

## Agenda Workshop on Hydrogen Production with CCS

Organised by CSLF, IEAGHG, IEA Hydrogen TCP, and Equinor  
Hosts: EDF and Club CO<sub>2</sub>

### Date and time:

November 6, 2019, 08:00 – 17:30

### Place:

CAMPUS EDF CHATOU  
Bâtiment B / “B” Building  
6 Quai Watier  
78400 CHATOU  
FRANCE

Meeting room “Renoir & Caillebotte” room, on the 1<sup>st</sup> floor.

PLEASE NOTE that your name will be checked against a list of registrants, and all participants will need to show a **photo ID (passport or other ID)**.

### Programme

08:00 Registration

09:00 Welcome, and background of workshop (IEAGHG and CSLF)

09:10 *Session 1: Role of hydrogen in a low-carbon economy – long-term perspective. Chair Lars Ingolf Eide, Research Council of Norway*

09:10 Global Perspectives on hydrogen and IEA hydrogen activities. **Paul Lucchese, IEA Hydrogen TCP**

09:30 A national view – **Marten Hamelink, Ministry of Economic Affairs and Climate, the Netherlands.**

09:50 Safety aspects. **Y. John Khalil, IEA Hydrogen TCP Task 37**

10:10 The CCS chain – example of Northern Lights Project. **Per Sandberg, Equinor**

10:30 Break. *One floor down*

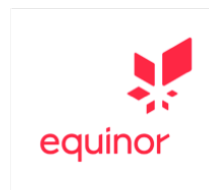
10:50 *Session 1 continues*

Views from industry

10:50 Maritime. **TBA**

11:05 Refining. **Damien Valdenaire, Concawe**

11:15 Questions and discussions



11:45 *Session 2: Case studies Chair Mary-Rose de Valladares, IEA Hydrogen TCP*

11:45 H21. **Anna Korolko, Equinor**

12:05 Hydrogen Energy Supply Chain (HESC). **Hiroshi Ohata, J-POWER, Japan**

12:25 Overview of Carbon Capture, Utilization and Storage (CCUS) and opportunities for Hydrogen in USA. **Mark Ackiewicz, US DOE** (Presented by **Richard Lynch, DOE**)

12:40 Key learnings from recent UK activities. **Emrah Durusut, Elementenergy**

12:55 Questions and discussions

13:15 Lunch. *One floor down*

14:15 *Session 3: Technology status hydrogen production from fossil fuels w/CCS. Chair Christoph Schäfer, Equinor*

14:15 Overview of hydrogen production methods (**Mary-Rose de Valladares, IEA Hydrogen TCP**)

14:35 Status of hydrogen production with CO<sub>2</sub> capture. **Sigmund Størset, SINTEF**.

14:50 Views from hydrogen producers and technology vendors (10 min each):

- **Fabrice Del Corso, Air Liquide**
- **Vince White, Air Products**
- **Markus Lesemann, GTI**

15:30 Groups grab coffee on their way to breakout rooms. *One floor*

15:30 Breakout in groups

Questions to answer:

- a. Where to go from here - opportunities for and approaches to cooperation (e.g. common task force)?
- b. RD&D needs for hydrogen production from fossil fuels w/CCS, with a view to bring down cost and carbon footprint?
  - i. Gaps
  - ii. Bottlenecks
  - iii. Analysis
- c. Creating a market for hydrogen w/CCS – incentives, policy and regulatory aspects?

16:45 Report out – breakout groups

17:15 Conclusions, wrap-up, the path forward

17:30 Adjourn