DRC ER-PIN

An Emission Reductions Program Idea Note for the Democratic Republic of the Congo

République Démocratique du Congo

Africa Footprint

Rapid population growth

Changing consumption patterns

Africa's ecological footprint increased by 238% between 1961 and 2008.

It is set to double by 2040.

The living planet index reported a steep decline in biodiversity: 40% in 40 years.

Business-as-usual scenario means jeopardizing the natural systems on which lives and economies depend.

Figure 2. **Historical trends in Africa's Ecological Footprint (1961-2008)** *(Global Footprint Network, 2011)*

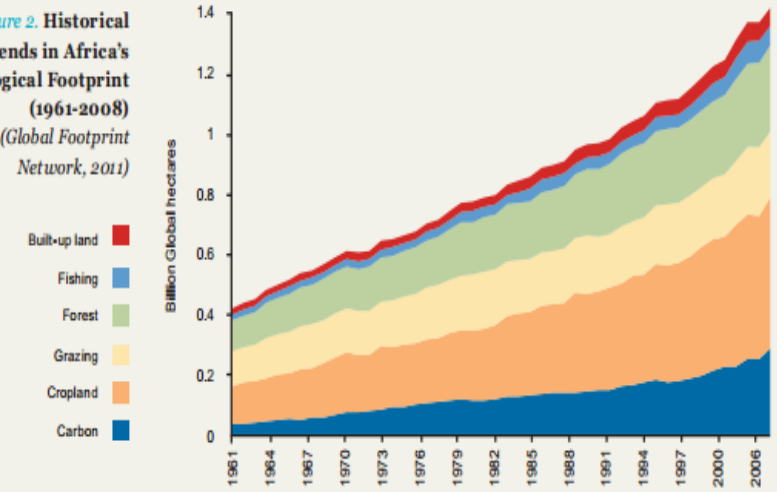
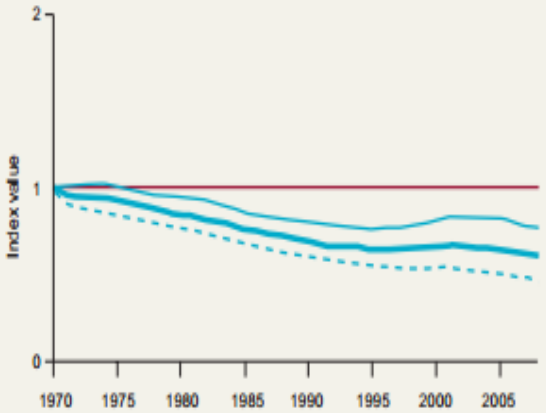
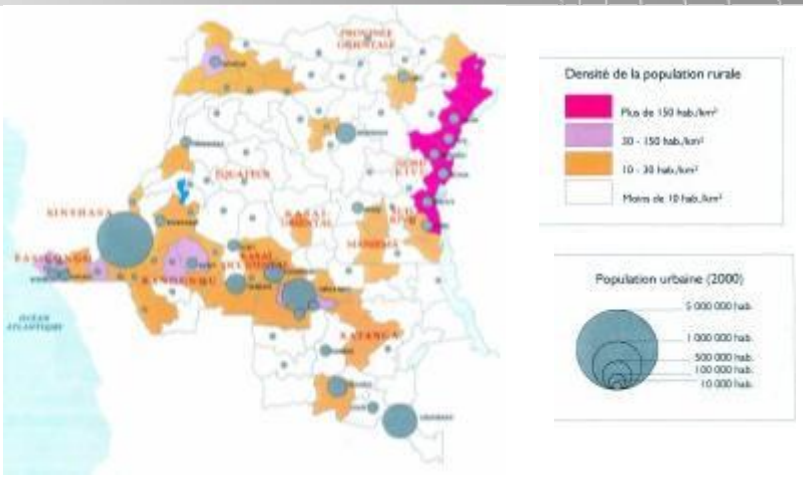


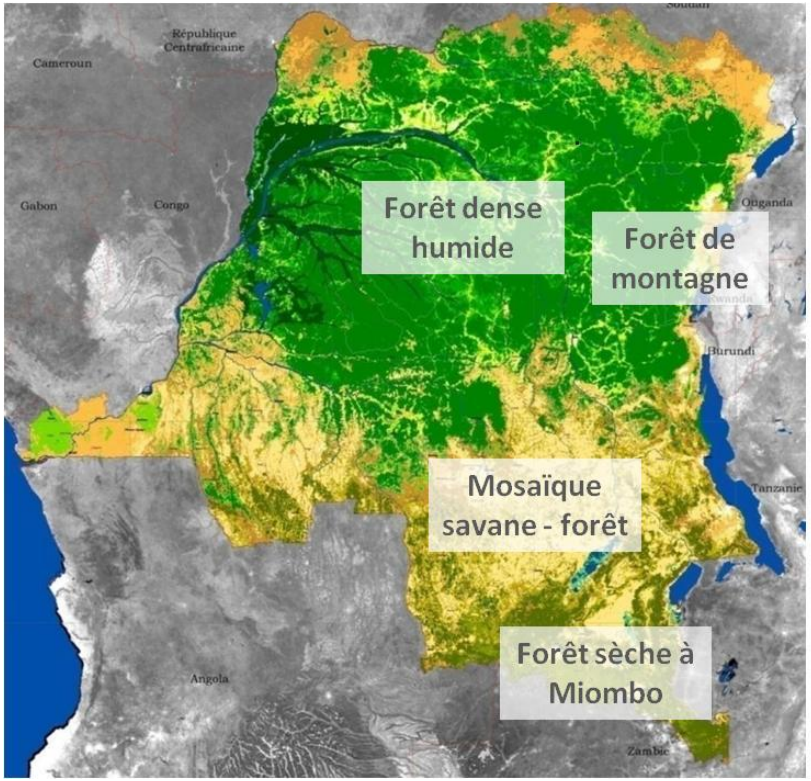
Figure 1. **Africa's Living Planet Index (1970 – 2008).** *The final index value indicates there has been an overall reduction of 39 per cent in animal populations over the 38-year period (WWF/ZSL, 2012)*



