Management Board Meeting of FCH JP

Time Tuesday 23th of September 2025, 13:00 - 14:30 (CET)
Place Teams Meeting

Persons present:
Jari Kiviaho (VTT), Chair
Daria Vladikova (BAS)
Vito di Noto (Università di Padova)
Jose Bellosta von Colbe (Hereon)
Mathias Gérard (CEA)
Martin Andersson (LU)
Alfredo Iranzo (US)
Marcello Baricco (Unito)
Josemaria Sanchez (CIEMAT)
Miguel Laguna (ICMA)
Marcin Blesznowski (IEN)
Vincenzo Mulone (Uniroma)
Jessica Vepsäläinen (VTT), Secretary

Present in parts of the meeting:
Fionn Iversen (Norce)

1. **Welcome and agenda approval** (Jari Kiviaho)

   The agenda was agreed on and the meeting proceeded accordingly.

2. **Minutes of the previous meeting**

   This was skipped.

3. **Membership application**

   Fionn Iversen gave a short presentation about NORCE and expressed the wish to join FCH JU. After the presentation the management board discussed if the application is accepted or not. (Attachment 1)

   Decision:
   - NORCE were accepted as a member of EERA FCH JP.

   Action Point: Jari to inform the applicant and EERA of the decision and ask for following information.
   - List of which SP you are willing to join.
   - Contact person of each SP (name and email)

4. **Outcomes from EERA Policy Working Group** (Vito & Daria)

   Vito and Daria provided an update on the EERA policy working groups, discussing current European hydrogen strategies, challenges in cross-country collaboration, and the evolving focus of EU funding and priorities, with contributions from several participants.

   The main challenges Vito identified for hydrogen policy in Europe.

- Lack of a unified European strategy for hydrogen, with fragmented national interests impeding coordinated action.
- Political uncertainty and shifting priorities, making it difficult to establish clear, long-term policies.
- Dependence on external partners (e.g., Morocco, China) for hydrogen production, leading to strategic vulnerabilities and unclear agreements.
- Underutilization of Europe's own renewable and geothermal resources, with too much reliance on imported technologies.
- Inefficient investment and resource allocation due to the absence of a federal approach, risking wasted resources and reduced competitiveness.
- The risk that Europe will fall behind global competitors if it does not rationalize and optimize its hydrogen strategy.

Daria proposed solutions for improving hydrogen policy and expressed concerns raised about current EU funding priorities.

- Foster federal-level cooperation among European countries to align hydrogen policy and strategy, rather than relying solely on institutional or company-level initiatives.
- Strengthen cross-border collaboration to connect countries with hydrogen production capacity to those with technological expertise, ensuring mutual support and development.
- Build multinational teams within the hydrogen implementation working group to enhance networking and integrate hydrogen efforts across various energy sectors.
- Increase transparency and active engagement in policy meetings, moving beyond information dissemination to facilitate meaningful discussion and input from stakeholders.
- Encourage updates to subprogram structures to reflect new priorities, such as critical raw materials and social sciences, ensuring public awareness and acceptance are addressed.
- Advocate for better integration of research, innovation, and industry in future EU programs to close the gap between development and practical application.
- Daria expressed concern that EU funding priorities are shifting away from climate and clean energy toward defense and resilience.
- She noted that while industrial decarbonization remains a priority, the increasing focus on security and defense could limit available resources for hydrogen and related research.
- Daria highlighted the challenge of ensuring that research, innovation, and industry remain connected and supported amid these changing funding priorities.
- She observed that about 30% of funding will need to come from Member States, which may create disparities and challenges for countries with fewer resources.

5. AOB

Outcomes from Joint workshop with EERA e3s JP (Marcello)

- Workshop "Impacts of hydrogen technologies on society" in late March.
- Marcello talked through the agenda of the workshop. Link to the agenda
- There were about 40 participants in total.
- Jari, Miguel and Alfredo agreed that a bit different perspective than normally was good and that these types of events should be encouraged.

JPCOM (Jari)

- Jari introduced the new Joint Program Committee structure aimed at enhancing collaboration between joint programs. Vito will act as the backup representative. Next meeting 21st and 22nd October. (Attachment 2)

Announcement (Jari)

- Jari announced that he is resigning from the chair position because of lack of time and resources.
- EERA secretariat will be informed and an election for new chair will be held.

Workplan for 2026 (All)

- The workplan needs to be agreed when new FCH JP Chair has been elected.
    - Maybe update the subprograms.

6. Next meeting

- Jari will arrange the next MB meeting for November/December this year.

7. End of the meeting

- The meeting ended at 14.35

Attachments

1. NORCE presentation
2. Draft IRoP Inclusion for the JP Committee

Passion for knowledge – together for sustainability

NORCE is an independent research institute that conducts research for both public and private sectors, to facilitate informed and sustainable choices for the future.

1200

NOK mill.

850

employees

50

nationalities

75%

doctoral degrees

Locally grounded, with a global perspective

NORCE is Norway’s leading research institute with a presence along the entire Norwegian coast. Maintaining a strong local presence facilitates close collaboration with unique specialist communities, centres of expertise, the business community and government authorities.

Priority areas

Our goal is to assist in solving major challenges for society, such as climate change, energy transition, the aging population, social inequality and youth exclusion.

To facilitate the creation of clear strategies for specific challenges, we have organised our interdisciplinary expertise into four areas of priority.

1

Safe and Inclusive Societies

2

Energy Future

3

Climate and Environmental Risk

4

Sustainable Oceans and Coasts

Infrastructure

NORCE builds its own facilities and has access to a variety of infrastructure, including various labs and test facilities. This infrastructure is important for developing new knowledge that meets society’s needs, and contributes to a sustainable energy transition.

