

Costa Rica ER-PIN
Inclusion in the CF pipeline



Ing. Jorge Mario Rodriguez

Propuesta

Proposal

- 341.000 hectáreas adicionales en su mayoría regeneración de tierras degradadas
 - Incluye más de 34.000 hectáreas en territorios indígenas
 - 12,6 millones de toneladas de CO₂ (*no incluye carbono PMR*)
 - \$ 63 millones a un costo estimado de \$ 5 por tonelada de CO2
 - Apalancamiento del 75% del costo total de la parte LULUCF de Neutralidad del Carbono
- 341,000 ha additional mostly regeneration on degraded lands
 - Including more than 34,000 ha in indigenous territories
 - 12.6 millions tons CO2 (*does not include HWP carbon*)
 - \$63 millions estimated cost at \$5 per ton CO2 (*this is NOT CR's proposed price for the ERPA*)
 - Leveraging 75% of total cost of LUCUF part of Carbon Neutrality

Potencial de mitigación y área a implementar de las opciones de reducción de emisiones consideradas en el Programa de Costa Rica (cifras preliminares)

ER-Mitigation Options and land tenure classes (estimates)

Option	Land Tenure	Emission Reduction Option 2010-2020	Area PES (ha)	CO ₂ (Tons)	Service
A	Bosques privados y Reservas Indígenas <i>(Private forests and indigenous reserves)</i>	Area adicional de PSA para Deforestación Evitada Bosque Viejo <i>(Expand the coverage of PES old growth forest)</i>	107,000	8,500,000	Deforestación Evitada <i>(Avoided deforestation)</i>
B	Bosques Privados <i>(Private forests)</i>	Area adicional de PSA para Deforestación Evitada en Regeneración Media <i>(Avoided deforestation in secondary growth forest)</i>	19,000	630,000	Deforestación Evitada y Secuestro de carbono
C	Bosques Privados <i>(Private forests)</i>	Area adicional de PSA para Captura de Carbono mediante Inducción de Regeneración Temprana <i>(Promote Secondary growth in degraded lands)</i>	124,000	6,500,000	Secuestro de carbono <i>(Carbon sequestration)</i>

Potencial de mitigación y área a implementar de las opciones de reducción de emisiones consideradas en el Programa de Costa Rica (cifras preliminares)

ER-Mitigation Options and land tenure classes (estimates)

Option	Land Tenure	Emission Reduction Option 2010-2020	Area PES (ha)	CO ₂ (Tons)	Service
D	Bosques Privados <i>(Private forests)</i>	Area adicional de PSA para Captura de carbono mediante establecimiento de Plantaciones Forestales <i>(Promote reforestation and agroforestry in degraded lands)</i>	72,000	8,000,000	Secuestro de carbono <i>(Carbon sequestration)</i>
E	Reservas Indígenas <i>(Indigenous reserves)</i>	Area adicional de PSA para Captura de Carbono mediante Inducción de Regeneración Temprana <i>(Promote Secondary growth in Indigenous Territories)</i>	19,000	785,000	Secuestro de carbono <i>(Carbon sequestration)</i>
F	No aplica	Captura de carbono en productos de madera mediante el Incremento Uso de Madera <i>(Promotion of the production and consumption of sustainable wood)</i>	-	5,000,000 (est.)	Secuestro de carbono <i>(Carbon sequestration)</i>
TOTAL			341,000	29,500,000	

