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IEAGHG 10th High Temperature Solid Looping Cycles Network (HTSLCN) Meeting & CaLby2030 Project 2nd Dissemination Event

17th – 18th March 2026 - Kulturens Hus, Luleå, Sweden

ORGANISING COMMITTEE

Melisa Borre', EU CORE Consulting - borre@eucore.eu

Martina Fantini, EU CORE Consulting - fantini@eucore.eu

Paul Cobden, Swerim - paul.cobden@swerim.se

Matilda Boudin, Swerim - matilda.boudin@swerim.se

Carys Blunt, IEAGHG - Carys.Blunt@ieaghg.org

Jasmin Kemper, IEAGHG - jasmin.kemper@ieaghg.org

MennatAllah Labib, IEAGHG - MennatAllah.Labib@ieaghg.org

BACKGROUND

Day 1 - 10th HTSLCN meeting - 17th March 2026

The high temperature solid looping cycles network (HTSLCN) meeting covers technology developments in fields where a solid material is cycled between multiple reactors at elevated temperatures. The scope of the IEAGHG HTSLCN is to discuss recent progress in solid looping cycles such as calcium looping and sorption enhanced reforming for selective CO₂ transport and chemical looping combustion and reforming with selective oxygen transport by the solids. It brings together well-known technologies used in fluid catalytic cracking, circulating fluidized beds and combined cycles, in new ways, to increase efficiencies and provide opportunities to decrease the carbon footprint of energy intensive processes.

Day 2 - CaLby2030 project – 2nd Dissemination event - 18th March 2026

CaLby2030 is a European project granted under Horizon Europe framework programme. The main goal is to act as enabling tool to achieve, by 2030, commercial deployment of Calcium Looping technology (CaL) using Circulating Fluidised Bed reactors.

CaLby2030 project presentations will focus on decarbonization in iron & steel industries and will include a site visit to Swerim's CaL-CFB pilot plant, one of the project's demonstration sites.

ABSTRACT SUBMISSIONS

The Call for Abstracts for the 10th HTSLCN is now closed.

REGISTRATION

Registrations are available through the following links:

- If you want to participate **both days** or just on the **first one**, please click [HERE](#)
- If you want to participate just for **day 2**, please click [HERE](#).

Please note that we will finalise the number of delegates on the **2nd of March 2026**. Please make sure to register before then.

AGENDA

Tuesday 17th March 2026 (HTSLCN)

