The Energy and Climate Ministerial of the Americas

Secretary Steven Chu

Inter-American Development Bank

Washington, D.C.

15 April 2010

The Energy and Climate Partnership of the Americas

"I pledge to you that we seek an equal partnership. There is no senior partner and junior partner in our relations; there is simply engagement based on mutual respect and common interests and shared values."

President Barack Obama
5th Summit of the Americas
April 2009

The Energy and Climate Partnership of the Americas

- Accelerating clean energy
- Advancing energy security
- Reducing energy poverty

Flexible framework – projects can be bilateral, multilateral, regional

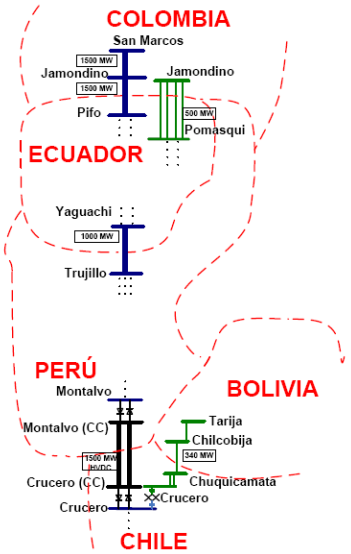
Broad participation – governments, industry, non-governmental organizations, Inter-American organizations

Through this Partnership, we will:

