European Commission

MANUFACTURING OF COMPONENTS FOR PRODUCTION OF RENEWABLE ENERGY OR ENERGY STORAGE

INNOVATION FUND

Deployment of net-zero and innovative technologies

GEN2HU: GENERON 2.0 Integrated Solar Roof Tile

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

| Project Factsheet

The GEN2HU project aims to implement new technologies as part of the development of proprietary second-generation roof-integrated solar photovoltaic module solution, GENERON. With GEN2HU, the objective is not only to increase the products' sustainability and output power, but also to decrease the unit cost and the production waste at the same time. In terms of relative greenhouse gas reduction potential, the project is expected to reach 100% compared to the reference scenario.

The planned project's scope is to increase performance and the aesthetic appearance of GENERON by applying cutting-edge, innovative developments in the production process. The project includes three main innovative elements, namely, the use of shingle-matrix technology, decreasing the lead in the soldering alley, and the introduction of terracotta-coloured tiles. By implementing the abovementioned innovations,

COORDINATOR
TERRAN TETOCSEREP GYARTO KFT

LOCATION
Hungary

CATEGORY
Renewable Energy (RES)

SECTOR
Manufacturing of components for renewable energy

AMOUNT OF INNOVATION FUND GRANT
EUR 2,220,000

EXPECTED GHG EMISSIONS AVOIDANCE
49,547 tonnes CO2 equivalent

STARTING DATE
01 July, 2024

ENTRY INTO OPERATION DATE
31 March, 2026

FINANCIAL CLOSE DATE
30 September, 2024

Updated on 02 December 2024

GEN2HU aims to create a cost-efficient, more sustainable, and aesthetically functional roof integrated solar module which will contribute to the accessibility of solar energy and green transition of European households.

The project will be located at one of the main sites of Terrán, in Pécs, Hungary. Starting in July 2024, the project is planned to reach entry into operation and thus start volume production and market entry by April 2026 and will last until March 2029. The solution proposed would enable residential buildings, public buildings, businesses or even buildings with important cultural heritage to utilise solar energy without compromising their aesthetic appearance. The project is expected to contribute to and increase the cooperation between the actors of the supply chain and would open further directions in the product development aiming at improving the energy efficiency of historical residential and public buildings.

The Project aims to support the green transition of the European Union, especially in the Central and Eastern European regions. Offering a cost-efficient, sustainable, roof-integrated solar module solution, with aesthetics also suitable for conventional architecture and landscape, the project can contribute to the increase of the renewable energy's share in European households. GENERON 2.0 would also contribute to local and national policy objectives, including the Hungarian National Energy Strategy 2030.

| Participants

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PECSI TUDOMANYEGYETEM - UNIVERSITY OF PECS	Hungary