

PFAS restriction proposal

SolarPower Europe position paper

SolarPower Europe acknowledges the rationale behind the proposed restriction on PFAS. Preserving a clean planet and ensuring a safe environment is a shared goal. It is essential that in the domain of renewable energy, we lead by example and foster the principles of sustainability, circularity and environmental safety.

In the realm of PV products, there are already substitutes available for certain components, such as frontsheets and backsheets. Frontsheets and backsheets serve as a notable example of a product that can be manufactured without the presence of "forever chemicals". Use of alternative materials contributes to the overall sustainability of PV systems and supports the transition towards cleaner and more recyclable solar energy technologies.

However, not all sectors, products and components have available or developed alternatives to PFAS, and it is crucial to offer these a helping hand. The most challenged sectors in PV value chain are:

- Polysilicon production: Polysilicon is the key building block of the most widespread PV module technology. PFAS are present in chemical plant engineering (gaskets, pipe and reactor liners, valves, pumps and other devices). As there are currently no alternatives available, the restriction poses an existential threat to the producers. What's more, a European ban on the use and imports would not affect PFAS used in production outside of EU, thereby undermining the global playing field of European producers. To keep and strengthen this strategic industry in Europe, a derogation for these uses is necessary.
- Inverters: Inverters, a crucial component of every PV system, contain PFAS. PFAS make these electricity-handling products waterproof, oilproof and high-temperature resistant. As there are no alternatives currently available, this ban would result in inverters not being imported or produced in the EU. What's more, PFAS used in inverter production outside of the EU would not be impacted by the European ban, motivating producers to move their production outside the EU. Therefore, derogation is necessary.
- Semiconductors: Semiconductors control and manage the flow of electric current in PV modules and inverters. PFAS is used in the chemicals utilized for photolithography (photoresists), etching and cleaning processes. They are also present in production of semiconductor components and in factory equipment. There is a long way to go in developing and scaling the use of alternative materials with the same properties. Therefore, derogation is necessary.

PFAS are also crucial for several key technologies complementary to solar, such as BESS, EV batteries, heat pumps, grid technology and green hydrogen electrolyzers. In most cases alternatives are thoroughly researched but are not currently available. Therefore, derogations are necessary.

Substantially increasing share of renewable energy is crucial to accomplish the twin transition, achieving climate neutrality by 2050 and honoring commitments of the Paris Agreement. Moreover, to maintain the current share of manufacturing in Europe, it is important to provide support to manufacturers rather than creating additional obstacles. Policies such as the Net Zero Industry Act (NZIA) and the Green Deal Industrial Plan (GDIP) aim to encourage the resurgence of manufacturing in Europe. These initiatives

recognise the significance of supporting domestic manufacturing capabilities and fostering sustainable economic growth in line with climate and environmental objectives. Staying on the path to reach ambitious environmental targets, and supporting European manufacturers is key in ensuring a successful twin transition.

In summary, while efforts should be made to restrict PFAS due to their environmental impact, it is crucial to provide derogations and support the development of alternatives, particularly in sectors where substitutes are currently unavailable and where the same properties are strictly necessary to keep the current level of product or production safety. Backed by EU sponsored research and support of partnerships with academia, the affected industries look forward to exploring potential phaseout strategies.

This approach ensures the continuity of strategic industries, such as polysilicon production, inverters, semiconductors, batteries and EV batteries, heat pumps, grid technology and green hydrogen electrolyzers, and allows for a successful transition to cleaner and more sustainable technologies, while staying on track with climate neutrality and domestic manufacturing goals.