

"Cost effective" monitoring for REDD+ and biodiversity

***Michael BUCKI, Unit CLIMA/A2
"Climate Finance and Deforestation"***

Multiple benefits in UNFCCC (Durban Decision)

"[REDD+], can promote poverty alleviation and biodiversity benefits, ecosystem resilience and the linkages between adaptation and mitigation, and should promote and support:

- [Respect for the knowledge and rights of indigenous peoples, taking into account relevant international obligations, national circumstances and laws. → **Legality/implementation grids**
- Full and effective participation of relevant stakeholders, in [REDD+ activities, and in addressing the drivers of deforestation and forest degradation, land tenure issues, and forest governance]. → **Capacity building for civil society & facilitators**
- That actions are consistent with the conservation of natural forests and biological diversity, ensuring that REDD+ activities are not used for the conversion of natural forests.]"

Usual concerns about addressing biodiversity in REDD+

- 1. "Broadens the agenda beyond original REDD mandate."**
 - Information in SIS should help reducing risks, and assessing if climate benefits will last longer than REDD+ incentives (sustainable performance).
- 2. "Puts an additional burden or new conditionalities on REDD+ countries, therefore compromising broad participation and the timely delivery of support."**
 - Test existing guidance. Inform investors interested in .
- 3. "Costs too much to monitor."**
 - Redefine performance. Seek synergies with rural development and Aichi targets: Hyderabad decision 11/27 *"urges Parties, to fully implement the relevant provisions and decisions of the CBD and UNFCCC in a coherent and mutually supportive way" and provides guidance.*

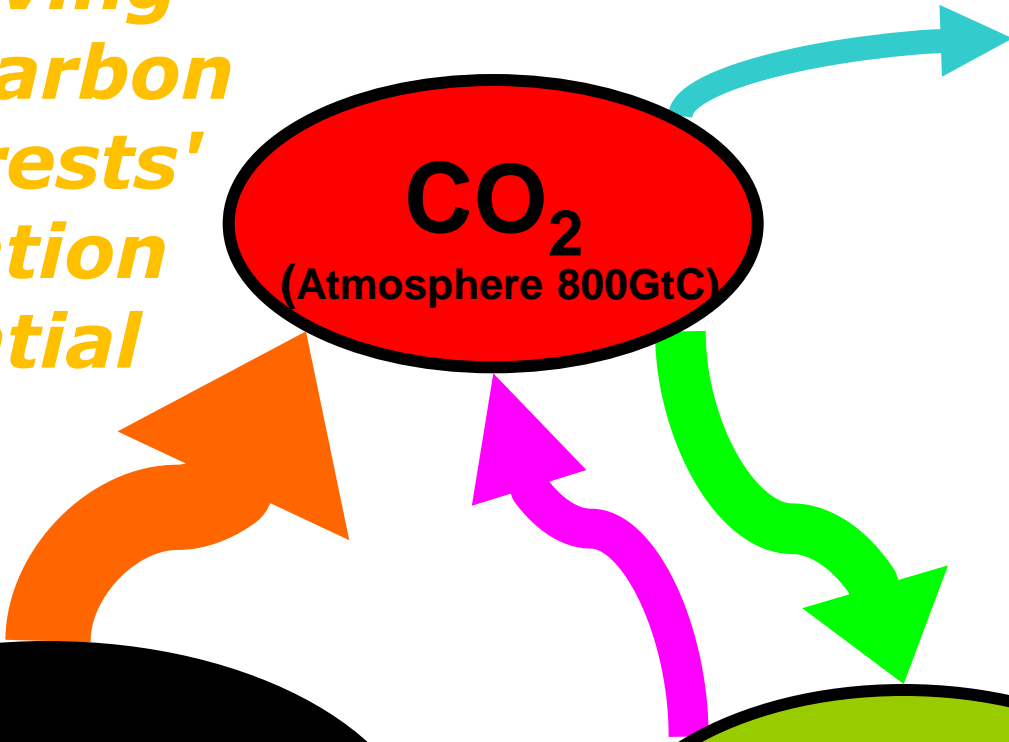
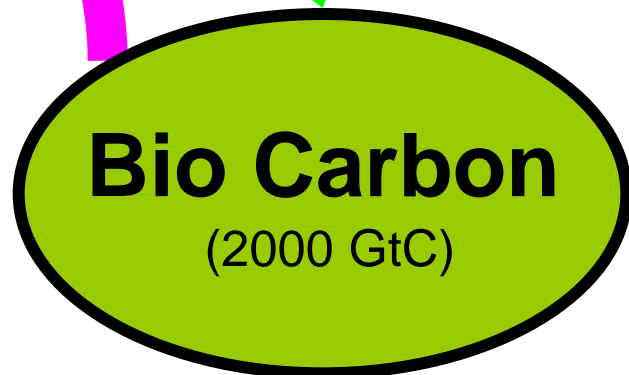
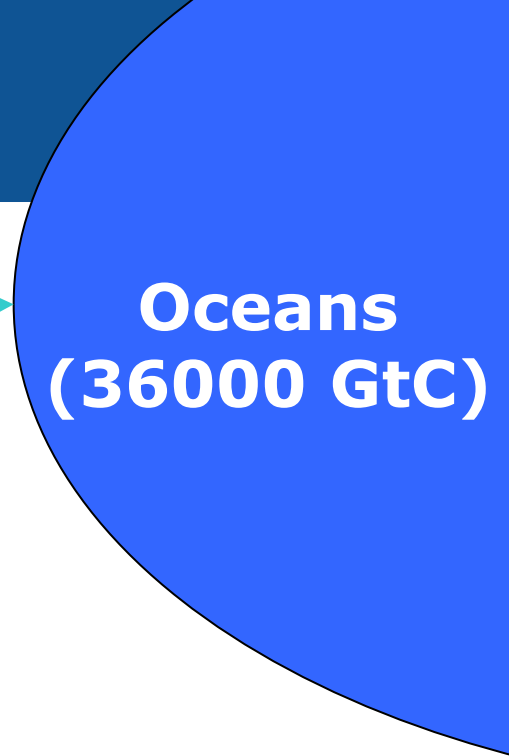
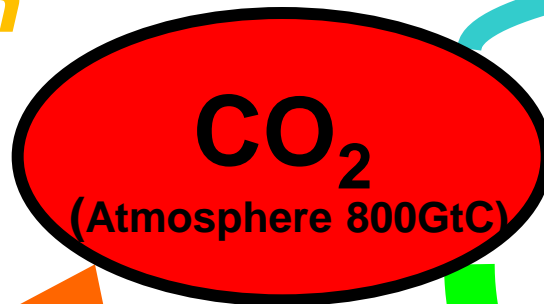
1) REDD+ does not "buy" carbon, it pays for lasting climate benefits

