

## Hydrogen: opportunities for Italian companies in Latin America. Focus on Chile

- According to the IEA, the number of projects announced for low-emission hydrogen production is rapidly expanding. Annual production of low-emission hydrogen could reach 38 Mt in 2030, if all announced projects come to fruition, but the measures to stimulate the use of low-emission hydrogen have only recently begun to attract political attention and they are not yet sufficient to meet climate ambitions.
- Therefore, international cooperation on this issue is necessary to maximize the positive effects of collective efforts, spreading the supply of this energy resource, lowering its costs, pushing demand and making its use more accessible.
- In this regard, the European Commission has included the topic of green hydrogen projects in its Global Gateway Agenda and has indicated Chile as one of the countries with the greatest potential in the sustainable production of this energy source. Investments are being mobilized (including through multilateral development banks) to ensure Chile to become a regional leader in the field of green hydrogen, by producing 150% of the existing global H<sub>2</sub> market and 15% of future demand in 2050.
- The European Commission has already proposed minimum levels of renewable hydrogen uptake in industrial applications and the transport sector in the Renewable Energy Directive (amounting to 5,6 Mt renewable hydrogen by 2030). In the RepowerEU Communication the Commission forecasted a potential scale up of renewable hydrogen use in the EU to 20 Mt in 2030, based on the assumption of 10 Mt renewable hydrogen produced in the EU and 6 Mt of renewable hydrogen imported from third countries while 4 Mt of H<sub>2</sub> imported as Ammonia or other derivatives. In Italy the National Climate and Energy Integrated Plan (PNIEC) sets a target for green hydrogen for 2030 of 252 kTonH<sub>2</sub>, 70% internally produced and 30% imported from abroad.
- The production of electrolytic hydrogen in Italy has a high cost (LCOH), which is currently between 8 ÷ 20 €/kg variable depending on the business models and in particular the *load factor* and the types of projects. It is necessary to consider the potential contribution of all available technologies, including blue H<sub>2</sub>, and provide for further measures aimed at promoting the application of CCS to hydrogen production from *steam methane reforming*. The spread of *low-carbon* hydrogen is necessary for the market development, considering its lower production costs.
- The Government of Chile launched its National Green Hydrogen Strategy in 2020 and currently has over 50 green hydrogen production projects in various stages of development, strategically positioned to take advantage of energy resources, potential demand and existing infrastructure.
- Thanks to the knowledge and technological availability of our national industry in this sector, Italy can propose itself as a strategic partner for Chile, thus contributing to spreading the production and use of green hydrogen and inserting its products into one of the most dynamic and open markets in Latin America.
- For all these reasons, Confindustria has scheduled an in-person meeting between representatives of InvestChile and Italian companies interested in the green hydrogen sector, to present all the business opportunities that exist for our industry. Furthermore, representatives of the Inter-American Development Bank - IDB were invited to provide information on financing opportunities for these projects and related tenders.