EU Hydrogen Strategy 2020: Key to the Energy Union & RePower EU

Phase 1, 2020 - 2024: Initial Deployment

Deploy 6 GW of renewable hydrogen electrolysers and produce 1 million tonnes of renewable hydrogen for industry and refueling.

Phase 2, 2025-2030: Scale-Up and Infrastructure

Expand electrolysers to 40 GW and develop EU-wide hydrogen infrastructure, Hydrogen Valleys, and international trade.

Phase 3, 2030-2050: Full-Scale Deployment

Implement full hydrogen use across sectors like aviation, maritime, and heating using renewable electricity up to 25%.

Source: European Hydrogen Observatory

European Hydrogen Backbone in 2030

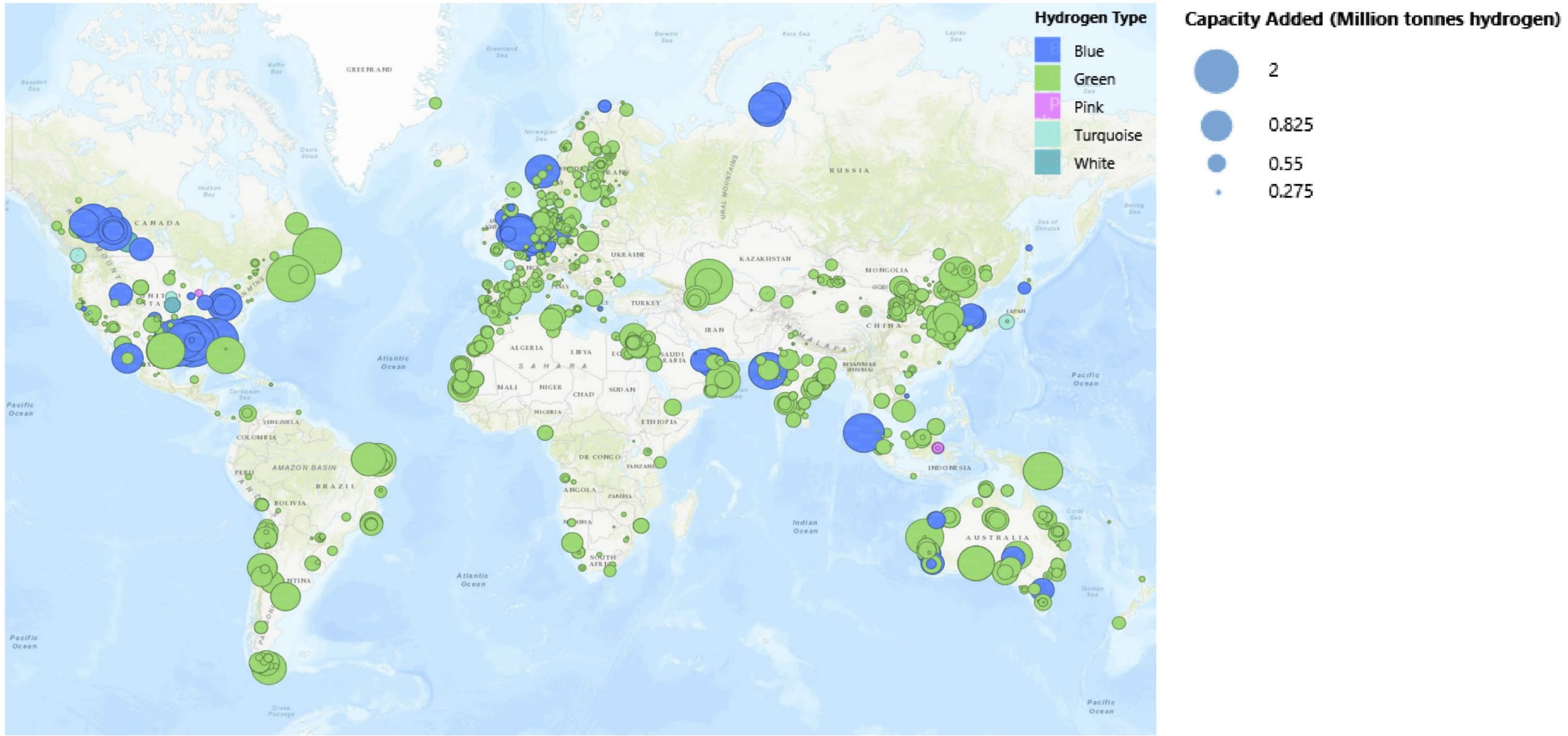
Source: ehb.eu

European Hydrogen Backbone in 2040

Source: ehb.eu

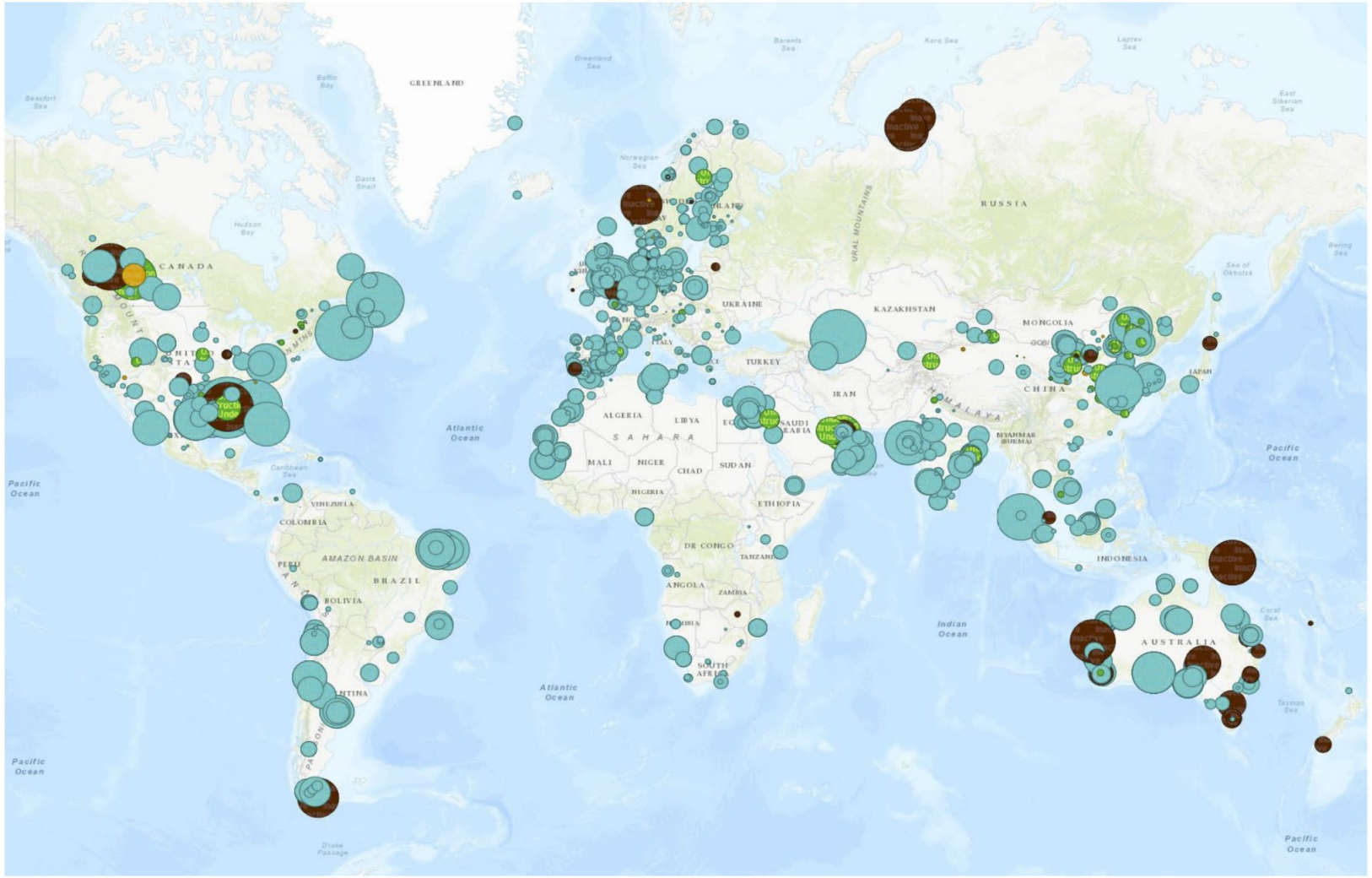
European Hydrogen Backbone

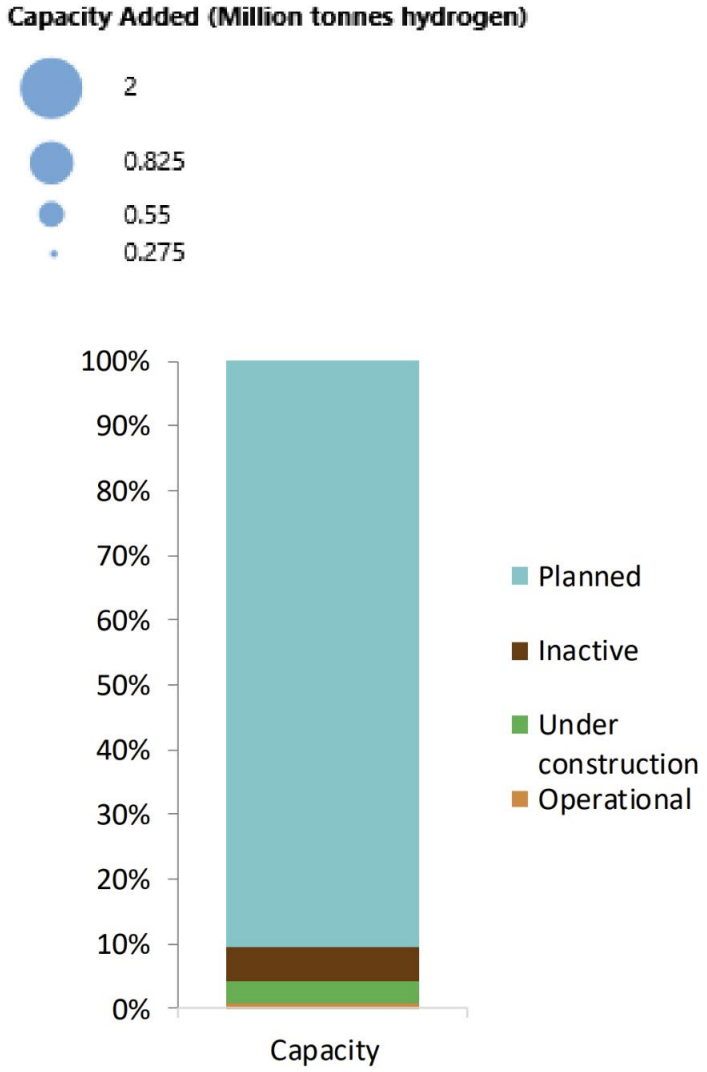
Global development of non-grey hydrogen production



