

CHILE

1. GOALS FOR EFFICIENCY IMPROVEMENT

1.1. Overall Energy Efficiency Improvement Goals

The Chilean Government has delivered a National Energy Strategy, which will be the navigation guidance for the next 20 years. This Strategy aims to achieve a cleaner, safer, and cheaper energy, and meets the energy requirements of our country. This strategy is based on a set of support, of which energy efficiency will be the first pillar of energy development.

1.2. Sectorial Energy Efficiency Improvement Goals

The National Energy Strategy has established a goal of 12% reduction in energy projection by 2020. Additionally the Ministry is elaborating an Action Plan by 2020 to reach the established goal

1.3. Action Plans for Promoting Energy Efficiency

The Energy Ministry is the institution responsible for developing public policies in energy efficiency, it centralizes the functions to develop, propose and evaluate actions in this area. The Energy Efficiency Division of the Ministry is responsible to define and promote: objectives and goals in energy efficiency, the regulatory framework that promotes energy efficiency, long-term strategy to follow.

Chile has a number of government institutions working to achieve increased energy efficiency, one of the most important is the Chilean Energy Efficiency Agency (Agencia Chilena de Eficiencia Energética - AChEE). The mission of AChEE is to promote, strengthen and consolidate the efficient use of energy by bringing together relevant stakeholders, national and international, and implementing public-private initiatives in energy sectors. AChEE is in charge of the implementation of the energy efficiency programs according to the policies developed by the ministry.

Other important actors are: Superintendencia de Electricidad y Combustibles (SEC)/Superintendency of Electricity and Fuels (SEC); Ministry of Housing; Ministry of Transport and Communications.

1.3.1 Energy Efficiency Monitoring and Reporting

The Division of Energy Efficiency and AChEE have established an area of Measurement and Verification. It seeks to implement methodologies to produce reports at both macro and project level.

At the macro level, energy statistics are prepared by the Prospective Division of the Ministry of Energy, while economic data (national accounts, production) are reported by both the Central Bank of Chile and by the National Institute of Statistics. In addition, we are participating in a project to build a base of energy efficiency indicators in Mercosur countries and partners.

At the project level, the results will be measured based on international methodologies (eg, Protocol CMVP) or by third parties (universities, consultants) to support the savings achieved by each project.

An example of progress is the development of a "methodology for measuring and reporting energy efficiency for the Mining Board", whose objective is that large mining companies manage energy use and measure progress in achieving efficiency. The mining industry in Chile is recognized as a world leader in managing the efficient use of energy.

1.4. Institutional Structure

1.4.1 Central Institutional Structure

a) Name of organisation

Ministry of Energy - Energy Efficiency Division

b) Status of organisation

Design, proposal, and evaluation of public policies in energy efficiency

c) Roles and responsibilities

Develop long-term strategy for energy efficiency.

d) Covered sectors

Covered sectors are: industry and mining, transportation, residential, commercial, construction, government, education, research, development and innovation, etc.

e) Date of establishment

2010

f) Number of staff members

The Ministry of Energy has approximately 150 staff members. The Energy Efficiency Division has seven professionals.

g) Description of Energy Minister

The overall objective of the Ministry of Energy is to develop and coordinate plans, policies and standards for the proper functioning and development of the sector, ensure compliance and advise the Government on all matters relating to energy.

The energy sector includes all activities of study, exploration, generation, transmission, transportation, storage, distribution, consumption, efficient use, import and export, and anything else that relates to electricity, coal, gas, oil and oil products, nuclear energy, geothermal and solar and other energy sources.

1.4.2 Implementing Institution Structure

a) Name of organisation

Chilean Energy Efficiency Agency (Agencia Chilena de Eficiencia Energética) or ACHEE

b) Status of organisation

Policy and program implementer

c) Roles and responsibilities

Promote energy efficiency and constitute itself as a technical organisation

d) Covered sectors

Covered sectors are: Industry (including mining), transportation, residential, commercial, construction, government, education, research, development and innovation, armed forces, etc.

