

# **Concentrated Solar Power (CSP) Developments & Market Outlook**

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## **Abstract**

With rising environmental awareness globally, climate change mitigation initiatives and inherent pressures, governments around the world are starting to commit to reduce their country's greenhouse gas footprint and setting targets for increasing share in clean & renewable energy production. To meet their renewable targets governments are incentivizing renewable energy production while at the same time the energy sector is looking out for innovative, reliable and cost effective solutions in the renewables space.

Solar energy is abundant, clean, and has no fuel costs associated. Technologies to convert solar energy into electricity have been under research & development for decades, and have over the last few years reached new levels of maturity and commercial proof.

In this context, Concentrated Solar Power (CSP) represents a promising solution for clean and affordable renewable energy production. With projects moving towards construction phase notably in Spain and certain other parts of the world as well as several hundred MW in operation, CSP plant costs are expected to decrease and the outlook for further cost reduction in the future appears somehow promising. In addition, the option of thermal energy storage associated to CSP plants makes it the most dispatchable & grid friendly of the solar energy solutions.

Spain has seen strong market developments due to attractive feed in tariffs in recent years. Other parts of the world including the US, MENA, India and China are also observing large project development pipelines building up. Initiatives such as the Mediterranean Solar Plan, the India Solar Plan and others are further advancing the CSP discussion globally.