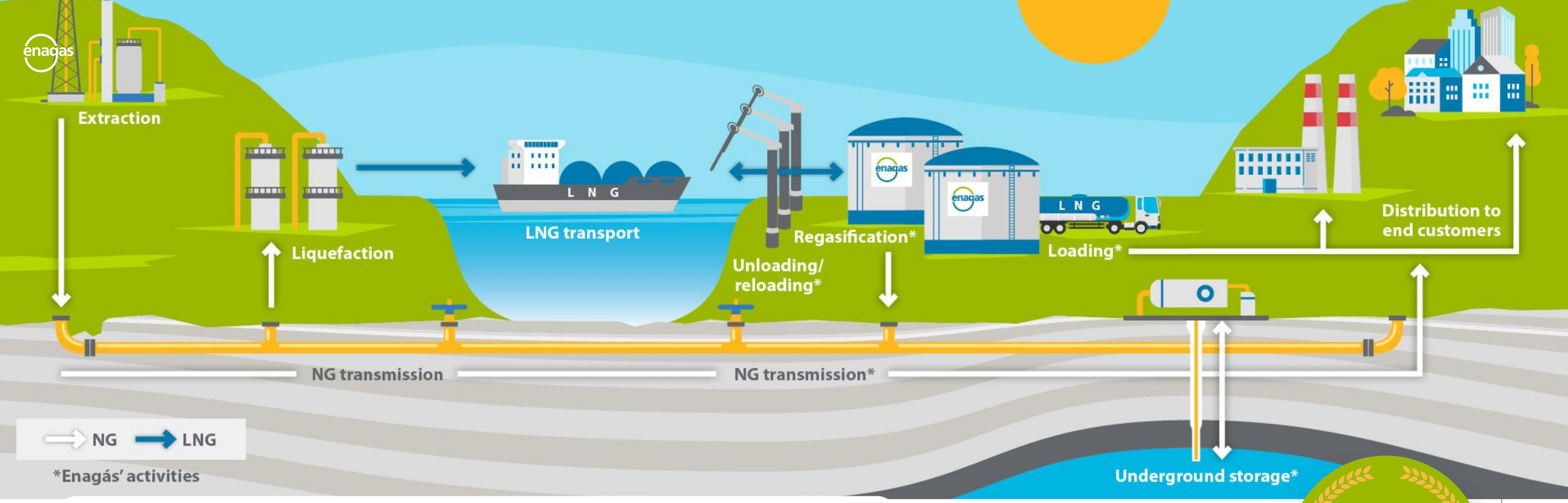
Enagás

CO2 Hubs Development in Spain

March 2026



Enagás leader in energy infrastructures

+50 years of experience

Midstream Company

Independent TSO by the European Union

Main Transport Company of Natural Gas in Spain

Technical Manager of the Spanish Gas System

Provisional hydrogen network manager (HTNO), according to Royal Decree-Law 8/2023

Business Development and affiliates General division

International scale

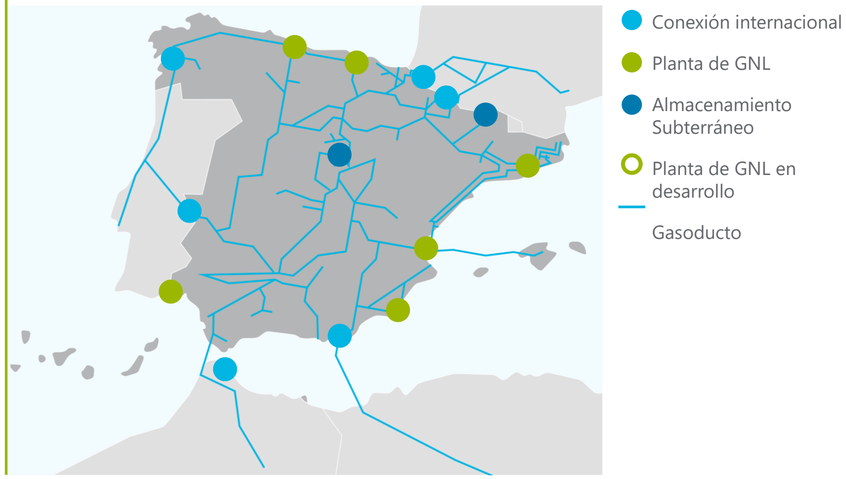
International scale: infrastructure operation in 7 countries

Spain

- 11,000 km of gas pipelines, 6 LNG plants
- 3 underground storage facilities

LNG Plants
- Barcelona
- Cartagena
- Huelva

Participations
- Musel E-Hub (75%)
- BBG (50%)
- Saggas (72,5%)



