



## The Inter-American Development Bank

Energy, Policy and Politics:  
The Changing Energy Landscape in Latin America

### OUTLOOK FOR ALTERNATIVE ENERGY

Juan Pablo Bonilla  
Chief, Sustainable Energy and Climate Change Unit

Houston  
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# Energy & Climate Change: Challenges for the LAC Region

## » LAC countries confront a twin dilemma:

- They must boost their energy consumption to fuel economic and social development
- Energy use has been largely responsible for an increase in greenhouse gases emissions

## » Approx. 10% of total population (50 million people) does not have electricity.

## » Energy demand in LAC will increase 75% by 2030.

- Required investments to satisfy such demand will be around US\$ 1,600 billion

## » Achieve sustainability of energy supply and rational use of energy resources

- Regulatory and institutional frameworks
- Pre-investment funding for project preparation

## Expected Impacts of Climate Change in LAC

- » Andean inter-tropical glaciers likely to disappear over the next decades
- » Changes in precipitation trends
- » Continuous decline in natural land cover at very high rates
- » Risk of significant species extinctions in many areas of tropical Latin America
- » 50% of agricultural lands likely to be subjected to desertification and salinisation in some areas, by the 2050s
- » Increase in the number of people experiencing water stress likely to be between 7 and 77 million by the 2020s
- » The expected increases in sea-level rise (SLR), weather and climatic variability and extremes are very likely to affect coastal areas

## Western Hemisphere

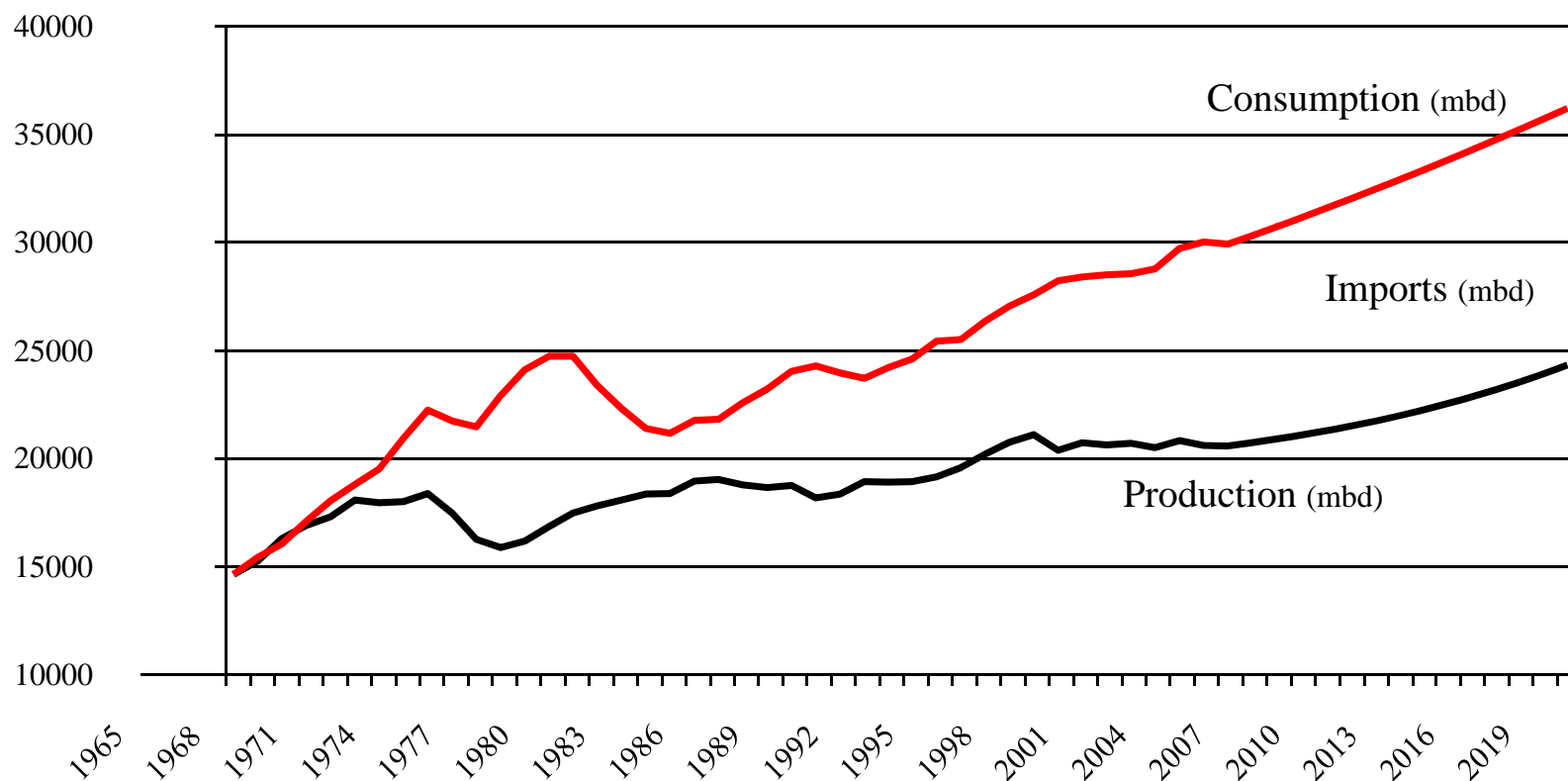
### Oil Stocks (Bb)

