





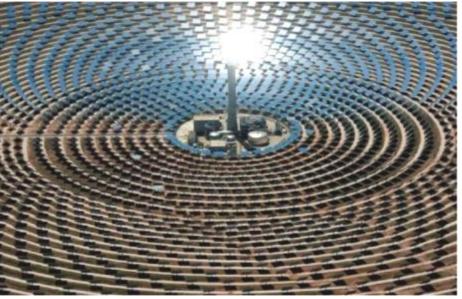


## KIP Workshop on CSP Markets, System Value & Financing

# Why STE/CSP matters today? Introduction to the panel discussion on CSP Value

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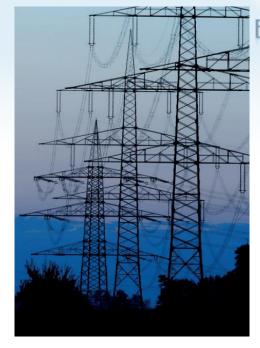
# The need for centralized power (in spite of distributed generation increase)

#### ■ Industrialized countries

- Reduced power increase rates (small  $\Delta$  GNP, reduction of energy intensity, stable population, ...), but ...
- Replacement needs + increased electrification
- Emission reduction commitments (Δ Renewable share)

## **☐** Developing countries

- Relative large power increase requirements ( $\Delta$  GNP,  $\Delta$  Population,  $\Delta$  standard of living, ...)
- Replacement needs
- ✓ Since 2014 capacity additions from RE are larger than from conventional power plants and this trend is continuously increasing
- ✓ Fossil fired power plants will not be bankable sooner than later (CO₂ cost, operational restrictions after COP XX, ...). New nuclear plants are out of question in those countries that think only in terms of energy (who knows how long does it take to finish a new nuclear plant and how much would it have cost when finished?)
- ✓ Cheap but variable renewables ONLY is simply unfeasible, from technical and investor perspectives



# STE is currently the best choice to

- ✓ Supporting further deployment of fluent renewables
- ✓ and achieving a CO<sub>2</sub>-free generation system at affordable cost



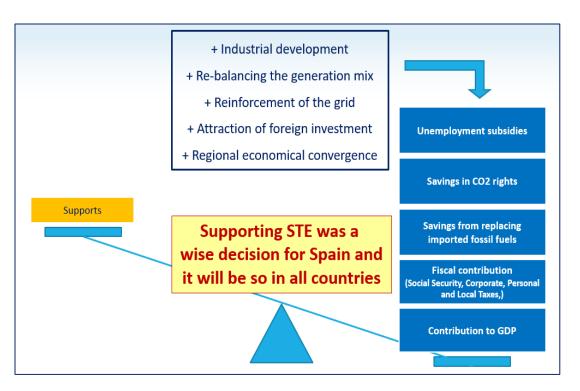


☐ Dispatchability and grid stability is a must: STE is a far better option than "fluent" renewables + combined cycles

Also, STE generation costs are currently much lower than for PV

with 6 hours of battery storage and it will remain lower at least until 2030

☐ Reaping all benefits for the country's economy of the new generation infrastructure should be appealing to governments and STE is also the best choice in this regard



### **Further considerations**



- ☐ The generation mix for 2030 must be planned today and construction must start soon
- ☐ The required support for STE plants is much more affordable today than 5 years ago

In many countries the "Value versus Cost" metrics show already that STE is competitive But even talking on PPA terms, STE plants will go soon below the "2-digits" threshold. Does anybody remember how much the cost of PV was - when only 5 GW were installed?

Support premium payments to STE generation will start 3 years after the program is launched, while the positive macroeconomic effects will be immediate - and they will last for ever

Such a big opportunity shouldn't be disregarded especially in countries with good solar resources.

The sooner the STE deployment program is launched, the better for the economy of the country



