



Press release

Enagás, Patron of the new Chair for Hydrogen Studies at Comillas Pontifical University

- The new chair will study the role of hydrogen as a new energy vector in the transition process towards a decarbonised economy and will contribute to its development.
- The Chair for Hydrogen Studies, promoted by Comillas ICAI and Comillas ICADE, features the active participation of several companies and patrons Acerinox, Carburos Metálicos, Cepsa Foundation, Enagás, Management Solutions and Toyota which will contribute to the promotion of research.
- It was created to serve as a meeting point for all agents involved in the hydrogen value chain and to contribute to the development of the renewable hydrogen sector in Spain, according to those responsible for the Chair.

Madrid, 14-07-2021. Hydrogen, and in particular green hydrogen produced from renewable energy sources, is set to play an essential role in a world that needs to achieve carbon neutrality to avoid the consequences of climate change. Therefore, the Comillas Pontifical University, in its effort to study and contribute to the process of decarbonisation of the Spanish economy, has just set up the Chair for Hydrogen Studies.

This is an interdisciplinary research group - made up of the Higher School of Engineering (Comillas ICAI) and the Faculty of Economics and Business Studies (Comillas ICADE) - whose aim will be to study the role of this energy vector in the process of decarbonisation of the Spanish economy and to draw up proposals for the development of business models and the necessary regulation. "We believe that a joint approach is necessary from the point of view of engineering and economics due to the potential disruptive effect of hydrogen on the Spanish economy and the need to analyse it from a multidisciplinary perspective", says Rafael Cossent, researcher at the Institute for Research in Technology (IIT) at Comillas ICAI, expert in the regulation and economics of the electricity sector, and co-director of the Chair.

The Chair aims to carry out rigorous research to demonstrate the key role of hydrogen in the transition process and to contribute to its development as a new energy vector and a new asset class or commodity. "Its relevance as a new commodity increases exponentially for regulators, investors and participants in the energy market. Renewable hydrogen will emerge as a key asset in the transition process towards an inclusive and green economic model", says Isabel Figuerola-Ferretti, professor in the Department of Financial Management at the Faculty of Economics and Business Administration (Comillas ICADE), expert in commodities, and co-director of the Chair.

Prime patron companies

The Chair for Hydrogen Studies has the active participation of several patrons companies and entities - Acerinox, Carburos Metálicos, Cepsa Foundation, Enagás, Management Solutions and Toyota - which will contribute to promoting research and end-use applications of the fuel. Together, they will cover the entire hydrogen value chain, from production, transport and end uses, as well as relevant organisations in areas such as finance or new associated business models.

The CEO of Enagás, Marcelino Oreja, stresses that, "as a patron of the Chair for Hydrogen Studies at Comillas Pontifical University, Enagás will help promote the development and comprehensive technological understanding of hydrogen, which will play a key role as an energy vector to promote a just energy transition". In this vein, he describes this development as "an environmental, social and economic opportunity that will allow progress to be made in the global challenge of decarbonisation".

All parties agree that hydrogen is destined to become a key vector in a decarbonised energy system, fundamentally because it enables the linking of energy sectors and the long-term energy storage required to manage the variability of renewable electricity production, and because it allows for the decarbonisation of consumption that is technically and/or economically difficult to electrify, particularly in the industrial and transportation sectors.

Those responsible for the Chair stress that the National Integrated Energy and Climate Plan drawn up by the Spanish Government places special emphasis on green hydrogen. "The Hydrogen Roadmap highlights the opportunity that the hydrogen economy offers Spain to position itself as a leader in renewable energy production and exports, as well as to promote R&D and economic growth", they explain.

In fact, Figuerola-Ferretti claims that "the Chair will be the meeting point for all agents involved in the hydrogen value chain to contribute to the development of the renewable hydrogen sector in Spain by conducting academic impact studies, compiling and analysing data, producing reports and organising events". Accordingly, the Chair will contribute to the development and fulfilment of the European and Spanish green hydrogen strategy, enabling the country to achieve climate neutrality and a 100% renewable electricity system no later than 2050.

With this in mind, the specific goals of the Chair of Hydrogen Studies are:

- To investigate the role of hydrogen in a decarbonised energy system: for example, hydrogen demand by sector, techno-economic aspects of hydrogen production, planning and regulation of associated infrastructures, etc.

- To generate proposals for business models associated with the hydrogen economy and promote financial innovation initiatives/financial instruments for financing these business models.

- To contribute to the creation of a hydrogen market as the main aggregator of information on supply and demand conditions, and to the valuation of the asset/commodity.

- To monitor the evolution of the indicators that determine the economic viability of renewable hydrogen in its production, storage, transportation and use.

- To identify and analyse the regulatory implications for and possible barriers to the development of renewable hydrogen, and contribute to the evaluation and generation of proposals and possible alternative adaptation techniques or regulatory modification, incentives and other possible measures.

- To promote informed debate among all stakeholders to facilitate the energy transition in Spain.