



History of International Cooperation on Tropical Forest Conservation with Emphasis on the *Brazilian Amazon REDD+*

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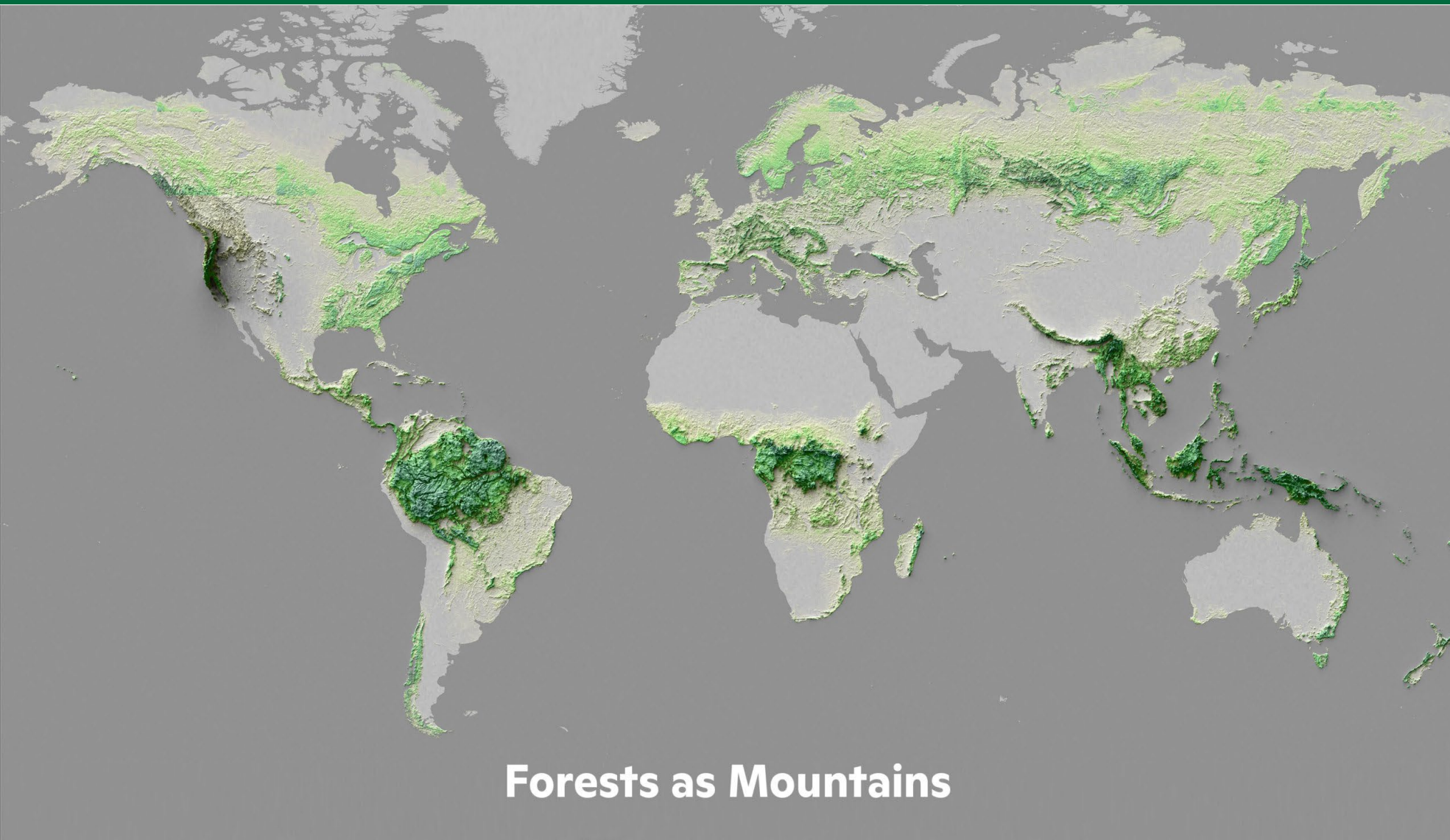
**Yale Forest Forum
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**Amazon Environmental Research
Institute (IPAM Amazonia)**

REDD+: The mechanism aims to reduce greenhouse gas emissions from deforestation and forest degradation and to enhance carbon sequestration and forest protection in developing countries.







