European Commission

SOLAR ENERGY

INNOVATION FUND

Deploying innovative net-zero technologies for climate neutrality

Floating Sky: Floating Sky: FUSIO demonstrator

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

| Project Factsheet

FLOATING SKY:

The project introduces a breakthrough Floating PhotoVoltaic (FPV) solution called FUSIO®, which aims to reduce the current costs of FPV solutions. Following its demonstration with a 100-kilowatt (kW) pilot, Floating Sky will launch its first large-scale FPV production facility of 12.2MWp in Belgium. The floating structure's innovative design allows a catamaran to pass over it and have full access to the PV surface for inspection, cleaning, and replacement, thus eliminating the need for heavy, walkable structures that impact water ecosystems. The lightweight, ventilated structure of the floating PVs minimises water impact and improves cooling efficiency. This groundbreaking project is set to establish a new standard for inland FPV installations, completely avoiding greenhouse gas (GHG) emissions compared to the reference scenario.

The FUSIO demonstrator introduces a novel, patented design with the shape of a triangular honeycomb

COORDINATOR
TERTRE INNOVATION SOLAIRE

LOCATION
Belgium

CATEGORY
Renewable Energy (RES)

SECTOR
Solar energy

AMOUNT OF INNOVATION FUND GRANT
EUR 3,200,000

EXPECTED GHG EMISSIONS AVOIDANCE
20,702 tonnes CO2 equivalent

STARTING DATE
01 April, 2025

FINANCIAL CLOSE DATE
31 March, 2026

ENTRY INTO OPERATION DATE
30 September, 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.*

structure, which is lighter and optimally distributes loads from wind and waves. Such a structure reduces costs and cuts operation and maintenance activities. This design also allows full access to PV panels for inspection and cleaning and increases electricity production by up to 5% due to the improved cooling effect of the water body. Floating Sky will generate around 12 GWh/year, sufficient to power 3 700 households in Belgium. In addition, FUSIO offers a scalable solution that avoids significant GHG emissions.

The revised Renewable Energy Directive has set an ambitious target, raising Europe's binding renewable energy goal for 2030 to a minimum of 42.5% with an aspiration to reach 45%. The project aligns with Europe's climate policies by reducing fossil fuel dependence and expanding renewable energy use. Broader FPV deployment in Europe could offer a more diversified energy mix and a new technology to reach net-zero climate goals by 2050. The solution is cost-effective and biodiversity-friendly and can reduce GHG emissions in energy production through on-site solar generation. In addition, it requires relatively short supply chains and less plastic use because of its lighter structure. Designed for inland water bodies, FUSIO could be a competitive solution that addresses challenges like land scarcity and rising global renewable energy demand. From 2026 to its first ten years of operation, the Floating Sky's plant will avoid more than 20 000 tons of GHG emissions compared to the current European electricity mix emissions.

Floating Sky will positively impact local job creation, with an estimation of more than 100 direct and indirect jobs created. Moreover, it will set a benchmark for biodiversity preservation and landscape integration as it will feature the installation of "bio huts" for fish and "floating gardens". The project aims to expand across Europe and offers solutions for hard-to-access sites with its easily transportable design, ideal for scalability. This will drive long-term cost reductions and further cost advantage, benefiting both renewable energy markets and regional economies committed to sustainable development.

| Participants

TERTRE INNOVATION SOLAIRE	Belgium
CIEL ET TERRE INTERNATIONAL	France

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