


# H2ROAM

## Hydrogen for Robust Off-road Application Modules

# ABOUT H2ROAM

H2ROAM is a Horizon Europe Research and Innovation Action developing hydrogen-powered solutions for non-road mobile machinery (NRMM) in agriculture and port operations. Over 48 months, the project aims to bring adaptable fuel cell powertrains closer to industrial deployment, demonstrating real-world performance and economic viability.

# OBJECTIVES

H2ROAM seeks to accelerate hydrogen adoption in off-road machinery by:

- Developing modular and scalable fuel cell powertrains
- Demonstrating TRL6 performance in real operational environments
- Ensuring flexibility across applications and power demands
- Proving environmental sustainability and economic feasibility

The project focuses on two main powertrain configurations:

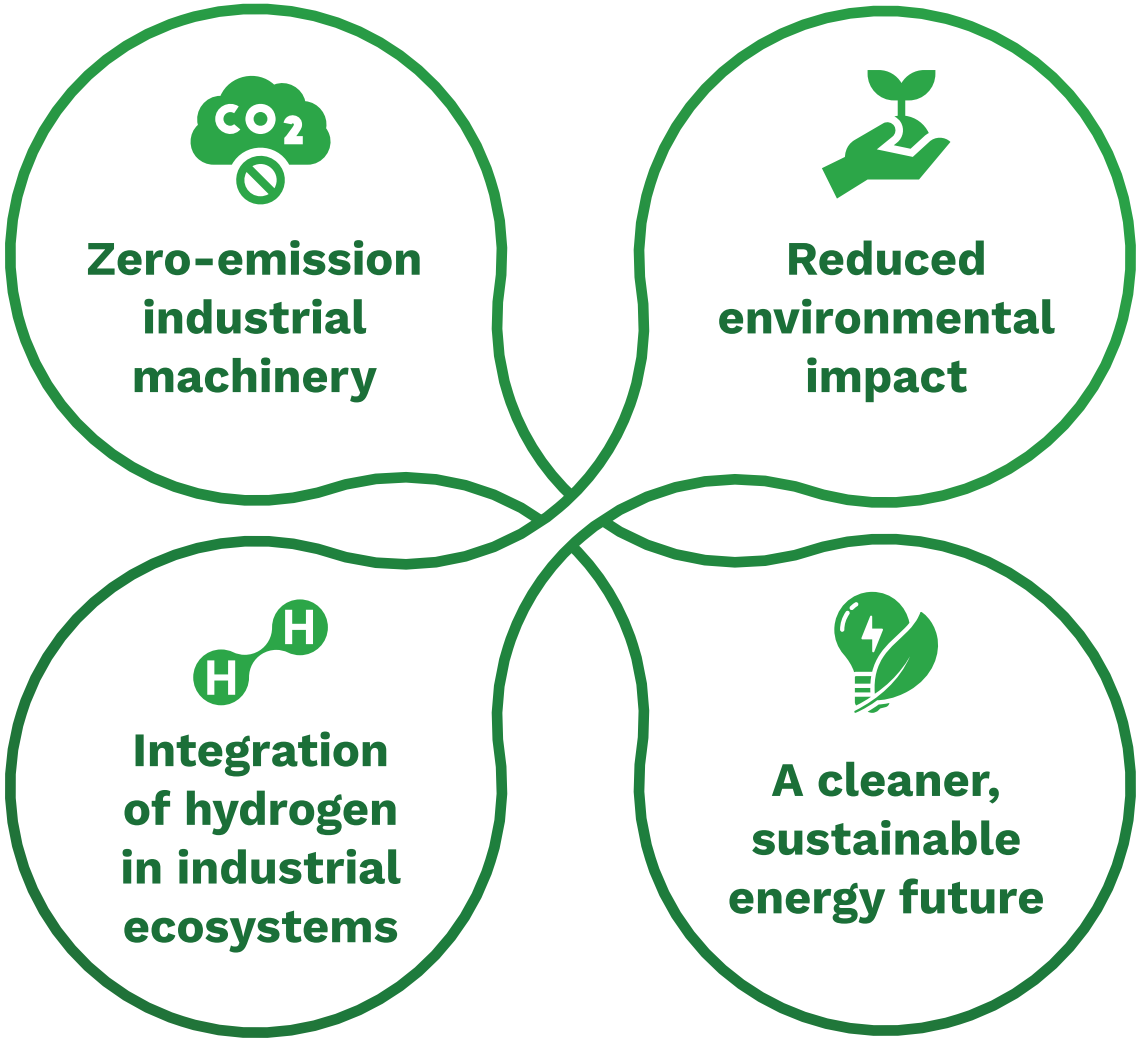
A baseline system at **110 kW**

A multi-configuration system up to **220 kW**

Different hybridization levels allow adaptation to diverse operational needs while maintaining **efficiency** and **reliability**.

# DEMONSTRATION AND IMPACT

Technologies are validated in demanding environments, including extreme temperatures, high humidity, corrosive conditions, dust, and continuous mechanical stress. By addressing both technical challenges and market adoption barriers, H2ROAM contributes to:



# PROJECT INFO

| | |
|---|---|
| **Acronym** | **H2ROAM** |
| **Programme / Call** | **HORIZON-JU-CLEANH2-2025** |
| **Topic** | **HORIZON-JU-CLEANH2-2025-03-01** |
| **Type of Action** | **Research and Innovation Action (RIA)** |
| **Start Date** | **January 2026** |
| **Duration** | **48 months** |

# CONTACTS


**www.linkedin.com/company/h2roam-project/**

**www.h2roam-project.eu/**

**info@h2roam-project.eu**


H2ROAM

Co-funded by the European Union

Clean Hydrogen Partnership


This project has received funding from the Clean Hydrogen Partnership under Grant Agreement No 101251484. The Clean Hydrogen Partnership receives support from the European Union's Horizon Europe Research and Innovation Program, Hydrogen Europe and Hydrogen Europe Research.