Europe

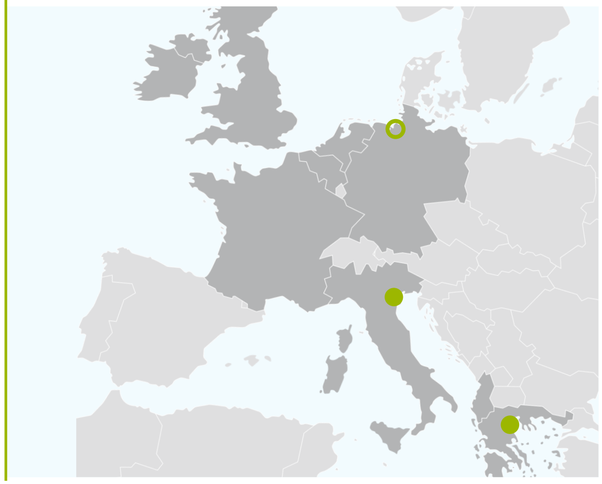
Germany/Italy/Greece/TAP

Germany
- Hanseatic Energy Hub (15%)

Italy
- Small Scale LNG Rávena (19%)

Greece · Albania · Italy
- Trans Adriatic Pipeline (TAP) (20%)

Greece
- DESFA (11,9%). Revithoussa LNG Plant



America

- Mexico/Peru

Mexico
- TLA Altamira Plant (40%)

Peru
- Transportadora de Gas del Perú (TGP) (28.9%)

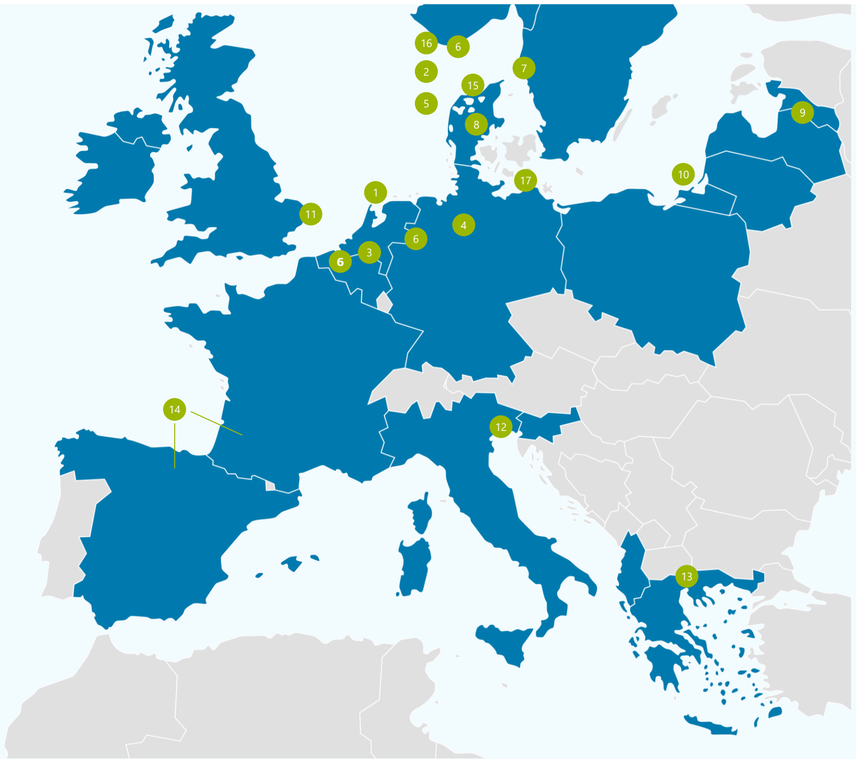
CO_2 as a new strategic infrastructure

Europe is already deploying CO_2 infrastructure

Need for large-scale storage in Europe
- 50 Mt/a (2030)
- 280 Mt/a (2040)
- 450 Mt/a (2050)

Hard to Abate Industry
- Cement, steel, chemical, refining
- Total reduction not immediate

Competitive window
- TSOs and operators already positioning themselves
- Acceleration of projects in the last year



17 projects of common interest on the provisional list of EU ICPs (pending ratification by the EU Parliament and Council)

1. CO_2 TransPorts
2. Northern lights project (PMI)
3. Aramis
4. Delta Rhine Corridor
5. EU2NSEA
6. Nautilus CCS (PMI)
7. Bifrost
8. Norne
9. CCS Baltic Consortium
10. ECO2CEE
11. Carbonconnect
12. Callisto
13. Prinos
14. Pycasso
15. BaltiCO2net
16. ATLAS
17. German Carbon Transport Grid

