

# HyTruck Monthly Breakfast Briefing Interreg – Baltic Sea Region

Online

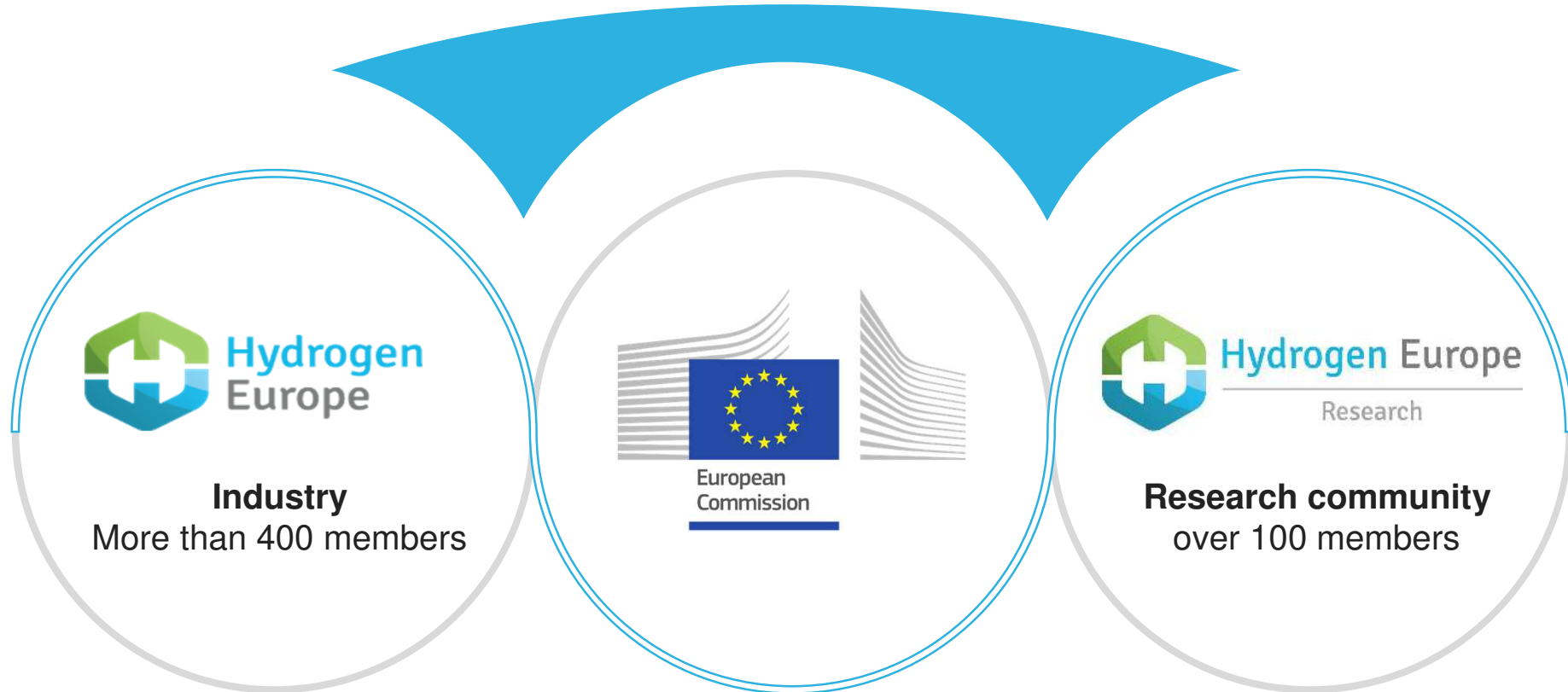
13 September 2023

**Athanasios BATSILAS – Financial Officer**



# Clean Hydrogen Joint Undertaking

EU Institutional Public-Private Partnership (IPPP)



**1 billion EURO from Horizon Europe\*** to implement R&I activities and facilitate the transition to a greener EU society through the development of hydrogen technologies