Key Issues identified by CF5

Paris, October 2012

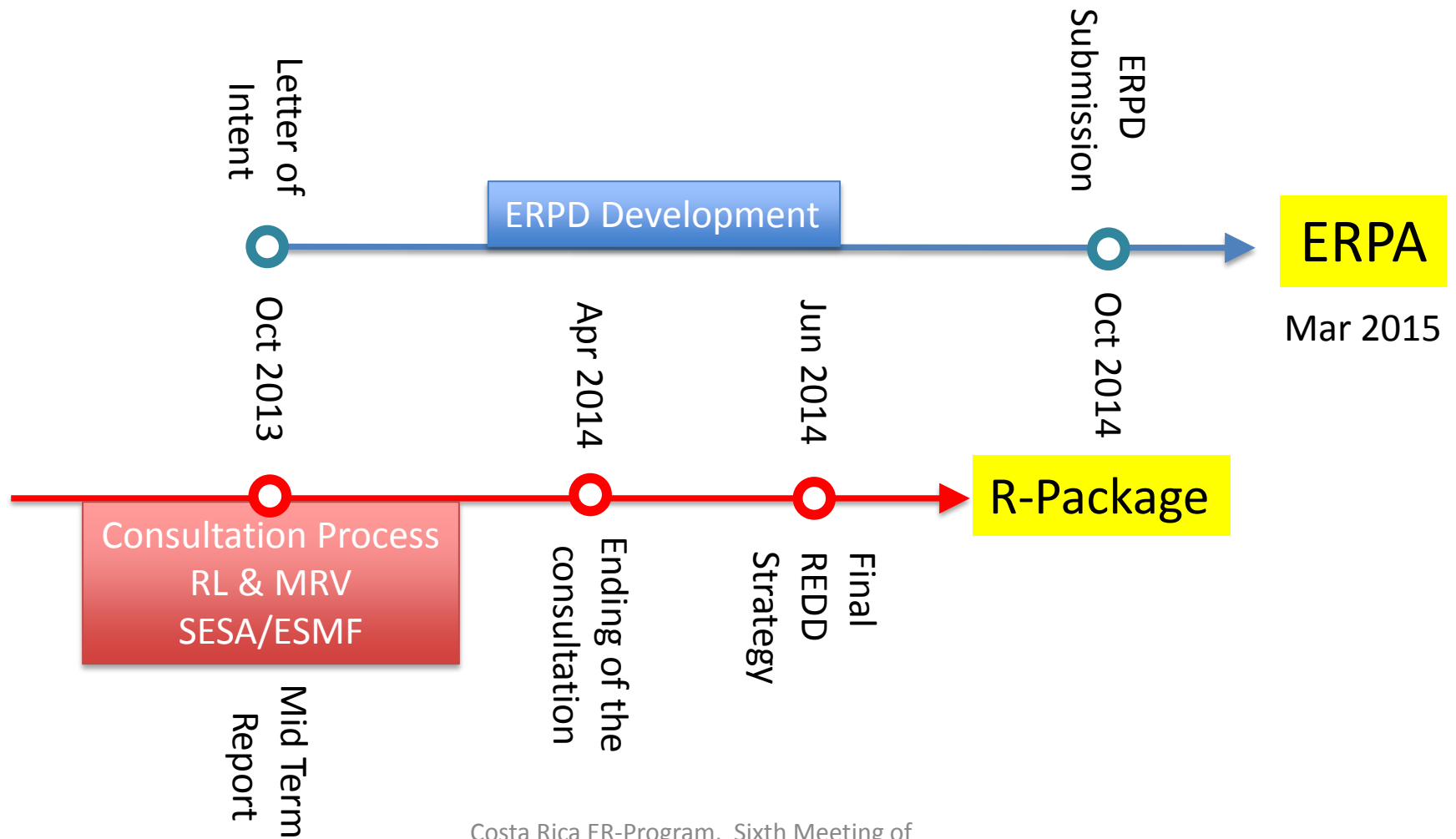
1. Clarify timing of the submission of the Mid-term Progress Report and the R-Package, and the linkage with the Readiness Preparation activities funded under the Readiness Fund
2. Description of the potential for displacement of emission outside of the targeted lands of the ER Program
3. Specify the historical reference period for setting the reference level, and provide the details on how the reference level was estimated and the key assumptions made
4. Improve the description of the consistency of the MRV system and reference level with the existing and emerging frameworks under IPCC and UNFCCC

Key Issues identified by CF5

Paris, October 2012

5. Explain the key assumptions underlying the estimated ERs for each of the proposed options
6. Describe the eligibility of the wood substitution component as a REDD+ activity under the UNFCCC definition and its contribution to the estimated ER volume offered to FCPF, if any
7. To the extent possible at this stage, clarify the expected level of precision in the proposed measurement of carbon stocks and estimation of ERs
8. Enhance the description of the plans to ensure environmental and social sustainability of the management of natural forests and forest plantations
9. Provide more information on the cost estimates for each of the proposed options, especially Option D, in the financial plan

Key Issue 1. Draft proposal for timing of the submission of the Mid-term Progress Report and the R-Package, and the linkage with the Readiness Preparation activities funded under the Readiness Fund.

