Ministerio de Ciencia, Tecnología, Conocimiento e Innovación

Gobierno de Chile

MinCiencia

HOW TO INSTALL A DATA CENTER IN CHILE?

Minister of Science, Technology, Knowledge and Innovation
Aldo Salvador Valle Acevedo

Undersecretary of Science, Technology, Knowledge and Innovation
Cristian Cuevas Vega

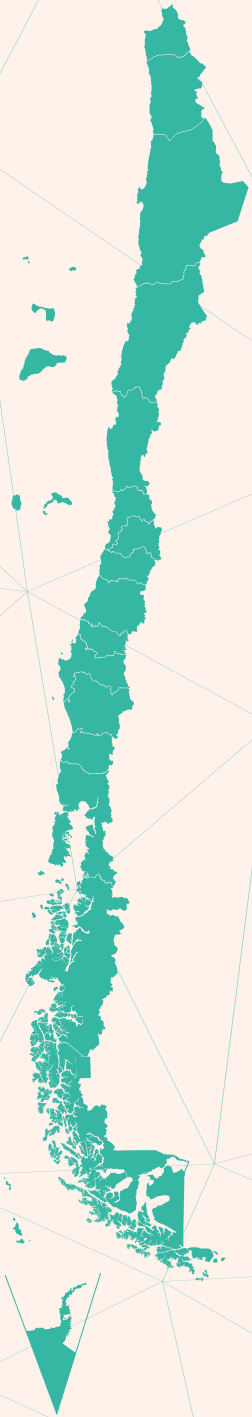
This publication was developed with the contribution of the institutions participating in the National Data Centers Plan.

Design and Layout
Natalia Saavedra Morales

www.minciencia.gob.cl

Photographs: SERNATUR and MinCiencia

First Edition: June 2025



WHY IS **CHILE** AN ***IDEAL*** LOCATION TO **SET UP YOUR DATA CENTER**?

Chile is emerging as one of the most attractive destinations in Latin America for data center development. Its unique combination of natural and technological advantages has positioned the country as a strategic hub for digital enterprises. With an increasingly clean energy matrix, strong national and international connectivity, and a stable political and economic environment, Chile offers favorable conditions for large-scale technology investments.

This document, developed under Chile's National Data Centers Plan (PDATA), provides a reference guide to facilitate the installation of data centers in the country. It includes practical recommendations to help navigate critical permitting pathways, identify opportunities, and streamline development timelines.

Through this Plan, Chile is advancing toward integrated digital development governance, enabling conditions that organize and support the growth of this industry. This approach not only fosters investment and innovation, but also aims to align technological expansion with the needs of local communities, territorial sustainability, and the country's digital strategy. The ultimate goal: to position Chile as a sustainable, competitive digital hub for the region.

GOVERNANCE AND **STRATEGIC VISION** OF THE *GOVERNMENT*

The National Data Centers Plan (PDATA) is a strategic initiative led by Chile's Pro-Growth and Employment Cabinet, designed to strengthen the State's capabilities and facilitate investment processes in key sectors for the country's economic development. Specifically, the PDATA addresses the growing demand for **robust, efficient, and sustainable digital infrastructure**, positioning Chile as a pioneer in Latin America and the Caribbean in developing a comprehensive public policy for this industry. No other country in the region has a plan of this scale, making Chile a regional leader in strategic technology infrastructure.