Democratic Republic of Congo - Context

- **Vast country: 234 million ha** (6 x Norway)
- **64 million inhabitants (2008), unevenly distributed**



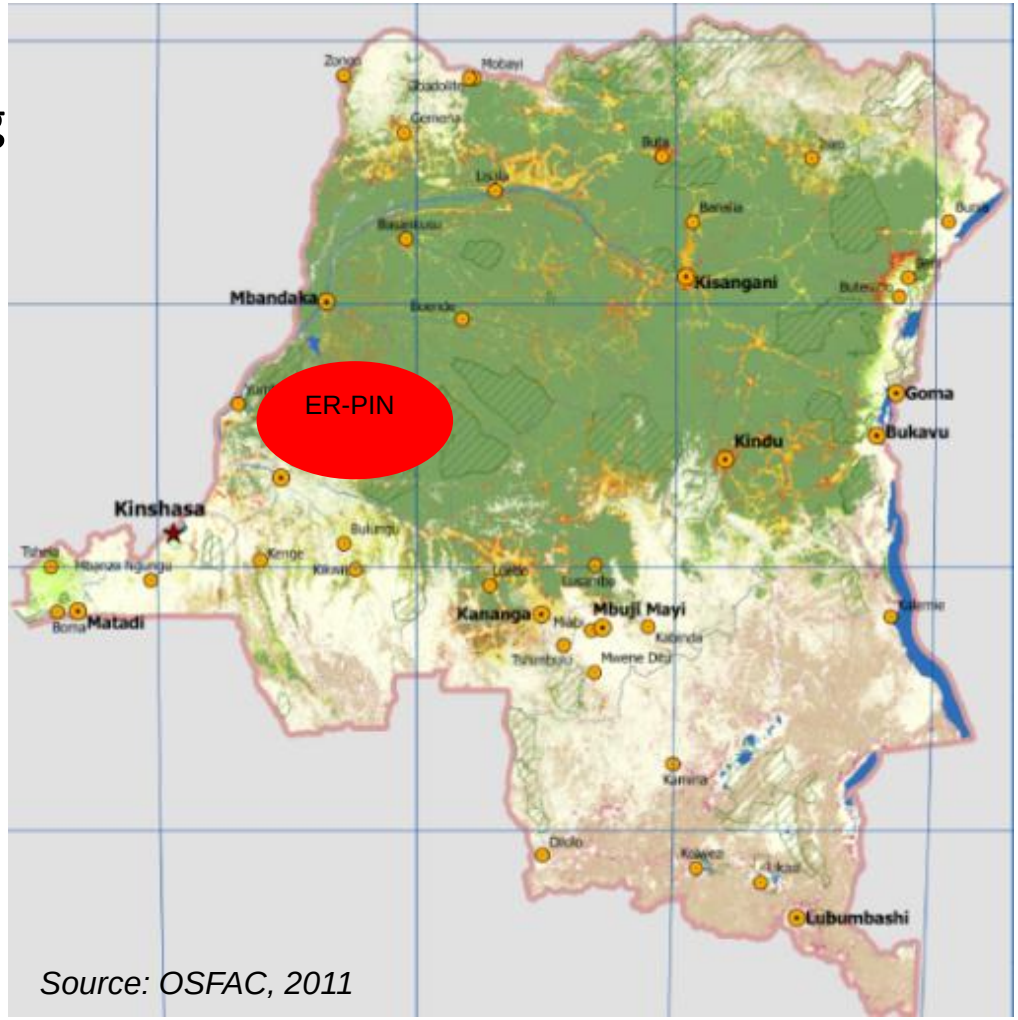


- **155 millions ha of forests* (67% of national territory):**
  - ≈ 10% of world tropical forest (2nd largest tropical forest country after Brazil)
  - ≈ 50% of African forests
  - ≈ 60% of Congo basin forests
- **Congolese forest stocks ≈ 140Gt CO_{2e}** (≈ 3 years of world emissions)
- **Very favorable hydrographical, geological, and climatic conditions largely under-used**

** Source: OSFAC, 2011*

Deforestation in DRC

- **Occurred mainly around some hot spots** (supply areas around big cities, agricultural production areas)
- **2000-2010 = 0,23%/year : low, but…**
  - A loss equivalent to 3.7M ha of forest (*1/10 of Norway*!), *including 1Mha of primary forest*
  - DRC amongst the 10 countries loosing most of their forest covered areas every year



Source: OSFAC, 2011

- **Foreseeable deforestation growth in the near future** (economic development, population growth, etc)

DRC - a REDD+ Pioneer

- First African country to have validated **REDD+ Readiness Preparation Proposal -** March 2010
- First country to have **Investment Plan v**alidated by FIP – June 2011
- First African country to develop a **Regulatory Framework** concerning the approval of REDD+ projects and to establish a **National REDD+ Registry - 2012**
- First African country to build a **National Forest Monitoring System** (www.rdc-snsf.org) - 2012
- One of the first countries in the world to put in place a **National REDD+ Trust Fund**, to develop **National REDD+ Standards** and to have a **National Strategy Framework - 2012**

3 phases of the REDD+ Process in DRC:

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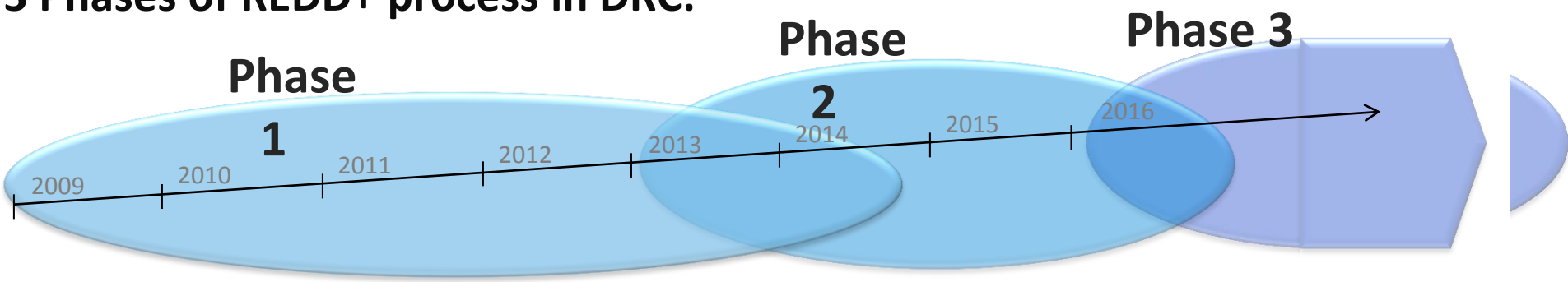


