



CSP
CONCENTRATED
SOLAR POWER

CSP ERA-NET has received funding from the European Union's Horizon 2020 Research and Innovation Program under grant agreement No. 838311



CSP ERANET

**Joint programming actions to foster innovative
CSP solutions**

Rachel C. Tully, Extremadura Energy Agency

SOLAR AND CSP EXCHANGE OF EXPERIENCES WEBINAR – 28 SEPTEMBER 2023





What to expect?

- CSP ERANET Action
- Concentrated Solar Technologies EU targets
- Co-fund call for project proposals and results: 6 funded projects
- Additional call for project proposals and results: 4 funded project



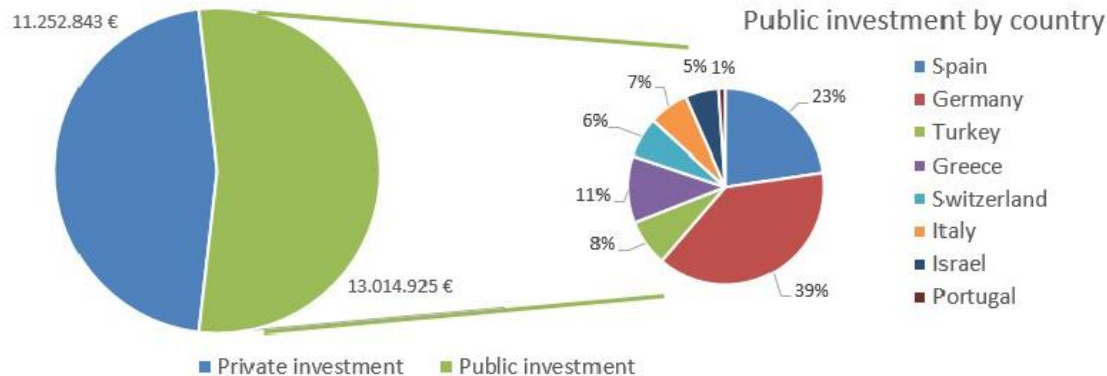
1. CSP ERANET



June 2019



November 2024



To bridge the gap between **research and commercial deployment** in the CSP technology, so it can play a main role in the EU renewable electricity generation in a medium term.