- Learn from each other and share best practices

Partner countries have hosted three regional meetings

Colombia
Developing long distance electricity interconnections



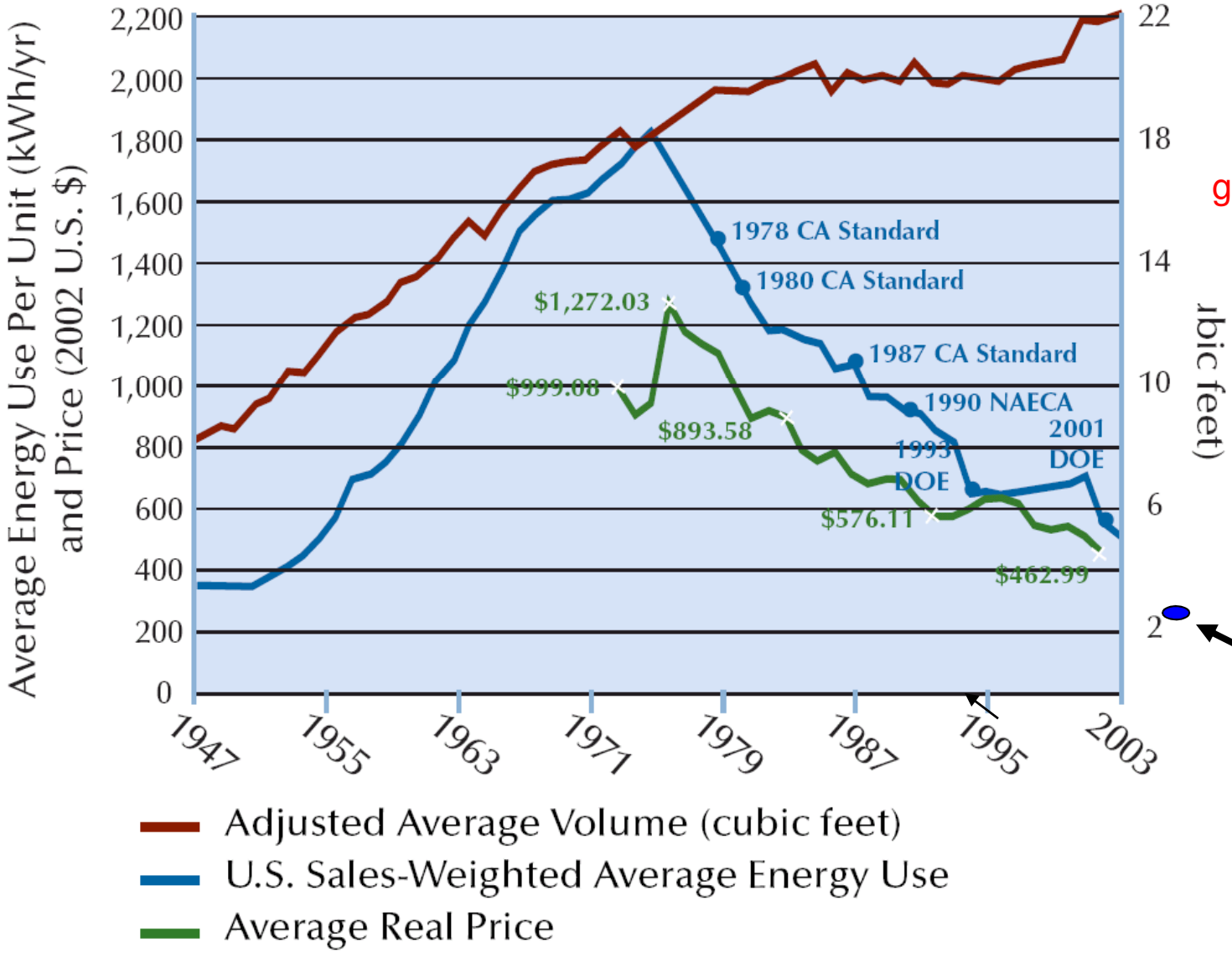
Mexico
Improving energy efficiency

Trinidad & Tobago
