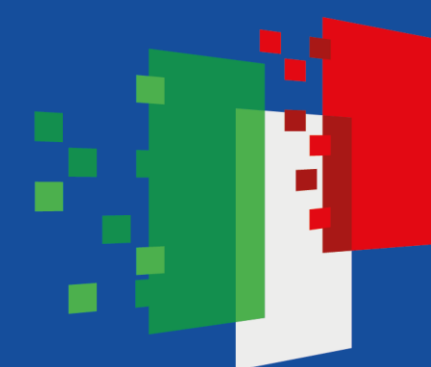




Finanziato  
dall'Unione europea  
NextGenerationEU



Ministero  
dell'Università  
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Italiadomani  
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DI RIPRESA E RESILIENZA



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Spoke1  
Aerospace and sustainable mobility



Sustainable mobility

# H2 MOBILITY

## Green Hydrogen Towards the Next Generation Mobility

### RESEARCH MODULES



→ HYDROGEN PRODUCTION

→ HYDROGEN STORAGE

→ HYDROGEN DISTRIBUTION AND TRANSPORT

→ E-FUELS: CO2 RECOVERY AND CONVERSION

→ E-FUELS: TECHNOLOGIES, COMPONENTS  
AND APPLICATIONS FOR FC MOBILITY

### SUSTAINABILITY AND HYDROGEN, THE CHALLENGE

The **main goal** is to **improve** the technological readiness for **the exploitation of H2 as the renewable energy vector for the future mobility system**. For an efficient and effective use of H2, the market will need new technologies, new components, and innovative services of **green H2 storage, distribution and on-demand use** (fuel cell and combustion).

### METHODOLOGY

The project aims to **develop of robust and reliable technologies and the related tech-transfer activities to support the transition of the regional supply-chain** towards the integration of new systems for the distribution and use of low-carbon and sustainable fuels. The project will also address E-Fuels, mainly on the development of components, technologies and systems for conversion of CO2 and other vectors into RFNBO (Renewable Fuels of Non-Biological Origin).

### About SPOKE 1

Spoke 1 is coordinated by Politecnico di Torino with collaboration between universities, research centers, and organizations that support innovation and innovative entrepreneurship, with the aim of supporting the competitiveness of the companies in the ecosystem. H2Mobility is brought forward by Politecnico di Torino, Università di Torino, Environment Park and Istituto on Membrane Technology, National Research Council of Italy.

### RESULTS AND IMPACT

H2Mobility means **improved opportunities for companies to develop PoCs** in collaboration with the project's partners, as well as **access to testing infrastructures** that are essential for the design of new systems and subsystems for the transition towards green hydrogen. H2Mobility's research will contribute to the transitions and strengthening of the Hydrogen supply chain. For example, researchers established a collaboration with an industrial partner for the development of a prototype exploiting metal hydrides and extension of PEM-FC component characterization protocols to the entire fuel cell.

21

researchers

14

publications

1

patents



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