# ENERGY AND CLIMATE MINISTERIAL OF THE AMERICAS

DAY 1 - APRIL 15, 2010

## INTER-AMERICAN DEVELOPMENT BANK

### WASHINGTON DC, USA

#### BACKGROUND

The Energy and Climate Partnership of the Americas (ECPA) announced by U.S. President Barack Obama at the Summit of the Americas in Trinidad and Tobago in 2009, is leading to the establishment of numerous bi-lateral and multi-lateral initiatives to support sustainable energy solutions throughout the Hemisphere. The road from Port of Spain led to the Lima Energy and Climate Symposium as the first follow-up step for key energy decision makers of the region to jointly discuss possible cooperation areas on critical energy matters and define next steps. The objective of the symposium was to identify concrete steps to be taken to achieve cooperation in energy and climate in the Western Hemisphere. After the meeting in Lima and subsequent conversations of key energy stakeholders, the operational framework of ECPA started to be outlined. Consequently, The Energy and Climate Ministerial of the Americas took place April 15-16 in Washington DC, which convened a 2-day event with energy ministers and several stakeholders from the energy arena.

This meeting of hemispheric energy ministers in Washington, DC further supports the ECPA process and has been called by Energy Secretary Steven Chu in an effort to deepen regional participation and commitment to ECPA and to advance the goals laid out in Trinidad & Tobago for the initiative.

The IDB hosted the first of two-day Energy and Climate Ministerial of the Americas. This day focused in bringing together different key energy stakeholders, international organizations, government representatives, non-governmental organizations, civil society, and others together to discuss on six subjects: i) Energy Poverty; ii) Energy Efficiency; iii) Renewable Energy; iv) Electric Power and Gas Infrastructure; v) Cleaner and more

Efficient use of Fossil Fuels; and vi) Financing Mechanisms and Policy Frameworks; and strengthen the collaborative actions, initiatives and focus of actions foreseen under the created partnership.

#### OPENING REMARKS

Welcoming remarks were given by **David B. Sandalow**, Assistant Secretary, U.S. Department of Energy (USDOE), **Luis Alberto Moreno**, President, Inter-American Development Bank (IDB) and **Steven Chu**, Secretary of Energy, U.S. Department of Energy. Details on their opening remarks can be found at the <u>IDB's event page</u>.

Opening remarks were followed by the signing of a Memorandum of Understanding (MoU) Ceremony in which President Moreno and Secretary Chu accorded to strengthen collaboration between the IDB and the USDOE. The day then led to six panels and working sessions to discuss the main pillars that had been defined under ECPA.

#### PANEL AND WORKING SESSIONS - PART I

The panel and working sessions were characterized by firstly becoming a space for presentations from different panelists in each of the ECPA pillars on country and region-specific projects and initiatives. Later the working sessions aimed at having open discussions for participants to develop project recommendations and identify areas for deeper collaboration between the public and private sectors and civil society. Each of the groups created a summary of the outcomes of their panel and working session which fed-in to the second-day of the ministerial and allowed for ministers to further elaborate on each of the topics.

### RENEWABLE ENERGY

**Objective:** ECPA's role in accelerating the development of renewable energy in the Western Hemisphere

**Discussion topics:** What renewable energy technologies are being successfully used in the hemisphere? What are the key barriers to implementation and increased deployment of RETs? Avenues and lessons learned on how public and private sector collaboration can facilitate RE development.

**Facilitator:** David Rothkopf, President and CEO, Garten Rothkopf

#### Panelists:

- Daniel Cameron, Secretary of Energy, Argentina
- Ricardo Raineri, Minister of Energy, Chile
- Rayburn Blackmoore, Minister of Public Utilities, Energy and Ports, Dominica
- Denis Bode, CEO, American Wind Energy Association (AWEA)

#### Co-lead Discussants:

- Carlos Florez, Executive Secretary, Latin American Energy Organization (OLADE)
- Annie Dufey, Director, Strategic Analysis Unit on Sustainable Energy, Fundacion Chile

#### **Session Summary**

We all agree that diversifying our energy matrix is critical to the shared challenges we face. Renewable energy development and deployment will help us all enhance our energy and environmental security, support our clean economic growth, and assist us in our collective efforts of combating and minimizing energy poverty and its affects.

In our discussions yesterday we touched on a number of issues that are critical to the increased use of renewable energy throughout our hemisphere. Many of these issues are items that governments will play a significant role in. These include, but are not limited to:

Long-term commitments by governments to transparent and open market places and the development of policies and regulatory frameworks that support the development and deployment of renewable energy technologies at scale are crucial.

Creating renewable electricity standards, such as that in Chile, is an example of positive government policy that will lead to more non-conventional renewable use.

