

Conclusions

3SUN PV GIGAFACTORY

INVEU-ICR-0032-2023 – Sustainable Infrastructure Window (SIW)

Short description of the financing or investment operation and its objectives

Name of the final recipient	3Sun Srl
Country of implementation	Italy
Implementing partner	European Investment Bank (EIB)

The operation concerns capital investments that will be carried out in the photovoltaic (PV) Gigafactory owned by the private company 3Sun Srl in Catania, Italy, a cohesion region under the EU Cohesion Policy. The project is comprised of two phases. Phase 1 concerns the installation of a 3GW production line for photovoltaic modules based on Hetero Junction Technology (HJT) – an established PV technology capable of producing modules. Phase 2 covers the research, development and innovation (RDI) activities for the development of new tandem perovskite-on silicon (Tandem) solar PV cells and modules and building a first-of-a-kind production line using this highly innovative technology, with the aim of bringing it from lab to commercial scale. The Tandem technology is capable of exceeding the theoretical solar irradiation energy conversion efficiency limits of silicon-only cells (including HJT).

Global Assessment and rationale for approval

The Investment Committee of the InvestEU Fund approved the use of the InvestEU guarantee on 9 June 2023 for the above-mentioned operation.

The operation addresses two important market failures (externalities). First, the project will lead to the development and deployment of innovative and process technologies with substantial environmental benefits. Second, the financing of this project supports RDI activities, which generate significant positive knowledge, technology and environmental externalities, through the creation of innovative processes, products or services and through skills development and upgrading.

The Investment Committee recognised the additionality of the operation. The operation is considered a flag-ship project for the EU, contributing to the transition towards renewable energy and leading to substantial GHG emission savings. It is consistent with the objectives laid out in the Commission's Net Zero Act. Moreover, the operation will support the competitiveness of a European company active on a global scale, while contributing to reshoring the production of state-of-the-art solar PV cells and modules to Europe, thus reducing dependence on extra-EU imports. The operation will therefore contribute to the Strategic Energy Technologies Plan and to Repower EU.

Conclusions

The operation entails a high degree of risk, in particular technological risk linked to the deployment of the Tandem technology and market risks (both supply and demand). The project will substantially benefit from the EIB contribution from a financial and non-financial standpoint. Local commercial lenders have very limited appetite for the risks associated with the project, evident in the co-funding by only one bank. In particular, EIB involvement has been key given the inability of other financiers to assume more than 50% of the total senior debt for a first-time borrower in a new sector segment with material technological risk, market risks. Also, the importance of support via guarantee by Italian ECA, SACE, to the non-InvestEU part of the EIB financing is highlighted. The substantial financial benefit provided by EIB allows for the improvement of the overall financials of the project. The operation would not be carried out by the EIB without the InvestEU support.