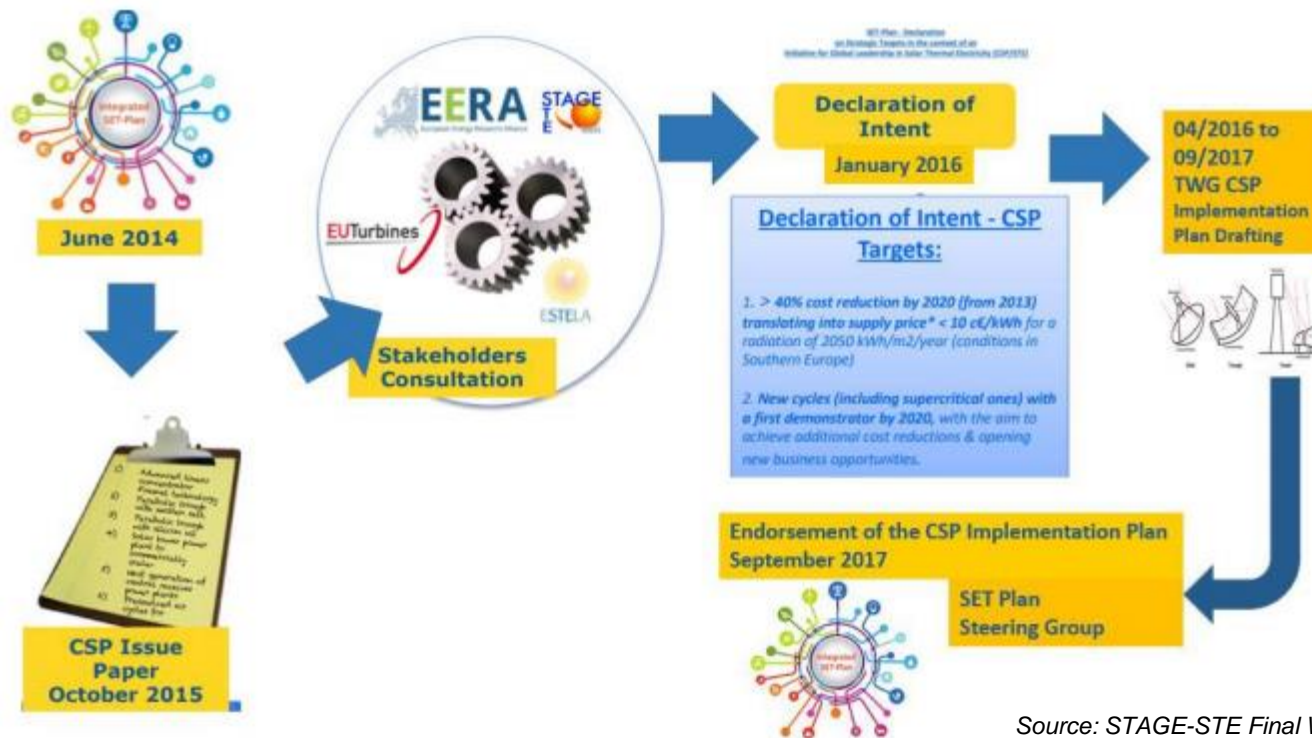


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Previous coordination efforts at EU level

