CSP ERANET NEWSLETTER

April 2021

1ST JOINT CALL

The **CSP ERANET 1st Cofund Joint Call** was launched on October 7, 2019. It counted with the participation of 11 Funding Agencies from 8 EU and Associated Countries and a total budget of **€13 million**.

6 proposals were submitted by **June 19, 2020**, end date of the full proposal stage.

The **Expert Panel Meeting** in which the ranking list was approved, took place online on **October 19, 2020**. The main goal of the meeting was to establish the ranking list of the 6 proposals submitted at the full proposal stage, on the basis of the scores and evaluation comments given by the 9 evaluators participating at the evaluation stage of the CSP Eranet Joint Co-funded Call (one independent observer and 7 representatives of the funding organizations also participated in the meeting).

The **Call Steering Committee Meeting** took place on **October 26, 2020**, following the Expert Panel Meeting. It was decided during the meeting that **all the ranked six projects would be funded**, with a total requested funding of €9,1 million, which is 70% of the total project costs.

PARTICIPATING COUNTRIES

TOPICS

CSP ERANET is based on the research and priorities identified in the SET Plan and the CSP Implementation Plan, and prioritazes **8 topics**, identified in the STAGE-STE Deliverable 2.3 “Final R+D input to Implementation Plan technological research programme to CSP/STE defined targets achievement”. The balance of these 8 topics of this 1st joint Call, showing the countries coordinating each of the targeted topics of the funded projects, is the following:

1. Advanced linear concentrator Fresnel technology with direct molten salt circulation
2. Parabolic trough with molten salts
3. Parabolic trough with silicone oil
4. Solar tower power plant to commercially scale-up and optimize the core components of the open volumetric air receiver technology
5. Improved Central Receiver Molten Salt technology
6. Next Generation of Central Receiver Plants with molten sal receiver
7. Multi-tower central receiver beam down system
8. Thermal energy storage

MORE INFORMATION

For more information on the CSP ERANET 1st Cofund Joint Call visit
https://csp-eranet.eu/calls/1st

Note that an ADDITIONAL CALL (without EU funding) will be coming in Fall 2021

FUNDED PROJECTS

6 projects have been funded in the CSP ERANET 1st Cofund Joint Call.

European Parabolic Trough with Molten Salt (EuroPaTMoS)

EuroPaTMoS pulls together the European expertise and testing infrastructure for **parabolic trough (PTC) with molten salt (MS), to accelerate transfer of technology from R&D to commercial deployment**.

Read more

Advanced thermocline concepts for thermal energy storage for CSP (NEWCLINE)

Thermocline is a cost efficient thermal storage system able to reduce capital costs up to 40%. The objective of **NEWCLINE** is to **develop new thermocline concepts that can be applicable to different CSP plants** (PT, CR, LF).

Read more

INNOvative SOLar micro-TES with high-POWER density (InnoSolPower)

The **InnoSolPower** project aims to demonstrate a **novel concept of an efficient, low-cost, low temperature, high energy density micro-thermal energy storage (μTES) dedicated to concentrated solar power (CSP) systems**.

Read more

High performance parabolic trough collector and innovative silicone fluid for CSP power plants.(Si-CO)

The **Si-CO** project aims to **techno-economically demonstrate a new optimized and large-scale parabolic trough collector (Si-PTC) design** that operates using HELISOL®XLP at 430°C, a siliconebased heat transfer fluid (Si-HTF).

Read more

Thermal Energy Storage for On-demand Solar Trigeneration (TES4Trig)

TES4Trig aims at **unifying the strategies established at the EU SET plan for CSP into a single innovative CCHP system driven by solar parabolic trough collectors (PTCs)**, based on the integration of the Organic Rankine Cycle (ORC) and Ejector Cooling Cycle (ECC) with a cost-effective TES system.

Read more

Techno-economical evaluation of different thermal energy storage concepts for CSP plants (CSPplus)

The aim of **CSPplus** project is to develop a new tool capable of fully identify, develop, and compare new storage concepts in an easy manner, providing a reliable and cost-effective solution based on the specific conditions of each possible scenario.

Read more

EuroPaTMoS

TOPIC: 2. Parabolic trough with molten salts

Coordinator: Deutsches zentrum fuer Luft - und Raumfahrt EV

10 partners from:

NEWCLINE

TOPIC: 8. Advanced TES (Thermal Energy Storage)

Coordinator: Universitat Politècnica de Catalunya

5 partners from:

InnoSolPower

TOPIC: 8. Advanced TES (Thermal Energy Storage)

Coordinator: Pars Makina Ltd. Research and Development

4 partners from:

Si-CO

TOPIC: 3. Parabolic trough with silicone oil

Coordinator: ACCIONA INDUSTRIAL S.A.