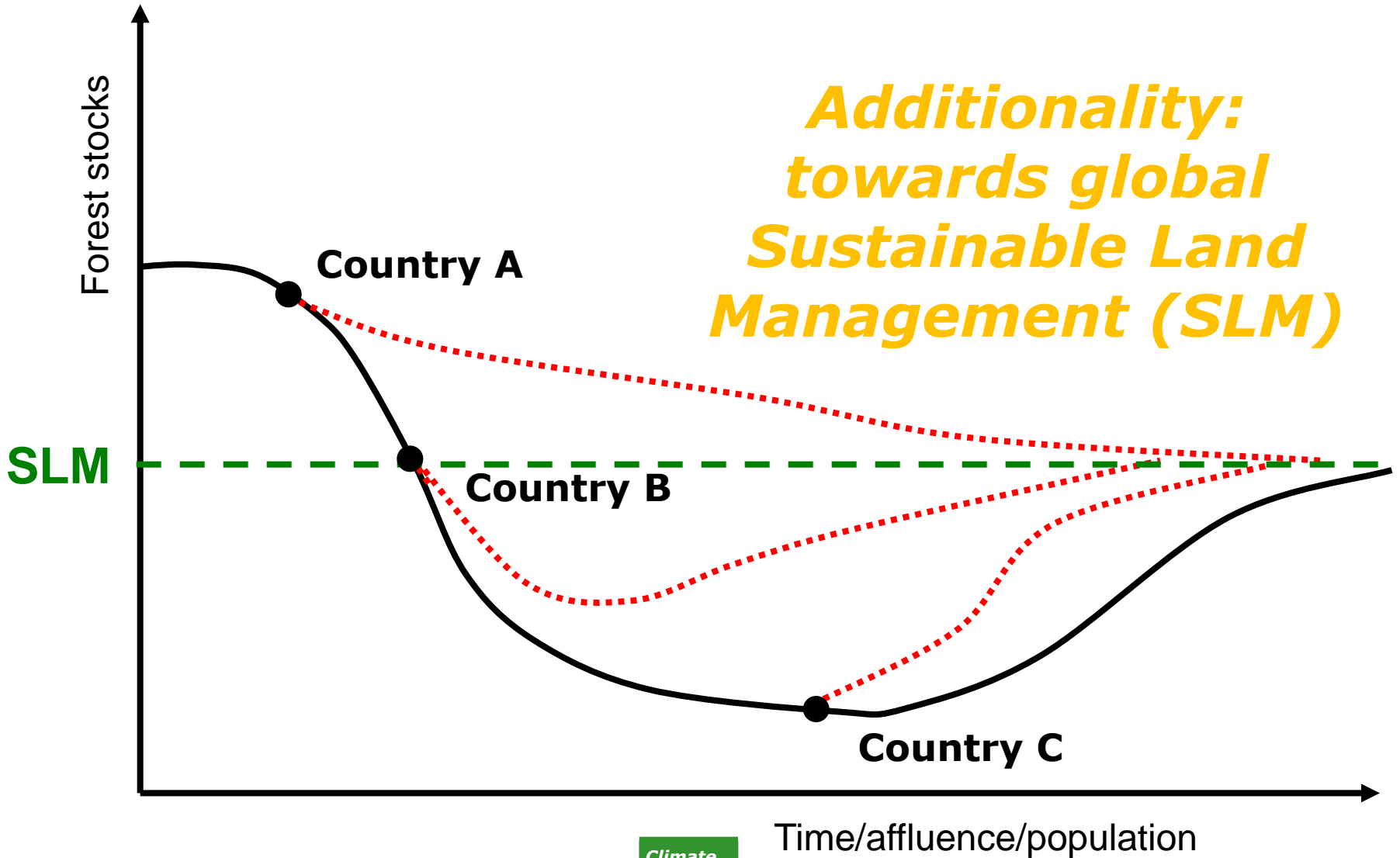
Until 2020: EU MS improve their MRV capacities, they report on LULUCF under UNFCCC but cannot use it to meet KP targets set at EU level. Forest offsets (from REDD+ or CDM) are also excluded.