CARBON STOCK
(AG)

Tropical Forest
200-300 Gton C

Amazon Rainforest

THE LAND OF REDD+
for the good or for the bad

Why the Amazon?



Huge stock of carbon
(90-100 billion tons of Carbon) – one decade of global emissions

240 different languages being spoken by indigenous groups. not dialects, but languages

Giant reservoir of Biological Diversity

Four hundred billion trees (10% - 30.000 species - of global plant diversity

Amazon 30-300 species/ha vs North America: 4-25 sp/ha.

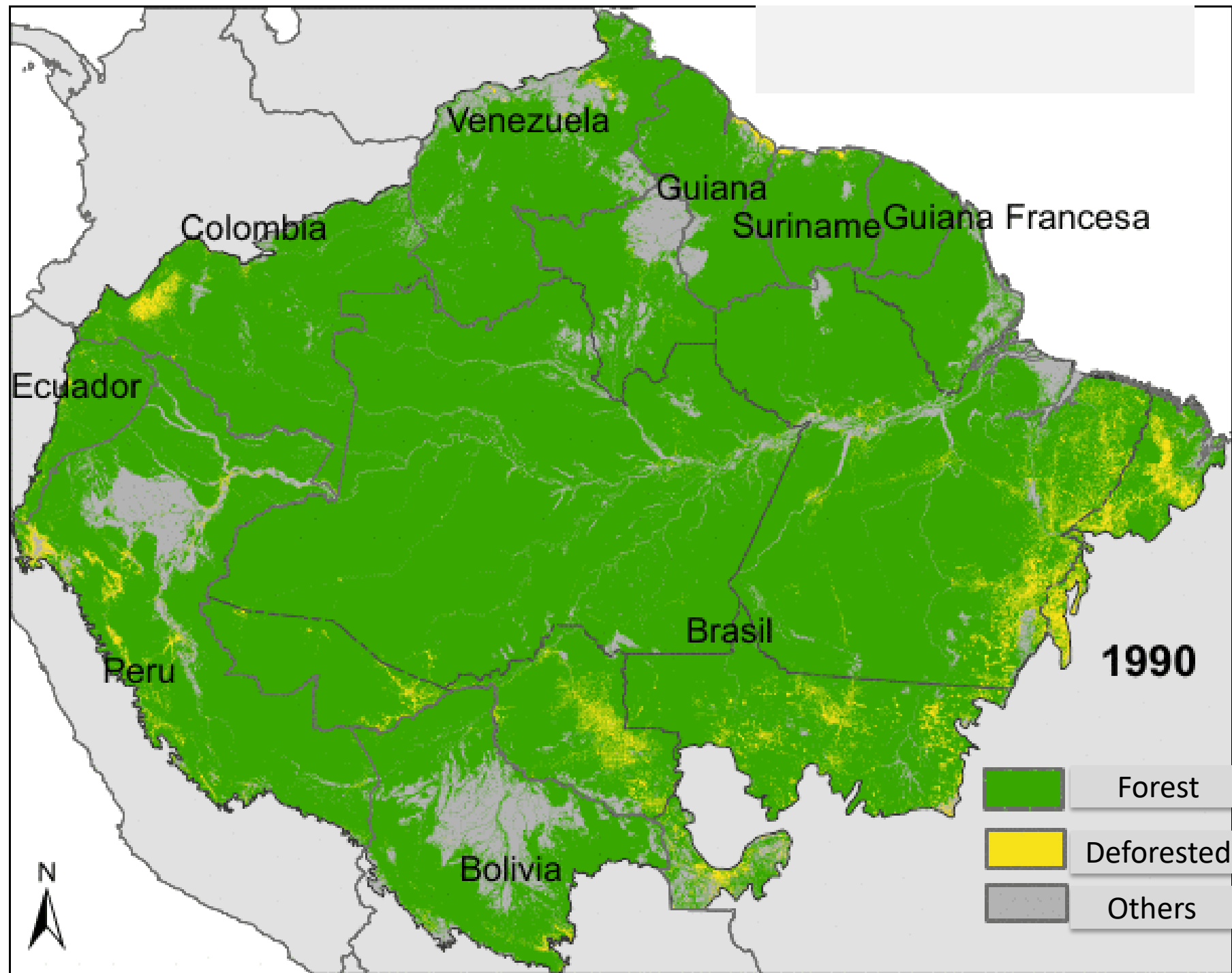
20% of Global Diversity

Air Conditioner of the Planet

Deforestation in the Amazon Basin

Past
(1990-2021)

Future
(2023-2030)





Global Climate Change + Deforestation
= Dry Amazon = Fire and Food Insecurity

If emissions from deforestation are part of the climate problem, why not be part of the solution?