Preparation

- National *Strategy and framework for implementation*
- *Measurement, Reporting & Verification*
- *Reference Level*

Investment

- *Politics & measures*
- *Field activities (ex: Agriculture)*

Implementation

Results-based International Payments

** Estimated dates*

2009 :
-National Coordination
-National Committee
-Interministerial Committee

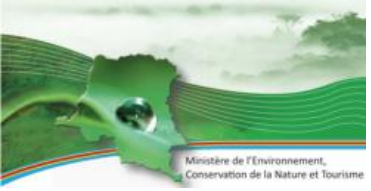
March 2010 :
- Approval the REDD+ Preparation Plan (1st country in africa)

June 2011 :
- Approbation of the FIP Investissement Plan (60M$)

August 2011 :
-22 M $ grant for 6 pilot projects with FFBC (22M$)

End 2012 :
National frame-work strategy for REDD
-National REDD Fund (Agreement soon to be signed)

Political Dialogue
- in DRC
- with International Community



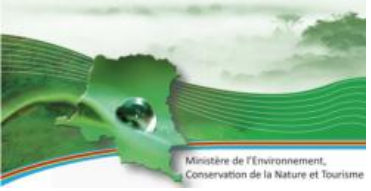
REDD+ and the DRC

A Turning Point

- DRC is the world's prime example of an HFLD country
  - 154M hectares of forest, 0.2% reported deforestation rate
- 186th out of 186 on the Human Development Index
  - Stability returning, investment climate improving, but these advances intrinsically put forests under threat
- The barrier to development – and deforestation - that existed in the past – political instability – is decreasing while population increases
- Brazil's forest estate is 3X as big as DRC, yet earns 100X the income from its forest sector
- REDD+ has the potential to help DRC avoid the traditional route of deforestation for development

The Dilemma of HFLD Countries

- HFLD countries offer a vital opportunity for REDD+ mechanism – they still have a large % of intact forest, and deforestation has not yet become a force of development
  - Therefore REDD+ offers the possibility to protect intact forests, without having to displace massive deforestation
- But there are 2 significant challenges:
  - 1. The common historical approach in REDD+ to REL does not provide an incentive for early action, while it provides greater rewards to countries who have already deforested for development
  - 2. The past does not predict the future – a historical REL fails to capture the growing pressure on forest resources, thereby limiting REDD's potential to succeed as an alternative financially viable development path (re. COMIFAC-World Bank study "Deforestation trends in the Congo Basin")



What is needed to make REDD+ work for DRC as an HFLD country?

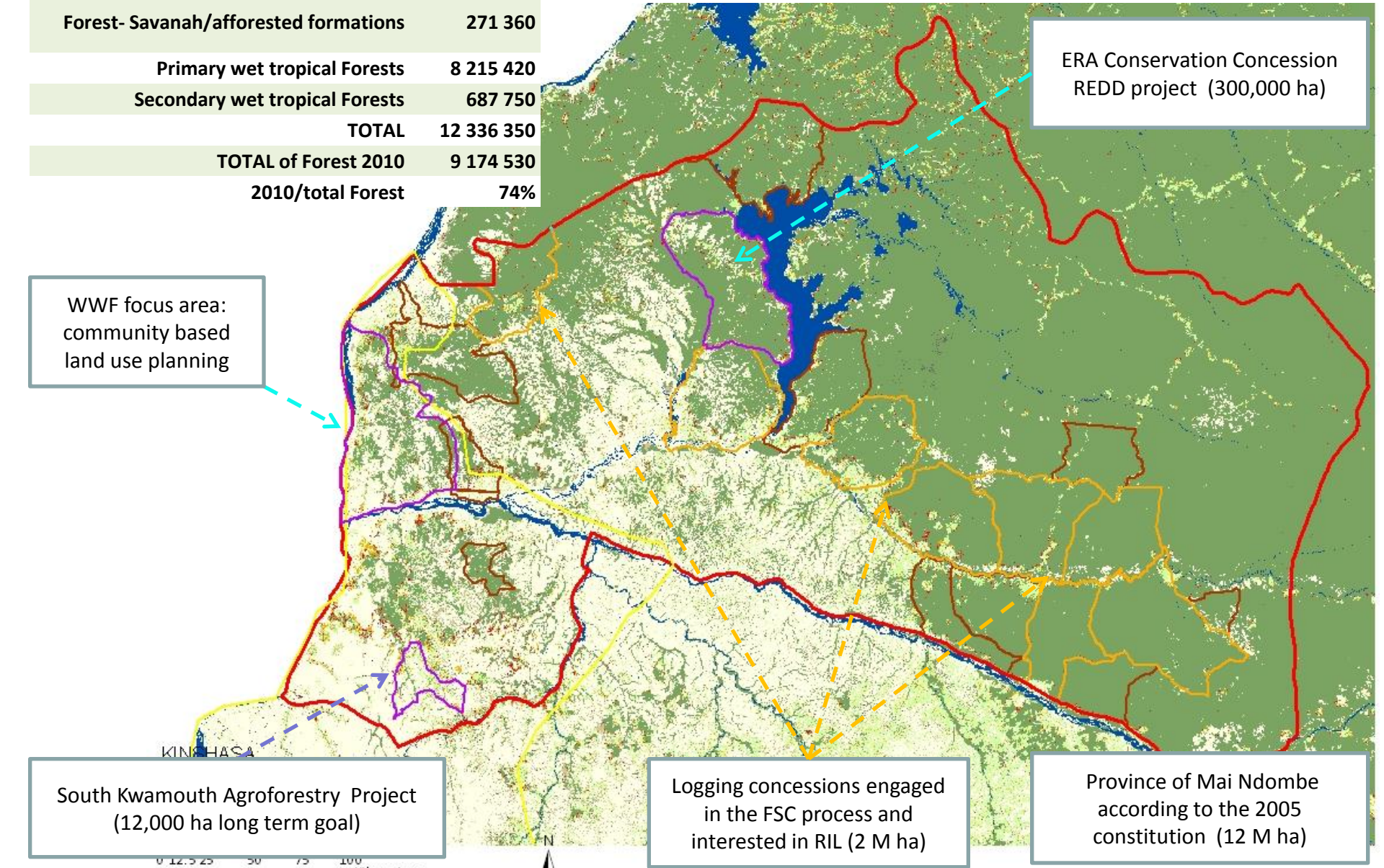
- Leadership and Collaboration – strong government commitment, civil society involvement, private sector partnerships
- Bottom-up meets top-down: test methods and approaches at subnational scale, incorporate lessons from pilot activities into ongoing national process
- Reward performance against reference scenario built on realistic future threat due to changing national circumstances
- Ensure rewards reach actors on the ground and are equitably distributed based on performance
- **Program must represent viable financial alternative that allows DRC to use its forests as a means of development, the *top priority* for the people of the DRC**

