



Webinar

**Retrofitting CSP projects
to store and integrate
variable renewable energy (VRE) in the grid**

Introductory words

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Introduce yourselves in the Chat and send your questions through the Q&A box



Putting things into perspective

- ❑ Large deployment of VRE will raise important dysfunctionalities on the electrical systems (curtailments, grid control, ...) and on the markets

**Flexibility will be a must
and CSP plants with thermal storage are the key**

- ❑ PV will be deployed very fast in the coming years

**Renewable backup from dusk to dawn to reduce emissions will be a must
and CSP plants are the key**

- ❑ Specific customers – not electrical integrated systems – might require systems that provide 24/7 direct or virtual supply

**Co-located RE plants could be requested
and CSP plants would be part of the solution**

The **2** essential roles of CSP plants for the Energy Transition in sunny countries

1. **To complement the PV production from dusk to dawn**, replacing the fossil fuel backup in sunny days.

CSP plants **are** – as of today – and **will be** the cheapest choice for this function



2. **In addition, to provide very valuable storage services to the electrical system** as the storage of CSP plants could operate independently to the committed dispatch profile.



- Strategic reserve for the 100 critical hours of peaking demand, usually in Winter (Nov. – Feb.)
- PV and wind curtailment collection
- Market price arbitration

All these services can be offered at much lower costs than battery systems.



Generation Infrastructure
Storage Infrastructure