**\* additional 200 million EURO for Hydrogen valleys (under RePowerEU)**

# Clean Hydrogen JU Objectives

## General

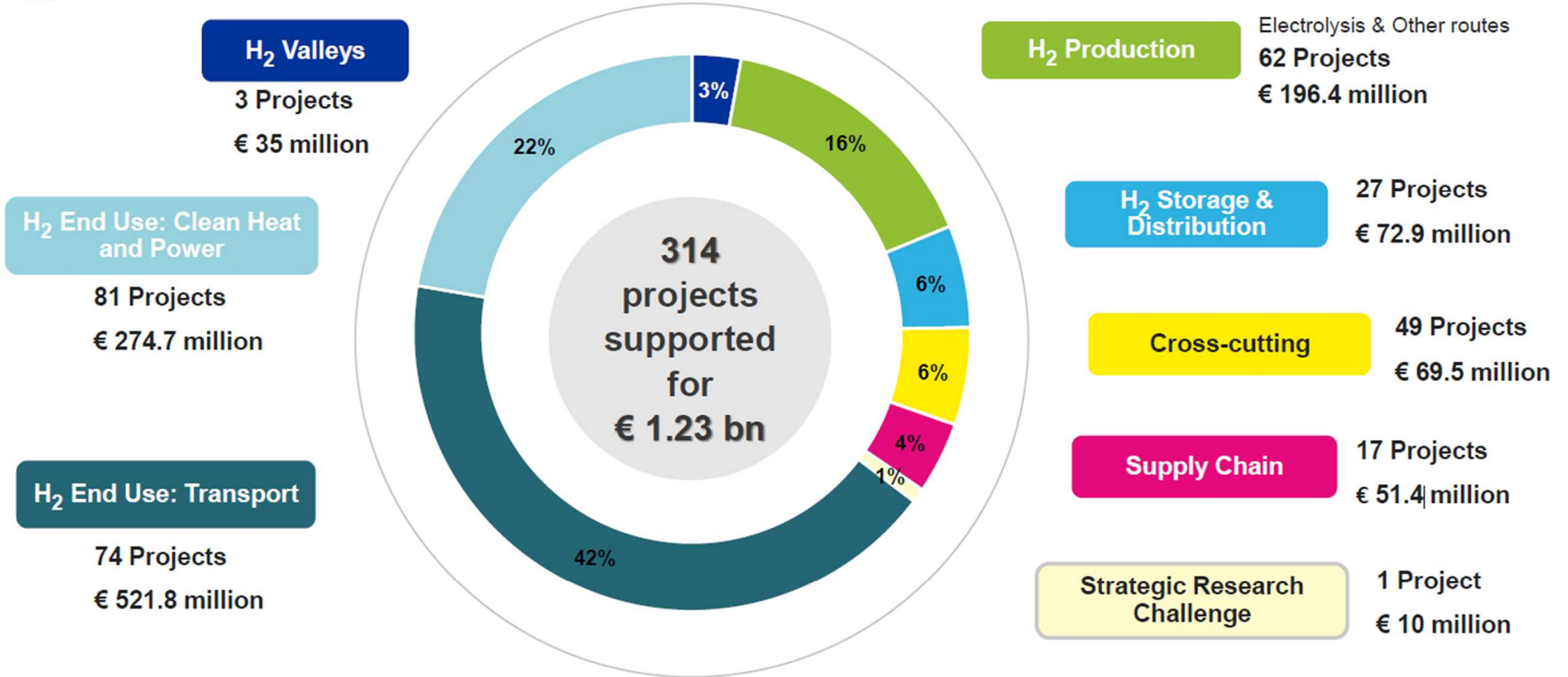
-  Support the implementation of the Commission's **Hydrogen Strategy**
-  Stimulate **research and innovation on clean hydrogen** production, distribution, storage and end use applications
-  Strengthen the **competitiveness of the EU clean hydrogen value chain**
-  Contribute to the EU ambitious **2030 and 2050 climate ambition**

