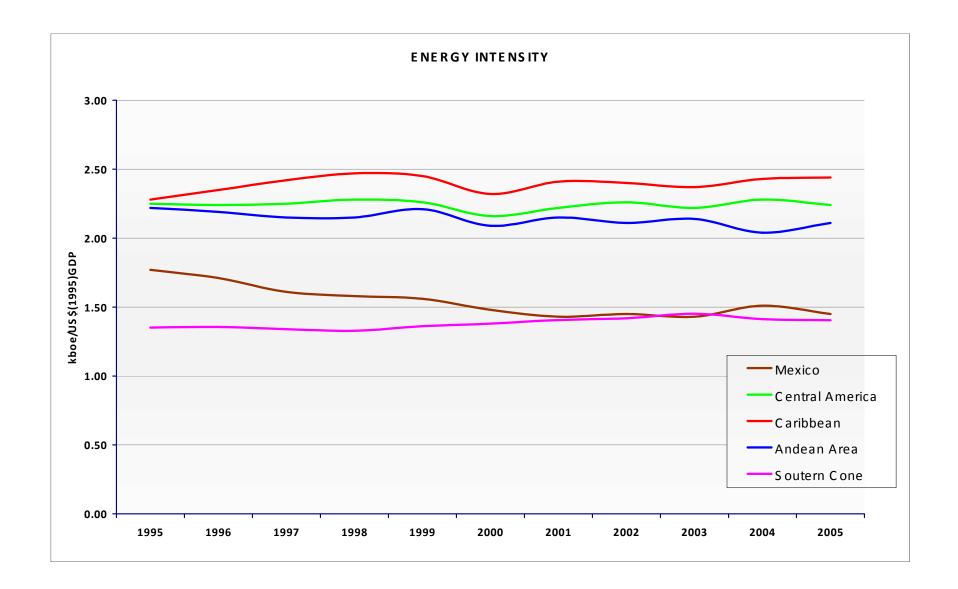


# ENERGY EFFICIENCY IN LATIN AMERICA AND THE CARIBBEAN



# Energy Efficiency in Latin America and the Caribbean





Source: OLADE's Energy Information System



### Cumulative savings due to energy efficiency in LAC:

Sub-region	Accumulated savings 2003–2018 (millions of US dollars)
Mexico	36.600
Central America	7.200
The Caribbean	9.900
Andean Region	24.900
Brazil	53.600
Southern Cone	23.500
Latin America and the Caribbean	155.700

<sup>\*</sup> Based on OLADE Prospective Study 2018, considering: transportation, commercial, residential and agriculture & mining (US \$ 50/oil barrel)

# Consolidated experience in Latin America and the Caribbean



# **Brazil**



- Program PROCEL by Eletrobras from December, 1985
- Investment fund developed from electric utilities contributions
- Promote energy efficiency actions with least social cost than producing the same amount of saved energy
- Program CONPET by Petrobras, 1991



# **Brazil**



## PROCEL Program

- Manage the Procel Seal
- 1986-2004 invest US \$ 397 millions
- -To save 21,969 GWh
- Equivalent to 6,979 MW and US \$7,400 millions in differed investments

# Costa Rica

- Long term plan start by OLADE's Project: PIER in 1993
- -RUE Law, November 1994
- Enforced saving projects to all biggest enterprises in the country
- Control of equipment and installations relevant for the country energy demand
- Equipment labeling system



# Cuba

- Program start in November 1997
- Looking for energy security
- Universal use of compact fluorescent lamps
- Replacement of old refrigerators. Use of better models
- Saving measures in industries



# Perú

- -CENERGIA, form 1985
- Energy saving program 1994
- Law No. 27345. Energy Efficiency
  Promotion, September 2000
  - Promote rational use of energy resources
  - Prepare plans and execute programs
  - Disseminate equipment energy consumptions



# Mexico



- CONAE Energy Savings National Commission -Created in 1989
  - Decentralized from Energy Secretariat
  - Technical and operationally autonomous
  - National Programs
  - Standardization
  - Technical assistance
- 2004 Results
  - 12,600 kWh saved
  - 2,200 MW differed US \$ 2,000 millions
  - 8.5 millions of oil barrels saved
  - 12 million CO<sub>2</sub> tons avoided



# Mexico



- FIDE Trust Fund to Save Electric Energy -Created in 1990
  - Technical and financial Assistance
  - Training
  - FIDE Seal
- 2005 Electricity savings
  - 4,046 GWh due to financial support
  - Summer savings time
  - Avoided investments US \$ 3,383 (10 years)



# **Jamaica**



- Energy Policy oriented to sustainable development, taking energy efficiency as the main component
- Refrigerators labeling 1992



# **Energy Efficiency** regional program



# **Energy Efficiency Ministerial Declaration**

- Compromise to implement national programs
- Promote rational use of energy
- To reduce environment impact, and,
- Allow social reassignment of saved resources



# **Mexico cooperation**

- Cooperation with OLADE to develop regional program
- Availability of Mexico's experience to all LAC countries
- Formal agreement signed by the Energy Secretariat



## Regional Energy Efficiency Program

### **Program components:**

### I. Efficiency in SMEs and Buildings

- Energy efficiency measures implementation implementation



- Training of Trainers and drivers based on Mexico and Colombia experiences

#### **III. Training of Professionals**

- Interactive energy efficiency training courses
- Measures implementation courses



## Regional Energy Efficiency Program



## **Program components:**

### IV. Framework development

- Institutional framework
- Program framework
- V. Development of Efficient Equipment Market
  - Efficient equipment incorporation and publicity

## **Conclusions**

- Energy efficiency policy must be supported by an strong energy policy
- LAC has many places without energy.
  Consequence: Emphasis to increase supply
- Reduction of non-technical losses in electricity
- It is necessary to demonstrate energy authorities and energy executives the EE benefits





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**Technical Paper** 

**ENERGY EFFICIENCY: AN UNEXPLOITED RESOURCE**