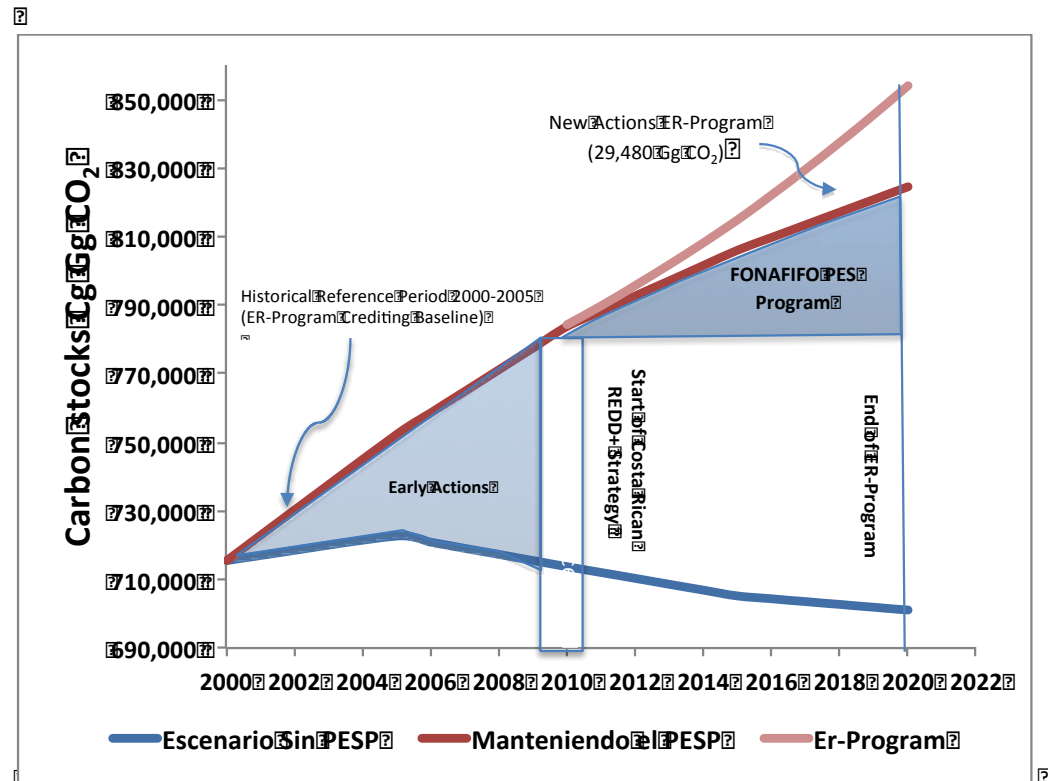


Key Issue 2. Potential for displacement of emission outside the targeted lands of the ER Program

- La magnitud de las fugas potenciales (negativo o positivo) no ha sido estimada.
 - La revisión de literatura no muestra un método disponible para medir las fugas a nivel nacional
 - Durante el pilotaje JNR-VCS se aplicarán sus instrumentos de evaluación de fuga
 - MRV de Costa Rica ha sido previsto a escala nacional, por lo tanto, las fugas son internalizadas.
 - El R-PP incluye las actividades de control para evitar el riesgo de fuga, para todas las diferentes opciones (ver Tabla 10, ER-PIN)..
 - Opciones
 - 1. Control de fugas podría incluirse como un componente en el MRV
 - 2. Utilizar tablas de consulta (FCPF podría generarlas)
- The magnitude of potential leakage (negative or positive) it has not yet estimated
 - Literature review shows no clear method available now for national level leakage assessment.
 - Piloting JNR-VCS will apply its leakage assessment tools
 - Costa Rica's MRV has been design at a National Scale, thus, existing internalization of leakage occurs.
 - The R-PP includes control activities to avoid potential for leakage, for all different options (see Table 10, ER-PIN).
 - Options
 - 1. Leakage monitoring could be included as a component in the MRV
 - 2. Use lookup table tables (FCPF could generate them)

Key Issue 3. ER PIN proposes historical reference period and crediting baseline. ERPD will review key assumptions and provide final proposal.