## Specific

-  Improve the **cost-effectiveness, efficiency, reliability, quantity and quality** of clean hydrogen solutions across **entire value chain**
-  Strengthen the **knowledge/capacity of scientific and industrial actors** along the Union's hydrogen value chain while supporting the **uptake of skills**
-  Demonstrations of clean hydrogen solutions with a view to **local, regional and Union-wide deployment**, aiming to involve stakeholders in all Member States and across **entire value chain**
-  Increase **public and private awareness, acceptance** and uptake of clean hydrogen solutions

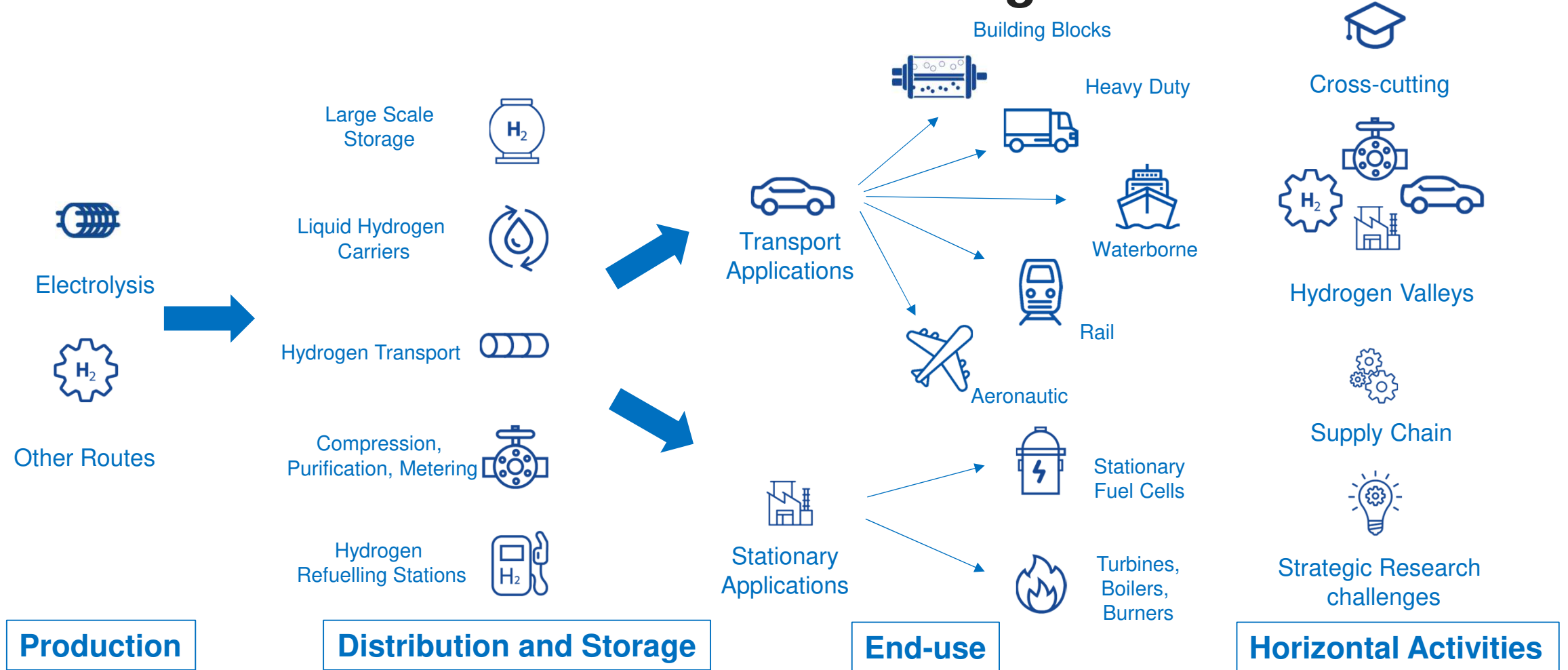


# Projects in the Clean Hydrogen JU



\*It excludes the results of call 2022-2 (under grant preparation currently)

# Clean Hydrogen JU Strategic Research and Innovation Agenda 2021 – 2027



# Websites

[European Commission](#)

[Clean Hydrogen Joint Undertaking](#)

