



European
Commission



INNOVATION FUND

Deployment of net-zero and innovative technologies

GREEN MEIGA: Green Methanol in Galicia

The Innovation Fund is 100% funded by the EU Emissions Trading System

| Project Factsheet

GREEN MEIGA, located in Begonte, Galicia (Spain), aims to deploy innovative and integrated technological approaches, clustered in a unique integrated plant. The proposed approach will achieve three key outcomes: enhanced production performance, improved operational flexibility, and competitive production costs. GREEN MEIGA plans to reach 157% relative greenhouse gas (GHG) emissions avoidance compared to the reference scenario.

The GREEN MEIGA project will develop novel concepts and technologies. They will be clustered in a unique integrated system and business case that will allow the production of 100 000 tonnes per year (t/y) of e-methanol and will avoid 2.9 million tonnes of CO2 equivalent during the first ten years of operation. The project will integrate (i) an innovative hybridised H2 production system including an alkaline Proton Exchange Membrane

COORDINATOR

IBERDROLA CLIENTES SOCIEDAD ANONIMA

LOCATION

Spain

CATEGORY

Energy Intensive Industries (EEI)

SECTOR

Chemicals

AMOUNT OF INNOVATION FUND GRANT

EUR 122,917,845

EXPECTED GHG EMISSIONS AVOIDANCE

2,901,078 tonnes CO2 equivalent

STARTING DATE

01 October, 2023

ENTRY INTO OPERATION DATE

30 June, 2027

FINANCIAL CLOSE DATE

30 September, 2025

(PEM), a Solid Oxide Electrolyser Cell (SOEC) and Co-SOEC systems, (ii) an integrated self-sustainable e-methanol production system, and (iii) an advanced CO₂-capture system integrating enzyme-based and direct air capture technologies.

The cost-efficient production of e-methanol is essential for the chemical sector's decarbonisation pathway, contributing to the European goal of reaching climate neutrality by 2050. The project will also contribute to the goals of the REPowerEU Plan of reducing fossil fuel consumption in industry and transport. As methanol is an important feedstock in the chemical industry, the on-site production of e-methanol can reduce GHG emissions, stimulate local economies and reduce the EU's current fossil fuel dependency (cost

efficiency ratio, lower than today's carbon price).

GREEN MEIGA will design a strategic plan to deploy the project concept in the future and mobilise investments in e-methanol production. The selected location is a representative scenario, being the first milestone of an ambitious scalability plan to replicate the concept in additional sites. The project will contribute to the development and decarbonisation of the value chain, both in the wood industry and in the energy sector in Galicia. GREEN MEIGA provides solidity and sustainability to the economic model and social and territorial cohesion, as it will contribute to the creation of green jobs in Galicia, planning to create up to 426 jobs during the operation stage and around 6 000 jobs during the construction stage.

| Beneficiaries

IBERDROLA CLIENTES SOCIEDAD ANONIMA

Spain

FORESA INDUSTRIAS QUIMICAS DEL NOROESTE SA

Spain