United Nations
Framework Convention on
Climate Change

NAMA Seeking Support for Implementation

A.1 Party	Chile
A.2 Title of Mitigation Action	Expanding self-supply renewable energy systems (SSRES) in Chile
A.3 Description of mitigation action	The Renewable Energy Centre (Centro de Energías Renovables, CER) of Chile, part of the Chilean government's economic development agency (CORFO) and an implementing arm of the Ministry of Energy, has developed a NAMA on self-supply energy systems based on renewable energy. The overall objective of the NAMA is to promote the incorporation of renewable energy systems for self supply in all economic sectors. The NAMA will address technical and financial barriers to small-scale renewable energy systems for self-supply in industrial, agricultural and commercial sectors, through financial instruments, technical support, and outreach and awareness with the support from the Renewable Energy Centre. Specifically the NAMA aims to: • Increase the uptake of small-scale renewable energy systems across the economic sectors. • Contribute to the achievement of Chile's national target to achieve a 20% deviation of GHGs below business-as-usual by 2020. • Support the development of the incipient energy services industry and further develop the market for renewable energy technology in Chile. The NAMA will achieve these objectives through a comprehensive programme that will simultaneously address technical and financial barriers to small-scale renewable energy deployment. The NAMA will be coordinated by Chile's Renewable Energy Center, a public institution that promotes and facilitates conditions for establishing non-conventional renewable energy in Chile. The components of the NAMA are:
1. Financial component:	
i) Preinvestment grants	
ii) Fund for renewable energy investments	
2. Technical Support component:	
i) Training and capacity building. Modules will be developed and delivered targeted at the different stakeholder groups (project developers, energy service professionals, the financial service industry as well as relevant government officials) covering at least:	
•	Renewable energy technologies and risk

- Project finance
- Project management
- Energy systems and audits
- Specific technologies demonstrations
- Regulatory and legal issues associated with RE technologies

ii) Technical help desk :

A technical help desk will be set up to provide a central entry point for project developers and other stakeholders in the self supply RE technology market.

The help desk would also function as a knowledge hub on self supply RE technology in Chile. Services may include the following:

- Run and maintain a public database of self- supply renewable energy installations and case studies in Chile
- Coordinate information and research on RE technology and related topics
- Organisation of events, conferences and workshops

3. Outreach and awareness component :

- Public awareness campaigns
- Technology road shows and demonstrations (site visits)
- Regional and local events

A.4 Sector

- ☒ Energy supply
- ☐ Residential and Commercial buildings
- ☐ Agriculture
- ☐ Waste management
- ☐ Transport and its Infrastructure
- ☐ Industry
- ☐ Forestry

A.5 Technology

- ☒ Bioenergy
- ☐ Energy Efficiency
- ☒ Hydropower
- ☒ Wind energy
- ☐ Carbon Capture and Storage
- ☐ Cleaner Fuels
- ☒ Geothermal energy
- ☒ Solar energy
- ☒ Ocean energy
- ☐ Other <Pls enter Other text here>

A.6 Type of action

- ☐ National/ Sectoral goal
- ☐ Strategy
- ☒ National/Sectoral policy orprogram
- ☐ Project: Investment in machinery
- ☐ Project: Investment in infrastructure
- ☐ Other: <Pls enter Other text here>

B National Implementing Entity

B.1 Name	Renewable Energy Centre
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B.4.1 Contact Person (alternative Contact Person 2)	Alexa Kleysteuber
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C. Expected timeframe for the implementation of the mitigation action

C.1 Number of years for completion	10
C.2 Expected start year of implementation	2013

D.1 Used Currency	USD

E Cost

E.1 Estimated full cost of implementation	60,000,000.00
E.2 Estimated incremental cost of implementation	30,000,000.00

F Support required for the implementation of the mitigation action

F.1.1 Amount of financial support 15,000,000.00

F.1.2 Type of required financial support

☐ Loan (sovereign)	☒ Loan (Private)
☐ Concessional loan	☐ Debt Swap
☒ Grant	☐ Equity
☐ Guarantee	☒ Carbon finance
☐ FDI	☐ Others:<Pls enter Other text here>