- El crecimiento acumulado de las reservas de carbono a través de la implementación de ER-Programa y las actividades en curso en la Estrategia REDD + de Costa Rica
- Accumulated growth of carbon stocks through implementation of ER-Program and current activities under Costa Rica's REDD+ Strategy



Key Issue 3. Historical reference period for setting the reference level. RL key assumptions will be reviewed and finalized for ERPD

- Estimación preliminar de la deforestación y la regeneración para el periodo comprendido entre 2000 y 2005
- Los datos reportados en el ER-PIN será revisados para el ERPD
 - Usando mapas de cobertura, metodológicamente estandarizados
 - Partiendo de la definición bosque reportada por Costa Rica (definición reportada para proyectos MDL)
 - Ampliando el período de referencia histórico 5-10 (2000-2010)
 - Considerando la ecuación de base IPCC para determinar las reducciones de emisiones (datos de actividad de Factor de Emisión)
 - Utilizando información proporcionada por el Inventario Forestal Nacional (2014)
- Preliminary estimation of the deforestation and regeneration comprised between 2000 and 2005.
- Data reported in the ER-PIN will be reviewed and final decision make for the ERPD
 - Using coverage maps, methodologically standardized
 - Using forest definition reported by Costa Rica (definition reported in CDM projects)
 - Expanding the historical reference period 5-10 (2000-2010)
 - Considering the IPCC base equation to determine the emission reductions (Activity Data by Emission Factor)
 - Using information provided by the National Forestry Inventory (2014)

Key Issue 4. Consistency description of the MRV system and reference level with the existing and emerging frameworks under IPCC and UNFCCC

- El monitoreo de la reducción de las emisiones en el marco del ER-Program será parte de la estrategia REDD+ MRV.
- Decisiones de la UNFCCC relacionados con los niveles de referencia de emisiones y niveles de referencia (ver tablas 32 y 33 ER-PIN):
 - 2/CP.13 Nivel de referencia propuesto
 - 4/CP.15 Identificación de los impulsores de la deforestación
 - 12/CP.17 RL en toneladas de CO₂ equivalente por año y se integran en los inventarios nacionales de GEI. Los niveles de referencia se pueden mejorar gradualmente
- Monitoring of the reduction of emissions under the ER Program will be part of the REDD+ Strategy MRV.
- UNFCCC Decisions related to reference emission levels and reference levels (see tables 32 & 33, ER-PIN):
 - 2/CP.13 Reference level proposed
 - 4/CP.15 Identification of Deforestation drivers
 - 12/CP.17 RL in tons of CO₂-equivalent per year and integrated in National GHG Inventories. Reference levels may be gradually improve

MRV components

CO2 EMISSION & REMOVALS FROM FOREST LANDS IPCC GENERAL METHODOLOGY

**IPCC
REQUIREMENTS**

**ACTIVITY
DATA**

X

**EMISSION
FACTORS**

=

**EMISSION &
REMOVALS**

**MRV
COMPONENTS**

**OPERATIVE
SATELLITE SYSTEM**

+

**NATIONAL FOREST
INVENTORY**

=

**NATIONAL GHG
INVENTORIES**

**SYSTEM
SPECS**

Operational wall-to-wall system based on satellite remote sensing data, with a sampling approach to assess historical deforestation and degradation rates. Changes in forest area to be assessed in order to fulfil the IPCC Approach 3 reporting requirements. All data will be presented and distributed through a web GIS system.

First NFI to be completed by 2012. Future NFI to be based on continuous sampling system, e.g. Indian forest inventory. Data on carbon stock for all forest carbon pools for the main forest types at IPCC Tier 2 and Tier 3 reporting requirements. The national inventory will be integrated with a community based inventories approach.