Avoided emissions from deforestation should be considered under the CDM (Kyoto Protocol)

Amazon Brazilian Civil Societies asked for the inclusion of avoiding deforestation in the CDM

Unfortunately, avoiding deforestation was excluded from CDM – **COP 7 - Marrakech Accords**

REDD+: yr 2003- COP9

The first Concept: Compensated Reduction of Deforestation

Finally, Brazil recognize that emissions from deforestation must be taken into consideration by the UNFCCC

MMA Secretary, Mr. Langoni, announced that Brazil will be more prepositive on how to mitigate emissions from deforestation in the Amazon

CER concept- developing countries that elect to reduce national level deforestation to below a previously determined historical level would receive post facto compensation and commit to stabilize or further reduce deforestation in the future (Santilli, Moutinho, Schwartzman, et al. 2005)



2003 COP (Milan). From left to right: Bill Hair (CAN), Claudio Langoni (MMA-Brazil), Carlos Nobre (INPE), Lisa Curran (Yale/Stanford), S. Schwartzman (EDF), Marcio Santilli (IPAM/ISA), João Capobianco (MMA-Brazil).

REDD+: 2005 - COP11, Montreal, Canada

Brazil's Position on emissions from deforestation is better defined by the government and partially based on compensated reduction of deforestation

Coalition for Rainforest Nations is created and led by Papua New Guinea and Costa Rica

<https://www.rainforestcoalition.org/>

Avoided deforestation was formally introduced under the context of the UNFCCC

Propose results-based RED mechanism as incentives for developing countries to maintain their rainforests



TROPICAL DEFORESTATION AND THE KYOTO PROTOCOL An Editorial Essay

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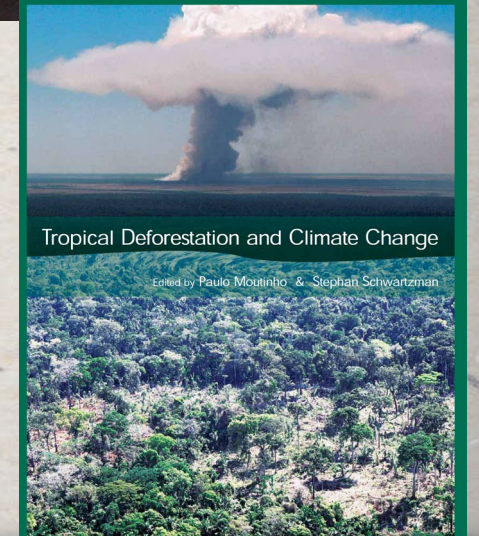
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Abstract. The current annual rates of tropical deforestation from Brazil and Indonesia alone would equal four-fifths of the emissions reductions gained by implementing the Kyoto Protocol in its first commitment period, jeopardizing the goal of Protocol to avoid “dangerous anthropogenic interference” with the climate system. We propose the novel concept of “compensated reduction”, whereby countries that elect to reduce national level deforestation to below a previously determined historical



Santilli M., P. Moutinho, S. Schwartzman et al. 2005. “Tropical Deforestation and the Kyoto Protocol.” *Climatic Change* 71(3):267–76. doi: 10.1007/s10584-005-8074-6.;

Moutinho and Schwartzman 2005. Tropical Deforestation and Climate Change - <https://1drv.ms/b/s!AvYYf8Y744MwgvQVhor2m6tVHkV6fQ?e=WJnJqy>

REDD+: 2007 (COP13, Bali, Indonesia)

COP 13. The Bali Road Map describe the process to enable the full, effective and sustained implementation of the Convention through long-term cooperative action (UNFCCC)

Mitigation part of the Map included: **reducing emissions from deforestation and forest degradation in developing countries**

“Bali was the real birth of REDD,” (Arild Angelsen)

“Everybody and his dog started a REDD project after that,” (Frances Seymour)

REDD+: 2009 Copenhagen, Denmark (COP15)

COP 15 Confirm the five activities related to REDD+

Nation's commitment to contribute with US\$ 10 billion a year, between 2010 and 2012 + US\$ 100 billion a year starting in 2020

Amazon Fund became operational with support from the Norway

Brazil launches its **National Policy for Climate Change** and it's approved by the Congress.

