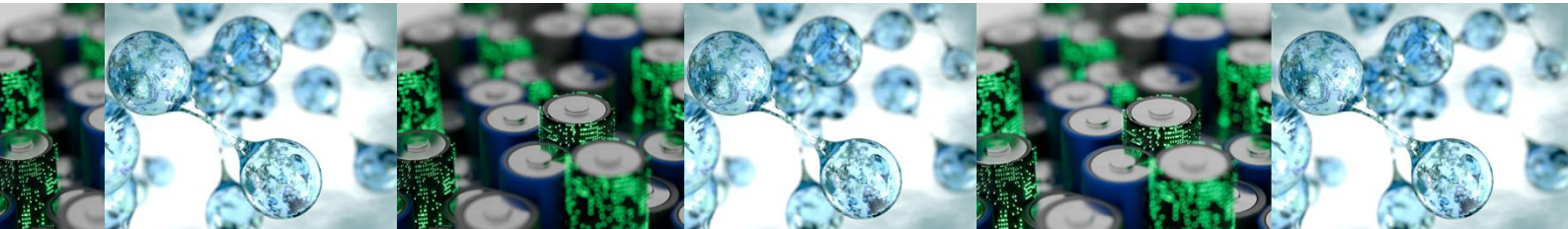


# Information & Matchmaking Event: EU Calls for Proposals 2023 on Battery and Hydrogen Technologies

14 February 2023



## 1. Batteries - Horizon Europe Cluster 5

HORIZON-CL5-2023-D2-01-01:

[Technologies for sustainable, cost-efficient and low carbon footprint downstream processing & production of battery-grade materials \(Batt4EU Partnership\)](#)

HORIZON-CL5-2023-D2-01-02:

[New processes for upcoming recycling feeds \(Batt4EU Partnership\)](#)

HORIZON-CL5-2023-D2-01-03:

[Advanced digital twins for battery cell production lines \(Batt4EU Partnership\)](#)

HORIZON-CL5-2023-D2-01-04:

[Battery management system \(BMS\) and battery system design for stationary energy storage systems \(ESS\) to improve interoperability and facilitate the integration of second life batteries \(Batt4EU Partnership\)](#)

HORIZON-CL5-2023-D2-01-05:

[Hybrid electric energy storage solutions for grid support and charging infrastructure \(Batt4EU Partnership\)](#)

HORIZON-CL5-2023-D2-02-01:

[Advanced materials and cells development enabling large-scale production of Gen4 solid-state batteries for mobility applications \(Batt4EU Partnership\)](#)

HORIZON-CL5-2023-D2-02-02:

[New Approaches to Develop Enhanced Safety Materials for Gen 3 Li-Ion Batteries for Mobility Applications \(Batt4EU Partnership\)](#)

HORIZON-CL5-2023-D2-02-03

[Creating a digital passport to track battery materials, optimize battery performance and life, validate recycling, and promote a new business model based on data sharing \(Batt4EU Partnership\)](#)

HORIZON-CL5-2023-D5-01-02:

[Innovative battery management systems for next generation vehicles \(2ZERO & Batt4EU Partnership\)](#)

## 2. Hydrogen

### 2.1 Horizon Europe Cluster 5

HORIZON-CL5-2023-D1-01-03:

[Climate impacts of a hydrogen economy](#)

HORIZON-CL5-2023-D2-01-06:

[Open Pilot Line/Test Bed for hydrogen](#)

HORIZON-CL5-2023-D3-01-01:

[Renewable Energy Valleys to increase energy security while accelerating the green transition in Europe](#)

HORIZON-CL5-2023-D5-01-07:

[Hydrogen-powered aviation](#)

HORIZON-CL5-2023-D5-01-08:

[Accelerating climate-neutral hydrogen-powered/electrified aviation](#)

HORIZON-CL5-2023-D5-01-12:

[Demonstrations to accelerate the switch to safe use of new sustainable climate neutral fuels in waterborne transport \(ZEWTP Partnership\)](#)