Identified CO_2 demand in Spain

Call for Interest 2023 results

Market Signal

- 2023: H_2 Call for Interest, incorporating CO_2 capture and transport
- Main result: identification of areas and hubs with the greatest interest

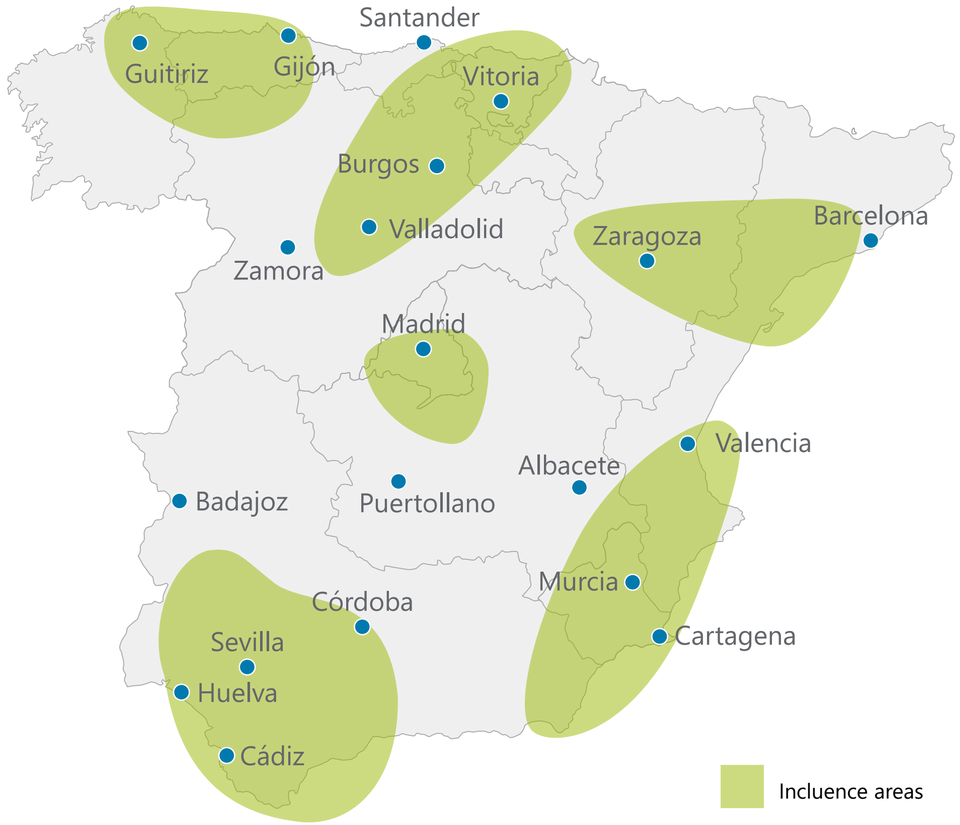
Identification of priority hubs for CO_2 capture

- Main output: map with areas/hubs of greatest interest for CO_2 capture

Sector profile

- >96% of the interest in catch comes from the cement sector
- In line with industry emissions (~10 Mt/y)

