the Norwegian RD&D program on CCS, Åse Slagtern, RCN (15 min)**  
09:15      **NORCEM Factory presentation (30 min)**  
09:45      **CO<sub>2</sub> capture presentation (45 min)**  
10:30      **HSE (15 min)**  
10:45      **Tour (1 hr)**
- 12:00 – 13:00      *Lunch*
- 13:00 – 15:00      **Field Trip to Yara**  
- See CO<sub>2</sub> handling in practice
- 15:00 – 20:00      Travel to Trondheim
- 20:30 – 22:00      *Dinner at Scandic Lerkendal Hotel*
- 22:00                  Group Work

**Tuesday August 11<sup>th</sup>, 2015**

**NTNU Campus, PFI - Høgskoleringen 6b, 5<sup>th</sup> floor, Trondheim**

08:00 – 08:30 *Breakfast at Scandic Lerkendal Hotel*

08:30 Meet up in the hotel lobby at 8:30 for a guided first walk to the [PFI-building](#)

**09:00 – 09:15 Welcome and Introductions**

**Public**

09:15 – 10:15 **"CCS Overview, incl. Steps to large scale deployment & Status of CCS projects"**

- [Nils Røkke, SINTEF](#)

- [Filip Johnsson, Chalmers](#)

10:15 – 10:45 *Coffee break*

10:45 – 11:15 **"Nordic CCS Roadmap" and Comments on Group Work**

- [Marit Mazzetti, SINTEF](#)

11:15 – 12:00 **"Capture Overview"**

- [Olav Bolland, NTNU](#)

12:00 – 13:00 *Lunch*

13:00 – 13:45 **"Capture 1 – Oxyfuel"**

- [Mario Ditaranto, SINTEF](#)

13:45 – 14:30 **"Capture 2 – BIO-CCS"**

- [Kristin Onarheim, VTT](#)

14:30 – 15:00 *Coffee break*

15:00 – 15:45 **"Capture 3 – Industrial sources"**

- [Hans Aksel Haugen, Tel-Tek](#)

16:00 – 17:45 Group Work

17:50 – 20:30 *Dinner at Kvilhaugen Gård*

- Meet up for the bus at the Hotel's front desk 17:50

- The bus returns to the hotel at 20:00

20:30 Group Work

07:30 – 08:30

*Breakfast at Scandic Lerkendal Hotel*

**Public**

09:00 – 09:45

**“Climate Changes”**

- [Kikki Kleiven, University of Bergen](#)

09:45 – 10:30

**“Storage Overview”**

- [Anja Sundal, University of Oslo](#)

10:30 – 11:00

*Coffee break*

11:00 – 11:45

**“Storage Capacity Assessments in the North Sea”**

- [Fridtjof Riis, Norwegian Petroleum Directorate \(OD\)](#)

11:45 – 12:30

**“Storage 1 – Nordic Storage Atlas”**

- [Karen Anthonsen, GEUS](#)

12:30 – 13:30

*Lunch*

13:30 – 14:15

**“Storage 2 – Site selection: capacity, injectivity and containment”**

- [Per Bergmo, SINTEF](#)

14:15 – 15:00

**“Capture 4 – Post-combustion”**

- [Espen Hamborg, TCM](#)

15:00 – 15:30

*Coffee break*

15:30 – 16:15

**“Storage 3 – Monitoring and verification of CO<sub>2</sub> storage and EOR”**

- [Philip Ringrose, Statoil](#)

16:15 – 17:00

**“Storage 4 – Critical Gaps in CO<sub>2</sub> Storage”**

- [Ane Lothe, SINTEF](#)

17:30 – 19:00

*Dinner at Scandic Lerkendal Hotel*

19:00 –

*Group work at Scandic Lerkendal Hotel*

Thursday August 13<sup>th</sup>, 2015

NTNU Campus, PFI - Høgskoleringen 6b, 5<sup>th</sup> floor, Trondheim

- 07:30 – 08:30 *Breakfast at Scandic Lerkendal Hotel*
- 09:00 – 09:45 **“CO<sub>2</sub> Utilization, CCUS Overview”**  
- [Purvil Khakharia, TNO](#)
- 09:45 – 10:30 **“Combined Capture and Storage”**  
- [Sigurdur Gislason, University of Iceland](#)
- 10:30 – 10:45 *Coffee break*
- 10:45 – 11:30 **“Transport of CO<sub>2</sub>: Options for ship and pipeline for the new Gassnova report – CCS opportunities in Norway ”**  
- [Svein Erik Losnegård, Gassco](#)

**Public**

- 11:30 – 12:45 **“Climate Psychology: How to build public support for climate policy”**  
- [Per Espen Stoknes, BI Norway](#)

- 12:45 – 13:30 *Lunch*
- 13:30 – 14:15 **“Transport, large scale infrastructure”**  
- [Jan Kjärstad, Chalmers](#)
- 14:15 – 15:00 **“Cost Analysis of CCS”**  
- [Nils H. Eldrup, Tel-Tek](#)
- 15:00 – 15:30 *Coffee break*
- 15:30 – 16:15 **"Legal issues of CCS"**  
- [Ingvild Ombudstvedt, AdeB](#)
- 16:15 – 17:00 **"CCS Outlook in Europe and beyond"**  
- [Keith Whiriskey, Bellona](#)
- 17:50 – 22:00 *Dinner at Munkholmen Island*
- Meet up for the bus at the Hotel's front desk 17:50
  - The bus returns to the hotel 22:00
- 22:00- Group work

**Friday August 23<sup>rd</sup>, 2015**

**NTNU Campus, PFI - Høgskoleringen 6b, 5<sup>th</sup> floor, Trondheim**

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| <i>07:30 – 08:00</i> | <i>Breakfast at the hotel</i><br>- Check out of the hotel and bring your luggage to the PFI building |
| 08:00 – 11:00        | <b>Group Work at Hotel</b>   |
| <b>11:30 – 12:30</b> | <b>At PFI: Group presentations/Oral Exam (group 1-2)</b>   |
| <i>12:30 – 13:30</i> | <i>Lunch</i>   |
| <b>13:30 – 14:30</b> | <b>Group presentations/Oral Exam (group 3-4)</b>   |
| <i>14:30</i>         | <i>Coffee</i>  |
| 15:00 – 15:30        | Team awards and wrap-up  |
| 15:30                | Departure – bus to Værnes airport from the PFI-building  |