



NAMA Seeking Support for Implementation

A.1 Party Uruguay

A.2 Title of Mitigation Action First introduction of Photovoltaic Solar Energy in the national electrical grid.

A.3_Description of mitigation action Since 2005, Uruguay has been developing an aggressive introduction of Non-Conventional Renewable Energies. The first steps have been focussed on specific measures for the introduction of wind power and biomass to the national grid, as well as solar thermal for domestic hot water production in commercial-services sectors, industry, public sector and more recently in residential sector. This process will allow reach the goal of have at least 50% of the national energy supply mix based on renewable sources and that at least 90% of the electrical grid supported by renewable sources, according to the Energy Policy 2005-2030.

The mix of non-conventional renewable energy in Uruguay produces not only environmental and social externalities, but also favorable economic externalities for the country.

Recent studies of technology foresight, developed by the Secretary of Energy (Ministry of Industry, Energy and Mining), show that in the short term Photovoltaic Solar Energy will be a source that meet conditions stated above. In this context, the Government of Uruguay has defined actions in order to incorporate in 2013 approximately 1% of the average power demand of Uruguay using solar source with photovoltaic technology. In this sense, the Secretary of Energy is working on the creation of conditions for holding a competitive process for the incorporation of new plants by private companies, ensuring the introduction of all the solar energy that can be generated in these ventures, through the signing of PPA contract with the Public Electric Utility (UTE). In addition, it has been guided the international cooperation for the purpose of building the first two solar farms (pilots) connected to the grid in order to test the technologies and their performance. After this initial goal, and considering that Uruguay would have achieved enough knowledges and local capacities at that time, the objective is to lead a continuous expansion of this technologies, willing to achieve de goal of 200 MW in 2020.

For all these reasons, it is essential to support this process with actions to achieve local capacity building in order to incorporate this technology in the legal



and technical regulatory framework, while generating knowledge and expertise for the sustainable future incorporation of fotovoltaic energy power in the national energy mix.

A.4 Sector Energy supply Transport and its Infrastructure
 Residential and Commercial buildings Industry
 Agriculture Forestry
 Waste management

A.5 Technology Bioenergy Cleaner Fuels
 Energy Efficiency Geothermal energy
 Hydropower Solar energy
 Wind energy Ocean energy
 Carbon Capture and Storage Other <Pls enter Other text here>

A.6 Type of action National/ Sectoral goal
 Strategy
 National/Sectoral policy or program
 Project: Investment in machinery
 Project: Investment in infrastructure
 Other: <Pls enter Other text here>

B National Implementing Entity

B.1 Name Secretary of Energy; Ministry of Industry, Energy and Mining.

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C. Expected timeframe for the implementation of the mitigation action

C.1 Number of years for completion 2

C.2 Expected start year of implementation 2015

D.1 Used Currency USD/kW of installed capacity



E Cost

E.1 Estimated full cost of implementation 2,000.00

E.2 Estimated incremental cost of implementation

F Support required for the implementation of the mitigation action

F.1.1 Amount of financial support 2,000,000.00

F.1.2 Type of required financial support

- | | |
|--|---|
| <input type="checkbox"/> Loan (sovereign) | <input type="checkbox"/> Loan (Private) |
| <input type="checkbox"/> Concessional loan | <input type="checkbox"/> Debt Swap |
| <input checked="" type="checkbox"/> Grant | <input type="checkbox"/> Equity |
| <input type="checkbox"/> Guarantee | <input type="checkbox"/> Carbon finance |
| <input type="checkbox"/> FDI | <input type="checkbox"/> Others:<Pls enter Other text here> |

F.1.3 Comments on Financial Support The financial support requested will be used in capacity building activities, as well as for the creation of infrastructures, in particular:

Strengthen the assembly and maintenance of the national solar network;

Creation of testing laboratories;

Capacity building support in the regulator organism and the Public Electric Utility (UTE);

Creation of specific technical regulatory framework for this resource;

Training professionals in the areas of engineering and architecture as well as technicians who will work in the development and maintenance of facilities. Financial support will be managed similarly to previously executed projects: "Introduction of Wind Energy in Uruguay" and "Electricity production from biomass". For this, it is necessary to identify the barriers to technology development and define specific measures.

F.2.1 Amount of Technological Support 0.00

F.2.2 Comments on Technological Support

F.3.1 Amount of capacity building support 0.00 \$ (Dollars)
 man/hours

F.3.2 Type of required capacity building support Institutional development
 Human capital
 Systemic (policies, legislative, regulatory, etc)



F.3.3 Comments on Capacity Building Support

G Estimated emission reductions

G.1 Amount 4.58

G.2 Unit MtCO₂e

G.3 Comments In order to estimate GEI reduction, it was considered that all the energy that would be produced by photovoltaic plants during the hole period of operation (from 2015 until 25 year beyond 2020), would have been produced considering the use of fuel oil.

The purpose of the requested financial support is to strengthen the initial steps of implementation of this technology and promote its replication in the future.

H.1 Other indicators of implementation

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

The decentralized feature of this activity makes a positive impact on local development.

J Links to National Policies and other NAMAs

J.1 Relevant National Policies

Energy Policy: <http://www.miem.gub.uy/gxpsites/hgxpp001?5,6,584,O,S,0,,>

"Solar Energy Program in Uruguay": <http://www.energiasolar.gub.uy/cms/>