**TC ABSTRACT**

**I. Basic Project Data**

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| ▪ Country/Region: | CHILE/CSC - Southern Cone |
| ▪ TC Name: | Support for the Modernization of the Energy Sector of Chile with a Citizen-Based Approach |
| ▪ TC Number: | CH-T1228 |
| ▪ Team Leader/Members: | Marzolf, Natacha (INE/ENE) Team Leader; Aiello, Roberto (INE/ENE) Alternate Team Leader; Madrigal, Marcelino; Suber, Stephanie; Malagón, Edwin; and Márquez, Fidel (INE/ENE); Robles, Paola; and Walter, Martín (INE/CCH); Navas, Cristian; and Rodríguez, Raúl (INE/TSP). |
| ▪ Taxonomy: | Client Support |
| ▪ Number and name of operation supported by the TC: | N/A |
| ▪ Date of TC Abstract: | February 13, 2020 |
| ▪ Beneficiary: | Ministry of Energy |
| ▪ Executing Agency: | Inter-American Development Bank |
| ▪ IDB funding requested: | US$250,000.00 |
| ▪ Local counterpart funding: | US$0.00 |
| ▪ Disbursement period: | 24 months |
| ▪ Types of consultants: | Individuals; Firms |
| ▪ Prepared by Unit: | Energy Division – INE/ENE |
| ▪ Unit of Disbursement Responsibility: | Infrastructure and Energy Sector – INE/INE |
| ▪ TC included in Country Strategy (y/n): ▪ TC included in CPD (y/n): | No Yes |
| ▪ Alignment to the Update to the Institutional Strategy 2010-2020: | Productivity and innovation; Institutional capacity and Rule of Law; Environmental sustainability |

**II. Objective and Justification**

2.1 The objective of this Technical Cooperation (TC) is to give support to the Government of Chile (GoCh) through the Ministry of Energy (MINENERGIA) for the modernization of the energy sector with a citizen-based approach following the commitments and priorities set forth in Chile's Energy Roadmap 2018-2022.

2.2 The Energy Roadmap 2018-2022 calls for the modernization of the energy sector by bringing the reforms closer to its citizens and with the following institutional priorities to: (i) generate a macroeconomic framework consistent with the Energy Roadmap 2018-2022 objectives; (ii) ensure a long-term electricity policy that takes into account changes in the sector; (iii) provide incentives for efficient energy use through the promulgation of energy efficiency (EE); (iv) regulate the use of non-conventional renewable energy such as biomass and geothermal energy; and (v) ensure a long term fuel policy.

2.3 Within this context, a series of ten key commitments has been made: (i) draw up a map of the country's energy vulnerability; (ii) modernize energy institutions; (iii) reduce by 25% the environmental processing time for infrastructure projects; (vi) reach four times the current capacity of small-scale renewable distributed generation (less than 300 KW) by 2022; (v) increase the number of electric vehicles circulating in Chile; (vi) modernize the regulation of electricity distribution; (vii) regulate solid biofuels such as firewood and its derivatives; (viii) establish a regulatory framework for EE that encourages efficient energy use in the sectors with the highest consumption; (ix) begin the process of decarbonizing the energy matrix by drawing up a timetable for withdrawing or converting plants to coal, and introducing specific measures for electromobility; and (x) train at least 6,000 operators, technicians and professionals, developing competencies and skills in the management and sustainable use of energy in the electricity, fuel and renewable energy sectors, certifying at least 3,000 people.

2.4 In addition, Chile has made substantial efforts to achieve a more sustainable and clean energy matrix, which are identified in its Energy Agenda and the National Energy Policy 2050 (NEP) calling for a gradual transition to a lower carbon economy where innovative technology will play a key role to achieve medium and long-term climate change goals such as hydrogen use, sustainable fuels for residential consumption (heating and cooling in particular) and cleaner fuels for transportation. These efforts are further reflected in Chile’s Intended Nationally Determined Contributions (INDC) on mitigation and reduction of its greenhouse gas emissions by 2030.

**III. Description of Activities and Outputs**

3.1 **Component I. Energy Sector Digitalization Plan.** This component will develop the digital strategy that will shape Chile’s future energy sector (including cyber security, smart cities, demand management and big data) and thus significantly reduce costs, increase resiliency and optimize energy use. It will support the digital and digitized transformation of the energy industry taking advantage of the technology disruptions (AI, data mining, etc.). This component will consist of a combination of consultancies (studies) and training workshops.

3.2 **Component II. Support for the Implementation of Energy Reforms to Modernize the Electricity Sector.** This component will finance consultancies that will pave the way for implementing Chile’s sustainable energy commitments as follows: (i) bill of law for an electric distribution law; (ii) thermal technologies for cooling and heating; (iii) drafting of an energy efficiency bill of law; (iv) new ancillary services market for flexibility of the electric system; and (v) support for an electromobility regulatory framework and EE standards for EV (specifically, cars and buses).

3.3 **Component III. Energy Transition Plan for Residential Heating Matrix.** This component will fund – through studies and consultancies – the development of an energy transition plan to move away from the residential use of firewood and charcoal and include: (i) regulation of firewood and biofuels; (ii) identification of zero carbon technologies to diversify the residential heating matrix; (iii) viability studies for firewood substitutes; and (iv) regulatory measures successfully implemented in other countries and which could be replicated and scaled up in Chile.

**IV. Budget**

**Indicative Budget**

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| **Activity/Component** | **IDB/Fund Funding** | **Counterpart Funding** | **Total Funding** |
| **Component I.** Energy Sector Digitalization Plan | US$70,000.00 | US$0.00 | US$70,000.00 |
| **Component II.** Support for the Implementation of Energy Reforms to Modernize the Electricity Sector | US$100,000.00 | US$0.00 | US$100,000.00 |
| **Component III.** Energy Transition Plan for Residential Heating Matrix | US$80,000.00 | US$0.00 | US$80,000.00 |
| **Total** | **US$250,000.00** | **US$0.00** | **US$250,000.00** |

**V. Executing Agency and Execution Structure**

5.1 As per request of the beneficiary, and in order to expedite the execution of the TC, the Bank will be the Executing Agency (EA) through the Energy Division (INE/ENE). Selection and contracting of the consulting firms and individual consultants will be done in accordance with IDB procurement policies and procedures (GN-2350-9). In accordance with the document Operational Guidelines for Technical Cooperation Products, Revised Version (GN-2629-1), this TC is classified as a Client Support product.

5.2 MINENERGIA has ample experience in executing policy loans with the Bank, such as the execution of loan "Sustainable Energy Program" (3821/OC-CH) approved by the Bank's Board of Directors on November 30TH 2016, disbursed that same year and where MINENERGIA and the National Energy Commission demonstrated high technical and management capacities in implementing and achieving the Program's commitments and meeting all the policy conditionalities agreed upon in the Policy Matrix. The professionals who acted as counterparts of the Program have a high level of specialized training in the energy sector and coordination skills to work as a team. Additionally, there is a coordination office (Office of International Affairs) that the Project Team will work closely with and which will help to coordinate the TC activities within MINENERGIA.

**VI. Project Risks and Issues**

6.1 The main risk for the execution of this TC is linked to the complexity of the technical aspects associated with each component and the fact that, given the current crisis resulting from the COVID-19 pandemic, other priorities may take precedence. Notwithstanding the latter, this risk is mitigated by MINENERGIA having established a strong technical team, obtained the endorsement and participation of their international affairs office which reports to the MINENERGIA cabinet and the support of a solid multi-disciplinary team at the Bank.

**VII. Environmental and Social Classification**

7.1 The ESG classification for this operation is "undefined".