



HORIZON
STE

Implementation of the Initiative for Global
Leadership in Solar Thermal Electricity

NEWSLETTER



ISSUE 6

25th April 2022, Brussels

State of Play

After two years of the Covid-19 pandemic that changed the way people work and project meetings are held, spring 2022 brought a lot of promise. However, the hopes for normalcy were shattered on February 24th, 2022, by the Russian invasion of Ukraine, pushing Europe in deep geopolitical crisis and sending the soaring energy prices even higher. Europe's security landscape was changed forever, and so was the one of energy, with a long overdue push for rapid clean energy transition and / or switch to non-Russian suppliers becoming a mainstream message from the Member States.

On the bright side, the HORIZON-STE partners are pleased to announce that the project duration has been extended until September 2022, while the 3rd annual General Assembly Meeting was successfully held on March 31st, 2022, via conference call with the objective to assess the project progress and plan the next steps for the last six months of the project. In this newsletter issue, we would like to share with you the progress made over the last six months of the project, as well as the results of our activities that may be of interest to you.

Work Package 1: “Implementation Plan (IP) initial and yearly status update”

The update of the Strategic Energy Technology Plan (SET-Plan) CSP Implementation Plan was agreed by the Core Working Group in early March 2022. The draft document has been distributed to the stakeholders for final comments, corrections or suggestions with deadline set for April 19th, 2022. Afterwards, the final endorsement from the CSP Implementation Group and submission to the SET-Plan Steering Group for the final formal approval is expected.

The project continues to monitor initiatives and legislative measures taken at EU level relevant for the CSP/STE sector, which shall be reported in the third yearly update of current framework and market conditions (deliverable D1.7 due in September 2022).



As reported in the previous newsletter issue, Spain was expecting to launch the auction for 200 MW of new installed capacity of CSP before the end of 2021. On December 30th, 2021, the Spanish authorities finally released a draft announcement for a RES auction with tentative date on April 6th, 2022, applicable to CSP installations, either standalone or hybridised with PV or biomass. Unfortunately, by the time this newsletter is issued, the final announcement of the auction is still to be published. This delay of the CSP auction is due to the pending implementation in Spain of the EU Directive about biomass, while a Royal Decree is expected by the Spanish Government to address this issue. Once the Royal Decree is issued, the official announcement of the auction should be published, giving a minimum of 2 months for the submission of offers, thus the auction is not expected to take place before mid-June 2022.

On January 18th, 2022 the EC Directorate-General for Energy launched the initiative "[Public consultation to feed into new EU strategy on solar energy](#)", which was open until April 12th, 2022. The initiative looked at "how best to achieve the required increase in solar energy capacity" via a series of 26 questions, seeking input on the main bottlenecks and barriers to investment. Unfortunately, the questionnaire fell short to address the entire solar energy sector, as most of the questions were dedicated to PV. As such, the project partners ESTELA, CIEMAT and DLR together with the national CSP associations in Spain (PROTERMOSOLAR) and Germany (Deutsche CSP) prepared a coordinated response to this consultation across entities involved in the CSP sector. The purpose of this initiative was to provide input to the consultation itself and have CSP correctly reflected in the "new EU strategy on solar energy". To achieve this, the document "[For a new, but inclusive EU strategy on solar energy](#)" was drafted, received the endorsement from 28 industry and R&I stakeholders and was included in the stakeholders' response to the initiative as a separate document.

The first draft of the "EU solar energy strategy" is expected by the end of May 2022 or beginning of June 2022.

Last but not least, on March 8th, 2022 the EC announced the [REPowerEU plan](#) to phase out the dependence of EU on fossil fuels from Russia well before 2030. The proposed plan aims at increasing the resilience of the EU-wide energy system via measures targeting the following:

- Diversification of natural gas supplies via imports from non-Russian suppliers.
- Decarbonisation of industry.
- Energy savings and roll-out of rooftop PV systems and heat pumps in buildings.
- Faster permitting process for renewable energy projects.
- Boost of biomethane and renewable hydrogen production.

While the initiative is very welcome, it does not address Europe's dependency on gas as a whole, but rather proposes to replace Russian gas with non-Russian suppliers. Furthermore, the dependency on nuclear fuel import from Russia is not addressed at all.





Work Package 2: “Re-launching STE Industry in Europe”

HORIZON-STE is pleased to report that significant updates are ongoing in five Integrated Country Reports, covering Turkey, Germany, Portugal, Spain and Italy. Two other Integrated Country Reports covering France and Greece are under preparation, in addition to the five Draft Country Reports covering Denmark, Belgium, Cyprus, the Netherlands and Switzerland.

