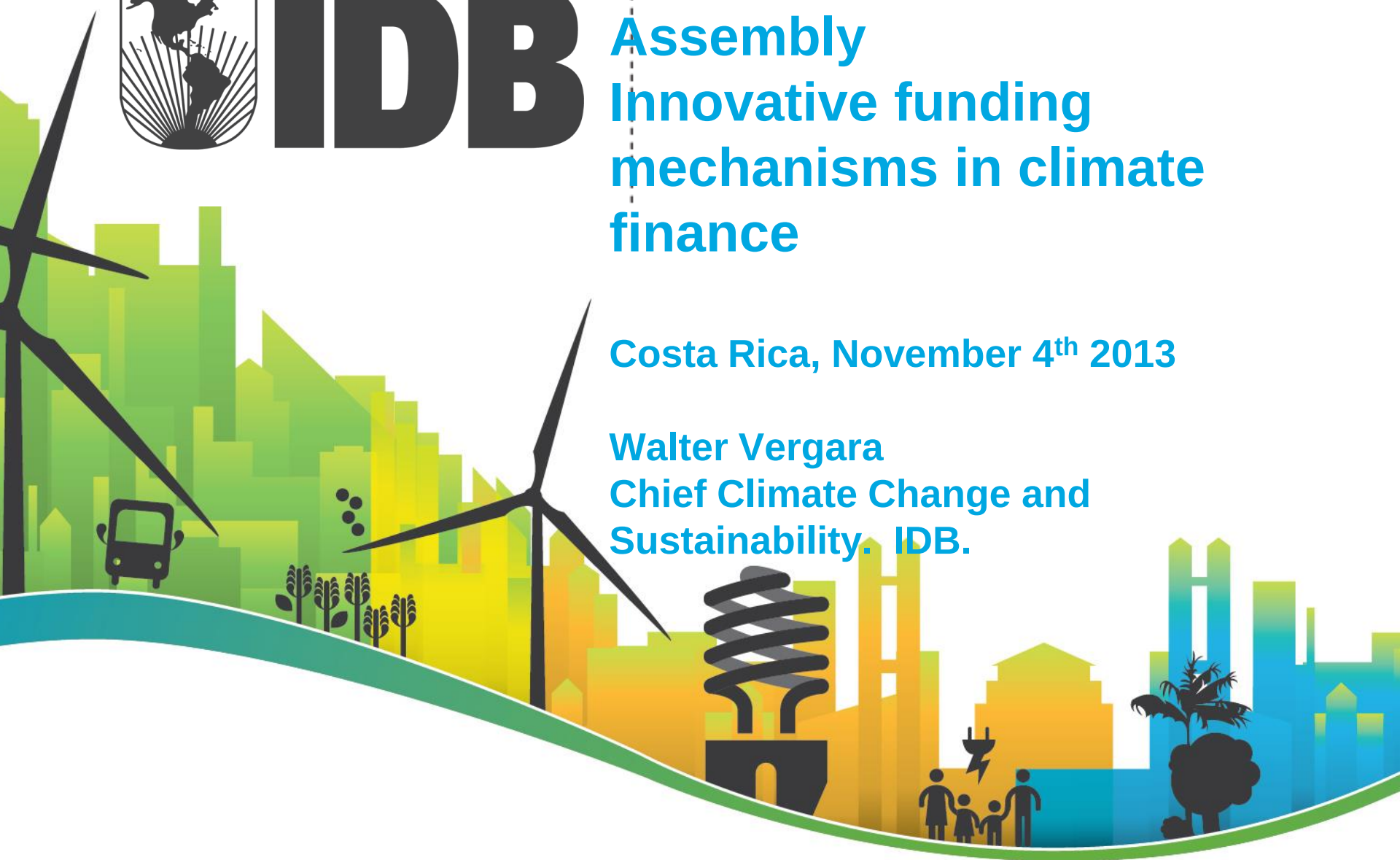
# 15th REDLAC Annual Assembly
# Innovative funding mechanisms in climate finance

**Costa Rica, November 4th 2013**

**Walter Vergara**
**Chief Climate Change and Sustainability. IDB.**



# Innovative funding mechanisms in climate finance

- **IDBs Climate Change Action Plan**
- **Increasing resilience to climate impacts**
- **Reducing the Carbon Footprint in the Region**

# Action Plan 2012-2015

- **Adaptation is priority one given high vulnerability of economies and ecosystems (adaptation Bank)**
  - Water supply
  - Agriculture
  - Coastal Areas
  - Ecosystems

- **Focused Approach to Mitigation (sectors that account for most of the carbon footprint of the region)**
  - Land use change (agriculture and forestry)
  - Power sector
  - Transport sector

# Climate Change Fund at IDB (SECCI)

- **Fund analytical work to set up foundations for IDB intervention on climate issues**
- **Provide resources for pre investment stage of IDB interventions**
- **Finance first of a kind pioneering solutions**

# Adaptation in high mountain ecosystems in Colombia: First SCCF project by IDB. Approval expected in 2013

## Value proposition/transformative opportunity

The natural water regulation function of these ecosystems is expected to be seriously affected by changes in the water cycle.

