



**Forest Carbon Partnership Facility (FCPF)  
Carbon Fund**

**Emission Reductions Program Idea Note (ER-PIN)**

**Country:**      GUATEMALA  

**ER Program Name:**

**GUATEMALA NATIONAL EMISSION REDUCTION PROGRAM:  
THROUGH STRENGTHENING FORESTRY GOVERNANCE IN  
VULNERABLE COMMUNITIES.**

**Date of Submission or Revision:**   September 12, 2014\_\_\_\_\_

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## 1. Entity responsible for the management of the proposed ER Program

<b>1.1 Entity responsible for the management of the proposed ER Program</b>	
<i>Please provide the contact information for the institution responsible for presenting and coordinating the proposed ER Program.</i>	
<b>Name of management entity</b>	<b>National Institute of Forestry, INAB / National Council of Protected Areas, CONAP</b>
<b>Type and description of the organization</b>	Governmental entity
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<b>1.2 List of existing partner agencies and organizations involved in the ER Program</b>		
<i>Please list existing partner agencies and organizations involved in the development of the proposed ER Program or that have executive functions in financing, implementing, coordinating and controlling activities that are part of the proposed ER Program. Add rows as necessary.</i>		
<b>Name of partner</b>	<b>Contact name, telephone and email</b>	<b>Core capacity and role in the proposed ER Program</b>
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The Government of Guatemala would like to thank the technical reviewers of the ER PIN document, especially to Timothy Pearson, Felipe Cassarim and Gabriel Sidman from Winrock International /CNCG; Leslie Durschinger and Luis Alejandro Mejia from Terra Global; and, Omar Regalado and Edwin Castellanos from University del Valle de Guatemala.

**2. Authorization by the National REDD+ focal point**

*Please provide the contact information for the institution and individual who serve as the national REDD+ Focal Point and endorses the proposed ER Program, or with whom discussions are underway*

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<b>Website</b>	<a href="http://www.marn.gob.gt/">http://www.marn.gob.gt/</a>

**2.1 Endorsement of the proposed ER Program by the national government**

*Please provide the written approval for the proposed ER Program by the REDD Country Participant's authorized representative (to be attached to this ER-PIN). Please explain if the national procedures for the endorsement of the Program by the national government REDD+ focal point and/or other relevant government agencies have been finalized or are still likely to change, and how this might affect the status of the attached written approval. ER Program must be located in a REDD Country Participant that has signed a Readiness Preparation grant agreement (or the equivalent) with a Delivery Partner under the Readiness Fund, and that has prepared a reasonable and credible timeline to submit a Readiness Package to the Participants Committee*

The Guatemala National Emission Reduction Program -ER Program- was approved by the National Government through the political level of the Inter-institutional Coordination Group (GCI) in its session of 23 April 2014. (See Annex II)

**2.2 Political commitment**

*Please describe the political commitment to the ER Program, including the level of support within the government and whether a cross-sectoral commitment exists to the ER Program and to REDD+ in general.*

**COMMITMENT OF THE CENTRAL GOVERNMENT**

The principal support from the Central Government for the National Emissions Reductions Program is the recent **“Framework Law for Regulating the Reduction of Vulnerability, the Obligatory Adaptation to the Impacts of Climate Change and Mitigation of Greenhouse Gases”**<sup>1</sup> (Decree 07-2013), adopted by the Congress of the Republic of Guatemala and published in the Official Journal of 4 October 2013 (SEE ANNEX III).

The Climate Change Framework Law (abbreviated name of the Decree 07-2013) consists of 28 articles and is binding for the whole territory of the Republic of Guatemala. The objective of this Law is to establish the regulatory framework necessary for prevention and planning of, and for responding in a timely, adequate, coordinated and sustainable manner to, the impacts of climate change. Its ultimate goal is for Guatemala, through its central and decentralized government bodies, autonomous entities, municipalities, civil society and the general population, **to adopt practices that will assist in reducing vulnerability, improving adaptation capacity and developing proposals to mitigate the impacts of climate change caused by greenhouse gas emissions.**

The following are the articles of the Climate Change Framework Law that are most relevant to the preparation and implementation of the Emissions Reductions Program proposed by Guatemala: i) Article 3. Specific Safeguards: ii) Article 8. On the Creation and Modus Operandi of the National Climate Change Council, presided by the Presidency of the Republic, iii) Article 9. National Climate Change Information System, iv) Article 11. National Action Plan for Adaptation to and Mitigation of Climate Change, v) Article 15. Institutional Strategic Plans for Reducing Vulnerability, Adaptation to and Mitigation of Climate Change, vi) Article 20. Reduction of Emissions from Land Use Change, vii) Article 22. Carbon Market Projects.

<sup>1</sup><http://www.marn.gob.gt/documentos/LeyCambioClimatico7-2013.pdf>

Article 20 in particular establishes the mandate for the four institutions participating in the Emissions Reductions Program (ER Program), to implement policies, strategies, programs, plans and projects for reducing emissions from the Land Use, Land Use Change and Forestry (LULUCF) Sector. The Climate Change Framework Law thus also becomes an Ordinance for the four institutions involved in implementing the ER Program: The National Forest Institute (INAB), The National Council for Protected Areas (CONAP), the Ministry of Environment and Natural Resources (MARN) and the Ministry for Agriculture, Stock Raising and Food (MAGA).

