

REEP-LAC Regional Preparatory Meeting

&

Consultation on the Implementation of Strategies and Recommendations to Promote Sustainable Energy

LAC Regional Secretariat Department of Sustainable Development Organization of American States

September 13, 2007 Sheraton Rio Hotel and Resort Rio de Janeiro – Brazil

reeep





Welcome

and

Overview



Meeting Overview

- Participating Countries: Brazil, Argentina, Ecuador, Guatemala, Mexico, and Peru
- More than 20 institutions participating in this preparatory meeting:
 - Secretaria de Planejamento e Desenvolvimento Energético do Ministerio de Minas e Energia do Brasil
 - Petrobras, IDEAAS, Tecbio, RENOVE, IDER, USAID/Brazil, IVIG, UNIFEI, IDEAL, CEPEL, CGEE, Winrock, Fundación Solar
 - Ministerio de Energía y Minas del Perú y del Ecuador, Secretaría de Energía de la República Argentina, British Embassy in Brasilia, CONCYTEG-Mexico, CONAE-Mexico



What are the Objectives for this Workshop?

Define the regional program needs to serve as input to the REEP Programme Board -> Governing Board

- Energy Efficiency and Renewable Energy
- Business & Finance and Policy & Regulation

Program Priorities directly influence the REEEP project portfolio

- Make recommendations on current and future program directions and themes
- Elect a regional representative to represent the region in the REEEP Programme Board

Analyze strategies for successful implementation of sustainable energy policies and initiatives (SEPI)



Presentations and Speakers

- Overview Sustainable Energy Challenges, Opportunities and Responses -Brazil
- Alternative Renewable Sources and Energy Efficiency Current Promotion Mechanisms and Perspectives
 - Laura Porto, Director, Department of Energy Development, MME
- Prospective of the Energy Matrix in View of the Year 2030
 - Gilberto Hollauer, Special Advisor, Department of Energy Development, MME
- Outline REEP Priorities, Programs, and Activities
- REEEP International Program Description
 - Binu Parthan, Deputy Director REEEP Program Coordination
- REEEP LAC Program Decription
 - Mark Lambrides and Juan Cruz Monticelli, REEEP Regional Secretariat, OAS



Presentations and Speakers

Selected Highlights of REEEP Funded Projects and Initiatives

- Development of an Energy Efficiency Program for the Brazilian Market
 - Reynaldo Sigilião, Consultant, Econoler International
- Amazonia Energy Initiative
 - Claudio Ribeiro, Project Manager, Winrock
- Mexican Energy Policy Reform
 - Félix González, Director of Financing and Environment, CONAE



Discussion on Priorities and Recommendations

- What are the needs an priorities of energy stakeholders (governments, private sector, NGOs, consumers...) in LAC?
- Outline need for REEP services
- Draft recommendations document
- Elect regional representative to Program Board



REEEP Regional Priorities and Interventions in Latin America and the Caribbean

(i.e. what has REEEP been doing in Latin America and the Caribbean?)

But, lets first discuss the market conditions in which RE/EE is competing throughout the Region

- Considerable renewable natural resources utilized for grid-tied and off-grid electricity generation
 - South and Central America developed large-scale hydropower
- Several factors have led to the increased use of fossil fueled generation over the past 20 years:
 - Power sector liberalization (short term power sales agreements);
 - Increased availability and reduced costs of natural gas; and
 - Limited availability of additional large scale hydro reserves.
- Wide variation in consumption patterns (economic variances)
- Degree of electrification varies throughout the region, with a total coverage ranging 80%



Growing Energy Needs

- Primary energy growth rate 2002-2003: 3.11% per year (OLADE)
- By 2010 LAC will require a 50% increase in its installed capacity...more than 90GW
- Approximately 10% of the total population in LAC does not have access to electricity
 - ~50 million people (20% to 90% of the rural population without access to electricity)



Increasingly, the region is seeking to incorporate RE/EE solutions into its energy portfolio

• Drivers

- Raising oil prices
- Diversification of energy supplies for national security reasons (generation costs reduction and price stabilization)
- Development of domestic natural resources (creation of employment, economic growth)
- Poverty alleviation, increase energy access
- Mitigate urban migration
- Encourage cooperation and integration among and between countries
- Climate change and local pollution