| Time* | Topic | Speaker |
|----------------------|---|-----------------------------|
| 08:30 – 09:00 | Registration of participants and coffee | |
| 09:00 – 09:05 | Opening note | |
| 09:10 – 09:30 | Utilizing high temperature furnace off-gases in biomass gasification: A pathway for efficient CO ₂ utilization | Shareq Mohd Nazir |
| 09:30 – 09:50 | Sorption-enhanced reverse water gas shift (COMAX) | Johannis A. Z. Pieterse |
| 09:50 – 10:10 | Chemical looping for CO ₂ purification | Dora Andreea Chisăliță |
| 10:10 – 10:40 | Coffee break | |
| 10:40 – 11:00 | Novel Direct Air Capture System using Calcium Looping | Yolanda A. Criado |
| 11:00 – 11:20 | Chemical looping CO ₂ splitting over Mn-based perovskites and high-entropy perovskites enabled by industrial waste-gas utilisation | Adam Zaidi |
| 11:20 – 11:40 | Sorption-enhanced gasification of residual biomass for high-purity hydrogen production with integrated CO ₂ capture | Luis La Calle |
| 11:40 – 12:00 | Pilot demonstration of Integrated CFB Calcium Looping in Cement Plants | Felix Mangold |
| 12:00 – 13:00 | Lunch | |
| 13:00 – 13:20 | SEWGS technology de-risking | H.A.J. van Dijk |
| 13:20 – 13:40 | Scaling Chemical-Looping Combustion for Sustainable Waste-to-Energy Applications beyond 1 MW _{th} | Jochen Ströhle |
| 13:40 – 14:00 | Fate of HCl in Calcium Looping Systems: Operational Insights from the 1.7 MW _{th} La Pereda CFB Pilot Plant | Borja Arias |
| 14:00 – 14:20 | NO _x Transformation and Reduction Kinetics in Calcium Looping Systems | Richard T. J. Porter |
| 14:20 – 14:40 | Environmental performance of synthetic CO ₂ sorbents for carbonate looping: an ex-ante LCA coupled with process modelling | Agnese Pedretti |
| 14:40 – 15:00 | Steady-state and transient modelling of calcium looping integrated with steelmaking processes | Markus Secomandi |
| 15:00 – 15:30 | Coffee break | |
| 15:30 – 15:50 | Integration of Calcium Looping and Solid Oxide Electrolysis for e-methanol production in steelmaking | Nestor D. Montiel-Bohórquez |
| 15:50 – 16:10 | Modeling and model development in novel solid looping projects | Markku Nikku |
| 16:10 – 16:25 | Evolution of the CO ₂ carrying capacity of limestone in CaL systems when exposed to HCl and SO ₂ containing gases | Sergio Celiméndiz |
| 16:25 – 16:45 | Design of a Mobile Carbonate Looping Pilot Plant for On-Site CO ₂ Capture from the Flue Gases of Various Industrial Plants | Jochen Ströhle |
| 16:45 – 17:05 | CO ₂ and SO ₂ capture in the copper production process | Sergio Celiméndiz |
| 17:05 – 17:25 | Calcium Looping based on CFB as a CO ₂ Capture Technology for Modern Steelmaking - Engineering and Design of the TRL 6 Pilot Plant | Martin Haaf |
| 17:25 – 18:00 | Panel discussion and closing remarks | |
| 19:00 – 21:30 | Bus pick-up for Dinner | |

Wednesday 18th March 2026 (CaLby2030)

| Time* | Topic | Speaker |
|----------------------|--|-------------------|
| 08:30 – 09:00 | Registration of participants and coffee | |
| 09:00 - 09:10 | Welcome words from the host and the coordinator | SWERIM & CSIC |
| 09:10 - 09:30 | Decarbonization pathways in iron & steel: an industrial perspective | TBC |
| 09:30 – 09:50 | Conceptual Design for First of a Kind (FOAK) Industrial Demonstration Projects | Martin Haaf (SFW) |
| 09:50 – 10:10 | Pilot demonstration of CFB-Cal integrated in Steel industries | SWERIM |
| 10:10 – 10:25 | Carbon Transport & Storage: Optimisation tools for Multimodal Transport | UCL |
| 10:25 – 10:45 | Coffee break | |
| 10:45 – 11:00 | Social acceptance of CCUS with focus in steel | TBC |
| 11:00 – 11:30 | EMPHATICAL project presentation | EMPHATICAL |
| 11:30 – 12:00 | INITIATE project presentation | INITIATE |
| 12:00 – 13:00 | Lunch | |
| 13:00 – 14:00 | Bus to Swerim + distribution of PPE | ALL |
| 14:00 – 16:30 | Visit to Swerim's pilot | ALL |
| 17:00 | Bus drop-off at the airport and return to venue | |

*Timings are expressed in CET – Central European Time

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Project name: CaLby2030 | Grant Number: 101075416.

Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Climate, Infrastructure and Environment Executive Agency (CINEA). Neither the European Union nor the granting authority can be held responsible for them.

The project is also supported by the UK Research and Innovation (UKRI).

VENUE

Name: Kulturens Hus

Address: Skeppsbrogatan 17, Luleå, Sweden



Kulturens hus is in downtown Luleå, just minutes from shops, entertainment, restaurants and accommodation. This modern cultural centre, located on Luleå's northern harbour front, commands a beautiful view and is ideally equipped for conferencing. The complex houses the city library, an art gallery, large and small concert halls, multifunctional foyers on three levels, conference facilities, a café and a restaurant. For visitors, Luleå's Tourism Office is conveniently located in Kulturens hus. Further information about the conference venue is available at www.kulturenshus.com.