These ecosystems and wetlands are the main sources of drinking water for the Bogotá metropolitan area and its adjoining rural communities.

## Objective

Implementation of adaptation measures addressing the consequences of climate change in the water supply and hydrological regulation functions provided by high mountain wetlands
Revegetation, natural water storage, land use planning

## Status

- GEF CEO approval October 2013
- Scheduled for Board presentation in 2013

| Financials | |
|---|---|
| Project size | $23.3 M |
| SECCI investment | $0.9M |
| Climate Funding SCCF | $4.2M |
| IDB Finance | $11.4 M |
| Others (JAXA, EAAB, CAR) | $11.0M |
| **Complementary funding** | **$54.4M** |

# Adaptation of Biodiversity in Costa Rica

## Value proposition/transformative opportunity

- Costa Rica, 1/20 more biodiverse countries in world;
- Ecosystems and biodiversity being afected by changes in climate

## Objective

- Develop the National Strategy of Biodiversity Adaptation to Climate Change impacts and update and redesign 2 existing conservation initiatives (GRUAS II, Biological Corridors System)

## Status

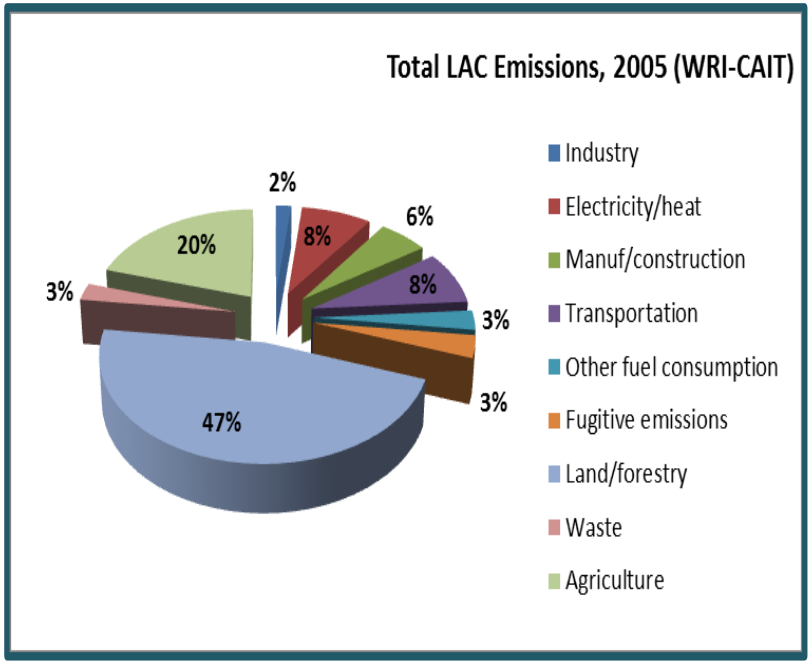
- In execution. To be finalized by December 2013.

| Financials | |
|---|---|
| SECCI | US$ 400,000 |
| Local | US$ 108,000 |
| **TOTAL** | **US$ 508,000** |

# The challenge to move to a low carbon economy

- The region has a modest contribution to the current GHG global budget (11% of total, about 5 Gt/year)
- However, to meet global stabilization goals will have to go to 1 Gt/year by 2050 (2 tpc)
- Carbon signal very focused (80% in land use change, power and transport)
- 94% in eight nations