Key Factors Inhibiting Market Penetration

A. <u>Policy</u>:

- Most countries have liberalized market structures
 - Few long-term power purchase agreements
 - Little incentives for RE and EE promotion measures
 - No inventory of RE resources
- Electricity generation decisions are made according to short-term commercial markets
- High capital cost of renewable energy options
- Lack of comprehensive RE laws and regulations (exceptions)



Key Factors Inhibiting Market Penetration

B. <u>Finance</u>:

- Lack of appropriate financing for sustainable energy investments
 - Large grid-tied RE developments
 - Private sector driven EE initiatives
- ESCOs and other private sector driven efficiency projects lack access to suitable long-term finance
- Up-front or start up capital seems to be the biggest challenge
- Need to match long-term scope of project investment returns with financing packages



...With a Goal to Improve the Sustainability of the Energy Sector in LAC by Increasing the Development and Use of Renewables and Energy Efficiency in the Region, REEEP has...



Hemispheric Events and Sustainable Energy "Advocacy"

- Ibero-American Energy Ministers Meeting, Montevideo
- OAS General Assembly (Energy Theme Panama City)
- Gleneagles (G8+12) Dialogue on Climate Change, Energy and Sustainable Development; Mexico City



Regional Sustainable Energy Dialogue and Partnerships

- Information Exchange/Access:
 - REEP Website (www.reeep.org; partners section)
 - RE/EE Search Mechanism (REEGLE; www.reegle.info)
 - Training database
 - Articles, phone communications
- Access to Best Practices, Similar Experiences:
 - Experts database
 - Linking partners
- Institutional Partners Initiatives
 - EEP, CREDP, OLADE



Capacity Building and Trade Promotion

- Liaison between developers and partner countries
- Trade shows/expos: Power-Gen, EE Global
- Regional participants in conferences/training workshops: REFF, UN/CSD, COPs...
- Links to energy regulators (SERN), REIL...
- Technical articles, research...



Regional and "Bi-Lateral" Policy Support

- Policy guidance and advice Sustainable Energy Policy Initiative
 - Mexico, Guatemala, Ecuador, Peru, Dominican Republic
 - Policy templates
- Sustainable Energy Plans Caribbean
 - Program with the EU (EUEI) in St. Lucia, Dominica, Grenada, St. Kitts & Nevis, Antigua & Barbuda, Bahamas, and St. Vincent & the Grenadines



Project management and technical assistance

 Cooperation in developing and implementing sustainable energy project opportunities with grant resources from REEP



Projects Supported by REEEP in the Region

• 4 projects supported in 2005/2006

EUR 285,000

• 6 projects supported in 2006/2007

EUR 315,000

• 7 projects supported in 2007/2008

EUR 584,000



Projects Funded in 2007

- Secretaría de Energía de Argentina
 - To <u>disseminate the use of "new" RE sources</u> such as wind, solar, small-hydro, geothermal, biomass and oceans (excluding large-hydro)
- CONAE/BASE (Mexico)
 - To identify <u>opportunities for the financial sector to engage</u> <u>and accelerate its participation in RE projects</u>, particularly at micro and small scale, in order to accelerate investments in RE and promote the sustainable use of energy in the long run

• IDEAAS (Brazil)

 To create the Learning Center for Renewable Energy and Decentralized Generation in order to <u>expand the use of RE by</u> <u>the utilities participating in the Luz Para Todos program</u>