Starting a renewable energy research center

DOE's Sam Browne & Minister Conrad Enill

Photo courtesy the Trinidad Guardian Newspapers - Shirley Bahadur

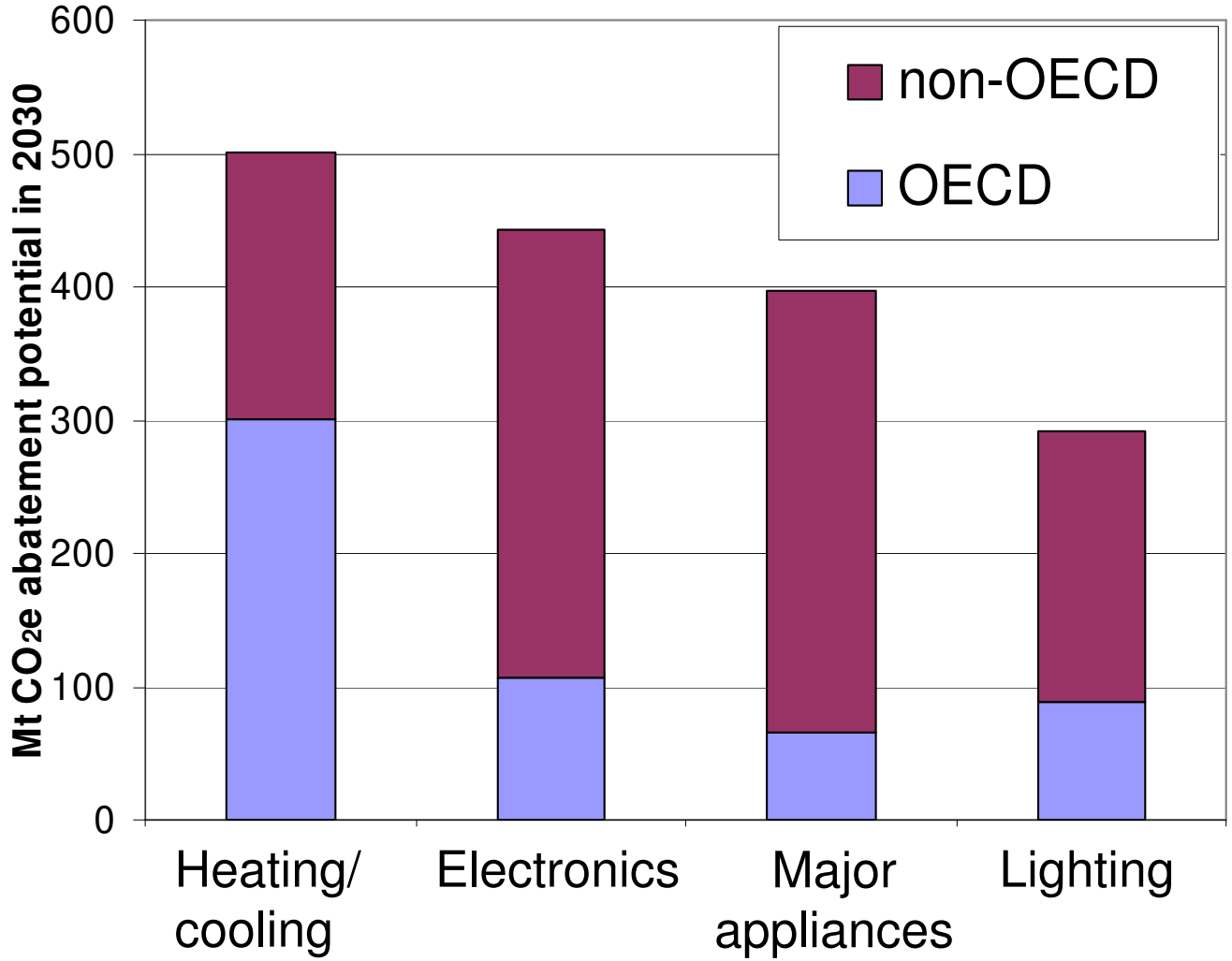
Standards stimulate technology: Refrigerator efficiency standards and performance



