European Commission

MANUFACTURING OF COMPONENTS FOR ENERGY INTENSIVE INDUSTRIES

INNOVATION FUND

Deploying innovative net-zero technologies for climate neutrality

FicH2tel: Ballard Power System's Fuel Cell Hydrogen Technology Engine Location

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

| Project Factsheet

The project aims to develop a power system's large-scale manufacturing facility of low-temperature proton-exchange membrane (LT-PEM) fuel cell components, stacks and engines for European heavy-duty transport applications. The project is expected to contribute significantly to the reduction of greenhouse gas emissions (GHG) in the heavy-duty transport sector across Europe, with up to 94% of relative GHG emissions avoided by deploying fuel cell engines in comparison to the reference scenario.

The project aims to accelerate the manufacturing of next-generation fuel cell products through innovations such as automation and robotics, potentially making the FicH2tel project a strong enabler to the fuel cell sector in Europe. FicH2tel aims to install capacity to produce eight million Membrane Electrode Assembly (MEA) and Bi-Polar Plates (BPP) corresponding to 25 000 stacks and 15 000 engines annually by 2031. By primarily targeting bus and truck segments, these fuel cells are expected to avoid

COORDINATOR
BALLARD POWER SYSTEMS INC

LOCATION
Germany

CATEGORY
Energy intensive industries (EII)

SECTOR
Manufacturing of components for energy intensive industries

AMOUNT OF INNOVATION FUND GRANT
EUR 113,248,840

EXPECTED GHG EMISSIONS AVOIDANCE
27,327,648 tonnes CO2 equivalent

STARTING DATE
01 April, 2025

FINANCIAL CLOSE DATE
30 September, 2027

ENTRY INTO OPERATION DATE
30 September, 2030

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.*

27 million tons of GHG absolute emissions over ten years.

Fuel cell electric vehicles offer substantial benefits in pollution reduction, fuel efficiency and innovation. The project will contribute to the objectives of the Green Deal Industrial Plan and the Net-Zero Industry Act, strengthening the capacity and competitiveness of the European fuel cell manufacturing industry and helping Europe meet its energy and climate goals.

FicH2tel will create approximately 190 jobs over ten years from 2030 and invest in developing the region's sectoral skills and the hydrogen fuel cell component supply chain. Additionally, knowledge-sharing activities and interactions will be incentivised among relevant stakeholders to boost the European hydrogen sector. On a broader, global scale, this project is a significant step into high-volume fuel cell production in Europe, with a replicable plant design ready for further scale-up.

| Participants

BALLARD POWER SYSTEMS INC	Canada

Additional information on the EU Funding & Tenders Portal.