Program Approach

- Goal: ***a model provincial green development program that provides alternatives and rewards performance to address the challenges of climate change, poverty reduction, natural resource conservation and protection of biodiversity***
- Serves as both a broad-scale Program with province-wide enforcement and incentives, and an umbrella for projects targeting specific drivers and actors
- Aligns with the activities financed in the FIP and CBFF, and includes both enabling and emission-reducing activities
- Pilots the VCS Joint Nested REDD+ standard, and the REDD+ SES standard

Program Area

	Surface Area (ha)
Non forest areas	2 736 200
Water Plans	420 330
No data (in DRC)	5 290
Forest- Savanah/afforested formations	271 360
Primary wet tropical Forests	8 215 420
Secondary wet tropical Forests	687 750
TOTAL	12 336 350
TOTAL of Forest 2010	9 174 530
2010/total Forest	74%



Why Mai Ndombe?

- 75% of the Program area is forested – 9.2 million ha
- Closest forest estate to Kinshasa - under threat from growing charcoal, timber, food needs of nearly 8 million people, forefront of deforestation
- Pilot activities already existing – WWF, ERA-WWC, Novacel, SODEFOR, SOGENAC, FIP investment, CARPE (USAID), CBFF
- Includes southern part of Ramsar site Tumba-Ngiri Mai Ndombe
- Includes part of Salonga National Park –threatened species such as the bonobo and chimpanzee; also home to elephant, buffalo, hippopotamus, leopard
- 1.8 million people within Program Area, many are agricultural households

Drivers of Deforestation and Forest Degradation

Direct causes:

- Charcoal production to supply Kinshasa
- Slash-and-burn agriculture (subsistence and commercial)
- Cattle Ranching (large and small holder)
- Bush Fires
- Illegal logging
- Industrial logging

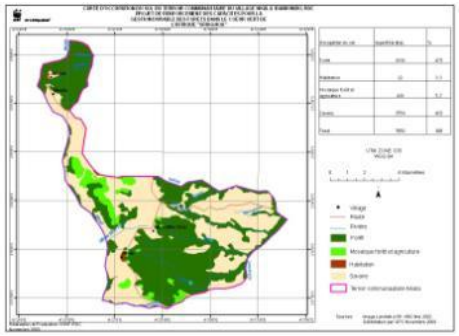
Underlying Causes:

- Population growth – increased demand for food and fuel
- Lack of alternatives
- Weak governance
- Low land productivity
- Improved accessibility to forest through roads and infrastructure

Enabling activities

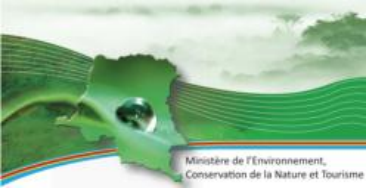
Designed around Community engagement and land management

- Climate change and REDD+ education
- Local governance empowerment
- Tenure clarification and reform
- Land use planning and management
- Compliance and Law enforcement



Emission Reductions Activities

- Agroforestry on degraded land to sustainably produce food and fuelwood
- Agricultural intensification as a strategy to phase out slash-and-burn agriculture
- Bush fire control (major regeneration of primary forest expected)
- Reforestation
- Community forestry and conservation
- Incentivize logging sector to reduce emissions through reduced-impact logging, forest certification, etc.



A World-Class Public-Private Partnership

Implementing Partners	Potential Roles
Ministry of Environment, Nature Conservation and Tourism (MECNT)	Overall Program Direction and Authority
Bandundu Province Environment Ministry	Program Management; deployment of the national REDD strategy at the provincial level
ERA-WWC	Program Management; technical partners in MRV and standards implemenation
WWF-DRC	Program Management; technical partners implementation of local land use plans
Local government and Rural Committees (CARGs)	Integration and approval of local land use plans and resolution of conflicts
Customary authorities and legally recognized local community organizations (ASBL)	Implementation of village level land use plans and adoption of alternative sustainable development strategies
Agricultural companies (NOVACEL, SEBO)	Implementation of alternative agricultural / agroforestery programs and control of wild fires
Legal logging companies	Forestry Certification and movement towards reduced impact logging
Civil society: GTCR, RRN, CEDEN, ISCO Congo, Hans Seidel, Churches	Information, education and communication. Surveillance and support for empowerment activities
FIP, KfW, CBFF, USAID-CARPE, NORAD, AFD, JICA	Financial support for activities within Program area

Institutional arrangements (TBC)

MECNT

Stakeholder Board of Direction
Composed of CN-REDD and key stakeholders

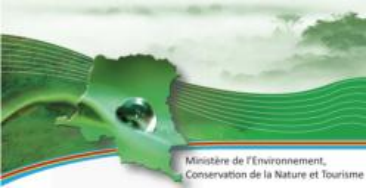
ER Program Management Entity
(Bandundu Province, WWF-DRC, ERA-WWC)