Refrigerator energy savings (3%) is greater than ***all*** of US renewable energy generation

Best Available Tech.
254 kwh/yr

More than 1.6 Gt CO_2e annual abatement potential in 2030 from improved efficiency standards and labeling

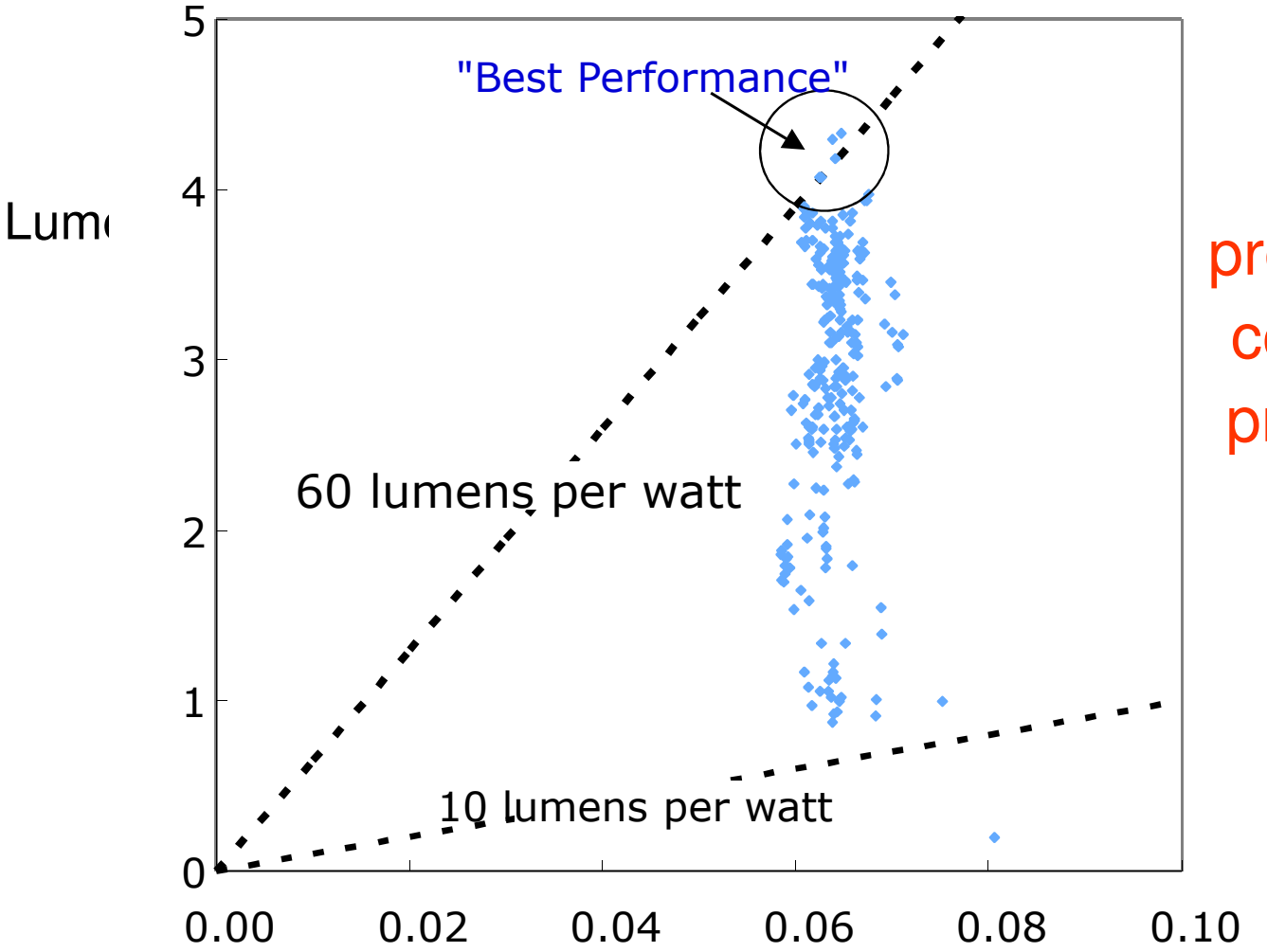


The Collaborative Labeling and Appliance Standards Program provides an online clearinghouse for energy efficiency policies

www.clasponline.org

Source: LBNL, November 2008

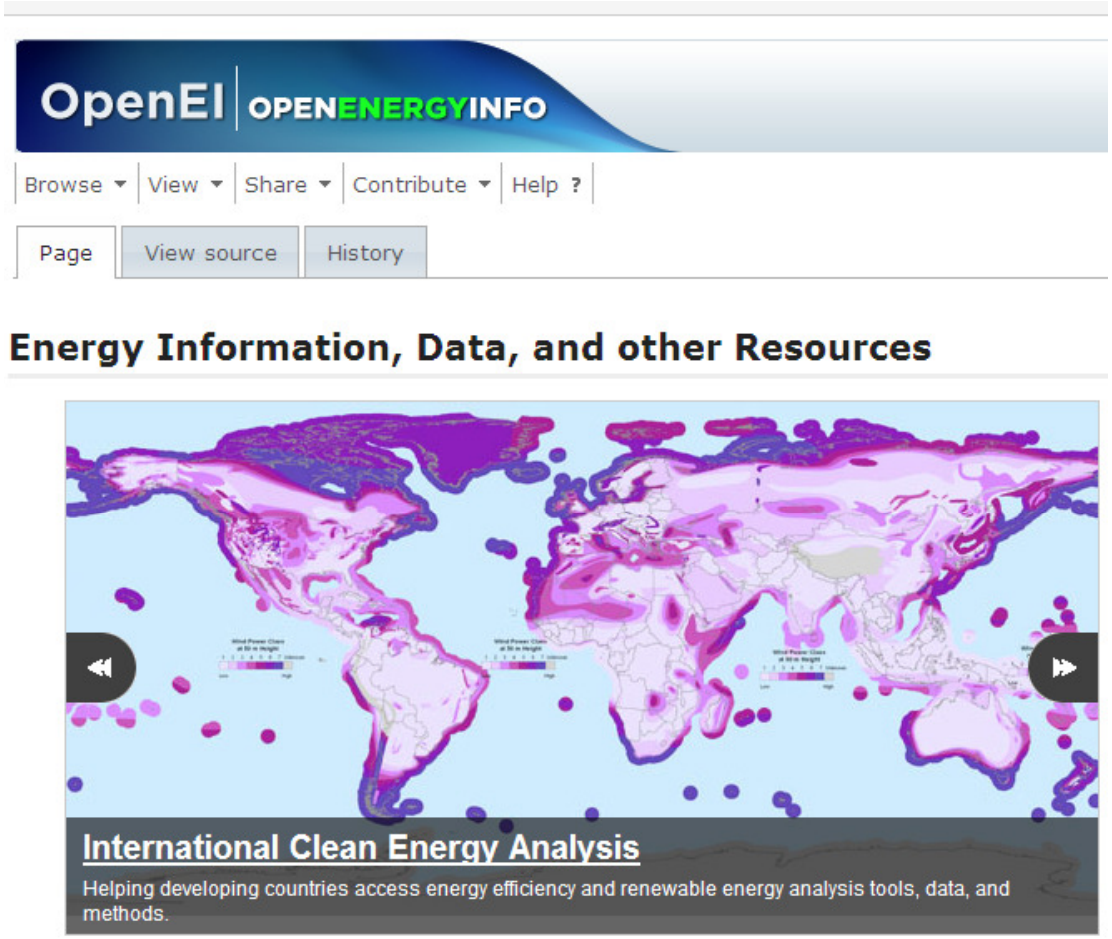
Importance of standards: The quality of LEDs in off-grid lighting products varies widely