These four institutions have been working since 2009 on preparing the Readiness Preparation Proposal (R-PP) for Guatemala and have signed an “**Inter-institutional technical cooperation agreement for the conservation and sustainable management of natural resources**” (SEE ANNEX IV). The objectives of this agreement are: a) Establish a coordination mechanism for the harmonization of policies and implementation of activities in the national territory, for the conservation, management and protection of biodiversity and natural resources, and b) Coordinate the implementation of policies relating to management and administration of natural resources, particularly for the use, management and conservation of renewable natural resources (protected areas and forests), which are guided, promoted and circumscribed by national land use planning.

In order to achieve the objectives of this agreement, which was signed in June 2011, **the Inter-institutional Coordination Group (GCI)** was created, a high-level political platform **for the coordination and government approval of the activities carried out under Guatemala’s REDD+ Readiness Process**. It consists of the Vice-Minister of the Environment (MARN), the Vice-Minister for Rural Economic Development (MAGA), the Director of INAB and the Executive Secretary of CONAP.

GCI has a Technical Secretariat in charge of operational and technical coordination, which consists of the coordinators of the above-mentioned four government institutions. The principal responsibilities of the Technical Secretariat of GCI are, among others: i) Facilitate dialogue between the different institutions involved in governing REDD+ in Guatemala, as mandated by the R-PP, ii) Manage the technical and administrative processes necessary for developing key actions for the REDD+ Readiness Process in the country, and iii) Monitor and report progress in the REDD+ Readiness process in Guatemala, as mandated by the R-PP. Annex V shows the lists the actors that are part of the governance platforms established for the REDD+ process in Guatemala.

## **COMMITMENT OF OTHER SECTORS TO THE EMISSIONS REDUCTIONS PROGRAM**

The commitment of other sectors to the ER Program is reflected in the participation of various actors in the governance mechanisms established for each of the major activities of the ER Program. As concerns the **first major activity**, “Strengthening of forest governance instruments such as the forest incentive programs (Forestry Incentive Program –PINFOR- and Forestry Incentives Program for Small Holders on Land Suitable for Forestry and Agroforestry-PINPEP-); **its governance is assured by the Board of the National Forest Institute (INAB)**. The Board includes representatives of the Central Government, such as the Finance and Agriculture Ministries, from the private sector through the forest producers’ association<sup>2</sup>, from academia, such as the National Agricultural School and the universities, from NGOs active in the forest sector, and from local government, through the National Association of Municipalities (ANAM). In the specific case of PINPEP, the forest incentive program for smallholders of lands suitable for forestry and agroforestry, the governance is assured by a **Steering Committee (CODI)** that consists of a representative and a secondee from Central Government (INAB), of the National Network of Communities benefiting from PINPEP and ANAM.

The **second major category of activities of the ER Program**, Strengthening of the activities of the Guatemala Protected Areas System (SIGAP), has as its principal governance institution the Protected Areas Council (CONAP). CONAP consists of government entities such as the Ministry of Agriculture, Stock raising and Food (MAGA), the Institute of Anthropology and History; representatives of academia such as the Center of Conservation Studies at the University of San Carlos de Guatemala (CECON); the municipalities (ANAM); environmental NGOs and the Guatemala Institute of Tourism. As concerns the **REDD+ Projects in protected areas** (Guatecarbon, Lacandon, Forests for Life, Caribbean Protected Areas and Carbon Project Lachua), their commitment is reflected in their participation in governance

<sup>2</sup>The « Gremial Forestal » in Spanish, which is a member of the Chamber of Industry.

mechanisms created by CONAP, such as the Co-management Agreements for Protected Areas, Forest concession contracts with local communities and direct administration by CONAP (See ANNEX VI).

These platforms are used by INAB and CONAP as a mechanism for participation and consultation on their policy instruments, and have enabled broad participation of communities and local actors in the elaboration of the ER program proposal and in the development and implementation of actions to manage and protect natural forest and to restore forest cover. These platforms will be strengthened as part of the ER Program, enabling the country to improve forest governance and comply with the relevant REDD+ Safeguards requirements. In both cases, central government actors, municipalities, the private sector, communities, indigenous peoples and academia, among others, are committed to support, and to participate directly in, the activities proposed under the ER Program.

### 3. STRATEGIC CONTEXT AND RATIONALE FOR THE ER PROGRAM

**3.1 Brief summary of major achievements of readiness activities in country thus far**  
*Please briefly provide an update on REDD+ readiness activities, using the component categories of the R-PPAs as a guide. If public information is available on this progress, please refer to this information and provide a link.*

Guatemala initiated a significant reform of forest policies and governance through the creation of the National Forest Institute (INAB) in 1996, in the framework of a new Forest Law, as well as through the creation of the Guatemalan System of Protected Areas (SIGAP) with the Protected Areas Law in 1989. Forest management and conservation in Guatemala are still based on these two laws, which also constitute a basis for the planning of the ER Program.

The REDD+ strategy options planned under the Guatemala RPP focus on further strengthening these legal and forest governance frameworks, which will be the basis for implementation of the strategy options. The policies that will form the basis for the REDD+ strategy options and the activities of the ER Program have been accompanied by instruments to support participation and consultation processes, forest policy reform and monitoring of non-carbon benefits (e.g. PINPEP, Forest concessions, co-management of protected areas) – instruments that will be reinforced as part of the ER Program. **The first component**, “Organize and Consult”, for the involvement and active participation in forest governance is reflected in the variety of organizations that have participated in the development and implementation of forest policy instruments (such as forest incentive programs, forest concessions), such as the Steering Committee of PINPEP, the National Alliance of Forest Communities (ANCF, consisting of over 300 grassroots forestry groups), the forest producers’ association (“Gremial forestal”). The pathway for the involvement and active participation in the framework of the Common Approach will be based on the use of these experiences to strengthen the instruments and deploy them to reduce greenhouse gas emissions. The Terms of Reference for the Strategic Environmental and Social Assessment (SESA), the Environmental and Social Management Framework (ESMF) and GRM/MAR (See ANNEX VII) that are under preparation will provide continuity to the above-mentioned processes and strengthen them, through refining the REDD+ Strategy Options and the ER Program.

