



News & updates | Published article

The ADVANCEPEM project recently was positively assessed by EU Project Officer and external reviewers during the mid-term review meeting.

DELIVERABLES & MILESTONES

D4.2 – Report on catalyst scaling-up (M24)
MS4 – Catalyst scaling-up and optimizing (M24)

NEXT PROGRESS MEETING IN LONDON

The next progress meeting is scheduled for April and will be hosted by HSSMI in London.



SCALING-UP OF CATALYSTS

Researchers at CNR-ITAE reported a significant progress regarding the scaling up procedure for catalysts syntheses. IrRuOx anode, Pt/C cathode electrocatalysts and PtCo recombination catalyst were developed and scaled up for large volume production by using optimised approaches to obtain materials with the same activity and stability as those produced on a small scale. To ensure a successful scaling – up method, CNR ITAE paid the attention to the design and operating conditions of the chemical reactor, to the batch size and quality control methods.

FIELD TESTING PREPARATIONS

RWE has begun preparing for the field test phase by drawing up the documents for informing the approval authorities on the basis of the technical documentation from OORT and from the test site. In addition, detailed planning for the interface connections, such as the H2 vent lines, are ongoing. A techno-economic assessment, informed by life cycle assessment inputs, is scheduled for the second project period.

STACK AND BOP DESIGN IS UNDERWAY

The team at Oort Energy have started the design of the stack as well as of a cost-effective BoP solution tailored for operation up to 200 bar and 80°C. Collaborative efforts between Oort Energy and RWE have also resulted in detailed ATEX and HazOp analyses to ensure a safe installation at the demonstration site.

LCA WORK LAYS THE GROUNDWORK FOR SUSTAINABILITY

Preliminary life cycle assessment work has been initiated by HSSMI, with the definition of the goal, scope, functional unit, and boundaries. These efforts will provide valuable insights into the environmental impact of the project and support informed decision-making moving forward.

PARTNERS:

