

REGULATORY OVERVIEW OF THE CHILEAN ENERGY SECTOR¹

POLITICAL CONSTITUTION

FUNDAMENTAL RIGHTS

The Article 19 N° 24 establishes that the State has the absolute, exclusive, inalienable and indefeasible dominion of all mines, including the salt mines and the deposits of coal and hydrocarbons and other fossil substances, notwithstanding the property of the persons on the lands in whose entrails they were located.

MINISTRY OF ENERGY

The **MINENERGÍA** is the highest collaborative body of the President of the Republic in the tasks of government and administration of the energy sector. Its main functions are to prepare and coordinate plans, policies and standards for the proper functioning and development of the energy sector, to ensure its compliance and give advice to the Government on all matters related to the energy sector, considering all types of primary and secondary energy source.

It was created by **Law N° 20.402** of 2009 that modifies Decree Law N° 2.244/1978.

NATIONAL COMMISSION OF ENERGY

The **CNE** is a decentralized public institution with its own capital and full capacity to acquire and exercise rights and contract obligations, whose communications with the President of the Republic are channeled through the **MINENERGÍA**. It is responsible for analyzing prices, tariffs and technical standards to which the production, generation, transport and distribution of energy companies must adhere. All of the above, to provide a sufficient and safe service, compatible with the most economical operation.

It was created by **Law N° 20.402** of 2009 that modifies Decree Law N° 2.244/1978.

SUPERINTENDENCY OF ELECTRICITY AND FUEL

The **SEC** is a functionally decentralized service, whose purpose is to supervise compliance with legal and regulatory norms as well as technical standards on the generation, production, storage, transportation and distribution of fuels, gas and electricity; services provided with current regulations and without danger to people or things.

It was created by **Law N° 18.410** of 1985.

NATIONAL OIL COMPANY

ENAP is a company owned by the State of Chile, with legal capacity and its own assets, which relates to the President of the Republic through the **MINENERGÍA**. Its main purpose is the exploration, production, refining and commercialization of hydrocarbons and their derivatives. In addition, ENAP may participate in companies that develop activities related to the generation of power and exploration and exploitation of geothermal energy.

It was created by Decree with Force of Law N° 1 of 1987.

NATIONAL COMMISSION OF NUCLEAR ENERGY

It is an organism of autonomous administration of the State, which relates with the Government through the **MINENERGÍA**. Its functions, among others, include addressing issues related to the peaceful uses of atomic energy; to regulate, supervise and control relevant nuclear and radioactive facilities throughout the country; and to advise the Government on matters related to nuclear energy.

It is the only entity empowered to conclude legal acts related to lithium. It represents the State of Chile in matters regarding the exploitation of grantable substances that are accompanied by lithium, being able to request their separation.

It was created by **Law N° 16.319** of 1985.

NATIONAL ELECTRICAL COORDINATOR

The **Coordinator** is a technical and independent organism, in charge of the coordination of operation of the interconnected facilities of the **SEN** that operate interconnected among themselves.

It was incorporated in the LGSE by means of **Law N° 20.936** of 2016.

PANEL OF EXPERTS

The **Panel of Experts** is an autonomous collegiate organism whose function is to solve the discrepancies and conflicts that arise as a result of the application of electrical and gas legislation.

It was incorporated in the LGSE by means of **Law N° 19.940** of 2004.

ENERGY SUSTAINABILITY AGENCY

The **Energy Sustainability Agency** (ex **ACHEE**) is a non-profit, private-law legal entity whose purpose, among other matters, is to promote, strengthen and consolidate the efficient use of energy on a national and international level. It also seeks to implement public-private initiatives in the different sectors of energy consumption, contributing to the competitive and sustainable development of the country.

It was created in 2010, by virtue of **Decree Law N° 2.244** of 1978.

National Energy Policy

The Chilean Energy Policy - Energy 2050 built through a participatory process, proposes a vision of the energy sector by 2050 that corresponds to a reliable, sustainable, inclusive and competitive sector; in order to move towards a sustainable energy in all its dimensions. To achieve this vision, the policy defines plans of action and goals for two horizons: 2035 and 2050.

The long-term energy policy will be updated in a participatory manner every 5 years.

Washington Convention

Also known as the **Convention for the Protection of Flora and Fauna and the Scenic Beauties of America**. Its objective is to protect all species and genres of the flora and fauna of the Americas from extinction and to preserve areas of extraordinary beauty.

Among other matters, it establishes conditions for activities carried out in areas with some degree of official protection.