# European Hydrogen Refuelling Station Availability System (E-HRS-AS)

- Real-time information on the HRS availability releases drivers` anxiety
- Free of charge
- Open source system
- Alternative Fuel Infrastructure Regulation (AFIR)

# European Hydrogen Refuelling Station Availability System (E-HRS-AS)

## EUROPEAN HRS AVAILABILITY SYSTEM

REALTIME | SECURE | FREE



EU Administration (Brussels)



CLEAN HYDROGEN JU Server Center (Berlin)



HRS (across Europe)



### DATA USER

- APP DEVELOPER
- CAR MANUFACTURER
- EUROPEAN UNION  
Example Project: [H2.Map.eu](http://H2.Map.eu)
- MAP PROVIDER
- UNIVERSITIES
- OS COMMUNITY



HRS Owners

dynamic Information SOFTWARE Option



using Import API



static Information PLATFORM Solution



realtime Data TO PLATFORM

dynamic Information HARDWARE Option



FREE Services



checks ONLY voltage

24V 0V



DIGITAL INPUT MODULE

unidirectional / TLS encrypted Transmission OPTIONS

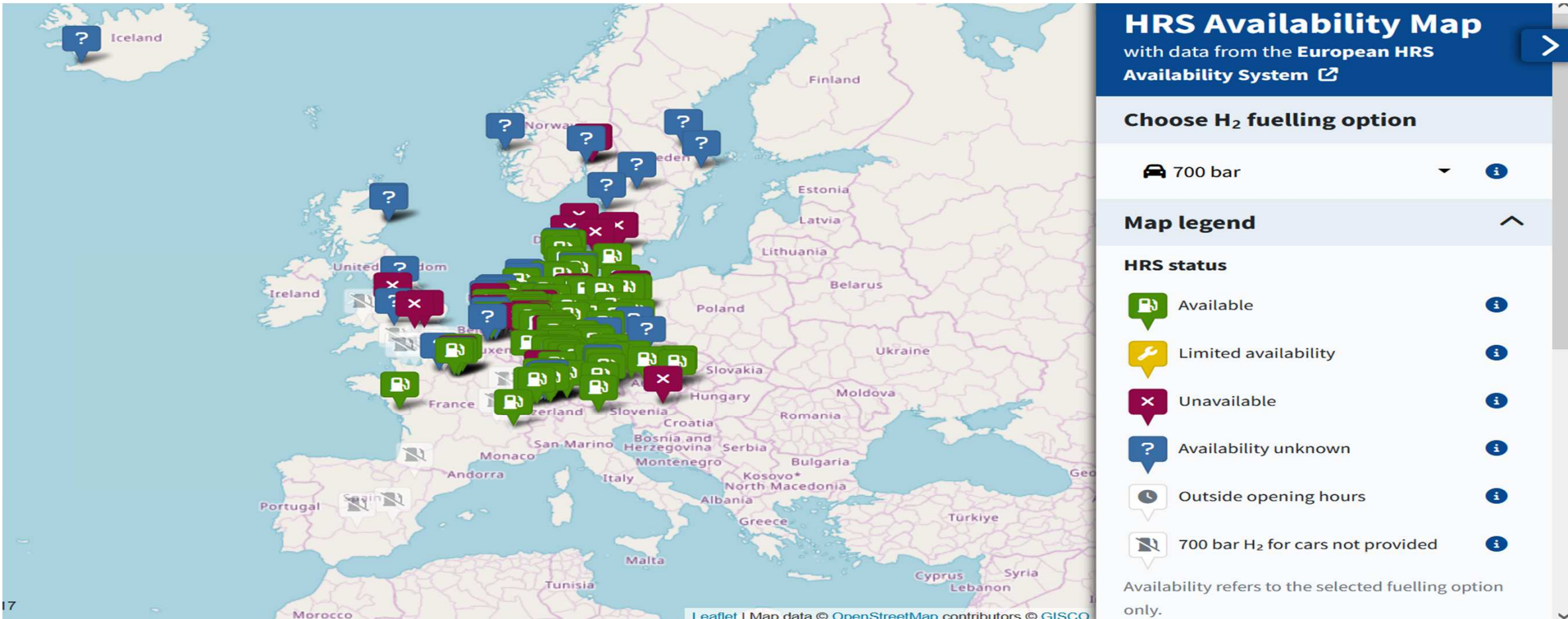
CLEAN HYDROGEN JU SERVER





# European Hydrogen Refuelling Station Availability System (E-HRS-AS)

<https://h2-map.eu/>



**HRS Availability Map**  
with data from the **European HRS Availability System**

**Choose H<sub>2</sub> fuelling option**

🚗 700 bar

**Map legend**

**HRS status**

- 🟢 Available
- 🟡 Limited availability