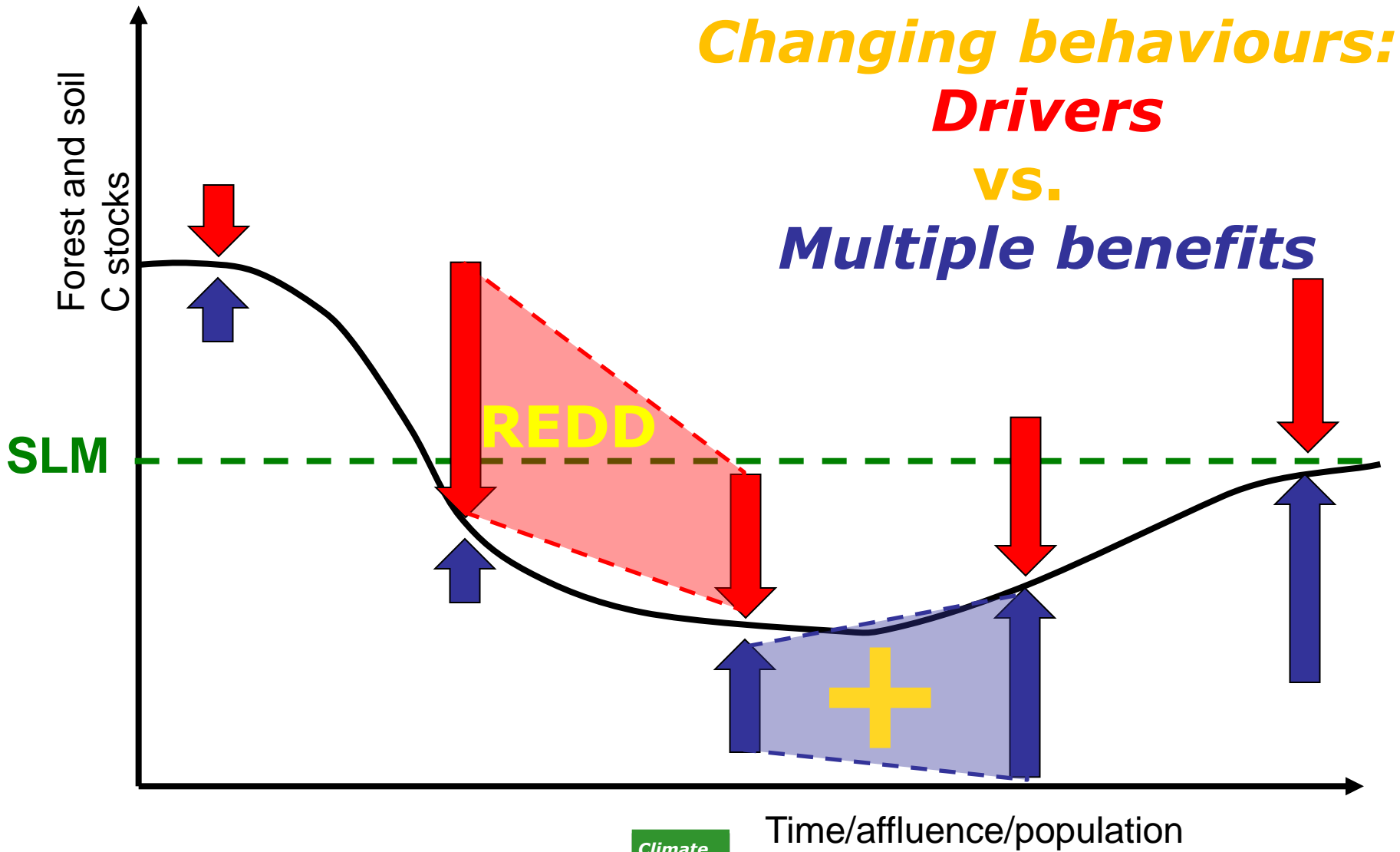
Low CC ambitions mean price of carbon << cost of REDD+

