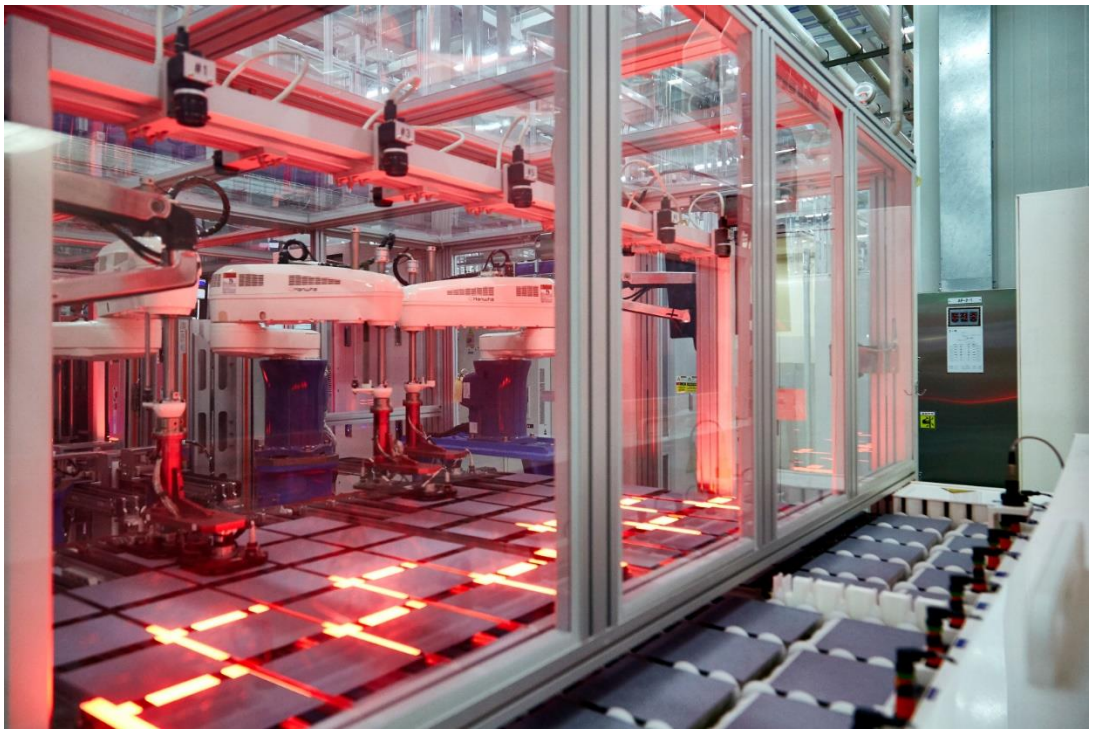
Project No: 101084251
Author(s): accelCH, Q CELLS, HZB
Date: 02 November 2022



Picture by @Qcells

Release date: 23 November 2022

Press release: FOM Technologies participates in developing a European pilot line for innovative photovoltaic technology based on tandem solar cells

PEPPERONI, a four-year Research and Innovation project co-funded under Horizon Europe and jointly coordinated by Helmholtz-Zentrum Berlin and Qcells, will support Europe in reaching its renewable energy target of climate neutrality by 2050. The project will help advance perovskite/silicon tandem photovoltaics (PV) technology's journey towards the market introduction and mass manufacturing. PEPPERONI's goal is to identify and address the barriers to tandem solar technology's market introduction, and ultimately lay the foundations for new production capacity in Europe. A pilot line enabling this development will be established at Qcells' European headquarters in Thalheim, Germany. The project began on 1 November 2022, with the long-term vision of enabling European industrial leadership on PV production in the global market.

Michael Stadi, Director CEO at FOM Technologies, said: "FOM *is proud to be part of the PEPPERONI consortium with its world-class technology partners. This research promises to break new ground in the advancement of perovskite-silicon tandem solar cell and module technology. At a time of unprecedented pressures on the current energy system, it is exciting to realise this first and transformative step towards industrial-scale manufacturing of next-generation PV technology in Europe.*"

Co-funded by the European Union

Funded by the European Union and supported by the Swiss State Secretariat for Education, Research and Innovation (SERI). Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Climate, Infrastructure and Environment Executive Agency (CINEA). Neither the European Union nor the granting authority can be held responsible for them.

Network

- Helmholtz-Zentrum Berlin für Materialien und Energie GmbH (RTO)
- Hanwha Qcells GmbH (IND)
- Mondragon Assembly S.COOP (IND)
- Von Ardenne GmbH Business Area PV (IND)
- FOM Technologies A/S (SME)
- Teknisolar SRL (SME)
- Dyenamo AB (SME)
- Yparex BV (SME)
- Institut National de L'Environnement et des Risques (RTO)
- Polymer Competence Center Leoben GmbH (RTO)
- Bureau de Recherches Géologiques et Minières (RTO)
- University of Ljubljana (UNI)
- Kauno Technologijos Universitetas Department of Organic Chemistry (UNI)
- Université de Liège Chemical Engineering (UNI)
- Technische Universiteit Eindhoven Applied Physics (UNI)
- Centre Suisse d'Electronique et de Microtechnique - Recherche et Développement (RTO)

PEPPERONI facts and figures

- **Funding Programme: HORIZON-CL5-2021**
- **Budget: 18.85 million euro**
- **Duration: 01.11.2022 – 31.10.2026**
- **Partners: 17**

About PEPPERONI

PEPPERONI is a four-year Research and Innovation project co-funded by the European Union under Horizon Europe and supported by the Swiss State Secretariat for Education, Research and Innovation that started on 1 November 2022. PEPPERONI will advance the perovskite/silicon tandem photovoltaics (PV) technology towards market introduction and mass manufacturing. The project, coordinated by Helmholtz-Zentrum Berlin (DE) and Qcells (DE) will identify and address the barriers to tandem solar technology's market introduction, and ultimately lay the foundations for fast implementation of new production capacity in Europe as a cost-effective and resource-efficient solution to decarbonise the energy system. The PEPPERONI consortium counts 17 partners from 12 European countries and it combines knowledge and expertise from fundamental research to small-scale testing and development of solar cells all the way to high-throughput industrial manufacturing of large solar modules.
Website: www.pepperoni-project.eu