

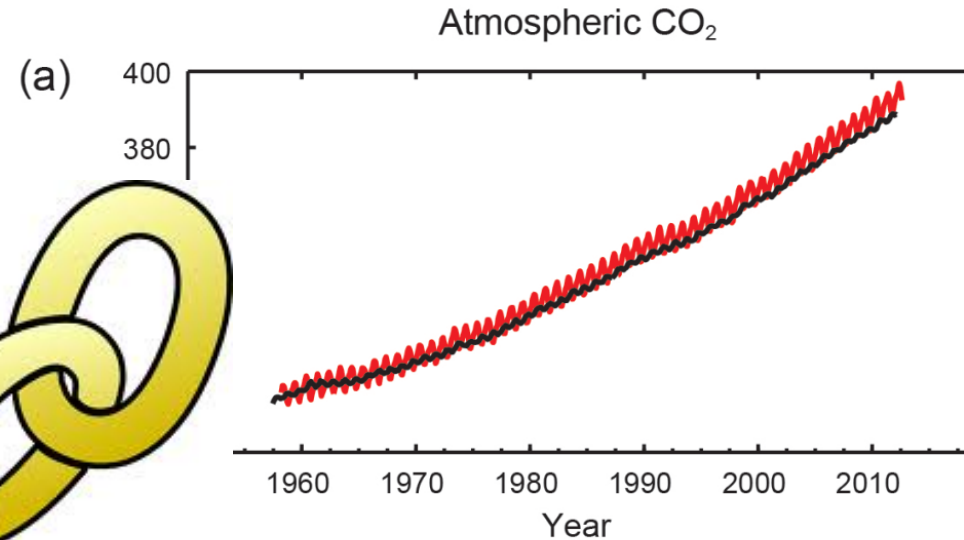
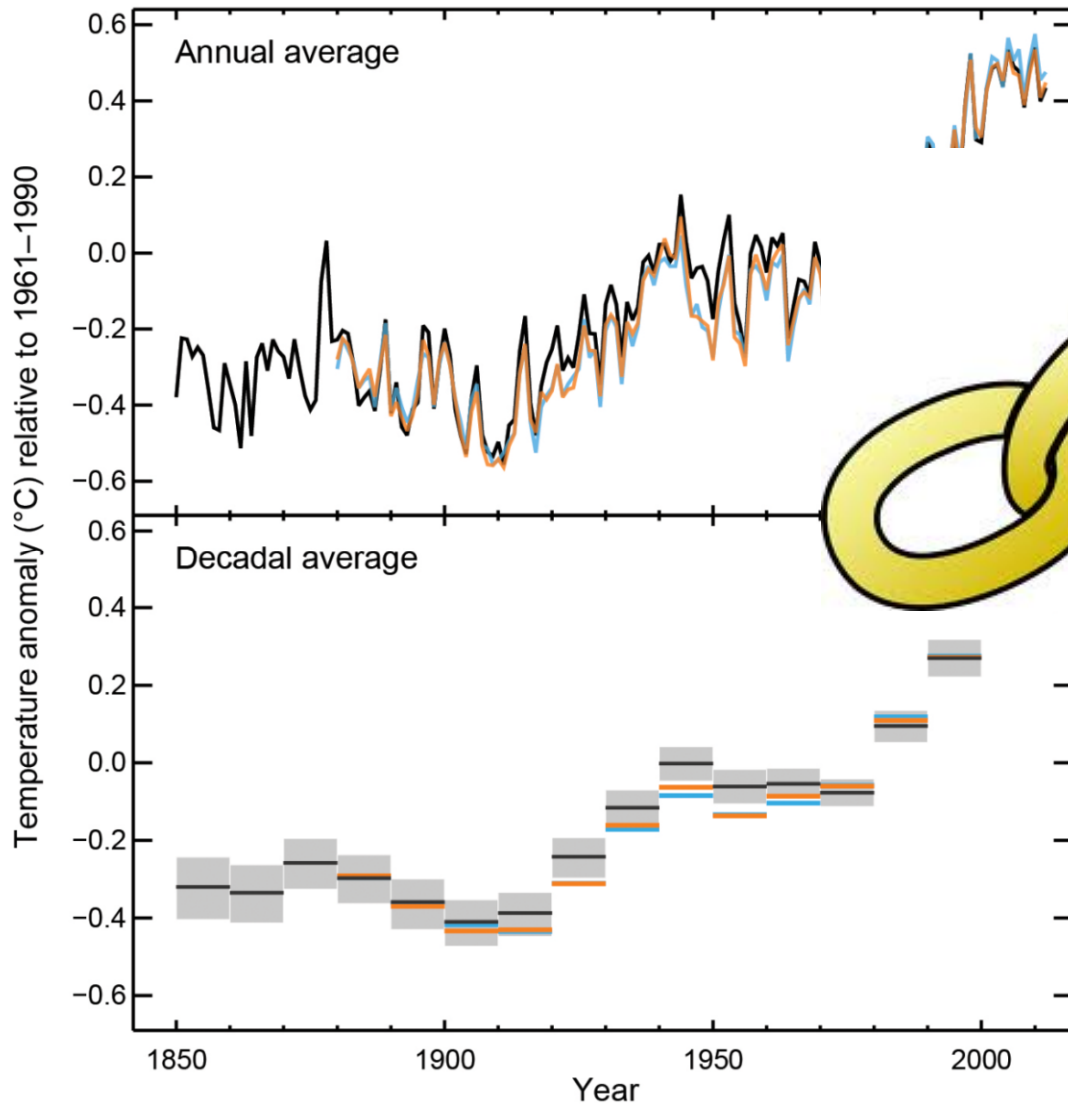
Introduction to REDD+

Expected Learning Outcomes

- Scientific evidence on climate change (IPCC)
- Review the fundamentals of REDD+
- Understand the UNFCCC process and phases of REDD+
- Learn about international commitments and programs for REDD+