After 2020: Compliance rules and targets could be reconsidered within and between the land sectors (LULUCF, Agriculture, REDD+). The use of land credits for compliance under the EU-ETS would still depend on "fixing" uncertainties in MRV, additionality, leakages and permanence.

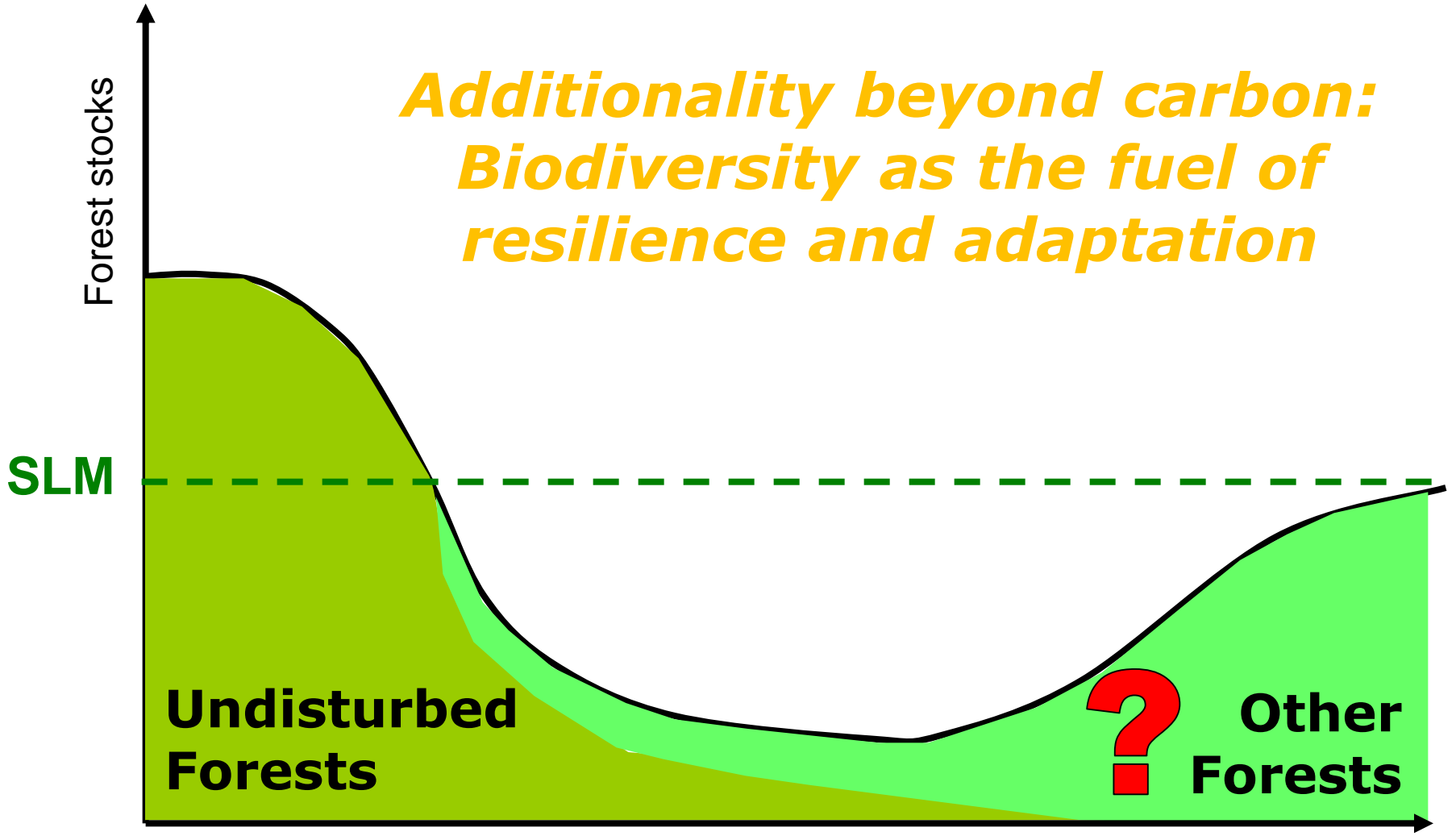
Permanence:
preserving forest carbon and forests' mitigation potential