CO2 Results



37

companies interested in CO2 capture

53

Interested companies in infrastructure

10,4

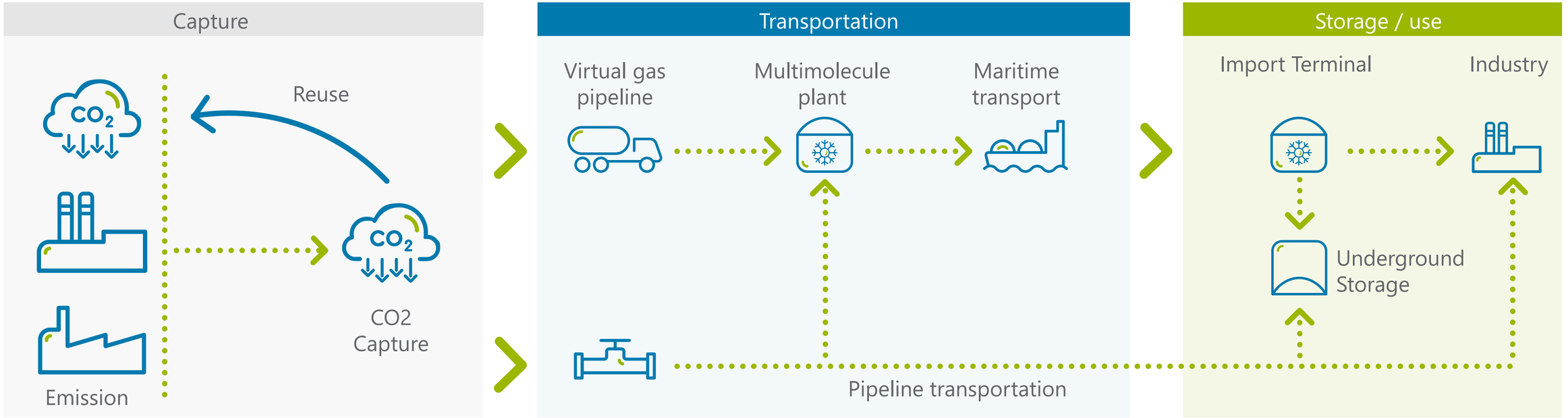
Mt/a, CO2 quantity to capture

Positioning of Enagás in the CO_2 chain

Infrastructure and logistics as the central axis of the CCS deployment

Enagás acts as an independent developer and operator of CO_2 infrastructures

CO2 Value Chain



Why Enagás can lead CO_2 infrastructure

Independent operator for the deployment of CO_2 infrastructure in Spain

Strengths

1. Know-how in energy infrastructures

+50 years operating critical networks

2. CO_2-Adaptive Transport Network

Existing Infrastructure, Accelerated Deployment

3. Underground Storage Expertise

Large-scale CCS pillar

4. Strategic ports and institutional relations

Base for multimodal hubs

5. Multimolecule terminals

Asset Reuse and Operational Efficiency

6. Proven Ability to Execute

Management of complex and European projects

We apply existing capabilities to a new key infrastructure for industrial decarbonization

Hub model for the deployment of CO_2 infrastructure in Spain

Geographical distribution of Hubs in Spain

Emission aggregation to accelerate deployment and optimize costs

What is the hubs model?

- Concentration of projects in areas of influence
- Demand aggregation for scale
- Infrastructure CAPEX and OPEX optimization

