

MANUFACTURING OF COMPONENTS  
FOR ENERGY STORAGE

# INNOVATION FUND

Deploying innovative net-zero technologies for climate neutrality

## AGATHE: Advanced Gigafactory Aiming at Tempering greenHouse gases Emissions

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

### | Project Factsheet

The project AGATHE will contribute to expanding the battery production capacity of Verkor's gigafactory in Dunkirk, France from 8 to 16 Gigawatt-hours (GWh) of NMC 811 battery cells. These are a type of lithium-ion battery where the cathode contains nickel, manganese, and cobalt in an 8:1:1 ratio, known for their high efficiency. The expansion will use advanced, digitalized, and sustainable manufacturing technologies. The goal is to increase the production capacity of batteries for electric vehicles (EVs) while reducing the overall carbon footprint of the transportation sector, with an expected 71.5% relative greenhouse gas emission avoidance compared to the production and use of Internal Combustion Engine (ICE) cars in Europe.

AGATHE will integrate a robust digital infrastructure, including AI-driven optimisation, allowing continuous process optimization and predictive maintenance, into its manufacturing process to shorten ramp-up times, improve energy performance of the manufacturing process, and ensure high product quality. A key

#### COORDINATOR

VERKOR

#### LOCATION

France

#### CATEGORY

Energy Storage (ES)

#### SECTOR

Manufacturing of components for energy storage

#### AMOUNT OF INNOVATION FUND GRANT

EUR 76,282,817

#### EXPECTED GHG EMISSIONS AVOIDANCE

12,488,656 tonnes CO<sub>2</sub> equivalent

#### STARTING DATE

01 May, 2025

#### FINANCIAL CLOSE DATE

30 June, 2026

#### ENTRY INTO OPERATION DATE

31 March, 2028

#### CALL NAME

InnovFund-2024-BATT

*\* Calculated vs. the 2021-2025 ETS benchmark of 6.84 tCO<sub>2</sub>e/tH<sub>2</sub>, not taking into account additional carbon abatement due to substitution effects in the H<sub>2</sub> end use application, i.e. conservative estimate.*

innovation is the construction of a pre-recycling facility near the gigafactory. This facility will process more than 95% of production scraps on-site, significantly reducing waste volumes and virtually eliminating the need to transport hazardous battery materials.

By prioritising resource efficiency, digital innovation, and the resilience of European supply chains, AGATHE aligns with the EU's broader industrial and climate policies. This resilience is achieved by reducing dependence on external suppliers, diversifying raw material sources, and promoting a localised circular economy. The project supports the European Green Deal, Critical Raw Materials Act, and Batteries Regulation by promoting recycling and circular

economy approaches. This transformative project paves the way for a competitive gigafactory model that integrates advanced digital tools, minimises the climate footprint, and strengthens Europe's technological sovereignty.

AGATHE will contribute to regional economic growth and job creation in Dunkirk, with over 500 new high-skilled jobs and up to 85% local workforce employment. The project's scalability offers future deployment opportunities across France and beyond, driving cost reductions and efficiency gains that benefit the economy and energy sector. Community engagement initiatives will strengthen its local impact, ensuring a positive influence on the region's socioeconomic landscape.

## | Participants

**GIGA VERKOR IMMO**

France

**REKOVR**

France

**VERKOR**

France

Additional information on the [EU Funding and Tenders Portal](#).