*Additionality beyond carbon:
Biodiversity as the fuel of
resilience and adaptation*



2) *No additional requirements*

UNREDD, FCPF, CARE-CCBA and the recent CBD decision on REDD+ biodiversity safeguards already provide detailed guidance, principles and examples of good practices:

- Safeguards are intended to reduce the risks, and may also enhance multiple benefits considering inter alia the following possible adverse impacts: → **Risk prioritization frame**
- **Timely and effective inter-sectoral coordination** and synergies among and within relevant ministries are of great importance for the application of safeguards
- **Solving land tenure, land zoning and land-use planning**, facilitate implementation.
- **Lack of benefits and/or lack of equitable distribution of benefits** for relevant stakeholders, are possible threats to the success of [REDD+].
- Well-designed national forest inventories, including through **remote sensing**, can also **provide valuable information relevant to biodiversity**.
- The ecosystem approach and its operational guidance (...) and utilizing standard criteria to **identify sites of high biodiversity value so as to prioritize their conservation**.
- When designing, implementing and monitoring afforestation, reforestation and forest restoration activities for climate change mitigation, **consider conservation of biodiversity and ecosystem services through, for example: (...)**
- Where appropriate, promote biodiversity conservation, especially with regard to soil biodiversity, while **conserving and restoring organic carbon in soil and biomass**, including in peatlands and other wetlands, as well as in grasslands, savannahs and drylands.

3) Cost effective monitoring for enabling broad participation and wide coverage

IOP PUBLISHING

ENVIRONMENTAL RESEARCH LETTERS

Environ. Res. Lett. 7 (2012) 014031 (13pp)

doi:10.1088/1748-9326/7/1/014031

Assessing REDD+ performance of countries with low monitoring capacities: the matrix approach

M Bucki¹, D Cuypers², P Mayaux³, F Achard³, C Estreguil³ and G Grassi³

¹ Directorate-General Climate Action, European Commission, B-1049 Brussels, Belgium

² Unit Transition, Energy and Environment, VITO, Boeretang 200, 2400 Mol, Belgium

³ Institute for Environment and Sustainability (IES), Joint Research Center (JRC), Via E Fermi 2749, I-21027 Ispra (VA), Italy


E-mail: Michael.Bucki@ec.europa.eu

Disclaimer: The views expressed in this paper may not in any circumstances be regarded as stating an official position of any of the authors or contributors' home institutions, including the European Commission.

LULUCF performance matrix (IPCC)

	<i>Forest</i>	<i>Other land use</i>
<i>Forest</i>	<i>Forest Management</i>	<i>Deforestation</i>
<i>Other land use</i>	<i>Afforestation & Reforestation</i>	

REDD+ activities in a performance matrix?