In addition to this basis for consultation and participation, in the framework of the preparation of the National Strategy for Reducing Deforestation under the Readiness Process, a series of activities have been implemented under the “Organize and Consult” element, through a supporting institution, the Group on Forests, Biodiversity and Climate Change, GBBYCC (See Annex V).

The main function of this group is to enhance participation of different sectors, peoples and actors in the preparation of the REDD+ strategy, and the integration of this strategy into Guatemala’s forest governance framework. The GBBYCC has four levels: a) National Level, formed by the Cabinet of the President and central government institutions with links to the environment, land use and forest sector; b) Regional Level, consisting of different institutions engaged in forest policy dialogue, such as the Forest Policy and Climate Change Round tables, c) Departmental Level, through the National System of Development Councils; and d) Local Level, through the COMUDES and COCODES, Indigenous peoples’ authorities, amongst others.

Within the GBBYCC there are different platforms such as the above-mentioned Inter-Institutional Coordination Group (GCI) between CONAP, INAB, MARN and MAGA; the Environmental and Social Safeguards Committee (CNSAS), consisting of sector agencies, indigenous peoples, local government,

forestry groups, women's organizations, academia, environment NGOs and the private sector. The REDD+ Implementation Group, consisting of civil society organizations working on pilot REDD+ proposals and activities in the field, has also joined GBBYCC. Each of these entities is involved in specific activities needed for developing the REDD+ strategy, according to their institutional role and competencies. The government has strengthened its capacity through the establishment, through ministerial agreements, of Climate Change Units in MARN, INAB, MAGA, CONAP and the Ministry of Finance, each of which have developed agendas to tackle climate change.

Under **Component 2**, in addition to what was already achieved under the Forest Law (by INAB) and the Protected Areas Law (by CONAP), the country has continued to work on further legal adjustments to strengthen the policy framework for emissions reductions. Apart from the above-mentioned Climate Change Framework Law, which was approved in September 2013, the new draft law on forest incentives ("PROBOSQUE") was presented to Congress in February 2014. This law will govern the establishment, regeneration, restoration, management, production and protection of forests in Guatemala, and strengthen the existing PINFOR forest incentives program. It contains specific goals for the protection and management of natural forest and regeneration of forest cover, totaling 43,000 hectares per year. One of the key objectives of the proposed PROBOSQUE law is to reduce greenhouse gas emissions. The proposed law, apart from continuing forest incentives, includes modalities for promoting production activities and livelihoods that are compatible with conservation and sustainable management of forests and agroforestry systems.

The Strategy for the sustainable use of fuel wood is another important adjustment to the forest policy framework, and constitutes one of the principal initiatives to reduce emissions from forest degradation. This strategy, which was approved by the INAB Board in March 2014, also has greenhouse gas emissions reductions as one of its objectives. Fuelwood is the main source of primary energy in the country (60%) and it is estimated to cause about 10 million tonnes CO<sub>2</sub>e worth of emissions.

Another important policy tool that contributes to reducing emissions from the forest sector is the Inter-institutional Action Plan to Control and Reduce Illegal Logging. Guatemala is working to promote forest legality through the implementation of activities to control and prevent illegal logging. This is done through regulations and actions that reduce the cost of marketing legal wood and through the implementation of the Electronic Information System on Forest Industries (SEISNEF), which is part of Guatemala's Forest Information System, SIFGUA.<sup>3</sup> In addition, INAB is corresponding with the European Union to get additional information about the EU's Forest Law Enforcement, Governance and Trade action plan (FLEGT). The private sector, through the Private Climate Change Institute (ICC) is implementing pilot activities to reduce emissions through the establishment of energy plantations and through the Grupo Occidente, is carrying out voluntary carbon market transactions based on the cultivation of rubber.

The policy framework for Protected Areas is also expected to be strengthened by the ER Program. Guatemala has over 500,000 hectares of FSC certified community forests within the multiple use zone of the Maya Biosphere Reserve. Forest Management Units have been allocated to resident and non-resident communities, and to local forest industries. These Forest Management Units have been defined and are being administered by CONAP, with a special utilization regime, allowing them to be authorized for co-management under the legal category of "concession for use and management of natural resources", with rules for sustainability, protection, conservation and improvement. The concession is allocated through a long-term contract obliging the concessionaire to elaborate management plans, carry out environmental impact studies and land use plans, which will be approved and supervised by CONAP to ensure compliance.

Protected areas can also be co-managed with NGOs and local communities interested in management and sustainable use of parts of protected areas. Under this arrangement, local actors participate directly in the utilization of the resources and benefits generated by protected areas, while also improving the governance of the areas concerned. The approach of the ER Program is to strengthen and consolidate the above-mentioned participation mechanisms for protected areas, as witnessed by the key actions under the four REDD+ Pilot Projects that are present in the ER Program area.

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<sup>3</sup>Forest Information System of Guatemala –SIFGUA ( <http://www.sifgua.org.gt> ).



Another policy instrument that contributes to the ER Program and the National REDD+ Strategy is the National Strategy for Forest Landscape Restoration.

Concerning the development of emission reference levels (**Component 3**), Guatemala has defined five REDD+ regions which will be used to develop a national emissions reference level and can be used in the interim for sub-national activities such as the ER Program. One of the five REDD+ regions, “Tierras Bajas del Norte”, already has a baseline for deforestation emissions and two more are under preparation (Sarstún-Motagua and Occidente). These REDD+ regions account for more than 90% of national deforestation, which is the main source of emissions. In addition, in the “Occidente” region degradation is an important source of emissions, therefore, this will be a priority region for implementing early actions to reduce degradation. The first two baselines, “Tierras Bajas del Norte” and “Sarstún-Motagua” have been elaborated with methodologies certified for use in voluntary markets, reinforced with a jurisdiction layer (VCS-JNR). This VCS-JNR approach overlaps considerably with the FCPF Carbon Fund methodological framework, and the adjustments needed to guarantee compliance of the proposed ER Program with the FCPF framework are currently under discussion. In three REDD+ regions mentioned, pilot projects have been designed using a jurisdictional approach to address methodological issues such as emissions leakage and reversals. The pilot projects are in advanced stages of design for actions concerning reducing deforestation, and one of them, Guatecarbon in the Maya Biosphere Reserve, has been under implementation since 2012.

The development of deforestation emissions baselines has been supported by the work that Guatemala has carried out on forest cover dynamics, for 2001, 2006 and 2010, using the same methodology for the three periods. Additionally, the national greenhouse gas inventory and commercial inventories for managed forests were used, to meet the minimum reliability needed for estimating greenhouse gas emissions.

Concerning degradation and increase of carbon stocks, the generation of data needed for the scenarios is still pending, nevertheless, this activity will be taken up under the development of the national REDD+ strategy.

Under **Component 4**, the two main institutions actively involved in the ER Program have significant experience with monitoring of forests and non-carbon benefits, and this will be further strengthened through the national REDD+ Strategy. CONAP has a Monitoring and Evaluation Center, CEMEC<sup>4</sup>, which has generated information for the national protected areas system (SIGAP, covering 32% of the country) for over 10 years, focusing on the Maya Biosphere Reserve. CEMEC has monitored forest cover, biological diversity, and more recently greenhouse gas emissions under the REDD+ pilot projects. CEMEC, whose capacity and equipment has been significantly strengthened in recent years through activities co-financed by USAID, has worked directly on the development of deforestation emissions baselines in the five REDD+ regions mentioned above.

For its part, the National Forest Institute (INAB) has a monitoring unit that is in charge of monitoring the implementation of forest incentives nation-wide. INAB has a geo-referenced database of over 900,000 beneficiaries and of all the forest areas that are receiving incentives. Apart from the condition of the forest areas, INAB also monitors the environmental and social non-carbon benefits generated by forest incentives. It has dedicated personnel in charge of verifying the correct application and payment of incentives, and is supervised by the National Controller (SEE ANNEX VIII for more details). INAB is preparing the baseline for the greenhouse gas emissions caused in the “Occidente” REDD+ region.

MAGA, which is also participating in the development of the National REDD+ Strategy, has a Geographic Information System (GIS) for monitoring forest cover, soils and the area covered by land uses other than forest nation-wide. It recently prepared a map of all the agricultural land use systems of Guatemala. MARN also has a GIS unit, which, among other responsibilities, is charged with compiling the information on greenhouse gas emissions, including those from land use change and forestry.

These four government institutions, supported by the University del Valle de Guatemala and the Rafael Landívar University, have formed the Forest Mapping Group, which constitutes the basis for the MRV for the implementation of the National REDD+ Strategy. This group, which has also contributed to the

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<sup>4</sup><http://www.conap.gob.gt/index.php/quienes/conap-direcciones-regionales/peten/cemec.html>

development of emissions reference scenarios and to the monitoring of emissions, will also support the MRV for the ER Program.

**Component 5: Schedule and Budget:** Guatemala has and schedule and budget for the US\$3.8 million dollars, see table summary of the budget (See Annex IX), and for the **Component 6: Design a Program Monitoring and Evaluation Framework**, has the program monitoring and evaluation framework of the RPP. (See Annex X).

**3.2 Current status of the Readiness Package and estimated date of submission to the FCPF Participants Committee (including the REL/FRL, REDD+ Strategy, national REDD+ monitoring system and ESMF).**

The agreement for the preparation process was signed on April 1th, 2014, under the technical assistance ATN/FP-14012-GU between the Government of Guatemala and the InterAmerican Development Bank (see Annex XX). At present time the Government of Guatemala has made important advances on the process of compliance to the conditions precedent previous to first disbursement.

Table 1 presents the timeline for completing the R-Package. Under component 1, actors and strategy options for the SESA have already been identified (See ANNEX VII). Guatemala's approach aims to proceed with the REDD+ regions according to the dynamics and the information availability in the different regions. The regions for which most information is currently available are Tierras Bajas del Norte and Sarstún-Motagua, which between them account for 90% of Guatemala's deforestation.

