

The background features a large, semi-circular watermark of the World Bank logo, which includes a globe and the text "WORLD BANK".

**Carbon market  
continuity after 2012 -  
challenges for LAC  
Region**

**Latin America Carbon Forum**

**Lima, Perú**

**September 2007**

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World Bank**

➤ What is needed to transition to a low carbon economy?

# The overall investment gap

	Annual Investment Needed	Current Funding	The Gap
Power sector in the developing world	\$165 billion	\$80 billion ➤ \$48 billion from private sector, IFIs, donors, ECAs ➤ \$32 billion from internal cash generation	<b>\$85 billion</b>
Low carbon transition	\$30 billion	Hundreds of millions	<b>&gt; \$30 billion</b>



# How to mobilize the resources required?

- Carbon Markets
- Concessional Finance
- Policy Reforms



# Developing Countries Share:

Carbon Market (~\$5 billion in 2006)

CDM & Clean Energy - Investment leverage 2002-06

**Cumulative CDM deals**

**= US\$ 7.8 billion \***

↳ **US\$ ~2.7 billion from  
clean energy projects**

**US\$ 16 billion  
leveraging clean  
energy in developing  
countries since 2002**

## Who buys ('06):

- EU Private Sector 75% of demand
- UK 50% (15% '05), Italy 10%, Japan 7% (46% '05), Spain 6%, Netherlands 4%

## Who sells ('06):

- BrIC: China 61%, India 12%, Brazil 4%

\* CDM + JI = US\$ 8.3 billion

# Key Messages

- **Carbon market** needs:
  - Predictability (long term, equitable and stable regulatory framework)
  - “Project-by project” to “sector / program approach”
  - Emissions from deforestation and degradation
  - Greening Investment Schemes (GIS)
  - Significant scale-up of GEF
  
- Additional soft loans from **IFIs** will be necessary, although this will not suffice.
  
- Sector and policy reforms required to unleash **private sector**:
  - Reforms that promote efficient production and energy use
  - Policy framework to stimulate investment low carbon investments and promote trading
  - Incentives for voluntary actions



# **WB Initiatives for Clean Energy and Development**



# Clean Energy Investment Framework – Three Pillars

- ❑ Pillar 1 focuses on Energy for Development and Access for the Poor: the Role of Energy in Economic Growth and Poverty Reduction
- ❑ Pillar 2 focuses on the policies and financial requirements to support a transition to a low carbon economy
- ❑ Pillar 3 focuses on the need for investments to reduce vulnerability to climate variability and climate risk, especially for the poor who suffer the most from this problem

# Role of the Bank and Next Steps

- Energy for development and access for the poor
  - accelerate energy access in SSA
  - support economic growth in low- and middle income countries through policy reform
- Low carbon economy
  - scale up energy efficiency
  - develop clean energy programs
  - continue to explore new financing options
- Adaptation
  - country studies to evaluate costs and policy options
  - increase project portfolio
  - risk sharing mechanisms

## Mexico, Brazil and other countries WB studies on low carbon development

- Study one of five country studies (Brazil, China, India, South Africa) being supported by the Bank as part of the Clean Energy Investment Framework.
- Develop a Low Carbon Development Scenario Analysis in the above mentioned countries including identifying a program of low carbon investments that could be funded by international and domestic resources.
- Initial outputs in December, February, and April.
- Full study to be completed in 18 months.

# Some Expected Outputs

- *Current situation and investment sector review.* Inventory of existing work and gaps in information.
- *Sector analytical analysis to the year 2030.* Baseline and alternative emission scenarios to the year 2030
- *Investment portfolio to mitigate GHG emissions.* Portfolio of priority climate change actions and implementation needs, based on costs, political and social feasibility, institutional, legal, and other pre-conditions.
- *CDM National Strategy.* Technical assistance to local Governments to enable a better institutional understanding on how to best assess the domestic or international funds, especially carbon credits through the CDM.

