Custom-Art consortium leads an ambitious and disruptive EC funded project for the development and demonstration of the next generation of BIPV and PIPV modules based on abundant thin-film materials

Building- and product-integrated photovoltaics (BIPV and PIPV) are identified as **key enabling technologies** to make "near-zero energy buildings" and "net-zero energy districts" a reality. The mass adoption of BIPV and PIPV solutions can only be achieved by developing cost-efficient and sustainable thin-film technologies with unbeatable aesthetic functionalities, mechanical flexibility and optical tunability.

The EU-funded CUSTOM-ART project aims to develop the next **generation of BIPV and PIPV modules** based on abundant thin-film materials such as **kesterites**. The project will bring flexible and semi-transparent solar modules to a higher level of maturity (TRL 7), demonstrating very competitive conversion efficiencies (20 % at cell and 16 % at module levels) and increased durability (over 35 years), at a reduced production cost (less than EUR 75/m2).

By combining advanced strategies for materials properties management, with customized modules design in a circular economy approach, two types of products will be developed including **flexible PV modules** and **semi-transparent PV devices**. CUSTOM-ART will bring these technologies from TRL4-5 up to TRL7, demonstrating very **competitive conversion efficiencies** and **durability** (over 35 years), at a **reduced production cost**. They will exclusively use abundant elements and contributing to ensure the full sustainability and competitiveness of the European BIPV and PIPV Industry.

CUSTOM-ART is a H2020 funded project that stands for "**Disruptive kesterites-based thin film technologies customised for challenging architectural and active urban furniture applications**". The kick-off meeting is held online from the 22nd to the 23rd of September, 2020.

The project has a total budget of 8M€ and will run for 42 months. It involves 17 partners across Europe that includes the **world leading groups and main European actors** involved in the development of kesterite technologies and **Alejandro Pérez-Rodríguez** from IREC is the coordinator of the project.

More information: https://cordis.europa.eu/project/id/952982/es

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CUSTOM-ART
DISRUPTIVE KESTERITE-BASED