National inventory for the LULUCF sector developed following the reporting requirements of the Annex-I Parties under the UNFCCC. The inventory will be developed following one of the IPCC default methods: 'gain-loss' or 'stock difference', but it could also be developed to implement a Tier 3 model.

Source: UN-REDD; See table 32, ER-PIN

Key Issue 5. Key assumptions underlying the estimated ERs for each of the proposed options under Costa Rican ER-PIN

- En la opción A y B, se asumió una implementación de PSA del 100%, no obstante, para ser conservadores, los datos se volverán a calcular utilizando el registro histórico de PSA de FONAFIFO.
- La reducción de emisiones en todas las opciones se ajustará con la densidad de carbono (biomasa por encima y por debajo del suelo) determinados en el Inventario Forestal Nacional para plantaciones forestales, bosque primario y secundario y pastizales degradados
- In option A & B, it was assumed an effective PPES implementation of 100%, nevertheless, in order to be conservatives, data will be recalculated using the historical PPES registry from FONAFIFO.
- Emission reductions under all options shall be adjusted with carbon stock data (above and below ground biomass) data collected in forest plantations, primary and secondary forest and degraded pastures in the National Forest Inventory

Key Issue 5. Key assumptions underlying the estimated ERs for each of the proposed options under Costa Rican ER-PIN

- Será evaluada la conveniencia de incluir reservorios adicionales, tales como el carbono orgánico en el suelo y la hojarasca del bosque, especialmente en áreas de crecimiento secundario,.
- El enfoque metodológico utilizado para determinar la ganancia de las reservas de carbono en los PMR, tanto en el nivel de referencia como en el MRV, se determinará con la colaboración de consultores especializados (p.e. Winrock Int)
- The appropriateness of including additional reservoirs such as organic carbon in the soil and forest litter, especially in areas of secondary growth, will be assessed.
- The methodological approach used to determine the gain of carbon stocks in the HWP, both at the reference level and in the MRV, will be determine with the collaboration of specialist (i.e. Winrock Int)

Option A: Key assumptions for ER estimates from Avoided Deforestation

- Tasa de deforestación histórica durante el período de referencia:
 - Deforestación bruta observado en 2000-2005 histórico, para bosques primarios privados fuera de Guanacaste. Dicha tasa se estimó en 11,3% para el período de cinco años (2,37% tasa anual)
- Estimación del area adicional de PSA para disminuir la deforestación en los bosques primarios
 - Estimada con el modelo econométrico mencionado en el componente 2ª del R-PP
- Cronograma de reclutamiento adicional de PSA
- Estimación de las reducción de emisiones
 - Por diferencia de reservorios de carbono entre escenario con proyecto y la situación sin proyecto.
- Historical deforestation rate during the reference period:
 - Gross deforestation observed during the 2000-2005 historical reference period, for Private Forests (old growth forests) located outside of Guanacaste. Said rate was estimated as 11.3% for the five-year period (2.37% annual rate)
- Additional PES area estimation to diminish deforestation in old growth forests
 - Estimations made with the econometric model mentioned in the R-PP component 2a
- Timeline recruiting additional PES area
- Emissions reductions estimations
 - by subtracting carbon reservoirs in the scenario With Project and the scenario Without Project

Option A: Avoided Deforestation

Table 23. Option A. Incorporation of additional PES area for avoided deforestation in old growth forests outside of Guanacaste, by incorporating 107,600 ha of additional PES area.