Climate Change – The evidence of what's happening

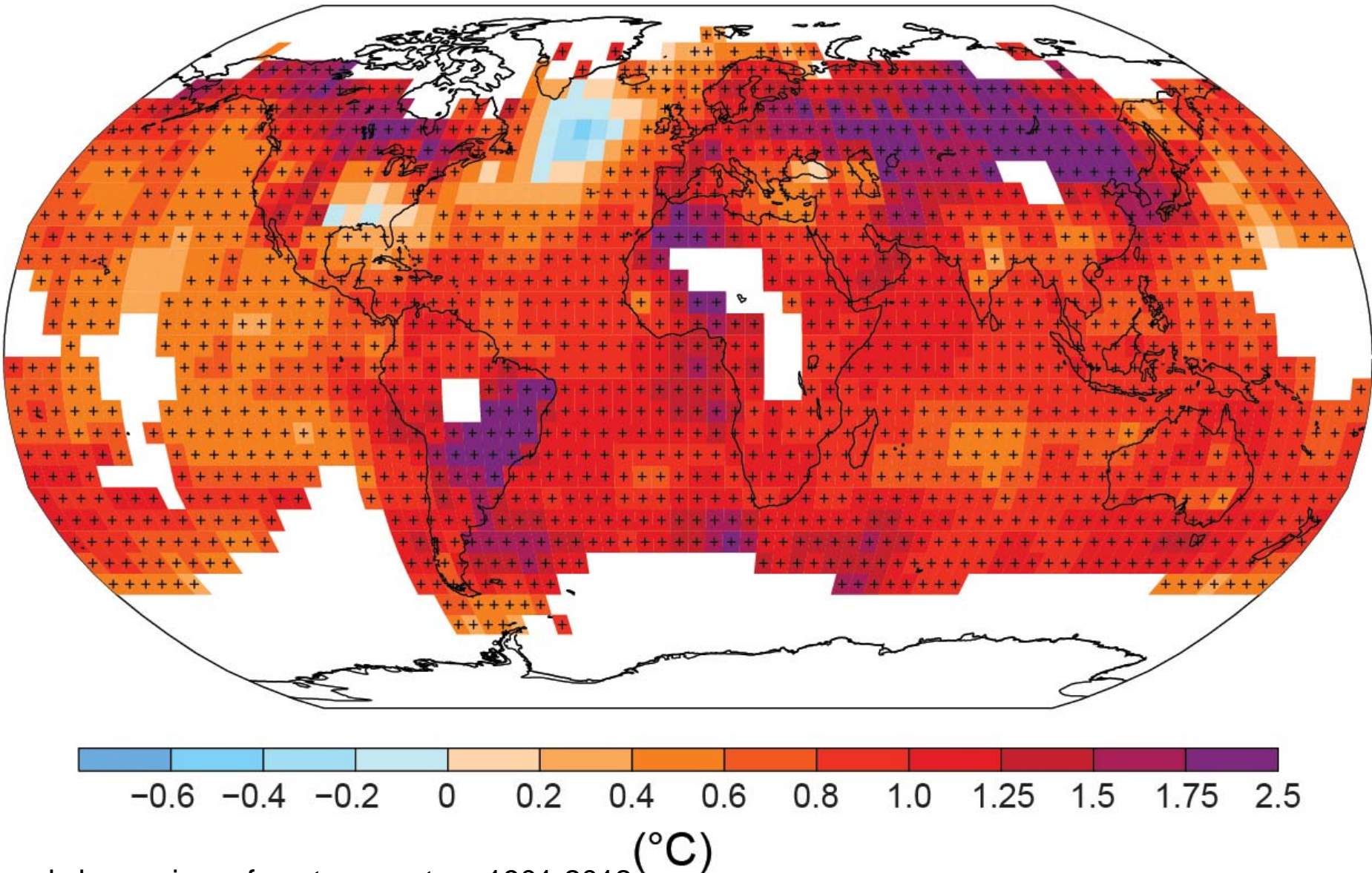
Global average temperature 1850-2012



Extremely likely (95%) that human influence has been the dominant cause of the observed warming since the mid-20th century

IPCC AR5 Working Group I
Climate Change 2013: The Physical Science Basis

Temperatures are rising worldwide

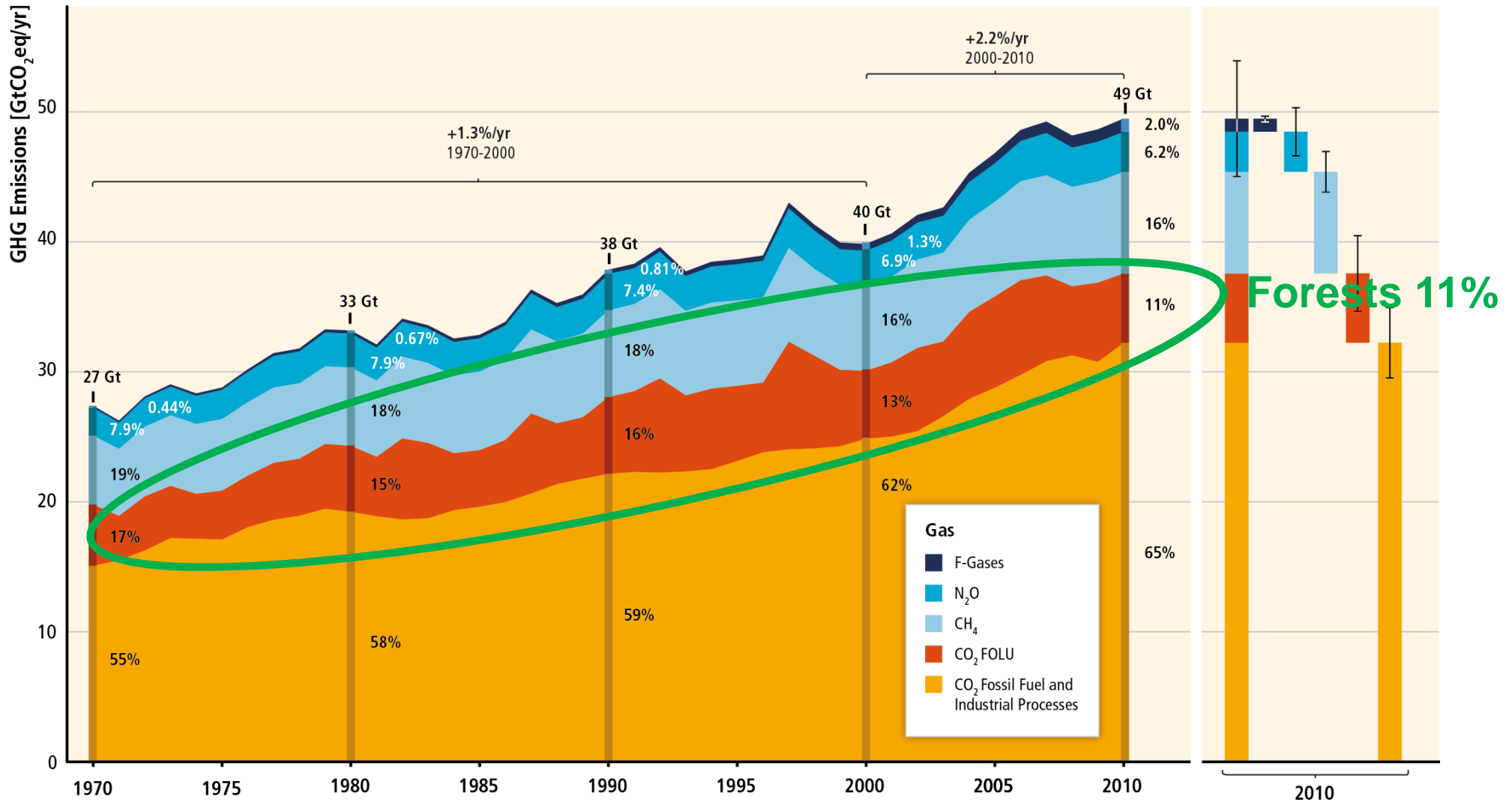


Observed change in surface temperature 1901-2012

IPCC AR5 Working Group I
Climate Change 2013: The Physical Science Basis

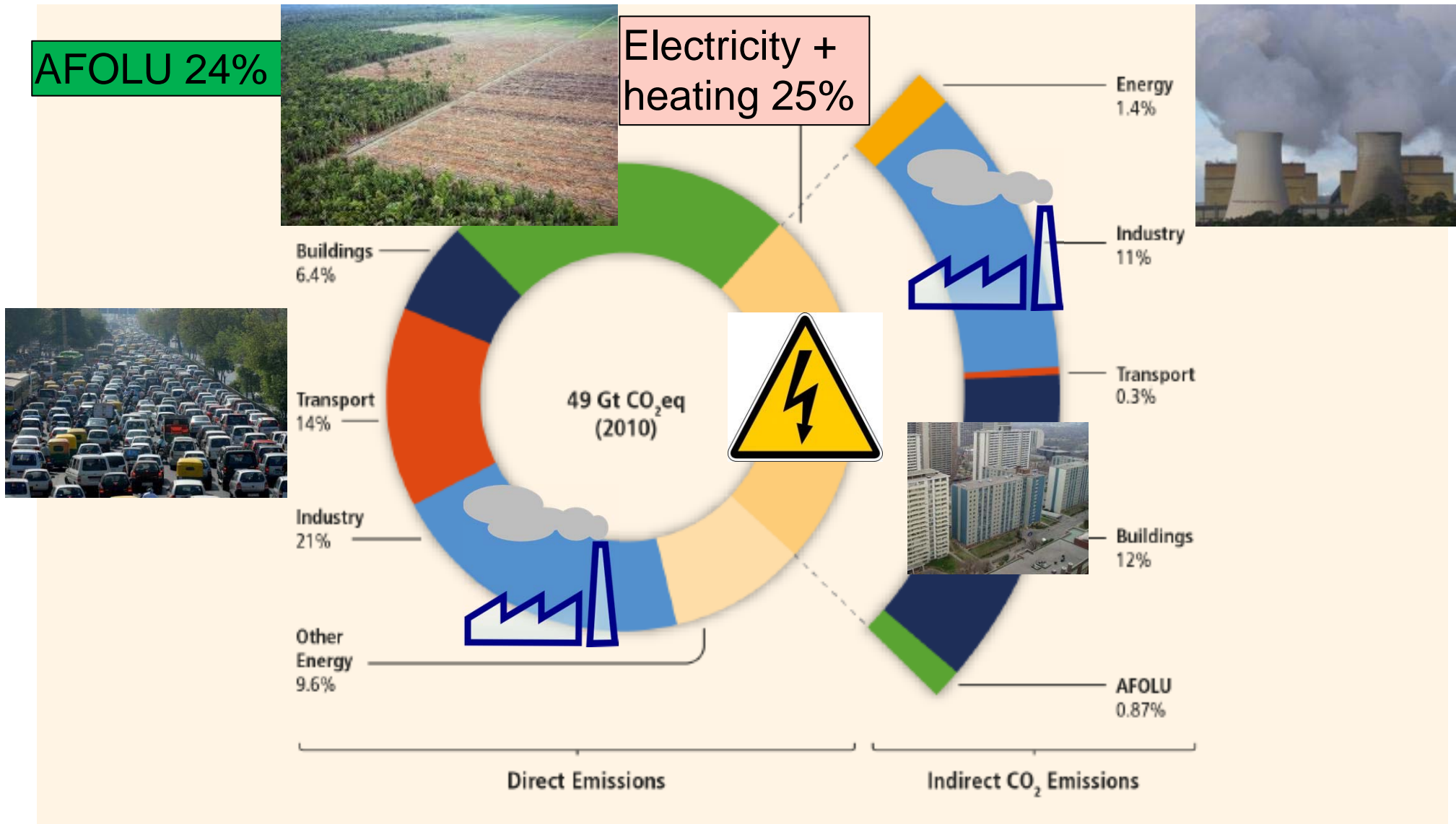
GHG emissions accelerate despite reduction efforts