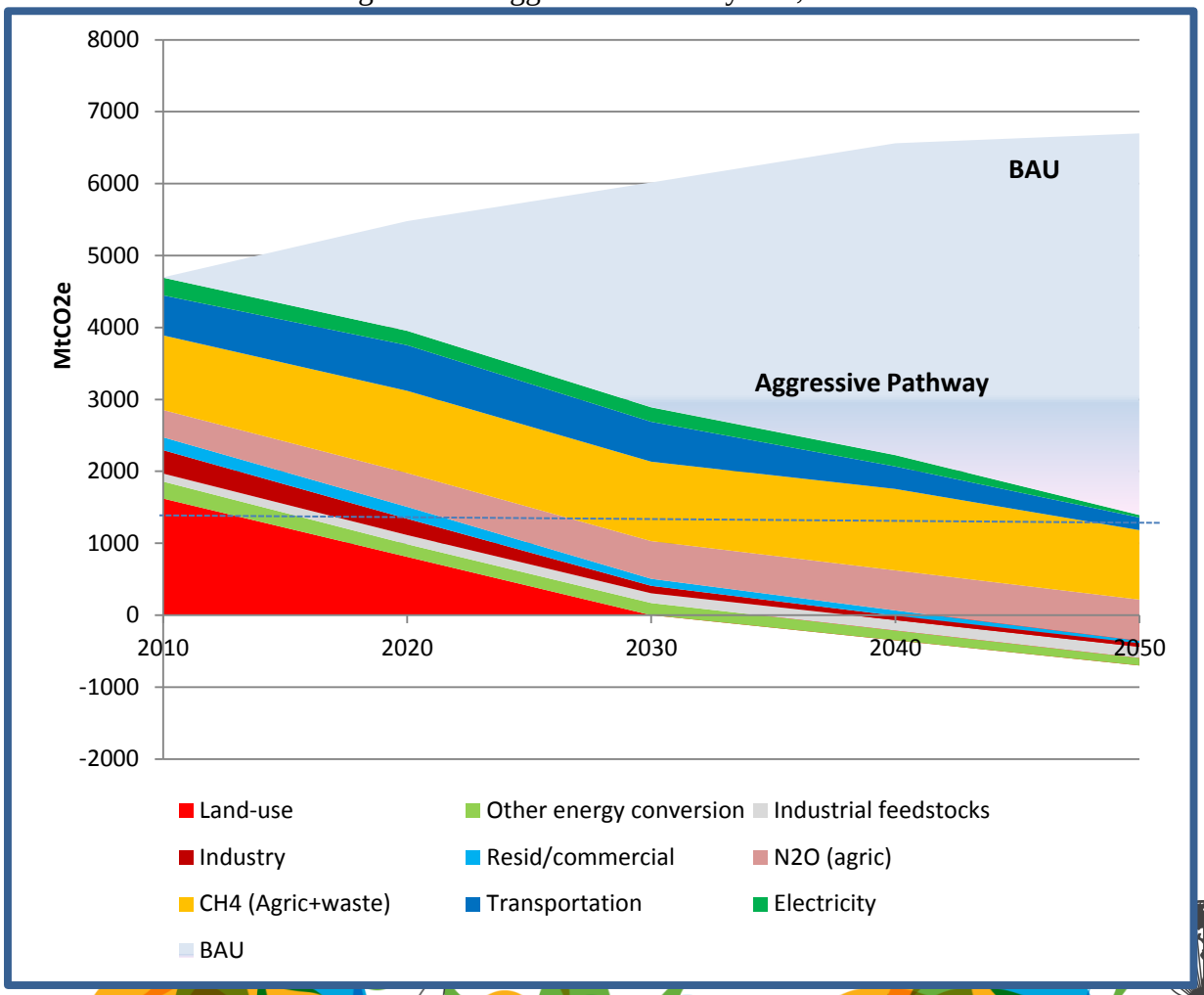
Sector composition of total LAC GHG emissions




**Source:** Own elaboration based on WRI-CAIT data.

# The challenge to move to a low carbon economy

Figure 11. " Aggressive Pathway I +", 2010-50




**Source:** Version 2.0.rc1 of the GEA Scenarios Database of the International Institute for Applied Systems Analysis (IIASA), and own elaboration

# The challenge to move to a low carbon economy

- **What needs to be done?**
  - *Power sector with 90% zero-carbon capacity*
  - *Stop net deforestation by 2020*.
  - *No net emissions from land use change by 2030, net accumulation of carbon sinks to 2050, and a 50% cut in agricultural emissions*
  - *Abate final energy demand by 40%*
  - *Widespread electrification of the transport sector*
  - *Tag: US$110 billion per year*

# Our Plan of Action: Promote decarbonization of Power Sector

- **Support key analytical pieces for policy actions and investment strategies**
- **Promote removal of policy and regulatory barriers**
- **Promote large-scale deployment of renewable energy**

# Large Scale Deployment: Atacama CSP Plant (100MW)– Chile

## Value proposition/transformative opportunity

- Promote use of solar energy in the Atacama desert, a region with the highest solar radiation levels in the world
- Entry of Low Carbon Technology would transform power sector in Chile have replication potential in Peru
- SECCI leverage 1: 1000

## Objective

- Trigger large scale investments in SCP in northern chile, eventually driving the power sector away from fossil fuels

## Status

- BID process closed October 22nd
- BID results to be announced November 15th.

| Financials | |
|---|---|
| Project size | 100MW |
| SECCI investment<br>KfW investment (up to) | $0.8M<br>$130 M |
| CTF funding | $70M |
| IDB Finance (est) | $200M |
| Other lenders and equity | $300M |
| Projected GHG emission reductions | 10 million tCO2e first 10 years |

# Incentive package

- **Capital grant** of up to **USD 20M** from GoC (Max 50% of total project cost)
- **Free lease of fiscal land (specific site);** not mandatory to accept
- **USD 66M CTF concessional loan -** through IDB
- **Euros 15M** grant from **EU (LAIF)** - through CORFO and KfW
- **IDB financing (market based)** -> may include also **US$30M concessional financing** from Canada (C2F)
- **Euros 100M credit line** from KfW, through CORFO and for on-lending to local commercial banks

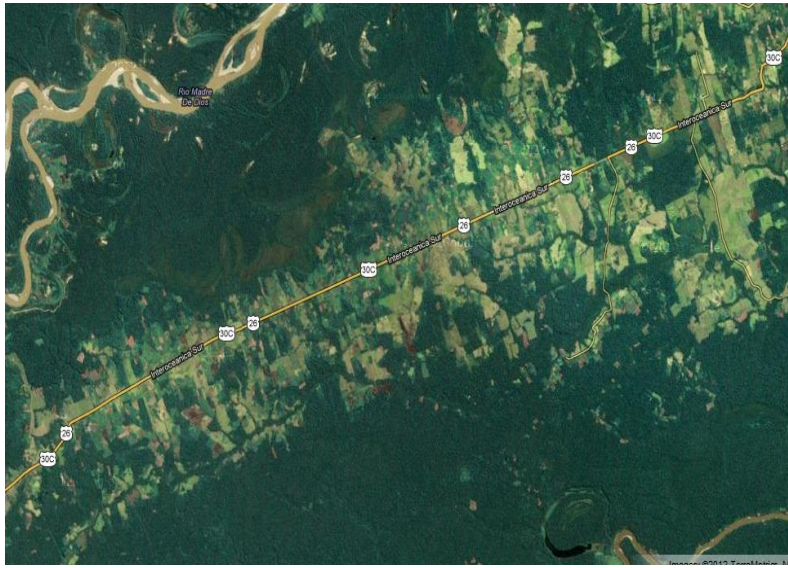
# Our Plan of Action: Promote reductions in emissions from land use change

- **Support key analytical pieces for policy actions and investment strategies**
- **Promote removal of policy and regulatory barriers**
- **Promote investments in low carbon agriculture and avoided deforestation**

# Bioclimate Fund in Peru

## Value proposition/transformative opportunity

20% of the carbon emissions in Latin America and 56% of the emissions in Peru are linked to land use change (largely deforestation).
The piedmont areas of the eastern ridge of the Andes, in particular in Peru provides the habitat for some of the highest concentration of biodiversity and a high carbon storage in the Planet.
uncontrolled deforestation and development process, may threaten its large biological and climate capital.



## Objective

To structure a financial instrument (Bio-climate Fund) that can be used to stop and revert the deforestation and land degradation process in the most vulnerable areas of influence of the IOH

## Status

- In preparation for delivery by COP 20

| Financials | |
|---|---|
| Project size | 200 Million |
| SECCI investment | $2.0M |
| Climate Funding | $100M |
| IDB Finance | $20M |
| Others | $80M |