The Policy establish a **reduction target** (36.1% and 38, 9% of the projected emissions by 2020) **for emissions from deforestation** in the Amazon

REDD+: 2010, Brazilian Amazonia

Amazon Forum of State Secretaries of the Environment

Coalition of Brazilian Amazon States for REDD+ 2010



The **REDD for Early Movers (REM)** program was established in 2011 and officially launched at the Rio+20

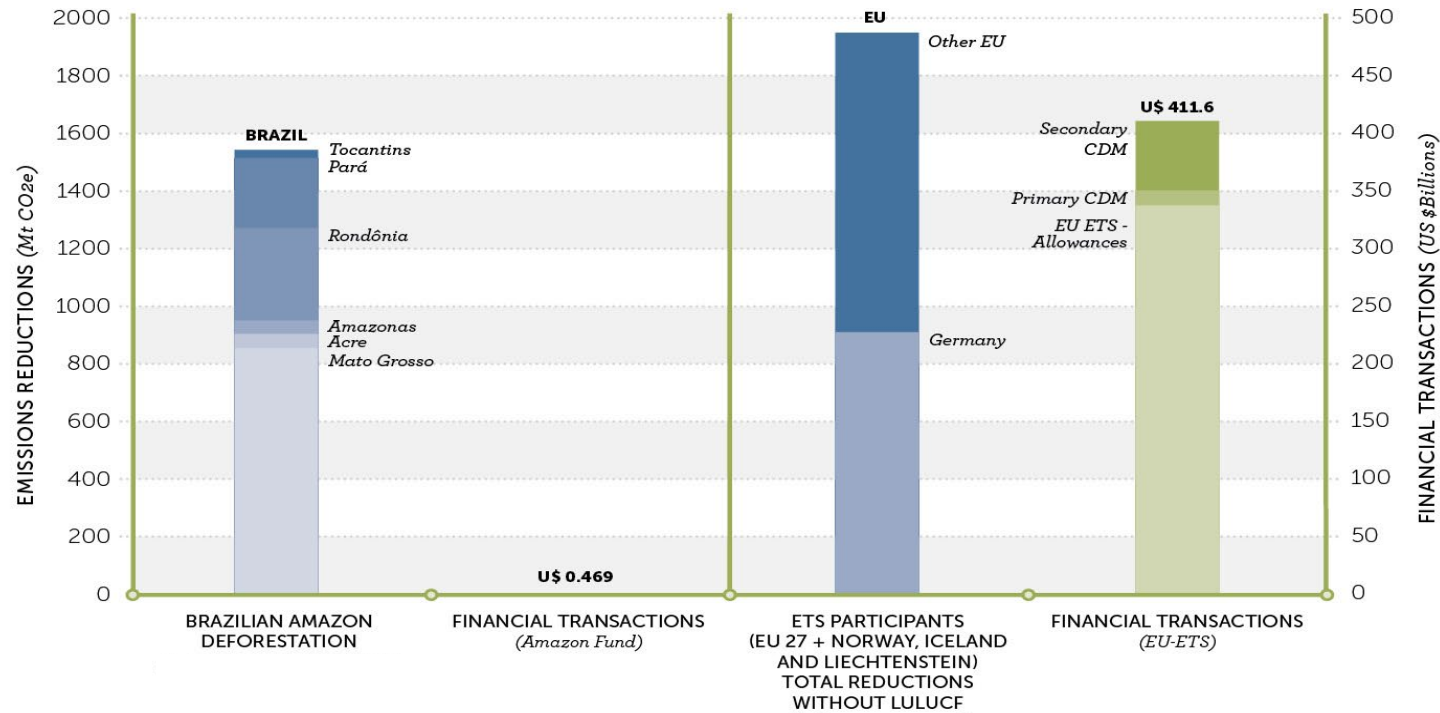


ACRE was the first Amazon State establishing a full jurisdictional REDD+ program with support of REM.

EUR 25 million had been disbursed as results-based payments for reducing emissions from deforestation between 2011 and 2015

REDD+: 2012 Brazil losing opportunities

EMISSIONS REDUCTIONS (CO₂) AND FINANCE
Brazilian Amazon and EU - ETS (Emissions Trading Scheme), 2008 - 2010



2008-2010

Brazilian Amazon States

Reduction: 1,4 Billion T CO₂

Finance: USD 400 Million

ETS – EU

Reduction: 1,8 Billion T CO₂

Finance: USD 400 Billion

Nepstad 2012 (<http://news.mongabay.com/2012/0925-nepstad-greenpeace-report.html>).

