



## support to EE

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#### **Presentation Outline**

- Available instruments at IDB to support the development of sustainable energy
- Examples of supported EE projects,
   specially in Mexico



#### **Inter-American Development Bank - IDB**

• Oldest regional development bank (1959): 48 member countries - 26 borrowers (with >50% votes in the Board); offices in all borrowing countries; finances both private and public sector projects, with or without sovereign guarantees. The IDB Group encompasses 3 institutions: the Inter-American Development Bank, the Inter-American Investment Corporation – IIC and the Multilateral Investment Fund - MIF.

#### Main source for LAC\* regional financing

- ✓ Approved loans/guarantees since its creation: US\$ 197 billion (1961-2010)
- ✓ Overall leveraged investments (project costs): US\$ 420 billion
- √ Non-reimbursable technical cooperations (grants): US\$ 4.1 billion

#### Loans/guarantees to Energy Sector:

US\$ 27 billion (1961-2010)

- ✓ Main item in Bank's pipeline with 14% of total Bank loans/guarantees
- √ 40% for hydroelectric powerplants; 20% for transmission systems; 20% for rural electrification; 20% other (EE, Biofuels, O&G, etc.)

Note: \* Latin America and the Caribbean

#### **Available support instruments at IDB**

- Loans and guarantees:
   (US\$ 12.5 billion in 2010, for all sectors; US\$ 1.13 billion for energy)
- Non-reimbursable technical cooperation (TCs): (US\$ 830 million in 2010, for all sectors)
  - Trust funds established by donors and managed by the Bank (HSET/DOE, JSF/JPO Japan, EC, Spain, UK, Netherlands, France, Austria, Switzerland, etc), including operations from the Multi-lateral Investment Fund (MIF), Infrafund and from the Global Environment Facility – GEF
  - More than a Bank: seeking sustainable economical development of LAC countries; General Capital Increase (GCI-9) requires increase of loan volume to climate change and sustainable energy projects to 25% of total volume





### **EE: LAC lags behind**

10% (143,000 GWh) of LAC electricity consumption by 2018 could be displaced by EE measures with investments of max. US\$17 billion

And what if the region does not improve its energy efficiency?

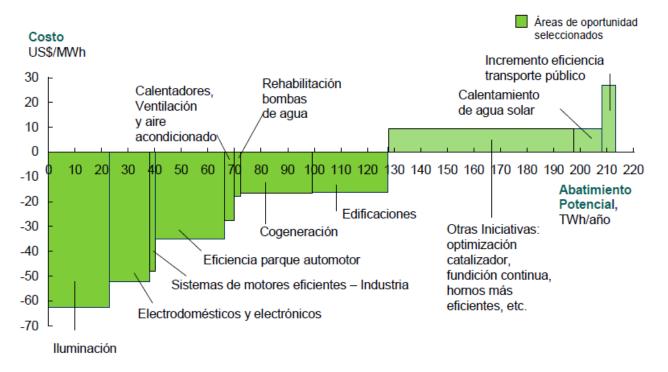
In that case, LAC will need to spend around US\$53 billion to build the equivalent of 328 gas-powered open cycle generators (250 MW each) necessary to produce the same 143,000 GWh of power



# National Program for the Sustainable Use of Energy - (PRONASE)

# A US\$750k Technical Cooperation to prepare PRONASE (the National EE Program), approved by President Calderón and published on November 27, 2009

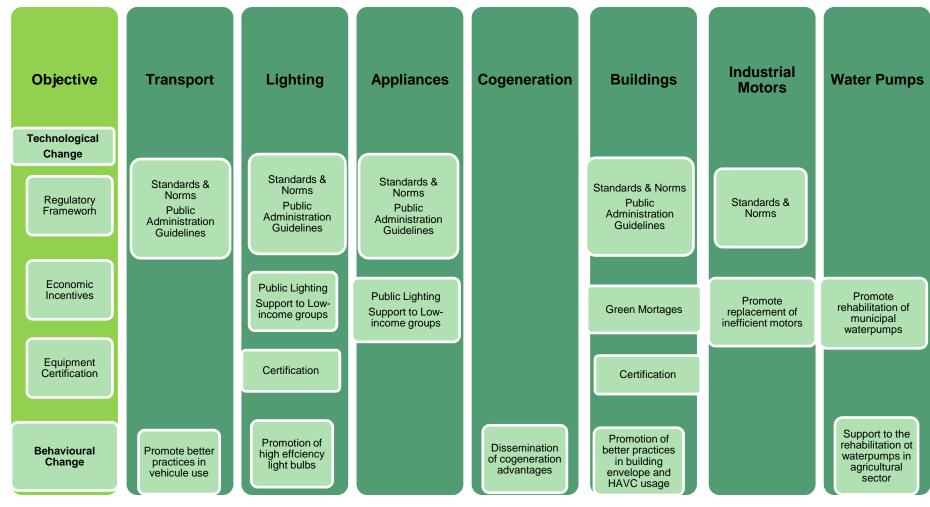
Áreas de oportunidad enfocadas en usos finales de energía