# Above Ground Carbon Stock Estimations

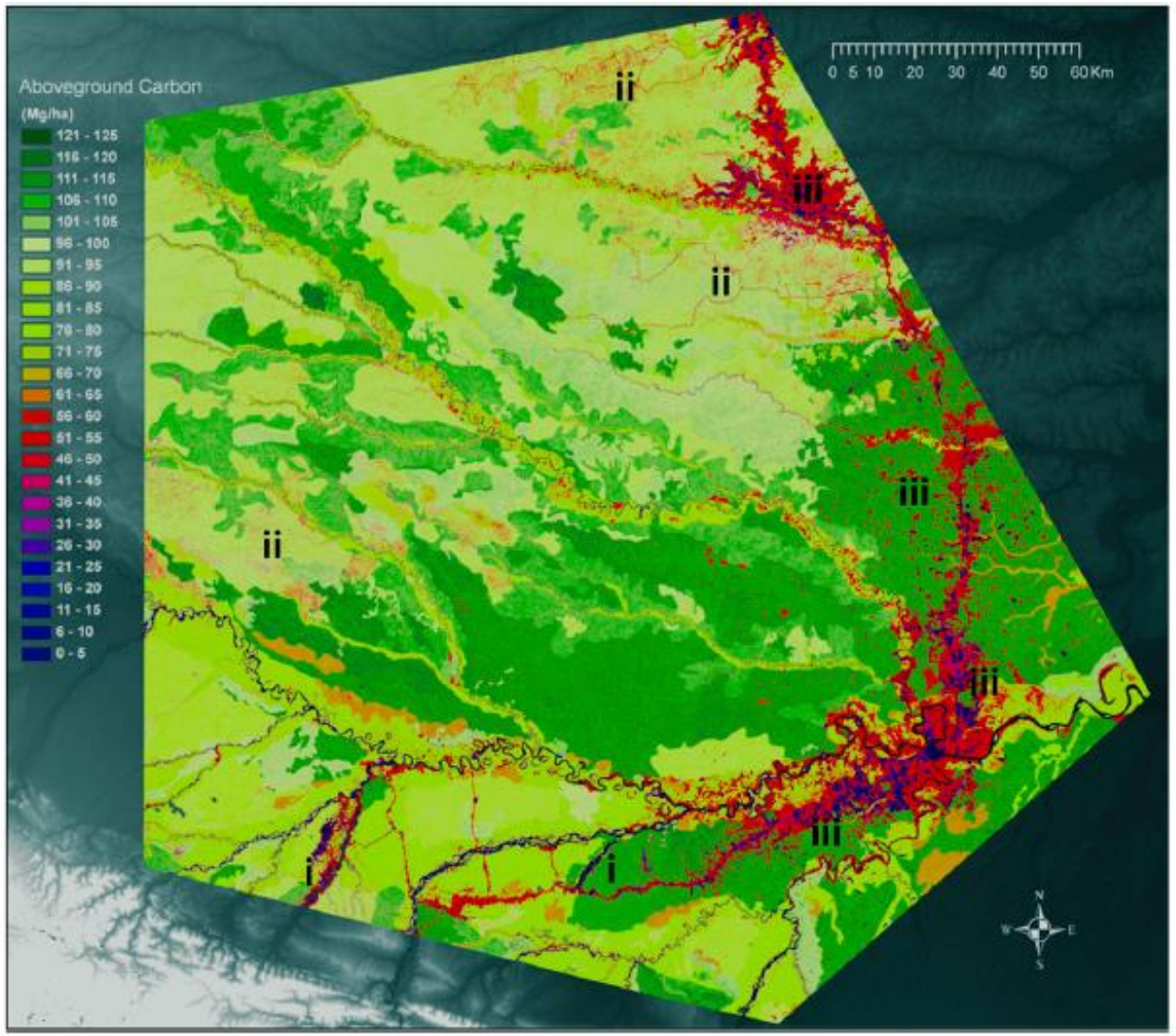