- 🔴 Unavailable
- 🟠 Availability unknown
- 🕒 Outside opening hours
- 🚫 700 bar H<sub>2</sub> for cars not provided

Availability refers to the selected fuelling option only.

# European Hydrogen Refuelling Station Availability System (E-HRS-AS)

E-HRS-AS Portal

Search HRS

Athanasios Batsilas

Dashboard

**HRS Registry**

Availability transmission

Event scheduler

Reports

Change history

ADMINISTRATION

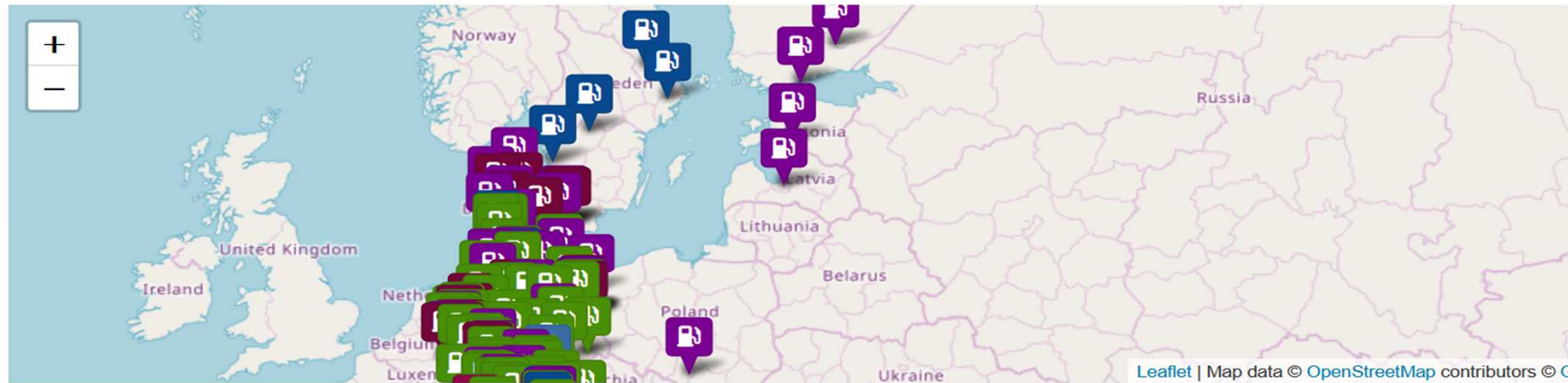
User administration

OTHER APPS

Availability Map

Registry Admin Interface

## HRS Registry



FILTER

RESET ALL FI

Current public status

all

Operation status

all

Country

Germany, Denmark, ▲

Owner

all

Operator

all

Draft?

all

Data quality

all

Monitoring status

all

Active signal originator

Active transmission type

Has users?

Fully integrated?

# European Hydrogen Refuelling Station Availability System (E-HRS-AS)

<https://h2-map.eu/>

[https://h2-stations.eu/#how-to-receive-  
data-details](https://h2-stations.eu/#how-to-receive-data-details)

[https://www.clean-  
hydrogen.europa.eu/get-  
involved/european-hydrogen-refuelling-  
station-availability-system\\_en](https://www.clean-hydrogen.europa.eu/get-involved/european-hydrogen-refuelling-station-availability-system_en)

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