

## MARINE ENERGY RESEARCH AND INNOVATION CENTER, **MERIC**

Impact Area: Research and development of marine energy in Chile.  
Speciality: Applied R+D, Deployment of marine energy projects and Services aimed at the marine industry.

In 2015 Energía Marina SpA contributed to establish the first Marine Energy Research and Innovation Center in Chile, known as MERIC (Marine Energy Research and Innovation Center). Initially supported by CORFO under the program of Attraction of Centers of International Excellence for the Competitiveness of the Ministry of Energy. As of 2021, it receives the support of ANID through its subdirectorate in Centers and Associative Research / Centers of International Excellence.

It currently has the support of its partners: Naval Group, Enel Green Power, Pontificia Universidad Católica de Chile, and Universidad Austral de Chile.

Thanks to the interdisciplinary approach and the team of professionals, MERIC has managed to understand the dynamics of the Chilean ecosystem and context for the integration of marine energy technologies, considering the extreme conditions of Chile. Developing capabilities, advanced human capital and experience throughout Chile through laboratory studies and open sea tests, testing in tanks and characterization of sites in remote areas.

In this context, MERIC stands out as one of the pioneer institutions in Latin America in terms of research and innovation in marine energy. The challenges associated with this type of energy require an approach that encompasses scientific, technological, ecological and social aspects. The research carried out at MERIC proposes comprehensive and innovative solutions that include opportunities such as offshore wind energy, supply in remote areas, seawater desalination, promotion of the development of green hydrogen, among others.

### Research lines:

- Knowledge of the Chilean environment.
- Implementation of marine technologies for Chile.

### Centers of International Excellence



Contributions to technological productivity (patents, utility models, technological licenses, spin offs, R&D projects and contracts): **2**

Applied research projects: **4**





>> CONTACT

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>> RESEARCHERS:

**Senior Researchers:**  
PUC: Rodrigo Cienfuegos, Cristian Escauriaza, Ignacio Vargas y Sergio Navarrete. UACH: Gonzalo Tampier y Cristian Cifuentes.

**Junior Researchers:**  
Felipe Lucero, Leandro Suárez, Francisca Rubio, Mirtala Parragué, Natalia Aziates y Jaime Cortés.

>> GEOGRAPHIC PRESENCE:



>> MAIN ACHIEVEMENTS:

- Chile's first open sea marine energy laboratory in Las Cruces, Open Sea Lab, where 6 R+D groups from Chile, Italy and the United States came together to study the behavior of a wave power prototype.
- Analysis of adaptation of marine energy prototypes to the national ecosystem and cutting-edge research and studies in biofouling and marine corrosion.
- Development of digital platforms (Adaptore, OceanPos, Emmap).
- Development of low-cost technologies and remote coastal monitoring camera projects.
- Development of methodologies and effective protocols to address complex scenarios in field and laboratory studies. likewise, promoting the development of advanced human capital.
- Preparation of 3 preliminary guides for good practices in the installation of marine energy projects.
- Publication of 40 academic articles.



>> ENGAGEMENT WITH COMPANIES OR OTHERS SECTOR OF SOCIETY

- The MERIC Center has been a catalyst for spaces and opportunities for collaboration, promoting the exchange of knowledge with the aim of promoting scientific advancement and strengthening research, development and innovation (R+D+i) in the field of marine energy.
- In addition, it has contributed significantly to the scientific community and Chilean society in general by participating in national and international activities such as conferences and presentations, community outreach activities, and support for undergraduate and graduate thesis students. Also integrating collaborations with Pamec Energy and ICOE, Blue Economy, REMAR among other institutions of great global prestige.
- On the other hand, establish strategic alliances at a communication, scientific and technological level with other marine energy centers in the world (EMEC, Tecnalia, Aquatera and Wavec).

Centers of  
International Excellence

**Associated Institutions:**  
Pontificia University Católica de Chile  
University Austral de Chile



Agencia  
Nacional de  
Investigación  
y Desarrollo  
Ministerio de Ciencia,  
Tecnología, Conocimiento  
e Innovación  
Gobierno de Chile