Source for EU-ETS Emission reduction: http://unfccc.int/ghg_data/ghg_data_unfccc/time_series_annex_i/items/3814.php

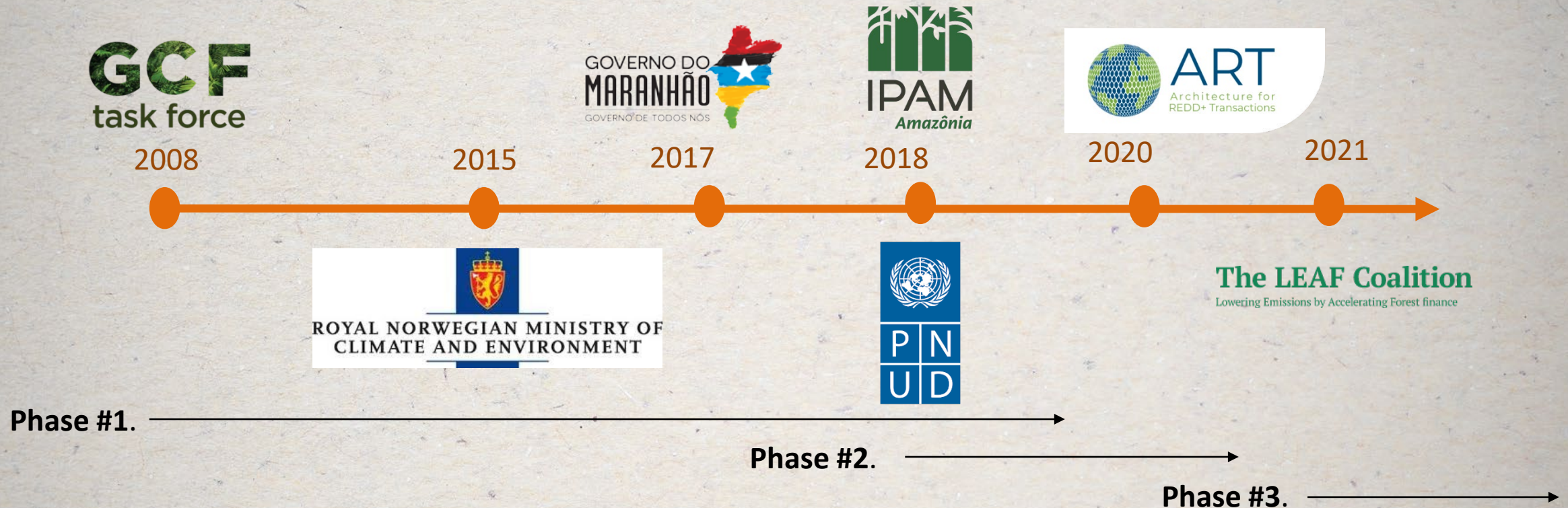
Source for EU-ETS finances: State and Trends of the Carbon Market Report 2011

<http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/ENVIRONMENT/EXTCARBONFINANCE/0,,contentMDK:22928492~pagePK:64168445~piPK:64168309~theSitePK:4125853,00.html>

Source for Amazon Deforestation emission: PRODES/INPE <http://www.obt.inpe.br/prodes/index.php>

JURISDICTIONAL REDD+ / NINE BRAZILIAN AMAZON STATES

The Case of Maranhão State



Phase #1. Guidance for Climate Policy and valuation of Maranhão's environmental assets

Phase #2. Establishment of institutional governance for the implementation of the REDD+ Jurisdictional System

Phase #3. Payment for Results; Carbon Market; Payment Environmental Services (Leaf Coalition)

REDD+ projects

REDD+ pilot projects VS Jurisdictional REDD+ Programs

	REDD+ Projects	Jurisdictional REDD+ Programs
Borders	Communities, reserves, concessions, multiple-use landscapes, landowners	National, state (or equivalent), or county/municipality boundaries
Role of Government/Policy	None, Small	Intermediate, Large
Risks to investors	Lack of performance of jurisdiction	Dealing with government agencies/bureaucracies
Contribution to low carbon development	Low	High
<u>Base Line</u>	Looking Ahead - Expected Emission If Project Is Not Implemented	Looking back – historical baseline or offsetting already reduced emission
Benefit Sharing	Voluntary	Mandatory

Chicken-pox REDD!