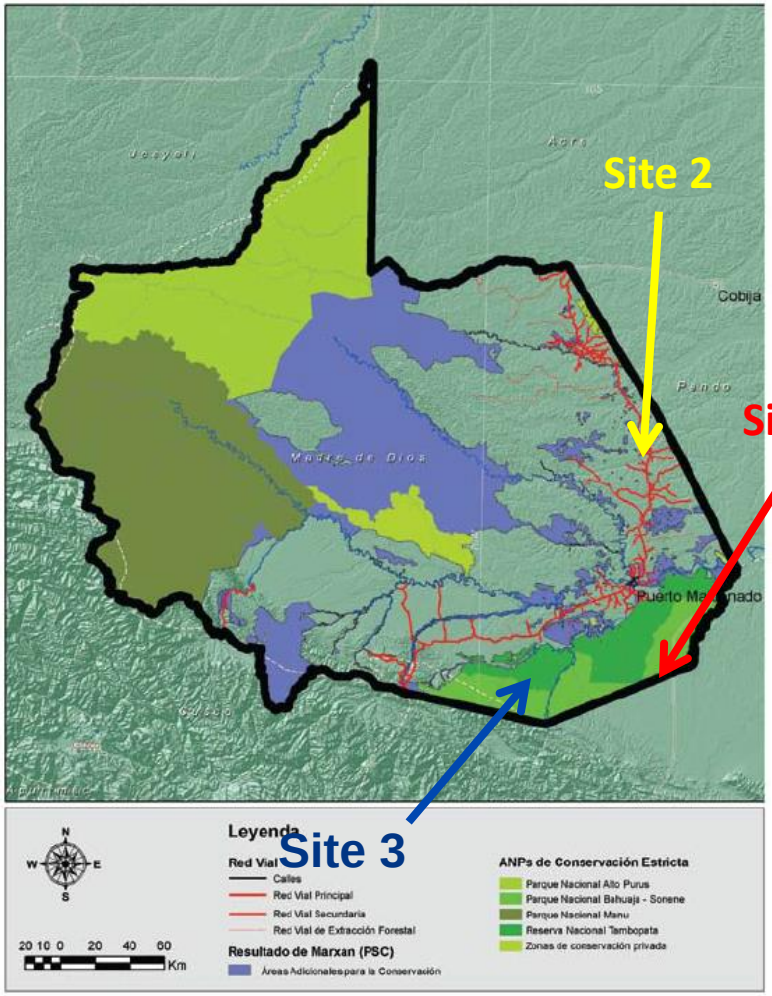
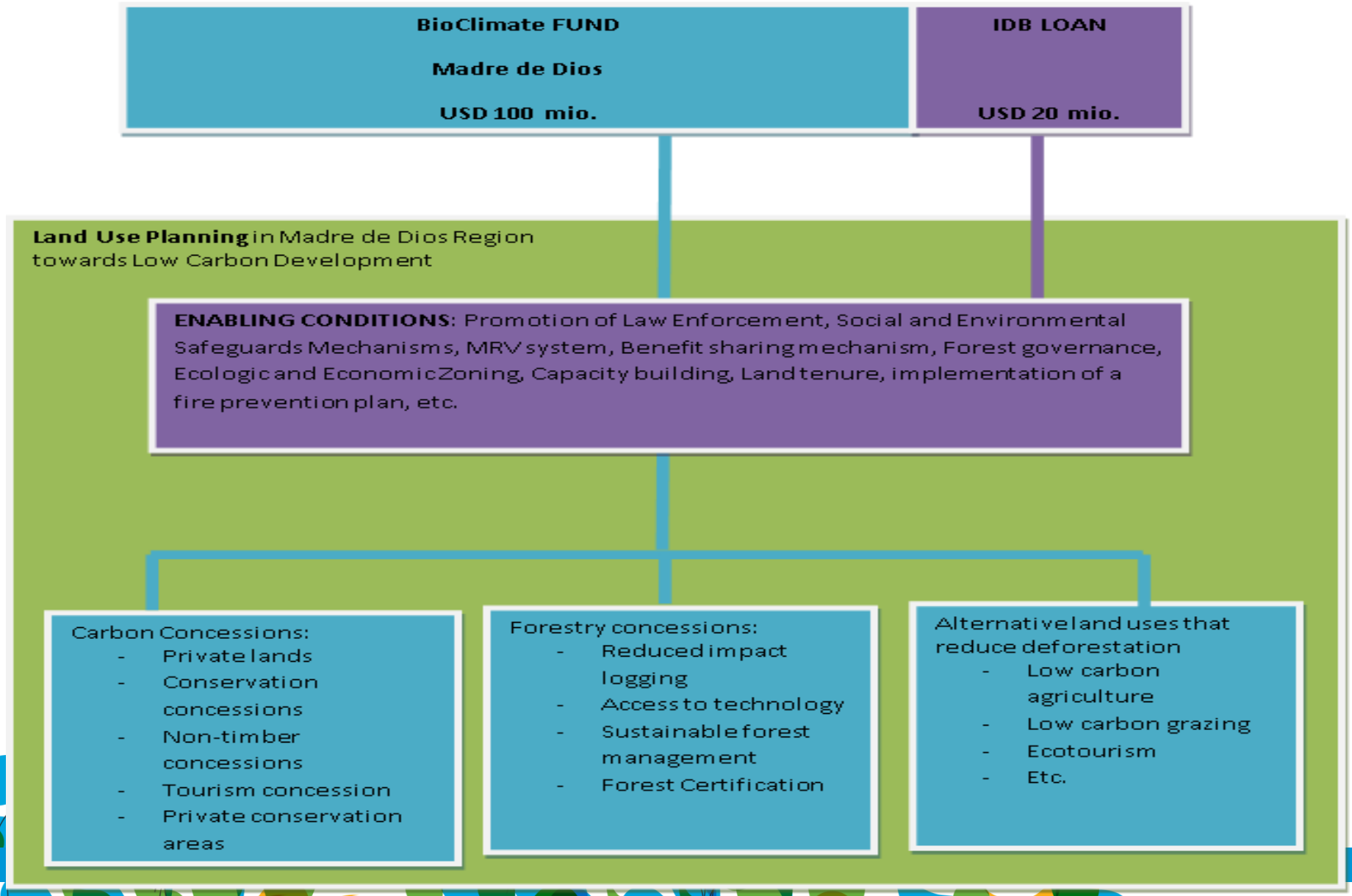