**Table No. 1 Timeline to complete the R-Package**

<b>Component 1: Organize and Consult</b>	
<b>Activity</b>	<b>Completion Date</b>
Definition of methodologies to systematize / perform the query plan.	December 2014 (validation and complementation CONAP used by INAB and processes).
Perform initial dialogue process with stakeholders in REDD +.	December 2014 (it is in advanced stage)
Implement the Plan Consultations with stakeholders in REDD +.	March 2015
Design mechanism for information Exchange.	March 2015
<b>Component 2: Prepare the REDD + Strategy</b>	
<b>Activity</b>	<b>Completion Date</b>
<u>Detailed</u> Analysis by Subnational Base on the situation regarding Agents Causes and Analysis of Deforestation.	Tierras Bajas del Norte is completed June 2015 (Sarstún-Motagua) September 2015 for the rest of the country
Analysis of the implications of the legal instruments (laws, regulations, policies, strategies and sectoral plans) in reducing deforestation.	Preliminary schematic version were produced Detailed report and recommendations for new policies such as PROBOSQUE, March 2015
Reviewed and updated options REDD + Strategy.	Preliminary reviewed and updated was done Detailed final reviewed and updated, December 2014
SESA: identification of stakeholders and strategic option Systematizing and possibly broadening actual scope,	December 2014
SESA, ESMF and MAR	March 2015
<b>Component 3: Emissions Scenarios reference</b>	
<b>Activity</b>	<b>Completion Date</b>
Baseline emissions from deforestation at sub-national.	December 2014 (Validation with VM0015 methodology, adjusted to JNR-VCS and in process of being adjusted to the Methodological Framework of the CF. –Tierras Bajas del Norte-) June 2015 (Sarstún-Motagua) December 2015 (rest of country)
Emission baselines for degradation and increased carbon stock.	December 2015 (Occidente) June 2016 (rest of country)
<b>Component 4: Design a Monitoring System Release and Co-Benefits</b>	
<b>Activity</b>	<b>Completion Date</b>

MRV System Approval Scheme	December 2014
MRV System Implementation	June 2015 (for Tierras Baja's del Norte and Sarstún-Motagua) June 2016 (for the rest of the country)

## Component 1: Organization and Consultations

### Subcomponent 1a: National Mechanisms Program Management REDD +

Annex V of the section 2.2, summarizes the different mechanisms and actors that make up the platforms for the governance and management of the REDD+ strategy and the ER Program in Guatemala. As will be clear from the box, MARN is the executive organization, coordinating with the other members of the Inter-Institutional Coordination Group (GCI). Each of the four member institutions of the GCI, through its own climate change unit, is responsible for implementing activities within its competence.

As will be clear from the table, apart from the political oversight, GBBYCC is also a technical platform with multi-sectoral participation that plays a supporting role for the Consultation, Participation and Technical Coordination of the preparation of the REDD+ Strategy and the ER Program. The National Committee on Environmental and Social Safeguards, on the other hand, has the specific role to support participation and consultation processes such as SESA, ESMF and MAR.

Finally, there are those actors that are directly involved in implementing ER Program activities, for whom there are specific management tools aligned with the governance mechanisms developed for the two major categories of activities, forest governance instruments of INAB (forest incentive programs) and Strengthening of the Guatemalan System of Protected Areas (SIGAP).

### Sub component 1b: Consultation, participation, dissemination

MARN, as the national organization responsible for leading the REDD+ process, in partnership with the GCI, has initiated a dialogue process with interested stakeholders through the governance platforms defined for REDD+. As part of the consultation and participation process, two types of actors have been identified, those "that participate directly in the REDD+ strategy options" and those "that have accompanying or supporting roles".

The first type of actor emanates from the REDD+ strategy options and the ER Program, which are based on the strengthening of political instruments and forest governance in the country: the Forest Law, through INAB, and the Protected Areas Law, through CONAP. Guatemala has ample experience with the consultation and participation processes through its forest governance instruments. Forest policy instruments such as PINPEP and PINFOR (First line of action under the ER Program) have benefited over 900,000 producers with USD230 million worth of forest incentives. These instruments, which fall under the authority of INAB, have been developed and are being implemented in consultation with the National Alliance of Community Forestry Organizations, the Network of Indigenous Authorities and Organizations, and the private sector forest producers' association, among others. The proposed PROBOSQUE law has followed a similar consultation process during its development, and is now under discussion in Congress. Protected Areas also have associated consultation processes and groups, such as the Association of Forest Communities in the Petén (ACOFOP) and the Roundtables for co-managers of protected areas, which have resulted in considerable participation in the management of protected areas.

The Strategic Environmental and Social Evaluation (SESA, for TOR see ANNEX VII) will build on the existing mechanisms for the identification of key actors and for participation and consultation described above (CODI/PINPEP, Association of Forest Communities, Consultation and Co-Management Roundtables for Protected Areas), which are managed by the two main implementers of the ER Program, CONAP and INAB. These mechanisms will also be instrumental in the analysis of environmental and social impacts, and for establishing the Environmental and Social Management Framework (ESMF). These mechanisms include:

- *Network PINPEP Beneficiaries*: Created by Legislative Decree 51-2010, with representation in 17 departments. It aims to strengthen the participation of owners of small tracts of land in the benefits of forestry incentives.
- *Alliance of National Forest Organizations*: this is an important two-way communications channel between grassroots organizations (community level) and the national level. Its objective is to make the voice of the community-level associations heard at the national level in order to influence government

policy. This Alliance includes about 300 grassroots organizations with a total of about 150,000 members.