Provincial and local govt, Local communities NGOs, Private Sector,

Enabling activities

Provincial govt, Local communities, NGO**s,** Private Sector

Emission Reductions activities



Alignment with National REDD+ and Development Strategy

Enabling Activities

Element 1

- Basic infrastructure

Element 2

- Organization of local institutions and communities

Element 3

- Land use planning, micro-zoning and land tenure modernization and recognition

Emission reductions activities

Element 4

- Bush fire control
- Community forestry
- RIL and Forest certification

Element 5

- Agroforestry on degraded land
- Agricultural intensification

REDD+ requirements

Element 6

- National Registry

Element 7

- Reference levels

Element 8

- Proxy MRV method for each program and stakeholder
- MRV system coherent and integrated into national system

Cross-cutting Activities

- Piloting the program
- Fiduciary management, benefits sharing mechanisms, legal and operational procedures
- Capacity building

Progress on SESA

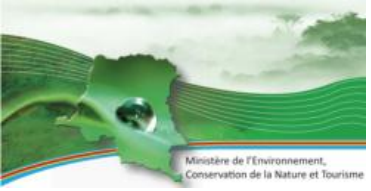
- Six provincial consultations: Sept.-Oct. 2012
- Consultation workshops on interim version of SESA open to all stakeholders: end of June
- Consolidation based on received comments: July
- Elaboration of draft and first designs for the REDD+ Registry in parallel with provincial consultations: August
- Provincial comments consolidation: September
- National validation workshop: end of October 2013

Co-benefits

CO-BENEFIT	LOC COMMUNITY	PRIVATE ENTERPRISE	GOVERNEMENT	INDIGENOUS PEOPLE
Biodiversity	Controlled hunting, Non-timber forest products	Extended rotations, Green Image, Market access	Forest cover, Carbon stock, Key species protected, Protects 50% of CARPE landscape	Same as for local community
Livelihood	Jobs, Health quality, Education, New skills, Access to markets	Business opportunity, Jobs, Workers benefits,	ER's sold, Training, Poverty alleviation, MDG results,	Protection of traditional lands + lifestyle
Right	Forest tenure, Community land tenure, Legal recognition of community institutions	Security of investment	Carbon rights clarified, Forest co-ownership recognized	Same as for local community
Governance	Less conflict, Clarity of laws, Protection of land rights	Security of investment, Less conflict, Clearer roles	International recognition, Partnerships, Law enforcement	As for local community

Benefit Sharing

- Upfront program investments in community projects to reduce pressure on forests
- Payments for emission reductions and proxies
- Performance payments at various levels, including:
  - Equitable share of profits between community and government proposed for province-wide activities
  - Equitable share of profits between private actors, government and communities in project-level activities
- Full design will take place during design phase



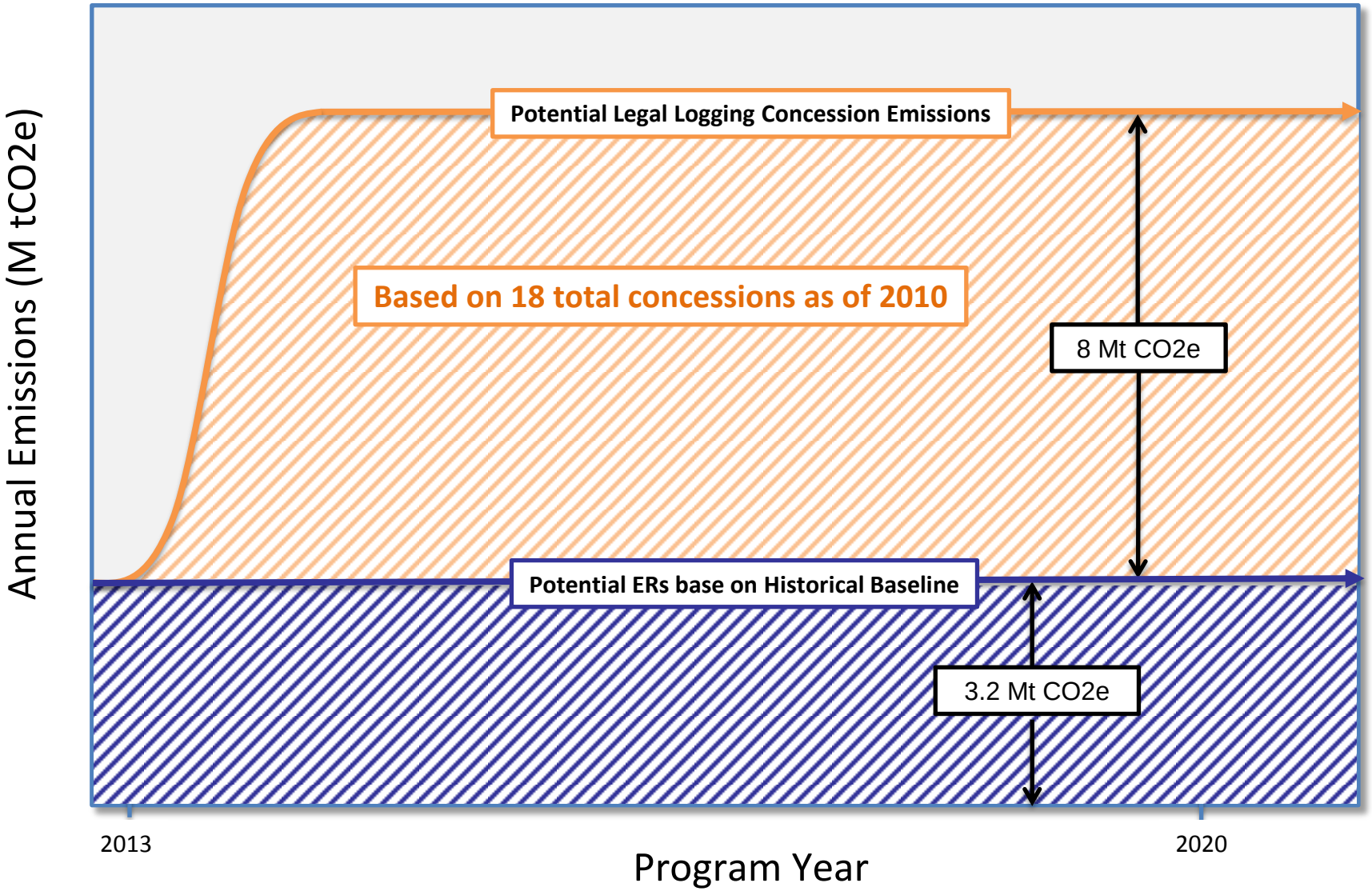
REL Development – an Evolving Approach - Historical