8 partners from:

TES4Trig

TOPIC: 8. Advanced TES (Thermal Energy Storage)

Coordinator: National Technical University of Athens

6 partners from:

CSPplus

TOPIC: 8. Advanced TES (Thermal Energy Storage)

Coordinator: University of Lleida

6 partners from:

NEWS & EVENTS

Most relevant **News & Events** for the **CSP ERANET** community that have been published in the webiste for the last months

The U.S. Department of Energy (DOE) Solar Energy Technologies Office (SETO) Webinar

The U.S. Department of Energy (DOE) Solar Energy Technologies Office (SETO) Webinar

MONDAY, 12 APRIL, 2021 - 20:00 TO 22:00
ONLINE

Registration
More information

The U.S. Department of Energy (DOE) **Solar Energy Technologies Office (SETO)** supports **funding opportunities** on photovoltaics, concentrating solar-thermal power, systems integration, technology to market, and soft costs projects. Following an open, competitive solicitation process, these funding opportunities encourage collaborative partnerships among industry, universities, national laboratories, federal, state, and local governments and non-government agencies and advocacy groups. Solicitations may include financial or technical assistance.

On March 25, 2021, the U.S. Department of Energy (DOE) announced the Solar Energy Technologies Office (SETO) Fiscal Year 2021 Photovoltaics and Concentrating Solar-Thermal Power (FY21 PV and CSP) funding program, which will provide $39.5 million for projects that will advance solar PV and CSP research and development (R&D) and help eliminate carbon dioxide emissions from the energy sector.

These projects will help achieve the solar office's goal of lowering costs and expanding solar to new markets. Learn more about SETO's goals and how to apply for a funding opportunity.

SETO expects to make about 31 to 54 awards under the SETO FY21 PV and CSP funding opportunity announcement (FOA), each ranging from $300,000 to $5 million.

To learn more join the **Funding Opportunity Announcement: FY 2021 Photovoltaics and Concentrating Solar-Thermal Power Funding Program** – Informational webinar on **April 12, 2021, 2:00 p.m. ET**

Candidates for European Partnerships in climate, energy and mobility

25 MAR 2021

European Partnerships bring the European Commission and private and/or public partners together to address some of Europe's most pressing challenges through concerted research and innovation initiatives. They are a key implementation tool of **Horizon Europe**, and contribute significantly to achieving the EU's political priorities. The aim of European partnerships with EU and associated countries, the private sector, foundations and other stakeholders is to deliver on global challenges and modernise industry.

The Horizon Europe proposal lays down the conditions and principles for establishing European Partnerships. There are 3 types: **Co-programmed European Partnerships** (based on memoranda of understanding and/or contractual arrangements between the European Commission and private and/or public partners), **Co-funded European Partnerships using a programme co-fund action** (involving EU countries, with research funders and other public authorities at the core of the consortium) and **Institutionalised European Partnerships** (in the field of research and innovation between the Union, EU member states and/or industry that require legislative proposals from the Commission and are based on a Council Regulation or a Decision by the European Parliament and Council)

The partnership candidates are collected across 5 areas:

- health
- digital, industry and space
- climate, energy and mobility
- food, bioeconomy, natural resources, agriculture and environment
- partnerships across themes

The candidate partnerships in the area of **climate, energy and mobility** are the following: **Transforming Europe's rail system**, **Integrated Air Traffic Management**, **Clean Aviation**, **Clean Hydrogen**, **People-centric sustainable built environment (Built4People)**, **Towards zero-emission road transport (2ZERO)**, **Connected and Automated Driving (CCAM)**, **Zero-emission waterborne transport**, **Industrial Battery Value Chain**, **Driving urban transitions to a sustainable future (DUT)**, **Clean Energy Transition**.

Final conference of MUSTEC project

Final conference of MUSTEC project

MONDAY, 22 MARCH, 2021 - 09:00 TO 12:30
ONLINE

Presentations

Join the upcoming Final Conference of the "Market Uptake of Solar Thermal Electricity through Cooperation" MUSTEC project, financed under Horizon 2020 programme and coordinated by CIEMAT next **22 March 2021 from 9:00 to 12:00 h CET**.

MUSTEC aims to explore and propose concrete solutions to overcome the various factors that hinder the deployment of **concentrated solar power (CSP) projects in Southern Europe** capable of supplying renewable electricity on demand to Central and Northern European countries. To do so, the project has analysed the **drivers and barriers to CSP deployment and renewable energy (RE) cooperation in Europe**, has identified future CSP cooperation opportunities and has gathered a set of concrete measures to unlock the existing potential.

The key topics to be discussed on this Final C0nference, in line with the agenda, include the Roadmap and Action Plan to support the realisation of CSP cooperation projects in Southern Europe, the lessons learnt for CSP cooperation mechanisms, a CSP market analysis and social acceptance study, as well as the framework conditions and policy pathways for CSP cooperation projects. The conference will conclude with a panel discussion on "The future of CSP cooperation projects in Europe", which envisages to bring together representatives from EU, the respective ministries from selected offtaker and host countries, as well as the CSP industry.

Fin the presenatations of the event here.

Concentrated Solar Power (CSP) ERA-Net at CETP Programmes Dialogue #8

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FRIDAY, 12 MARCH, 2021 - 11:00 TO 13:00
ONLINE

Recorded Video

In preparation of the **Clean Energy Transition Partnership**, ERA-Nets and national RDI programmes in the field of energy innovation share their (joint) programming experiences, good practices, successful activities and formats. The Programmes Dialogues intend to provide a mutual learning and capacity building exercise for the CETP with an open and interactive atmosphere. In this Event#8 representatives from the CSP ERA-Net are speaking about the main outcomes, good practices and main improvements of thsi ERA-Net.

