Workshop on hydrogen production with CCUS November 6, 2019, in Chatou, Paris, France

Carbon sequestration Leadership Forum (CSLF), the IEA Greenhouse Gas R&D programme (IEAGHG), the IEA Hydrogen Technology Collaboration Programme and Equinor are jointly organising a workshop on hydrogen production with CCS November 6, 2019, in Chatou outside Paris, France. The workshop will be held in conjunction with CSLF meetings in Chatou, Paris, November 4&5 (Technical Group meeting) and November 7 (workshop on CCUS in Energy Intensive Industries, EIIs).

The hydrogen workshop will be full day. Its objective is to identify RD&D needs for decarbonised hydrogen. The wanted outcome will be recommendations on decarbonised hydrogen to the CSLF ministers, or Clean Energy Ministerial (CEM) CCUS Initiative and Mission Innovation CCUS and Hydrogen Challenge. Another objective is to lay a foundation for further co-operation, e.g. a common task on the topic between IEA Hydrogen TCP, IEA GHG and CSLF.

The targeted audience is primarily scientists and project managers within the field of hydrogen production with CCS, but at the workshop we want also to hear views on the expected, or hoped for, role blue hydrogen can play in a future low-carbon society, and we have invited speakers from IEA, large projects, industry and governments to give some views.

The workshop is based on a report by CSLF from In June 2018 on hydrogen production with CCS, with emphasis on activities in the membership countries (https://www.cslforum.org/cslf/sites/default/files/documents/Venice2018/CSLF_Hydrogen_Task_Force_Phase_0_Final_Report_05_June_2018.pdf).

Separate registrations are needed for all three events. Registration and programmes for the events:

https://www.cslforum.org/cslf/Events/Chatou2019

Direct registration for the hydrogen workshop November 6 only: https://forskningsradet.pameldingssystem.no/workshop-on-rnd-needs-for-hydrogen-production-with-ccs.

Registration deadline: October 24, 2019, at 24:00.

The preliminary programme is attached.

Note that the available seats are limited. The receipt for registration is only a confirmation that the registration has been received. The organisers will revert with final confirmation shortly after the deadline.

Workshop on Hydrogen Production with CCS

Organised by CSLF, IEAGHG, IEA Hydrogen TCP, and Equinor

Hosts: EDF and Club CO_2

Date and time:
November 6, 2019, 09:00 – 17:30

Place:
CAMPUS EDF CHATOU
Bâtiment B / "B" Building
6 Quai Watier
78400 CHATOU
FRANCE

Meeting room "Renoir & Caillebotte" room, on the 1st floor.

PLEASE NOTE that your name will be checked against a list of registrants, so IT IS IMPORTANT that you register for the meeting using the online meeting registration form. Please note that all participants from outside France will need to show a **valid passport.** Attendees from France will nee to show **passports OR another ID.**

Preliminary programme

08:00 Registration

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

09:10 Role of hydrogen in a low-carbon economy – long-term perspective
- Perspectives of the hydrogen society and IEA activities (20 min., **IEA Hydrogen TCP)**
- A national view – **Marten Hamelink, Minisytry of Economic Affairs and Climate, the Netherlands**..
- Views from industry
  - Maritime. **Øystein Ulleberg, IFE** (to be confirmed)
  - Steel. TBD
  - Chemicals. CEFIC (to be confirmed)
- Safety aspects. **Y. John Khalil**, **IEA Hydrogen TCP Task 37**
- The CCS chain – example of Northern Lights Project. **Per Sandberg, Equinor**
- Panel discussion? (speakers and audience).

11.10 Break

11:35 Case studies
- o H21. **Anna Korolko, Equinor**
- o Hydrogen Energy Supply Chain, HESC. **Hiroshi Ohata, J-POWER, Japan**
- o USA. **US DOE.** (To be confirmed)
- o Discussions

12:45 Lunch

13:45 Technology status hydrogen production from fossil fuels w/CCS
- Overview of hydrogen production methods (**IEA Hydrogen TCP**)
- More specifics of status of hydrogen production with CO_2 capture. **Sigmund Størset, SINTEF**.
- Views from hydrogen producers and electrolyser manufacturer; **Air Liquide**, **Air Products** (To be confirmed)

15:15 Break-out in groups (coffee break at groups' convenience) to answer:
- a. What are the RD&D needs for hydrogen production from fossil fuels w/CCS, with a view to bring down cost and carbon footprint?
- b. How to creating a market for hydrogen w/CCS – incentives, policy and regulatory aspects?
- c. Where to go from here - opportunities for cooperation (e.g. common task force)?

