



**CST4ALL**

Support to the Activities of the Concentrated Solar Thermal Technology Area of the SET Plan



## Online Workshop

### R&I challenges for the hybridization of CST with other renewable energy technologies

<b>Date and time</b>	March 22, 2024 – 9:30 AM – 1:00 PM CET
<b>Venue</b>	Online (via Microsoft Teams)

The synergistic combination of CST with other renewable energy technologies in hybrid plants can overcome several technology-specific shortcomings and allow to achieve a better performance in terms of flexibility, capacity factor and levelized cost of energy. However, there are several challenges, mostly related to the operational strategy and interfaces between the different plant components, that must be addressed to fully exploit the potential of hybridization. This calls for a multidisciplinary approach and cooperation of different scientific and industrial communities.

By bringing together leading experts in the field of CST and other renewable energy technologies, both from industry and research institutions, this workshop aims at identifying the main R&I challenges that hinder the development of hybrid systems and to contribute to the definition of the research priorities to be set in order to untap the full potential of the integration of renewable energies.

[Online registration form](#)



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the European Union**

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Agenda	
9:30	Opening remarks
	Introduction to the workshop Peter HELLER, DLR, Germany (coordinator of the CST4ALL project)
	Welcome address Elisabeth SCHELLMANN - DG ENERGY of the EU Commission
	SSH and gender aspects in the CST4ALL project Hande ERYILMAZ, ODTÜ-GÜNAM, Türkiye
	PART I
9:45	Development of components and technological interfaces for hybridization Moderator: Luca TURCHETTI - ENEA, Italy
	Electric molten salt heaters Alex ELLIS - Exheat, United Kingdom
	Hybrid Systems for electrifying industrial processes: introduction to the Magaldi Green Thermal Energy Storage Technology Carla BEVILACQUA, Fulvio BASSETTI - Magaldi Power, Italy
	Innovative approach in the power-to-heat conversion using microwaves Margarita RODRIGUEZ - CIEMAT, Spain
	Development of hybrid CST-(C)PV collectors Moritz RUHWEDEL - DLR, Germany Elsen AYDIN - ODTÜ-GÜNAM, Türkiye
11:15	15-min break
	PART II
11:30	Optimization of the operational strategy of hybrid systems Moderator: Marco BINOTTI - Politecnico di Milano, Italy
	Trends in hybrid CST-PV systems for grid-connected and industrial applications Rafael GUÉDEZ, KTH, Sweden
	Navigating Complexity: Simulating Hybrid Power Plants Yibekal GEDLE, TSK Flagsol, Germany
	Simulation and Optimization of hybrid CST Systems Jürgen DERSCH - DLR, Germany
	Hybridization Opportunities of Geothermal Power Plants with CST and Biomass Bertuğ ÇELEBI, METU, Türkiye
	Optimizing the use of CST and PV for hydrogen production via the Hybrid Sulfur process Raffaele LIBERATORE - ENEA, Italy
12:50	Wrap-up and Conclusions
13:00	End of the workshop

CST4ALL team reserves the right to make changes to the workshop program.



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