The Event is structured in 4 sections:

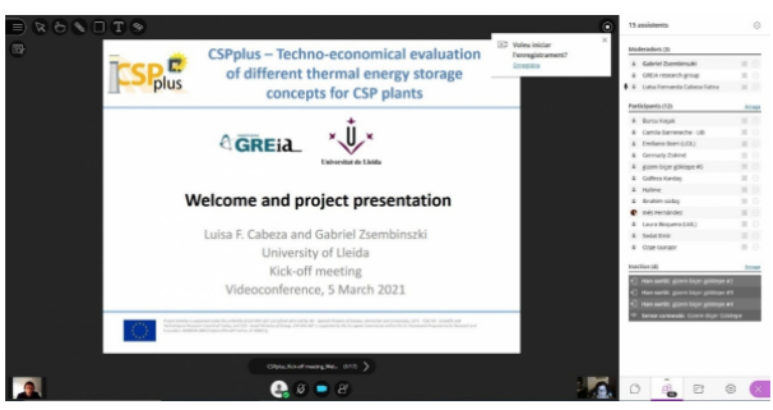
- Section A: General overview of the CSP ERANET (Speakers: Rachel Tully, from AGENEX and coordinator of CSP ERANET)
- Section B: CSP ERANET CALL processes and tools (Speakers: Beatriz Gómez from AEI, Renate Horbelt and Kambulakwao Chakanga from Projektträger Jülich PtJ and Julio Marchamalo from FECYT-AEI)
- Section C: CSP-ERA.NET collaboration with Stakeholders (Speakers: Julián Blanco, director of the Plataforma Solar de Almeria CIEMAT)
- Section D: CSP-ERA.NET in transition from Horizon 2020 to Horizon Europe (Speakers: Beatriz Gómez from AEI)

CSPplus Kick off Meeting

16 APR 2021

The **Kick-off-Meeting** of the CSP-ERANET 1st Call project **CSPplus** (Techno-economical evaluation of different thermal energy storage concepts for CSP plants) was held online on **March 5th 2021, 15:00-19:00** (CEST). Therefore, the project activities have been initiated.

The meeting was chaired by the project coordinator, **Luisa F. Cabeza** from University of Lleida - GREiA Research Group and a total of 15 participants attended the meeting to discuss the strategy of cooperation during the project duration and the first steps to be done in the next few months.



InnoSolPower Kick off Meeting

22 FEB 2021

The **Kick-off-Meeting** of the CSP-ERANET 1st Call project **InnoSolPower** (INNOvative SOLar micro-TES with high-POWER density) was held online on **February 9th 2021, 09:00-11:00** (Brussels time). Therefore, the project activities have been initiated.

The meeting was chaired by the project coordinator, Dr. Ibrahim Sinan Akmandor from Pars Makina Ltd. (PARS) Research and Development, and counted with the participation of all the consortium partners, the project coordinator of CSP ERANET and some representatives of the funding agencies.

InnoSolPower project aims to demonstrate a novel concept of an efficient, low-cost, low temperature, high energy density micro-thermal energy storage (μTES) dedicated to concentrated solar power (CSP) systems. The project is coordinated by Pars Makina Ltd. (PARS) - Research and Development (Turkey) and counts with the participation and expertise of Centre for Renewable Energy Sources and Saving (CRES) - Solar Thermal Systems Department (Greece), Middle East Technical University (METU) - Mechanical Engineering Department (Turkey) and University of Pisa (UNIPI)- Department of Energy, Systems, Territory and Constructions Engineering (Italy) as project partners. The project is funded by TUBITAK (Turkey), GSRI (Greece) and MUR (Italy) funding agencies under the CSP-ERANET 1st Call, co-funded by the European Commision.

The InnoSolPower project webisite is cooming soon.

Webinar: Concentrating Solar Power: Clean Power on Demand 24/7

Webinar: Concentrating Solar Power: Clean Power on Demand 24/7

WEDNESDAY, 3 FEBRUARY, 2021 - 08:00 TO 14:00
ONLINE

Registration

Thanks to its ability to store energy for days with minimal loses, CSP can provide the **flexibility and dispatchability** that electricity systems need to effectively incorporate a high share of variable renewable energy from PV and Wind. By combining **low-cost variable renewables** such as **solar PV** and **wind power with CSP plants**, in areas with high direct normal irradiance, overall system costs can be minimized and the benefits of locally sourced and produce renewable electricity maximized.

In this **webinar**, experts from the **World Bank and IRENA** will draw upon the findings of their brand-new report **"Concentrating Solar Power: Clean Power on Demand 24/7"** to analyze the **role of CSP in energy systems**. Comments on prospects for future development of CSP will be heard from Tunisia's Ministry of Industry, Energy and Mines and from the Madrid-based Protermosolar industry association. The webinar will take place on **3 Februay 2021 from 08:00 to 14:00 (CET)**.

If you are interested plase **register** here