

## EU NEEDS A SMART AND FAST FINANCING STRATEGY ALONG WITH POLICY FRAMEWORKS TO EMPOWER THE PV MANUFACTURING POTENTIAL IN EUROPE

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**Problem: the European PV market is at the edge of double-digit growth, but the PV manufacturing industry in the EU is dramatically small.** In 2020, the installed PV capacity in Europe reached 20.6 GW (in comparison, new wind power installations amounted to 14.7 GW). Forecasts expect that PV annual installations could double in 2-3 years in the EU — reaching 40-45 GW annual installations in 2023-2024!

While in the EU about 15% of the new global PV systems were installed in 2020, Europe only produced 11% of the PV silicon, 1% of ingot and wafers, 0.4% of cells and 4% of modules of the global production. The global annual PV manufacturing market is forecasted to grow from 150 GW to 600 GW annually within this decade, but up to now in the EU only 10 GW of new PV manufacturing capacity is planned. The EU should have PV manufacturing in focus when implementing the installation boom that will be part of the EU Green Deal.

**Target: At least 60 GW by 2026 and 100 GW by 2030 annual PV manufacturing capacity across the whole value chain should be established in Europe, to safeguard sustainable implementation of the Green Deal objectives and Europe's competitive participation in global PV production value chains. This can be well based on decades of intense and successful R&D efforts in the development of low-cost and high-efficient PV cell and module concepts in Europe. As of today, Europe still has a global technology leadership role in PV.**

The ESMC has extensively addressed EU Member States to dedicate adequate fractions of the Recovery and Resilience Facility financing for PV manufacturing, and is now forming a consortium to establish an Important Project of Common European Interest (IPCEI) for PV manufacturing. The timing for the EU to achieve the breakthrough in PV manufacturing is critical. Accordingly, three key instruments are proposed to be implemented.

**Financing tools (grants, credit guarantees, loans) and policy frameworks should be mobilised to achieve the PV manufacturing targets described above.** Grants, loans or loan guarantees are decisive elements for investment decisions and help mobilise private capital for the European companies. Several other global players, such as China, India and now also the USA under the Biden administration, are taking strong and fast actions, to ensure the competitiveness of local PV manufacturing based on smart financing measures. A package of instruments should be implemented in Europe without any further delay:

- 1) Financing tools — at least € 10 billion of grants and € 10 billion credit guarantees would mobilise the necessary private capital.** Public (local, regional, national, European) and private financing tools will have to be adopted to support local PV manufacturing. A special focus on the activities of the European Investment Bank (EIB) and on rules of engagement are needed, combined with a novel, off-takers based approach, to de-risk the establishment of PV manufacturing.
- 2) Policy frameworks — the targets of the Green Deal ensured increased clarity for the market of *deployment of renewables*, now the focus should be turned to achieve clarity and confidence for the *PV manufacturing industry*.** Sustainability policies, such as EcoDesign, green public procurement, Eco-labelling, and the Carbon Border Adjustment Mechanism are critical to promote high environmental standards and low carbon footprint in manufacturing. The forthcoming "Fit for 55" legislative package should ensure the practical implementation of these core principles.
- 3) Integration of PV installations — a competitive advantage for European PV manufacturing to deploy PV in integrated systems should be extensively supported to maintain the sustainable competitiveness of the EU.** Local manufacturing of PV modules optimized for deployment in Building Integrated PV (BIPV), Vehicle Integrated PV (VIPV), Floating PV (FPV) and Agricultural PV (APV) should be supported on European and national levels.

**ESMC believes that a mobilisation of these efforts, together with the establishment of a PV manufacturing IPCEI, will have the potential to establish 100 GW PV manufacturing capacity in Europe, generating at least € 10 billion annual local benefits, and more than 200 thousand jobs.** Currently, there are several suitable financial and policy instruments available in the EU (Recovery and Resilience Facility, Just Transition Fund, EU Cohesion fund, Horizon Europe program), but **without streamlined efforts to mobilize at least € 10 billion of grants and € 10 billion of credit guarantees for the industrial PV manufacturing, Europe risks to lose the potential benefits of the Green Deal, by entering into a new type of energy dependency of importing key components for PV installations.**