FUENTE: McKinsey GHG abatement cost curve V 2.0, análisis CONUEE



#### **PRONASE Action Lines**



Source: CONUEE



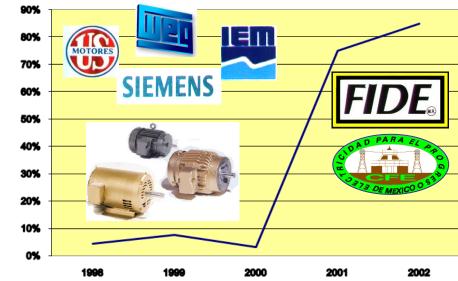
## **Example of an EE project in Mexico: FIDE-CFE-NAFIN**

A US\$ 47 million Loan Program\* to finance several EE measures in the industry and commerce:

 Rebates for efficient <u>electric motors</u>, compressors and lighting systems

Penetración

- ESCOs development and certification; MDL methodology preparation
- Cumulative savings as result of the project until its completion: 5.274 GWh and 270 MW, plus 3.8 million ton CO2 reduction
- Design of a EE guarantee fund





### **Project Objective and Description**

## Title: "Residential Applications of Energy Efficiency (EE) and Renewable Energy (RE) in Baja California"

- Comisión Nacional para el Uso Eficiente Energía (CONUEE)
- Comisión Estatal de Energía de Baja California (CEE)
- Objective: Support the Mexican Government, through CEE in the promotion of EE/RE through pilot projects in existing lowincome homes in Baja California.
- Grant Funding: JAPANESE TRUST FUND FOR CONSULTANCY SERVICES (JCF); US\$749.000
- Executors: BID/CEE Padeco
- Time schedule: Nov 2010 August 2012



## Present Situation of existing low-income homes in Mexicali

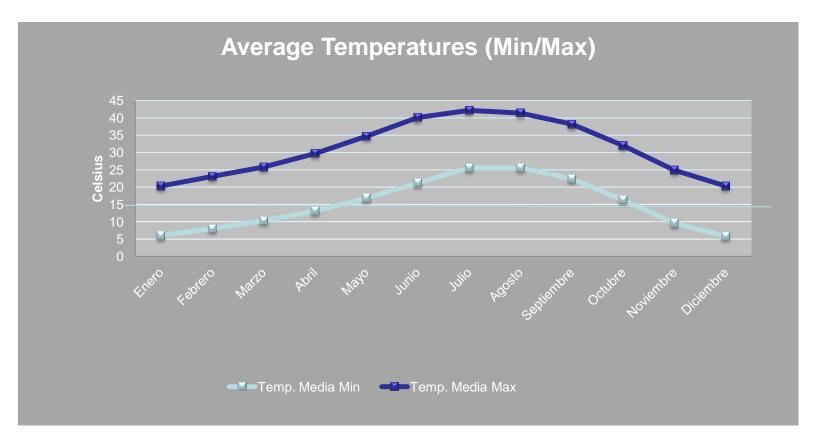
- Low-efficiency household equipment
  - HVAC, refrigerators, lighting, etc
- No proper thermal insulation
- Poor solar radiation protection (windows/shades)
- Comfort issues in Summer
  - Indoor temperatures more than 25C (77F) despite high energy consumption
  - In order to reach better comfort level, a 40% increase in energy consumption would be required





## **Project Characteristics**

ExtremeTemperatures of Mexicali





# EE improvements being installed in pilot projects

- New thermal insulation in roofs and walls
- Change of lighting systems
- Substitution of HVAC and refrigerators
- Other improvements









### **Before and After**





### Data Monitoring (Oct 21, 2011)





#### **IDEAS** Contest

Provide non reimbursable resources to develop ideas and innovative concepts on sustainable energy (access/rural electrification, energy efficiency, renewable energy, biofuels), replicable in LAC and possible of scaling-up.

- First round (2009): 1094 proposals; 850 eligible
- 264 finalists.
- 26 winners (<US\$200k each)</li>
- Event with partners and winners Cartagena Nov.2010

#### **IDEAS 2011:**

The 2nd contest in 2011 received more focused 300 proposals. New sponsors will support continuation of works started by 2009 winners.

















## THANK YOU

Inter-American Development Bank / www.iadb.org