



# Initiative 20x20

*With the  
support of:*



Federal Ministry  
for the Environment, Nature Conservation  
and Nuclear Safety



NORWEGIAN MINISTRY OF  
THE ENVIRONMENT

## Land Restoration in Latin America: Initiative 20x20

*An effort led by 17 countries to change the dynamics of land degradation in Latin America*



# Context of land use and land-use change in Latin America

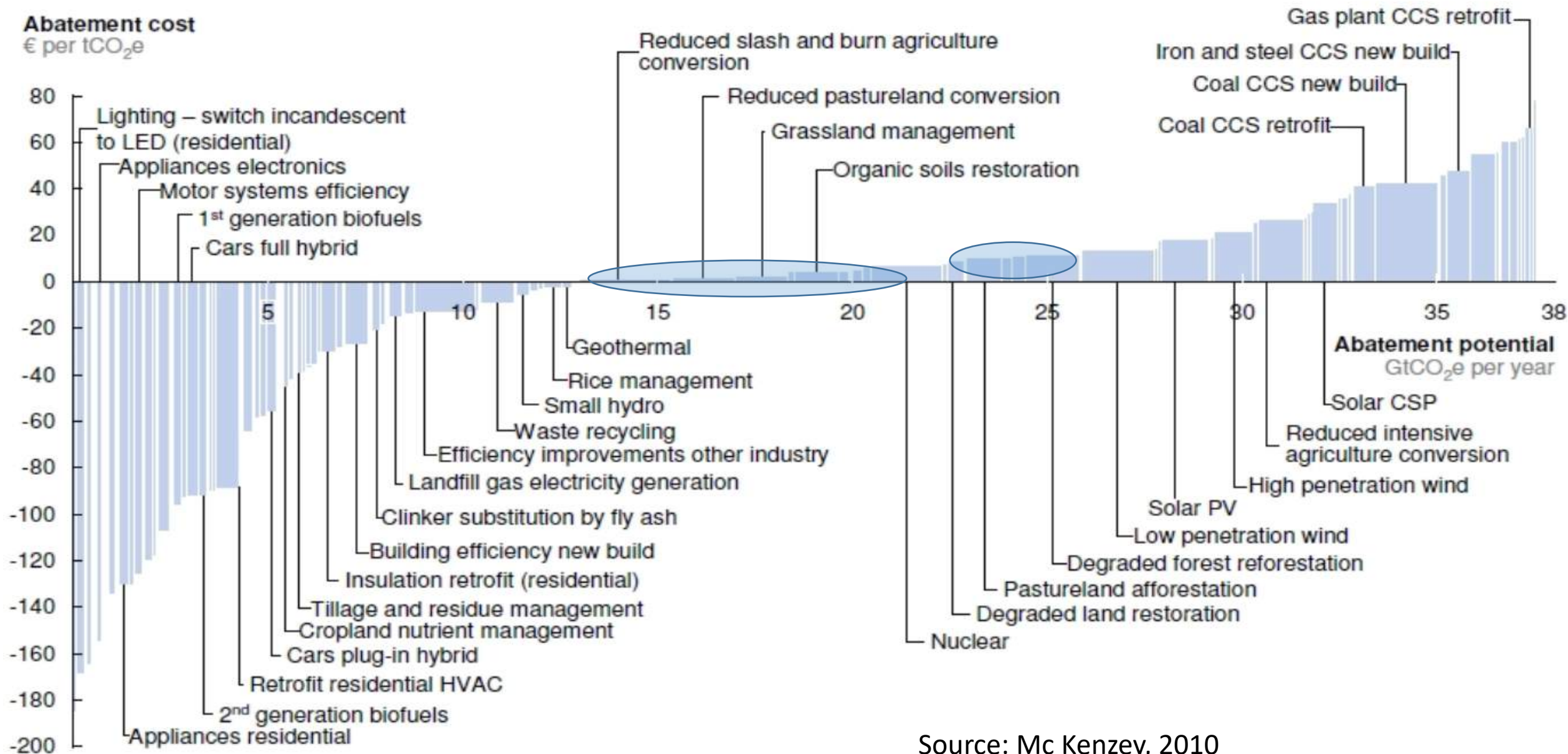
- 56%** of annual GHG emissions in LAC from land use and land use change
- 50%** of non large urban area employment in LAC tied to agriculture and forestry
- 13%** of global food and fiber trade from LAC
- 37 mha** of forests and grasslands converted to agriculture in LAC since 2000
- 3.4 mha** of forests are cleared every year, 70% of the area of Costa Rica
- 350 mha** of degraded forest landscapes – half the landmass of Australia

# THE ARGUMENT FOR LAND RESTORATION IN LATIN AMERICA:

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- **Optimize the sustainable** use of natural resources
- Increase resilience and productivity of agriculture
- **Energize** rural economy and reduce poverty
- **Improved** husbandry of biodiversity (AICHI targets, soil and water endowments)
- **Best way forward** to meet Paris Agreement (NDC goals)

# Land based mitigation: Cost effective, at scale, with substantial co-benefits





# LAND BASED SOLUTIONS KEY TO ZERO CARBON ECONOMIES

Table 4.8 - Potential carbon storage/abatement rates through reforestation and restoration and sustainable agriculture efforts.

Scheme	Size of effort (million ha by 2050)	Potential carbon storage rates (tC/ha-year)	Accumulated Carbon sinks (GtCO <sub>2</sub> e/year)
Reforestation	50	3.5	0.6
Restoration through agro-forestry and silvopastures	200	2	1.3
Avoided deforestation	0.8	260 (*)	0.7
Management of fertilizers in cropland for abatement of N <sub>2</sub> O	n.a.	0.2 - 0.4	0.2
Management of nutrients for livestock for abatement of CH <sub>4</sub>	n.a.	n.a.	0.2
<b>Total</b>	<b>250</b>		<b>3.0</b>

Source: author's elaboration. The estimate for reforestation uses 140 tC/ha as the average carbon stored in managed forests as reported in Table 4.4 and a period of reforestation of forty years; for restoration, the estimate uses a rate of carbon storage through silvopastures and agroforestry at the low-point range, 2 tC/ha-year, of the values in the literature (Table 4.5); (\*) The avoided carbon emissions through preventing deforestation uses 260 tC/ha as the average carbon stored by forests, as estimated by Nair & Garrity (2012) and as reported in Table 4.4.

# INITIATIVE 20X20

AN EFFORT LED BY 17 COUNTRIES TO CHANGE  
THE DYNAMICS OF LAND DEGRADATION IN LATIN  
AMERICA

17 COUNTRIES

22 FINANCIAL PARTNERS

50+ TECHNICAL PARTNERS





**Silvopasture**



*Windows of  
investment  
Vegetation  
Carbon  
Soil  
Surface Water  
Biodiversity*

**Agroforestry &  
Low carbon agriculture**



**Avoided  
deforestation**



**Grassland  
restoration**



**Reforestation**





# Initiative 20x20

Land based options that can support NDC, AICHI targets and Sustainable Development Goals

## Technical partners



Argentina  
Belice  
Brasil  
Chile  
Colombia  
Costa Rica  
Republica Dominicana  
Ecuador  
El Salvador  
Guatemala  
Honduras  
México  
Nicaragua  
Panamá  
Paraguay (\*)  
Perú  
Uruguay

## Financial partners





# Analytical efforts under 20x20



- The economic argument for landscape restoration
- Seed supply for restoration with local species
- Incentive systems to promote restoration
- Monitoring systems
- Carbon markets for restoration