Projects Funded in 2007

- EPS Capital Corp. (Mexico)
 - To <u>build performance and credit risk guarantees and risk mitigation</u> <u>structures</u> so that local banks are willing to provide resources, project-based financing for ESCO-structured energy efficiency projects.
- IDER (Brazil)
 - To implement a <u>dissemination strategy for efficient cook-stoves</u>, including installation, sustainable forest recovery activities, and capacity building, in the State of Ceará
- RENOVE (Brazil)
 - To foster the Brazilian legal and regulatory framework towards the <u>implementation of a widespread grid-connected solar photovoltaic roofs</u> <u>program</u>, in connection with a comprehensive set of public policy measures aimed at a more sustainable and diversified electrical energy mix
- Ministry of Energy and Mines of Ecuador
 - To create a law that promotes and regulates RE/EE nationally

reeep





Past/Current policy and finance program priorities

reeet



DEPARTMENT

SUSTAINABLE

Overview of the Montevideo Regional Preparatory Meeting

- Effective implementation of policies is pivotal to the expansion and development of RE markets
- RE should be taken into consideration in the early stages when reforming the energy sector policies and regulations
- Identify and quantify the potential for RE in any given region/country
- Establish RE promotion policies that attract private investment
- Promote institutional strengthening
- Promote public-private partnerships and work schemes
- Include EE in the energy matrix
- Focus on the use of technologies with proven results
- Promote natural resources analysis and adequate risk management in energy generation portfolios
- Traditional energy consumption patterns are linked to fossil fuels

reeep



Policy & Regulation and in 2007/2008

Programming Need	Comments
1. Development of public policies and establishment of targets and goals which may include RE, EE, and renewable fuels for transportation	National standards (RE portfolios) broaden the share of renewables in the energy matrix
2. Fiscal incentives, and industrial promotion incentives to reduce the cost of renewables and improvement of regulations in order to promote cost reduction through tax exemptions	
3. Promote and/or establish the harmonization of norms and standards on biofuels and bioenergy, encourage increased capacity and awareness in the energy arena.	Environmental considerations relating to primary forests should be taken into account

reeep



Policy & Regulation and in 2007/2008

Programming Need	Comments
4. Improve the quality of renewable resources inventories as a basis for the assessment and development of projects	
5. Increase the use of standard M&V (monitoring & verification) protocols, including the quantification, or economic and environmental benefits, of the advantages of renewable energy and energy efficiency, including cost benefit studies at the government level for RE/EE	RE/EE pricing is possible through CDM. Government should take the lead in incorporating RE/EE
6. Desarrollo de politicas de fomento de la educacion en ER y uso eficiente de la energia y politicas de promocion a la innovacion tecnologica en la materia	
7. Estrategia de desarrollo sostenible que vincule el desarrollo de energias renovables con la lucha contra la pobreza extrema	

reeep



Policy & Regulation and in 2007/2008

Programming Need	Comments
8. Foster the CDM mechanism and the second phase of the Kyoto Protocol	Training should be useful for some of the countries
Cooperate in the development of national and regional policies to make CDMs viable at the program level	
9. Support rationalized transport models and foster fuel substitution in the transportation sector	
10. Virtual efficiency power plants (EPP) models	Adopted as a subject by few countries. It should be better known and the REEEP should promote and disseminate its knowledge.

reeep



Business & Finance Priorities in 2007/2008

Programming Need	Comments
1. Design of a center for the development of small businesses, including support services for small business models and financing services	These projects should bear the green seal so that they may be promoted in other regions
2. Creation of a fast track for a basket of LAC projects relating to the implementation of CDM projects in the region	The objective is to avoid the bureaucracy involved in this type of projects
3. Creation or design of financial mechanisms and funding schemes with risk allocations specific to RE/EE projects, including differentiated (lower) guarantees	
4. Creation of a catalyzing agent that will bridge communications between financial institutions and project developers	It should be an independent institution or entity.

reeep



Business & Finance Priorities in 2007/2008

Programming Need	Comments
5. Support the creation of an equity fund for small RE projects within the inter-American Development Bank or the World Bank	Facilitation mechanisms that quantify the value of potential RE/EE businesses in order to promote RE/EE projects among financial institutions. This would allow the banking sector to better visualize the RE/EE sector business possibilities. These projects should bear the green seal so that they may be promoted in other regions.
6. Awareness program targeted at banking institutions in order to promote ESCOs and RE/EE projects	These types of projects are currently being implemented in Mexico
7. Identification of local and international funds to build and support the local capacity for the financing of RE/EE projects, including the promotion of government and private sector funds	

reeep





Workshop Discussion REEEP Program Regional Priorities for LAC



REEP Program Regional Preparatory Meeting

Objetives:

- Define the regional program needs to serve as an input to the REEEP Programme Board
 - Energy Efficiency and Renewable Energy
 - Business & Finance and Policy & Regulation

Program Priorities directly influence the REEEP project portfolio

- Make recommendations on current and future program directions and themes
- Elect a regional representative to represent the region in the REEEP Programme Board



REEP Program Regional Preparatory Meeting

Description:

- Annual meeting coordinated by the RS's in their respective regions before the RS Meeting in Vienna
- REEEP partners, members of the program steering committees, project Managers of REEEP Projects (current and past), key RE/EE stakeholders, and region experts attend
- Identifies Regional Programming needs
- Elects a regional representative to the Programme Board
- Ensures that the program priorities are targeted
- Builds on past project activities and best project proposals
- Ultimately becomes the recommended scope and direction for the Governing Board



REEP Program Regional Preparatory Meeting Expected Outputs

- Prioritized list of programming needs from the Region for the future period
- Name, contact details and short bio-data of the regional representative on the Programme Board
- Meeting Report



Other REEEP Governing Bodies

• REEP Programme Board

- Key program experts
- Subsidiary body of REEEP Governing Board
- Responsible for REEEP Programme of work
- Provides strategic guidance to the REEEP Steering Committees and Regional and International Secretariats on the REEEP Programme Cycle.
- Specifies the Programme Priorities, which directly influence the REEP project portfolio
- Recommends the final selection of projects to the REEP Finance Committee for approval.
- Responsible for monitoring and evaluation process for REEP
- Reports to the Commission on Sustainable Development (CSD) through the Governing Board



Guidelines for Developing and Defining Regional Programming Needs

- Consider the human and financial resources known to be available to REEP and the region
- Consider acknowledgements and mandates received from the CSD and the G8
- The number of projects supported by REEEP in the region for the 6th program cycle should serve as a reference in determining future REEEP support in LAC



Selection of the Regional Representative

- Elected by consensus
- Representative should:
 - Have long term program or policy level experience
 - Expertise in RE/EE in issues relating to business, finance, policy or regulation
- Can be:
 - A senior official from one of the governments in the region
 - A Senior expert from other sectors who are respected for their expertise in the region and internationally
- Good communication skills
- Cannot be a member of:
 - The REEEP regional secretariats
 - The regional steering committees

reeep





Sustainable Energy Policy Initiative - SEPI -



Sustainable Energy Policy Initiative – SEPI

<u>Objective</u>: To promote the development and implementation of effective sustainable energy policies and regulations addressing RE/EE

Participating Countries: Argentina, Dominican Republic, Peru, Guatemala Mexico



Activities of SEPI

- 1. Actualize a survey of RE/EE policies and regulations in participating countries
 - Meeting held during the ibero-American Ministerial Meeting on Energy Security in the Latin American Region (Montevideo, September 2006)
 - 15 participating countries
 - Consultations held with energy sector specialists from OLADE, ECLAC, UNIDO and OAS
 - Specific national and regional priorities relating to the promotion of RE/EE in LAC
- 2. Identify best practices in policy and regulatory reform
 - Development of country energy profiles



Activities of SEPI

- 3. Provide a baseline on RE/EE policies and regulations, and their impact in other regions
 - Renewable Energy and Energy Efficiency Policy Analysis Report (ESG)
- 4. Identify key stakeholders critical to bring about a significant change in the policy/regulatory environment
 - Capacity Building Workshop, Las Vegas
 - Development of results-oriented recommendations strategies for executing the critical reforms necessary (ESG)
- 5. Implementation of policy development initaitives
 - Mexico, Guatemala, Ecuador and Argentina with REEEP Grants
 - Dialogue, planning with all...



Discussion on Policy Initiatives for RE/EE

- Brazil
- Mexico
- Guatemala
- Ecuador
- Argentina
- Dominican Republic

reeer



REEEP Regional Secretariat for Latin America and the Caribbean Region

Department of Sustainable Development Organization of American States

http://www.reeep.org

http://www.oas.org/dsd