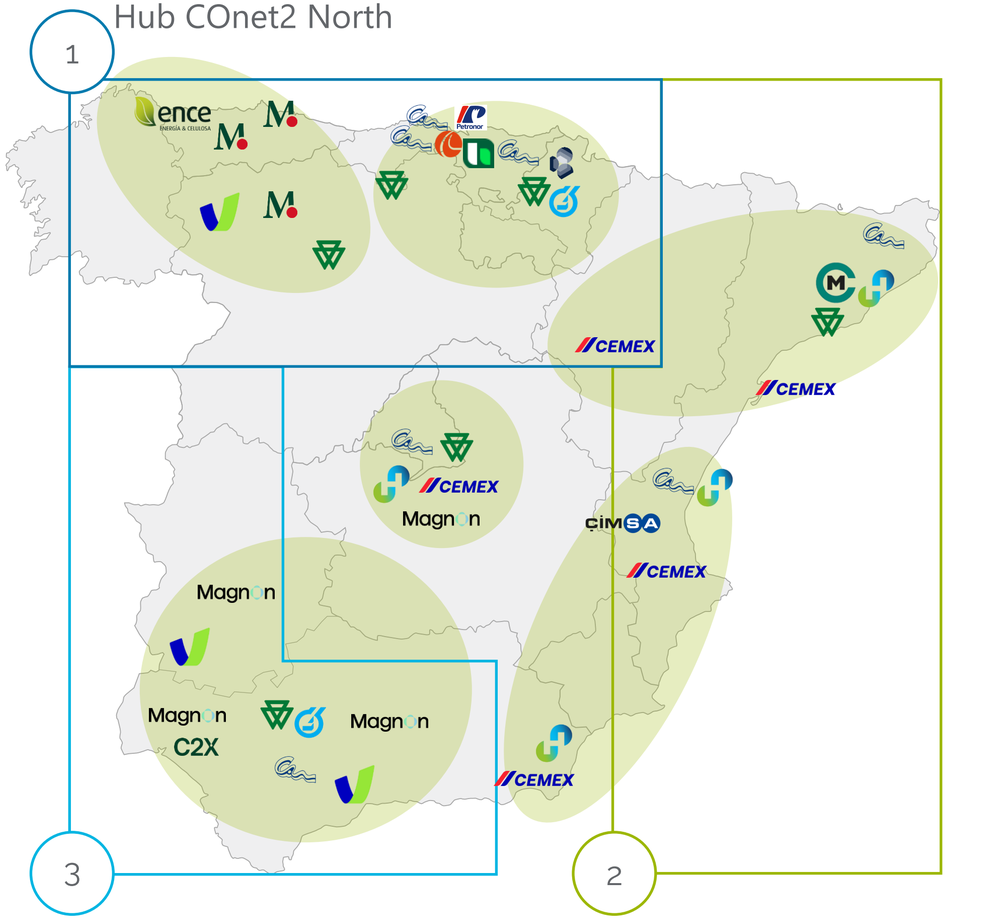
Priority Hubs Identified

- North
- Mediterranean
- Atlantic

Initial Scope

~14 Mt/a
potential CO_2 to be captured

3
Identified Hubs



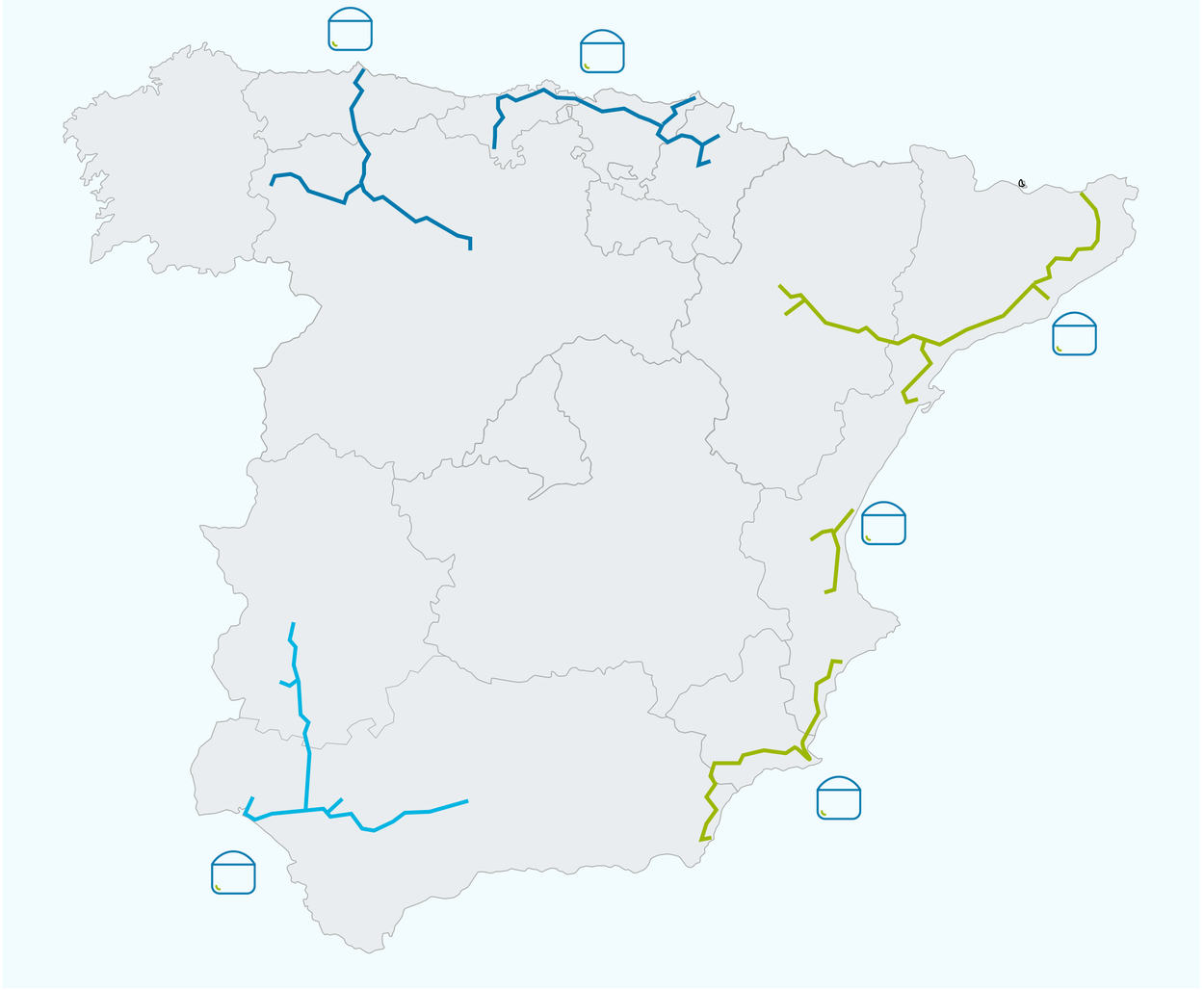
Progress in the pre-feasibility of the CO_2 network in Spain

Development by hubs and coordination of synergies with LNG plants

Enagás makes progress in the pre-feasibility of the CO_2 network and terminals by hubs

What's being done:

Network design by hubs	Industry-terminal connection as the basis for deployment
Definition of CO_2 terminals	Integrated and coordinated with existing LNG plants
Technical and economic optimisation	Leveraging existing infrastructure and assets