Ramsar Convention

Convention on **Wetlands of International Importance**, especially as **Waterfowl Habitat**. Its objective is to ensure the conservation of wetlands and their flora and fauna through long-range national policies combined with coordinated international action to the activities carried out in these areas.

Indigenous and Tribal Peoples Convention 169 OIT

It refers to the **human rights and civil liberties of indigenous and tribal peoples and their right to land and territory, health and education**; it establishes the protection of the social, cultural, religious and spiritual values and practices proper to indigenous peoples; and, among other matters, establishes the obligation to consult indigenous communities on legislative and administrative measures that may directly affect them.

Paris Agreement

It has its origin in the United Nations Framework Convention on Climate Change that establishes measures for the reduction of emissions of greenhouse gases (GHG) through the mitigation, adaptation and resilience of ecosystems for the purposes of global warming. It will be applicable as of the year 2020, when the Kyoto Protocol expires. Chile committed to meet goals to reduce the increase in the intensity of GHG emissions per GDP, as established in the National Determined Contribution (NDC) of Chile.

LAWS

SECTORAL LEGISLATION

ELECTRICAL ENERGY

Electrical Services
DFL 4/20.018/2007 MINECON

It regulates the following markets, in matters such as:

- **Generation:** Concessions, a system of annual quotas of injection of NCRE to the SEN, PMG and PMGD, rationing.

- **Transmission:** Concessions, open access, tenders, expansion, valuation and remuneration of transmission, interconnections.

- **Distribution:** Concessions, open access, energy tenders for the supply of regulated customers, the price regime according to the type of customers and size of the electricity system, fare equity, distributed generation.

- **Coordination and operation of the SEN and the electricity market:** Security, operation and economic transfers, public information, international exchanges, ancillary services.

- **Medium Systems:** Those electrical systems whose installed generation capacity is greater than 1.5 MW and less than 200 MW.

RENEWABLE ENERGY²

Geothermal Energy Concessions
LAW 19.657/2000 MINMINERÍA

It establishes that geothermal energy is a state own good, **capable of being explored and exploited, after granting a concession**, and it defines the rules for the granting of exploration and exploitation concessions.

Among other matters, it regulates the relationships between the geothermal energy concessionaires, the State, the owners of the surface land and the holders of rights over other natural resources; as well as the obligations that concessionaires must respect and the sanctions applicable in case of non-compliance.

Tax Exemption for Solar Thermal Systems

LAW 20.365/2009 MINHACIENDA

It establishes a **transitory benefit** for construction companies, through which they can **deduct from their income tax payment** a tax credit equivalent to all or part of the value of the Solar Thermal Systems destined for the heating of sanitary water, which are installed in new homes built until 2020.

FUELS

Registry of Owners of Fuel Facilities
DFL 1/1979 MINMINERÍA

It establishes a registry where the owners of facilities that serve for the production, import, refining, transport, distribution, storage, supply, regasification or that commercialize fuel derived from petroleum, liquid biofuels, combustible liquefied gases and all combustible gas, must register natural gas, gas network and biogas. This record is carried out by the SEC.

Gas Services

DFL 323/1931 MININTERIOR

It regulates the transport, the gas distribution of the network; the marketing of gas; the system of gas network concessions and tariffs; the role of the State regarding these matters; and the criminal and infraction provisions.

Fuel Price Stabilization Mechanism

LAW 20.765/2014 MINHACIENDA

It regulates the **stabilization of domestic sales prices of fuels**, such as automotive gasoline, diesel oil, compressed natural gas and liquefied gas. This regulation is achieved through increases and reductions in the specific taxes established by the fuel tax law.

NUCLEAR ENERGY

Nuclear Safety and Security
LAW 18.302/1984 MINMINERÍA

It regulates activities related to the peaceful uses of nuclear energy and nuclear substances and radioactive materials. It establishes measures to prevent the misappropriation and illicit use of nuclear energy, substances and facilities.

Mining Concessions

LAW 18.097/1982 MINMINERÍA

It regulates the substances that are susceptible to mining concession and those whose are not. Non-concessible substances include, among others, liquid or gaseous hydrocarbons, lithium, deposits of any kind existing in maritime waters subject to national jurisdiction and reservoirs of any kind located, in whole or in part, in areas that according to the law, may be determined as important for national security with mining effects.

As required by the national interest, the lithium extracted and concentrates, derivatives and compounds thereof, may not be subject to any legal act except when they are executed or concluded by the Chilean Nuclear Energy Commission or with its prior authorization.

