

CENTER FOR SOLAR ENERGY TECHNOLOGIES OF FRAUNHOFER CHILE, **FCR CSET**

Speciality: Renewable energies and decarbonization, Dual use of land, Green hydrogen and derivatives.
Artificial Intelligence (AI) and Machine Learning (ML).

The Fraunhofer Chile Research Foundation - (CSET) is a leader in R+D of solar technologies, with more than 100 projects executed in Chile. Its objective is to promote solar activities in the Chilean industry.

In the line of Photovoltaic Systems, Fraunhofer CSET carries out applied research on innovative PV systems, solar resource evaluation and cleaning management. It also focuses on the integration of renewable energy in industry and the reduction of greenhouse gases.

In the line of Solar Thermal Systems, it carries out bankable solar resource studies, storage for CSP plants and design of solar concentration systems. It works on the incorporation of solar systems in industrial processes and water treatments, and on the innovation of intelligent control systems.

Fraunhofer CSET also focuses on New Technologies for the decarbonization of complex solar sectors and on hydrogen technologies. It carries out pre-feasibility and feasibility studies, business models and basic engineering throughout the entire hydrogen value chain.

In a transversal way, it works on Energy Storage Systems in their various forms, battery energy storage systems (BESS) and distributed energy applications. It is also dedicated to energy modeling, energy systems and the efficient integration of PV/CSP/renewables into energy networks.

In summary, Fraunhofer CSET is an institution that stands out for its excellence in the research and development of solar technologies, contributing significantly to the creation of a sustainable, economical, safe and socially fair energy offer.

Research lines:

- Solar Photovoltaic Systems.
- Solar Thermal Systems.
- New Technologies.

Centers of International Excellence



Applied research projects: **12**





>> CONTACT:

Director:

Prof.Dr. Frank Dinter

Contact email:

contacto@fraunhofer.cl

fraunhofer.cl



>> RESEARCHERS:

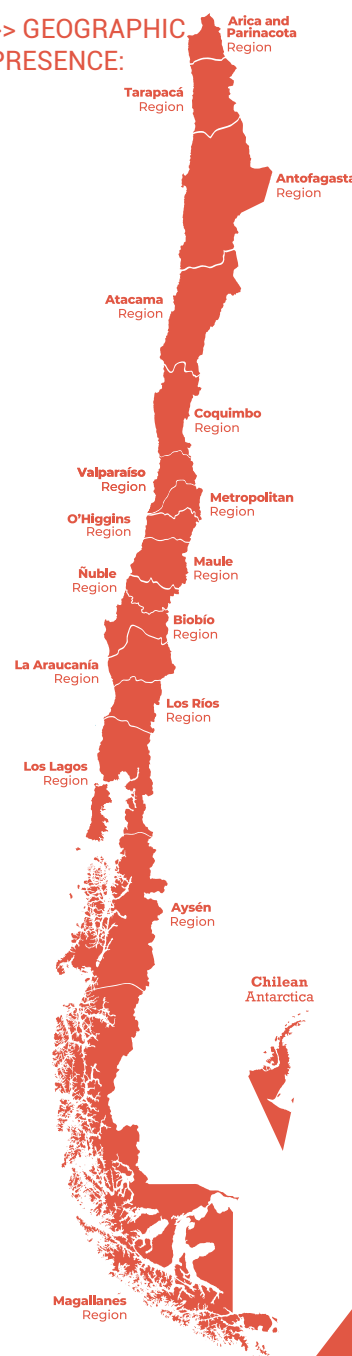
Associate Researchers:

Marco Vaccarezza, Iván Muñoz, Lars Metkemeyer, Francisco Fuentes, Francisco Moraga, Álvaro Henríquez, Frederik Schonberger, Valentina Puentes, Carlos Felbol, Felipe Godoy, Pablo Castillo, Cristobal Doña, Cristóbal Venegas.

Associate Researchers:

Diego Naranjo, Christopher Rozas.

>> GEOGRAPHIC PRESENCE:



>> MAIN ACHIEVEMENTS:

- Medme, Renoval, Deepscan and Pact projects.



>> ENGAGEMENT WITH COMPANIES OR OTHER SECTORS OF SOCIETY:

- 4 indexed academic publications.
- 4 audiovisual presentations: Evaluation of the Levelized Cost of Energy With New Costs for Concentrating Solar Power Tower Plants in Northern Chile and Impact of Green Taxes, Enhancing Resilience of Agriculture in Semi-Arid Zones: Effects of Agrivoltaics on the Microclimate in Agriculture, Assessment of Economic Synergies of Agrivoltaics in the Distributed Generation Segment in Chile, Techno-Economic Analysis of the Integration of Large-Scale Hydrogen Production and a Hybrid CSP+PV Plant in Northern Chile.
- 1 book published: Guideline for Yield Assessment in SHIP Plants: Uncertainties derived from the simulation approaches.