Year	Recruited Area (ha)		Non-recruited Area (ha)	Without Project Coverage (ha)	With Project Coverage (ha)	Avoided Deforestation (ha)	Carbon Reservoirs		Accumulated carbon (Mg C)	Accumulated CO ₂ (Mg)
	Annual recruited PES area (ha)	Accumulated area (ha)					Without project (Mg C)	With project (Mg C)		
2009	-	-	299,884	299,884	299,884		29,988,353.97	29,988,353.97	-	-
2010	40,217	40,217	253,513	292,778	293,731	953	29,277,752.95	29,373,051.29	95,298	349,427
2011	46,474	86,691	202,133	285,840	288,825	2,985	28,583,990.26	28,882,452.86	298,463	1,094,363
2012	20,909	107,600	176,930	279,067	284,530	5,464	27,906,666.90	28,453,025.45	546,359	2,003,315
2013	-	107,600	172,738	272,454	280,338	7,884	27,245,393.33	28,033,773.72	788,380	2,890,728
2014	-	107,600	168,644	265,998	276,245	10,247	26,599,789.23	27,624,456.53	1,024,667	3,757,113
2015	-	107,600	164,648	259,695	272,248	12,554	25,969,483.30	27,224,838.48	1,255,355	4,602,969
2016	-	107,600	160,747	253,541	268,347	14,806	25,354,113.04	26,834,689.74	1,480,577	5,428,781
2017	-	107,600	156,938	247,533	264,538	17,005	24,753,324.53	26,453,785.92	1,700,461	6,235,025
2018	-	107,600	153,219	241,668	260,819	19,151	24,166,772.24	26,081,907.97	1,915,136	7,022,164
2019	-	107,600	149,588	235,941	257,188	21,247	23,594,118.84	25,718,841.99	2,124,723	7,790,652
2020	-	107,600	146,044	230,350	253,644	23,293	23,035,034.97	25,364,379.19	2,329,344	8,540,929

Option C: Key assumptions for ER estimates from Enhancement of carbon stocks

- Tasa de deforestación histórica durante el período de referencia:
 - Deforestación bruta observado en 2000-2005 histórico, para bosques primarios privados fuera de Guanacaste. Dicha tasa se estimó en 11,3% para el período de cinco años (2,37% tasa anual)
- Estimación del area adicional de PSA para disminuir la deforestación en los bosques primarios
 - Estimada con el modelo econométrico mencionado en el componente 2ª del R-PP
- Cronograma de reclutamiento adicional de PSA
- Estimación de las reducción de emisiones
 - Por diferencia de reservorios de carbono entre escenario con proyecto y la situación sin proyecto.
- Additional PES area estimation to diminish deforestation in old growth forests
 - It was estimated the effect of duplicating the regeneration rates of the 2000-2005 period in the Land Use transition matrix, of private lands
- Timeline recruiting additional PES area.
- Emissions reductions estimations
 - Potential carbon storage produced by Option C, was estimated assuming that secondary forest carbon storage approached primary forest levels after 35 years (Sesnie, 2006)

Option C: Enhancement of carbon stocks

Option C. Incorporation of additional PES area for carbon capturing in new private regenerated forests outside of Guanacaste, by incorporating additional PES area.

Year	Annual recruited PES area (ha)	Accumulated area (ha)	Accumulated carbon (MgC)
2010	4,838	4,838	50,686
2011	2,031	6,869	71,958
2012	10,110	16,979	177,875
2013	10,110	27,089	283,793
2014	10,110	37,200	389,710
2015	14,514	51,713	541,758
2016	14,514	66,227	693,806
2017	14,514	80,741	845,853
2018	14,514	95,254	997,901
2019	14,514	109,768	1,149,949
2020	14,514	124,282	1,301,997
Totals	124,282		6,505,287

Key Issue 6. Wood substitution component eligibility as a REDD+ activity under the UNFCCC definition and its contribution to the estimated ER volume offered to FCPF

- Al Fondo de Carbono se ofrece un 50 por ciento de la reducción de las emisiones producidas al 31 de diciembre de 2020, *excluyendo los 5,000 Gg de CO2 del programa por aumento del consumo de madera.*
- Costa Rica propone realizar un pilotaje de secuestro de carbono en productos de madera.
- Costa Rica esta gestionando un proyecto para garantizar aun más la seguridad jurídica del manejo forestal sostenible, promover los encadenamientos productivos y aumentar el consumo de madera.
- The Carbon Fund is offered 50 percent of the emission reduction produced as of December 31, 2020, *excluding the 5,000 Gg CO2 from the program to increase wood consumption.*
- Costa Rica propose to pilot carbon sequestration in wood products.
- Costa Rica is developing a project to further ensure the legal security of sustainable forest management, promote production chains and increase wood consumption

