

NS-7 - Promotion of renewable energy participation in the Uruguayan primary energy mix

Uruguay

NAMA for Recognition

A Overview

A.1 Party

Uruguay

A.2 Title of Mitigation Action

Promotion of renewable energy participation in the Uruguayan primary energy mix

A.3 Description of mitigation action

Several measures promoted by the Uruguayan State will enable reach the objectives and goals established in the Energy Policy, particularly the minimum 50% of the energy supply mix supported by renewable sources by 2015. Some of these measures are detailed below. BIOFUELS: the Law 18.195 (2007) promotes and regulates the production, sale and use of biofuels, entrusting to the National Oil Company (ANCAP) the mixture of ethanol (a minimum of 5% from December 31, 2014 on) with gasoline and biodiesel (minimum of 5% since January 1, 2012) with gas oil. This process of production and mixing of biofuels was initiated by the company Alcohols Uruguay (ALUR) (an ANCAP's company), fostering the development of agro-industrial chains. BIOMASS: eight plants are installed in the country up to 2012, totaling 250MW of installed power, using forestry residues, rice, bagasse and black liquor as fuel. Decree 367/010, enables the Public Electric Utility (UTE) to hold special contracts with suppliers to purchase electricity from these sources. Since 2010 the project "Production of Electricity from Biomass in Uruguay" (PROBIO) URU/10/G31 is being developed, focusing on the analysis of political and information barriers to decentralized power generation connected to the network. WIND: in 2007 a "Wind Energy Program in Uruguay" (PEEU) URU/07/G31 was initiated in order to promote the development of wind energy in the country. Together with the National University, this program developed the national wind map, and with UTE it promoted competitive procedures for the installation of wind farms by private developers. As a result of the first call (Decree 77/2006 and Supplementary) 23MW were installed, while other 20MW are part of the Emanuelle Cambilargiu wind complex (owned by UTE), totaling the 43MW installed in the country up to date. The main impulse to wind energy was a series of three subsequent competitive procedures (Decrees 409/009, 159/011 and 424/011), in which 880MW were awarded to private investors. Most of these wind farms will begin operation prior to 2015, and will be located in different regions of the country. In turn, UTE expects the installation of 71MW through operating leases and 180MW through projects in conjunction with Eletrobras. SOLAR: in Uruguay, Solar Thermal Power (STP) and photovoltaics (PV) are being promoted, the first one showing greater development due to aspects related to

technology and costs. The introduction of the STP was promoted through multiple policy instruments, including the Law 18.585 of Solar Power (2009) and its implementing regulations, Decree 50/012 of Solar Plan creation and municipal regulations, such as Decree 34151/2012 which regulates its utilization in buildings and heated pools. The Solar Plan, launched in 2012, promotes the utilization of STP for residential water heating through affordable loans and discounts on the electric bill. Regarding solar PV energy, two pilot plants of 500kWp each, will be installed in the departments of Salto and Lavalleja, in order to introduce this source in the national grid by year 2014. Additionally, a competitive procedure for the installation of private solar PV plants is planned for the short term. In November 2012 the Secretary of Energy hold a data room presenting relevant information to organizations and private developers, to promote the installation of a maximum 6MW PV capacity. TAX BENEFITS FOR RENEWABLE ENERGY: the Law 16.906 on the Promotion and Protection of Investments, provides a general framework of incentives for investment in the country. Decrees 02/2012 and 354/009 establish the requirements to obtain tax benefits (Consumption, Rent and Heritage taxes), for renewable energy projects. Furthermore, Decree 354/009 promotes a series of activities, including electricity generation from non-traditional renewable sources and local manufacturing of machinery and equipment bound for these and other related activities.