To move forward with the Integrated Country Report of Spain, ESTELA held a series of meetings with the Spanish CSP association, PROTERMOSOLAR. The topics discussed included the forthcoming CSP auction, the Spanish industry’s interest for uses of CST beyond the sole electricity market (industrial process heat, new fuels etc.) as well as the views of the Spanish TSO Red Eléctrica de España (REE) about CSP.

A rich contribution to the progress of the Integrated Country Report of Italy can be attributed to the meetings with the Italian stakeholders Terna S.p.A. and ENI S.p.A. These meetings revealed the need to study the field of CSP applications from the industrial perspective through the whole supply chain, with emphasis on uses for industrial process heat. The Italian stakeholders also emphasized almost systemic social acceptance issues at local level as the main factor blocking the development of CSP, in particular the installation of large plants that could affect the natural setting and be perceived as environmentally harmful. The latter argument stems from the difficulty of obtaining all administrative permits from regional authorities, for the construction of the plants, either at commercial or pilot scale. Social acceptance and public opinion play an important role in the authorisation processes, for which acceleration is being attempted at the national and regional levels.

For drafting the Integrated Country Report of France, ESTELA held a number of meetings with the following stakeholders: RTE (Electricity Transmission Network Operator), CEA (Alternative Energies and Atomic Energy Commission), CNRS (National Centre for Scientific Research), ENGIE and TotalEnergies. Projections for the evolution of the French energy mix can be found in scenarios drawn up by the RTE, which was commissioned by the Minister of Ecological Transition and accompanies the National Energy and Climate Plan. Both plans consider the objective of carbon neutrality with the perspective that electricity production must no longer be a source of greenhouse gases. Six scenarios are proposed, an ambitious bet, especially if aimed at nuclear production, which has a great historical importance in France and represents 67% of the energy production. These scenarios propose different levels of dependency on nuclear power, varying from 0% up to 50% with the other part being RES. Finally, the analysis in the framework of the project indicated that the general trend that is developing in France is not focusing on the electricity system, but rather on industrial process heat. France’s priority is now the high-temperature applications or developments, which appears to be also a stronger, new point of interest on the policy makers’ agenda.





Work Package 3: “R&I Impact Maximization”

WP3 partners have been active in several tasks that seek to support R&D of CSP/T in Europe, such as:

- Data collection about R&I policy, activities and infrastructure for CST of European countries not actively participating in HORIZON-STE such as Portugal, Cyprus, France, Greece, and Switzerland;
- Coordination with R&D entities from Portugal, France, Italy, Greece, Cyprus, Switzerland and Turkey to align the proposals made by their National Contact Persons for the Horizon Europe Work Programmes;
- METU examined the CSP sector in Turkey through a stakeholder analysis and by scanning research networks. Based on this, a paper entitled as "[Stakeholder Analysis for Development of Concentrated Solar Thermal Technologies in Turkey: Local integration to Global Value Chains through International Channels](#)", was submitted to Journal of "The Review of Evolutionary Political Economy" with acknowledgment to HORIZON-STE and it is under review;
- METU provided feedback on the draft of the ERANET call for the Thermal Energy Storage content;
- ENEA has worked with Italian stakeholders to define the activities to carry on within the framework of the new 3-year plan for 2022-2024 of Ricerca di Sistema Elettrico Nazionale (National Electric System Research, RdS), funded by MiTE:
 - To explore the possibility to include CST R&I projects within the framework of Italian National Recovery and Resilience Plan; and
 - To support CST R&I projects within the forthcoming call of TRI 2 Clean Energy Transition Partnership.
- CIEMAT presented two proposals to collaborate with other IWGs at the SET Plan Cross-IWGs cooperation workshop held on March 8th, 2022. One proposal was related to Solar Heat for Industrial Processes (SHIP), while the other one was related to CSP/PV full integration.

Work Package 4: “Communication and Events”

The project partners are pleased to report that on April 7th, 2022, the first national Joint Industry and R&I Event was held in Turkey. HORIZON-STE and the aligned EU H2020 SolarTwins project co-organised a seven-part conference at the International Istanbul Solar Energy and Technologies Fair ([SOLAREX](#)). The event included content on CST Technologies from industrial, political and research perspectives. The HORIZON-STE Coordinator Marcel Bial opened the conference with a presentation on the CST industry perspective at EU and global levels. The international presentations continued with Eduardo Zarza from CIEMAT giving a presentation on CST Applications and the Spanish experience, while the EERA JP CSP Coordinator Ricardo Sánchez from CIEMAT gave a presentation on EU and global research perspectives.