	1985	1995	2005	% of total stocks
<b>Western Hemisphere</b>	164	173	163	~ 0%
<b>North-America</b>	102	89	59	- 36.5%
<b>South-America</b>	63	84	104	63.5%
<b>Non-Andean</b>	5	10	16	9.9%
<b>Andean</b>	57	73	87	53.6%

Source : BP Statistical Review of World Energy June 2007  
 Courtesy: Ramón Espinasa - IDB

# Western Hemisphere 2020 Scenario

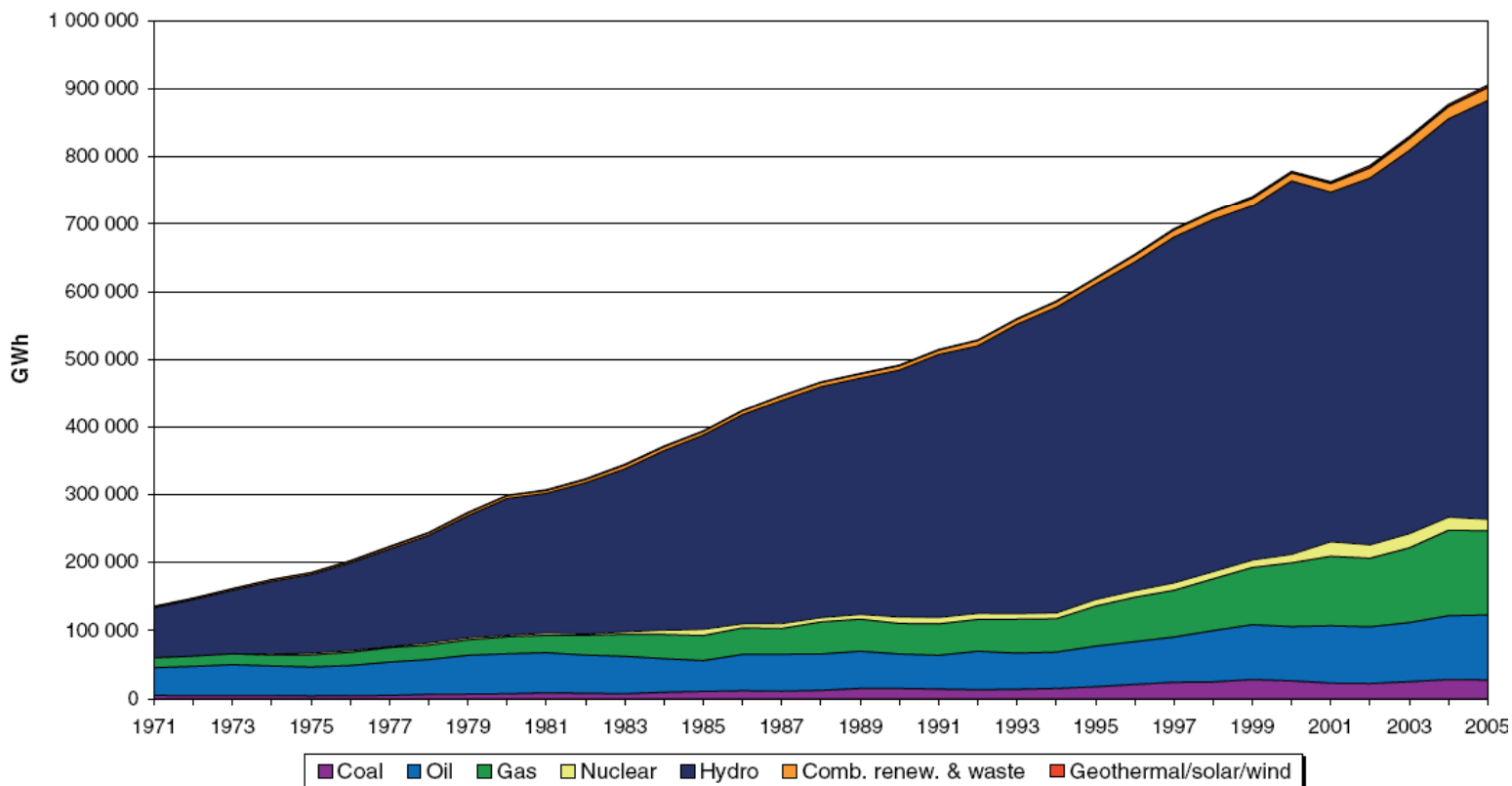
Hemisferio Occidental: Producción y Consumo de Petróleo (mbd) 1965 - 2020



Source : BP Statistical Review of World Energy June 2007  
Courtesy: Ramón Espinasa - IDB

# The other "squeeze": Climate Change

Evolution of Electricity Generation by source  