Source: Rystad Energy HydrogenCube

Status hydrogen production projects

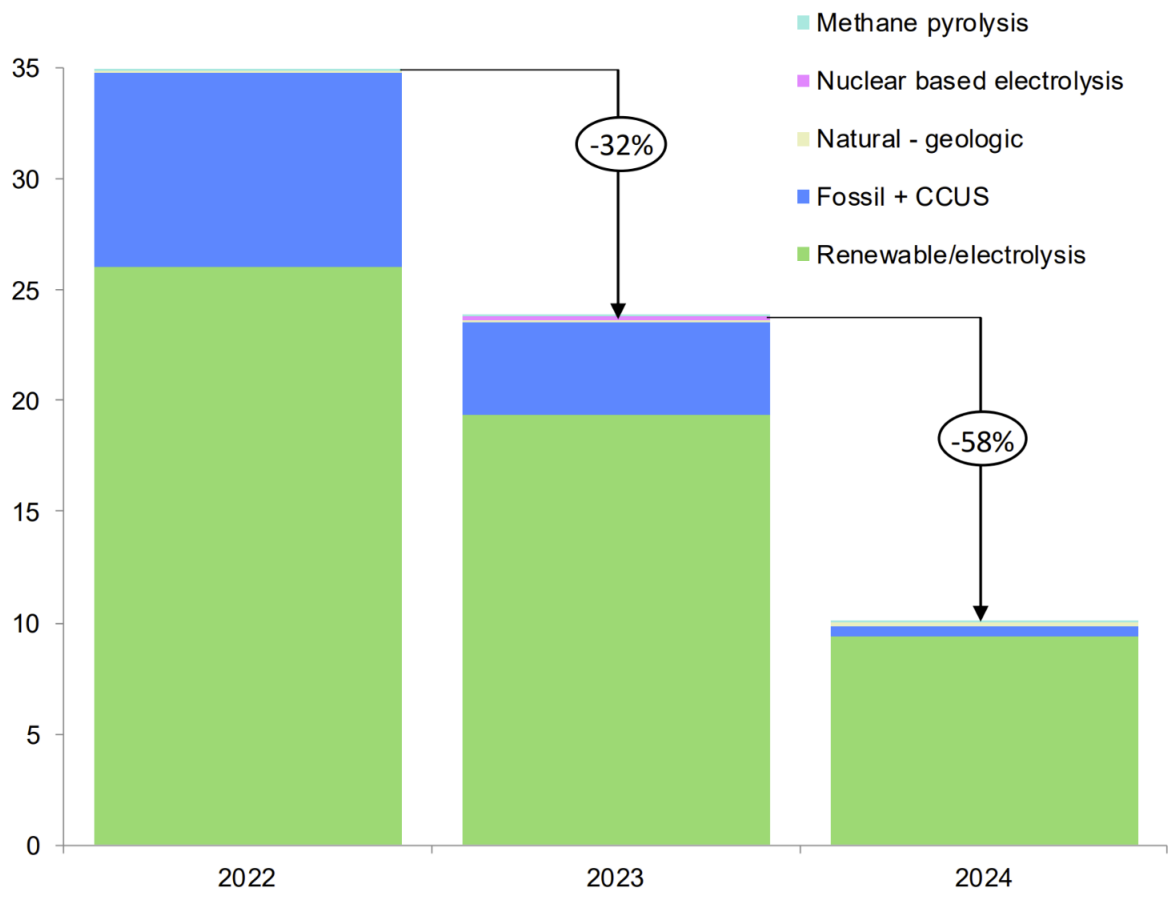




Source: Rystad Energy HydrogenCube

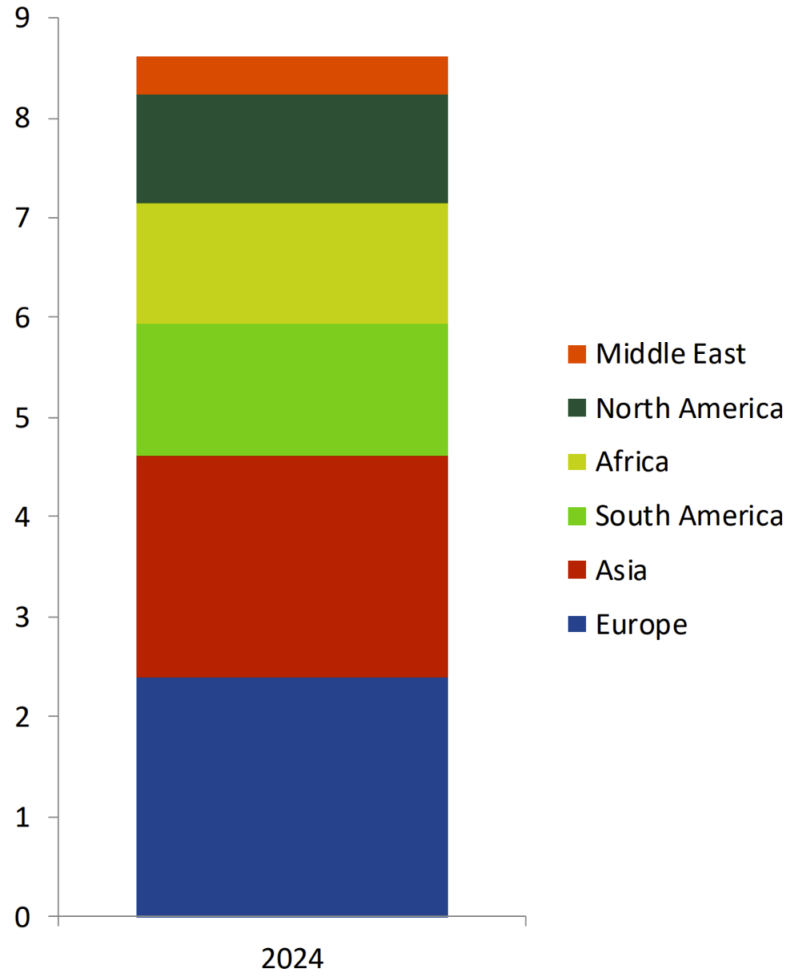
Clean hydrogen announcements

Clean hydrogen announcement in 2022, 2023 and 2024
Million tonnes per annum

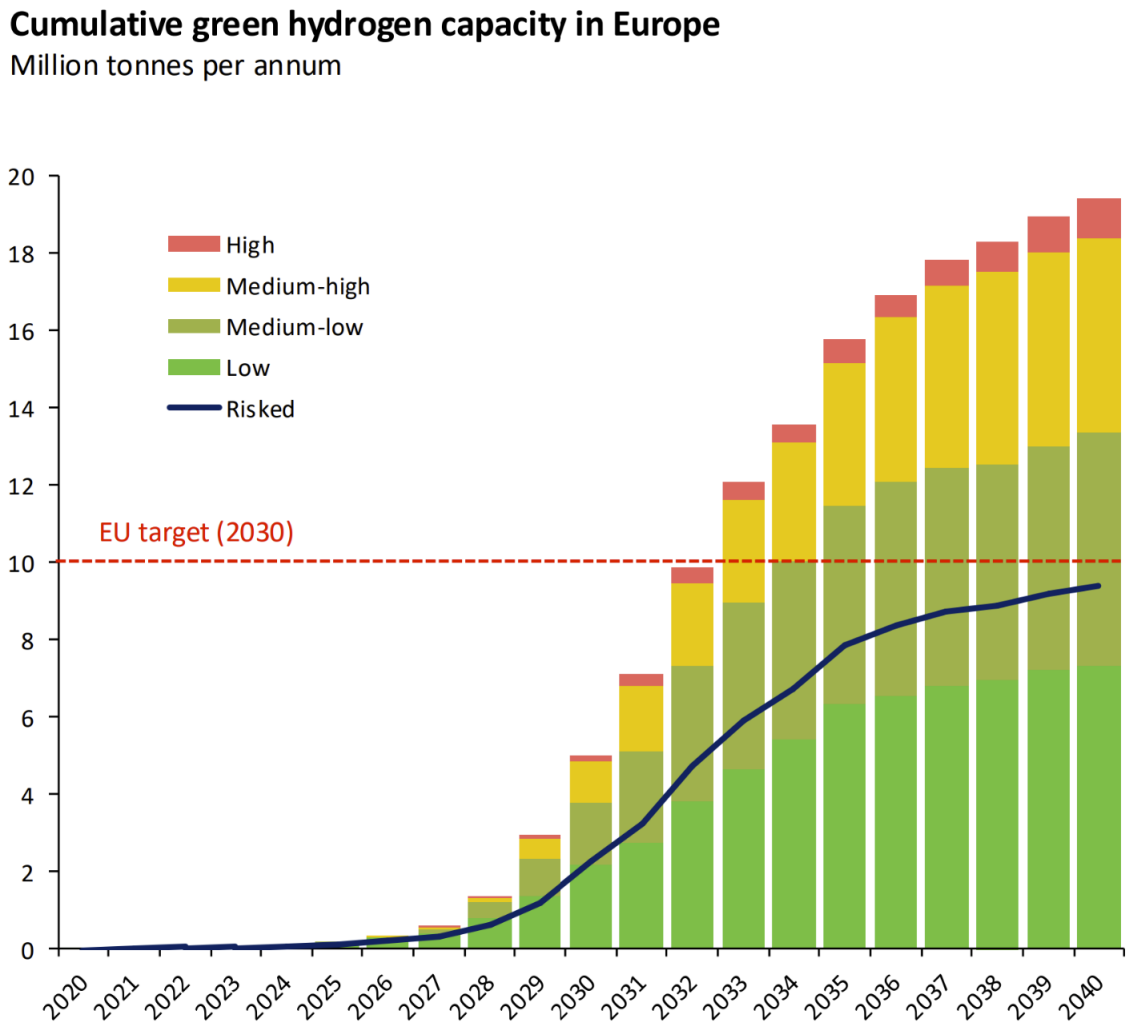


Source: Rystad Energy HydrogenCube

Clean hydrogen announcement in 2024 by region
Million tonnes per annum



Risked prognosis of hydrogen production



Source: Rystad Energy Hydrogen Solution

NORCE hydrogen research

Ongoing hydrogen projects

Selected projects

HyValue

Centre for Hydrogen Value Research

Host: NORCE Research

Forskningssenter for miljøvennlig energi · The Research Council of Norway · NORCE · Universitas Bergensis · Universitetet i Stavanger · Fridtjof Nansens Institutt · NHH · SNF Centre for Applied Research at NHH · toi · Høgskulen på Vestlandet


Storage
H_2 injection
1 km
CO_2 injection
2 km
Safety
Production
Distribution
Trust
Policy and regulations
End-users
HyValue
NORCE

“MiBiHy” Project: Microbial and Geochemical Effects of Subsurface Hydrogen Storage