Quality assurance programs protect consumers and prevent "market spoiling"

Mills, E. and A. Jacobson. 2007. "The Need for Independent Quality and Performance Testing for Emerging Off-grid White-LED Illumination Systems for Developing Countries," *Light & Engineering*, 16(2):5-24

The **Open Energy Information** project



www.openei.org

A new platform to connect the world's energy data

U.S. OpenLabs provides access to the resources of our National Laboratories

We're working with our partners in Chile to launch a **Spanish-language** version

Through this Partnership, we will:

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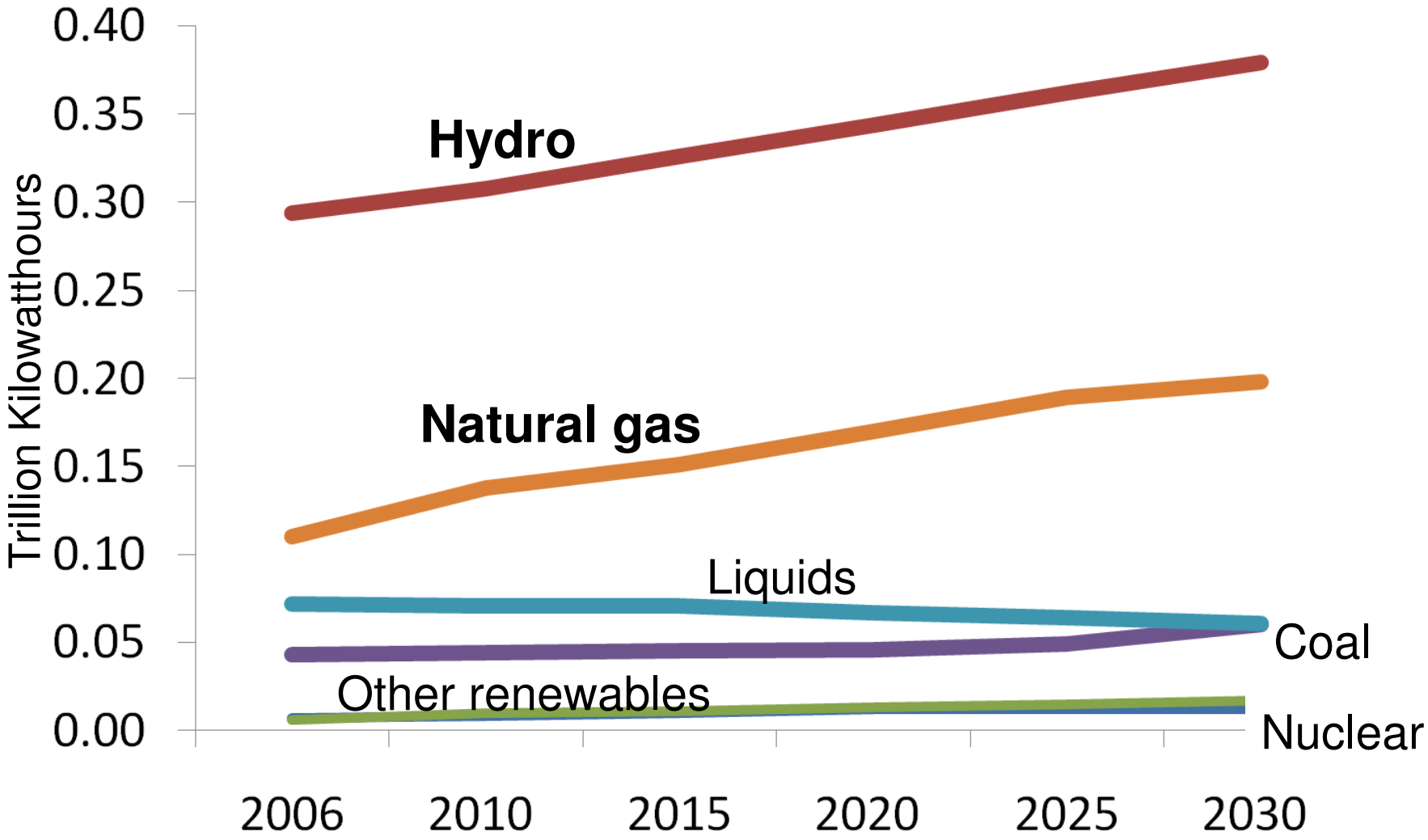
- Cooperate on technology research, development, and deployment

