



INNOVATION FUND

Deploying innovative net-zero technologies for climate neutrality

AMBASSADOR: closed-loop installation for sustainable production of bioMethane, BioCO₂ And biofertilizerS a new StandArD fOr zeRo waste economy

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

| Project Factsheet

The project aims to construct and operate an innovative biomethane plant in Poland. This facility will combine advanced anaerobic digestion processes with a range of agri-food waste feedstocks, alongside biogas purification and CO₂ capture and purification technologies, to create a closed-loop, zero-waste system. The project's scalable design enables a high replicability and serves as an ambassador for biomethane technology development in Central and Eastern Europe. The installation is expected to achieve an annual production of approximately 5 008 624 cubic meters (m³, or 52 591 MWh) of high-quality biomethane, 3 983 622 m³ (7,876 t) of food-grade liquid CO₂, and 176 720 t of digestate. The project will result in a 277% greenhouse gas emission avoidance compared to the natural gas reference scenario.

AMBASSADOR introduces a groundbreaking integration of technologies that prioritise resource

COORDINATOR

BZK ENERGY SPOLKA Z OGRANICZONA
ODPOWIEDZIALNOSCIA

LOCATION

Poland

CATEGORY

Energy intensive industries (EII)

SECTOR

other

AMOUNT OF INNOVATION FUND GRANT

EUR 7,958,244

EXPECTED GHG EMISSIONS AVOIDANCE

256,100 tonnes CO₂ equivalent

STARTING DATE

01 April, 2025

FINANCIAL CLOSE DATE

31 December, 2025

ENTRY INTO OPERATION DATE

31 December, 2026

CALL NAME

InnovFund-2023-NZT

* Calculated vs. the 2021-2025 ETS benchmark of 6.84 tCO₂e/tH₂, not taking into account additional carbon abatement due to substitution effects in the H₂ end use application, i.e. conservative estimate.

efficiency and circularity. The biomethane facility will feature a versatile fermenter capable of processing a wide range of feedstocks, making the plant flexible and easily adaptable. A portion of the biomethane produced will be used to generate heat and power for the facility itself, enabling it to operate off-grid. Additionally, the system includes CO₂ capture and liquefaction, and a high-quality biomethane production, which is cooled via an air cooler and subsequently injected into the national gas grid. Over its first five years of operation, this facility is expected to prevent 128 050 tons of CO₂ emissions.

The project represents a practical example of transformation toward a sustainable, resilient, and competitive economy. It is aligned with several key

policies, including the European industrial strategy, the Recovery Plan for Europe, the Green Deal Industrial Plan, and the Net-Zero Industry Act.

AMBASSADOR will create high-quality jobs and set new standards for energy security and sustainable industrial development. The installation's strategic rural location (southwestern Poland) enables efficient utilisation of locally available feedstock. Close cooperation with nearby farms, waste management facilities, and other organic waste suppliers ensures a stable feedstock supply while minimising transportation costs and associated emissions. AMBASSADOR's business model stimulates regional economic development and builds lasting local relationships.

| Participants

BZK ENERGY SPOLKA Z OGRANICZONA ODPOWIEDZIALNOSCIA	Poland
BIOAGRA SPOLKA AKCYJNA	Poland

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