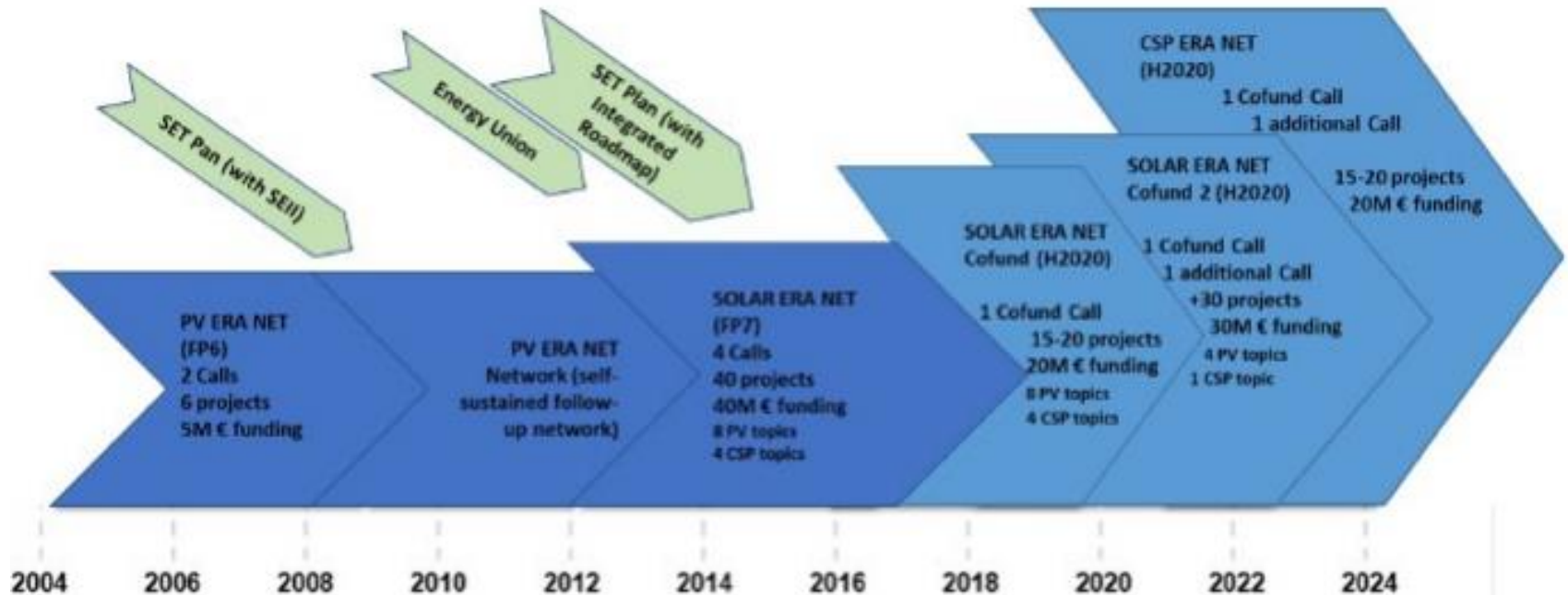


Source: STAGE-STE Final Workshop presentation



Previous coordination efforts at Project level

Source: SOLAR ERANET Cofund project





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Strengths of the Consortium

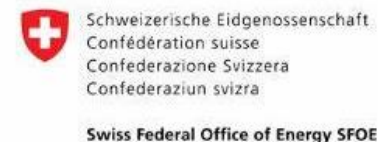
- Strong and balanced members
- Common interest in CSP
- Committed to achieve results in the CSP technology field
- Common background in solar power (SOLAR ERANETs)
- Previous experience in launching joint calls