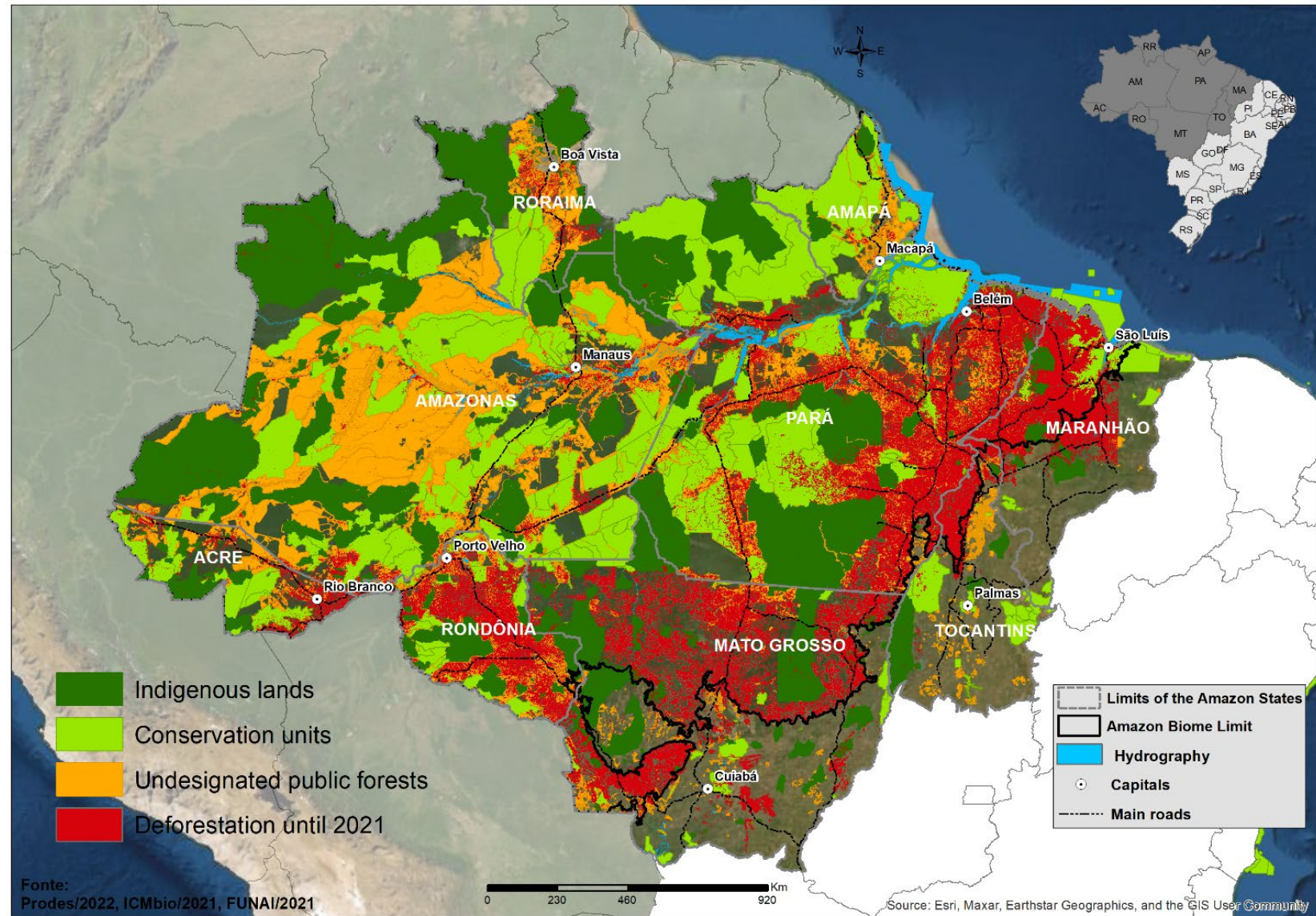
REDD+ Potential in the Brazilian Amazon

Designate the Undesignated Public forests in the Amazon to Conservation

Public forests that have not yet been designated for conservation or sustainable use by the government