Increased government-to-government cooperation, both bilaterally and multilaterally, in information sharing, technology research and development, and project development.

Through the ECPA-supported Centers in the region, including the Renewable Energy Center in Chile, the DOE-IDB Innovation Center, the wind center in Mexico, this type of collaboration and cooperation can be enhanced and provide concrete benefit to the hemisphere.

This cooperation should also leverage the capabilities of international and national financial institutions to ensure that capital investment and opportunity is available to support the ideas and talent in the region.

Governments must also continue to work towards defining the price of carbon to allow renewable energy to compete with conventional energy sources. Whether that entail a carbon tax or a cap and trade system: that is for your governments to decide. In doing so, we will level the playing field for renewable energy technologies that are currently more expensive to become competitive in the marketplace.

As I mentioned previously, the discussions yesterday also stressed that each of us face different challenges and have different renewable resources and capacities, which will invariable lead to different technologies that will be deployed. However, it will be critical for us to work together, whether you are from the Caribbean, Central America, North America, or South America.

CLEANER AND MORE EFFICIENT USE OF FOSSIL FUELS

**Objective:** ECPA's role in enhancing more efficient use and incorporation of environmentally friendly technologies

**Discussion topics:** Challenges for incorporating fossil fuels into the clean energy portfolio of the hemisphere. What new technologies are available to make fossil fuels more environmentally friendly? What policies and regulatory structures have fostered these technologies?

**Facilitator:** David Goldwyn, Coordinator for International Energy Affairs, U.S. Department of States

#### Panelists:

- Rafael Ramirez, Minister of Energy, Venezuela/President PdVSA (not confirmed)
- Christian Paradis, Minister of Natural Resources, Canada
- Ali Moshiri, President, Chevron Africa Latin America Exploration and Production Company
- Liz Barratt-Brown, Natural Resources Defense Council (NRDC)
- David Fyfe, Head Oil Industry and Markets Division and Editor, Oil Market Report, International Energy Agency (IEA)

#### **Co-lead Discussants:**

- Jeremy Martin, Director, Energy Program, Institute of the Americas
- Marcel Coutu, President and CEO, Canadian Oil Sands Trust

#### **Session Summary**

While renewable energy is getting much of the publicity, the bulk of energy produced and consumed in the region will be from fossil fuels for the foreseeable future.

The Americas are rich in energy resources. One of the challenges for ECPA will be to help maximize the regional benefits that the natural resources can bring.

Representatives from producing nations expressed the economic imperative to continue to increase production.

Private sector representatives expressed a confidence in technology to produce fossil fuels in a more environmentally sound way, and to help countries maximize their resource potential

Natural gas can function as a "bridging" fossil fuel. It can break the false dichotomy between either clean energy or fossil energy by moving us down the carbon chain.

Gas also points to the lack of necessary infrastructure in parts of the Hemisphere.

ECPA can help by sharing best practices throughout the region. This applies to regulations that work, to successful environmental protections and to the latest technologies. The new Canadian Heavy Oil Working Group is one tool announced yesterday that can help spread these best practices.

#### **ENERGY POVERTY**

**Objetive:** ECPA's role and tools to bridge the gap for those under-served by electric grids and lacking access to clean energy technologies

**Discussion Topics:** Long-term plan for electricity and clean technology access and energy infrastructure efforts in Haiti. What are the challenges that Latin American urbanization poses with regard to access to reliable electricity and clean technologies? What is the role of international organizations in promoting renewables, clean energy technologies, energy efficiency and sustainability?

**Facilitator:** Mark Lambrides, Division Chief for Energy & Climate, Department of Sustainable Development, Organization of American States (OAS)

#### Panelists:

- Marcio Zimmermann, Minister of Mines & Energy, Brazil (not confirmed)
- Jacques Gabriel, Minister of Public Works, Haiti
- Christian Holmes, Senior Advisor for Energy and Environment, U.S. Agency for International Development (USAID)
- Hugo Altomonte, Officer in Charge, Natural Resources and Infrastructure Division, ECLAC
- Hattie Babbitt, Attorney and Vice Chair, World Resources Institute (WRI)

#### Co-lead Discussants:

- Paul Flowers, Strategic Planning and Policy Advisor, Ministry of Natural Resources, Belize
- Shalini Vajjhala, Deputy Assistant Administrator for International and Tribal Affairs, U.S. Environmental Protection Agency (EPA)

#### **Session Summary**

#### INSERT SUMMARY on ENERGY POVERTY

#### KEYNOTE SPEECH

## ENERGY AND CLIMATE POLICY COOPERATION IN THE AMERICAS

Luis Alberto Moreno, President, Inter-American Development Bank introduced the keynote speaker of the day.

