



European
Commission

Policy brief:
**Competitiveness of
clean energy technology –
Solar thermal**

October 2023

Headline findings

- A new generation of highly concentrated solar power plants is building confidence that these systems can improve power grid reliability with cost-competitive electricity.
- No new plants have started operation in the EU since 2014 but Spain plans to add **2GW** to the EU's existing **2.4 GW** capacity.
- The current levelised cost of heating/cooling using the technology (**EUR 20 – 110/MWh**) can be cost-competitive with gas heating.

Key (competitiveness) challenges for Concentrated Solar Power and Heat

Challenge 1

The CSP industry is still relatively small compared to other energy sectors, leading to challenges in securing a stable supply chain and attracting investment.

Challenge 2

The comparatively small market means that cost-effective standardisation has not yet been achieved.

Key policy recommendations

Recommendation 1

Increased standardisation including at the component level can help achieve economies of scale and reduce costs, particularly for industrial needs.



Recommendation 2

For CSP solar power generation, getting the right auction design and market access conditions can improve the capacity to meet demand peaks.

Scan QR code for more information on the Clean Energy Competitiveness Progress Report

