



HORIZON  
STE

Implementation of the Initiative for Global  
Leadership in Solar Thermal Electricity



## A TWO-FOLD APPROACH TO THE DEPLOYMENT OF CST IN EUROPE

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The project has received funding from the European Union's Horizon 2020 research and innovation program under grant agreement No 838514.

# CONTENT



1. HORIZON-STE introduction
2. A 2-fold country-based approach to the deployment of CST aiming at combining:
  - a **national policy** environment with
  - The R&D perspective
  - The industry perspective
3. Our (preliminary) findings

# KEY FEATURES OF THE PROJECT



- **HOW?**

As competence centre of the Implementation Working Group on CSP within the Strategic Energy Technology Plan (SET Plan) of the European Commission,

- **WHY?**

To support European countries through political, legislative, and institutional decisions that will impact solar thermal energy.

- **WHAT?**

Opening doors for the best procurement of CST solutions and achieving increased public funding for close to market CST related R&D activities.

- **WHERE?**

In “relevant” European countries (such as Spain, Italy, Germany, Turkey, France, the Netherlands, Luxembourg, Portugal, etc., that show natural, technological or industrial capabilities for the STE/CSP markets, and/or as potential off-takers.

# PROJECT PARTNERS



## 1. Project Coordinator:



## 2. Project Partners:





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# THE R&D PERSPECTIVE

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**Recognized technological/R&D capacities?**

**Structural dependency on funding from:**

- National funding agencies
- Direct contracts with local industries
- Participation in international projects

**R&D operate under different:**

- \* Governance models
- \* Public funding levels
- \* Direct contracts with industry..

**Threat on funding → on research excellency**

**Potential risk of redundancies, unalignment on short-term industry needs,..**

**Need to showcase benefits to..**



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# THE INDUSTRY PERSPECTIVE



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But such a market for CST encompasses:

- ❑ utility-scale CSP or CSP+PV power plants with CST storage capabilities that may become an export asset beyond the own power market
- ❑ many types of small medium size hybrid applications in the field of industry heat applications

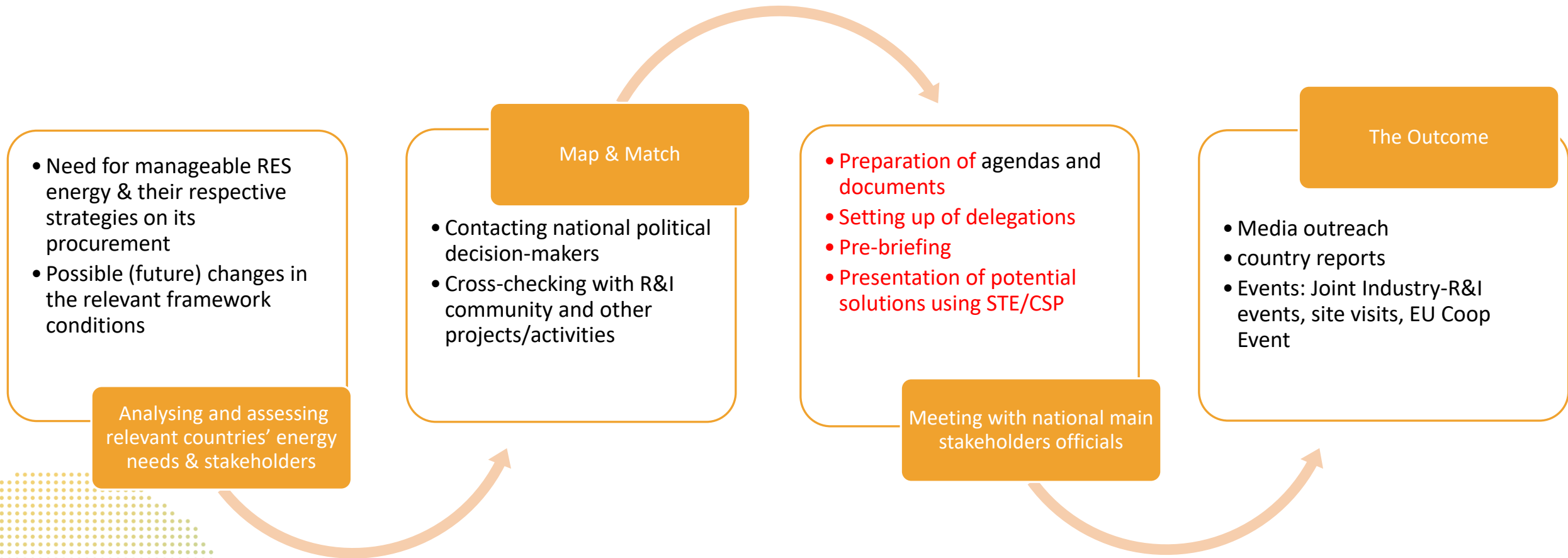


# TARGET GROUPS





# THE METHODOLOGICAL APPROACH





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# FIRST FINDINGS

# FIRST FINDINGS (1/3)



## #1 ELECTRICITY WITH CSP IS MAINLY SEEN AS A SOLUTION TO INTEGRATE MORE WIND & PV

- Kept in the radar by EU countries
- Non-EU countries (Morocco, MENA) have a different approach

## #2 **TSOS DO NOT SEE THIS AS A PRIORITY NOW**

- Benefits of European interconnections
- Substantial power reserves in both electricity and gas

# FIRST FINDINGS (2/3)

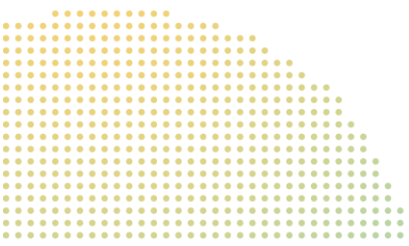


## #3 CSP COULD IMMEDIATELY BRING BENEFITS TO THE GRID

- Portuguese study using Inductive Projection Planning
- An added-value which could mitigate the flaws of the current auctions

## #4 DECARBONISING BEYOND ELECTRICITY

- A strong interest from ministries in hydrogen production and use
- The need for CSP to demonstrate its decarbonising potential

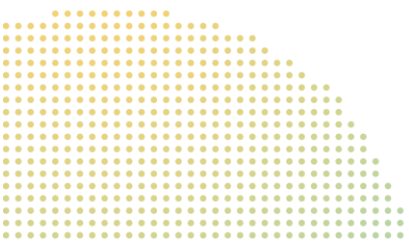


# FIRST FINDINGS (3/3)



## #5 A NEED FOR FAIR AND SUPPORTING FRAMEWORK CONDITIONS

- To benefit both the industry and the R&I
- To explore specific auctions, regulatory sandboxes, etc...





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# CONTACT

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Project page: <https://www.linkedin.com/showcase/horizon-ste> or ESTELA  
(<https://m.estela.solar/LinkedIn>)



[www.horizon-ste.eu](http://www.horizon-ste.eu)



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