Total Annual Anthropogenic GHG Emissions by Groups of Gases 1970-2010



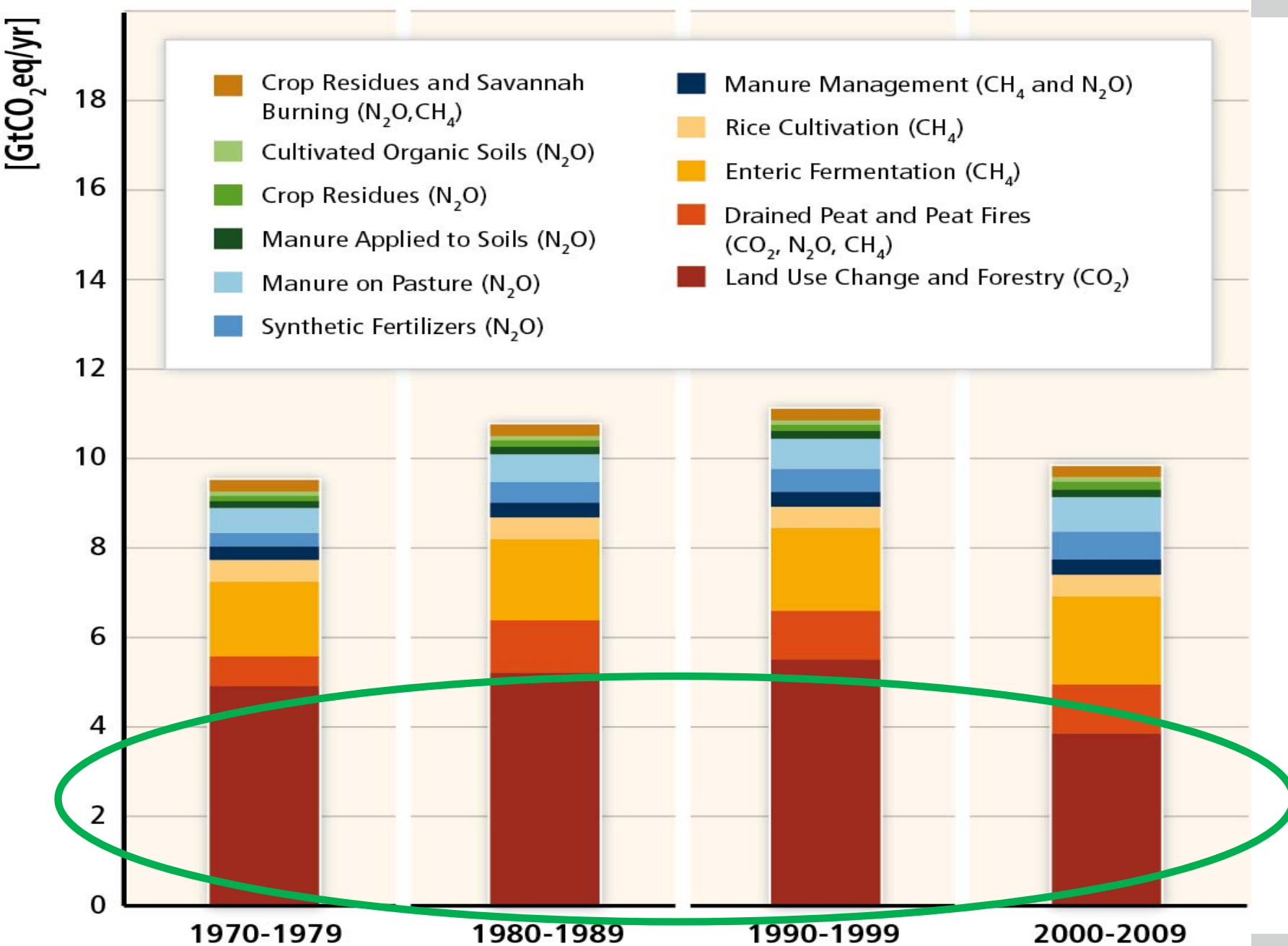
Most emission growth is CO₂ from fossil fuel combustion and industrial processes.

Contributions from Agriculture, Forestry and Other Land Uses (AFOLU)



Working Group III contribution to IPCC AR5

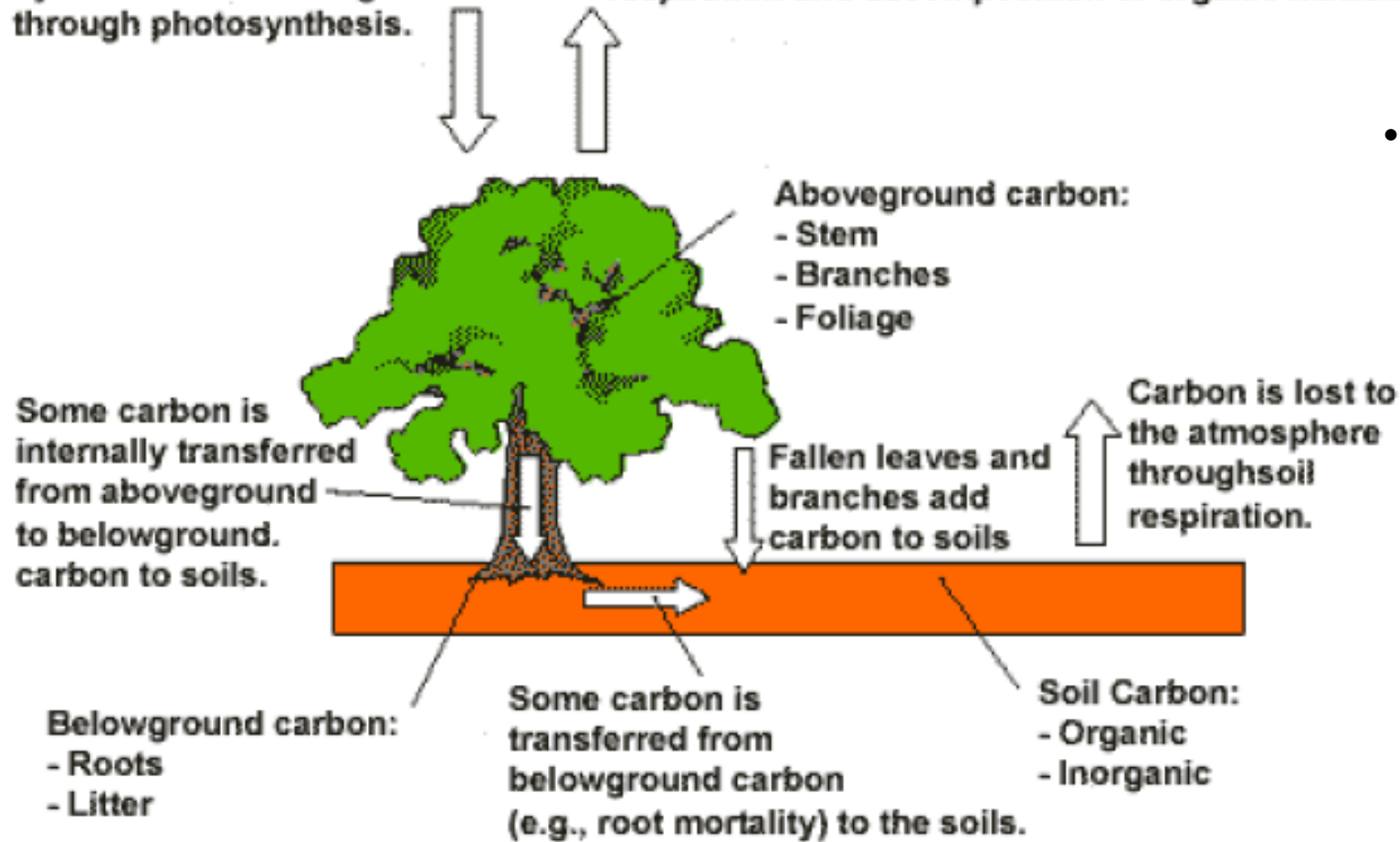
The role of Forests in GHG emissions from AFOLU



Why are forests important to climate change

Atmospheric carbon is fixed by trees and other vegetation through photosynthesis.

