



European Commission



MANUFACTURING OF COMPONENTS FOR PRODUCTION OF RENEWABLE ENERGY OR ENERGY STORAGE

INNOVATION FUND

Deployment of net-zero and innovative technologies

ELAN: Upscaling Vianode innovative synthetic graphite production technology for a responsible electrification of Europe

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

| Project Factsheet

Project ELAN will fill the supply/demand gap for anode materials, for the growing number of European battery cell manufacturers. The project will supply premium quality synthetic graphite anode materials that are produced in the cleanest possible way. It will bring an innovative and highly energy-efficient graphitization technology to commercial scale, for the responsible electrification of Europe. ELAN will produce anode materials for electric vehicle batteries with 100% relative greenhouse gas (GHG) emission avoidance compared to the reference scenario.

Project ELAN will bring a unique graphitization technology to commercial scale, setting a new global standard in the production of synthetic graphite anode materials.

The ELAN technology uses closed furnaces to produce synthetic graphite, suitable for battery

COORDINATOR

VIANODE AS

LOCATION

Norway

CATEGORY

Energy Storage (ES)

SECTOR

Manufacturing of components for production of renewable energy or energy storage

AMOUNT OF INNOVATION FUND GRANT

EUR 90,000,000

EXPECTED GHG EMISSIONS AVOIDANCE

7,275,691 tonnes CO2 equivalent

STARTING DATE

01 January, 2024

ENTRY INTO OPERATION DATE

30 June, 2027

FINANCIAL CLOSE DATE

30 June, 2025

anodes, in an energy- and material-efficient process. This drastically reduces the emissions resulting from anode manufacturing. It will be the first time a closed-controlled atmosphere furnace technology will be demonstrated for synthetic anode graphite production at a large scale. In absolute terms, project ELAN will contribute to avoiding over 7 million tonnes of CO2 equivalent of greenhouse gas emissions over the first ten years of operation. The anode materials produced by this project will power about 846 000 electric vehicles per year.

The project will supply key materials, to scale the emerging EU battery value chain, building European industrial leadership and contributing to the strategic autonomy of the continent. It further addresses resource constraints and environmental impact, by developing a clean graphitization

process and a circular value chain to increase battery recycling. It therefore contributes to the Green Deal objectives, the Net Zero Industry Act, the Clean Battery Directive and the Just Transition objectives of the European Union.

The project will lead to the creation of up to 700 jobs, plus up to an additional 4 000 during the construction phase. ELAN will also contribute to attracting top international talent across the manufacturing and recycling process. It will engage with universities and research institutes to share and co-create knowledge, as well as build competencies in battery materials. The project will also create value for the local economy, through increased demand in the local supplier network and labor market, development and sharing of infrastructure, and building key competencies in the value chain.

| Participants

VIANODE AS

Norway

ELKEM ASA

Norway

AV ANODOS AS

Norway

HYDRO ENERGI INVEST AS

Norway