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2. Concentrated Solar Technologies EU targets



*Implementation Plan
updated in February 2023*

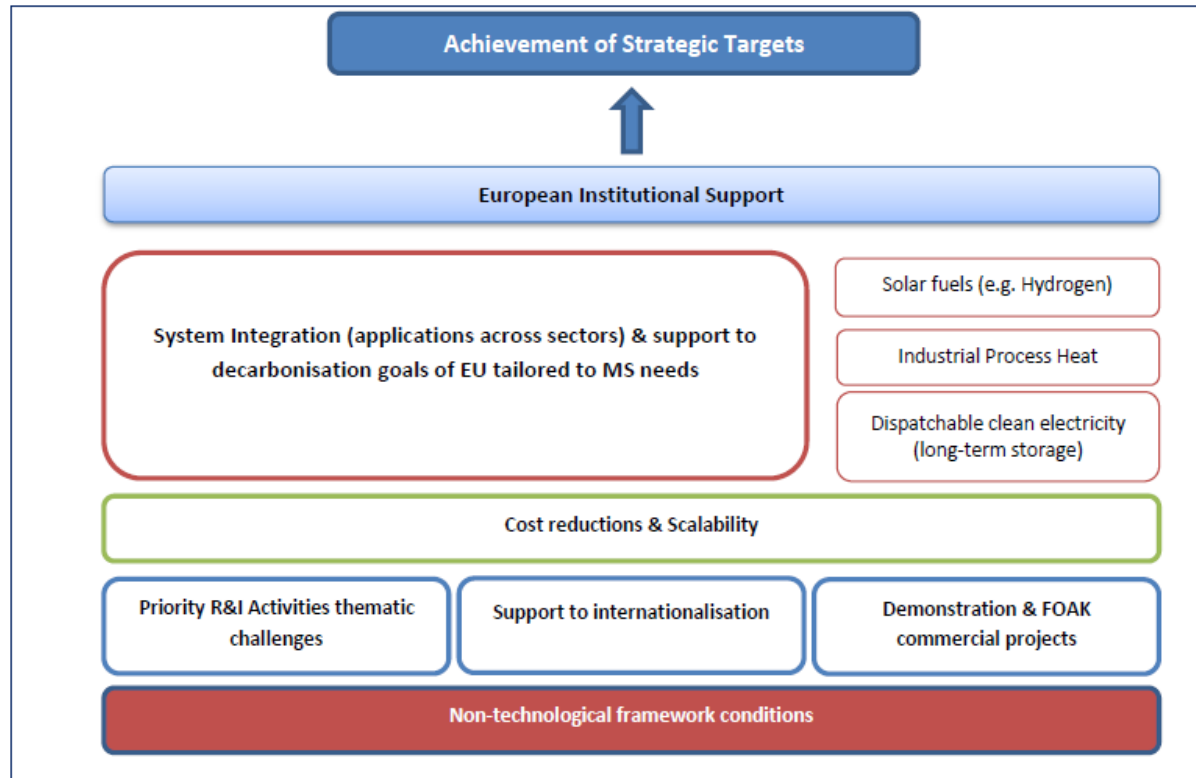
1. **Cost reduction** of electricity below 15c€/kW by 2025
2. Development of the **next generation** of CSP/STE to increase the power plant efficiency by 2025
3. Integrate one **FOAK** in the energy system by 2025
4. Cost of thermal energy for **industrial process heat** applications below 3c€/kWh by 2030
5. Demonstration of 24/7 economically viable of green hydrogen and other **solar fuels** by 2030