Carbon is lost back to the atmosphere through respiration and decomposition of organic matter.



Trees are 50% carbon, huge biomass store

- Conversion of forests to agriculture (land use change) creates emissions:

- Large emissions (forests 11%)

- **Relatively quick, cost-effective opportunity for large reductions**

- Agriculture (14%) but hard to reduce without affecting food



Photo credits Background stadium Thomas Faivre-Duboz, forest taken from H.-D. Viktor Boehm globalcarbonproject, labeled free for illustrative purposes, Photo montage by Alan Belward, Joint Research Centre

Deforestation; emissions ~ 1.2 Pg C yr⁻¹



Photo credits Background stadium Thomas Faivre-Duboz, forest taken from H.-D. Viktor Boehm globalcarbonproject, labeled free for illustrative purposes, post-harvest brush taken from CIFOR
Photo montage by Alan Belward, Joint Research Centre

5.8 m ha/yr, 13 m ha/yr globally



...less than 3 seconds to clear a sports field



...every 3 seconds of every day



The Emergence of REDD+

What is REDD+?

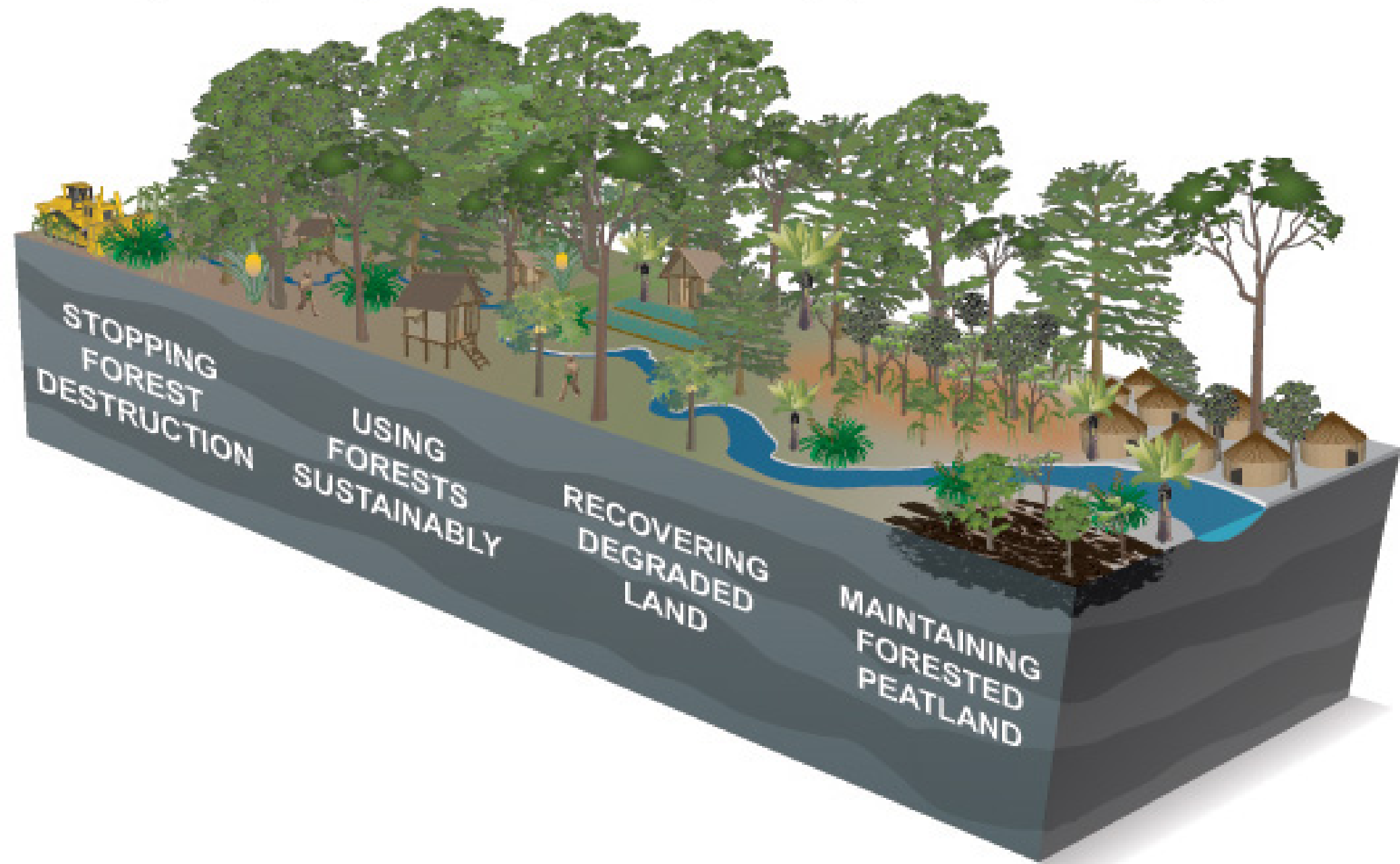
- Reducing Emissions from Deforestation and Forest Degradation (REDD+) is an effort to create a **financial value for the carbon stored in forests**, offering **positive incentives for developing countries to reduce emissions from forested lands** and invest in low-carbon paths to sustainable development with **developed countries'** adequate and predictable **support**. Financing is equally expected to come from the **private sector**.
- The key idea is **results-based payments** to be derived from **verified carbon emission reductions or removals**.

What is REDD+?

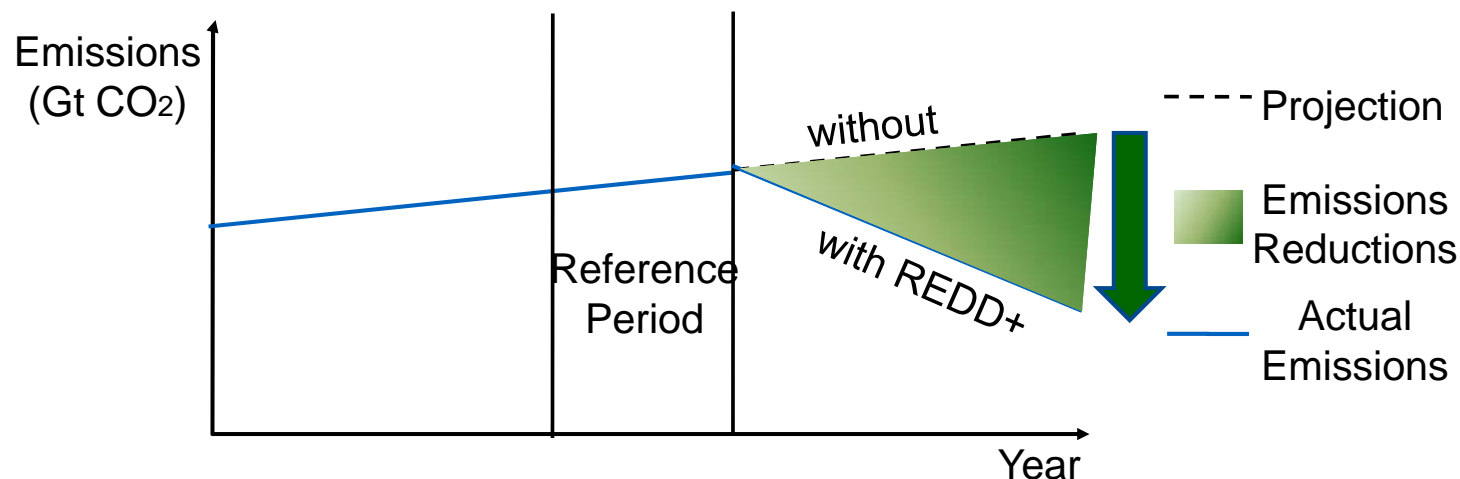
- REDD = Reducing Emissions from Deforestation and Forest Degradation in Developing Countries
- Plus =
 - + Conservation of forests
 - + Sustainable management of forests
 - + Enhancement of forest carbon stocks

REDD+

REDD+ helps to mitigate climate change through forests, and provides social and environmental benefits. It includes these essential components: creating incentives for not clearing standing forests, maintaining and expanding forest cover, sustainably managing forest and recovering degraded lands.