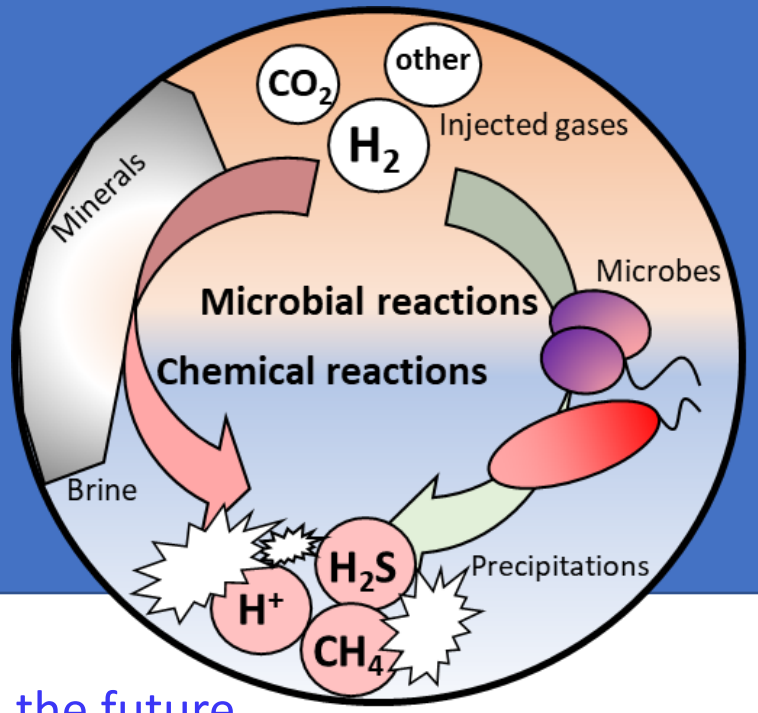
Goal: Can **hydrogen** be safely stored in **porous media e.g. old gas reservoirs**?

What are the major microbiological and biogeochemical effects occurring in the subsurface?

Field specific investigations (field water provided by operators)

Work packages

1. **Field sampling and water analysis (microbial community and chemical aspects)**
2. **Microbial reactions (gas changes) at near field conditions**
3. **Inhibition study (test of specific microbial inhibitors on H_2 consumption)**
4. **Impact study (risk assessment and development of risk tool)**



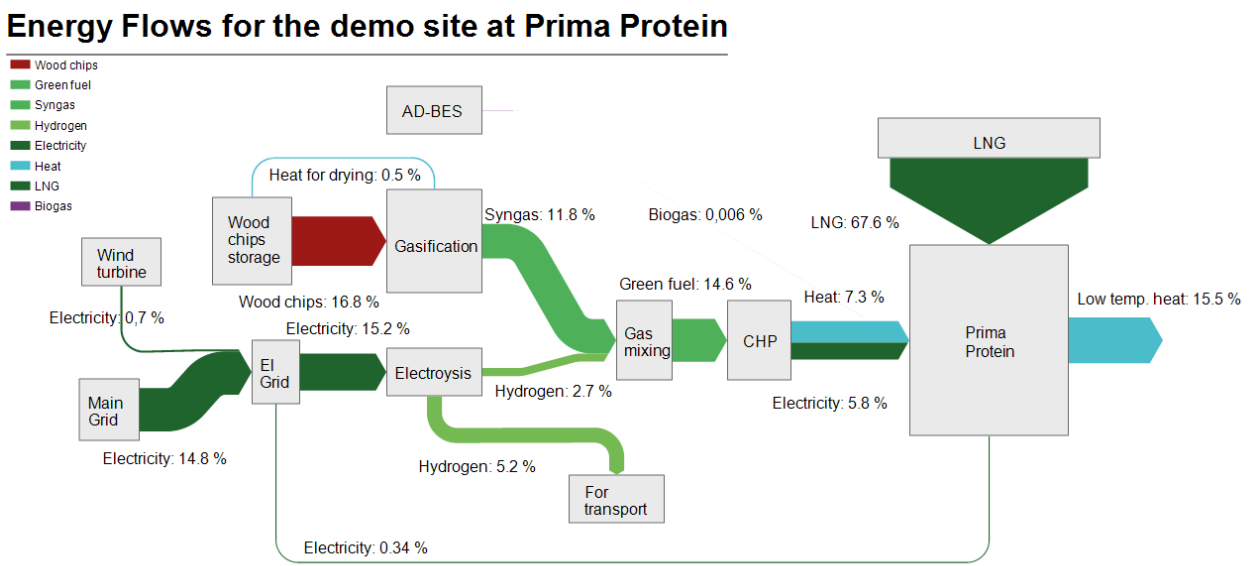
Impact:

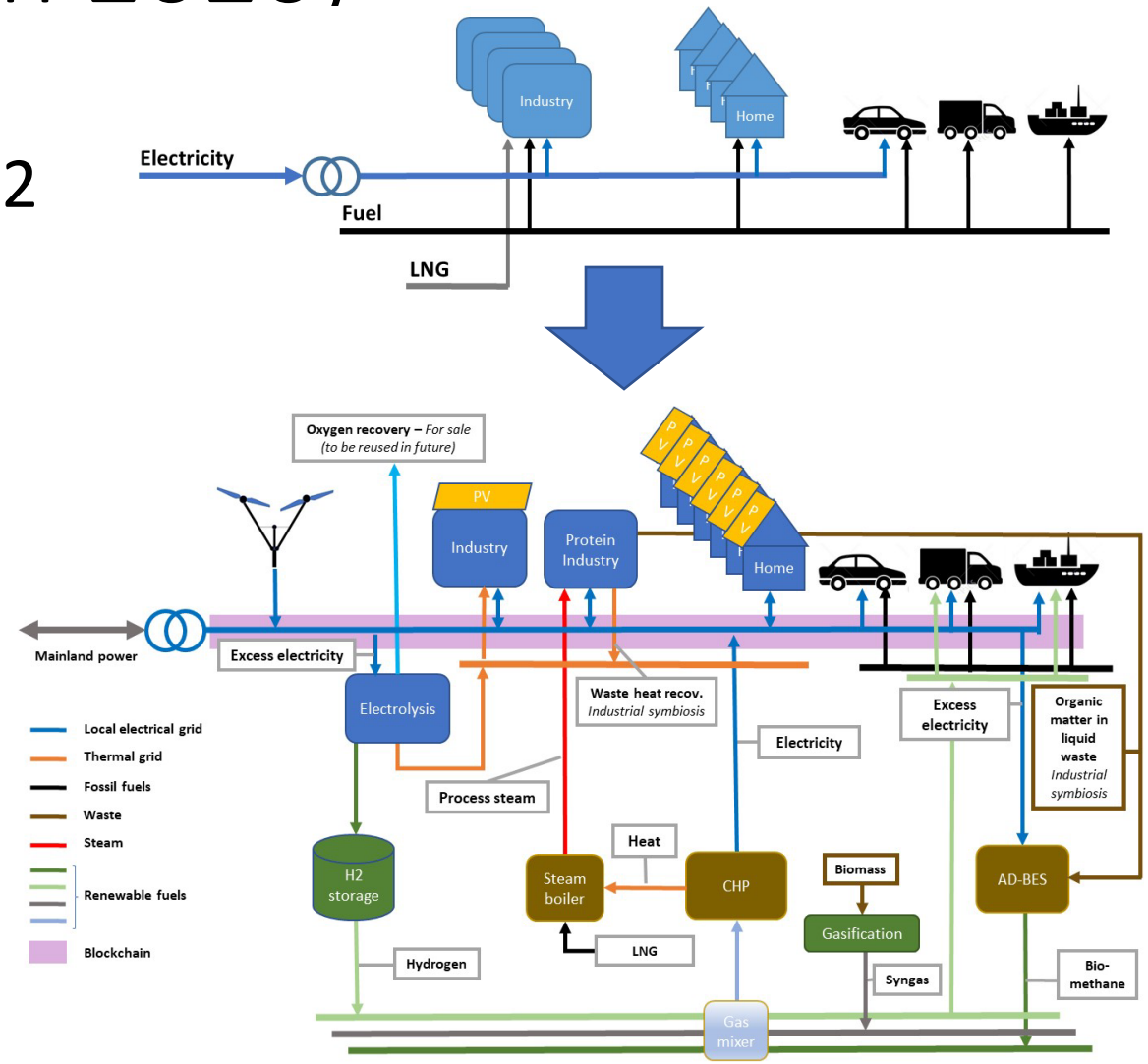
Understanding of risks/effects and therefore enable better risk evaluation in the future

Recommendations, guidelines & predictions of hydrogen underground storage

Robinson project (Horizon 2020)

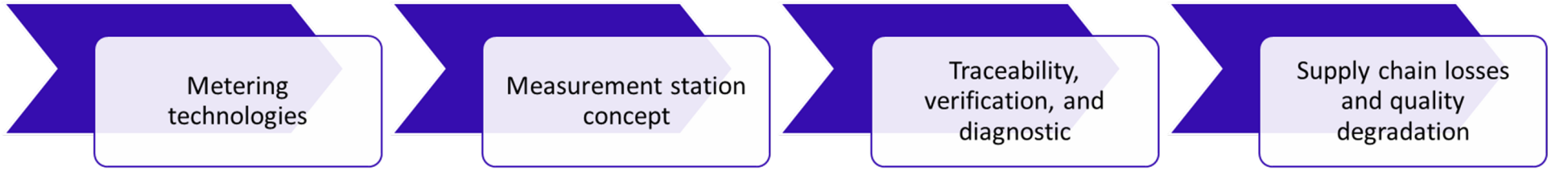
- Implementing and demonstrating an integrated energy system with local H2 generation and it's use in a CHP
- CHP is a flue flexible GT with up to 30% H2





HyMe - Hydrogen Metering

Competence building project 2023 - 2026



How do different metering technologies respond to hydrogen?	How to combine meters at measurement points along the supply chain?	How to calibrate/prove meters along the supply chain?	How to detect and quantify losses and quality changes along the supply chain?

Develop knowledge, increase competence and establish methodologies that enables reliable and cost-efficient meters and measurement stations

Current focus: ***Large volume transport of pressurized hydrogen through pipelines***

1. Map metering technology status and potential towards end-user cases
2. Develop a framework for design and analysis of hydrogen measurement stations with respect to **uncertainty and technological risk**

Project partners

Shell
TotalEnergies
equinor
GASSCO
Justervesenet
UiB
NORCE

Funded by The Research Council of Norway

NORCE under the SET-plan

Coordination of Norwegian efforts towards EU

- The Research Council of Norway is currently coordinating Norwegian efforts on strategic work towards EU within energy.
  - Coordination meeting to be held in Oslo October 23rd.
- Also newly established Norwegian energy forum for decision makers and experts in energy, with mandate from Energy ministry: Energi2050

Co-programmed partnerships (previously Joint Undertaking)

Member state driven

Funding

The budget of the Clean Hydrogen JU shall be formed of contributions from the Union and its members in Hydrogen Europe and Hydrogen Europe Research. *Objective: Support the implementation of the Commission's Hydrogen Strategy*

Strategic Energy Technology Plan Governance

Steering Group (Decision making)

Bureau of the SET Plan Steering Group

Implementation Working Groups (IWGs)

IWG Hydrogen NORCE (Implementation plan)

SET Plan Information System (SETIS)

IWG Liaison / support (specifically mentioned in relation to SET)

ETIP Bioenergy

EERA
Research pillar of SET plan
Networking organisation

Joint Programmes
Fuel Cells and hydrogen JP

Collaborative proposals

CSA
Funding
Supporting IWG

co-funded partnerships
EU-driven (under Horizon Europe)
Funding

Joint Calls
(related to SET Plan actions / IWG topics)

Our vision is reflected in the **Strategic Research and Innovation Agenda (SRIA)**, co-created together with the involved countries, the ***EU SET-Plan Implementation Working Groups*** *and* ***ETIPs***, all energy relevant **ERA-Nets** as well as the **EERA** joint programmes

European Partnerships in Horizon Europe (europa.eu)

Implementing the actions - European Commission (europa.eu)

Why NORCE in EERA JP FCH?