The Keynote Speech was given by Hillary Rodham Clinton, Secretary of State, U.S. Department of State, which can be viewed <a href="https://example.com/here">here</a>.

#### LUNCHEON

Santiago Levy, Vice President for Sectors and Knowledge, Inter-American Development Bank

#### PANEL AND WORKING SESSIONS - PART II

## ENERGY EFFICIENCY

**Objective:** ECPA's role in increasing energy efficiency and conservation

**Discussion topics:** Efforts in the region to embrace smart grid and energy efficiency technologies. Lessons learned on deployment of energy efficiency technologies across the region's economies. Can North American examples in this area provide insights?

**Facilitator:** Mauricio Cardenas, Senior Fellow and Director of the Latin American Initiative, Brookings Institute

#### Panelists:

- Georgina Kessel, Secretary of Energy, Mexico
- Pedro Sanchez, Minister of Energy and Mines, Peru
- Kristina Johnson, Undersecretary, U.S. Department of Energy
- Steve Meissel, Vice President, Aclara ESCO

#### Co-lead Discussants:

- Dymitr Wajsman, Director, APTEL Brazil & Chairman, International Division, Utilities Telecom Council (UTC)
- Mark Hopkins, Director, Energy Efficiency Programs, UN Foundation

#### Session Summary

#### INSERT ENERGY EFFICIENCY SUMMARY

## ELECTRIC POWER AND GAS INFRASTRUCTURE

**Objective:** ECPA's role in enhancing regional collaboration and accelerated integration of energy infrastructure

**Discussion topics:** Update on existing and planned energy interconnection projects. Development of new transmission infrastructure to meet increased electricity usage in the hemisphere. Principal challenges and opportunities for electric and gas integration.

**Facilitator:** Jeffrey Davidow, President, Institute of the Americas **Panelists:** 

Hernan Martinez, Minister of Mines & Energy, Colombia

- Susana Latronico, CRIE, Guatemala
- Andrew Vesey, President, AES Latin America
- Keith Trent, Group Executive & President Commercial Businesses, Duke Energy

#### Co-lead Discussants:

- Nathan Younge, Regional Director for Latin America and the Caribbean, USTDA
- Nancy Rivera, Director, Secured Finance, OPIC

#### Session Summary

#### Framing of Issues Discussed

Central theme was regional energy integration throughout Latin America. The technical aspects are manageable. The lack of common agreement on a regulatory framework is the largest obstacle.

- 1) Opportunities and challenges of integration facilitating energy interconnection
  - a. Integration of markets
  - b. Integration of renewable technology
  - c. Integration of communities
- 2) Role of markets and political agreements in advancing regional integration
  - a. A market based regional interconnection can create a bigger market, drive costs down, create efficiencies, and reduce intermittent supplies of energy.
  - b. Political agreements with commitments, however, can strengthen regional buyin to create investment: SIEPAC is a useful example, but 16 years is too long.
  - c. That said, gas integration in the Southern Cone is an example that demonstrates a lack of commitment to follow through on political agreements (e.g. Argentina and Chile).
- 3) Emerging interconnection proposals include the Andean and Caribbean initiatives.

#### How can ECPA help?

- 1) Expedite regional interconnection initiatives by providing a platform to bring regulators, technical experts (both government and private sector), and other authorities together to share best practices, offer technical assistance, and build consensus among countries interested in creating regional interconnections.
- 2) Facilitate access to multilateral financing through the IDB and other institutions to promote regional initiatives.
- 3) Offer assistance in developing proposals for clean development mechanisms.

#### Key Actions for Governments to Take:

- 1) Strengthen political commitment to establish a common regulatory framework.
  - a. Build public awareness on the cost benefits of regional interconnection.
- 2) Establish an adequate investment climate by upholding the rule of law and sanctity of contracts.
  - a. Penalty for non-compliance and incentives for compliance for both private and government contracts.
- 3) Recognize that government policy is vital to incentivizing renewable energy development and inclusion into the grid.

- 4) For the Caribbean and Andean initiatives, regional players need to decide how to move forward.
  - a. Andean region: options include members approving the CIER 03 proposal as a way forward or a version of that proposal along with political commitment from each to endorse regional interconnection.
  - b. Caribbean: At the conclusion of the meeting at the OAS on Wednesday, members agreed to continue discussing the initiative at a working group level. Under ECPA, the OAS and other multilateral institutions, such as the IDB, can assist in providing a platform for further discussion, additional studies, and eventually a sustainable proposal for regional interconnection

FINANCING MECHANISMS AND POLICY FRAMEWORKS

**Objective:** ECPA's role in improving regulatory and financial frameworks for energy

**Discussion topics:** Financing options for the region's varied projects. Public and private finance sources for the varied size, scale and type of projects. Critical regulatory and finance barriers and challenges.