e) Date of establishment

2010

f) Number of staff members

25

g) Description of AChEE

The Energy Efficiency Chilean Agency (AChEE) is a private foundation, nonprofit organization whose mission is to promote, strengthen and consolidate the efficient use of energy by bringing together relevant stakeholders, national and international level, and implementing initiatives public private partnerships in various sectors of energy, contributing to the country's sustainable competitive. AChEE has a board comprising representatives of the Ministry of Energy, Ministry of Finance and the Confederation of Production and Trade

1.4.3 Regional or Local Institutional Structure**a) Name of organisation**

Ministerial Regional Secretaries of Energy (SEREMIS)

b) Status of organisation

SEREMIS lead the implementation of energy efficiency strategies in different regions of the country.

c) Roles and responsibilities

Disseminate and promote the efficient use of energy at the local levels.

d) Covered sectors

Covered sectors are: industry, mining, transportation, residential, commercial, construction, government, education, research, development and innovation, etc.

e) Starting date

2010

f) Number of staff members

There are six regional ministry representatives (SEREMI).

1.4.4 Information Dissemination, Awareness-raising and Capacity-building**a) Information collection and dissemination**

Chile has a product labelling program that leverages the European comparative labelling scheme, which breaks-down all similar models of a product into one of seven efficiency categories: A (most efficient) through G (least efficient). This labelling is currently applied to: incandescent bulbs (2007), compact fluorescent lamps (2007), refrigerators (2008), refrigerator-freezer (2008), freezer (2008), standby in: microwaves (2010) – TVs (2011) – Set top Box (2011) – stereos (2012) – DVDs (2012) – Blu Ray (2012), electric motors to 10 hp (2011), air conditioner (2011).

Products covered are mostly for residential applications. The future coverage is aimed at residential to small commercial applications, like: sodium lamps, high and low pressure (2012), ballast for sodium lamps, high and low pressure, ballast for high pressure mercury lamps, and/or metal halides (2012), LED technology devices for lighting fixtures (2012).

Appliances that are in the process of defining labels and measurement and verification protocols are: washing machine (2012), gas water heater (2012), gas stove (2012), halogen lamp (2012).

Ministry of Energy is working with Ministry of Housing and Urbanism in volunteer housing labeling.

Another initiative that is being developed is new car labeling, which will be in operation during 2012.

b) Awareness-raising

Chile has carried out, at least once per year, communication campaigns aimed at residential users, through television, billboards and newspapers. The last campaign is called “La Energía Importa” (Energy Matters), it has emphasis in energy efficiency and it has a national scope.

In 2011 the 2nd “Energy Efficiency Exposition” was held, a place to exchange experiences and learn more about this topic. The exposition in 2011 featured more than 150 participating companies and more than 8,000 visitors. In this edition, it had international speakers, like Amory Lovins (EE.UU), Darío Pérez (Spain), Bill Wylie (Canada), and others.

c) Capacity-building

There are numerous opportunities for energy efficiency training for professionals of the area, including courses offered in about 20 universities, and two engineering associations with sub-groups focused on energy.

In 2011, AChEE made three professional certifications: CRU: Certified Retscreen User; CMVP: Certified Measurement & Verification Professional program; CEM - Certified Energy Manager. Also the first certified "European Energy Manager" was dictated by the German-Chilean Chamber of Commerce and Industry.

1.5. Research and Development in Energy Efficiency and Conservation

The Energy Efficiency Division has conducted a series of studies to evaluate the potential of energy efficiency. Research highlights include the following:

- Study of Bases for the elaboration of an Action Plan for Energy Efficiency.
- Study of energy end uses in the residential sector.

There are insipient policies on energy efficiency research, development and demonstration.

Although research is done mostly in universities, there are energy efficiency research projects and programs in the government.

2. MEASURES FOR ENERGY EFFICIENCY IMPROVEMENTS

2.1. Government Laws, Decrees, Acts

In February of 2010 the Ministry of Energy was created, the highest organ of cooperation of the President in the functions of government and administration of the energy sector. The ministry centralises the functions of developing, proposing and evaluating public policies, including the definition of objectives, regulatory frameworks and strategies to be applied, as well as the development of public policy instruments.

2.2. Regulatory Measures

2.2.1. Mandatory Labelling

See point 1.4.4 a)

2.2.2. Minimum Energy Performance Standards

Chile is developing a strategy to establish MEPS. The first milestone is to have the MEPS regulation in 2012.

