







Press Release 2016-11-30, Almeria, Spain

CSP plant stakeholders meet H2020 Projects to minimize the water consumption in CSP plants at a joint workshop

- Partners of the MinWaterCSP and WASCOP project discuss with CSP plant stakeholders about their solutions to reduce water consumption in the steam cycle and in cleaning, soiling and water treatment in solar fields.
- CSP plant operators expressed a positive feedback about the workshop and the relevance of the project activities.

Solar power is considered a sustainable energy source. But just how sustainable are CSP plants (CSP = Concentrated solar power) really? And what can be done to make them more sustainable?

To this day a large proportion of CSP plants use significant amounts of water to function properly. Water is a restricted resource in the parts of the world where the majority of CSP plants are installed. Addressing the challenge of minimizing water consumption in CSP plants was the subject of a call for proposals issued by the European Commission. MinWaterCSP (Minimized water consumption in CSP plants) and WASCOP (Water Saving for Concentrated Solar Power) successfully presented proposals detailing their solutions to addressing the challenge of significantly reducing the water consumption of CSP plants while maintaining their overall efficiency and now receive EU funding.

On 29th November 2016, MinWaterCSP and WASCOP collaborated to organise a joint workshop for plant operators, plant owners and service providers. The one-day workshop was held at the Plataforma solar de Almeria (PSA) in Spain. The PSA, a dependency of the Centro de Investigaciones Energéticas, Medioambientales y Tecnológicas (CIEMAT), is the largest concentrating solar technology research, development and test center in Europe. Besides the representatives of each project 28 CSP plant stakeholders were present.

After welcome addresses from CIEMAT (*Arantxa Fernández, CIEMAT-PSA*), the WASCOP project (*Delphine Bourdon, CEA*) and the MinWaterCSP project (*Peter Nitz, Fraunhofer ISE*) participants were introduced to the topics "Water consumption in the Steam Cycle" and "Water consumption in cleaning, soiling and water treatment in solar fields" by *Chris Sansom* (*Cranfield University*) and other project representatives. Both projects summarized their objectives, approaches and their work to date. Following those presentations the representatives of MinWaterCSP and WASCOP were open to discuss how these projects can help the CSP stakeholders to reduce the all-over water consumption of CSP plants and gather input from participants.







CSP plant operators expressed a positive feedback about the workshop and the relevance of the project activities. Delegates confirmed their interests in the R&D content and methodologies which will be potentially integrated in the current or new CSP plants. Stakeholders provided important inputs for both consortiums which will be taken into consideration during the next implementation phase of the project tasks.

Furthermore, participants had the opportunity to visit some of the PSA facilities and have a clear overview of the current R&D activities in PSA and in the WASCOP project. Other dissemination activities such as a summer or winter school and training for CSP professionals, diverse site visits are scheduled in the coming years. CSP plant operators were informed about incoming dissemination activities and they will be contacted to attend future events.

About the projects and partners

<u>MinWaterCSP</u> is a research and development project which aims at reducing water consumption and improving cycle efficiencies of Concentrated Solar Power plants. This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 654443.

The project commenced in January 2016 and is scheduled for completion in December 2018.

The MinWaterCSP project is coordinated by Kelvion Holding GmbH (Germany) and consists out of 12 partners in an international consortium of 6 different EU- and Non-EU Countries. Further partners of the consortium are: Kelvion Thermal Solutions Pty Ltd. (South Africa), Fraunhofer ISE (Germany), Universita Degli Studi di Roma la Sapienza (Italy), ECILIMP Thermosolar SL (Spain), Stellenbosch University (South Africa), Notus Fan Engineering, (South Africa), Laterizi Gambettola SRL – SOLTIGUA (Italy), ENEXIO Germany GmbH (Germany), Institut de Recherches en Energie solaire et Energy Nouvelles - IRESEN (Marocco), Steinbeis Innovation gGmbH (Germany), Waterleau Group NV (Belgium).

For more details please contact: Falk Mohasseb (coordinator), Kelvion Holding GmbH (Germany) <u>Falk.Mohasseb@kelvion.com</u> <u>http://www.minwatercsp.eu/</u>, Twitter: <u>MinWaterCSP</u>

WASCOP is a project funded by the European Union's Horizon 2020 research and innovation programme (GA No. 654479) coordinated by Commissariat à l'Énergie Atomique et aux Énergies Alternatives from Grenoble, France. It aims to develop a revolutionary innovation in water management of Concentrating Solar Powerplants, a more flexible integrated solution comprising different innovative technologies and optimized strategies for the cooling of the power-block and the cleaning of the solar field optical surface.

The project started in January 2016 and is scheduled for completion in December 2019.

WASCOP project is coordinated by CEA (Commissariat à l'Energie Atomique et aux Energies Alternatives - France) and consists of an international consortium of 11 partners active in the CSP field. Further partners are: DLR (Germany), CIEMAT (Spain), Cranfield University (UK), Fundacion







Tekniker (Spain), Masen (Morocco), Rioglass Solar S.A. (Spain), Archimede Solar Energy Srl (Italy), OMT Solutions B.V. (Netherlands), Hamon d'Hondt (France), AMIRES s.r.o. (Czech Republic).

For more details please contact: Delphine Bourdon (Coordinator), Commissariat à l'Énergie Atomique et aux Énergies Alternatives (France) <u>Delphine.bourdon@cea.fr</u> <u>http://wascop.eu/</u>



Picture: Participants and projects partners of the joint workshop at the Plataforma solar de Almeria (PSA) in Spain



These projects have received funding from the European Union's Horizon 2020 research and innovation program under grant agreement No 654443 (MinWaterCSP) and No 654479 (WASCOP).