How does REDD+ work to reduce GHG?



Green shaded area represents reduced emissions from REDD+ actions

The simplified option shown above does not reflect removals, but only emission reductions.

REDD+ is not only about reduced emissions, but also about potential carbon removals from the atmosphere through sustainable forest management and restoration.

The Emergence of REDD+ in the UN Climate Regime



The principles and procedures governing REDD+ implementation are negotiated through the UN Framework Convention on Climate Change (UNFCCC).

The Emergence of REDD+ in the UN Climate Regime



A general view of the Rio Earth Summit plenary, 1992

The UNFCCC was adopted at the Rio Earth Summit in 1992 and entered into force on 21 March 1994. As of September 2014, the UNFCCC has 196 country parties.

Its goal is to stabilize greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system.

The Emergence of REDD+ in the UN Climate Regime

Under the Convention, Parties commit – taking into account their common but differentiated responsibilities and their development priorities – to promote the sustainable management, conservation and enhancement of forests, among other identified carbon sinks and reservoirs.

The Framework Convention allows policies to evolve over time as more is understood about climate change.

The Emergence of REDD+ in the UN Climate Regime



A plenary session in the main hall of the Kyoto International Conference Center, December 1997

The UNFCCC ‘houses’ the Kyoto Protocol, a substantial extension to the Convention, adopted at the UNFCCC’s 3rd Conference of the Parties (COP 3) in Kyoto, Japan, in December 1997. Among other measures, industrialized states are enabled to reduce or limit emissions from land-use change and forestry activities as part of their climate mitigation commitments.

The Emergence of REDD+ in the UN Climate Regime

The UNFCCC did relatively little to address carbon emissions from deforestation and forest degradation in developing countries until the mid 2000s.

For example, tropical deforestation was largely excluded from the scope of the Kyoto Protocol's Clean Development Mechanism (CDM), whereby only afforestation and reforestation are eligible for emissions accounting purposes.

CDM never achieved substantial forest action because of cumbersome rules and due to the fact that the European Union (EU) did not allow forest carbon in their Emissions Trading Scheme (the EU's market for trading carbon emissions).

The Emergence of REDD+ in the UN Climate Regime



At COP 11 in 2005, the governments of Costa Rica and Papua New Guinea submitted a proposal to include the effort to Reduce Emissions from Deforestation (RED) in the climate negotiations agenda.

In the period 2005-2010, the idea of establishing a global mechanism to reduce emissions from deforestation and forest degradation in developing countries quickly emerged and gained traction in the UN climate regime.

The Emergence of REDD+ in the UN Climate Regime



Photo: B. Kasirajan (CC BY-SA 3.0)

Definitions for certain important terms were agreed upon in 2005 at the Montreal meeting of COP 11/CMP 1

Afforestation

“... the direct human-induced conversion of land that has not been forested for a period of at least 50 years to forested land through planting, seeding and/or the human-induced promotion of natural seed sources.”

Reforestation

“... the direct human-induced conversion of non-forested land to forested land through planting, seeding and/or the human-induced promotion of natural seed sources, on land that was forested but that has been converted to non-forested land.”

Deforestation

“... the direct human-induced conversion of forested land to non-forested land.”

The Emergence of REDD+ in the UN Climate Regime



UN Secretary-General Ban Ki-moon (right), flanked by Yvo de Boer, Executive Secretary of the UNFCCC, addresses a joint press conference at COP 13 in Bali.

Two years later, as part of the Bali Action Plan, the UNFCCC COP 13 formally initiated negotiations to provide incentives and policy approaches for reducing emissions from deforestation and forest degradation in developing countries and supporting the conservation and sustainable management of forests and the enhancement of forest carbon stocks in developing countries (REDD+).

The Emergence of REDD+ in the UN Climate Regime

(From left to right)
Connie Hedegaard, Minister for Climate and Energy of Denmark, Lars Løkke Rasmussen, Prime Minister of Denmark, UN Secretary-General Ban Ki-moon, and Yvo de Boer, Executive Secretary of the UNFCCC, briefing correspondents at COP 15 in Copenhagen, 2009.



Over succeeding rounds of negotiations, the UNFCCC has adopted numerous decisions that have provided the architecture of an eventual global REDD+ mechanism. A large number of countries confirmed their support and pledged funding for the establishment of such a mechanism as part of the 2009 Copenhagen Accord.

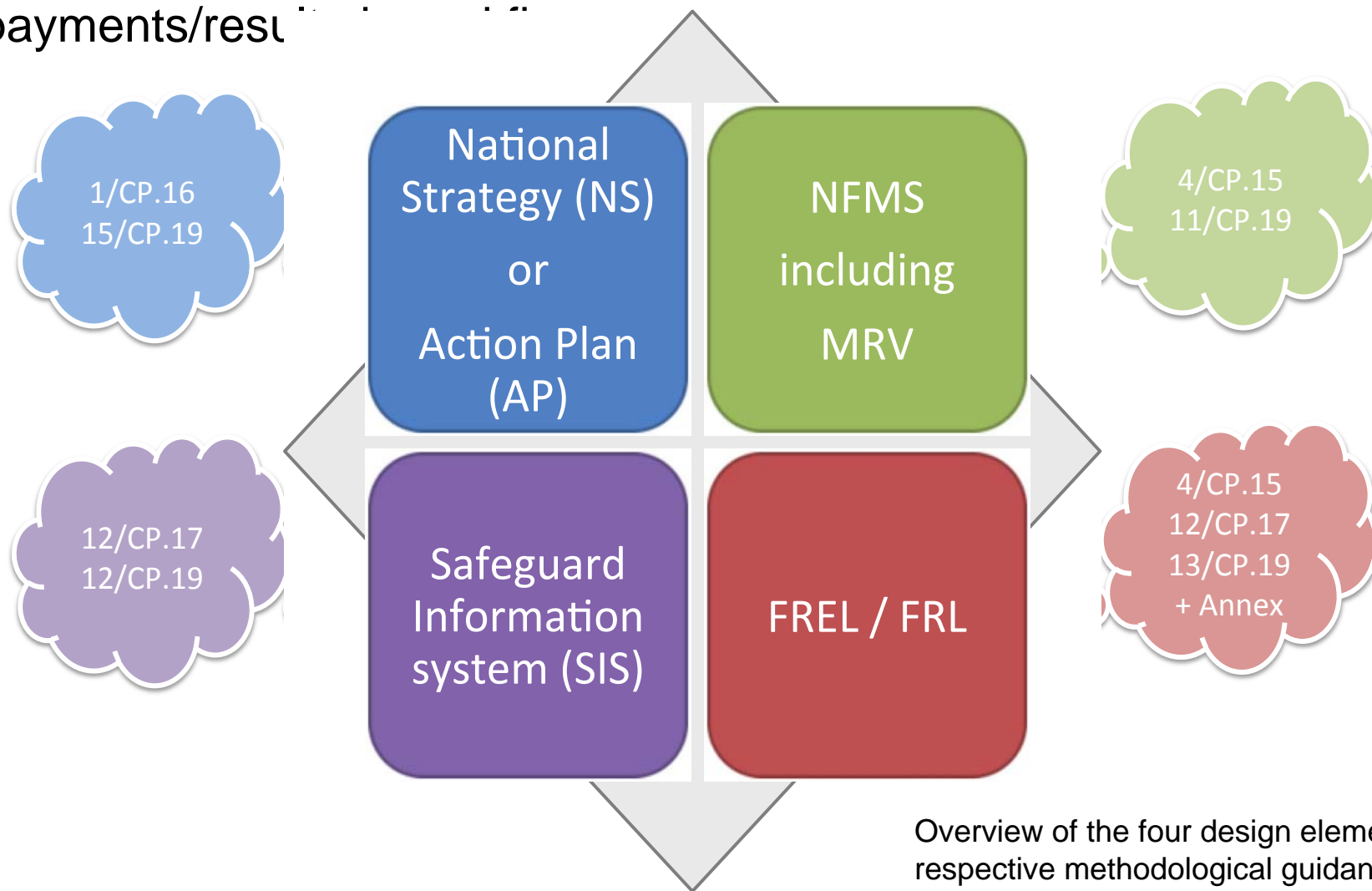
The Emergence of REDD+ in the UN Climate Regime



The UNFCCC COP has moreover established rules and provided methodological guidance for the eventual operationalization of REDD+ as part of the 2010 Cancun Agreements, the 2011 Durban Platform for Enhanced Action, the 2012 Doha Climate Gateway, and most recently, the 2013 Warsaw Framework for REDD+.