### 2.2 Clean Hydrogen

HORIZON-JTI-CLEANH2-2023-01-01:

[Innovative electrolysis cells for hydrogen production](#)

HORIZON-JTI-CLEANH2-2023-01-02:

[Innovative Solid Oxide electrolysis cells for intermediate temperature hydrogen production](#)

HORIZON-JTI-CLEANH2-2023-01-03:

[Advances in alkaline electrolysis technology](#)

HORIZON-JTI-CLEANH2-2023-01-04:

[Photoelectrochemical \(PEC\) and/or Photocatalytic \(PC\) production of hydrogen](#)

HORIZON-JTI-CLEANH2-2023-01-05:

[Waste to Hydrogen demonstration plant](#)

HORIZON-JTI-CLEANH2-2023-01-07:

[Hydrogen use by an industrial cluster via a local pipeline network](#)

HORIZON-JTI-CLEANH2-2023-02-01:

[Large-scale demonstration of underground Hydrogen storage](#)

HORIZON-JTI-CLEANH2-2023-02-02:

[Pre-Normative Research about the compatibility of transmission gas grid steels with hydrogen and development of mitigation techniques](#)

HORIZON-JTI-CLEANH2-2023-02-03:

[Novel insulation concepts for LH2 storage tanks](#)

HORIZON-JTI-CLEANH2-2023-02-04:

[Demonstration of high pressure \(500-700 bar\) supply chain](#)

HORIZON-JTI-CLEANH2-2023-02-05:

[Demonstration of LH2 HRS for Heavy Duty applications](#)

HORIZON-JTI-CLEANH2-2023-03-01

[Real environment demonstration of Non-Road Mobile Machinery \(NRMM\)](#)

HORIZON-JTI-CLEANH2-2023-03-02:

[Development of a large fuel cell stack for maritime applications](#)

HORIZON-JTI-CLEANH2-2023-03-03:

[Ultra-low NOx combustion system for aviation](#)

HORIZON-JTI-CLEANH2-2023-04-01:

[Development and validation of high power and impurity tolerant fuel cell systems ready to run on industrial quality dry hydrogen](#)

HORIZON-JTI-CLEANH2-2023-04-02

[Research on fundamental combustion physics, flame velocity and structure, pathways of emissions formation for hydrogen and variable blends of hydrogen, including ammonia](#)

HORIZON-JTI-CLEANH2-2023-04-03:

[Retrofitting of existing industrial sector natural gas turbomachinery cogeneration systems for hydrogen combustion](#)

HORIZON-JTI-CLEANH2-2023-04-04

[Hydrogen for heat production for hard-to-abate industries \(e.g. retrofitted burners, furnaces\)](#)

HORIZON-JTI-CLEANH2-2023-05-01

[Product environmental footprint pilot for a set of FCH product categories](#)

HORIZON-JTI-CLEANH2-2023-05-02:

[European Hydrogen Academy](#)

HORIZON-JTI-CLEANH2-2023-05-03:

[Pre-Normative Research on the determination of hydrogen releases from the hydrogen value chain](#)

HORIZON-JTI-CLEANH2-2023-06-01

[Large-scale Hydrogen Valley](#)

HORIZON-JTI-CLEANH2-2023-06-02

[Small-scale Hydrogen Valley](#)

HORIZON-JTI-CLEANH2-2023-07-01

[Advanced materials for hydrogen storage tanks](#)

HORIZON-JTI-CLEANH2-2023-07-02

[Increasing the lifetime of electrolyser stacks](#)



### 3. ERA-MIN

[Topic 1-5 can be found here.](#)

Topic 1. Supply of raw materials from exploration and mining

Topic 2. Strengthening the Circular Economy

Topic 3. Processing, Production and ICT

Topic 4. Environmental assessment, climate and policy development for sustainability

Topic 5. Social sustainability in health, safety and public perception

### 4. M-ERA.NET

Not yet published.