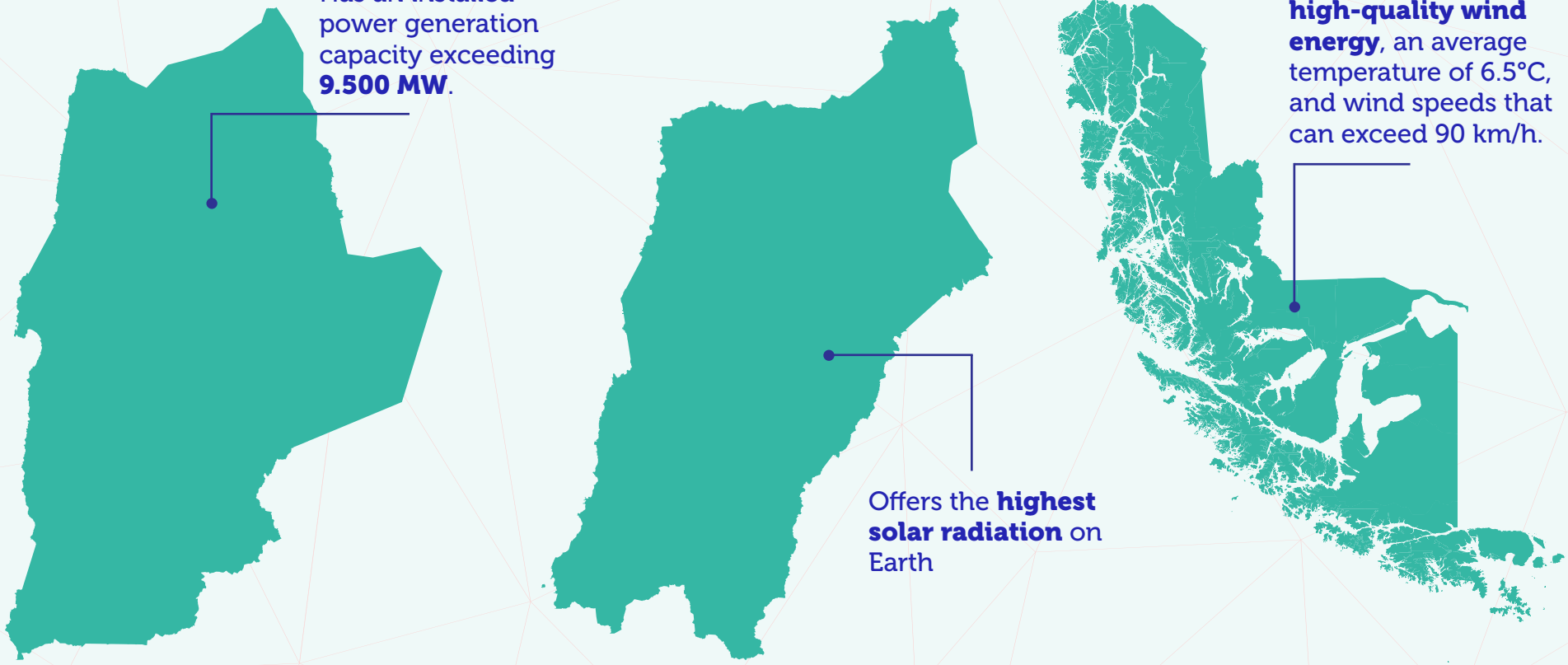
This Plan is not just a technical roadmap, it is a public governance tool that enables the planning and orderly growth of the data center industry in Chile. In a context shaped by the rapid evolution of global technology markets and the urgent need to accelerate digital transformation, the PDATA aims to provide certainty, interinstitutional coordination, and a long-term strategic vision to guide both the State and the private sector.

CLEAN, ABUNDANT, AND EXPANDING *ENERGY* SUPPLY

Chile is a regional leader in energy transition. Its electricity matrix is undergoing a rapid decarbonization process, with a growing share of renewable energy, enabling data centers to access a stable and cost-competitive power supply.

- As of early 2024, 66.1% of the country's electricity generation came from renewable sources, 40.7% from solar, wind, biomass, geothermal, and mini-hydro, and 25.4% from conventional hydropower. This marks a historic record for the national power system.
- Installed renewable sources capacity now exceeds 14,800 MW, led by solar energy (9,031 MW) and wind power (4,517 MW). This represents roughly 46% of Chile's total installed electric capacity, placing the country among the most advanced in Latin America in renewable energy development.
- Chile projects that by 2030, at least 80% of its electricity generation will come from renewable sources, as part of its commitment to achieving carbon neutrality by 2050. This context offers investors an ideal platform to meet ESG standards and sustainability goals.
- More than 7,300 MW of new renewable projects are currently under construction or in testing phases, reinforcing the future availability of clean energy for high-demand investments such as data centers.
- The country is also advancing innovative initiatives, including the development of green hydrogen and energy storage technologies, which will improve renewable energy management and enhance grid stability.

Chile's geography offers exceptional natural advantages for the deployment of this industry. The Atacama Desert, located in the regions of **Antofagasta** and **Atacama,** has the highest solar radiation on the planet, while the **Magallanes** Region, in the far south, contains some of the world's best wind resources.



ROBUST, RESILIENT, AND EXPANDING INTERNATIONAL DIGITAL CONNECTIVITY

Chile offers not only clean and competitive energy, but also one of the most advanced digital connectivity infrastructures in Latin America. Its combination of territorial coverage, high-speed networks, and system resilience makes the country a prime node for data processing, storage, and distribution at both regional and global scales.