- Latin America -



Source: OECD/IEA, 2007

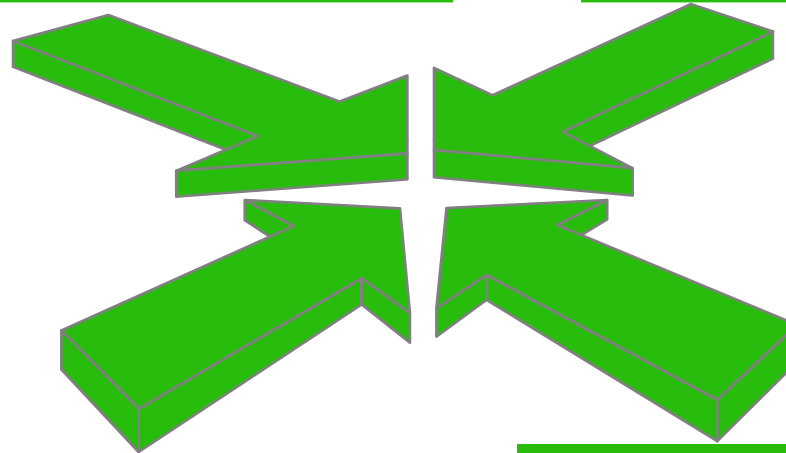
## **IDB's response: SECCI**

- » **Approved by the IDB Board in March 2007**
- » **A response to LAC's request for an expanded role in sustainable energy and climate change in LAC**
- » **IDB contribution to the new international clean energy investment framework**
- » **Bank wide-initiative complementing the Bank's existing efforts in energy**
- » **Technical Cooperation, programmatic PBL and Investment Grant: support for IDB project lending and policy lending**