Key Issue 6. Wood substitution component eligibility as a REDD+ activity under the UNFCCC definition and its contribution to the estimated ER volume offered to FCPF

- Directrices del IPCC (2006) para los inventarios nacionales de GEI (Cap 12, Vol 4: Agricultura, silvicultura y usos de la tierra), describe diferentes métodos para informar el almacenamiento de carbono en productos de madera.
- En la reunión de expertos del IPCC sobre los PMR, Humedales y N₂O del suelo, celebrada en Ginebra en 2010, los participantes acordaron que la orientación metodológica en las Directrices de 2006 del IPCC es correcta
- 2006 IPCC Guidelines for National GHG Inventories (Chapter 12, Volume 4: Agriculture, Forestry and Other Land Use), describes different approaches for reporting the storage of carbon in wood products.
- IPCC Expert Meeting on HWP, Wetlands and Soil N₂O held in Geneva in 2010 , participants agreed that the methodological guidance in the 2006 IPCC Guidelines is correct.

Key Issue 7. Expected level of precision in the proposed measurement of carbon stocks and estimation of ERs

- Costa Rica propone la utilización de una combinación sofisticada de teledetección, LiDAR aerotransportado e inventario forestal, para medir los cambios en las existencias de carbono debida a la deforestación, la degradación y aumento de las reservas forestales de carbono en biomasa.
- De acuerdo a la literatura, con este enfoque es posible reducir la incertidumbre en general, a menos de 20% de las estimaciones de emisiones y absorciones de CO₂ (véase la Tabla 30, ERPIN)
- Costa Rica proposes to use a highly sophisticated combination of remote sensing, airborne LiDAR and on-the-ground forest inventory to measure carbon stock changes due to deforestation, degradation and enhancement of forest biomass carbon stocks.
- According to literature review, with this approach is possible to reduce overall uncertainty to be less than 20% for CO₂ emission and absorption estimates (see Table 30, ERPIN)
- During ERPD better estimates of precision will be develop

Key Issue 7. Components adding to overall uncertainty in the ER estimates. Literature estimates.

Measuring component	Source of uncertainty	National data employed	Expected uncertainty	References
Activity data	Land cover maps	Yes	7-11%	Sánchez-Azofeifa et al. 2002
Activity data	Airborne LIDAR with remote sensing imagery	Yes	8-35% or 15 to 23 Mg C ha ⁻¹	Asner et al. 2009, Asner et al. 2010, Asner et al. 2011, Asner et al. 2012a, Asner et al. 2012b, Asner et al. 2012c Castillo et al. 2012 Gautam et al. 2010 (ArboLiDAR by Arbonaut) Mascaro et al. 2011 Saatchi et al. 2011 West 2009
Emission factors	Carbon fractions	Yes	<15%	
Emission factors	Biomass allometric models	Yes	0% for biomass change	Brown and Lugo 1992, Harmon et al. 2007, Mitchard et al. 2012
Emission factors	Biomass estimates from National Forest Inventory data	Yes	12-40%	Brown and Lugo 1984, Chave et al. 2004, Asner et al. 2012a, Lu et al. 2012
Propagated error for CO ₂ emissions and absorptions			10-30%	

Key Issue 8. Description of the plans to ensure environmental and social sustainability of the management of natural forests and forest plantations