- Chile has deployed over 62,000 kilometers of fiber optic cable across the country, enabling connectivity in virtually every part of the territory. Thanks to the National Fiber Optic Project (Fibra Óptica Nacional, FON), more than 9,000 kilometers of backbone network link the northern city of Arica to the Los Lagos Region in the south, including remote communities, rural areas, and border complexes.

- Through the "Zero Digital Divide" plan (Brecha Digital Cero), the Chilean government has implemented a universal connectivity policy. As a result, 343 out of the country's 345 municipalities already have high-speed internet access, with full national coverage expected by 2025.

- Chile leads the region in fiber optic adoption (FTTX): 70.2% of fixed internet connections use this technology, placing the country among the top 10 globally in residential fiber optic use.

- On the mobile front, Chile was an early adopter of 5G networks. As of 2024, more than 6 million devices are connected to 5G, strengthening the country's digital infrastructure for distributed services, low-latency applications, and the growth of technologies like edge computing.

In terms of international connectivity, Chile is linked by several high-capacity submarine cables, including:

- **Curie (Google):** connects Chile directly with California, USA.
- **Mistral (Telxius):** links Chile with Peru, Ecuador, and Guatemala.
- **South American Crossing – SAC (Cirion):** circles South America.
- **Sam-1 (Telxius):** forms a ring around Latin America.
- **Pan American Crossing – Pan-AM (CenturyLink):** provides connectivity across the Pacific and Caribbean sides of South America.

Upcoming projects

- **Humboldt Cable:** Scheduled to begin in 2025, this will be the first transpacific cable linking South America and Oceania, connecting Chile with Australia. Spanning 14,800 kilometers, it will make Chile the first direct digital bridge between Asia-Pacific and Latin America.
- **Antartic Cable:** A proposed submarine fiber optic cable to connect Antarctica via Chile. Estimated at 1,000 kilometers, this project is currently in the technical feasibility study phase.

This infrastructure, combined with broad energy coverage, positions Chile as a resilient, well-connected hub, ready for the storage and processing of large-scale data.

GROWING DIGITAL ECOSYSTEM AND STRONG **INTERNATIONAL INVESTMENT**

Chile not only offers enabling conditions, but also has a proven track record in attracting technology investments and a reliable institutional environment to support their development.

- **Over US $2.3 billion in data center projects** were materialized between 2020 and 2024.
- **With an estimated investment exceeding US $4 billion,** more than 30 projects are already in various stages of development.
- Chile is already home to major cloud and colocation service providers, both from the United States and China.
- The country has a broad network of trade and economic agreements covering 65 economies, representing 88% of global GDP.