	<i>Forest</i>	<i>Other land use</i>
<i>Forest</i>	<p><i>Degradation, Sustainable Management of Forests, Conservation and Enhancement of Carbon Stocks</i></p> 	<p><i>Deforestation</i></p>
<i>Other land use</i>	<p><i>Enhancement of Carbon Stocks</i></p>	

Cost effective MRV of Forests: Focus on Activity Data!

	<i>Natural Forests</i>	<i>Other Forests</i>	<i>Other Land Use</i>
<i>Natural Forests</i>	<i>Conservation</i>	<i>Degradation</i>	<i>Deforestation</i>
<i>Other Forests</i>	<i>Enhancement of Carbon Stocks (Restoration)</i>	<i>Sustainable Management of Forests</i>	
<i>Other Land Use</i>	<i>Enhancement of Carbon Stocks (Afforestation and Reforestation)</i>		

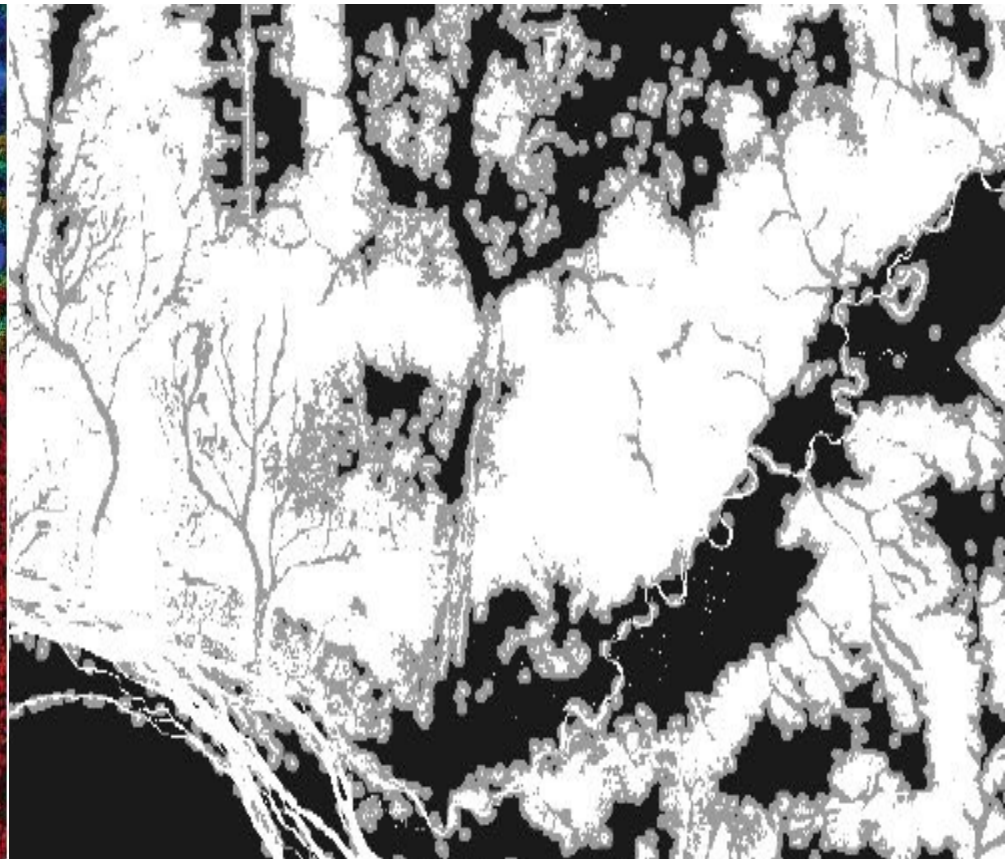
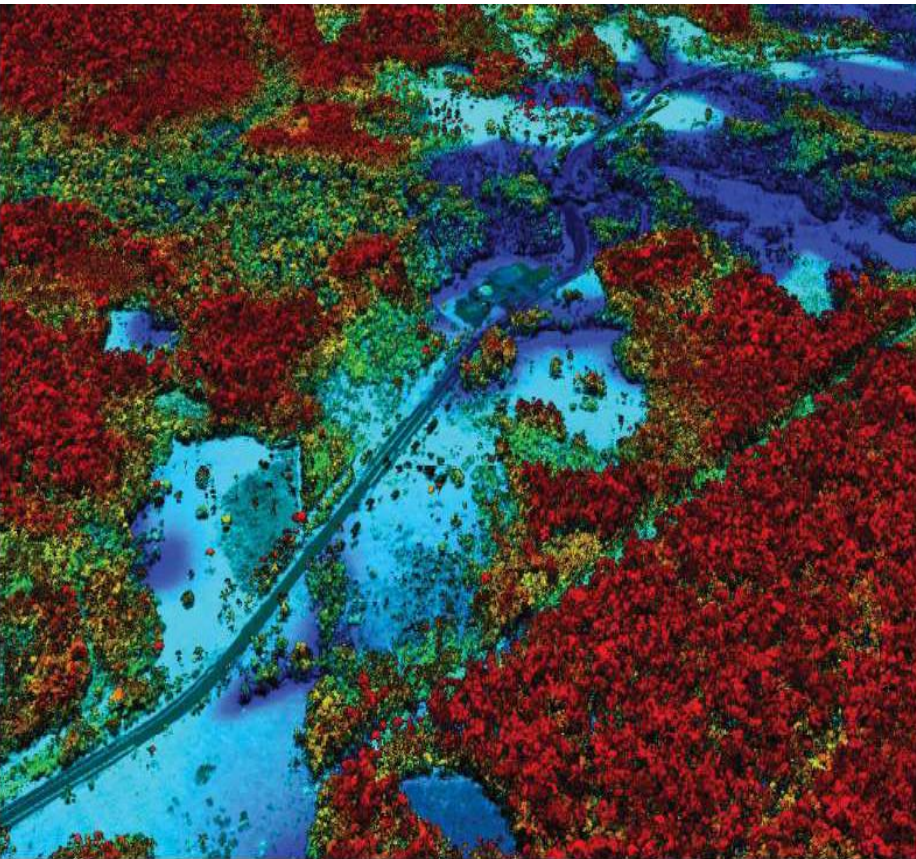
How does one define natural/other forests?