- Co-management Roundtables: the co-management of Protected Areas is the technical, administrative and institutional means by which CONAP can engage with different individuals or organizations, whether public or private, civil society or other, in order to fulfill the objectives of Guatemala's National Protected Area System, SIGAP, as required by the Protected Areas Law (Decree 4-89).
- Forest Consultation Roundtables: seven of these regional roundtables have been organized so far. They include all actors (government, civil society, private sector) involved in the socioeconomic and environmental aspects of forests, facilitate and implement participatory processes aiming to further forestry development at regional and local level.
- Network of Indigenous Peoples and Authorities: This network includes the recognized indigenous authorities and organizations. It is a representative body, and an influential interlocutor with State authorities and institutions. In general, the network focuses on promoting recognition of community land rights, an issue which has not yet been embraced by the Guatemalan state.

**The Grievance Redress Mechanism (GRM/MAR)** will benefit from existing platforms where land tenure claims in protected areas are submitted and resolved. The main roundtable includes CONAP, the Secretariat of Agricultural Issues of the Presidency of the Republic (SAA), The Attorney General's Office (PGN), The Land Fund (FONTIERRAS), the Cadaster (RIC), the General Property Register (RGP) and the Office of the High Commissioner for Human Rights (OACDH). The SAA publishes a policy report on agrarian conflict in Guatemala, which includes a chapter on conflicts addressed and resolved within protected areas.<sup>5</sup> This platform will be adapted as necessary to fulfill its function under the ER Program. (See Annex VII).

Within the second group of actors, who support the management of various ER Program elements, the following should be mentioned:

- Platform on Forests, Biodiversity and Climate Change (GByCC): this is a platform for dialogue animated by MARN, INAB, CONAP and MAGA. Its objective is to function as a mechanism for the formulation of proposals and to achieve consensus in the preparation process for the National Strategy to Reduce Deforestation. The platform aims to harmonize the obligations under the Climate Change, Biological Diversity and Desertification conventions, and to contribute to public policy and to Guatemala's position in international negotiations on issues such as REDD+, LULUCF and forest ecosystem based climate change adaptation.
- National Committee on Environmental and Social Safeguards: This is a cross-sectoral and inter-institutional body that takes decisions related to the national interpretation of indicators and that monitors the implementation of REDD+ related social and environmental safeguards standards.
- Group of REDD+ Project Implementers: This is a working group consisting of national and international NGOs and community associations that have the capacity to implement REDD+ actions in their territories. The dialogue in this group serves the key purpose of allowing for discussion and comparison of REDD+ field experiences among its members, thus enabling them to evaluate different methods and actions to reduce deforestation and degradation, and provide feedback to national and international policy processes.
- National Climate Change Roundtable: The objective of this roundtable is to reinforce the climate change work of NGOs at national level, in order to influence the agenda and progress towards an integrated government policy on climate change mitigation and adaptation that includes legal safeguards and participation mechanisms at all levels.
- Indigenous Climate Change Roundtable: This is a not-for-profit civil society organization of a political nature that consists of indigenous organizations whose principal objective is to promote mechanisms to influence the formulation and implementation of public policies related to climate change and mother earth, at national and international level, to ensure that the rights of Guatemala's Indigenous Peoples are respected.
- Climate Change National Council: it is an instance within the Climate Change Framework (Decree 7-2013). It was established on June 25, 2014 and is led by the Presidency of the Republic. The Council is composed of representatives from the following sectors of Guatemalan society: Indigenous Peoples, NGOs, the National Association of Municipalities (ANAM), Coordinating Committee of Agricultural,

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<sup>5</sup>See <http://portal.saa.gob.gt>

Commercial, Industrial and Financial Associations (CACIF), National Coordinator for Disaster Reduction (CONRED), Universities, MAGA, MEM and MICIVI. It has designated the representatives of the ANAM, CACIF, Universities and Indigenous Peoples to work on the issue of social and environmental safeguards.

All of these mechanisms support the process of developing the REDD+ strategy and help to inform and include in the discussion the actors that are directly concerned by the implementation of REDD+ strategy options that will be discussed below.

**COMPONENT 2: REDD+ STRATEGY PREPARATION**  
**Sub Component 2a: Evaluation on the Land Use, the Factors Causing Changes in Land Use, Forest Law, Politics and Forest Governance.**

Guatemala has a wealth of documents produced by government institutions and academics that describe historical land use tendencies (e.g. forest cover change maps), means of subsistence (e.g. livelihood profiles of Guatemala) and a range of analyses of forest and environment legislation, and related policies and regulations. The identified drivers, agents and causes of deforestation in Guatemala have been identified and are detailed in subsections 5 and 8. Based on that analysis, the next subsection proposes national strategy options.

**Sub Component 2b: REDD+ Strategy Options**

This ER Program proposal, which has been elaborated during the REDD+ Strategy Preparation (R-PP) has two main categories of activities: (i) Reinforcement of forest policy instruments of INAB; (ii) Strengthening of the management of the National Protected Areas System (SIGAP), managed by CONAP.

Table 2 shows the strategy options that form the core of Guatemala’s REDD+ strategy and the main activities under each of these options. These activities will be discussed in more detail below.

