

TEAM EUROPE INITIATIVE

Green hydrogen cooperation with Chile:

FAST FORWARD TO CARBON-NEUTRALITY

The **Team Europe Initiative (TEI) on Green Hydrogen (GH2) development in Chile**, is a joint effort of the EU and its Member States to foster cooperation with Chile for the development of its green hydrogen economy. The aim is to boost investment opportunities in the field of green hydrogen in Chile by:

- A) Strengthening the enabling environment for the green hydrogen economy
- B) Supporting Technological Development and Human Capital
- C) Market Development/Business Cooperation
- D) Project Development/Finance

The GH2 TEI initiative will support the decarbonisation of the Chilean economy, creating green jobs and generating business opportunities for Chilean and European companies, whilst meeting Europe's own demand for import of green hydrogen.

As part of the European Green Deal announced in December 2019, the EU aims to achieve climate neutrality by 2050. Europe needs to speed up its energy transition and reduce greenhouse emissions by at least 55% over this decade compared to levels in 1990. Green hydrogen is considered a strategic component of the energy transition not only for fulfilling climate targets but also for economic development and European industrial leadership in hydrogen-based technologies worldwide, as well as meeting Europe's "RepowerEU" starget for the import of green hydrogen (target of 10 million tonnes in 2030).

Chile is recognised as one of the leading global candidates and LAC front-runner for cheap GH_2 production due to its enormous renewable energy resources and ambitious GH_2 strategy. There is currently a portfolio of more than sixty GH_2 projects and six R&D efforts in Chile. The Ports of <u>Rotterdam</u>, <u>Antwerp</u> and <u>Hamburg</u> have already signed MoUs with the Chilean Ministry of Energy to pave the way for importing green hydrogen from Chile.

The ongoing and future actions in each of these areas developed by EU and its Member States are described below. Most of the future EU technical assistance actions will be funded through the **4MEUR Chile Country Window under the new Regional Green Transition Programme for Latin America and the Caribbean**, to be co-financed by Germany and being implemented by GIZ and AECID.

A) Strengthening the enabling environment for the green hydrogen economy

Actions:





#TEAMEUROPE

Providing regulatory development support through GH2 regulation codes and standards

(RCS) development.

Providing assistance for **policy development and analysis**, e.g. relating to the impact and design of new carbon pricing instruments, green taxonomy / green bonds and/or certificate of origin schemes, the development of regional climate action plans for Antofagasta and Magallanes, including green hydrogen development.

Assessing expected **infrastructure** investments and upgrades required at national level; specific attention on shared infrastructure that can enable the development of hydrogen valleys/islands or hubs (linked to Chile's participation in Mission Innovation and FCH-JU).

Support programmes

<u>EU:</u>

<u>Regional Green Transition Programme</u>, <u>Euroclima+</u>, <u>Copernicus</u>, <u>EU-Chile Triangular</u> <u>Cooperation Fund</u> (support for policy development in third LAC countries), <u>Clean Hydrogen</u> <u>Partnership</u>

EU Member States:

Germany <u>(4E Programme)</u>, <u>Netherlands</u> (pilot on certification, studies port investment <u>Port</u> <u>of Rotterdam/KIWA/DNV GL</u>, <u>Finland</u>)

B) Supporting Technological Development and Human Capital

Actions:

Providing support for GH2 prospective **platforms and tools for market appraisals**, including the development of interactive maps to assess solar and wind potential for costs evaluation, for which the **EU Copernicus earth observation programme could provide key data**.

Promoting continued Chilean participation in **research and training activities** with focus on production, distribution, and storage of clean hydrogen.

Support programmes

<u>EU:</u>

<u>Regional Green Transition Programme</u>, <u>Copernicus Earth Observation</u>, <u>Erasmus+</u>, <u>Marie</u> <u>Curie Action</u>, <u>Horizon Europe</u>, <u>Clean Hydrogen Partnership</u>, <u>Joint Research Center</u>.

C) Market development/business cooperation

Actions:

Developing market studies, organise seminars, high-level events and other collaboration activities to promote GH2 market strengthening.





Carrying out networking/matchmaking activities (i.e. business roundtables and exchanges)

between European and Chilean and Latin American organizations to promote business, technological, logistical cooperation and generate aggregate demand and supply for GH2 production and applications.

Support programmes:

<u>EU:</u>

<u>Regional Green Transition Programme</u>, Low Carbon Business Action (<u>LCBA</u>), Green <u>AL-INVEST Verde</u>.

EU Member States:

Netherlands market study in 6 LA countries, import feasibility studies <u>Port of Rotterdam</u>, <u>Finland</u> market study on GH2 Chile, matchmaking activities by Hydrogen Associations, Energy Agencies, Chambers of Commerce and MS Embassies (e.g. PT, SP, IT, DK, FI, NL, AU, FR, DE, SE); through <u>H2Global</u>, Germany will implement a **double auction** programme based on a contract for differences scheme to support both supply and demand of H₂. It is open to international partnerships.

D) Project development/finance

Actions:

Technically supporting the **design and development of GH₂ production and application projects** in different sectors and activities.

Financing of **GH2 production/application projects and technology**, inter alia making use of the European Fund for Sustainable Development Plus (EFSD+) and loans provided by European Financing Institutions (EFIs) & export credit agencies.

Support programmes:

<u>EU:</u>

<u>EU-Chile Development in Transition Facility</u>, <u>Regional Green Transition Programme</u>, <u>NAMA</u> Facility for auto-consumption of renewable energy, <u>Low Carbon Business Action</u>, <u>European</u> <u>Fund for Sustainable Development Plus</u> (grant financing for blending with loans from EFIs (included the EIB) and technical assistance, guarantees.

EU Member States:

Project development support: Germany GIZ (<u>4E Programme</u>), Netherlands <u>DHI instrument</u>
Project finance: Grants - Germany finances innovative pilot GH2 projects abroad through its EUR 200 M International GH2 strategy (e.g. synthetic fuel Project <u>Haru Oni</u>).
Loans: <u>SBI-BMI</u> (BE), <u>COFIDES</u>, <u>ICO</u> and <u>FIEM</u> (ES), <u>Simest</u> (IT), <u>KfW</u> (DE) <u>Proparco</u> (FR), <u>IFU</u> (DK), <u>Invest International</u> (NL); in addition, most EU Member States have export credit agencies that can play a specific role in opening markets for technology suppliers.