- La sostenibilidad ambiental y social de la gestión de los bosques naturales y las plantaciones forestales es garantizada mediante (ver tablas 4,5,7 y 8, ER-PIN):
 - Principios, Criterios e Indicadores, Código de Prácticas, y Manual de Procedimientos) desde el decreto MINAE 344559 (Manejo de Bosque Natural)
 - Manual de procedimientos y sus modificaciones en el programa de PSA, y el Decreto 36935 MINAET PPES
 - Principios, criterios e indicadores de sostenibilidad, código de prácticas y manual de procedimientos para el manejo de plantaciones forestales y bosques secundarios (R-Package)
- Otros mecanismos de gestión sostenible
 - Sistema de seguimiento y monitoreo de Salvaguardas
 - Incluir la Certificación Forestal (FSC)
- Environmental and social sustainability in the management of natural forests and forest plantations is guaranteed by (see Tables 4,5,7 & 8, ER-PIN):
 - Principles, Criteria and Indicators; Code of Practices; and Procedures Manual) from the 344559 MINAE Decree (Natural Forest Management)
 - Procedures Manual and its modifications of the PES Program, and the 36935 MINAET PPES Decree
 - Principles, criteria and indicators of sustainability, Code of practices and Procedures (Manual) for the management of forest plantations and secondary forests (R-Package)
- Other mechanisms for sustainable management
 - Tracking and monitoring safeguards. Implementation of ESMF
 - Forest certification (FSC)

Key Issue 9. Basis for cost estimates for each of the proposed options in the ER-PIN Financial Plan

PPES Type	Option	Actual amount MINAET Decree 36935 (\$ US*ha ⁻¹)		Estimated amount (\$ US*ha ⁻¹)		Increment (%)
		Total	Annual	Total	Annual	
Old growth fores	A	640	64	800	80	25%
Mid-regenerated forests	B	-	-	400	80	
Indigenous Territories						
Secondary growth	C & E	410	41	700	70	70%
Reforestation	D	980	196	1200	240	20%

?

Next Steps

Enhancement of ER PIN into ER Program Document

- **Medición y reporte de ERs**
 - Determinación y proyección del nivel de referencia en $\text{CO}_2^* \text{year}^{-1}$ basado en un análisis histórico de deforestación.
 - Mejorar la estimación de la potencial reducción de emisiones
 - Asegurar la consistencia entre el nivel de referencia y el MRV
 - Incluir el monitoreo de fugas como componente del MRV para garantizar la integridad ambiental de las ER generadas
- **Measurement and reporting on ERs**
 - Determination and projection of the reference level in $\text{CO}_2^* \text{year}^{-1}$ based on historical analysis of deforestation.
 - Improve the assessment of the potential emission reduction
 - Ensure consistency between the Reference Level and the MRV
 - Include leakage monitoring as a component of MRV to ensure the environmental integrity of the ER generated

Next Steps

Enhancement of ER PIN into ER Program Document

- Mejorar el plan de financiamiento
 - Desarrollo de incentivos positivos y mecanismos financieros, para la implementación de las opciones del ER-Program
- Improve financial plan
 - Development of positive incentives and financial mechanisms for the implementation of the ER-Program Options

Next Steps

Dissemination and ER-Program Safeguards

- Diseminación amplia ER-PIN/ERPD
- Retroalimentación de los actores ER-PIN/ERPD
- Aplicación de las políticas operacionales ambientales y sociales del BM
- Preparación de los instrumentos de Salvaguardas en base al ESMF
- Wide dissemination of ER-PIN/ERPD
- Feedback from stakeholders ER-PIN/ERPD
- WB Operational policy implementation (environmental and social)
- Preparation of instruments based on ESMF Safeguards

Key activities to be performed if additional funds are available

- Develop MRV full system design
- Conduct leakage study to reduce potential leakage in the design
- Implementation of each of the 6 options
- Develop a quantitative estimate of Program leakage
- Develop refined financial plan and cost estimates;
- Refine RL proposal and make final RL decision;
- Consult and communicate evolving ER Prog Doc design issues with stakeholders)
- Estimated total requested:
 - \$500k total?

Final comments

- De acuerdo a las circunstancias nacionales, este es el mejor enfoque posible para implementar el ER-PROGRAM.
- El ER-PROGRAM esta integrado en la Estrategia país para el desarrollo de una economía baja en carbono. Esto requiere:
 - Experimentación con PMR
 - Experimentación con JNR (VCS)
 - Experimentación con PMR
- According to national circumstances, this is the best approach to implement the ER-PROGRAM.
- The ER-Program is well integrated into the country's strategy for the development of a low carbon economy. This requires:
 - Piloting with PMR
 - Piloting with JNR (VCS)
 - Piloting with HWP