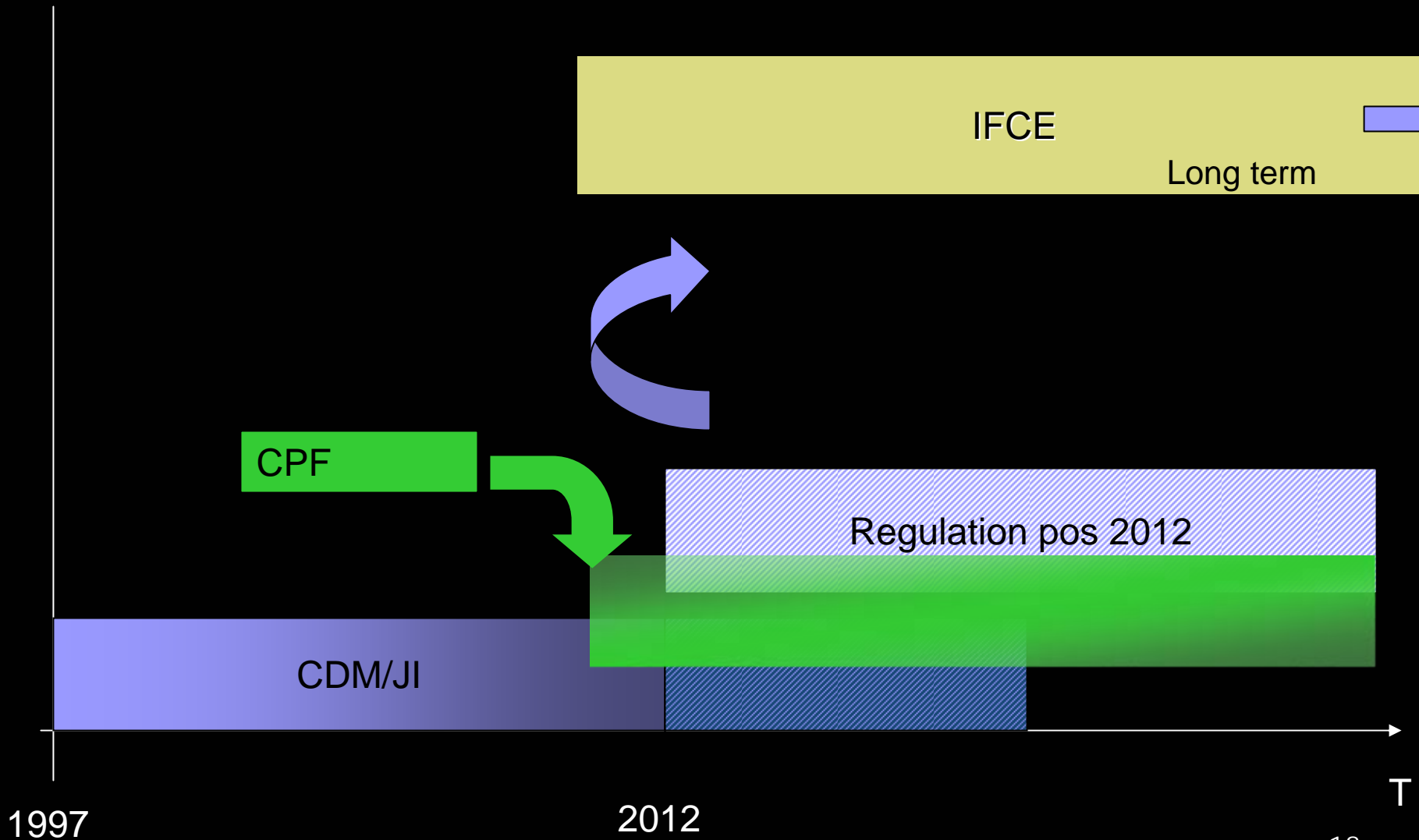


# **A Carbon Facility for Low Carbon Growth (CPF)**

Under Development



# Transition and Long Term



# Background

- Urgent and immediate need for action and scaling up of mitigation efforts require:
  - ❑ Supporting long-term investments for transition to *low-carbon economy*
  - ❑ Shifting away from a project-by-project approach to *programs* of investments
  - ❑ Providing incentives for development of low carbon *technology*
  - ❑ Systematically integrating carbon finance into public and private *investment decisions*
  - ❑ New incentives for avoiding *deforestation*



# The Carbon Partnership Facility

- Focus on mitigation opportunities in multiple sectors with long-term, large-scale impact on emission trajectories
- Start now, not wait for agreement on post-2012 regime

# Key features

- Strategic and programmatic approach:
  - ❑ Strategic integration into existing WB assistance framework, to support regions' and countries' sustainable development objectives
  - ❑ No longer opportunistic single project operations, but focus on investment programs, leveraging macro-economic and sector dialogue as well as lending
- Mitigation on a large scale:
  - ❑ Support transition to a low-carbon economy
  - ❑ Will require creation of enabling environments, crowding in of the private sector, and larger-scale facilities over long term
- Partnership approach with both sellers and buyers
- Flexible with regard to markets and applicable regime



# Buyers and sellers in a partnership

## Buyers

Minimum financial contributions

Willingness to commit to purchase emission reductions when generated and over the long term

Supported by:

•Carbon Asset Development Fund

## Sellers

Minimum ER contribution

Willingness to develop and implement emission reduction programs and sell ERs

# Carbon Partnership Facility

- Will involve sectors where carbon finance has already demonstrated its impact, but will focus on scaling up and broadening reach by supporting national, sub-national (e.g., provincial level) or sectoral strategies
- This will require new methodological approaches: e.g., programmatic, sectoral, cross-sectoral, wholesale (e.g., energy efficiency program through financial intermediary)

# CPF – Program categories

- Renewable energy
- Supply-side energy efficiency, process energy improvement, and demand-side management:
  - New power generation using advanced technologies
  - Rehabilitation of old, inefficient power plants
  - Process efficiency
  - Lighting efficiency
  - Transport
- Waste management
- Gas flaring and leak reduction
- Fuel substitution to lower or zero carbon fuels
- Carbon sequestration (geological, forestry, land-use)

# Some examples

- Technology leapfrogging: Introduction of new technologies in developing countries.
- Energy efficiency scale-up through financial intermediaries
- Climate-friendly urban development: city-wide approach (including waste management, waste water treatment, transport, public lighting, building codes)



# The Forest Carbon Partnership Facility

(under preparation)



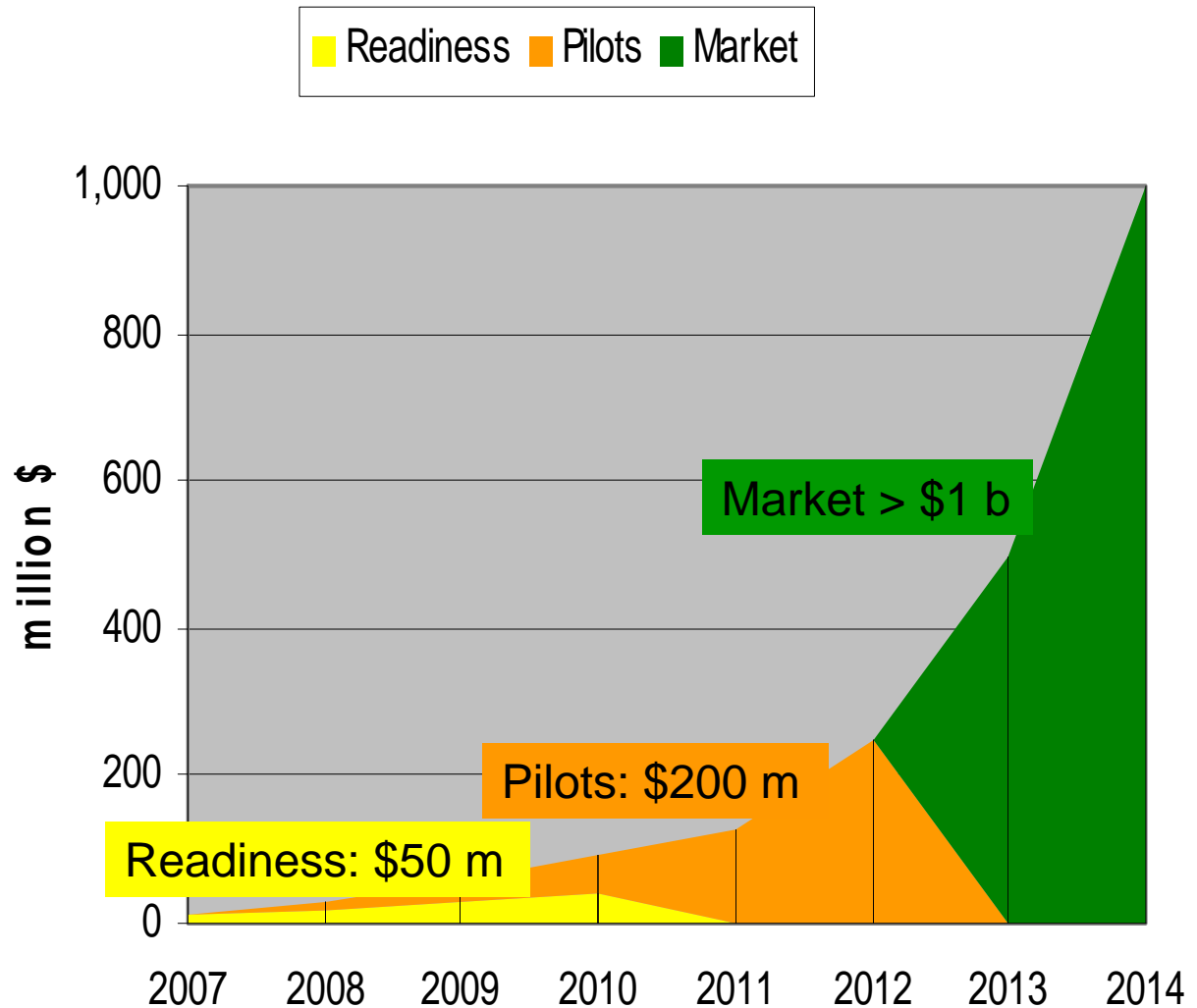


# Avoiding deforestation

Set the stage for a system of positive incentives post-2012 that includes reduced emissions from deforestation and forest degradation through:

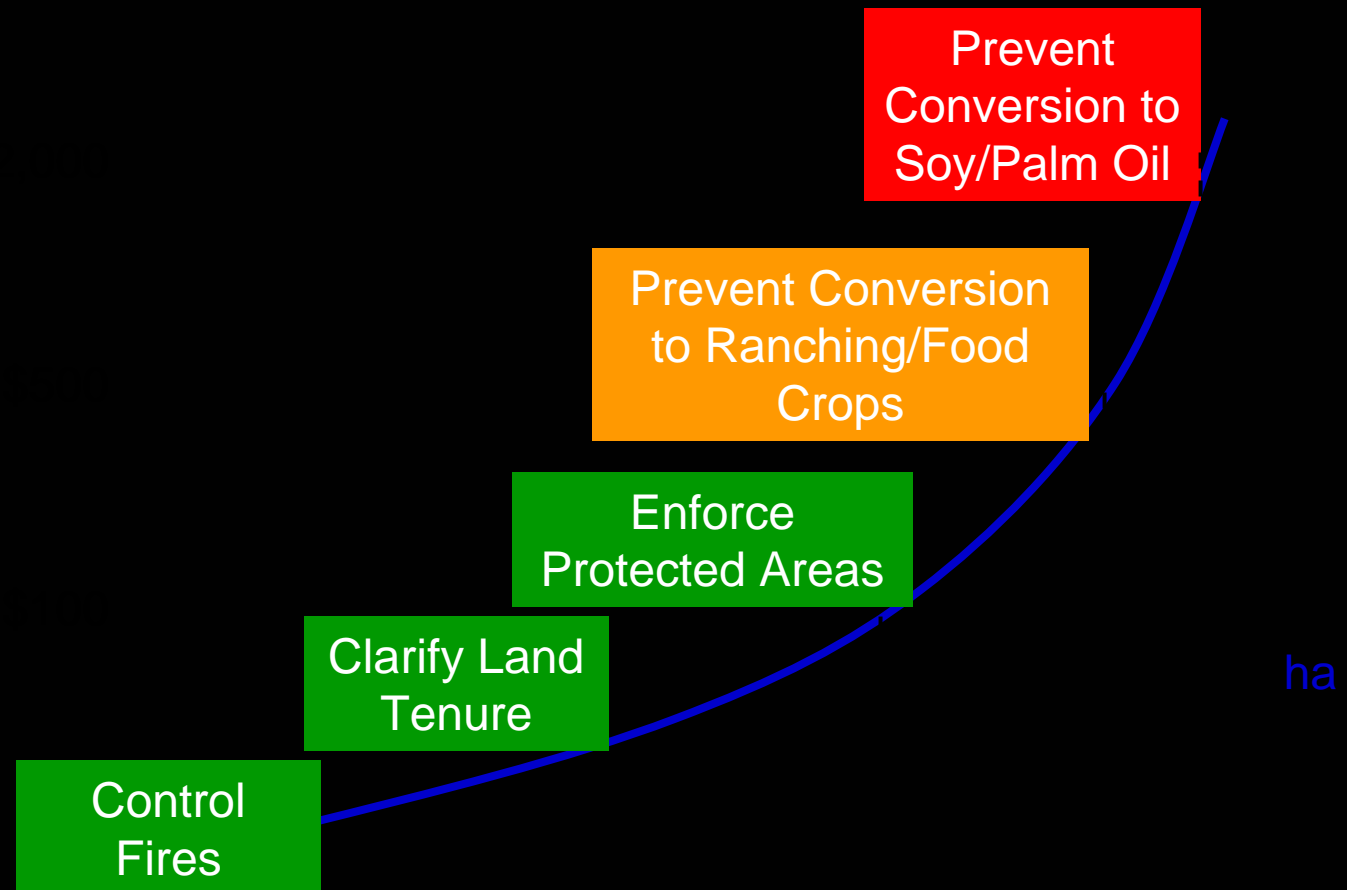
Capacity building: readiness for a future system