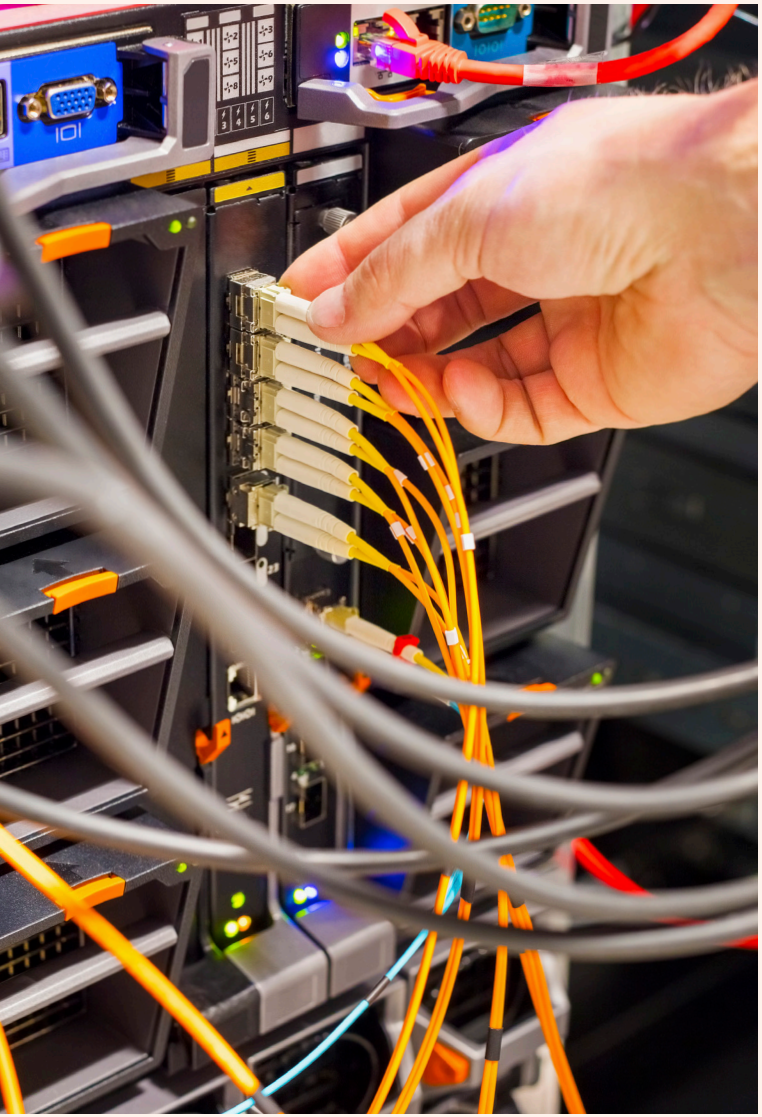
RECOMMENDATIONS FROM THE GOVERNMENT OF CHILE FOR ESTABLISHING *A DATA CENTER*

The process of installing a data center in Chile involves a range of permits that vary depending on the scale and characteristics of the project. To support clearer and more efficient planning, the Government of Chile offers the following recommendations, based on key challenges identified by the industry:

Energy Feasibility

Electricity supply is a critical factor in data center deployment, given the sector's high energy demand and the need for continuous operation. While Chile has significant renewable energy potential, some urban areas face limited substation capacity or constrained transmission networks. The following is recommended:

- **Prioritize sites** with access to substations that have available capacity, or consider locations near existing or planned transmission lines.
- Coordinate early in the project with the National Electricity Coordinator (Coordinador Eléctrico Nacional), the Ministry of Energy, and transmission companies to **assess connection timelines and technical feasibility**.
- If **self-supply or dedicated infrastructure** is required, base the request on Article 102 of the General Law of Electric Services (Ley General de Servicios Eléctricos), providing justification for the necessity and urgency.
- At the end of 2025, **Decree No. 38** (2020) from the Ministry of the Environment will come into effect, **requiring backup generators to meet stricter emissions standards (Tier IV)**. It is advisable to anticipate equipment purchases or secure suppliers with compliant stock.



Land use and industrial classification

The location of a data center in Chile is subject to land use regulations and the project's industrial classification. In Chile, data centers are typically classified as "energy infrastructure" and "disruptive industry" (industria molesta), which limits their installation in many urban areas. The following is recommended:

- Verify that the selected site is zoned for energy **infrastructure use**, in accordance with Article 2.1.29 of the General Ordinance on Urban Planning and Construction (Ordenanza General de Urbanismo y Construcciones, OGUC), and coordinate early on with the respective Directorate of Municipal Works (Direcciones de Obras Municipales).

- If the project is located in rural or agricultural areas, a formal land-use change must be requested through the Agriculture and Livestock Service (Servicio Agrícola y Ganadero, SAG). This process may require environmental, technical, and archaeological assessments.

- Consider installation in mixed-use zones such as **ZUC**, **ISAM**, or **ZDUC**, which offer greater regulatory flexibility provided specific conditions are met.

- The classification as a **disruptive industry** is primarily due to the use of combustion generators. It is advisable to engage with local authorities to mitigate perceived impacts and explore potential reclassifications in the medium term.

Permits

There are three particularly critical permits for data center projects in Chile, due to their potential impact on timelines and investment certainty:

Environmental Impact Declaration (DIA):

- When a data center project in Chile requires environmental assessment, one of the primary pathways into the Environmental Impact Assessment System (Sistema de Evaluación de Impacto Ambiental, SEIA) is through a **Declaración de Impacto Ambiental (DIA)**. This process, overseen by the Environmental Assessment Service (Servicio de Evaluación Ambiental, SEA), typically takes between 12 and 18 months, depending on the project's complexity and the quality of the submitted documentation.

- It is strongly recommended that, when choosing this pathway, project developers submit **clear, specific, and well-founded environmental commitments** from the outset. These should include not only mitigation measures, but also compensation proposals aligned with international best practices. Examples include ecological restoration plans, benefit-sharing agreements with local communities, low water and energy impact technologies, and participatory monitoring mechanisms.

