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## MAIN FACTS

- DURATION: 2014-2018
- PROJECT LEADER: CIEMAT
- PARTNERS: 41
- COUNTRIES: 19
- BUDGET: 21,198,352 €
- EU CONTRIBUTION: 9,997,207 €
- TOTAL EFFORT: 2,504 PMs
- DELIVERABLES: 86

## **STAGE-STE** **Scientific and Technological Alliance for Guaranteeing European Excellence in Concentrating Solar Thermal Energy**

This Integrated Research Programme (IRP), funded by the EC's FP7 Programme, engages all major European research institutes with relevant and recognized activities on Solar Thermal Electricity (STE) and related technologies, in an integrated research structure plus relevant industrial and international organizations.

### OBJECTIVES

- Convert the consortium into a reference institution for STE research
- Provide a natural gatekeeper for R&D investment/technology transfer
- Achieve the alignment of different STE national research programmes
- Provide coordinated & complementary research capabilities
- Accelerate knowledge transfer to the industry
- Reinforce current European leadership
- Promote and coordinate international cooperation beyond EU borders

<http://stage-ste.eu/>

A wide-angle photograph of a large solar thermal power plant. The foreground and middle ground are filled with rows of blue solar collectors (heliostats) arranged in a grid pattern. In the background, there are industrial buildings and a mountain range under a clear sky.

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## COORDINATION ACTIVITIES

- WP 1: Consortium governance and management issues (CIEMAT, Spain)
- WP 2: Integrating Activities to Lay the Foundations for Long-lasting Research Cooperation (Cyl, Cyprus)
- WP 3: Enhancement of STE Research Facilities cooperation (CTAER, Spain)
- WP 4: Capacity Building and Training Activities (CNRS-PROMES, France)
- WP 5: Relationship with Industry & Knowledge Transfer Activities (CEA, France)
- WP6: International Collaboration with relevant organizations at key World regions (FRAUNHOFER, Germany)

## RESEARCH ACTIVITIES

On the research side, the project covers all the key areas in concentrating solar-thermal energy (leading partners in brackets):

- WP 7: Thermal Energy Storage for STE Plants (ENEA, Italy). Assessment and development of best concepts of TES systems of each STE technologies.
- WP 8: Materials for Solar Receivers and STE Components (DLR, Germany). Development of material with improved optical and thermal performance & durability.
- WP 9: Solar Fuels (PSI, Switzerland). Development and demonstration of solar thermochemical processes for the production of fuels.
- WP10: STE plus Desalination / D.C. Alarcon (CIEMAT, Spain). Long term industrial development of cost effective STE plants integrating desalination facilities.
- WP11: Linear Focusing STE Technologies (CIEMAT, Spain). Generation of new knowledge and technologies with aim to reduce costs and increase efficiency.
- WP12: Point Focusing STE Technologies (CENER, Spain). Increasing of concentration of systems to achieve higher working temperatures and efficiencies