The four REDD+ “design” elements

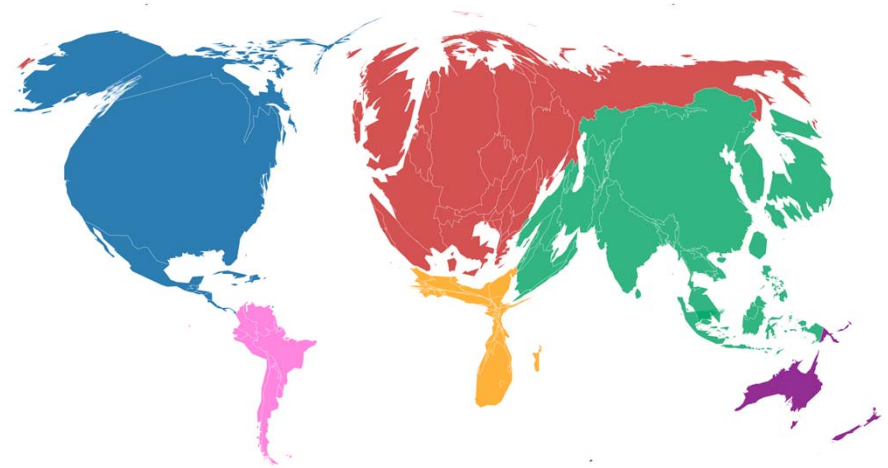
Decision 1/CP.16, para. 71, requests countries to have the following elements in place for REDD+ implementation and to access results-based payments/results-based payments



Overview of the four design elements and where the respective methodological guidance can be found in the UNFCCC decisions.

Challenges in including forestry and land use

World map warped to represent cumulative CO₂ emissions from energy use (1850-2011)



Historical Responsibility

Responsibilities to stabilize the climate should be implemented in a manner that takes into account countries' historical contribution to current levels of GHG emissions and their respective capabilities for undertaking mitigation actions.

An aerial photograph of a dense tropical forest. The majority of the trees are lush green, but a single, large, dead tree with a white, skeletal structure stands out prominently on the right side of the frame. The text 'Five REDD+ Activities' is overlaid in the center in a large, white, sans-serif font.

Five REDD+ Activities

The Five REDD+ Activities

The scope of REDD+ was agreed in Cancun. Developing countries are encouraged to contribute to mitigation actions in the forest sector by undertaking the following activities:

I. Reducing emissions from deforestation

II. Reducing emissions from forest degradation

III. Conservation of forest carbon stocks

IV. Sustainable management of forests

V. Enhancement of forest carbon stocks

The Five REDD+ Activities

The REDD+ activities have not been further defined in the UNFCCC decision texts to allow for flexibility of implementation by developing country Parties.

However, this means that sometimes countries struggle to understand what the activities may mean in their national context, or which activities to prioritize.

Given the technical and procedural complexity involved in the implementation of the REDD+ activities, Parties agreed that this should be done in three phases.

A phased approach to REDD+ implementation

Phase 1: Readiness

Countries design national strategies and action plans with relevant stakeholders, build capacity for REDD+ implementation, work on policies and measures for REDD+ implementation and design demonstration activities

Phase 2: Implementation

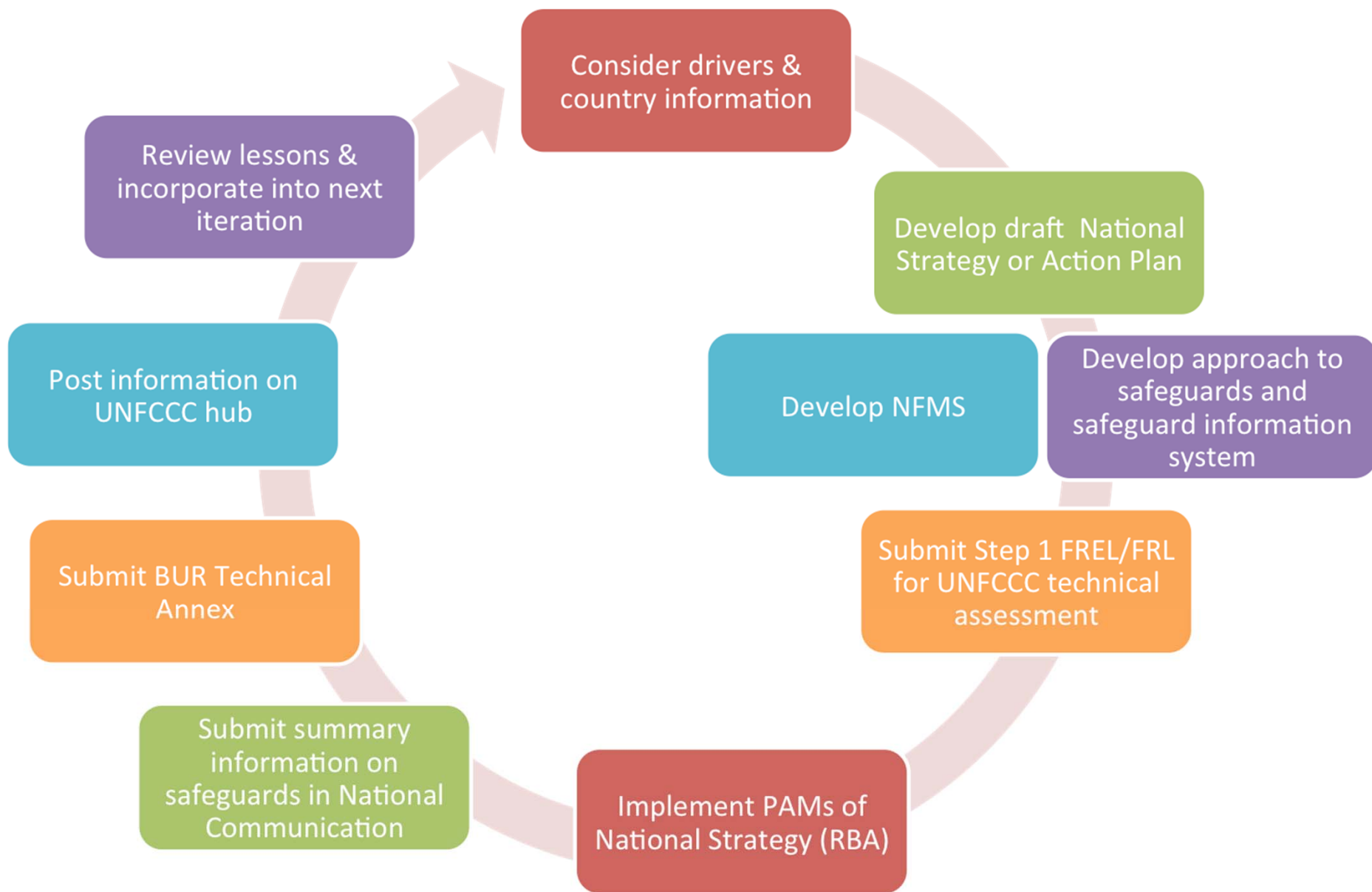
National strategies, policies and action plans proposed in Phase 1 are implemented and tested. This phase may include results-based demonstration activities and require additional capacity building, technology development and transfer

Phase 3: Results-based actions

Results-based REDD+ actions are supported implemented at the national level and results are fully measured, reported and verified

During the UNFCCC negotiations, countries collectively agreed on the importance of having an iterative, flexible and learning-by-doing approach to REDD+ implementation. In practice, the phases are more continuous and discreet than originally thought.

The iterate process of REDD+



I. Reducing Emissions from Deforestation



Deforestation in Northern Thailand

Deforestation is the human-induced conversion of forest to non-forested land.

The deforestation process typically converts the carbon stored in forests into carbon dioxide through the burning and decomposition of forest organic matter.

II. Reducing Emissions from Forest Degradation



Forest Degradation is the human-induced loss of carbon stocks within forest land that remains forest land.