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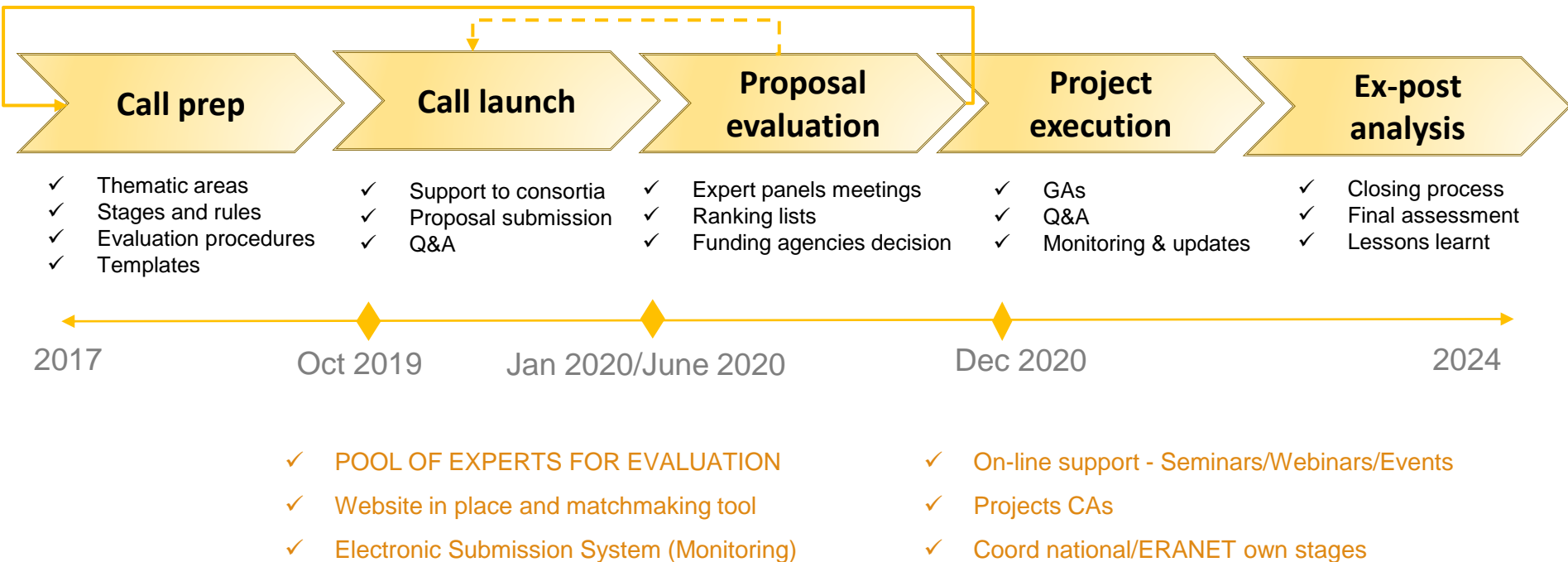
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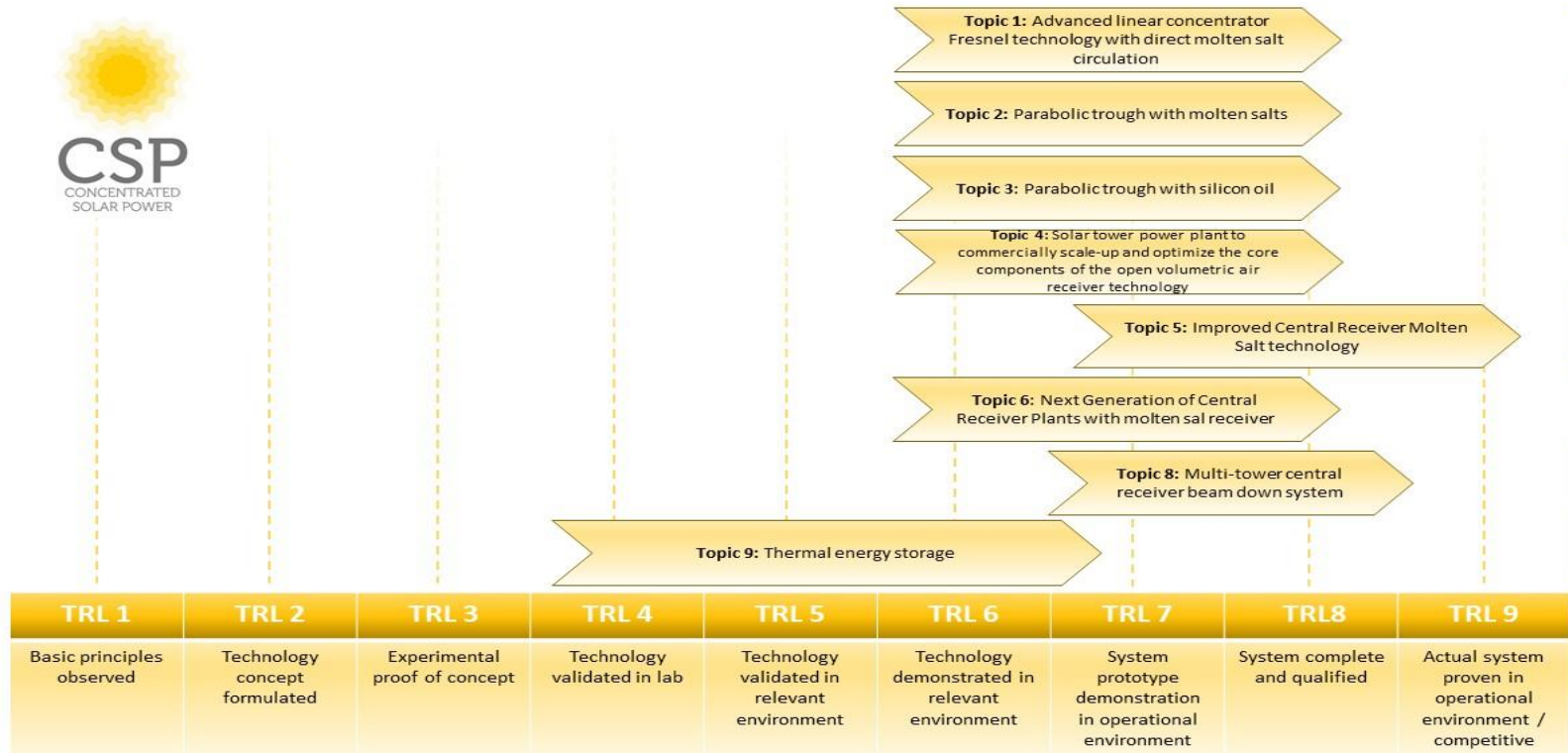
Updated Implementation Plan: Building blocks for the achievement of the Strategic Targets for CST