**Table No. 2 REDD+ Strategy options**

REDD+ Strategic Options	Policy Actions <sup>6</sup>	REDD+ Activities in ER Program
Harmonization of policy framework, plans and instruments for all sectors linked to land use, change in land use and forest - environmental management.	<ul style="list-style-type: none"> <li>a. Revision of the Agrarian Policy and updating of the instruments used by Land Fund (FONTIERRA) and Cadaster (RIC)</li> <li>b. Homologation process of management tools for Forestry Management between INAB- CONAP.</li> <li>c. Preparation of harmonization of REDD+ institutional competencies</li> <li>d. Approval of the Institutional Agenda of INAB for Forest and Climate Change</li> <li>e. Approval of Climate Change and Protected Areas Agenda of CONAP</li> </ul>	<ul style="list-style-type: none"> <li>▪ Activity 4- Strengthening governance in forest lands.</li> <li>▪ Activity 6- Development of Competitivity and legality in forestry products value chain.</li> </ul>
Promotion and strengthening of national land use planning.	<ul style="list-style-type: none"> <li>a. Preparation of Natural Resource Management and Land Use Planning instruments in the National Development Plan “Katún 2032”.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Activity 4- Strengthening governance in forest lands.</li> <li>▪ Activity 5- Improved Forest Management</li> </ul>
Strengthening of institutional capacities for forest monitoring and protection, enforcement operations and control of illegal logging.	<ul style="list-style-type: none"> <li>b. Approval of the Inter-Institutional Action Plan for the Prevention and Reduction of Illegal Logging in Guatemala</li> </ul>	<ul style="list-style-type: none"> <li>▪ Activity 4- Strengthening governance in forest lands.</li> <li>▪ Activity 6- Development of Competitivity and legality in forestry products value chain.</li> </ul>
Strengthening of existing programs and creation of new incentive mechanisms for forest and agroforestry conservation, protection and	<ul style="list-style-type: none"> <li>c. Approval of Decree 51-2010, Forest Incentives Program for Smallholders of Land Suitable for Forestry or Agroforestry (PINPEP)</li> <li>d. Proposal of expansion and improvement scale of Program of Forestry Incentives PINFOR, through</li> </ul>	<ul style="list-style-type: none"> <li>▪ Activity 1- Incentives for increase of carbon stock.</li> <li>▪ Activity 2- Incentives for conservation and sustainable management of natural forests.</li> </ul>

<sup>6</sup>See Annex VII for the summary of each of these policies and programs and how they relate to the ER Program.

REDD+ Strategic Options	Policy Actions <sup>6</sup>	REDD+ Activities in ER Program
management activities, (economic and non-economic) and for wood energy production.	e. approval of the proposed PROBOSQUE Law. Analysis of viability of a Horticultural Incentive Program as a mechanism to reduce greenhouse gas emissions	<ul style="list-style-type: none"> <li>▪ Activity 3- Incentives for smallholders, local communities and indigenous people</li> <li>▪ Activity 5- Improved Forest Management</li> </ul>
Development of the regulatory and institutional framework for the recognition of the economic importance of forest goods and services, including forest carbon.	a. Introducing to Congress the pre-project of the Law to promote establishment, regeneration, restoration, management, production and protection of forests in Guatemala ("PROBOSQUE") b. Design and prepare National Forest Landscape Restoration Strategy	<ul style="list-style-type: none"> <li>▪ Activity 4- Strengthening governance in forest lands.</li> <li>▪ Activity 6- Development of Competitiveness and legality in forestry products value chain.</li> </ul>
Encouragement of productive activities and compatible livelihood means with conservation and sustainable management of forests and agroforestry landscapes.	<ul style="list-style-type: none"> <li>- Implementation of Family Agriculture Program for the Strengthening of Peasant Economies (PAFFEC)</li> <li>- Proposal of Forest-Industry-Market Strategy, pending approval by the INAB Board</li> <li>- Strengthening community participation in forest management and management through community forestry concessions</li> <li>- Strengthening of co-management of protected areas</li> </ul>	<ul style="list-style-type: none"> <li>▪ Activity 1- Incentives and financial mechanisms to increase carbon stock.</li> <li>▪ Activity 2- Incentives for the conservation and sustainable management of natural forests.</li> <li>▪ Activity 3- Incentives for indigenous peoples and community based smallholders.</li> <li>▪ Activity 5- Improved Forest Management</li> <li>▪ Activity 6- Development of Competitiveness and legality in forestry products value chain</li> </ul>
Development and Implementation of a Strategy for sustainable Fuel wood use	<ul style="list-style-type: none"> <li>- Implementation of National Strategy for Sustainable Fuelwood Production Systems and Use of Fuelwood</li> </ul>	<ul style="list-style-type: none"> <li>▪ Activity 1- Incentives and financial mechanisms to increase carbon stock.</li> <li>▪ Activity 2- Incentives for the conservation and sustainable management of natural forests.</li> <li>▪ Activity 3- Incentives for indigenous peoples and community based smallholders.</li> <li>▪ Activity 6- Development of Competitiveness and legality in forestry products value chain</li> </ul>

REDD+ strategy options have been discussed and analyzed in depth. Relationship to future policy actions to be implemented in future REDD+ program activities and profiles of potential on the field actions are clear and strategically aligned. All strategy framework developed responds to addressing drivers, dealing with agents and solving causes of deforestation with a national program level approach.

### 3.3 Consistency with national REDD+ strategy and other relevant policies

Please describe:

- a) How the planned and ongoing activities in the proposed ER Program relate to the variety of proposed interventions in the (emerging) national REDD+ strategy.
- b) How the proposed ER Program is strategically relevant for the development and/or implementation of the (emerging) national REDD+ strategy (including policies, national management framework and legislation).
- c) How the activities in the proposed ER Program are consistent with national laws and development priorities

The ER Program proposal is relevant to the development of the R-PP to the extent that it is directly aligned with the REDD+ Strategy options identified under the R-PP, which are being updated and validated as the preparation process continues.