A.4 Sector

<input checked="" type="checkbox"/> Energy supply	<input checked="" type="checkbox"/> Transport and its Infrastructure
<input checked="" type="checkbox"/> Residential and Commercial buildings	<input checked="" type="checkbox"/> Industry
<input checked="" type="checkbox"/> Agriculture	<input checked="" type="checkbox"/> Forestry
<input checked="" type="checkbox"/> Waste management	
<input type="checkbox"/> Other <input type="text"/>	

A.5 Technology

<input checked="" type="checkbox"/> Bioenergy	<input checked="" type="checkbox"/> Cleaner fuels
<input type="checkbox"/> Energy Efficiency	<input type="checkbox"/> Geothermal
<input checked="" type="checkbox"/> Hydropower	<input checked="" type="checkbox"/> Solar Energy
<input checked="" type="checkbox"/> Wind Energy	<input type="checkbox"/> Ocean Energy
<input type="checkbox"/> Carbon Capture and Storage	<input type="checkbox"/> Low till / No till
<input type="checkbox"/> Land fill gas collection	
<input type="checkbox"/> Other <input type="text"/>	

A.6 Type of action

<input checked="" type="checkbox"/> National/ Sectoral goal	<input type="checkbox"/> Project: Investment in machinery
<input type="checkbox"/> Strategy	<input checked="" type="checkbox"/> Project: Investment in infrastructure
<input checked="" type="checkbox"/> National/Sectoral policy or program	<input type="checkbox"/> Project : other
<input type="checkbox"/> Other <input type="text"/>	

A.7 Greenhouse gases covered by the action

<input checked="" type="checkbox"/> CO2	<input type="checkbox"/> CH4
<input type="checkbox"/> N2O	<input type="checkbox"/> HFCs
<input type="checkbox"/> PFCs	<input type="checkbox"/> SF6
<input type="checkbox"/> Other <input type="text"/>	

B National Implementing Entity

B.1.0 Name	Secretary of Energy; Ministry of Industry, Energy and Mining
B.1.1 Contact Person 1	Dr. Ramón Méndez
B.1.2 Address	Mercedes 1041 - 2nd floor, Montevideo, CP: 11.100
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B.1.5 Contact Person 2	
B.1.6 Address	
B.1.7 Phone	
B.1.8 Email	
B.1.9 Contact Person 3	
B.1.10 Address	
B.1.11 Phone	
B.1.12 Email	
B.1.13 Comments	

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	2005

D Currency

D.1	Used Currency	AED
		Conversion to USD: 1

E Cost

E.1.1	Estimated full cost of preparation	
E.1.2	Comments on estimated full cost of preparation	
E.2.1	Estimated full cost of implementation	
E.2.2	Comments on estimated full cost of implementation	Estimated full costs of implementation presented here only consider the budgets of "Wind Energy Program in Uruguay" and "Production of Electricity from Biomass in Uruguay" project.
E.3.1	Estimated incremental cost of implementation	
E.3.2	Comments on estimated incremental cost of implementation	

F Estimated emission reductions

F.1	Amount	5.20
F.2	Unit	MtCO ₂ e/yr
F.3	Additional information (e.g. if available, information on the methodological approach followed)	The amount of emission reduction presented (5.20 MtCO ₂) corresponds to 2015, due to the increased use of renewable energy related to 2005. In order to estimate GHG reduction, the projected matrix of supply energy for 2015 was considered. It is estimated that in 2015, the 55% of energy would be supplied by renewable power, specifically through wind (4%), hydro power (11%), biomass (28%), wood (12%) and solar (<1%). The participation of renewable sources in 2005 was 37% of the supply energy mix. The methodology followed was to calculate the amount of CO ₂ that would have been emitted in the year 2015, if the increased level of renewable energy (between 2005 and 2015) would have been supplied by fossil fuel. For electric generation, the emissions were calculated considering the use of fuel oil.

G Other indicators

G.1 Other indicators of implementation	The number of years for completion is the time remaining to 2015 from current date.
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H Other relevant information

H.1 Other relevant information including co-benefits for local sustainable development	This increase in the share of renewable sources in the primary energy mix, along with the benefits of reducing GHG emissions, will enable distributed power generation, increment energy independence, and also promote national value-added
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I Relevant National Policies strategies, plans and programmes and/or other mitigation action

I.1 Relevant National Policies	Energy Policy: http://www.miem.gub.uy/gxpsites/hgxp001?5,6,584,O,S,0 , "Wind Energy Program in Uruguay" (PEEU): http://www.energiaeolica.gub.uy/ "Solar Energy Program in Uruguay": http://www.energiasolar.gub.uy/cms/
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I.2 Link to other NAMAs	.
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J Attachments

J Attachments	<table border="1"><thead><tr><th>Title</th><th>Description</th></tr></thead></table>	Title	Description
Title	Description		

J.1 Attachment description	
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J.2 File	<input type="text"/>	<input type="button" value="Browse..."/>
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