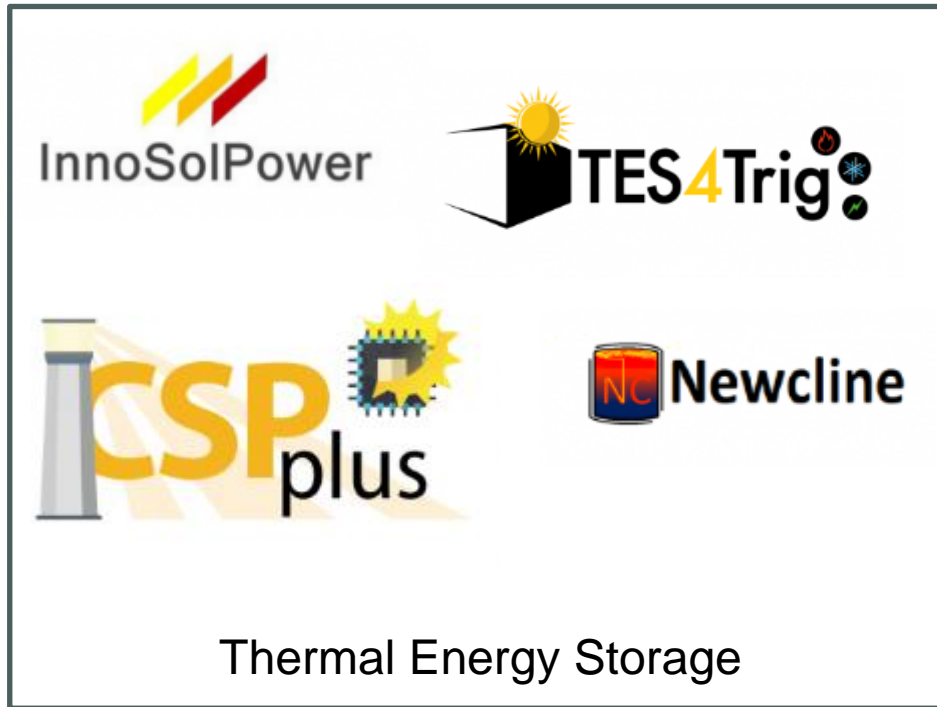
3. First (co-fund) Call



Topics selected for the Calls



Projects approved for funding under the 1st Call



InnoSolPower

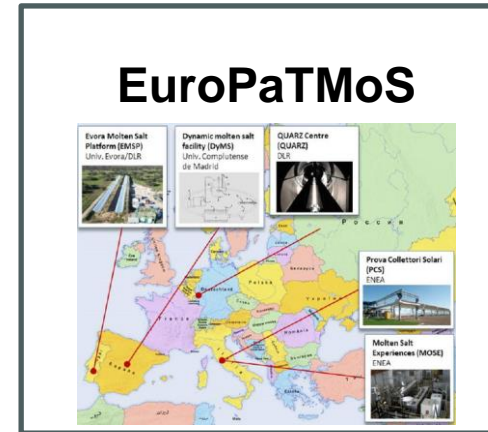
TES4Trig

CSP plus

Newcline

Thermal Energy Storage

EuroPaTMoS



Evora Molten Salt Platform (EMSP)
Univ. Evora/DLR

Dynamic molten salt facility (DyMS)
Univ. Complutense de Madrid

QUARZ Centre (QUARZ)
DLR

Prova Collettori Solari (PCS)
ENEA

Molten Salt Experiences (MOSE)
ENEA



PT Silicon Oil

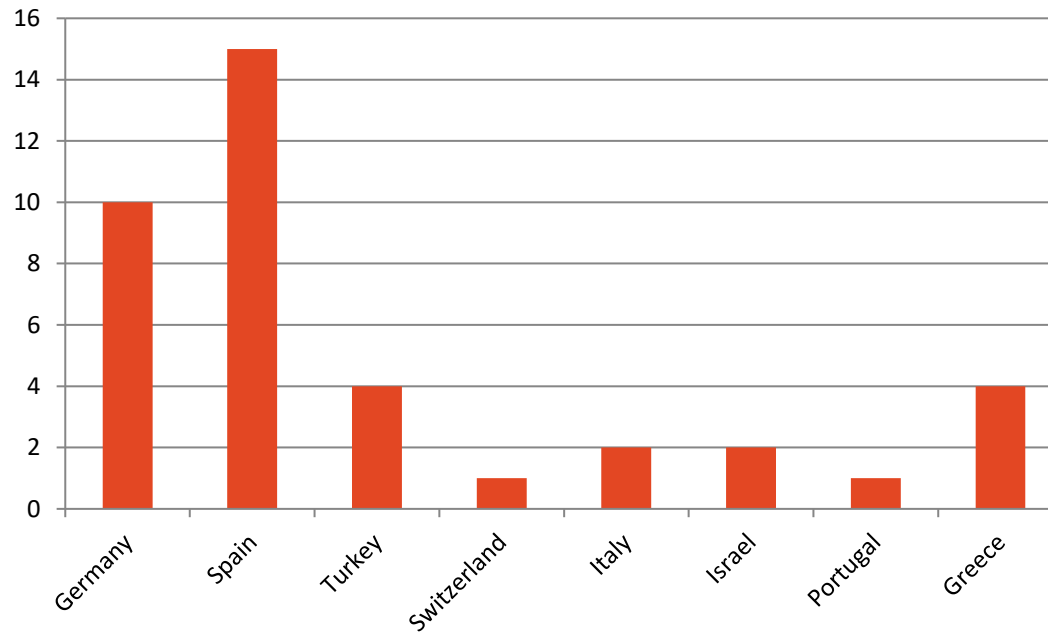


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Partners per country participating in projects





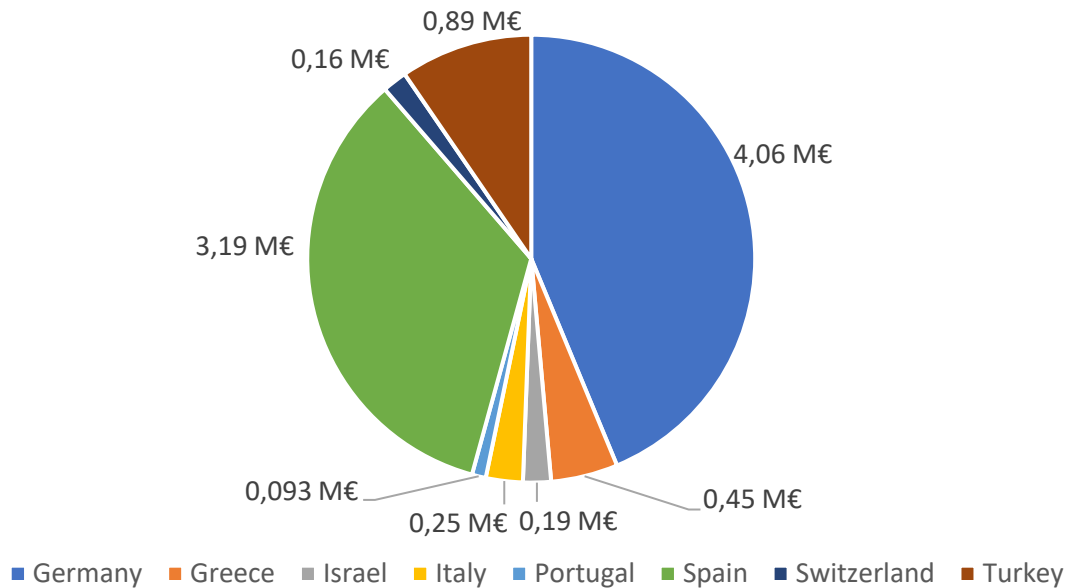
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Funding per countries

Funding per country



- Total costs: **13,2 M€**
- Total funding: **9,3 M€**



4. Second (additional) Call

Call prep

- ✓ Thematic areas
- ✓ Stages and rules
- ✓ Evaluation procedures
- ✓ Templates

Call launch

- ✓ Support to consortia
- ✓ Proposal submission
- ✓ Q&A

Proposal evaluation

- ✓ Expert panels meetings
- ✓ Ranking lists
- ✓ Funding agencies decision

Project execution

- ✓ GAs
- ✓ Q&A
- ✓ Monitoring & updates

Ex-post analysis

- ✓ Closing process
- ✓ Final assessment
- ✓ Lessons learnt

Oct 2021

Dec 2021/March 2022

2022/2023

2025/2026

- ✓ Participating Funding Agencies are reduced
- ✓ Pool of Experts for Evaluation (Full-proposals)
- ✓ Electronic Submission System (Monitoring)

