FALLING WALLS CIRCLE

PLENARY TABLE "DRIVING THE SOLAR ENERGY TRANSITION: BUILDING A MORE RESILIENT AND SECURE ENERGY SUPPLY CHAIN"

The urgency to tackle the climate crisis and achieve sustainable growth is adding to the momentum of the global energy transformation. Solar Photovoltaics (PV) has the potential to overcome the energy trilemma of energy security, sustainability, and affordability. This Falling Walls Circle discussion explores how a diverse solar PV industry can effectively mitigate technology development risks and help to overcome potential barriers to its competitiveness.

Panelists: <u>Walburga Hemetsberger</u> (SolarPower Europe, BE), <u>Seth Marder</u> (University of Colorado Boulder / NREL, US), <u>Daniel Menzel</u> (Meyer Burger, DE), <u>Rutger Schlatmann</u> (Helmholtz-Zentrum Berlin, DE), and moderator <u>Jennifer Porto</u> (NYU Berlin, DE).

KEY TAKEAWAYS

- 1. There is an urgent need for political action and funding in solar energy. According to the experts, EU member states need to invest in their local solar industry, not just in the lab, but at scale. They also need to embrace ambitious concepts such as Agri-PV and establish new incentives for European manufacturers. Whereas the US and China are heavily subsidising their PV industry, European policy still trails behind with guidelines.
- 2. Redirect financial and human resources from the fossil energy sector to renewables. In terms of global development, Europe is still lagging behind. The experts demand more government funding, to support the upward movement. As the need for skilled solar energy workers increases, they recommend phasing out subsidies for fossil energy and reskilling workers from 'declining industries'.
- **3.** Bring supply chains back to Europe. In alignment with the EU goal to increase the manufacturing capacity of solar energy to 30 gigawatts by 2030, the experts emphasise the need for returning innovations and supply chains to Europe. "We are transforming from a centralised to a decentralised energy grid and we need to make sure that both the system itself and its supply chains are resilient, especially in times of geopolitical tensions", says Walburga Hemetsberger. Diversification of supply chains with trustworthy international partners could be a promising solution.
- 4. A good solar development strategy is a sustainable one. A solar energy chain needs to be built with sustainability in mind, including the use of resources in manufacturing and the recycling of components. According to Seth Marder, "We need to keep the energy payback time in mind and find ways to produce materials with the lowest carbon footprint possible". The experts emphasise the democratic nature of solar energy, its potential for innovation, and its cost-effectiveness compared to traditional energy sources. However, there is a risk of underestimating the needs and costs of the energy supply chain transformation that must be taken seriously.

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