- Norway is a key energy provider to Europe. Strategy to take part in transition to low / zero carbon energy carriers for continued supply.
- Norway invests in European research programs. Wish to contribute in defining research agenda.
- Collaboration and networking for increased research impact and accelerating energy transition.

What does NORCE bring to the table?

- Competency in hydrogen related R&D
- Added resources for the work of the EERA
- Coordination across hydrogen-related committees under the SET and European Commission

Why cooperate with NORCE

360-degree perspective

Independent research

Broad expertise

Extensive experience

In-house infrastructure

Thank you. Takk. Merci. Gracias. Obrigado.

norceresearch.no @NORCEresearch

NORCE

Draft IRoP Inclusion for the JP Committee

Joint Programme Committee

1. Role and responsibility

1.1 The primary purpose of the Joint Programme Committee (JPCOM) is to serve as a collaborative and representative body of the Joint Programmes, ensuring alignment and active participation of the JPs in EERA's strategic decision-making processes, in full alignment with articles 9.1 and 11.1 of the Statutes.
Sections 1.2–1.7 outline the key areas in which the JPCOM aims to establish its recognition.

1.2 **Strategic Input:** The JPCOM provides consolidated recommendations from the JP community and input on EERA's strategic direction, particularly concerning research and advocacy priorities, medium- and long-term goals, and the alignment with external initiatives.

1.3 **Visibility and Impact**: The JPCOM collaborates with SEC to enhance the visibility, recognition and impact of EERA JPs.

1.4 **Coordination and Support**: The JPCOM collects the needs and priorities of the JPs, coordinating and consolidating interactions and support requests to the SEC and aligning on collective goals.

1.5 **Advocacy**: The JPCOM will team up with SEC and ExCo to strengthen the advocacy efforts of the JPs towards policymakers

1.6 **Sharing Best Practices**: The JPCOM will foster the identification and sharing of best practices across multiple EERA JPs, notably but not only with respect to the outcomes of Programme Review Meetings (PRMs).

1.7. **Developing Synergies:** The JPCOM will support and foster the identification and development of JP collaboration between multiple EERA JPs, on cross-cutting research areas or areas of common interest.

2. Composition and selection

2.1 The JPCOM shall be composed of the JPC of each JP. The JPC will nominate a back-up representative to the JPCOM, to be either the Vice-JPC, when existing, or a member of the JP-MB

2.2. The JPCOM shall elect a JPCOM chair and vice-chair among the JP Committee members. The mandate of the chair and vice-chair has a term of two years. Re-election

shall be possible. The election process will be held every two years during one of the JPCOM meetings. The election will follow the rules outlined in section 3.2 below.

2.3 Role of the chair (Ivan Gordon - PV)) and vice-chair (Alessandro Sciullo - E3S)

a. The chair will act as the spokesperson for the JPCs within the EERA organisation. The chair and vice-chair will be responsible of finding consensus within the JPCOM for the JPCOM activities outlined in sections 1.2 to 1.7.
b. The chair will be responsible for preparing the agendas and presiding the meetings of the JPCOM, as well as writing the minutes thereof, with the support of the vice-chair and Secretariat.
c. Interactions with other EERA bodies
   The chair or the vice-chair will represent the JPCOM. Moreover, the chair will regularly interact with the secretary-general and key members of the EERA secretariat, to align objectives and activities of JPCOM and EERA Secretariat.
   The JPs benefit from dedicated support (such as dedicated JP managers supporting the JP within the JPC host organization or hosted by the EERA secretariat) and the EERA secretariat will assist with the JPCOM administration.

3. Meetings and Decisions

3.1 The JPCOM shall meet at least three times per year and whenever necessary: one of these meetings will be held jointly with members of the ExCo and the EERA Secretariat, the other meetings will be held at moments the JPCOM deem appropriate. Except otherwise stated, JPCOM meetings will be held physically. A decision may be taken without a meeting if the chair circulates to all JP Committee members a written document which is then signed and approved by the defined majority of all JPCOM members.

3.2 The JPCOM is validly constituted if 2/3 of JPs are represented. By default, recommendations of the JPCOM are adopted by consensus. In case a consensus cannot be reached, recommendations can be adopted by a qualified majority of 2/3 of all JPs. Remote voting procedure can apply if needed.

3.3 The The chair and vice-chair will lead the organisation of the JPCOM meetings and will co-define the agenda with the SEC. The SEC is a permanent observer of the JPCOM meetings. ExCo members might also be invited as observers to the JPCOM meetings. Observers may take part in the discussions but have no voting rights.

3.4 Recommendations of the JPCOM shall be recorded in writing. The minutes of the meeting or other recommendations shall be sent to all JPCOM members and the Secretariat in reasonable time after the meeting or decision. The minutes shall be approved in the following meeting unless otherwise decided by the JPCOM members present and represented in the recorded meeting.