You can find more information about Luleå, including the weather forecast through the following link: [Welcome to Luleå!](#). Please keep an eye on the weather forecast and please make sure to bring weather-appropriate clothes.

DIRECTIONS TO THE MEETING/VENUE

Upon arrival at Luleå Airport, please take a taxi to your hotel. Taxis are found outside the airport. Please make your taxi booking in advance if possible. The trip from the airport to the hotels or the conference venue takes about 10 minutes. The Clarion Hotel Sense is very close to the venue, just opposite the street.

CONFERENCE DINNER

Dinner will be held at 19.30 on Tuesday March 17th, more information to follow.

SITE VISIT

On March 18th, after CaLby2030 project 2nd Dissemination event we will organize a site visit to Swerim's brand new TRL6 pilot for metallurgical CaL-CFB, located at Aronstorpsvägen 1, 97437 Luleå, Sweden. Buses will be available from the venue to the site and from the site to the venue/ airport.

Please wear appropriate clothing for the site visit, including no open-toed shoes and no high heels. Please note that delegates are **not permitted** to take photographs or videos at the site.

HOTEL ACCOMMODATION

To support your stay in Luleå during the 10th HTSLC Network Meeting and the CaLby2030 Dissemination, Swerim have pre-booked a number of single rooms a centrally located hotel for the nights of the **17th and 18th March 2026**. These rooms include breakfast and can be reserved on a first-come, first-served basis.

Please find the booking options below:

Clarion Hotel Sense

Single rooms including breakfast

[More information & book your room](#)

Savoy Hotel Luleå

Single rooms including breakfast

[More information & book your room](#)

Quality Hotel Luleå

Single rooms including breakfast

[More information & book your room](#)