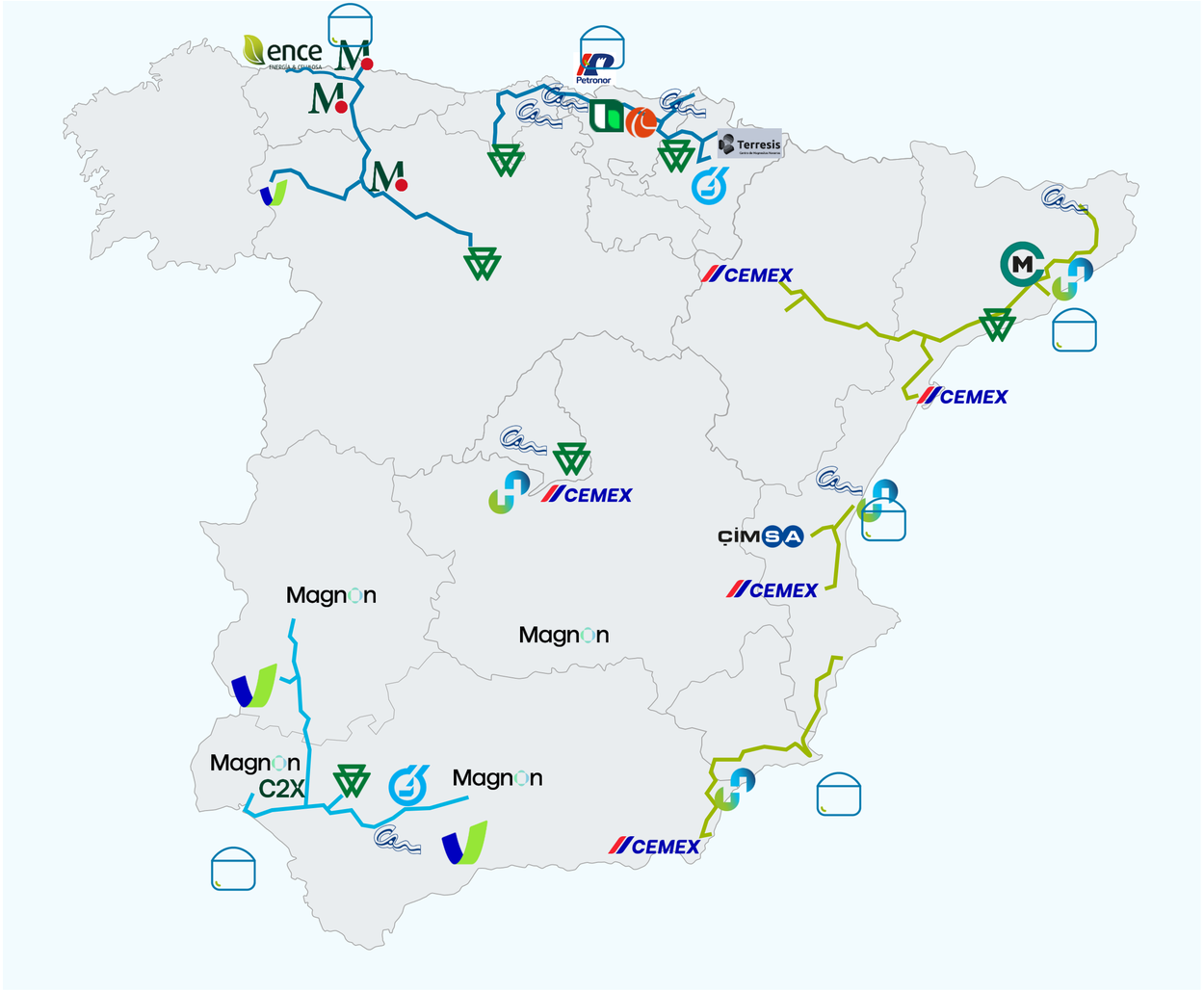


Confirmed interest by the industry

Main actors

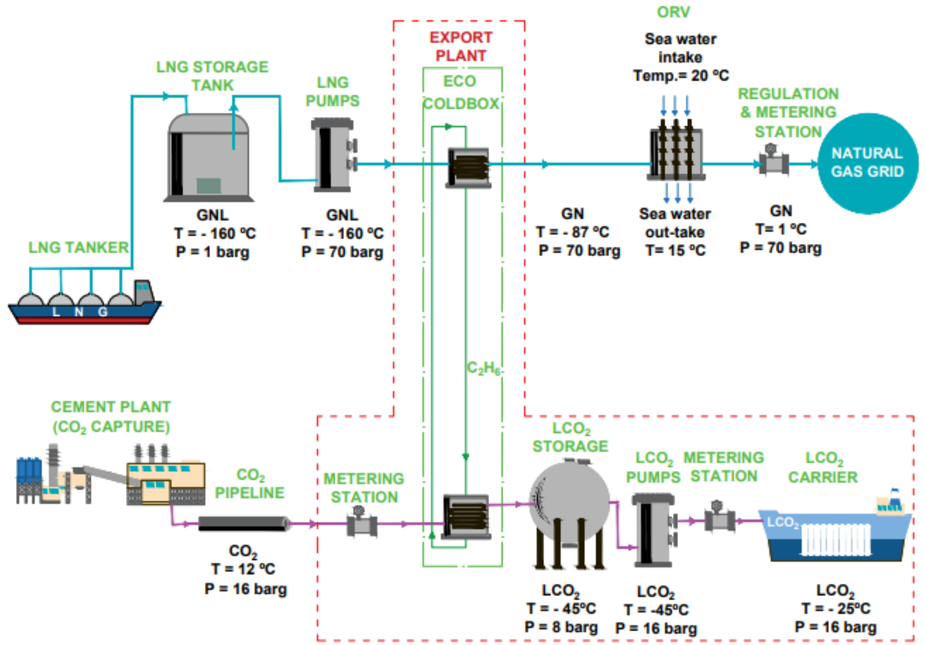
Enagás makes progress in the pre-feasibility of the CO_2 network and terminals by hubs

- Cemex
- Cementos HOLCIM
- Cementos Molins
- Votorantim Cimentos
- Portland Valderrivas
- Corporación Masaveu
- Cementos Heidelberg
- Cementos Lemona
- Cementos CIMSA
- Ence Energía Celulosa
- Calcinor
- Terresis (Magna)
- Lhoist
- C2X
- Magnon (Ence)
- Petronor



Port facilities. CO2 Plant

SGE Patented ColdBox Technology



Using residual cold from LNG plants

Port facilities. Plant

Our terminals are multi-molecule plants in which LNG, CO2 and ammonia services are integrated

Plants that offer multimodal services
They will be prepared for modal transport by track and by train in addition to the reloading of LCO2 ships

COnet2Sea

Project selected by the EU Innovation Fund

This creates a **virtual pipeline** to ensure the continuity of pipeline transport and liquefaction services. In this way, Enagás offers a combined service encompassing transport, liquefaction, intermediate storage, and shipping.

What is the Project

- Development and operation of a liquefied CO_2 vessel (20,000 m^3)