56 Million ha
8 Gton Carbon
(almost one year of global emissions)

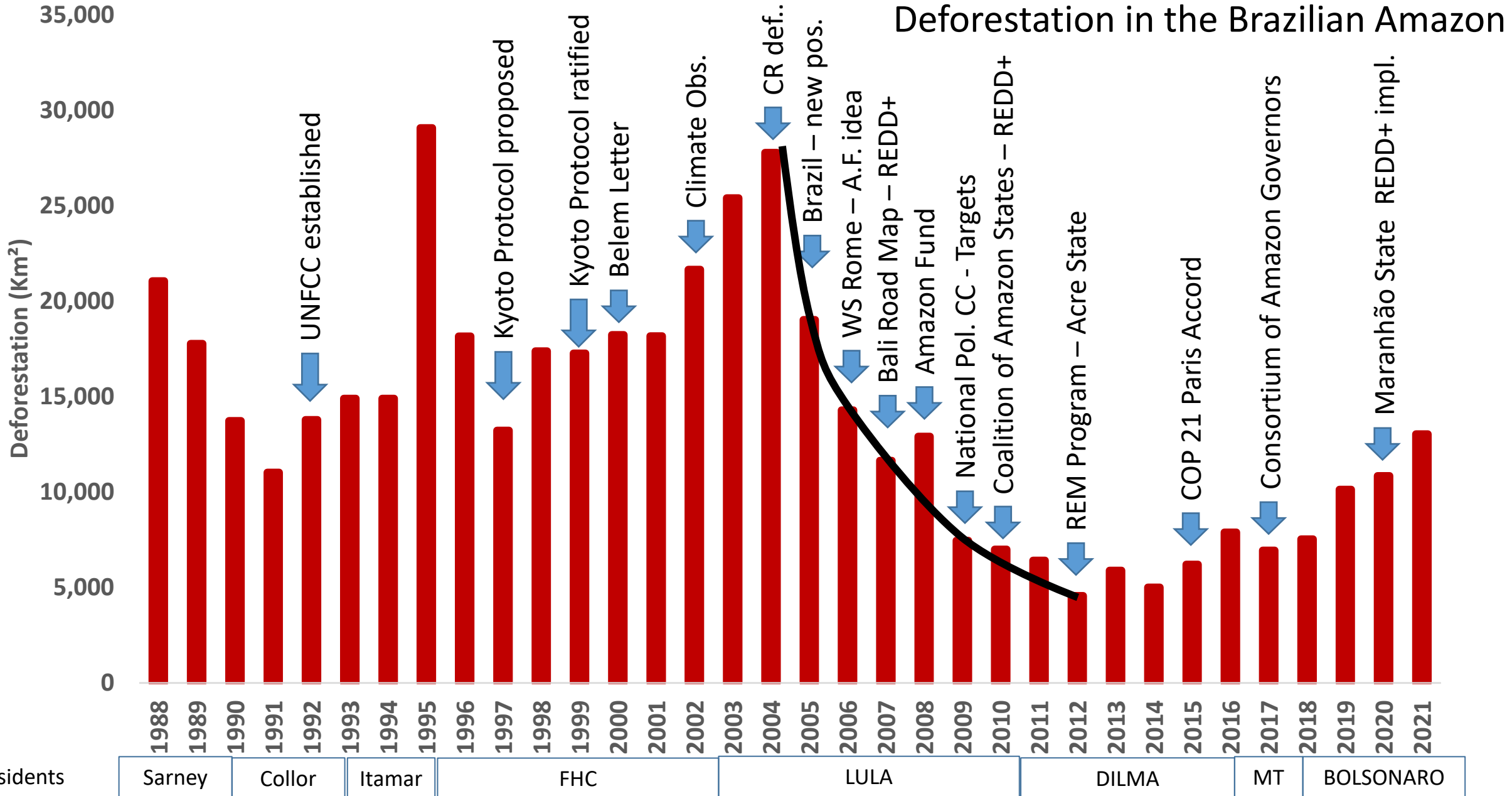
14% of the biome



Fonte: Prodes/2022, ICMBio/2021, FUNAI/2021

Source: Azevedo-Ramos, C & P Moutinho 2018..No man's land in the Brazilian Amazon. Could undesignated public forests slow Amazon deforestation?. Land Use Policy 04/2018, 73:125-127...

An Amazonian perspective on the history of REDD+







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