F.1.3 Comments on Financial Support <The NAMA is still under design and open to discussion in terms of the most effective and adequate types of financial support for the different components. In any case, the Government of Chile has already alocated around 15 million USD for the

	promotion of SSRES in the form of grants and guarantees. The idea is to increase the amount of financial resources available for this program in order to amplify and accelerate its impact in the following years. Because of the structure of the NAMA, different financial vehicles will be designed and implemented according to the specific needs of each of the sectors and the stage of market development. The total amount of financial support is 15,000,000, which includes an amount of 1,500,000 for capacity building (10% of total amount).
F.2.1 Amount of Technological Support	0.00
F.2.2 Comments on Technological Support	<Pls enter Comments here>
F.3.1 Amount of capacity building support	1,500,000.00 ☒ $ (Dollars) ☐ man/hours
F.3.2Type of required capacity building support	☒ Institutional development ☒ Human capital ☐ Systemic (policies, legislative, regularatory,etc)

F.3.3 Comments on Capacity Building Support Because of the early development of the renewable energy market in Chile, a key aspect of the program is the promotion of capacity building activities in order to make available the technical capacities in the country to design, implement and operate the SSRES. During 2012, CER trained more than 300 people with basic skils to evaluate and design SSRES in various technologies. This work must be continued and expanded in order to reach the country's goals.

G Estimated emission reductions

G.1 Amount 1.70

G.2 Unit MtC02e/yr

G.3 Additional information (e.g. if available, information on the methodological approach followed):
Emission reduction estimates are preliminary and are currently being reviewed as part of the NAMA design process.

Monitoring, reporting and verification (MRV) will be undertaken to verify the outcomes of this NAMA. To do so, the CER is developing an MRV platform that will be available from March 2013. The first step in the MRV process for an installation is to complete a standardized baseline calculation sheet according to the type of project being undertaken. These worksheets would be published by the CER in advance and made available in an easy-to-use tool such as MS Excel. The tool would estimate the emission reduction potential of a project and calculate emission factors for a reference and a mitigation scenario. All applicants would need to submit

the worksheet with their application for funding. If funding is granted, the following steps would be undertaken:

1. The CER would store the reference and mitigation scenario emissions factors for the installation in a centralized database. Installations would be identified with unique ID numbers.
2. Meters would be installed that would measure electricity, heat production or both. This data would be reported to the CER on a predetermined basis.
3. CER would calculate estimated GHG impacts by multiplying activity data with emission factors for the reference and mitigation scenarios of all installations under the programme.
4. Non-punitive corrective measures would be taken if installations are not performing according to a specified standard.
5. Random audits would be undertaken annually for a percentage of the installations to verify data

H.1 Other indicators of implementation

Depending on the co-benefits that will be evaluated, other data will also be collected at the installation level. These correspond to other objectives under the programme and include:

Renewable energy capacity installed: Indicates the total amount in MW of renewable energy installed. This indicator is broken down into subsets according to technology.

Job creation: Indicates the number of permanent and temporary positions created as a result of renewable energy projects that are part of the programme. Expressed in units of Full Time Equivalent positions.

Private sector leverage ratio: Indicates the contribution of the private sector to renewable energy projects under the programme. It is expressed as a ratio of (NAMA funds:private funds). For example, a value of 1:2 would indicate that for every $1 spent on the programme $2 was contributed by the private sector.

I.1 Other relevant information including benefits for local sustainable development

Self-supply non conventional renewable energy projects will reduce the demand for grid connected power, thereby contributing to local sustainable development by using available natural resources, reducing external dependence and decreasing pollution that would be generated by using other types of power generation sources that use fossil fuels. By promoting market growth and competition, this NAMA will enable more suppliers to establish themselves in Chile and contribute to reducing the cost of renewable energy.

J Links to National Policies and other NAMAs

J.1 Relevant National Policies

National Energy Strategy:

<http://www.minenergia.cl/documentos/estudios/national-energy-strategy-2012-2030.html>

National Climate Change Action Plan:

http://www.mma.gob.cl/1304/articles-49744_Plan_02.pdf