The Chilean Government has developed a collaborative framework through CORFO and the Ministry of Energy to draft the Solar Energy Program Roadmap, which includes the development of different actions planned to boost the solar energy industry and strengthen its value chain. This roadmap is designed to help the Atacama Desert become a global solar energy hub. The following pages provide an overview of the roadmap, highlighting the key initiatives and goals for the development of the solar energy industry in Chile.

### Executive Board

**President**
- Minister of Energy, Andrés Rebolledo

**Science and Technology Sector**
- CORFO
- Ministry of Energy
- Energy Innovation Office
- National Renewable Energy Laboratory

**Private Sector**
- AIA (Asociación de Industriales de Antofagasta)
- Asociación de Productores de Energía Solar

**Civil Society**
- Fundación Chile
- Association of Electrical Industry and Electronics

**Expected Impacts**

<table>
<thead>
<tr>
<th>Year</th>
<th>Solar Industry</th>
<th>Industrial Diversification</th>
<th>Strengthening Quality Infrastructure for Solar Energy</th>
<th>Technological Development</th>
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<tbody>
<tr>
<td>2016</td>
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<tr>
<td>2025</td>
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### Solar Road Map

**2025 Goals**
- Development of 105,000 kilowatts of photovoltaic capacity
- 2.5 billion kWh of solar generated electricity
- 200 gigawatts of solar generation capacity

**Key Projects**
- Desert Module and System
- Solar Fuel program
- Solar Desalinization program
- Thermal Energy Storage Systems

**Technology Centers**
- Solar Technology Center
- Renewable Energy and Innovation Center

### Solar Energy Program Roadmap 2016-2025

- **2016**
  - Definition of the national solar strategy
  - Proposal of regulatory frameworks
  - Development of human capital programs
  - Identification of initial infrastructure projects

- **2017**
  - Launch of the Solar Energy Program Roadmap
  - Definition of labor skills profiles
  - Drafting of labor skills profiles
  - Definition of the national solar strategy

- **2018**
  - Development of the solar industry
  - Continuation of human capital programs
  - Deployment of initial infrastructure projects

- **2019**
  - Expansion of the solar industry
  - Further development of human capital programs
  - Continuation of infrastructure projects

- **2020**
  - Acceleration of the solar industry
  - Completion of human capital programs
  - Significant expansion of infrastructure projects

### Contact

Contact CORFO for more information on the Solar Energy Program Roadmap and how to get involved.

**Website**
- www.programaenergiasolar.cl

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**Chile’s Atacama Desert**

Chile understands that, in the context of climate change, it is an opportunity for development. The mining industry's urgent need can be a powerful ally to concentrate resources on the search for innovative energy solutions. One process that is already under way is the birth of a solar energy industry that develops solutions. This new industry is an engine that drives the transformation of the country's productive base. The Desert also presents challenges. The lack of water and the high cost of reliable and sustainable energy supplies are a real threat to the mining sector's competitiveness.

The Desert's renewable resource potential is enormous, with an estimated 105,000 kilowatts of photovoltaic capacity and 2.5 billion kWh of solar generated electricity. The Desert has the highest levels of solar irradiation in the world, with an average of 2,500 GHI and 3,500 DNI per year. This makes it an ideal location for solar energy production.

The Desert is also home to the world’s largest copper mine, the El Salvador mine, which supplies 5.7 million tons of copper per year. The Desert is also a hub for mining activities, with 100 companies inserted into the solar energy industry value chain by 2025.
OPEN INNOVATION PLATFORM AND FINANCING FOR INNOVATION

EXPECTED RESULTS

- To incentivize and support the development and deployment of new solar technologies and innovations that address specific challenges related to the design and operation of solar power plants in the desert environment.
- To foster knowledge sharing and collaboration among different stakeholders involved in the solar industry.
- To strengthen the innovation ecosystem and accelerate the commercialization of solar technologies.

EFFICIENT POWER PLANT DESIGN

EXPECTED RESULTS

- Improved design and operation of solar power plants, resulting in enhanced efficiency and reduced costs.
- Development of novel cooling technologies that can operate effectively in desert environments.
- Establishment of efficient balance of system (BoS) solutions, including inverters, storage systems, and installation practices.

FINANCING

- US$20 million from the Chilean Government.
- US$5 million from the private sector.

DESERT MODULE AND SYSTEM TECHNOLOGY PROGRAM

EXPECTED RESULTS

- Development of new solar modules and system technologies optimized for desert environments.
- Enhancement of the durability and performance of solar systems in extreme conditions.
- Creation of a knowledge sharing platform for the exchange of best practices.

FINANCING

- US$14 million from the Chilean Government.
- US$20 million from the private sector.

CUENCA DEL SALADO SOLAR CORRIDOR

EXPECTED RESULTS

- Installation of a large-scale solar power plant in the desert environment.
- Implementation of advanced energy storage systems.
- Development of a comprehensive grid integration strategy.

FINANCING

- US$45 million from the Chilean Government.
- US$22 million from the private sector.

STRENGTHENING QUALITY INFRASTRUCTURE FOR SOLAR ENERGY

EXPECTED RESULTS

- Establishment of a robust quality infrastructure for solar energy systems.
- Strengthening of international standards for solar technologies.
- Development of new certification processes.

FINANCING

- US$4 million from the Chilean Government.
- US$2 million from the private sector.

SOLAR TECHNOLOGY CENTER (DTS)

EXPECTED RESULTS

- Development of a national solar innovation hub.
- Promotion of international collaborations.
- Establishment of a technology transfer network.

FINANCING

- US$0.8 million from the Chilean Government.

OBJECTIVE

To achieve excellence and technological leadership of the Chilean solar energy sector, both at national and international levels.

EXPECTED RESULTS

- Development of new solar technologies and innovations.
- Establishment of robust quality control processes.
- Shaping the technology landscape for the future.

FINANCING

- US$14 million from the Chilean Government.
- US$12 million from the private sector.

DESERT TECHNOLOGY CENTER (DTC)

EXPECTED RESULTS

- Development of new solar technologies and innovations.
- Establishment of robust quality control processes.
- Shaping the technology landscape for the future.

FINANCING

- US$14 million from the Chilean Government.
- US$12 million from the private sector.