

The European Commission's science and knowledge service

Joint Research Centre



Extension of Knowledge Sharing to non-NER 300 projects

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NER300



Outline

- Background
- General principles
- Way forward

Background: Why knowledge sharing?

- Knowledge sharing requirements part of NER 300
- Lower risks in bridging the transition to full market uptake of innovative renewable energy and CCS
- Accelerating deployment of CCS and/or innovative RES
- Increase confidence in CCS and/or RES by wider public
- Knowledge sharing a requirement for disbursement of annual payments after entry into operation

Extension to non-NER 300 projects

- Specifications for Legally Binding Instrument: foresee opening of knowledge sharing mechanism
- Non-NER 300 projects willing to share relevant knowledge from their experience (on terms similar to those receiving NER 300 funding) can join
- Benefits for EU RES/CCS sector & NER 300 projects: access to richer knowledge base, increased networking opportunities, access to dissemination activities capable of reaching a wider public

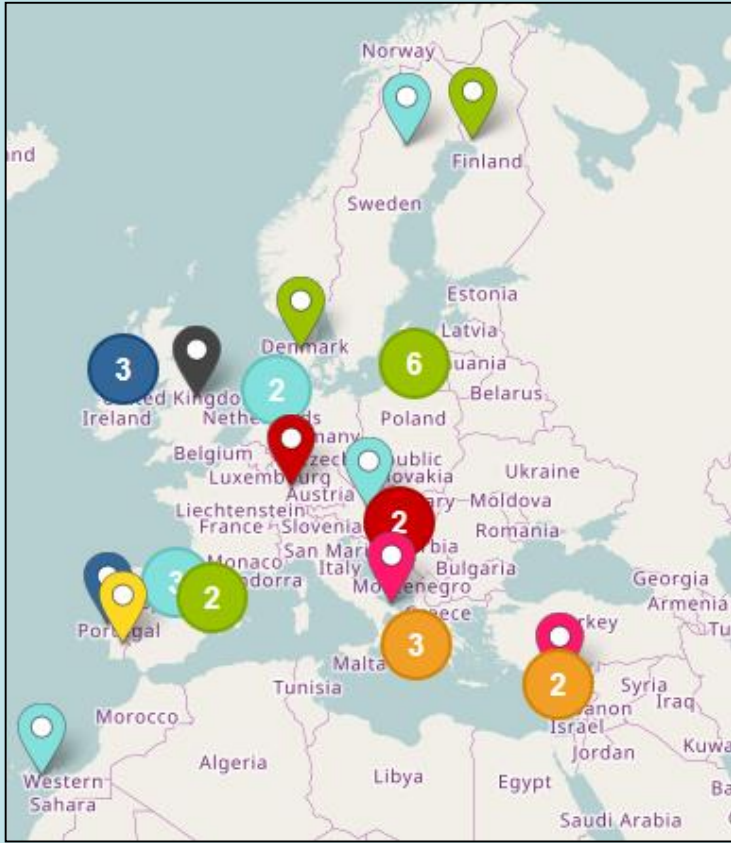
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General principles

- Support from the Commission tailor-made to the need of projects to ensure benefits
- Strive to design KS activities to fulfil project needs
 - Confidential information will remain confidential
 - Non-confidential information can be made public
 - Knowledge sharing is not forced, but voluntary
 - Flexible approach as markets are evolving
 - Enabling of communication flow & unlocking of communication channels

Current situation



3D rendering of the Minos CSP plant, showing a large field of heliostats (mirrors) reflecting sunlight onto a central receiver tower. The European Commission logo is visible in the top right corner.

Minos

The project
 Technology category: Concentrated solar power
 Location: Atherinolakos area, Lassithi, Crete, Greece
 Max. NER 300 funding: EUR 42.0 million
 Final investment decision: December 2016
 Entry into operation: December 2018

State of advancement
 The project is under licensing. The major permits have been approved and the project is awaiting some final regulatory approvals in order to sign the PPA and proceed.

Outlook for coming year
 Complete financing and construction preparation in order to commence construction within 2017.

Outlook for coming 5 years
 Construction period 2017-2019. Operation years from 2019 onwards.

Project sponsor
 NUR-MOH Heliothermal S.A.

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Project summary
 The "Crete" project 50 MW Tower Superheat CSP demonstration Plant Based on the Innovative Minimum Intermittency Operating System" - MINOS is a concentrated solar power (CSP) plant with tower configuration at one of the sunniest locations in Europe.
 The project is located in "South-East Crete Island, Greece, at the Atherinolakos area. It is a multi-tower CSP power plant utilising superheat steam cycle. It utilises a solar field consisting of heliostats (sun tracking mirrors) which focuses solar radiation to the solar receivers which are on top of the towers. The molten salt storage system provides superheat steam generation during cloudy periods or after sunset and can be complemented by a conventional boiler too. The plant generates steam at temperature in excess of 500 °C and pressure over 100 bar.
 The power plant utilises air-cooled condensers. The innovative CSP plant will utilise systems to minimise intermittency of the generated power, thus providing stable power to the grid.

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Climate Action

Photo: Enel/Enel 2016

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Way forward

- Simple registration process (via NER 300 website)
- Eligibility check (NER 300 category, EU territory, in operation) by JRC
- Non-NER 300 project can:
 - Participate at public events
 - Participate at annual NER 300 information event
 - Create fact sheets + information on website
 - Participate at closed technology sessions (if NER 300 projects agree)

Q&A

- How to do better?
- Wishes? Suggestions?



Any questions?

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