**Fig. 2.** Variation in aboveground carbon storage at 0.1 ha resolution throughout a 4.3 million ha region of the Peruvian Amazon, derived from an integrated use of CLAShite, LiDAR and field-plot data. Examples of (*i*) artisanal gold mining, (*ii*) selective logging and other forest disturbances, and (*iii*) deforestation for cattle ranching, road building, and other infrastructure are indicated.

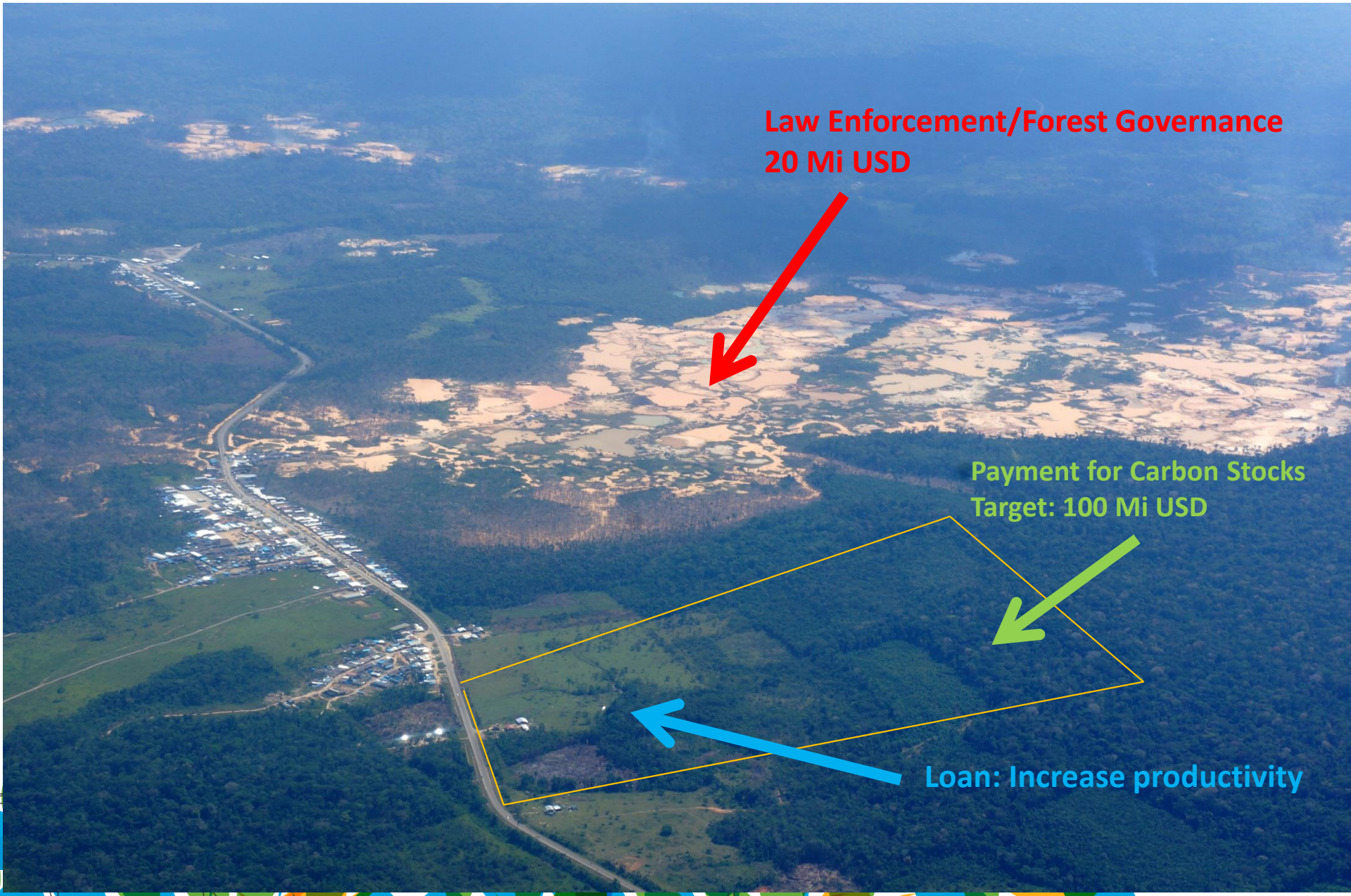



# According to bio climate criteria different payments would be considered

| Selected Sites | Soil conservation | Hydrological stability | Species Diversity | Additional Payment (ie) % |
|---|---|---|---|---|
| Site 1 | 1 | 1 | 1 | 60 |
| Site 2 | 0 | 1 | 0 | 20 |
| Site 3 | 0 | 1 | 1 | 40 |


BioClimate FUND
Madre de Dios
USD 100 mio.
IDB LOAN
USD 20 mio.
Land Use Planning in Madre de Dios Region towards Low Carbon Development
ENABLING CONDITIONS: Promotion of Law Enforcement, Social and Environmental Safeguards Mechanisms, MRV system, Benefit sharing mechanism, Forest governance, Ecologic and Economic Zoning, Capacity building, Land tenure, implementation of a fire prevention plan, etc.
Carbon Concessions:
- Private lands
- Conservation concessions
- Non-timber concessions
- Tourism concession
- Private conservation areas
Forestry concessions:
- Reduced impact logging
- Access to technology
- Sustainable forest management
- Forest Certification
Alternative land uses that reduce deforestation
- Low carbon agriculture
- Low carbon grazing
- Ecotourism
- Etc.