# IDB Sustainable Energy and Climate Change Initiative 2008 Activity

**1. RENEWABLE ENERGY AND EFFICIENCY**  
18 TCs (US\$10m) / 5 Loans (US\$300m)

**2. SUSTAINABLE BIOENERGY**  
8 TCs (US\$4.2m) / 4 Loans (US\$310m)



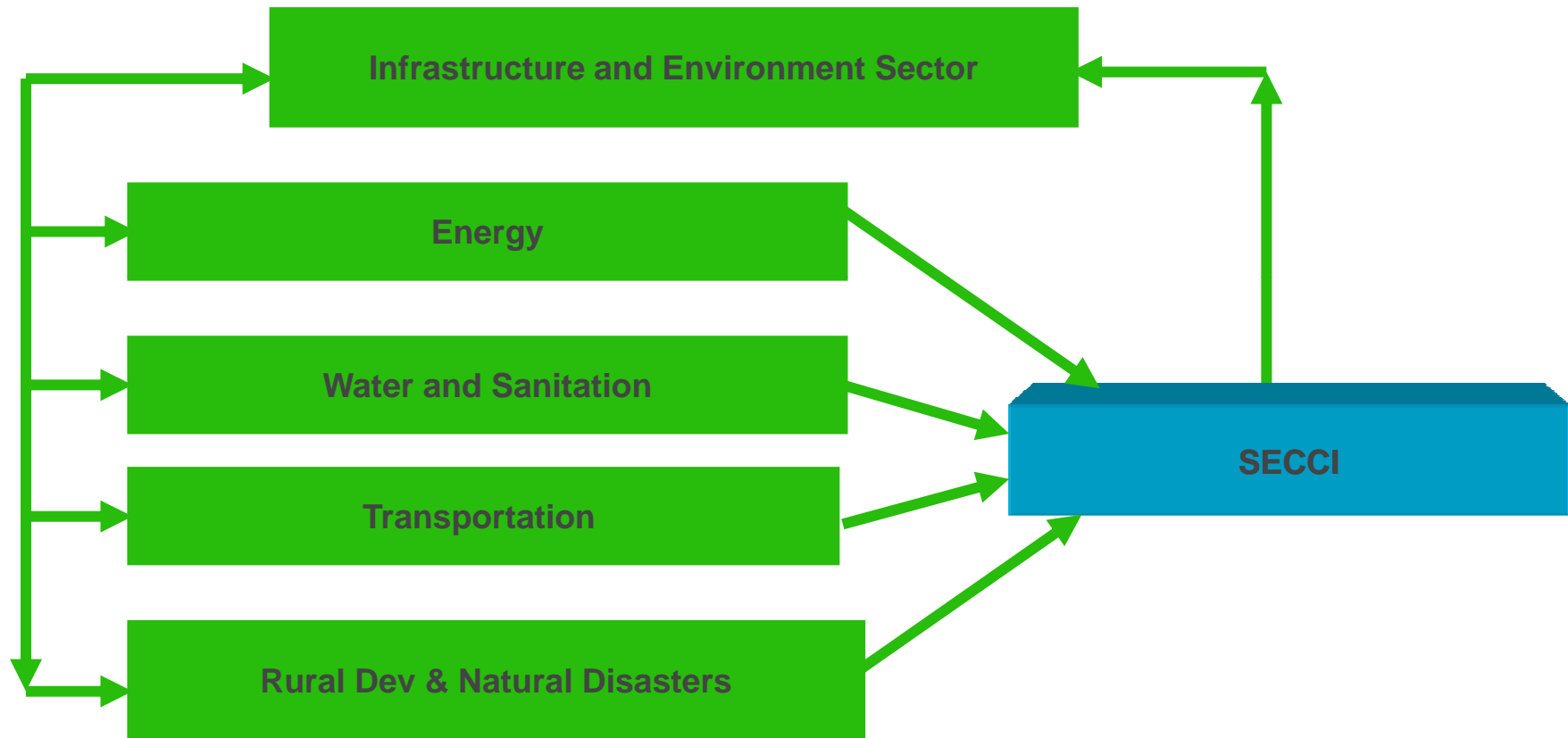
**3. CARBON FINANCING**  
5 TCs (US\$2.85m)