- Historical Approach:
  - Uses FACET baseline of 2000-2010 – 0.21% rate of deforestation
  - But there are some problems with using this as a REL
    - FACET uses composites of several years to develop its maps, which reduces temporal accuracy
    - FACET does not capture degradation – forest-to-non-forest only – underestimates emissions
  - Historical approach fails to include legal emissions from the 18 logging concessions – failing to include these potential emissions would completely overwhelm a historical REL
  - Does not take into account clearly anticipated demographic and future growth in economic sectors (logging, energy, agriculture, mining, transport)

Emissions from degradation (not accounted for in FACET) vs a REL based on historical rate slightly adjusted

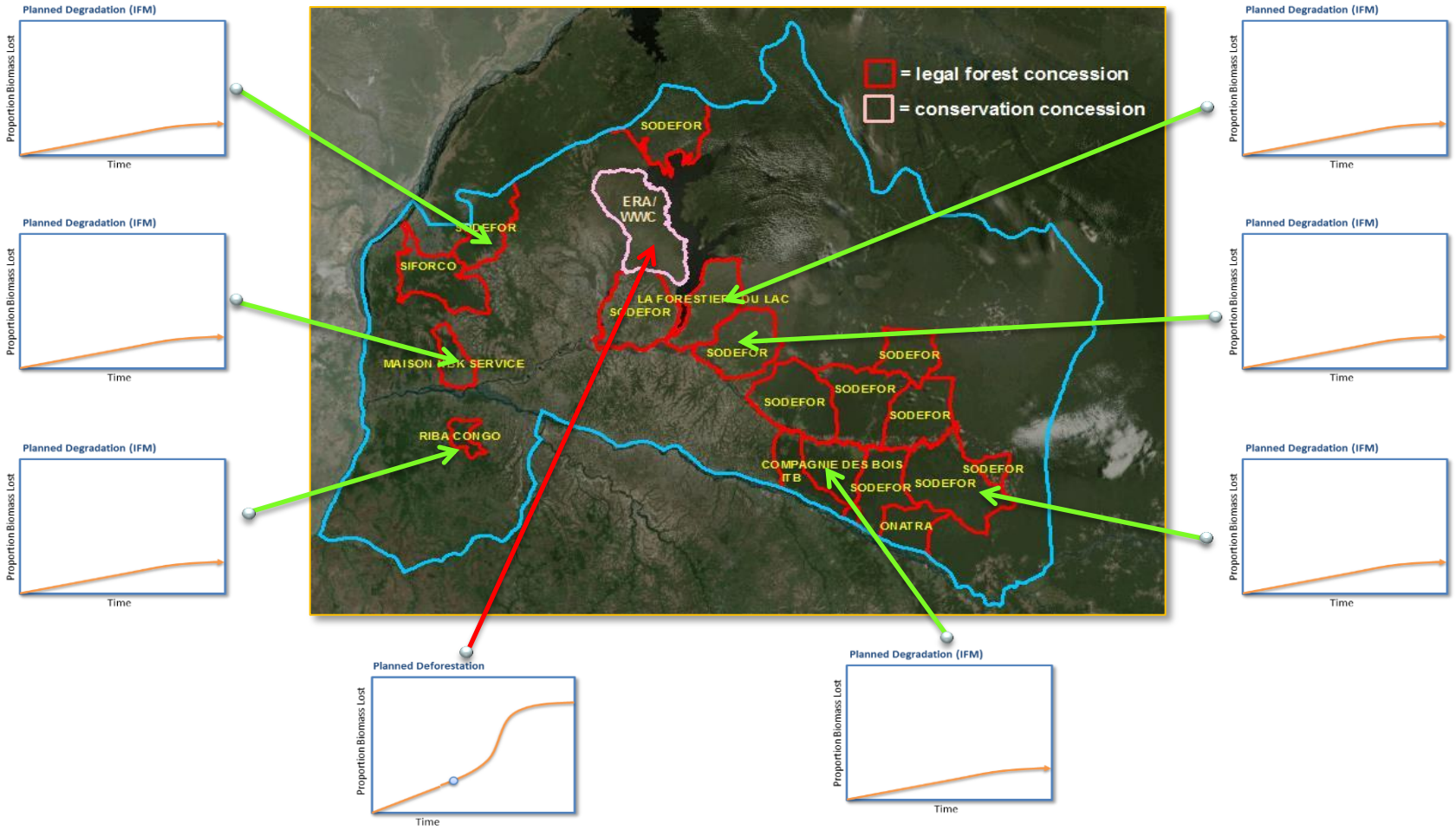
= Potential Legal logging concession emissions

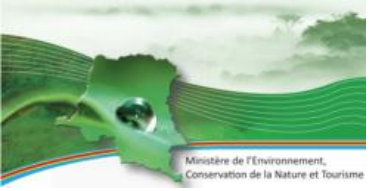
= Projected ERs based on pure historical reference scenario (slightly adjusted)