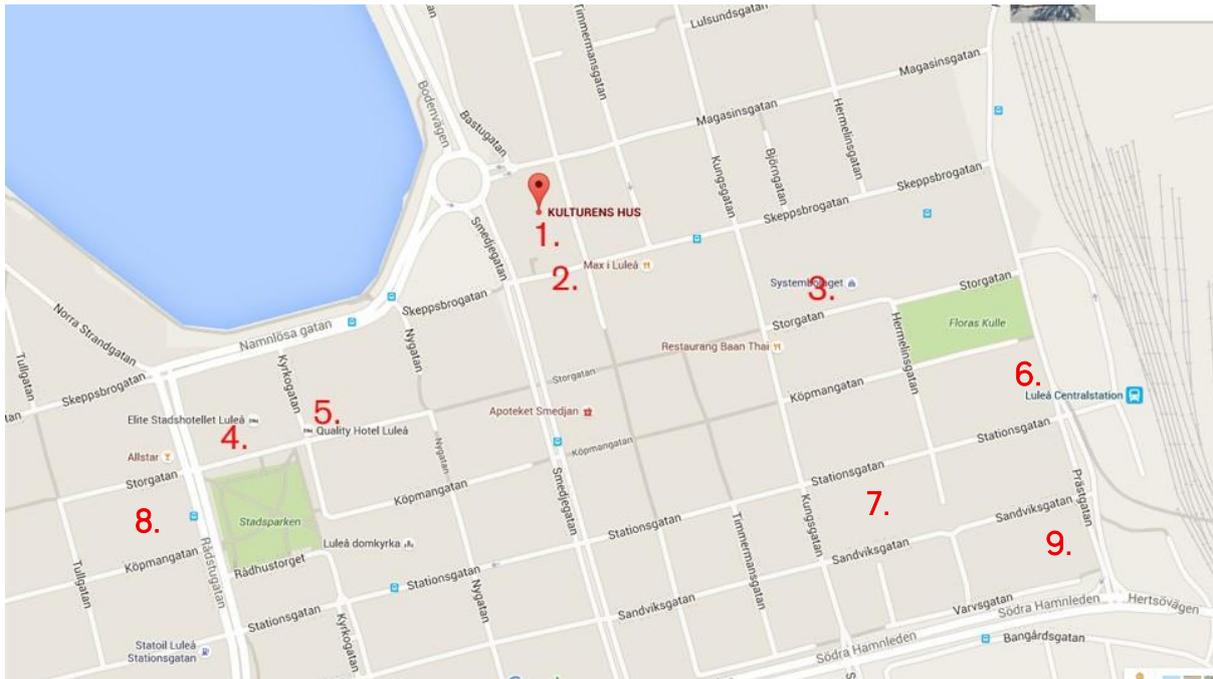
Important booking details

- The rooms are reserved until the **17th of February 2026**. After this date, any unbooked rooms will be released to general sale.
- Cancellations can be made with the respective hotel up to **14 days** before arrival.
- If you would like to book additional nights (e.g., the night of the 16th and/or the night of the 19th of March 2026), you may choose to book the nights of the 17th and 18th through the links to the pre-booked hotel rooms above, and then you can book the additional nights directly through the respective hotels' websites (linked below).

We recommend booking your accommodation as soon as possible due to limited availability in Luleå during the meeting dates.

Below is a map showing the location of the venue and hotels:

1. Kulturens hus
2. Clarion Hotel Sense <http://www.clarionsense.se/>
3. Best Western Plus Savoy [Best Western Plus Savoy Luleå | Best Western Luleå | Hotels in Luleå](#)
4. Elite Stadshotellet <https://www.elite.se/sv/hotell/lulea/stadshotellet/>
5. Quality Hotel Luleå <https://qualitylulea.se-hotel.com/en/>
6. Hotell Amber & Naran [SPiS Hotell Amber](#)
7. Park Hotell Luleå [Park Hotell Luleå | Luleås billigaste hotell](#)
8. Luleå Bed and Breakfast [Luleå Bed & Breakfast](#)
9. Comfort Hotel Arctic [Comfort Hotel™ Arctic | Luleå | Strawberry](#)
10. Hotell Scandic Luleå is 2 bus stops away (or a 28 minute walk) from the conference venue, with buses every 15 minutes [Bo på Scandic Luleå | Hotell i Luleå](#)



SCIENTIFIC COMMITTEE

The Scientific Committee of the HTSLCN organises and manages the technical sessions of the meeting:

- Anders Lyngfelt, Chalmers University, Sweden
- Ben Anthony, Cranfield University, UK
- Bernd Epple, TU Darmstadt, Germany
- Carlos Abanades, CSIC-INCAR, Spain
- Dennis Lu, Natural Resources Canada, Canada
- Jasmin Kemper, IEAGHG, UK
- Matteo Romano, Politecnico Di Milano, Italy
- Paul Cobden, Swerim, Sweden
- Peter Clough, ERM, UK
- Stuart Scott, University of Cambridge, UK
- Tobias Pröll, University of Natural Resources Vienna, Austria
- Vincenzo Spallina, University of Manchester, UK
- Zhenshan Li, Tsinghua University, China

ABOUT IEAGHG

The IEA Greenhouse Gas R&D Programme (IEAGHG) is an international collaborative research programme established in 1991 as an Implementing Agreement under the International Energy Agency (IEA).

IEAGHG studies and evaluates technologies that can reduce greenhouse gas emissions derived from the use of fossil fuels. The Programme aims to provide its members with definitive information on the role that technology can take in reducing greenhouse gas emissions.

IEAGHG takes pride in being an informed but unbiased source of technical information on greenhouse gas mitigation.

The programme's main activities are:

- To evaluate technologies aimed at reducing greenhouse gas emissions.
- To help facilitate the implementation of potential mitigation options.
- To disseminate the data and results from evaluation studies.
- To help facilitate international collaborative research, development and demonstration activities (R,D&D).



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