A European industrial strategy for PV

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REPower EU – only “fast forward” will get us out of the crisis

• 45% Renewable target
• Ambitious Solar Rooftop mandate
• Faster Permitting
• Skills
Versatile Solar PV can support EU energy independence - fast

Our May forecast sees EU solar market to add in High Scenario 40 GW in 2022, a 60 GW market as soon as 2024 and 92 GW new capacity in 2026. That’s already way too conservative.
With the right policy framework solar PV can reach 1 TW by 2030

EU-27 total solar PV market scenarios

1 TW solar by 2030 corresponds to 117 bcm saved per year
Under the REPowerEU scenario, solar jobs more than double compared to 2021, reaching 1 million FTEs in 2030. However, with a 1 TW target solar jobs would further increase to 1.5 million FTEs by the same year.
EU Solar PV Industry Alliance

• EU Solar PV Industry Alliance targets 30 GW domestic manufacturing by 2025

• Should translate to annual/biannual ministerial meetings (like Battery Alliance)

• Will map & co-ordinate EU funding potential - including Innovation Fund

• Supports efforts to establish IPCEI for Solar
Investments are needed along the value chain. In certain segments today’s production levels are low to sub-GW level, e.g. ingots and wafers.

Why EU PV Industry Alliance asks for 30 GW production until 2025? – Scale matters!

SolarPower Europe’s estimates based on company announcements.
Though very ambitious from today’s perspective, 30 GW production capacity would provide strategic resilience. Serving over 50% of EU market in 2025 in Medium Scenario.
The start of EU solar manufacturing renaissance?

**Enel secures EU funds to scale up Italian heterojunction PV module factory to 3 GW**

An unspecified sum is being provided by the European Union to help Enel become a large-scale PV panel manufacturer. The Italian company secured the funds through the Innovation Fund.

**Meyer Burger is developing additional production capacity for solar modules in Germany, thereby optimizing the expansion to 1.4 gigawatts for 2023**

**REC Solar wins EU grant to build 2GW HJT plant in France**

By Jonathan Touino Jacobs

**Strategic Collaboration For Over 4 GW European Ingots Production By 2025**

European Union’s EIT InnoEnergy Invests In Norwegian Crystals To Support European Upstream PV Manufacturing

Wednesday, 07 Sep 2022

Norwegian Crystals (NCR) has secured a strategic investment from a European Union (EU) body EIT InnoEnergy that’s aimed at accelerating European silicon ingots production from the company’s site at Glomfjord in Northern Norway.
Identifying right key support tools for EU PV Manufacturing

Funding Demo Projects for innovative low-carbon technologies

➢ Two large-scale calls (>€7.5 mn projects) closed with solar being awarded 1 project in each call (Enel, REC)

Support scheme providing exemption to European State-Aid rules
Learning from others?

India’s Production Linked Incentive Scheme
- 10 GW Module production (3 Bio Eur support)
- 65 GW silicon-to-module projects
- Basic custom duty (25% cell imports, 40% modules)

Support worth 3 bio Eur

US Inflation Reduction Act
- Production tax credit available on all segments of the value chain and calculated on a USD/Wp basis
- Additional financing support for manufacturing
- Additional tax credit (30% + 10%) at installation step for bids with domestic content (100% iron and steel, 40% increasing for manufacturing goods)

$369 billion total support
IRA creating rapidly solar manufacturing momentum in USA

Catalyzing American Solar Manufacturing
A roadmap to achieving 50 GW of domestic solar manufacturing capacity by 2030

Thin Film Panel Maker First Solar To Build New 3.5 GW Factory In Southeast US; May Plan Further Expansions
Aug 30, 2023

Solar Wafer Production In US Soon
SPI Energy Intends To Set Up 1.5 GW Solar Wafer Manufacturing Capacity In 2023 In USA
Friday, 26 Aug 2022

As per the US Department of Energy (DOE), there has been no production of solar wafers in the country since 2016, but it could change soon as SPI Energy has signed a letter of intent to secure solar wafer manufacturing equipment for 1.5 GW capacity, and increase it to 3 GW by 2024.
EU PV Industry Alliance – make it a success!

**Basic requirements**

- **Sustainability standards**
- **CAPEX support** (IPCEIs under the energy infrastructure category, Innovation Fund)
- **Offtake pipeline & stable demand**
- **Competitive business environment** (materials, energy)

**Acceleration**

- Deliver a true solar PV industrial strategy
- Come up short-term with a dedicated solar PV manufacturing support scheme inspired by EU Chips Act, flanked by competitive OpEx support for the entire supply chain, in particular the energy-intensive production of polysilicon and ingots/wafers
Thank you!

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