



Press Release

University and companies team up for research into hydrogen, a key resource in the fight against climate change

Fondazione Politecnico di Milano and Politecnico di Milano, together with Edison, Eni and Snam have created a platform to develop technologies linked to hydrogen, the new energy vector for decarbonisation.

Milan, 30 November 2021 - A new university-company joint research platform set up to study and develop an energy vector capable of playing a decisive role in the achievement of global climate objectives, i.e. hydrogen.

Announcing the **Hydrogen Joint Research Platform (Hydrogen JRP)** created by **Fondazione Politecnico di Milano**, together with **Politecnico di Milano** and three founding companies, **Edison S.p.A.**, **Eni S.p.A.** and **Snam S.p.A.**

Hydrogen JRP will promote innovative studies and research in several areas: the production of clean hydrogen, which includes green hydrogen and low carbon hydrogen; associated transport solutions and advanced storage systems; innovative electrochemical and thermal applications for domestic and industrial use and in transport systems; and the development of best practices in the design and construction of hydrogen transport and storage infrastructure.

The intention is to stimulate the creation of a hydrogen value chain in Italy, to encourage company competitiveness and the growth of new high-tech companies. Hydrogen JRP is open to all companies that want to experience research and development into hydrogen-associated products and services, with the support of Italy's first technical university and its laboratories.

To increase its impact, Hydrogen JRP will establish a strategic advisory body, which will involve all the main institutional stakeholders, including at global level, in view of attracting interest and investment. Hydrogen JRP intends to take up the hydrogen challenge and build an ecosystem of innovation. Over the upcoming months, we will confirm JRP membership for companies interested in developing a hydrogen value chain. The platform enables the members themselves, depending on their membership level, to propose vertical research topics that encourage the advance of expertise and know-how within Italy's energy industry.

Hydrogen can play a central role in addressing the current demand for progressive decarbonisation in many sectors. In order to pursue this prospect and promote the production and use of hydrogen, one of Italy's aims is to support hydrogen research and development, and complete all the reforms and regulations necessary to its use, transport and distribution. In Europe's hydrogen strategy, the share of green hydrogen in its energy mix is projected to increase up to 13-14% by 2050.

Ferruccio Resta, Rector of Politecnico di Milano, explained: *"Energy transition is one of the major challenges of our times. We must persevere with two key concepts, firstly, to pursue a more forceful political path, aligning ourselves with European guidelines, based upon a phase of providing support to the industrial system, and secondly, to forge ahead in the area of research and training in order to become a global reference point for this technology. To be successful, we chart a common project where universities are operating at the side of companies. This is why we are today announcing our Hydrogen Joint Research Platform, which owes its launch to three great companies in this sector, their participation, capacity to listen and ability to 'do' innovation, and why this platform must be able to expand as far as possible within Italy's productive tissue"*.

Andrea Sianesi, President of Fondazione Politecnico di Milano, added: *"Hydrogen will play a crucial role in Europe's green revolution, it is a flexible energy vector and potentially with zero environmental impact. The Italian Government has given hydrogen a primary role in the country's National Plan for Recovery and Resilience, specifically to respond to the needs of progressive decarbonisation in various sectors. We, as Fondazione Politecnico di Milano and in line with our mission of acting as a bridge between academia and the productive system, believe that it makes strategic*

sense to create a joint research centre to help establish an industrial value chain linked to hydrogen development, a centre that, with the backing of Italy's first technical university and several leading energy companies, can drive innovation, while also targeting research of excellence and effective and impactful energy transfer for the development of Italy's entire economic system".

Giovanni Brianza, Executive Vice President for the Energy & Environmental Services Market at Edison, noted: *"Hydrogen is an energy vector critical in achieving our decarbonisation objectives in transport and "hard-to-abate" sectors of industry. The biggest challenge today is to accelerate its development, so that it becomes economically sustainable, and also to give life to a new industrial chain, injecting impetus into the Italian economy, and confirming the value of our skills and expertise on the international stage. We are working with the Hydrogen JRP platform, Politecnico di Milano, Eni and Snam to place the foundations for such an invaluable common enterprise. We can also confirm that Edison is playing a fundamental role in the hydrogen sector and is resolute in supporting research and development in this field".*

Francesca Zarri, Research Director Technology, R&D and Digital at Eni, stated: *"Research and development is one of the pillars underpinning Eni's strategy of totally abolishing emissions for industrial processes and products, as well as being the key for a fair and successful energy transition. This project is inserted within the network of collaborations with primary universities and research centres, nationally and internationally, that Eni is developing to accelerate the industrialisation of innovative technology in the field of decarbonisation and renewables".*

Cosma Panzacchi, Executive Vice President for Hydrogen at Snam, noted: *"Snam has joined Hydrogen JRP with the firm intention of contributing to the growth of the R&D system, in order to strengthen Italy's hydrogen chain and thereby accelerate its diffusion, while exploiting current infrastructures, and galvanising the energy transition. This initiative is in line with Snam's commitment to back the most promising technologies in the hydrogen ecosystem through projects like the Hydrogen Innovation Center, launched in collaboration with some of Italy's primary universities, including Politecnico di Milano, and HyAccelerator, the first corporate global-scale acceleration programme for hydrogen startups".*