



Open letter

Urgent Call for Action to Ensure a Sustainable Future for European PV Manufacturing

Solar photovoltaics (PV) is a sector of strategic importance for the EU economy, providing energy independence, industrial jobs and economic growth. Europe since two decades is leading in technological development, state-of-the-art manufacturing (industry 4.0), sustainability of production and quality and efficiency of solar products. There is hardly any other sector in the EU which received as much public dedication and thrilled more young people, engineers and scientists. Even if the emergence of huge overcapacities outside Europe led to a severe damage to the EU industry the EU value chain from raw materials and equipment to complete PV solar systems successfully remained intact until now. Together with the support of a unique R&D ecosystem this is the basis for the EU manufacturing industry to keep its significant technological advantage towards industrial followers outside Europe.

To maintain solar R&D and EU manufacturing and to take further opportunities for Europe, researchers and manufacturers call for urgent action:

1. Maintain existing and develop further Europe's biggest state-of-the-art manufacturing sites, whose continuation as a going concern is at stake right now. Moving those sites to outside Europe must be prevented. Interested investors must be encouraged to continue operations and co-operations in Europe. Especially public investment banks (national and European) should swiftly signal their interest in backing manufacturing in PV. In addition, access to investment support (see ECSEL program for microelectronics) needs to be provided.
2. Focus on supporting the manufacture of high-quality, technologically advanced products at scale. This is the right strategy for being internationally competitive.
3. Increase and sufficiently finance R&D activities. The current financing schemes at national and European level should be raised to the levels of our foreign competitors. Also, European public money for pilot production must require that initial commercial scale production happens in Europe.
4. Implement smart regulation to put products complying with EU manufacturing standards at an advantage: public support for the installation of PV in the EU should be linked to sustainability and efficiency criteria. Use top-runner programs, EU ecolabel and tougher quality standards to steer investments towards better performing products. PV to be installed on public land and properties or subject to public tenders or feed-in-tariffs should at least meet these criteria.
5. Ensure a special contribution from EU member states with the biggest R&D expenditures and already willing to cooperate in an energy partnership, such as Germany, France and many more.



6. Foster European political and technological cooperation with emerging markets, especially in India, Africa, Latin America, and the Middle-East.
7. Last but not least, Europe needs to install more PV. From the leading region until 2012, the EU fell to less than 8% of the global PV market in 2016. PV installations are down to 2009 levels, while installations in the Americas and Asia are currently ten times those in Europe, and prices are today more cost competitive than ever. All barriers against the rapid addition of centralized and decentralized PV to the power system should be removed.

PV is transforming Europe's and the World's energy system. It is strategically important for Europe to maintain strong involvement in this technology. This can only be achieved with an innovation-driven robust ecosystem of companies and research centers supplying different PV-related products and services. Large-scale manufacturing sites across the whole value chain are needed to ensure a sustainable future of PV in Europe. Cheap finance, accelerated R&D and smart regulation are the main ways to achieve sustainable PV manufacturing in Europe.

On behalf of ETIP PV / SOLARUNITED / EUREC

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Endorsing organisations



Fraunhofer Institute for Solar Energy Systems ISE



INES National Solar Energy Institute



Research Centre for Sustainable Energy (FOSS)



University of Ljubljana



Becquerel Institute



Energy research Centre of the Netherlands



Open Renewables



Norwegian crystals



TECNALIA



Malta College of Arts Science and Technology



French research federation on Photovoltaics



NorSun



Institute for Solar Energy Research Hamelin (ISFH)



WIP Renewable Energies



European Energy Research Alliance



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Lithuanian PV technology cluster



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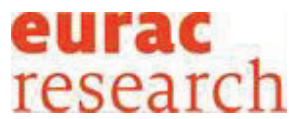
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Spanish Photovoltaic Technology Platform



Elettrorava



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Absolicon



Valencia Nanophotonics Technology Center



Lasercenter Munich University of Applied Sciences



NexWafe



Institute of Research and Development on Photovoltaic Energy



PVA TePla



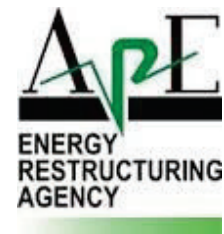
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CSEM



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ARCSIS



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Allianz BIPV



SiC Processing (Deutschland)



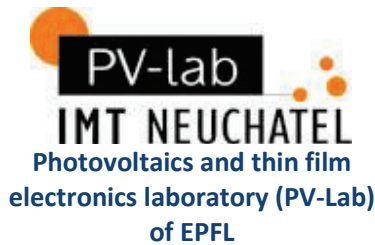
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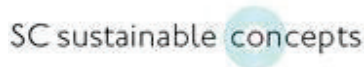
Fraunhofer Center for Silicon Photovoltaics



Catalonia Institute for Energy Research



Solomya (SOLar cells and Mass spectrometrY Analysis)



SC sustainable concepts



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