COMPLEMENTARY SPECIAL LEGISLATION

Water Regulation Code

DFL 1122/1981 MINJUSTICIA

It regulates the right to use the water that is destined to the production of electrical energy. Likewise, it regulates hydroelectric plants that are governed by the provisions of the LGSE.

Maritime Concessions

DFL 340/1960 MINHACIENDA

It regulates the maritime concessions granted on national public goods or focal goods whose control, supervision and oversight corresponds to the Ministry of National Defense, whatever the use to which the concession is destined and the place where the goods are located.

Marine Coastal Spaces of Native Peoples

LAW 20.249/2008 MIDEPLAN

It establishes that the goods included in the coastal border that are under the supervision and administration of the Ministry of National Defense are susceptible to be declared as marine coastal spaces of native peoples.

General Basis of the Environment

LAW 19.300/1994 MINSEGPRES

It regulates the right to live in a pollution-free environment, the protection of the environment, the preservation of nature and the conservation of environmental heritage.

Among other matters, it establishes:
- Procedures to dictate quality standards and emission of pollutants.
- The Environmental Evaluation System of investment projects.
- The responsibility for environmental damage.
- The Ministry of Environment.
- The Council of Ministers for Sustainability.
- The Environmental Evaluation Service.
- The Superintendence of the Environment.

Acquisition, Administration and Disposition of State Goods

DL 1.939/1977 MTyC

It establishes that State assets may be subject to destinations, concessions of use, affectations and leases.
In particular, it states, among others, that the general provisions for sale, lease and use through concessions of fiscal lands for the installation of energy generation and transmission infrastructure.

Income Tax

DL 824/1974 MINHACIENDA

It establishes, among other provisions, an annual tax for fiscal benefit that taxes air emissions of particulate matter, oxides of nitrogen, sulfur dioxide and carbon dioxide, produced by fixed sources that add a power greater than or equal to 50 MW thermal.

Incentives for Economic Development in Extreme Zones

LAW 19.606/1999 MININTERIOR

It grants a tax credit in favor of all those First Category taxpayers that invest in the extreme zones of the country, destined to the production of goods or provision of services in said zones.

Incentives for Economic Development in Arica and Parinacota

LAW 19.420/1995 MINHACIENDA

It grants a tax credit in favor of all those First Category taxpayers that invest in the provinces of Arica and Parinacota, destined to the production of goods or provision of services in said zones.

ENERGY INSTITUTIONALITY

ENERGY POLICY

INTERNATIONAL TREATIES

REGULATIONS

ELECTRICITY SECTOR

GENERATION

Small Distributed Generation
DS 244/2006 MINECON

It establishes an **optative energy price stabilization mechanism** for proprietors of generation means whose capacity surplus does not exceed **9 MW**; as well as the procedure for obtaining the authorization, operation and coordination of those generation means when they connect to electric lines from a distribution concessionaire, or facilities of a company with distribution lines that use national goods of public use.

Capacity Transfers between Generation Companies
DS 62/2006 MINECON

It regulates the **transfers of capacity between generation companies**, which are determined from the generation capacity that is compatible with the sufficiency and with the existing peak demand engagements.

Determination and Payment of Compensations for Unavailability
DS 37/2017 MINENERGÍA

It regulates the **compensations that coordinated electricity companies must pay** in case of unavailability of the electricity supply.

Hydraulic Pump Stations Without Hydraulic Variability
DS 128/2016 MINENERGÍA

It regulates the treatment for **pumping facilities without hydraulic variability** as electricity storage systems coordinated by the Coordinator, as well as their technical characteristics.

Tenders for the Provision of Annual Energy Blocks with NCRE
DS 29/2014 MINENERGÍA

It establishes the **conditions and characteristics of the annual public tender processes** for the provision of energy blocks from NCRE means and the applicable rules to materialize and operate the awarded projects.

MEDIUM SYSTEMS

Medium Systems Operation and Management
DS 23/2015 MINENERGÍA

It establishes the **provisions applicable to electrical systems** which installed generation capacity is between **1.5 MW and 200 MW**, named Medium Systems.

Recovery and Expansion of Medium Systems
DS 229/2005 MINECON

It establishes the **conditions and requirements for current installations in Medium Systems to qualify as generation facilities or transmission facilities** and makes provision for the cost and demand calculation methodology.

Regulation of the Expert Panel
DS 44/2018 MINENERGÍA

It regulates the **integration, operation, financing and faculties of the Expert Panel**, as well as the procedures and other matters necessary for the proper exercise of their duties.

TRANSMISSION

Long-Term Energy Planning
DS 134/2017 MINENERGÍA

It regulates the **procedure applicable to long-term energy planning** in order to determine the scenarios for the transmission system planning, subject to the provisions of the LGSE.

