

## Feedback for Public consultation on potential measures for regulating the photovoltaic (PV) modules, inverters, and systems

The European Solar Manufacturing Council (ESMC) supports the introduction of sustainability policies for PV modules and inverters, and in particular the proposal for the mandatory policies Ecodesign and Energy labelling, coupled with the voluntary Green Public Procurement. We believe that Ecodesign and Energy labelling, if designed well, will promote sustainability and can contribute to the EU Green Deal, 'Fit for 55', RePowerEU and especially the EU Solar Strategy.

Manufacturing in Europe is more sustainable than in most other parts of the world, and a recent study has shown that the CO<sub>2</sub> footprint of modules produced in Europe are about 40% lower than if the same module would have been produced in China<sup>1</sup>. A sustainability criterion therefor potentially provides a competitive advantage for European manufacturers.

However, potential sustainability benefits for European manufacturers can only be realized if the policy is designed well, and the effects and impacts therefore depend on how it will be implemented. The policies need to be verifiable, as simple as possible, and have a strong element of verification/certification to avoid cheating and provide a level playing field. However, if the policies are too weak and leave loopholes, in the worst case, they could be counter-productive, giving the impression of promoting sustainability, while in fact they might not.

ESMC strongly stress that the Energy labelling of PV modules should be based on the carbon footprint using the same methodology as for Ecodesign, where the environmental impact of a module is reported rather than a labelling that is based solely on the conversion efficiency of a module. The later rather reflects how efficient a PV module is in relation to the surface it occupies, no matter how much energy and what kind of energy was used to produce it.

Furthermore, Energy Attribute Certificate (EAC) to count towards the carbon intensity of electricity should not be included, as is the case with the suggested PEFCR methodology. ESMC believes this approach would significantly weaken the policy, as it would allow "dirty" producers to buy their way out, which implies a risk of "green washing". The carbon content of electricity should be based on the National grid mix without allowing market-based mechanisms to avoid the risk of double-counting green electrons. This would potentially undermine the benefits in terms of sustainability and the competitive advantage for European manufacturers.

Hence, ESMC wants to see a more established and proven methodology consistent with this approach, such as the EPD PCR<sup>2</sup> (the international EPD system is commonly used in the construction industry), instead of the proposed PEFCR methodology.

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<sup>1</sup> <https://www.sciencedirect.com/science/article/abs/pii/S0927024821003202>

<sup>2</sup> <https://www.epd-norge.no/pcr-register/npcr-029-2020-part-b-for-photovoltaic-modules-article2642-353.html>