- Integrated into the permanent storage logistics chain
- Connected to Enagás' CO_2 plants

Status and calendar

- Grant: EU Innovation Fund
- COD: January 2032

Key innovations

- Use of bio-LNG
- BOG management using ecoCOLDBOX
- Capture and storage of CO_2 from exhaust gases

Hub COnect2 North
Included in the provisional PCI list

What the project enables

- Transport of CO_2 captured in industries in northern Spain
- Liquefaction and export by ship to permanent storage in Europe
- Integrated and optimized logistics chain

Project Status

- PCI status: approved by the European Commission
- Final validation: Council and Parliament expected in Q1 2026

Key infrastructure

- CO_2 terminals: El Musel (Gijón) and BBG (Bilbao)
- Maritime transport: LCO_2 vessels

CO2 emissions abatement

Phase 1	Phase 2
2 Mt/a	3 Mt/a
in 2033	in 2035

Mosusol netCO_2
Deployment of the CO_2 model in the Mediterranean

What it does
- Project to capture CO_2 in Molins (Catalonia) and transport it for permanent offshore storage (Port of Tarragona area)

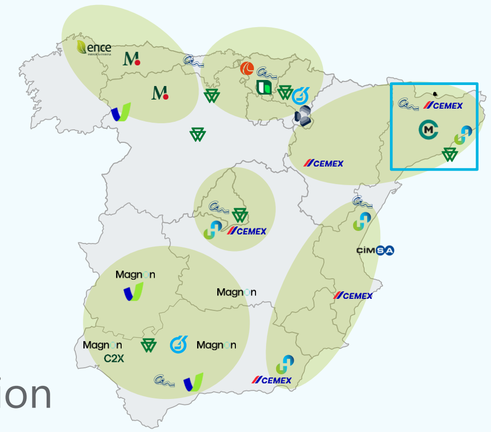
What it brings
- Key infrastructure: Enagás will participate in a ~100 km pipeline to transport >1 MtCO_2/year to storage

