平成 19 年度総会特別講演(第 121 回定例研究会) 資料



Renewable Sources of Energy Argentina 2007

Minister Jorge A. Osella Embassy of Argentina in Japan May 14th 2007



Hydrogen Energy Society System



Energy Matrix (ettos equivalent to thousands Ts of oil)

Hydroelectric 3.683 4.4%
Nuclear 2.089 2.5%
Gas 41.064 50%
Oil 33.934 40%
Coal/others 1.568 1.83%
Renewable 702 0.77%

Argentina

Imports of Energy Needs

(ettos)

Gas 1.337
Oil 215
Coal 1.038
Total 2.589

• 3% of our primary production

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Energy Policy Energy as a Right for the People

- 1./ Provide adequate energy to the people,
- 2./ in a sustainable way.

Argentina

Sustainable Development has to satisfy present needs without jeopardizing future generations.

· Bruntland Report

• Kyoto Protocol is the only international mechanism to face Climate Change.

- Long way to go
- It is regretable that investments in renewable sources of energy are minimal considering the huge amounts that are invested in the exploration and dwelling of Fuels.

Argentina

Sustainability and Renewable

Sources of Energy go together





CO2 Reductions Proposals by Argentina

• 2/19% between 2008/2012

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How?

//Increasing Hydroelectric Capacity to 5.700 Megawatts by 2015. //Increasing Wind Energy Capacity to 3.000MW by 2013. //Energy Efficiency.



Legal Framework

- -Regulation nr 2247/1985. Founding of Regional Center for Wind Energy.
- -1998 National Regime for Sun and Wind Energy. (National Interest)
- -Law 25467, Coordination activities with National Universities.

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National Legislation

- Law 26123. National Interest de production and development of H.
- -Develop the scientific structure.
- -Incentives for using H through renewable sources of
- -Incorporate de private sector
- -Protection of the environment
- · Support new developments.



National Legislation

- Law 26190. Incentives for the use of Renewable Sources of Energy to produce Electric Power
- · Target to get to 8% of Energy Matrix



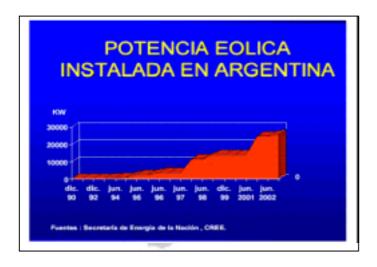
National Plan for Development of Hydrogen

- · National Policies for development and using of H.
- Promote de Technical Development
- Support new developments
- Enforce international regulations
- Support the private sector
- International Agreements
- · Determine subsidies and benefits

Advantages of Wind Energy

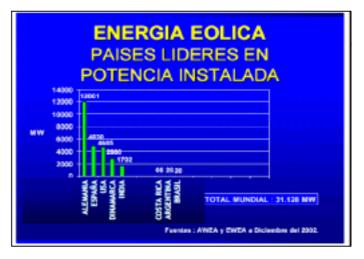
Argentina

- · Protection of Environment
- · Economic growth
- Development of labor
- · Diversification of Energy sources
- Easy settling up
- · Innovation and transfer of technology











Wind Energy Costs

- 1000U\$S KW installed
- 5/11 cents U\$S Kwh to operate
- by 2013 Argentina produce 3000 MW means a lot CO2 reductions and the development of labor.

Argentina

Global Wind Energy

 ettos
 labor

 • 2005
 73.908
 243.886

 • 2010
 233.905
 547.413

 • 2015
 610.000
 1.066.645

 • 2020
 1.261.157
 1.475.808

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Challenges of Wind Power

- Financing
- Technology
- · Incentives



Experimental Hydrogen Plant Pico Truncado. Santa Cruz

- Hydrogen by electrolysis
- Production
- Training
- Research
- Workshop



Argentine Hydrogen Association Hydrogen Energy System Society

- Two towers 100mts
- Wind
- · Electricity
- Hydrogen



Wind Romanutti Park Wind Moran Park

- Tower of 50 mtrs to measure the intensity of the wind.
- Importance of measuring wind
- design of new generators
- profitability of the project
- · Technology of Electrolysis
- Technology of stocking



Campo Moran Project

- > In may 2006 SCPL and JCF signed a contract for credits of CO2 of the project.
- > JCF is working in the verification and certification of the emissions. >United Nations has already approved the project.
 - 1. Selection and contract
 - 2. Monitoring Report
 - 3. Verification
 - 4. Certification
 - 5. Emissions Reduction
 - 6. Approval 7. Payment

Antonio Moran Wind Power Plant Project in Patagonia Region

- Project Company:
 - Sociedad Cooperativa Popular Limitada de Comodoro Rivadavia, "SCPLCR"
- Project Description:
 - Generation and distribution of electricity produced at the plant, which has a capacity of 10.56MW, thus substituting the energy purchase to the Patagonia Regional System, which generates mainly by thermal power stations supplied by natural gas and hydroelectric power stations
- Amount of Reduction
 - Annual Reduction 26,928tCo2
 - Total Reduction in the 1st Crediting Period 188,496tCO2e
- CDM Process
- Host Country Approval Japanese Gov. Approval
 - 13 Oct, 2005 29 Dec. 2005
- Registration Date
- 1st Half of 2007(e)
- Verification/Certification Crediting Period 01 Nov, 2001 - 31 Oct 2008

(After the end of the first crediting period, the second crediting period is expected to follow)

19 Jul, 2005



Mutual benefits

Japan is getting CO2 credits to fulfill its commitments of the Kyoto Protocol.

Argentina is getting technology, cheap energy and labor to the population

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Argentina

Future course of action

////Pursue National targets 8% Energy Matrix through Renewable sources

////Pursue national commitment of reduction between 2 and 19% of emissions

////Investments

////Technology

//// Clean Development Mechanism

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THAT IS OUR CHALLENGE

LETS WORK TOGETHER

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