Determination of Preliminary Corridors for New Transmission Projects
DS 139/2017 MINENERGÍA

It establishes the procedure applicable to the determination of alternative and preliminary corridors for those new transmission projects that may require it and the determination of the final layouts, security corridors and the constitution of electrical easements in case of determining corridors.

COORDINATION AND OPERATION OF THE SEN

Coordination of the Operation
DS 291/2008 MINECON

It complements the LGSE regarding the **obligations of the Coordinator**, as well as the **planification** and programming of the operation.

Supply Security Plans Requirements
DS 97/2008 MINECON

It regulates, among others, the **circumstances under which a Supply Security Plan is required to the Coordinator**. The plan will be a set of measures to be fulfilled by the Coordinator, aiming at ensuring the supply of the relevant electrical system and the prevention of deficit situations or reducing to a minimum level the risk of them within a given period of time. The plan shall also take into consideration, where applicable, a proper handling of the hydrological resources of a system and/or the optimal use of the available consumables for thermal plants.

International Exchanges of Electrical Services
DS 142/2017 MINENERGÍA

It establishes the **requirements, terms and procedures for energy export and import applications and other electrical services**, from and to the electrical systems located within the national territory.

Independent Coordinator of the SEN
DS 52/2018 MINENERGÍA

It establishes the provisions applicable to the organization, composition and operation of the Coordinator. It also regulates all the necessary matters for the Coordinator to exercise its duties and powers according to the provisions of the LGSE and other applicable regulations.

Ancillary Services
DS 113/2019 MINENERGÍA

Ancillary Services are those services that allow the coordination of the operation of the National Electric System. The Coordinator, through the Ancillary Services, must preserve the security of the service and guarantee the most economical and quality operation for the electric system.

DISTRIBUTION

Concessions and Distribution
DS 327/1998 MINMINERÍA

It regulates all those matters of the LGSE that are not entrusted to a special regulation. Currently those standards regarding **concessions and electricity easements; security and quality of the electricity supply** provided by electricity distribution companies; determination of the distribution component of the tariffs applicable to regulated customers, among others, remain valid.

Price Determination for Ancillary Services
DS 341/2008 MINECON

It regulates the **determination of prices for services different from the electricity supply** provided by distribution concessionaires as **ancillary services**, such as: leasing, installation; modification or reprogramming of electricity consumption measuring devices; installation, removal or capacity enlargement of electric connections; or review of electric projects.

Base Price Determination
DS 86/2013 MINENERGÍA

It establishes the **applicable rules for determining the energy and capacity prices** that will be transferred from the concessionaires of the public service of distribution to their clients subjected to tariff regulation.

Energy Tender for Regulated Customer
DS 106/2016 MINENERGÍA

It establishes the **provisions applicable to bidding procedures for the supply of electrical energy**, which have the purpose of making the public services concessionaires put in place energy supply agreements to supply the consumption of regulated customers located in their concession area with electrical systems of **installed capacity greater than 200 MW**.

Distributed Generation (Netbilling)
DS 71/2014 MINENERGÍA

It establishes the **requirements and procedures to be met by distribution companies, installers and regulated customer of the distribution companies** that have NCRE generation equipment or efficient cogeneration facilities for **self-consumption**, for them to be able to use their right to inject their energy into the distribution network, and have this injection economically valued and discounted from their energy bill.

Technical Standard for Low-Voltage Consumption Facilities
DS 115/2004 MINECON

This standard aims at establishing the **minimum security conditions to be met by low-voltage consumption** electrical facilities to safeguard people who operate or use them and preserve the environment where they have been built.

OTHER MATTERS

Regulation of the Expert Panel
DS 44/2018 MINENERGÍA

It regulates the **integration, operation, financing and faculties of the Expert Panel**, as well as the procedures and other matters necessary for the proper exercise of their duties.

Procedure for Issuing Technical Standards
DS 11/2017 MINENERGÍA

It regulates the **procedure for elaboration and amending technical standards governing technical matters related to security, coordination, quality, information and economic performance of the electrical sector**. These standards are enacted by the CNE.

Procedure for determining other Means for the Generation of Non-Conventional Renewable Energies
DS 20/2015 MINENERGÍA

It regulates the **procedure for determining other means for the generation of NCRE**, which use renewable energies for the production of electricity and diversify supply sources.

Security of Electrical Facilities
DS 109/2018 MINENERGÍA

It establishes the **minimum security requirements to be met by electrical facilities devoted to the production, transportation, provision of ancillary services, storage and distribution systems of electrical energy**. It also establishes the obligations of natural and legal persons that participate in these activities to develop them in a safe manner.