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14th YEAR **SOLAREX** **ISTANBUL** **14th YIL**
SOLAR ENERGY & TECHNOLOGIES EXHIBITION INTERNATIONAL
GÜNEŞ ENERJİSİ & TEKNOLOJİLERİ FUARI

ODTU GUNAM **07 APRIL 2022 THURSDAY** **GOLD HALL**

MARCEL BIAL
SECRETARY GENERAL OF ESTELA

INDUSTRY PERSPECTIVE - EU AND GLOBAL

11:00 - 11:30

Logos: T.C. İÇİŞİLERİ BAKANLIĞI, HSA, TÜRKİYE ENERJİ PİYASASI REGÜLATÖRÜ, İSO 9001, TÜRKİYE ENERJİ ENJEKTORÜ VE DAĞITIM ENJEKTORÜ BİRLİĞİ, SİMÜLTANE TERCÜME, YOUTUBE CANLI YAYIN, KOSGEB

BU FUAR 17'Nİ SAYILI KANUN GEREĞİNDE TOBB (TÜRKİYE ODAKLAR VE BORSALAR BİRLİĞİ) DENETİMİNDE DÜZENLENMEKTEDİR.
THIS FAIR IS ORGANIZED WITH THE ASSET OF TOBB (THE UNION OF CHAMBERS AND COMMUNITY EXCHANGES OF TURKEY) IN ACCORDANCE WITH THE LAW NO.5174.

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ODTU GUNAM **07 APRIL 2022 THURSDAY** **GOLD HALL**

PROF. DR. DEREK K. BAKER METU & ODTU GÜNAM
EDUARDO ZARZA MOYA CIEMAT-PSA
RICARDO SANCHEZ EERA, JP CSP

APPLICATIONS AND RESEARCH PERSPECTIVE - EU and GLOBAL

11:30 - 12:30

Logos: T.C. İÇİŞİLERİ BAKANLIĞI, HSA, TÜRKİYE ENERJİ PİYASASI REGÜLATÖRÜ, İSO 9001, TÜRKİYE ENERJİ ENJEKTORÜ VE DAĞITIM ENJEKTORÜ BİRLİĞİ, SİMÜLTANE TERCÜME, YOUTUBE CANLI YAYIN, KOSGEB

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International presentations were followed by two presentations from national stakeholders on solar energy policies in Turkey. The CST part of this conference ended with an industrial round table with 5 representatives from Turkish industries. More than a hundred people participated in this event representing universities, companies, researchers, and R&D Institutes and Centres. The recording of the event is available [here](#).



Industrial Round Table (Left to Right): Haluk Erdem (SISECAM); Fatih Can (TEKFEN); Sinan Akmandor (Pars Makina); Serdar Erturan (City University of New York & Greenway CSP); Derya Gunvaran Soyler (Dow Chemicals Turkey); Tayfun Hiz (Moderator)



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CIEMAT together with ATA Insights have also organised two international round tables:

- “How CSP can improve frequency stability of the power grid”, organised on January 27th, 2022. CIEMAT presented the section “Potential of Concentrating Solar Power in Portugal using Inductive Projection Planning”. The recording of the event is available [here](#);
- “The opportunities of the new 200 MW CSP tender in Spain”, organised together with PROTERMOSOLAR on February 15th, 2022. In this event, experts from the industry and R&I sectors presented their opinion about different aspects related to the Spanish auction. The recording of the event is available [here](#).

The Joint Industry and R&I Event in Turkey has kickstarted the series of project events in the framework of HORIZON-STE:

- **Joint Industry and R&I Events.** A total of six events are foreseen. The first event in Turkey already took place, while the ones in Spain, Portugal, Italy, France and Germany are in the planning phase. The goal of the events is to present the findings of the mapping exercise between needs and CSP/STE value proposition opening ground for potential cooperation and to facilitate dialogue and information exchange in a bidirectional manner at national level.
- **EU Cooperation Event.** This event will be organised in September 2022 in Brussels with the aim to build upon the results of the Joint Industry and R&I Events.
- **Final project conference.** This event will also be organised in September 2022 with the goal of spreading and anchoring the final findings of the project in policy and academic communities, and to the CSP and electricity industry.
- **European webinar and brokerage event.** The updated Implementation Plan for CSP will be presented at this event, which will take place in September 2022 and will be focused on possibilities for international collaboration in R&I activities at European level (Horizon Europe calls and database prepared in HORIZON-STE with the list of European stakeholders interested on R&I activities).

Last but not least, CIEMAT is pleased to share information about the upcoming workshop on “Solar Thermal Electricity”, jointly organised with [SOLARCONCENTRA](#) and [PROTERMOSOLAR](#). The workshop will take place in June within the framework of the GENERA-2022 fair with duration of 3 hours. The programme is under preparation and once ready, the event will be announced on social media and web pages of CIEMAT, SOLARCONCENTRA and PROTERMOSOLAR.

Previous Newsletters

For previous newsletters, please check them out [here](#) or visit our website:
<http://www.horizon-ste.eu/media-outreach/>

