

GH2 at the heart of the Energy Transition

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El Grupo Air Liquide: 2020 Key Figures



~64,500 EMPLOYEES



78 COUNTRIES



3.8 MILLION CUSTOMERS & PATIENTS



REVENUE **€20.5bn**

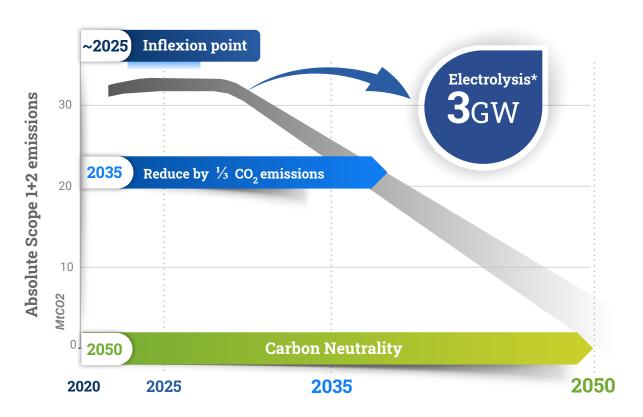


NET PROFIT (GROUP SHARE) **€2.4bn**



DECISIONS €3.2bn

An Ambitious plan to carbon neutrality



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50+ years of Hydrogen Development

Production & Supply chain

Production



Supply-chain





Distribution Networks



Synthetic gas facility

Synthetic gas

Markets Segments

Process industries



Steel, Glass





Electronics



Mobility





Key Figures

1.2 Mt H₂/year

Pipeline 1,850 km H_2

53 large plants of H_2 / CO

2.4busd sales

Co Founders of **Hydrogen Council**

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Air Liquide already started to invest



Electrólisis Dinamarca 1.2 MW



CCU + H₂ bajo en carbono Francia 1"Cryocap" de captura de CO₂



CCS + Low-Carbon H₂ (In Devt.) Antwerp / Benelux CO₂ Capture



120 Hydrogen

Refueling

Stations (HRS)

installed by Air Liquide in the

world, in which

more than 50

are directly

invested and operated by Air Liquide

and o

Electrólisis Bécancour, QC 1x 20MW



Electrólisis a gran escala (In Devt.) H2V Francia 200 MW



Supply Chain Costa Oeste de EE.UU. Liquefactor H₂



Reducción de H₂ en la fabricación de acero y Cobre Alemania



Supply Chain (En Devt.) Noruega H₂ líquido para buques



Estaciones de H₂
para consumidores
70 Hrs



Red de H₂ para camiones Francia / Benelux / Alemania HyTrucks





Flota de autobuses y taxis H₂ Francia / China / Korea

ALIAD: 12 M€ invested in 5 start-ups

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Why Chile?



The **knowledge** gathered in this process will be extremely valuable.

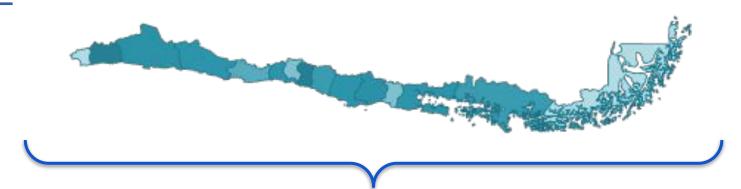


Chile can become a **test bed** for large scale
hydrogen production



Replication of Projects among the countries for shared experiences

What we are doing in Chile?





Industrial Scale **Green Methanol** project for mobility and export.



Pilot project of complete value chain of GH2 with **buses for mining**



Ports H2 ecosystem based on Hytrucks experience

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BÉCANCOUR - PEM más grande del mundo



Electrolizador **PEM** más grande del mundo utilizando energía hidroeléctrica.



Integración con basin existente de AL, con un licuefactor de AL.



Para la **industria** y la **movilidad**



Evitando la emisión de 27,000 toneladas por año de CO2





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I AIR LIQUIDE, A WORLD LEADER IN GASES, TECHNOLOGIES AND SERVICES FOR INDUSTRY AND HEALTH

Date
Name & Function
Department

Doc
Title

HYDROGEN ENERGY