16:15 Report out – break-out groups

17:00 Conclusions, wrap-up, the path forward

The meeting will take place in conjunction a meeting of the Technical Group of the Carbon Sequestration Leadership Forum (CSLF) November 4 and 5 (for registration and programme, **https://www.cslforum.org/cslf/Events/Chatou2019**) and workshop on CCUS in energy intensive industries (EIIs) November 7, organised by CSLF/Club CO_2 workshop (registration: see the CSLF website, both held at the same location).

Separate registrations are needed for all three events.

Some Meeting Venue Information

Chatou is located approx. 15 kilometers to the west-northwest of Paris city center, and approx. 6 kilometers from the La Défense business district of the city. One option for traveling to Chatou from Charles de Gaulle International Airport is the RER. The RER "B" train will bring you to city center, where a change to the RER "A" train (the A1 branch) will get you to the Gare de Rueil-Malmaison, which is not far from the meeting venue.
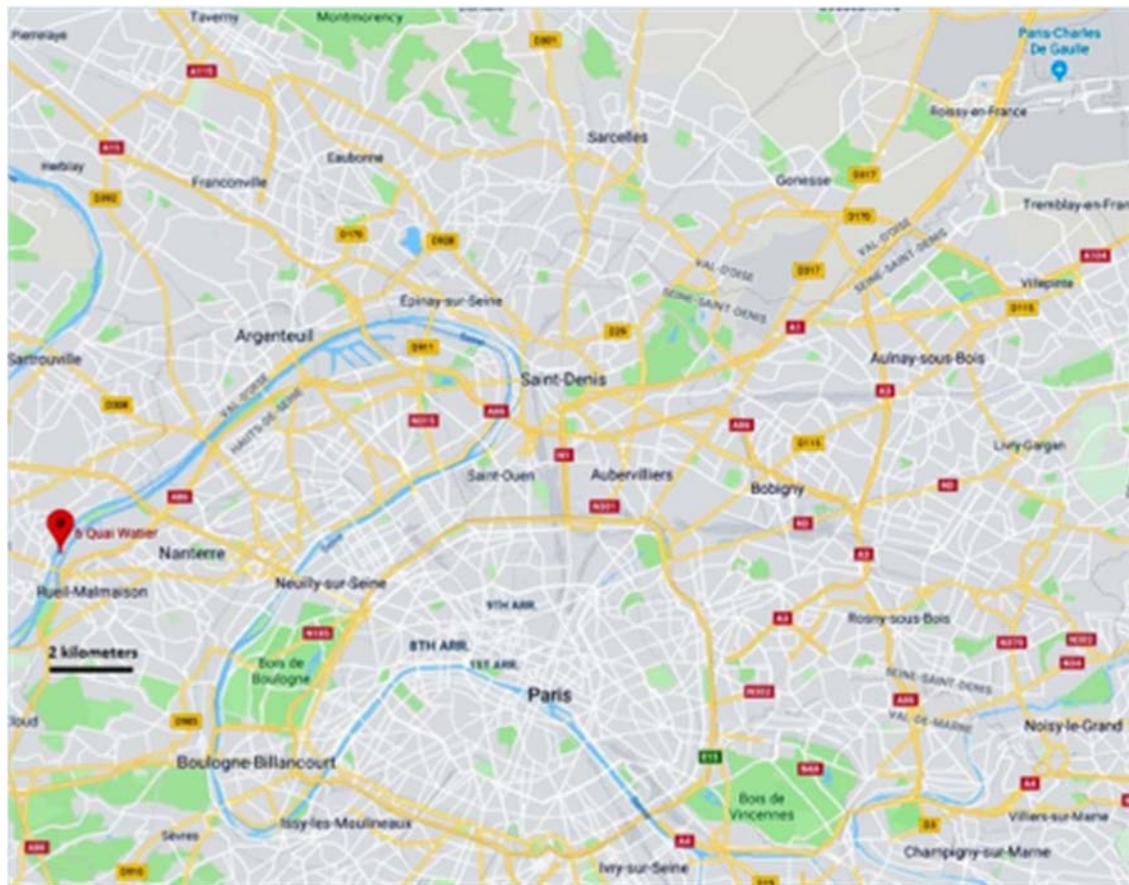
There are several hotels in the general vicinity. For those wishing to stay in Paris instead, the one option may be the La Défense business district where there are many hotels located near the RER station. If instead preferred, a taxi ride from La Défense to the meeting venue will take approx. 15-20 minutes.