Pilot performance-based payments



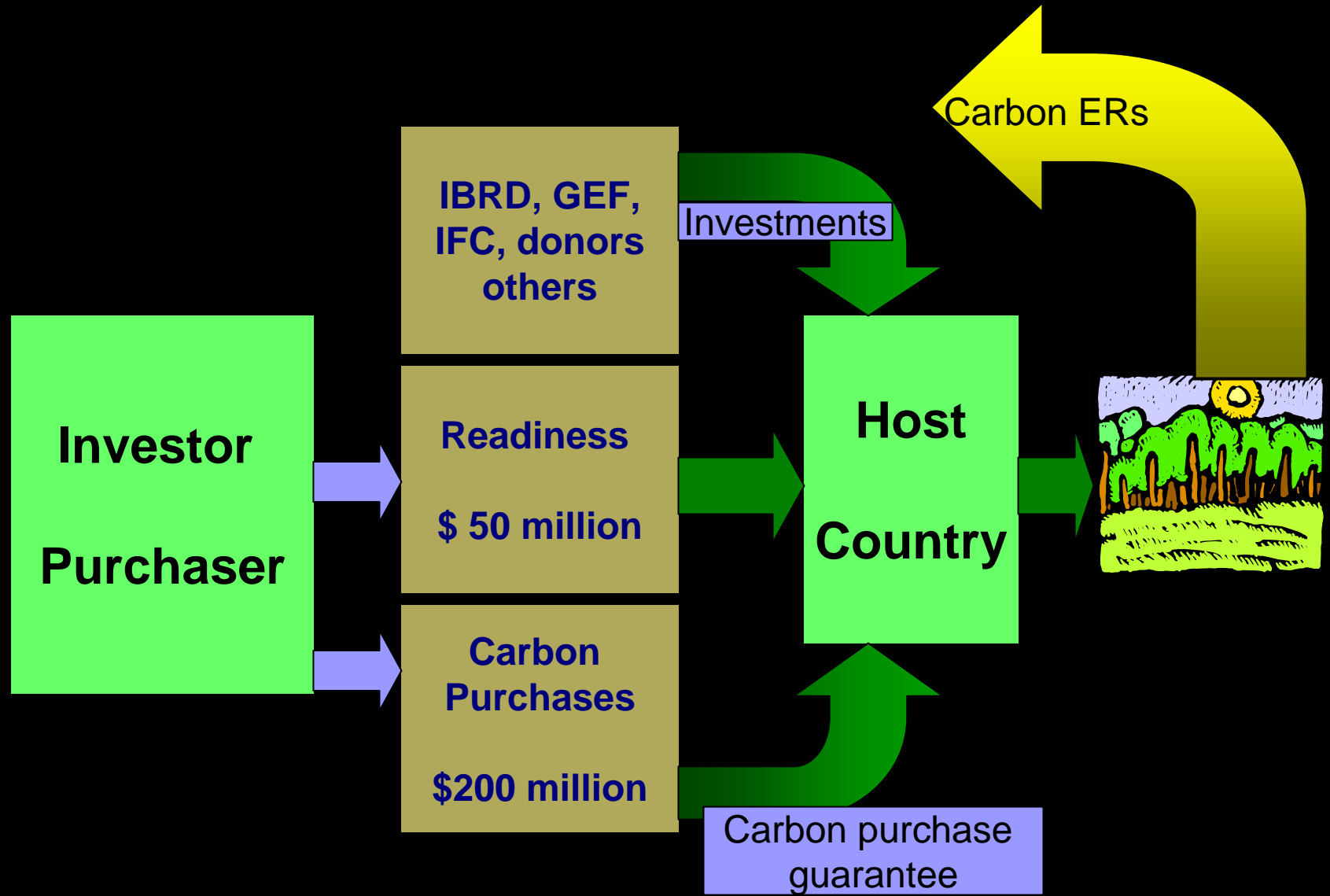
# Avoiding deforestation

Cost per ha of forest saved



ha

# How the facility could work



# LAC Desafíos y Oportunidades

## Fortalezas:

- Región pionera
- Sector privado muy dinámico
- Estructuras de gobierno proactivas
- Proyectos con sólido componente de Desarrollo Sostenible

## Desafíos

- Con algunas excepciones economías de pequeña escala
- Díficil acceso a fuentes de financiamiento
- La Banca regional recién se incorpora al proceso del MDL
- Fuerte apuesta en el sector agro-forestal
- Integración de otras agencias del estado en el proceso
- Necesidad de avanzar en agrupamiento de proyectos y proyectos programáticos



Thank you / Muchas gracias

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