

French CO2 Capture Project Takes Major Step with EU Backing

June 18, 2024



Air Liquide and Dunkerque LNG have received a significant boost for their carbon capture and storage project, D'Artagnan. The European Commission has pledged over €160 million in funding as part of the Connecting Europe Facility for Energy (CEF-E) program.

D'Artagnan is a key element of the wider “Cap Décarbonation” initiative, aiming to slash CO2 emissions by 1.5 million tonnes annually in the Dunkirk industrial basin. The project involves:

- **CO2 capture:** Air Liquide's Cryocap™ technology will be used to capture CO2 from Eqiom's cement plant and Lhoist's lime production facility, both located in northern France. This aspect benefits from separate funding under the Innovation Fund program.
- **CO2 transportation and export:** Captured CO2 will be transported via pipelines built and operated by Air Liquide to a new terminal in Dunkirk's west port, near the existing LNG terminal.

This new terminal, jointly operated by Air Liquide and Dunkerque LNG, will liquefy CO2 for shipment to permanent North Sea storage sites. The design allows other regional industries to join the project, with a potential future capacity of up to 4 million tonnes per year – equivalent to over 5% of French industrial greenhouse gas emissions.

Emilie Mouren-Renouard, member of Air Liquide's Executive Committee and Chief Executive Officer of the Europe Industries Hub, said: “Today is the first time that a CO₂ infrastructure project in France receives support from the European Union. Together with our partner Dunkerque LNG we are delighted with this

major milestone! Decarbonizing industry will be pivotal to achieving the European Union objective of reducing emissions by 55% by 2030. This is why we are involved in the D'Artagnan project, which is part of the wider "Cap Décarbonation" initiative: bringing our expertise and technologies to help industrial players in the Dunkirk industrial port basin to significantly reduce their CO₂ emissions."

Olivier Heurtin, Chairman of Dunkerque LNG, added: "This is an exciting time for the D'Artagnan project. We are celebrating an important milestone. Europe's support is a testimony to the commitment, expertise and collaborative spirit of all the project partners. Together, we are making a positive impact. With this project, Dunkirk would have its own CO₂ export infrastructure. The first in France. This shows that this project will be a major factor in the competitiveness and attractiveness of Dunkirk and surrounding area. We are enthusiastic and proud to be an essential link in this project, which will benefit the environment, the region and its residents."

The total D'Artagnan project investment is estimated at over €400 million. The final investment decision hinges on securing CO₂ management and capture service contracts.

D'Artagnan is seen as a crucial step towards implementing carbon capture and storage technologies needed to reduce emissions in France and Europe. These technologies are vital for sectors like cement and lime production, where reducing emissions through process changes alone is challenging.

This project is co-funded by the European Union. The views and opinions expressed are those of Air Liquide and Dunkerque LNG only and do not necessarily reflect the official position of the EU or CINEA.

¹ Phase 2 of K6 project which is subject to additional funding, regulatory approvals and internal feasibility assessments prior to commencement.

² CalCC project

³ This investment includes the construction of the pipelines and of the CO₂ exportation terminal, before consideration of the funding attributed by Europe.