

EUROPEAN COMMISSION LIFE+

4 PARTNERS INVOLVED IN THE PROJECT

The European Commission LIFE+ programme is co-financing the PHOSTER project.

The LIFE+ programme is the European Union's financing programme for the environment. Its general aim is to contribute to the development and deployment of the EU's environmental policy and regulation by co-funding pilot or demonstration projects with high European added value.

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GRUPE ET

PHOSTER

PHOtovoltaic STEel Roof

A research project to develop a
universal solar steel roof envelope

Ready-to-plug in BIPV roofing steel envelope based
on innovative green technologies and processes

ArcelorMittal



The **PHOSTER** project consists of the **development of a highly efficient eco-designed building-integrated photovoltaic (BIPV) roofing element** using an innovative and greener manufacturing process. The project intends to contribute strongly to the expansion and promotion of solar energy and to address the climate change environmental problem.

A prototype of a new universal solar steel roof envelope **will be designed**, manufactured, installed and monitored during the project's 48-month timeframe.

5 ENVIRONMENTAL OBJECTIVES

In order to support the further expansion of solar energy and to limit as much as possible its environmental impact, five environmental targets are set for the project:

- 1 **Reduce** by up to **30% the Global Warming Potential (GWP)** with respect to a framed PV module on a metal roof
- 2 **15% reduction** of **carbon footprint** and **primary energy use** for the manufacture of copper, indium, gallium, selenium (CIGS) modules
- 3 **1.5% increase** in the **kWh/kWp** produced
- 4 **Reduce** the amount of rare toxic elements including the substitution of **cadmium**
- 5 **Recyclability** of at least **85%** (by weight) of the BIPV roofing envelope