**4. CLIMATE CHANGE ADAPTATION**  
3 TCs (US\$1.4m)

**5. MULTI-PILLAR**  
6 TCs (US\$3.1m) / 2 PBL Loans (US\$500m)



## SECCI's Operational Structure

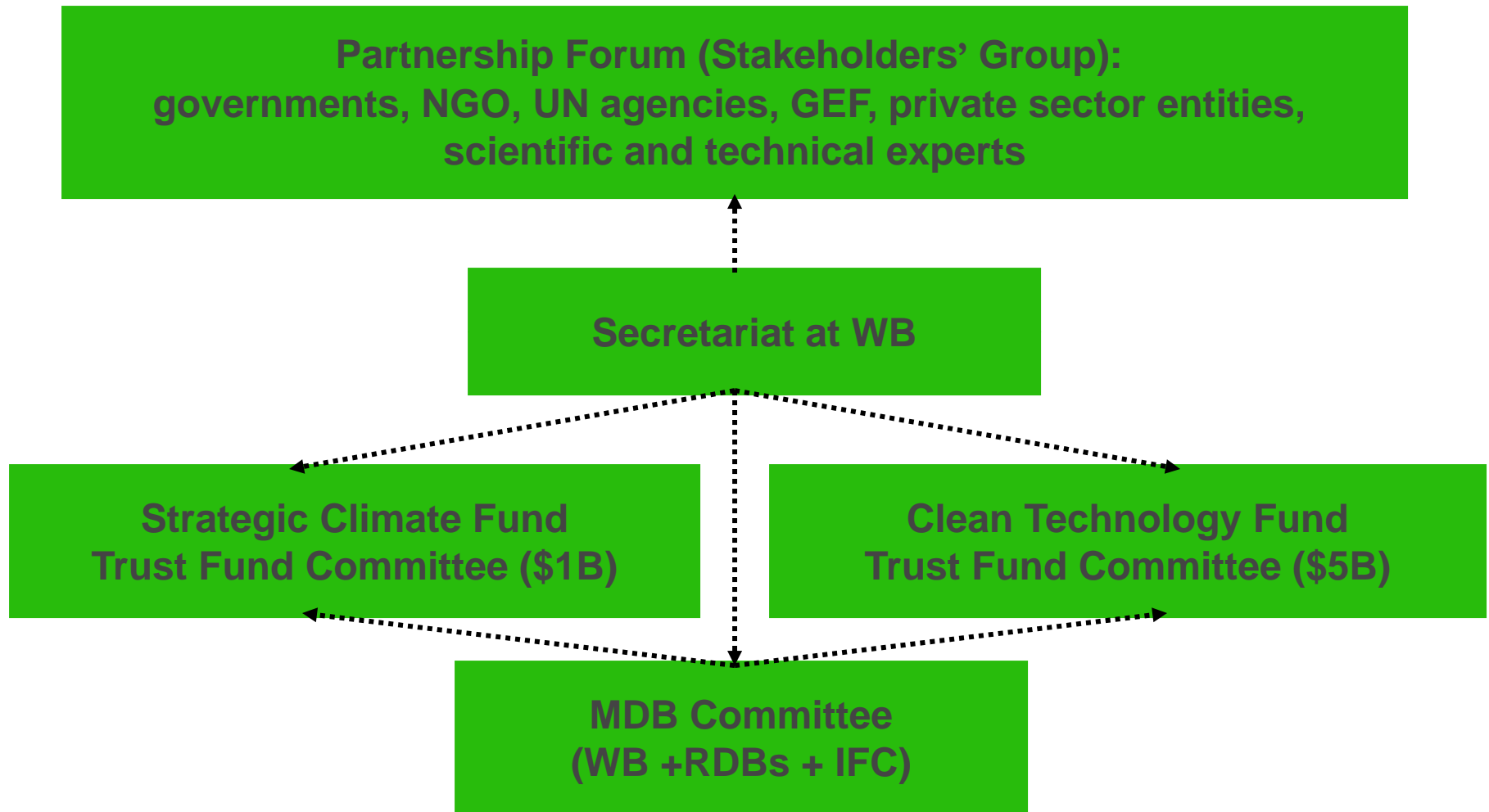


# Climate Investment Funds:

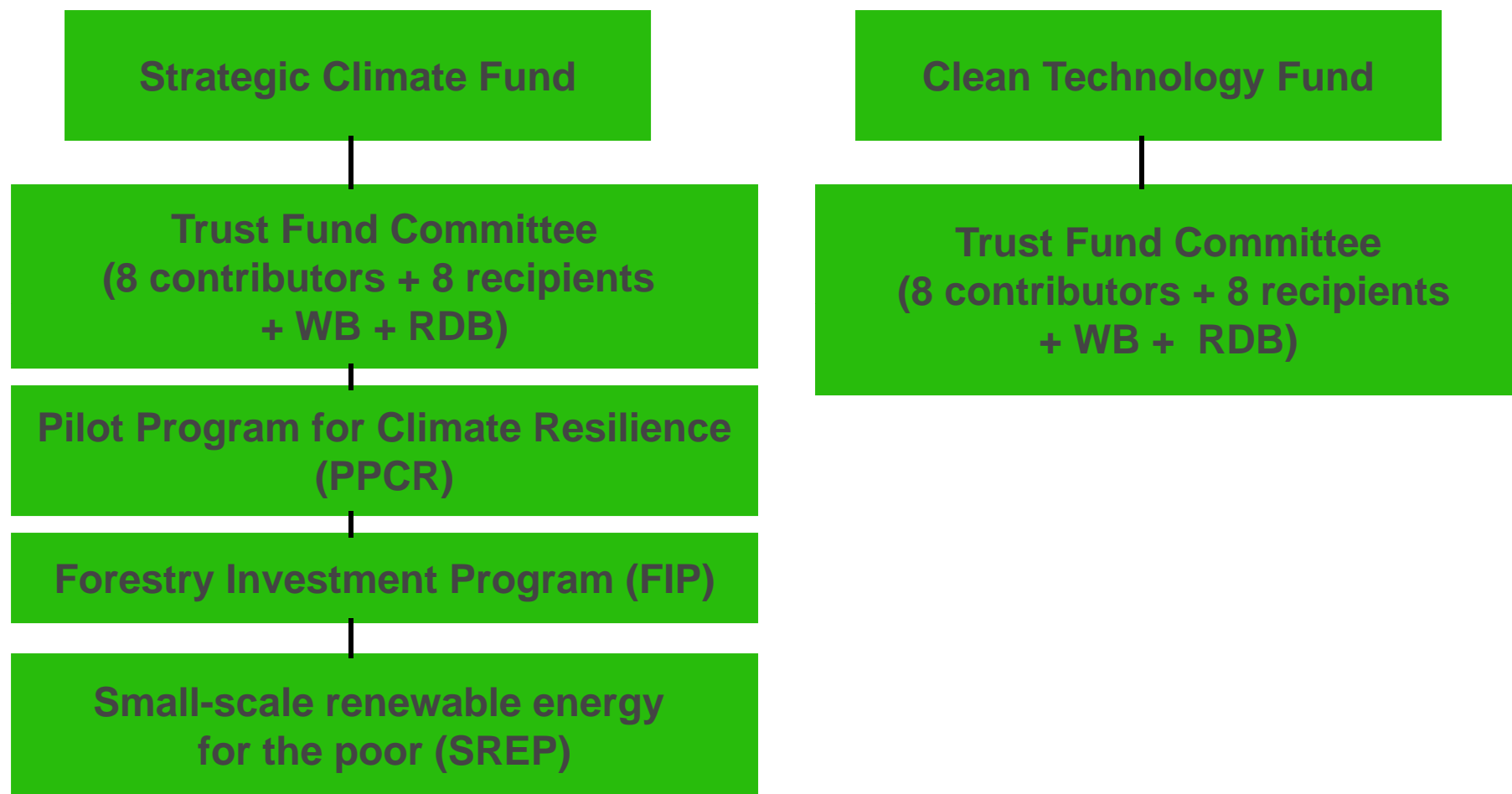
## IDB's leadership on Climate Change in LAC