Latin America's electricity growth is projected to be met largely by hydropower and natural gas



EIA

Melting glaciers will affect hydropower

Since 1970, glaciers in the Andes have lost 20 percent of their volume, according to Peru's National Meteorology and Hydrology Service

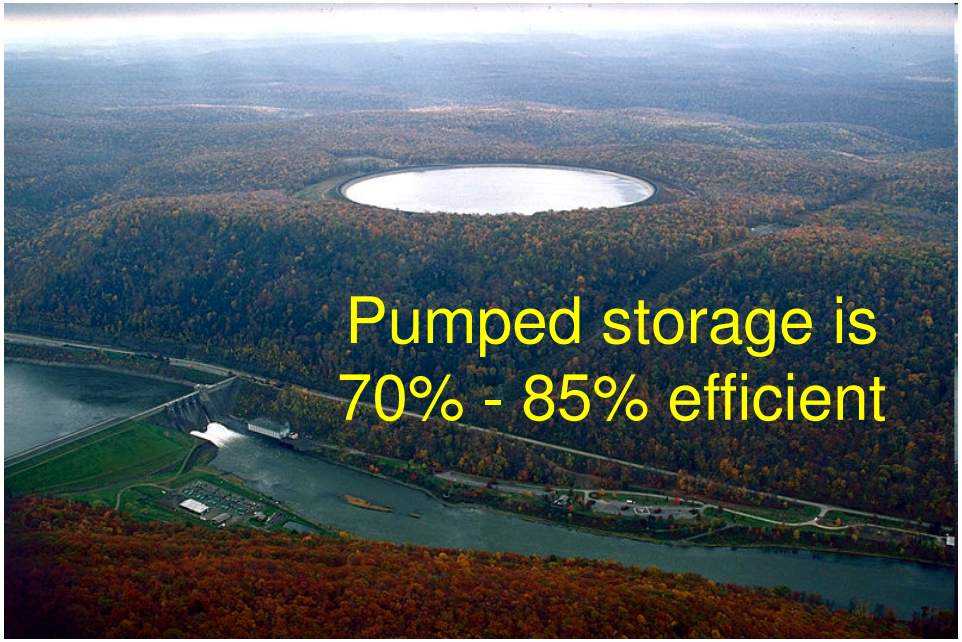
Bolivia's Chacaltaya Glacier in 1940… and 2005

"During the next 15 years, inter-tropical glaciers are very likely to **disappear**, affecting water availability and hydropower generation." -- IPCC 2007

Upgrading existing hydro facilities

Modernizing older facilities:

- Output increases as high as 30% are possible
- Relatively low cost



Pumped Storage can provide:

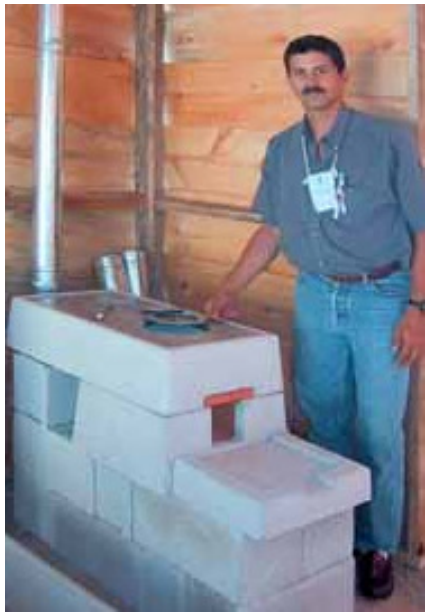
- Rapid response to offset intermittent renewable energy
- Extra capacity during times of peak electricity use

Renewable energy sources can diversify energy supplies and address energy poverty

Solar, wind, bioenergy, geothermal and small hydropower hold great potential in the region

The Department of Energy is providing technical assistance for Regional Clean Energy Centers throughout the hemisphere

High impact does not require high technology



Efficient cook stoves

60 – 70% more efficient, less wood-gathering, less deforestation, fewer emissions, improved public health

White roofed buildings:

Sunlight energy is reflected back into space rather than heating up buildings and homes in the summer.

