European Commission

SOLAR ENERGY

INNOVATION FUND

Deployment of net-zero and innovative technologies

SUNBREWED: Solar eNergy for the BREWEry inDustry

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

| Project Factsheet

The objective of the SUNBREWED project is to demonstrate the innovation, technical feasibility, commercial viability, and scalability of solar thermal technology in combination with an innovative energy contracting business model in the food and beverage industry. Implemented at a brewery, the SUNBREWED project will supply a sustainable carbon dioxide (CO2) free steam into the brewing process, replacing conventional fossil fuel-based energy, and achieving a relative greenhouse gas (GHG) emissions avoidance of 100% compared to the reference scenario.

The project aims to install an industrial-scale concentrated solar thermal power plant with a thermal storage system at a brewery in Patras, Greece. This plant will operate under a Thermal Purchase Agreement (TPA). This approach, which

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LOCATION
Greece

CATEGORY
Renewable Energy (RES)

SECTOR
Solar energy

AMOUNT OF INNOVATION FUND GRANT
EUR 4,465,584

EXPECTED GHG EMISSIONS AVOIDANCE
21,482 tonnes CO2 equivalent

STARTING DATE
01 July, 2024

ENTRY INTO OPERATION DATE
28 February, 2025

FINANCIAL CLOSE DATE
30 September, 2024

Updated on 02 December 2024

combines an efficient renewable energy technology with a well-established business model, serves the industrial end-user's demand for reliable and affordable thermal energy, while simultaneously reducing carbon emissions from its operations.

The key factors driving this project to supply solar heat to an industrial process are (1) the environmental concerns over carbon emissions and efforts to reduce air pollution, (2) high energy costs, (3) solar thermal technology being a product-market fit (unlike several other renewable alternatives), (4) policy enforcement support from governments to drive the adoption of renewable technologies for industries, and (5) the integrability of the SHIP (Solar Heat in Industrial Processes) systems with thermal storage systems, as well as with other renewable energy or fossil-fuel based systems. Through the use of these technologies this project aligns with the REPowerEU Plan as well as the European Climate goals by contributing to produce clean energy and combining diverse technologies to increase the energy supplies in the European territory.

The project expects to boost the local economy of the area and strengthen local communities with the collaboration of local suppliers, contractors and subcontractors who are responsible for constructing, installing, and maintaining the solar plant. In total, 29 new jobs will be created during both, the construction phase and the operation of the project. The new SUNBREWED solar thermal plant also has a two-fold educational value and impact. First, it brings general awareness to the region, showing that large manufacturers are becoming more sustainable and can produce their products using new green technologies. Second, there is the potential for the new plant to collaborate with local and regional schools to offering organised visits for students to the plant facilities.

| Participants

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