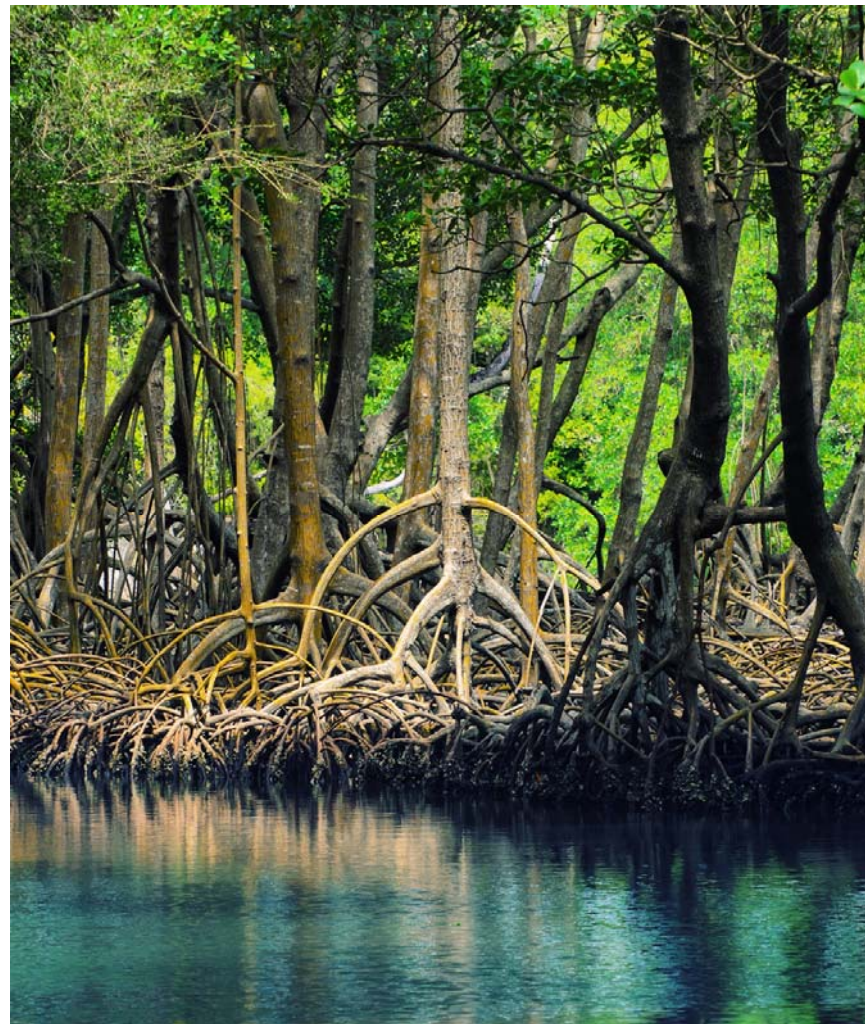
These forest stocks typically degrade and/or lose their ability to absorb atmospheric carbon dioxide.

III. Conservation of Forest Carbon Stocks

Of the five REDD+ activities, conservation is the only one without precedent under the UNFCCC.

Conservation refers to any effort to conserve forests.

Conservation is generally considered as an emissions neutral activity as it preserves a status quo, and can hence be considered as actively maintaining a carbon stock.



Mangroves in Los Haitises National Park,
Dominican Republic

IV. Sustainable Management of Forests

When the rate of extraction from forests is in line with the rate of natural growth, the forest can be said to be sustainably managed.



Forest management in Lao PDR

V. Enhancement of forest carbon stocks

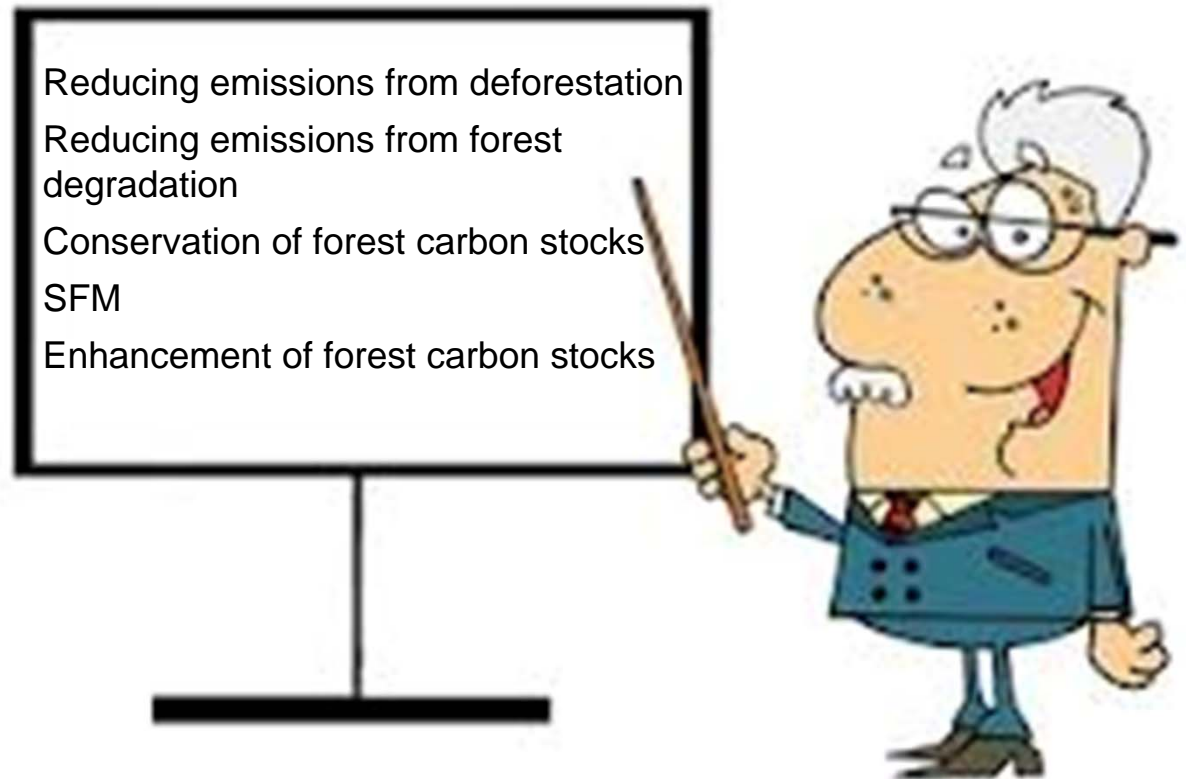


Enhancing carbon stocks can include:

- (i) converting non-forested land into forested land; and
- (ii) the enhancement of forest carbon stocks in formerly degraded forests

The Five REDD+ Activities

The REDD+ Academy will introduce and discuss each of the five REDD+ activities in detail with participants.



International Commitments and Programs for REDD+

Multilateral REDD+ Initiatives



The **UN-REDD Programme** was launched in 2008 and builds on the convening role and technical expertise of the UN Development Programme (UNDP), the UN Environment Programme (UNEP) and the UN Food and Agriculture Organization (FAO).

UN-REDD Programme

56

partner countries across Africa, Asia-Pacific and Latin America and the Caribbean

21

partner countries with approved funding for UN-REDD National Programmes

US\$215.2 million

in donor contributions from Denmark, the European Union, Japan, Luxembourg, Norway and Spain

91%

of donor contributions already allocated to support partner countries through UN-REDD National and Global Programmes



3,300+

REDD+ practitioners trained since 2010 in UN-REDD Programme regional and global capacity building events on MRV, governance, gender, transparency and accountability, stakeholder engagement, multiple benefits and green economy scenario analysis

34%

of the world's forests

56%

of the world's tropical forests

located in UN-REDD Programme partner countries

1 million+

monthly website hits on un-redd.org

950+

members of unredd.net, the UN-REDD Programme's online community of practice

As of August 2014

UN-REDD Programme

The Programme provides...