Facilitator: Eric Farnsworth, Vice President, Council of the Americas

#### Panelists:

- Luis Enrique Berrizbeitia, Executive VP, CAF
- Leandro Alves, Head, Energy Division IDB
- Laura Tuck, Director, World Bank
- Frederico Pena, Senior Advisor, Vestar Capital

#### Co-lead Discussants:

- Brian Bolster, Global Head of Alternative Energy, Goldman Sachs
- Ethan Zindler, Director New Energy Finance, Bloomberg

#### Session Summary

#### Framing of Issues Discussed

Renewable projects are capital-intensive, estimated at 80% capital costs, which is based on the technology itself and the transportation costs, since most are produced abroad. Private sector investments depend on the return on equity (no more than 15% debt risk), interest rates (6-8%) and tenors (in the private sector set at 8-10 years and sovereigns at 20 years). There is a cost premium for renewable relative to conventional energy. Moreover, traditional financing institutions have had difficulty supporting adoption of efficient and renewable technologies in Latin American and the Caribbean. For example, Former DOE secretary Federico Pena suggested that venture and private equity firms have more than half a trillion dollars that is ready for clean energy investments, if investors can find the right balance between risk and return.

Key areas to financing energy efficiency and climate change projects include three basic components: policy environment, financings options and risks assessment and allocation.

The policy environments must include strong and consistent regulatory frameworks, fiscal policy, institutions that allow for capacity buildings, transparent judiciary and good governance. Private capital in particular is very risk adverse when in comes to political uncertainty. Currency exchange risk is an additional possible deterrent.

On the financial side, new approaches are needed such as sovereign and non-sovereign guarantee, public-private partnerships, tenors with amortization that match useful life of projects and broader participation from local banks and project developers. New innovative financing is also necessary, i.e. green bonds allow more capital to flow to clean energy projects and the carbon markets enable streamlined and sector based financing. For example, the World Bank highlighted several different funds with which it works CTF, GEF, propel fund and carbon financing.

There are a variety of risks associated with clean energy development that need to be assessed, quantified and assigned to the appropriate party. For example conventional fuels have price volatility, the cost of which sometimes charged directly to consumers through "pass through the provisions" in the PPA. Governments may consider assigning these costs to equity investors rather than consumers. Thus protecting consumers from price volatility, but energy prices will be higher thereby allowing renewable and efficiency to become more competitive.

#### *How can ECPA help?*

ECPA's flexible policy framework allows governments to join and work together as needed. Three main areas, which ECPA can contribute, include policy dialogues, leveraging political will and sharing leading case studies.

Although Central America is more of an energy consumer than an energy exporter, therefore, further linking of electricity grids from Mexico to Colombia will allow lower cost clean energy to be sold throughout the region. Continuous dialogue has been key to allow SIEPAC success. For example, by creating an overall governance body SIEPAC facilitated the sale of electricity across its boarders. ECPA can act as a further vehicle to help strengthen SIEPAC.

Similar type dialogues are also needed with local stakeholder groups affected by energy infrastructure investments. ECPA can play a role in facilitating stakeholder dialogues.

ECPA can be used as a vehicle to convene MDBs, local banks, angel and investor capital, and large and small project developers in discussions that result in pilot projects being built.

ECPA can compile and share case studies of financing of clean energy projects in the hemisphere.

#### Key Actions for Governments to Take

Governments should strive to maintain political, legal, fiscal control in order to create a sound environment for clean energy finance. For example, Brazil has been successful in attracting investments in its ethanol industry by maintaining good governance. Additionally, Mexico has created a positive policy environment in order to establish and successfully implement its efficiency project, which retrofits refrigerators and light bulbs and sets country wide efficiently standards.

Governments should work with traditional IFIs, private investors and local banks to identify new and effective approaches to clean energy finances. Examples could include:

- 1) use government guarantees creatively-i.e. applying the guarantee to the most riskiest portion of sovereign loan portfolios first (projects in constructions are riskier than projects that are built and are delivering power) or by allowing private sector investment to be used as subordinated debt which is also guaranteed.
- 2) engage with local banks to help educate them on the sector and provide tailored services to support their lending. Like the IDB's "Planet Banking Initiative."
- 3) take advantage of specialized clean energy and climate funds to facilitate financing.
- 4) provide policy incentives that drive demand for clean energy, examples include: tax credits, renewable portfolio standards and accelerated depreciation of clean energy assets.

Governments can consider taking more of their own risk by using public pension funds to offset or guarantee private funds. Governments can use MDBs to develop and off set risks of default within a particular country (using programs like MIGA). Governments could allow equity to come in as subordinated debt that is guaranteed during project construction and shifts un-guaranteed equity after construction.