Multidimensional study of the hydrogen value chain applications in the local industry

We are a Multidisciplinary Research Project working on the multidimensional and integral study of the green hydrogen value chain, in supporting decision making on the technologies that can be used at each stage of the value chain, in providing public policy recommendations on this topic, as well as in the formation of advanced human capital in this area with international support and collaboration networks in Germany.

The H2IN Project aims at the multidimensional and integral evaluation of the value chain for green hydrogen in Chile, strengthening public and private decision makers by improving the understanding of the current energy transition in Chile. Specifically, in the technical-economic, environmental, political and social aspects to support the deployment of hydrogen technologies, along with the implications for end users and businesses. The main fields of action will be technology transfer, modeling of energy systems, climate change, geographic applications of big data and circular economy.

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Eckdaten

Kurztitel

H2IN

Forschungsschwerpunkt

Sustainable Production, Energy Technologies and Smart Materials

Laufzeit

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Fördergeber

ANID

Projektträger

Pontificia Universidad Católica de Valparaíso

Projektleitung

Prof. Dr. Javier Valdes

Ziele

- To identify the technical and economic potential of the companies provided by the implementation of H2 and P2G in Chilean industries.
- Sizing of H2 plants on selected companies and modeling at the national level.
- Analysis and optimization of the most suitable H2 technologies for the industrial sector in Chile: Integrating biomass in the green hydrogen production process.
- Generation of a methodology for the application and implementation of the most appropriate H2 value chain for companies in Chile.
- Application of knowledge of the methodology to generate recommendations for regulatory framework conditions to enable H2 and P2G participation in the Chilean energy market.