- ✓ On-line support - Seminars/Webinars/Events
- ✓ Projects CAs
- ✓ Coord national/ERANET own stages





Projects approved for funding under the 2nd Call

DISOPED - Digital twin analysis of Solar Parabolic trough collector plant to scale to higher powers for the integration into Electrical Distribution network

MIRAGE - Characterization and Optimization of High Reflectivity Mirrors for Solar Towers

ADVIAMOS - Advancing Innovations in Molten Salt

LEIA - SoLar field mEasurements to Increase performAnce



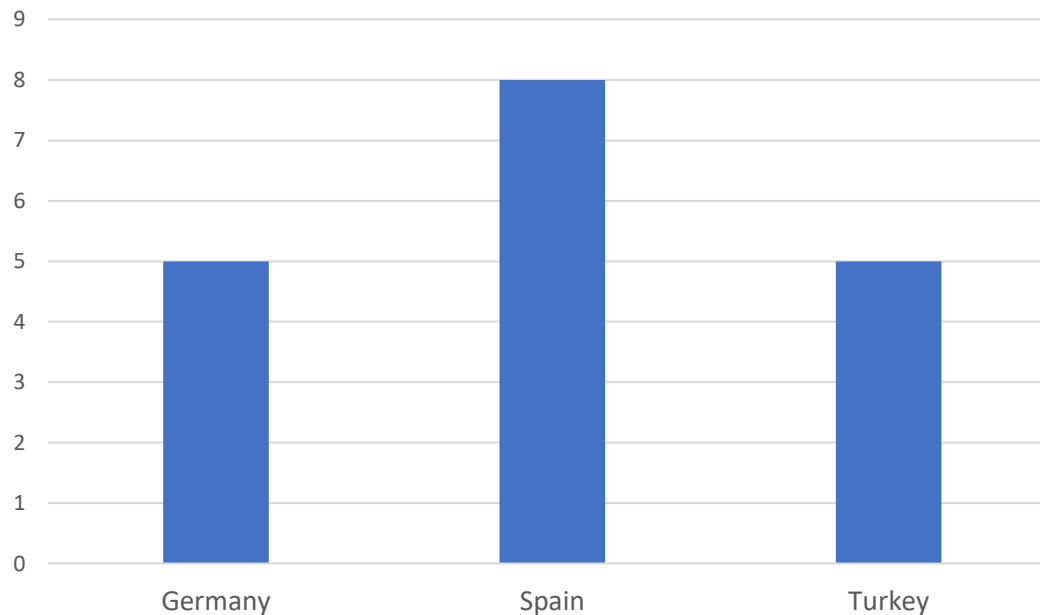


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Partners per country participating in projects





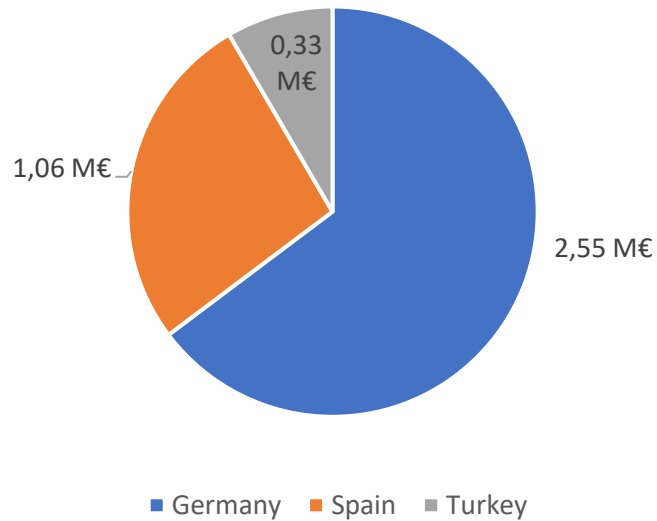
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Funding per countries

Funding per country



- Total costs: **5,5 M€**
- Total funding: **3,9 M€**





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Thank you!

Rachel C. Tully

Head of International Projects Area - AGENEX

rctully@agenex.org

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