RENEWABLE ENERGY²

Tax Exemption of Thermal Solar Systems
DS 331/2010 MINENERGÍA

It establishes **complementary standards for implementing Law N° 20.365**, that establishes a fiscal credit for building companies installing Thermal Solar Systems intended for warming sanitary water in new residences before 2020.

It also details the minimum requirements Thermal Solar Systems must meet, their installation and mandatory maintenance, as well as other matters entrusted by the law.

Geothermal Energy Concessions
DS 114/2013 MINENERGÍA

It regulates the **procedure and granting of geothermal energy exploration and exploitation concessions**, as well as the **control and compliance with the obligations** derived from the concession, whether it is granted to explore or to exploit.

Safety of Biogas Facilities
DS 119/2017 MINENERGÍA

It establishes **minimum safety requirements that biogas facilities must comply with in the design, construction, operation, maintenance, inspection and definitive conclusion of operations**, in which any of the stages associated with generation or consumption of biogas is specified out.

Quality Specifications for Biofuels
DS 172/2008 MINECON

It contains quality definitions and specifications for the production, import, transport, storage, distribution and commercialization of bioethanol and biodiesel.

EMISSIONS

Procedure for Applying a Tax Over Atmosphere Contaminating Emissions
DS 18/2016 MMA

It regulates the **obligations and procedures for identifying taxpayers who are obliged to pay the tax over emissions to the atmosphere** of particulate material, Nitrogen Oxides, Sulfur Dioxide and Carbon Dioxide produced by facilities with boilers or turbines that, individually or as a group, have a thermal capacity greater than or equal to 50 MW, considering the maximum limit of the energetic value of fuel established in the Income Tax Law. It also establishes the administrative procedures required for its correct implementation.

Emission of Atmosphere Contaminants for Thermal Power Plants
DS 13/2011 MMA

It seeks to **control the emission to the air of Particulate Material (PM), Nitrogen Oxides (NOx), Sulfur Dioxide (SO2) and Mercury (Hg)**, aiming to prevent and protect people's health and the environment. **This regulation is mandatory throughout the Chilean territory.**

FUEL SECTOR

SECURITY

Security of Facilities and Production, Refining, Transportation, Storage, Distribution and Supply of Liquid Fuels
DS 160/2009 MINECON

It establishes the minimum safety requirements that liquid petroleum and biofuel (LP) fuels installations must fulfill, and the operations associated with the production, refining, transport, storage, distribution and supply of LP that are carried out in such facilities, as well as the obligations of natural and legal persons involved in such operations. The latter, in order to develop such activities in a safe manner, controlling the risk in such a way that it does not constitute a danger to people and/or things. It will not be applicable to facilities in oil production fields, direct aircraft supply or LP maritime transport.

Security for the Transportation and Distribution of Gas Network
DS 280/2010 MINECON

It establishes the minimum safety requirements that must be met by gas transmission and distribution networks, new and in use ("gas networks"), with respect to their design, construction, operation, maintenance, repair, modification and inspection and in addition, the obligations of natural and legal persons involved in these facilities are established. The latter, in order to develop such activities in a safe manner, controlling the risk in such a way that it does not constitute a danger to people and/or things.

Safety for the Transportation of Liquefied Natural Gas
DS 102/2014 MINENERGÍA

It establishes the minimum safety requirements that the transport units of LNG must meet in the stages of design, manufacture, commissioning, operation, maintenance, inspection and definitive end of operations, as well as the obligations of the natural and legal persons that intervene in them. The latter, in order to develop such activities in a safe manner, controlling the risk in such a way that it does not constitute a danger to people and/or things.

Safety for Storage, Transportation and Distribution of Liquefied Petroleum Gas
DS 108/2014 MINENERGÍA

It establishes the minimum safety requirements that LPG facilities must meet, in the stages of design, construction, operation, maintenance, inspection and definitive end of operations, in which storage, packaging, transport, transfer, and distribution activities will be carried out. It also regulates the supply of LPG, as well as the obligations of natural and legal persons involved in said activities. The latter, in order to develop such activities in a safe manner, controlling the risk in such a way that it does not constitute a danger to people and/or things.

Safety of Liquefied Natural Gas Plants
DS 67/2012 MINENERGÍA

It establishes minimum safety requirements for the design, construction, operation, maintenance, inspection and definitive termination of LNG Plant operations, in which Natural Gas liquefaction is performed or LNG is received, stored, transferred or regasified. It also establishes