Rio de Janeiro

Through this Partnership, we will:

- Learn from each other and share best practices
- Cooperate on technology research, development, and deployment
- Encourage investment

New financing mechanisms are accelerating clean energy deployment in the region

- Guaranteed renewable energy payments
- Revolving loan funds
- Public benefit funds
- Loan guarantees

Brazil has been a leader through the PROINFA feed-in tariff incentive and BNDES financing for renewable energy projects

Today, we're announcing the creation of an **Energy Innovation Center** at the IDB

To channel investment toward clean energy

IDB

Helping IDB expand its clean energy investments and support projects of all sizes

The Department of Energy will provide expert staffing

U.S. DEPARTMENT OF ENERGY

Connecting the Caribbean

Much of electricity generation relies on imported fossil fuels

Renewable energy could displace fossil fuels if market sizes were increased and economies of scale achieved

We have the technology to connect the Caribbean region, make clean energy profitable, and make island economies more energy secure

Haiti relief effort

The Department of Energy immediately began working to restore and improve the Haitian energy system

The United States has announced $1.15 billion for reconstruction of Haiti, and part will help Haiti create a clean, efficient energy sector.

We are working to improve output of existing hydro and to introduce new technologies – solar, micro-hydro, and micro-grids

A long-term solution under consideration is long distance transmission lines between Haiti and the Dominican Republic

Energy systems are vulnerable to earthquakes

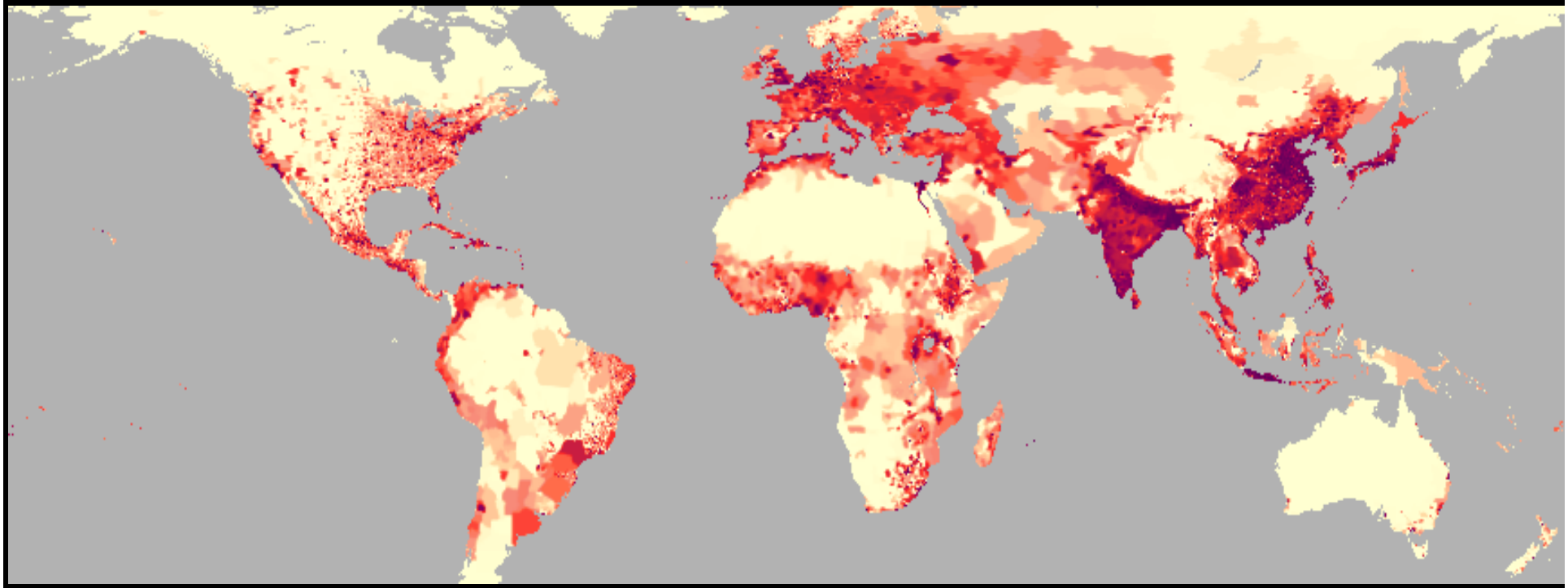
Our Hemisphere has recently had major earthquakes in Haiti, Chile, and Baja California, Mexico