- » New funds for promoting low carbon and climate resilient growth and development
- » CIF - Two Funds: Clean Technology (CTF) and Strategic Climate Fund (SCF)
- » Purpose: to scale-up investments moving from project to programs
- » Fill immediate financial gap for urgent actions until the post-2012 regime financial architecture is effective
- » Accelerate public and private investments
- » Amount: US\$ 6.1 Billion
- » Timeframe: now and for next 5 years

# Organization of the CIF Funds



## Organization of the CIF Funds



# Support for Low–Carbon Investments: Mexico Investment Plan

» **Jointly developed by IDB & WB**

» **IDB public and private sector activities in:**

- Renewable Energy program: wind power and small-scale hydropower, Mexico's Green Fund and assistance with costs of interconnection and technology development
- Energy efficiency program: scaling-up FIDE with Second Phase (ex: replacement of inefficient motors in SMEs, commerce)

» **Approved by Trust Fund Committee of the CIF** (January 29, 2009)

# Support for Climate Resilience

- » **Pilot Program for Climate Resilience (PPCR)**
- » **Several potential pilots identified (7 countries & 3 regions)**
  - LAC: Bolivia (country) & Caribbean (Region)
- » **Objective**
  - Integrate climate-related risks into country planning
  - Support strengthening of institutional capacity for climate resilient development (grants)
  - Support investments in climate-resilient infrastructure (concessional financing)

## SECCI Policy-based programs: Mexico and Colombia

- » Country-specific Stern Report
- » Strengthening Environmental Ministries responsible for CC policies
- » Mainstreaming CC in priority sectors
- » Development of CC plans for 15 states (Mexico)

## **TECSIS** (Tecnologia e Sistemas Avançados Ltda.), Brazil

- » One of the leading manufacturers of wind turbine blades.

### **Actions:**

- » A market study on the global wind power sector, industry trends and company competitiveness relative to other players in the wind power sector.
- » Funding for capital investment needs that will allow the company to boost its production of tailor-made blades.
- » US\$120 million in loans from the IDB were approved to restructure TECSIS debt and invest in new production lines.
- » Creation of up to 2500 additional high-skilled and stable “green-jobs” required for the expansion of the production line.





## **LACFIN** (Latín American Capital Finance), Regional

- » Energy audit and investment plan for sugar mills, ethanol plants and irrigation systems of feedstock cultivation
- » Evaluation of possibilities to increase cogeneration (boiler, irrigation, sales to grid, etc.)
- » Implementation of measures financed by LACFIN
- » Three potential clients identified in Brazil, one in DR

## IDB Sustainability Scorecard

- » **IDB knowledge product developed for use by financial institutions, investors/developers, and IDB at all stages of project lifecycle**
  - Government entities, NGOs, and other members of biofuels community also expected to benefit from Scorecard
- » **Thinking tool for how to address environmental and social sustainability issues**
  - Does not provide a single score
  - Fosters communication with clients about specific sustainability issues related to biofuels
  - Not a replacement for environmental and social due diligence
- » **Addresses complex issues in an organized and visual way**
  - Color map allows user to assess sustainability of project, including key trade-offs

[www.iadb.org/scorecard](http://www.iadb.org/scorecard)