



European Commission



OTHER ENERGY STORAGE

# INNOVATION FUND

Deployment of net-zero and innovative technologies

## InnoSolveGreen: Demonstrating a novel Energy-as-a-Service solution for industrial sector energy consumers

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

### | Project Factsheet

The InnoSolveGreen project will showcase a novel Energy-as-a-Service solution in Lithuania that will enable industrial consumers to meet 100% of their annual electricity needs with cost-effective, locally produced electricity from solar photovoltaic plus storage (PV-plus-storage) systems. The project will encompass two PV-plus-storage systems: one at the site of the selected industrial client; and another off-site utility-scale system. The project aims to achieve a 100% relative greenhouse gas (GHG) emission avoidance during the first ten years of operation compared to the reference scenario.

The InnoSolveGreen project's innovative elements are twofold:

(1) a novel, zero-investment Energy-as-a-Service business model for industrial consumers that will enable 100 % coverage of their annual energy needs with cost-effective, locally produced

#### COORDINATOR

UAB GREEN GENIUS

#### LOCATION

Lithuania

#### CATEGORY

Energy Storage (ES)

#### SECTOR

Other energy storage

#### AMOUNT OF INNOVATION FUND GRANT

EUR 2,614,114

#### EXPECTED GHG EMISSIONS AVOIDANCE

16,669 tonnes CO2 equivalent

#### STARTING DATE

01 April, 2023

#### ENTRY INTO OPERATION DATE

31 December, 2024

#### FINANCIAL CLOSE DATE

30 November, 2023

renewable electricity. And the model will diversify revenue streams and enable additional value for both the developer and the final client; and,

(2) an innovative utility-scale PV-plus-storage system design, featuring a novel combination of both Direct Current (DC) and Alternating Current (AC) connected battery storage systems. This set up will showcase a method for integrating at least 30% more renewables into existing limited capacity electrical grids.

Upon entering into operation, the InnoSolveGreen project will produce approximately 7 442 megawatt hours (MWh) of electricity each year and will achieve an estimated total of 16 669 t CO<sub>2</sub> equivalent avoidance during the first 10 years of operation, which corresponds to 100% of GHG emissions when compared to the reference scenario. By offering locally-produced, affordable, and clean electricity, the InnoSolveGreen project solution will not only create a pathway for achieving the EU's objective of climate neutrality by 2050, but will also enhance existing value chains and enable the establishment of new ones.

Furthermore, by showcasing an innovative system design to significantly increase renewables integration into existing limited-capacity electrical

grids, the InnoSolveGreen project will also contribute to the goals of the European Strategic Energy Technology Plan (SET Plan). By using this design solution, renewable asset developers will be empowered to achieve their pipeline targets quicker and electrical grid operators will benefit from major grid investment deferrals.

As the project proposes a novel and highly attractive business model to other renewable asset developers, the InnoSolveGreen project has considerable scalability potential in other European countries. The suggested Energy-as-a-Service solution requires very low initial investments from the industrial energy consumers, which means it has significant capability to be expanded to multiple industries, providing substantial energy cost reductions and the possibility to cover 100% of energy demand using renewable electricity. The proposed solution might be easily adaptable to country-specific regulatory frameworks and it offers future opportunities for additional services related to energy cost savings and energy supply security.

## | Participants

UAB 'GG LTU S20'

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