Today, we are proposing a new task force to:

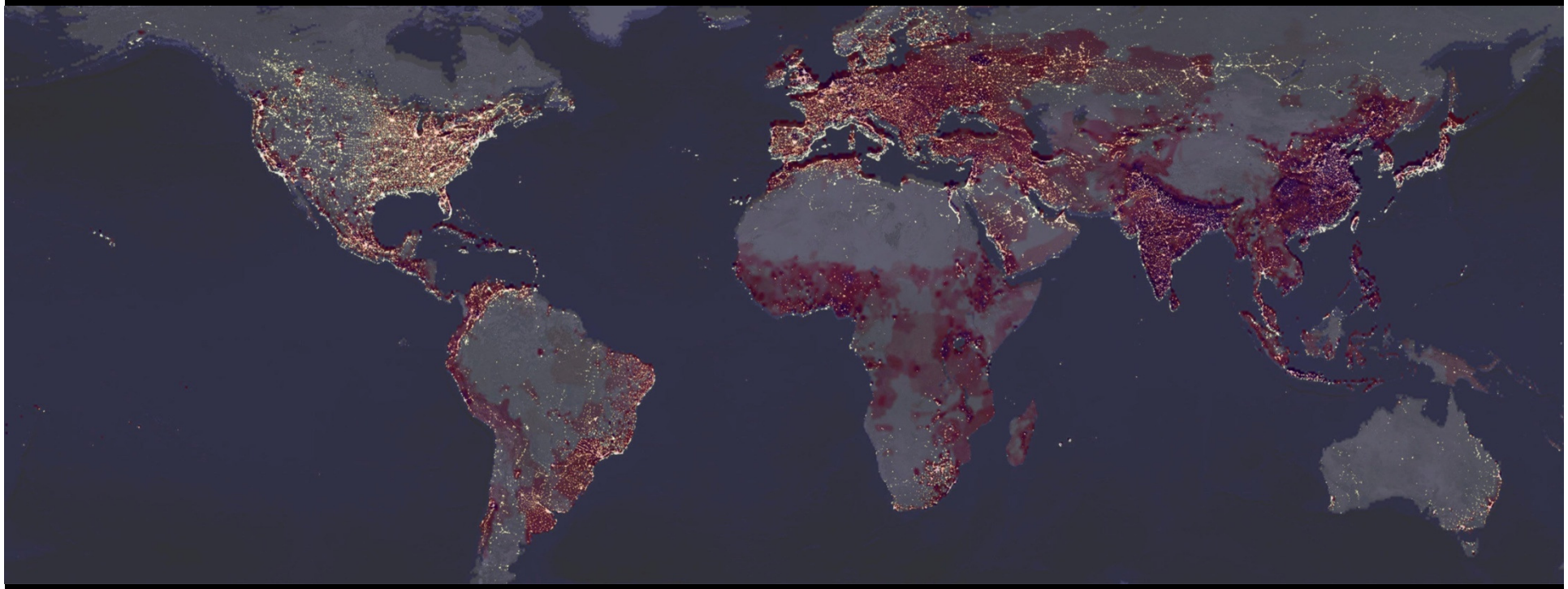
- Promote seismic design standards that will minimize losses to energy infrastructure
- Use computer simulation of disasters to estimate earthquake motions and structural response

Where the world uses the most electricity…

Where the most people live.



We can help turn on the lights where people live…



…***and*** solve the climate challenge at the same time.