# BioClimate Fund: Madre de Dios



# ARPA for Life

Permanently protect 15% of the Amazon basin

Preserve the ecological function of an area crucial to **global biodiversity, water and climate functions**

Secure a significant **reduction in deforestation** and related **CO2 emissions**

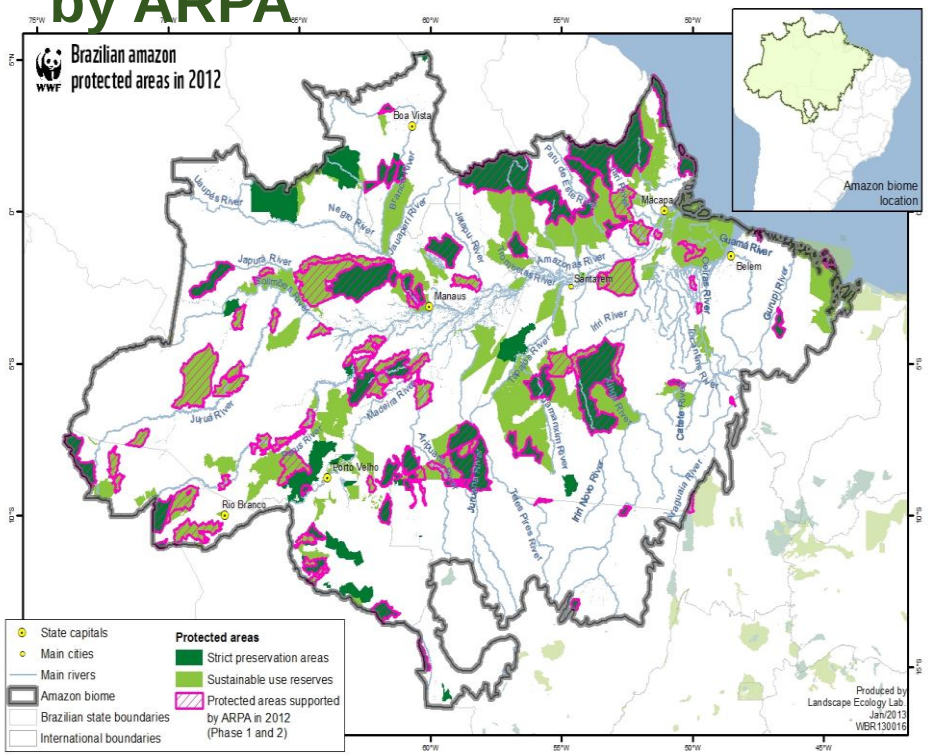
Help Brazil meet its **commitments** under the **UN's biodiversity and climate treaties**

Convention on Biological Diversity

IDB

# Builds on the Amazon Region Protected Areas (ARPA) program

## Protected Areas (PAs) supported by ARPA




- World's largest land conservation program
- ARPA for Life seeks to lay the foundation for sustainability of these efforts through the set up of a $215 M transition fund, while permanent funding in Brasil is secured.

IDB

# SECCI Investment in ARPA for Life

- **US$4.5 M Grant to FUNBIO will support management and initial implementation of US$200 M fund to support ARPA for Life**
  - Critical studies (climate resilience, optimized monitoring)
  - Professional services
  - Monitoring Equipment
  - Training
  - Administration costs

# SECCI Fund Investment Grants, 2013

| Project | Country/Region | Amount in USD |
|---|---|---|
| Marine Energy Pilot Projects in Southern Chile | Chile | 2,400,000 |
| Monitoring Climate-induced Changes in Tropical Glaciers | Andean Region | 1,500,000 |
| Adaptation to Climate Change on Peru's Coastal Marine Ecosystem and Fisheries | Peru | 1,000,000 |
| Pilot: Battery-Electric Buses | Colombia | 1,500,000 |
| Adaptation of the Hydrologial Cycle in Cuyo to the Impacts of Climate Change | Argentina | 1,500,000 |
| Analysis and Development of Energy Storage Options | Costa Rica | 900,000 |

Zusammenarbeit für die Zukunft wir wollen

Working together for the future we want

Trabalhando juntos pelo futuro que desejamos

Trabajando juntos por el futuro que anhelamos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