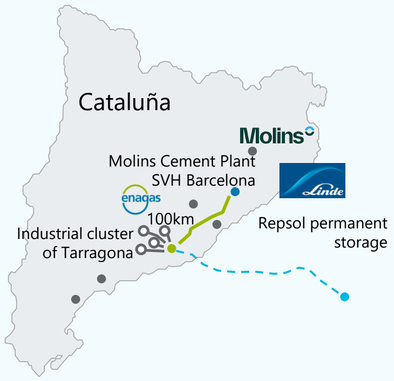
What validation does it have?
- Financing and reserve requirements: linked to an underground storage facility that obtained the Innovation Fund (FI) 2023; Molins-Enagás project under development and submitted to European calls
- Evaluated with STEP positioned for European funding;

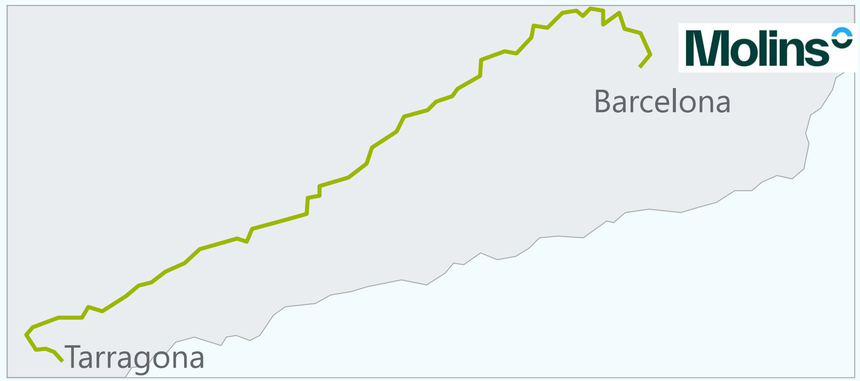
2028-2029
Construction

~ 1 M tCO_2
per year

2031-2032
Entry into operation







CO2necta

Deployment of the CO_2 model in the Mediterranean

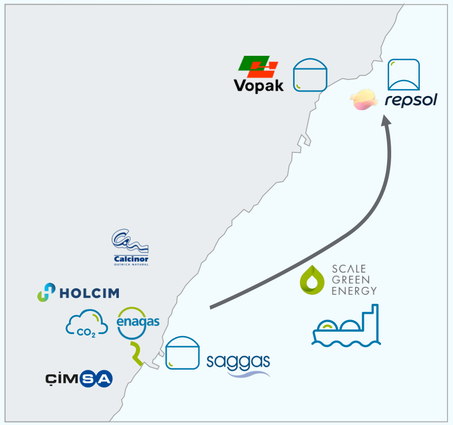
Project aims at connecting Valencian industry with the future CO_2 logistics infrastructure.

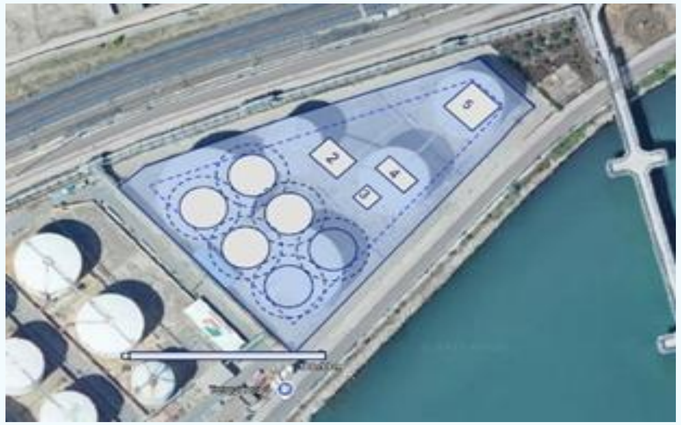
- Project to capture CO_2 in Holcim (Sagunto) and enable its liquefaction and maritime departure from Saggas
- Key infrastructure: ~7 km pipeline to transport to the Saggas regasification plant (72.5% owned by Enagás)
- Differential: use of the residual cold from LNG (SGE technology) to liquefy CO_2 and store it until it is loaded on the ship
- Status / funding: Enagás–Holcim–Saggas project under development; submitted to EU calls and awarded with STEP

2028-2029
Home Construction

~ 0,8 M tCO_2
per year

2031-2032
Entry into operation





An experienced team

Enagás' commitment to the development of these projects with a competent and solid team.

Enagás demonstrates a firm commitment to the development of these projects through a competent, multidisciplinary and results-oriented team. We bring experience in infrastructure, capacity to manage complex projects and a consolidated relationship with the main agents in the value chain.
This approach allows us to move from technical definition to commissioning, guaranteeing high standards of safety and coordination with customers, ports and administrations.

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Thanks