# MONETIZATION OF BENEFITS (NPV) ~ \$1000/HA

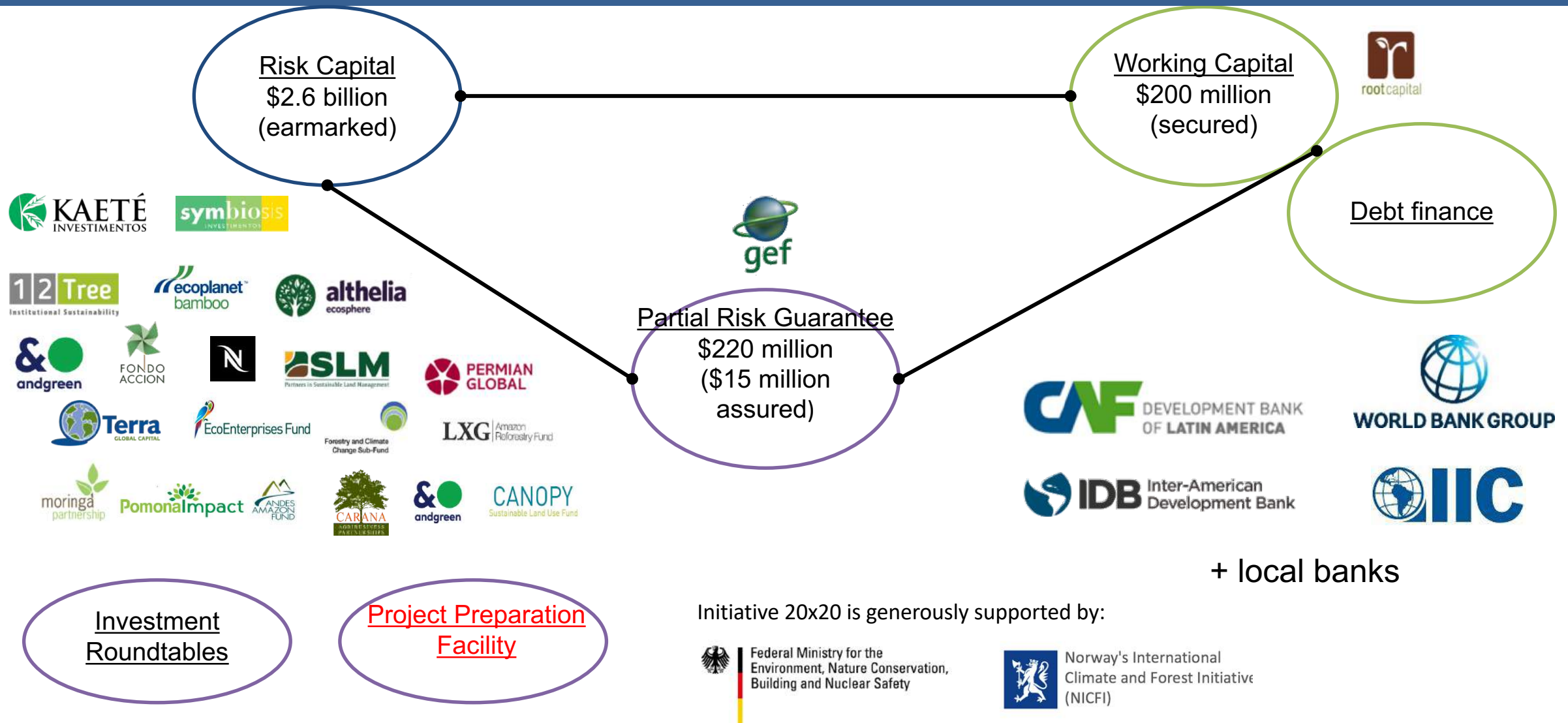
## COMPOSITE MACRO REGIONAL PICTURE

- Restoration brings economic benefits and can be a very good business (IRR and NPV positive)
- It has substantial, but difficult, to monetize co-benefits





# FINANCIAL ARCHITECTURE OF 20X20





# NEARLY 90 PROJECTS ON 13 MILLION HECTARES



*Althelia/Mirova*  
10,000 ha  
Sustain. cattle ranching  
Brazil



*Althelia & Carana*  
50,000 ha  
Cacao agroforestry  
Peru



*Moringa*  
1200 ha  
Agroforestry: coconut  
and citrus. Belize



# NEARLY 90 PROJECTS ON 13 MILLION HECTARES



**12Tree**  
1000 ha  
Agroforestry cocoa  
Panama



**Moringa**  
4,000 ha  
agroforestry coffee  
Nicaragua



**FCCF**  
6,000 ha  
Secondary forest restoration  
Nicaragua