Future Mai Ndombe Province Land-use Based REL

Separate reference levels for each concession

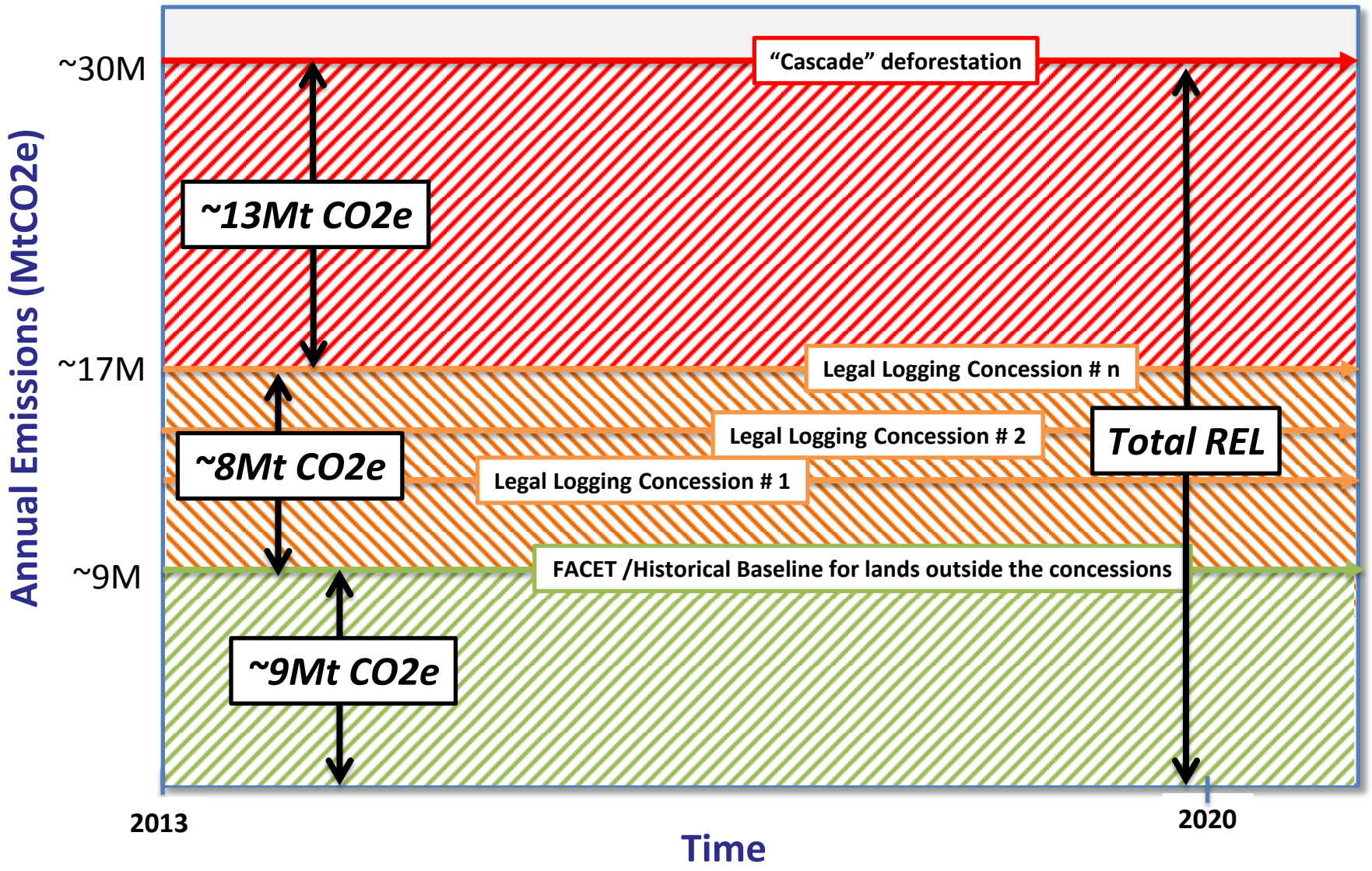




REL – An Evolving Approach – Hybrid Approach

- A hybrid approach using modeling inside logging concessions and a small adjustment to historical emissions outside concessions was included in the ER-PIN
  - Similarity in the approaches: land-use types must have separate REL's in order to reflect different potential emissions profiles –these REL's are then added up to the full jurisdictional REL – but individual REL's are used to assess performance and payment
- But this hybrid approach has problems as well
  - It does not take into account realistic dramatic increasing pressure on forests outside of logging concessions due to Kinshasa demographic demands
  - Different approaches to REL inside the same program – not harmonized
  - It could result in an imbalance of potential ER's within the REL that does not reflect the similarities in drivers inside and outside concessions