2.2.3. Minimum Thermal Standards

a) Name

Minimum Thermal Standard for Residential Buildings

b) Purpose

To improve the energy efficiency of residential buildings

c) Applicable sectors

Construction

d) Outline

In 2000, the Ministry of Housing and Urbanism began a process to establish a Minimum Thermal Standard for Residential Buildings. The first regulation that went into effect includes minimum transmittance and thermal resistance requirements. In January 2007 Building Envelope Regulation went into effect involving to the entire building envelope including roof, walls, ventilated floor and windows.

e) Financial resources and budget allocation

No information available

f) Expected results

No information available

g) Other regulatory measures

No information available

2.3. Voluntary Measures

a) Name

Mining Roundtable on Energy Efficiency (MMEE)

b) Level

Economy-wide

c) Purpose

The promotion of energy efficiency research; dissemination of results coming out of energy efficiency projects in the mining sector; evaluation of energy efficiency pilot projects; fostering technology development and innovation in or the mining sector and fostering an energy efficiency culture within the mining companies that are members of the roundtable.

d) Applicable Sectors

Mining sector

e) Outline

Started in 2006

f) Financial resources and budget allocation

No information available

g) Expected results

Support management in the energy efficiency (EE) in companies and mining operations in Chile to improve its energy management by developing cross-cutting projects on energy.

h) Description

MMEE consists of a voluntary affiliation by the 14 largest mining companies in the economy in addition to other participants, such as the Chilean Chapter of the International Copper Association (ICA and Procobre), Mining Council, ACHEE and Mining Ministry.

i) Other voluntary measures

There are several other sectorial round tables such as the one established with the retail sector, where studies are underway to determine the characteristics of consumption and energy efficiency recommendations for its members.

2.4. Other Measures

a) Name

National Truck Replacement Program

b) Purpose

Replace of 350 trucks older than 20 years with new and efficient ones that fulfil the EURO III or EPA 98 standards.

c) Applicable sectors

Transport

d) Outline

This program was carried out in two stages, the first one in 2009, when 196 trucks were replaced, the second stage in 2011 with 154 trucks involved. In the latter the drivers were also trained in eco-driving.

e) Financial resources and budget allocation

The financial resource for this program was equivalent to USD 6 million.

f) Expected results

The savings of the first stage are estimated as 1.7 million litres of fuel and 4.000 t of CO₂ in ten years. The savings of the second stage are estimated as 2.3 million litres of fuel and 7.500 t of CO₂ in the same period.

2.5. Financial Measures Taken by the Government

2.5.1. Tax Scheme

Chile does not provide any tax scheme for energy efficiency improvements.

2.5.2. Other Incentives

Information not available

2.6. Energy Pricing

There is a government-regulated pricing mechanism for small clients. The price of electricity for regulated consumers is set by the regulator (National Energy Commission / Commission Nacional de Energia). No energy efficiency is considered in the calculation of rates.

2.7. Other Efforts for Energy Efficiency Improvements

2.7.1. Cooperation with Non-Government Organisations

There is a number of NGOs that provide feedback to ACHEE. A study of the economy-wide energy efficiency potential was financed by NGOs.

In 2011 there were two important inputs for energy policy in Chile: Report of the Advisory Committee for Electrical Development, and the Technical Committee Report of the parliament.

2.7.2. Cooperation through Bilateral, Regional and Multilateral Schemes

Chile participates in COPANT¹ for the harmonisation of energy efficiency standards, and participated in the design discussions of the ISO 50.001 standard.

Currently being developed to generate instances National mirror committee of ISO / TC 242 Energy Management, this allows the participation of national stakeholders in Chile.

On the other hand, Chile has an active participation in the Energy Working Group (EWG) of the Asia Pacific Economic Cooperation (APEC). On the regional level, Chile participates in MERCOSUR's efforts to promote energy efficiency in the region, and collaborates with ECLAC in this area.

2.7.3. Other Cooperation/Efforts for Energy Efficiency Improvements

2.7.3.1. Cooperation Agreements

Chile has signed several non-binding cooperation agreements with institutions from different economies, which include some kind of assistance on energy efficiency.

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¹ Pan American Standards Commission – COPANT.