- 1. As one can and will map it, wall to wall, every X years, for the purpose of managing its forests well.**
- 2. Adapting reference definitions ("FAO primary forest", "undisturbed", "intact forest landscape"...)**

"An unbroken expanse of natural ecosystems within the zone of current forest extent, showing no signs of significant human activity, and large enough that all native biodiversity, including viable populations of wide-ranging species, could be maintained". (Potapov, 2008)

- 1. Through remote sensing, as much as possible, to get cheap, frequent, reliable and comparable data sets.**
- 2. In a participative manner, using IT:** Pilot projects are testing smart phones for simple data collection using GPS functions, which train communities to update forest data. The spread of such technologies for forest and agriculture could also contribute to improving governance, land tenure, fair benefit sharing, extension services, access to finance and the consultation of local populations.

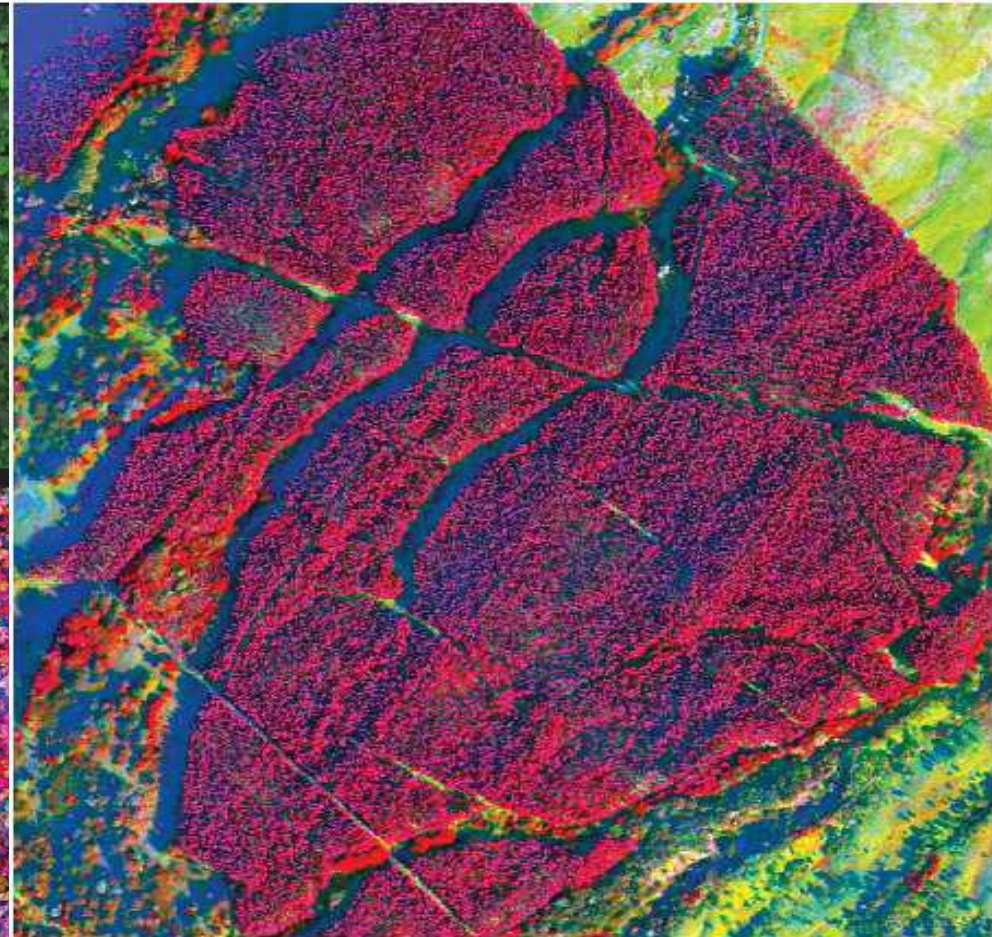
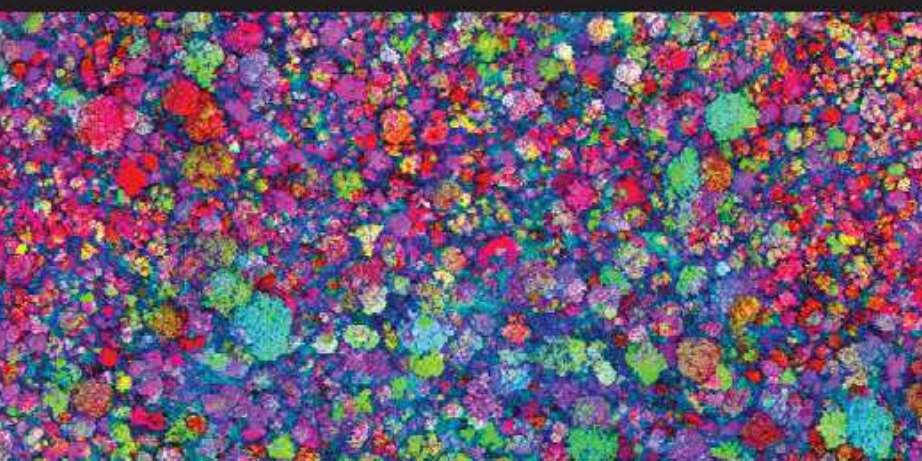
Using roads, rivers and edges as a proxy



(by courtesy of Asner & Fernandes)

Remote sensing can show more than carbon

(by courtesy of Asner & Fernandes)



Disaggregation of RL and results

	NF 2005	NIF 2005	OL 2005	Total 2000		NF 2010	NIF 2010	OL 2010	total 2005
NF 2000	62,869	587	36	63,492	NFL 2005	62,273	538	57	62,869
NIF 2000	-	39,610	327	39,937	NIF 2005	-	39,559	638	40,197
OL 2000	0	-	125,011	125,011	OL 2005	0	-	125,374	125,374
Total 2005	62,869	40,197	125,374	228,440	Total 2010	62,273	40,097	126,069	228,440

Area (10 ³ ha)	Difference Actual - RL	Deforestation (in 5 yrs)		Degrad. (5 yrs)	Sust. Manag.	Conserv.	Total
		NF to OL	NIF to OL	NF to NIF	NIF to NIF	NF to NF	
		+3	+147	-635	-147	+632	0
C losses (-), tC/ha ^(a)		-150	-73	-78			
C increment (+), tC/ha/yr					1.6	0.5	
Cumulated credits(+) or debits (-) in 2010, MtC ^(b)		-0.4	-10.6	49.2	-1.1	1.5	38.6