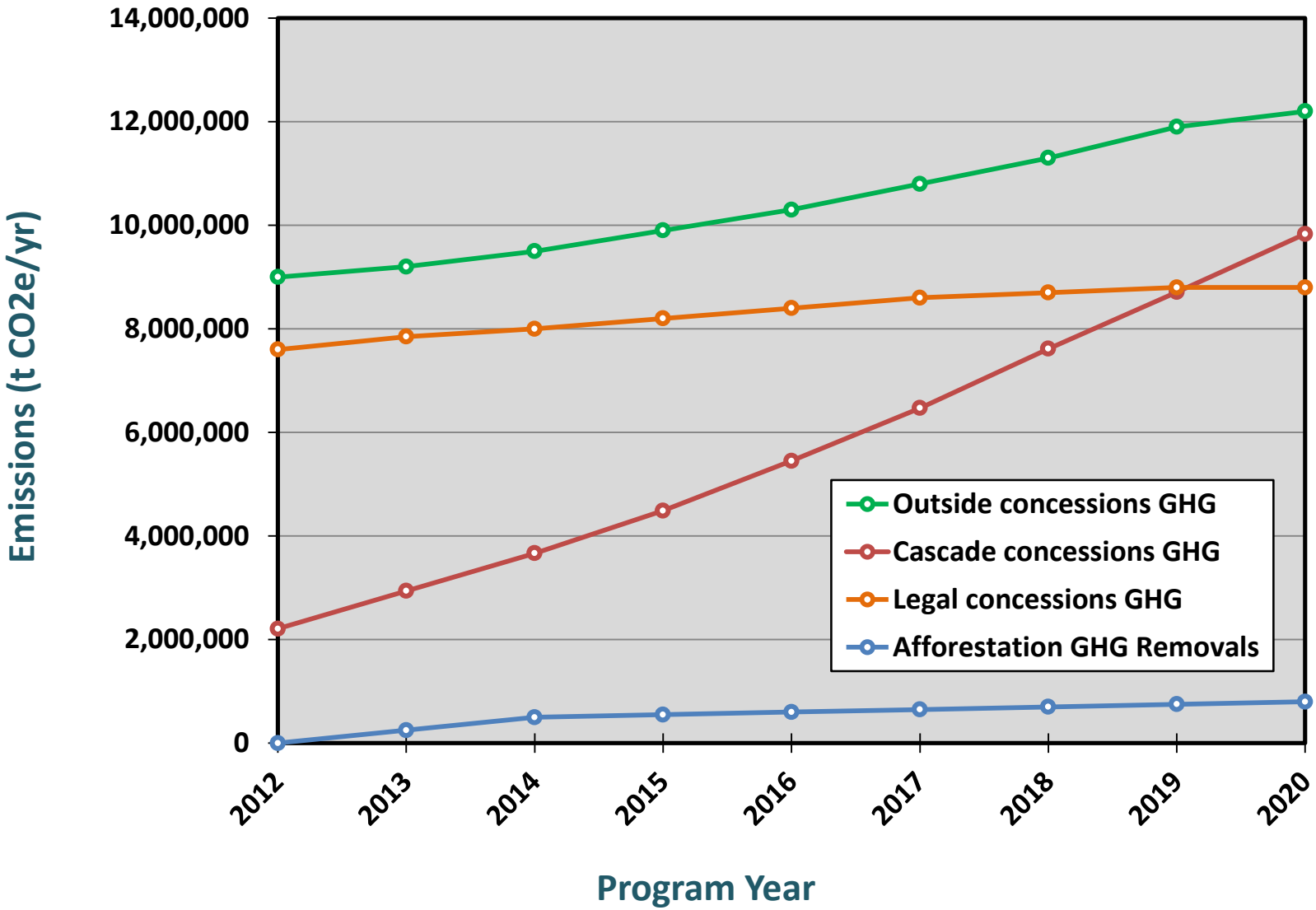
REL using Hybrid Approach



REL Development – an Evolving Approach – Common Modeling Approach

- A more harmonized common approach to adjustment is needed, that models threat outside concessions (as the current model does inside concessions)
  - In addition to providing a more coherent approach to REL development, this will have the outcome of balancing within the REL the potential ER's across the land-use types, providing a balanced proportion of incentives for logging concessionaires, conservation concessions, as well as communities and actors outside concessions
- Work on this common modeling approach is already initiated, with preliminary results available soon
- The plots on the next slide show an estimate of how each land use REL might look once more accurately modeled.

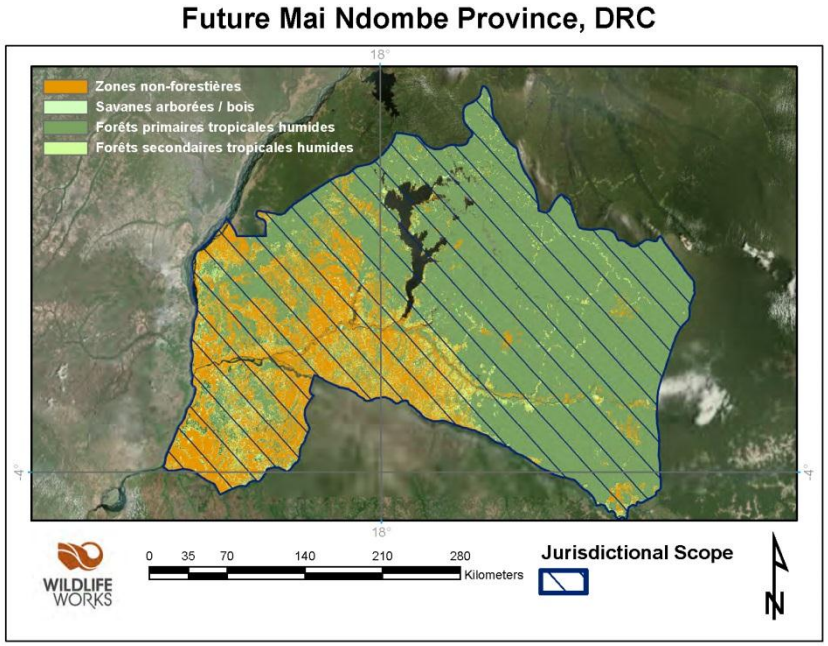
Common Modeling Approach - Projection of Potential RELs by Land-Use Type



Measurement, Reporting and Verification

ER-Program MRV system based on

- National Forest Inventory (will be completed with Lidar integrated approach)
- Greenhouse Gas Inventory
- Improved and validated Baseline 2010 FACET forest cover map



ER-Program Data will be fully integrated into the National Forest Monitoring system for REDD+ :

1. REDD+ Registry
2. Terra Congo (satellite land monitoring system)
3. Moabi interactive mapping and ombudsman mandate

Timetable

- February 2013: ER-PIN launch workshop with all the stakeholders (CSO, IPs, private sector, etc.)
- May 2013: ER-PIN validation workshop
- June 2014: ER Program Document
- December 2014:
  - ERPA and start of ER Program implementation
  - R-Package
- December 2015: first verification

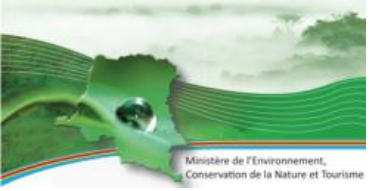
Financing Plan

- Donor-funded Start Up Financing is needed, e.g., $60M (4 years at $15M)
- $20M Annual Fixed ER Program Cost Estimate
- Approx. $50-75M in variable costs based on $90-120M in revenues from ER sales
- 70+% of the total costs invested in communities/program activities to address drivers
- The program would net $20-25M a year for the government

ER Estimate	ER - total (range - Mt CO2e)		ER - % of the REL (range)		ER – to Dec. 31, 2020 (Mt CO2e)	ER – 10 years (Mt CO2e)	ER – Program Lifetime (to 2050) (Mt CO2e)
	low	high	low	high	average	average	average
Total	**7.2**	**23.4**	**37%**	**78%**	**91.8**	**153**	**540**

Key Messages

- DRC sees potential in REDD+ as an ***alternative green development*** mechanism and is committed to implementing the first subnational REDD+ Program in Africa, in partnership with FCPF
- **Program must represent viable financial alternative to deforestation –** therefore modeled REL reflecting future threat is critical to fit with DRC National Circumstances
- The Mai Ndombe REDD+ Program is a unique opportunity to link public and private finance to deliver emissions reductions and sustainable development at large scale
- Flexibility is key in Design Phase, as DRC determines successful path not only with CF, but to secure long-term carbon finance
- Mai Ndombe REDD+ Program will provide experiences and lessons that can be used not only in DRC but also in other COMIFAC and HFLD countries



Thank You

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