- Integrating these elements early can significantly reduce the risk of objections or project rejection by the environmental authority. It also helps **build local legitimacy**, leading to better reception by communities, municipalities, and other key stakeholders. A solid environmental strategy from the beginning not only facilitates the assessment process, but also helps build long-term trust, key to the sustainable development of the project.

Building Permit (DOM):

- To construct a data center in Chile, a **Permiso de Edificación (Building Permit)** must be obtained from the Directorate of Municipal Works (Dirección de Obras Municipales, DOM) in the municipality where the project will be located. This process typically takes 6 to 8 months and requires submission of architectural plans, technical descriptions, and other supporting documents, in accordance with the General Law on Urban Planning and Construction (Ley General de Urbanismo y Construcciones, LGUC) and local regulations.

- It is advisable to work with an architect who has experience in industrial or infrastructure projects, and to initiate contact with the DOM early to align technical criteria from the start.

- Additionally, permits must be obtained for potable water and wastewater works, which are necessary to secure basic utility services.

- **Early planning**, a robust technical file, and parallel coordination with electricity and water providers are essential to prevent delays and ensure a smooth permitting process for technology-intensive projects.

Archaeological Survey Permit (CMN)

- If a data center is planned in areas with **archaeological potential or heritage value**, an archaeological survey permit must be requested from the National Monuments Council (Consejo de Monumentos Nacionales, CMN). This process can take up to 18 months on average, making early preparation essential.
- A **preventive** archaeological diagnosis is recommended during the early stages of development, conducted by accredited professionals to identify any findings before construction begins.
- Associated costs, such as studies, site rescue operations, and ongoing monitoring, can be **significant** and should be factored into budget planning. It is also advisable to include contractual clauses with construction firms to address unexpected findings and to establish direct communication channels with the CMN to streamline the process and minimize back-and-forth with the authority.

Interinstitutional coordination and regulatory efficiency

Because data center projects require permits from multiple public entities, orderly planning and early engagement with each relevant agency is essential to avoid delays.

- It is recommended that coordination with public services begin **simultaneously** during the permitting process. Key institutions include the Environmental Assessment Service (SEA), the Regional Health Authority (SEREMI de Salud), the National Monuments Council (CMN), the Agriculture and Livestock Service (SAG), the Directorate of Municipal Works (DOM), the Ministry of Public Works (MOP), and the Ministry of Housing and Urbanism (MINVU).

- For large-scale or strategic projects, companies can consolidate their permitting processes through the **Unified Permitting System (Sistema Unificado de Permisos, SUPER)**, a digital platform that allows for centralized management of permits required by various State agencies. Additionally, for projects with investments equal to or exceeding US $100 million, the Ministry of Economy, Development, and Tourism acts as a coordinating body between sectoral agencies and project developers, facilitating dialogue and accelerating permitting procedures.

- InvestChile also supports foreign companies throughout the process of bringing their projects to fruition in Chile.

Sustainability and community engagement

Harmonious development with the surrounding social and environmental context is increasingly valued by local communities, municipal governments, and international investors. Incorporating best practices from the design phase can enhance project acceptance and reduce future risks. The following is recommended:

- Assess early on the use of **energy-efficient and low-water-consumption cooling technologies**. Consider alternatives such as air-based cooling systems or water recycling.
- Promote the use of **100% renewable energy** through traceable power purchase agreements (green PPAs) or international renewable energy certificates (RECs).
- Establish communication channels with local governments, communities, and territorial organizations. An early community engagement plan can ease the permitting process, especially under the Environmental Impact Assessment System (SEIA).

KEY STAGES OF THE PROCESS

Stage	Recommended action	Estimated time
Preliminary assessment	Land, energy and connectivity analysis	2-3 months
Initial permit applications	DIA, land use authorization and archeological survey	6-18 months
Construction permits	Building permit (DOM), electricity and water connections	6-12 months

MinCiencia

Ministry of Science, Technology, Knowledge and Innovation, **minciencia.gob.cl** | National Electricity Coordinator, **www.coordinador.cl**
SUBTEL – Undersecretariat of Telecommunications, **www.subtel.gob.cl** | CNE – National Energy Commission, **www.cne.cl**
SEA – Environmental Assessment Service, **www.sea.gob.cl** | SAG – Agriculture and Livestock Service, **www.sag.gob.cl**
MINVU – Ministry of Housing and Urban Planning, **www.minvu.gob.cl** | InvestChile, **www.investchile.gob.cl**
Chile Data Centers, **chiledatacenters.com**