Direct National Support

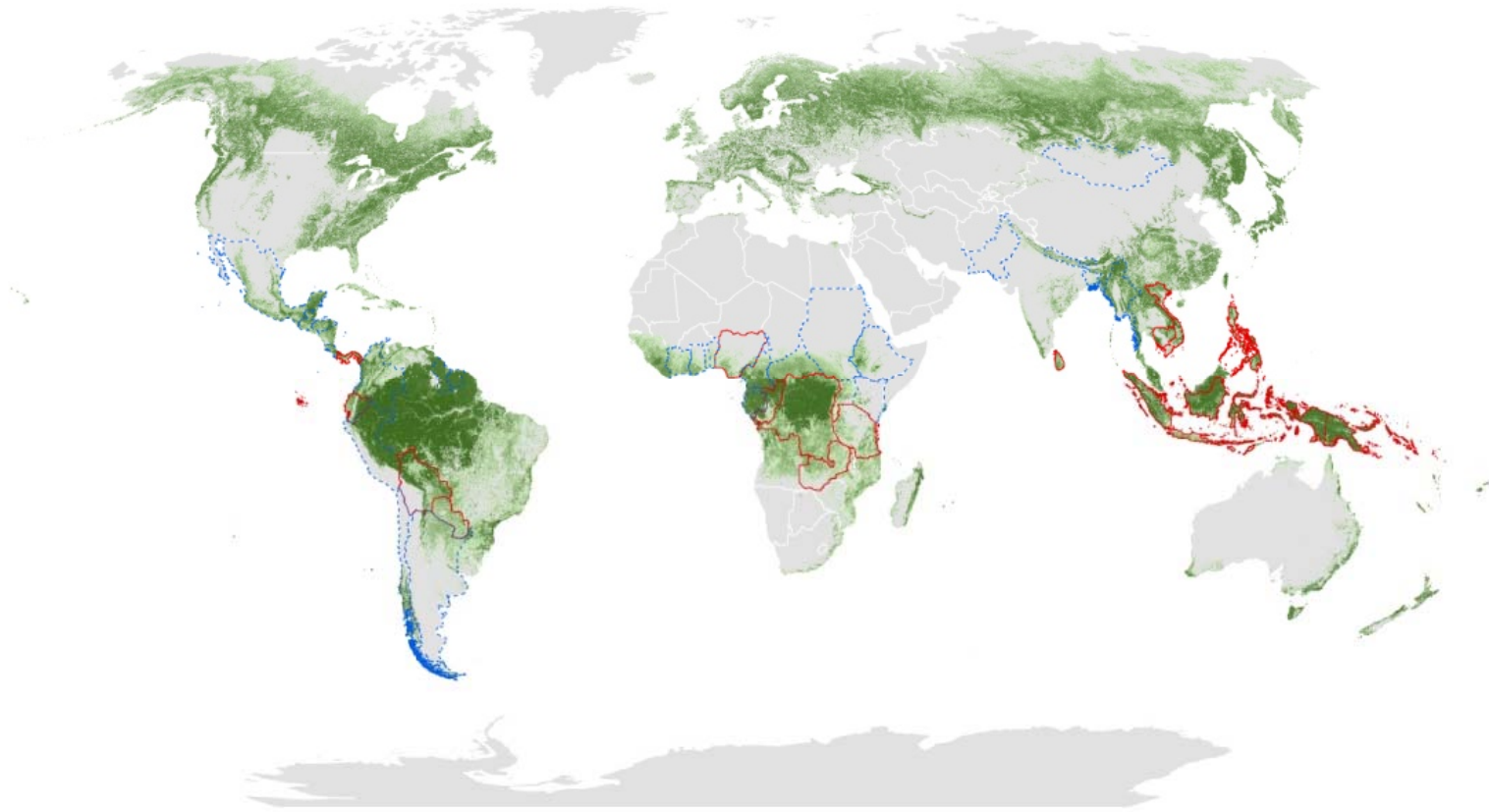
- Comprehensive REDD+ readiness support through National Programmes to selected partner countries
- Targeted support and technical advice to all member countries
- Strong focus on country ownership and Indigenous Peoples' & civil society involvement

Support to National Actions (SNA)

- Development of tools, methodologies and guidelines
- Knowledge sharing and South-South collaboration
- Building of awareness of and support for REDD+ at national and international levels
- Secretariat services

UN-REDD Programme: 56 partner countries

More than a third of the world's forests...



... and more than half the world's tropical forests

Multilateral REDD+ Initiatives



Established in 2008, the World Bank's **Forest Carbon Partnership Facility** (FCPF) is a global partnership focused on REDD+.

FCPF's **Readiness Fund** provides funding through to support capacity building and preparedness for REDD+ activities.

REDD+ preparedness activities include:

- adopting national REDD+ strategies
- developing reference emission levels (RELS)
- designing measurement, reporting and verification (MRV) systems
- setting up REDD+ national management arrangements (including environmental and social safeguards)

Forest Carbon Partnership Facility

Moreover, FCPF's **Carbon Fund** (operational since May 2011) is designed to pilot performance-based payments for emission reductions from REDD+ activities.



The FCPF and the UN-REDD Programme have developed a harmonized standard template for national programs.

The **Readiness Preparation Proposal (R-PP)** includes a number of conditions, addresses standard policy and governance issues, and is subject to review and monitoring.

Multilateral REDD+ Initiatives

The **REDD+ Partnership** was created in 2010 to serve as the interim international platform for REDD+ pending its full establishment under the UNFCCC.



As of August 2014, the Partnership included 76 partner countries as well as the European Commission.

It continues to play a role in coordinating REDD+ readiness efforts and collecting and sharing information across different initiatives, including through the **Voluntary REDD+ Database**.

The Voluntary REDD+ Database has information on funding by **bilateral donors**, many of whom are also heavily involved in multilateral REDD+ initiatives.

Other REDD+ Initiatives

- European Union's FLEGT and REDD Facilities
- Germany's REDD Early Movers (REM) Programme
- USAID's Forest Carbon, Markets and Communities (FCMC) Project
- Etc.



Scope and Limitations to Different REDD+ Approaches

Scope and limits of different approaches to REDD+

“In order to be effective and lasting, REDD+ was originally conceived as a mechanism with a nation-wide scope, anchored to national-level policies, national implementation measures and public/private transformational investments. Such national scope would foster, achieve and demonstrate sustainable development with a social and environmental performance of magnitude. The national scope of the REDD+ mechanism is thus not arbitrary – it lays the basis for mainstreaming, impact and permanence.”

UN-REDD / Josep Garí, “Pilot Projects versus National Policy in the REDD+ Arena,” available at: <http://www.un-redd.org/Newsletter39/PilotProjectsversusNationalPolicy/tabid/129673/Default.aspx>

Scope and limits of different approaches to REDD+

“Conversely, local projects on REDD+ remain a tangible means to test innovations and to accomplish concrete results. In fact, REDD+ projects of diverse sizes and designs are advancing in several countries, such as Colombia, the Democratic Republic of the Congo, Indonesia, Kenya and Tanzania. The investment phase for REDD+ also accepts pilot projects – as geographically discrete interventions – yet the underlying philosophy of REDD+ remains the achievement of country-wide performance and compliance with UNFCCC objectives and criteria.”

UN-REDD / Josep Garí, “Pilot Projects versus National Policy in the REDD+ Arena,” available: <http://www.un-redd.org/Newsletter39/PilotProjectsversusNationalPolicy/tabid/129673/Default.aspx>

Challenges in including forestry and land use

Technical issues

Also, a number of technical concerns have hindered early action on deforestation in developing countries:

Permanence

...how to ensure that reductions in emissions from deforestation are not eventually reversed by later activities

Additionality

...how to ensure that actions represent a net positive change in terms of an established reference level scenario

Displacement

...how to ensure that actions are not otherwise negated by increases in deforestation activities elsewhere

REDD+: Developing countries' gains

- Support to design and implementation of REDD+
- Payments per ton of carbon emissions reduced or removed
- Fair and adequate price for proven results
- International recognition for their mitigation results
- Multiple benefits: biodiversity conservation, poverty alleviation, catalyze a green economy that integrates multiple sectors (forestry, agriculture, energy, finance, etc.)

Main challenges associated with REDD+

- Ensuring meaningful sources of finance and adequate private sector engagement
- Powerful political and economic interests favour continued deforestation and degradation
- Institutional arrangements: Implementation must be coordinated across various government levels and agencies – Ministries of Environment and Forest should successfully coordinate with Ministries of Finance and Planning

Main challenges associated with REDD+

- Benefit sharing: if benefits are to be distributed, effectiveness and equity need to be balanced; tenure insecurity and safeguards must be genuinely addressed; and transparent institutions put in place
- Challenges associated with carbon measurement and establishing reference levels

Lesson Review

- Scientific evidence on climate change (IPCC):
Temperatures rising, strongly driven by CO₂
- Reducing Emissions from Deforestation and Degradation (REDD+) and its codification during the UNFCCC negotiations
- Why it is important, what are the challenges and how it can help
- International commitments and programs for REDD+