The ER Program contains two main categories of activities: (i) Strengthening of Forest Incentive Programs created by the Forestry Law (101-96) and Strengthening of the management of the National Protected Areas System (established by law 4-89).

Each of these two categories include specific actions regrouped according to what policy instrument supports them, the implementation mechanism, geographic location, as well as emissions reductions capacity. Most of these policy instruments and implementation mechanisms are already under implementation, while others are awaiting approval. All the instruments and mechanisms will be strengthened by the implementation of the ER Program. The policy instruments mobilize significant amounts of national resources, which will provide leverage for the performance-based payments that will be paid under the ER Program. The State currently provides USD 40 million per year for the PINPEP smallholder forest incentives program and USD 10 million per year for the management of SIGAP, the National Protected Areas System. The new PROBOSQUE law, which is under consideration by Congress, will provide an additional USD20 million worth of forest incentives annually.

These government-funded programs contribute not only to the environment, but also to poverty reduction objectives. Participation and benefit sharing with communities and families are integrated in all INAB's and CONAP's programs, especially in municipalities with high poverty levels. These programs directly contribute to the well-being of over 250,000 families.

The four REDD+ strategy options from the R-PP that have been retained in the ER Program, and that will be implemented in the aforementioned REDD+ regions are: i) Strengthening of institutional capacities for forest monitoring and protection, enforcement operations and control of illegal logging, ii) Strengthening of existing programs and creation of new incentive mechanisms for forest and agroforestry conservation, protection and management activities, whether profitable or not, and for wood energy production, iii) Promotion of productive activities and livelihoods that are compatible with conservation and sustainable management of forests and agroforestry landscapes, iv) Development and Implementation of a Strategy for the sustainable use of Fuelwood.

The proposed activities under the ER Program are consistent with national development priorities and laws, including the following: i) Framework Law for the Regulation of Reduction of Vulnerability and Obligatory Adaptation to the impacts of Climate Change and the Mitigation of Greenhouse Gases (Decree 07-2013), ii) Biodiversity Policy and Strategy, iii) Climate Change Agenda for Protected Areas and Biodiversity of Guatemala, iv) Institutional Agenda for Forests and Climate Change, v) National Integrated Rural Development Policy (PNDRI), vi) Policy on Gender and Promotion of Women and Rural Youth, vii) National Climate Change Policy, viii) Law on the Forest Incentive Program for Smallholders of Lands suitable for Forestry or Agroforestry (Decree 51-2010), ix) National Forest Policy 2012+.

This guides national efforts to identify instruments that the State currently develops. Guatemala in the proposed ER Program highlight the forestry incentive programs, sustainable wood management and protected areas. These instruments that concretize REDD + activities are included in the R-PP pop, have political, legal, regulatory and planning frameworks. So have a link with the development priorities of the state.

<b>4. ER Program location and lifetime</b>
<p><b>4.1 Scale and location of the proposed ER Program</b></p> <p><i>Please present a description and map of the proposed ER Program location and surrounding areas, and its physiographic significance in relation to the country. Indicate location and boundaries of the proposed ER Program area, e.g., administrative jurisdiction(s).</i></p>

The ER Program proposes a National Program approach and will include the five regions that cover the country and that have been determined using biophysical (altitude, rainfall, slope, life zones) and socioeconomic criteria as well as the nature of deforestation agents. These REDD+ regions are not aligned with administrative boundaries.

The availability of historical information and implementation capacity was also important in the division and allows for some regions to move ahead, while others develop more capacity. The map in Figure 1, shows the five REDD+ regions identified for the purpose of implementing national REDD+ in Guatemala: a) Occidente, b) Tierras Bajas del Norte, c) Sarstun-Motagua, d) Centro-Oriente; and e) Costa Sur.

**Figure No. 1 Guatemala ER Program location**



The ER Program will implement different activities depending on the drivers and source of emissions in the respective REDD+ region, as detailed in Table No. 3.

**Table No. 3 Main sources of greenhouse gases, approaches selected for REDD+ regions**

REDD+regions	Source of most GHF emissions	Selected Approach
TierrasBajas del Norte	Deforestation	Avoided deforestation and Increase of carbon stocks
Sarstun-Motagua	Deforestation	Avoided deforestation Avoided degradation
Occidente	Degradation	Avoided degradation and Increase of carbon stocks
Centro Oriente	Deforestation and degradation	Increase of carbon stocks
Costa Sur	Use of land deforestation. Change to agriculture and cattle growing happened between 1940-1980.	Increase of carbon stocks

These REDD+ regions show high and extreme poverty conditions (between 30-65% of the population, see Annex XIX, Figure 3 in red area), high levels of food insecurity, (see Annex XIX, Figure 4), lack of employment and high consumption of fuel wood (see Annex XIX Figure 5). On the map balance between supply and demand for fuel wood in Guatemala, it is evident that the Occidente region has townships with higher demands and others with lower supply of fuel wood in the country. These will be priority townships for the implementation of forestry incentive programs (PINPEP, PINFOR and PROBOSQUE, see Annex XIX, Figure 6) and for the national strategy of sustainable use of fuel wood, (see Annex XIX, Figure 5).

These are strategic areas for reducing deforestation, degradation and to increase carbon stocks by implementing REDD+ actions that help reduce the above-mentioned conditions in vulnerable rural populations.



## 4.2 Expected lifetime of the proposed ER Program

Please describe over how many months / years the proposed ER program will be:

- Prepared; and
- Implemented (including expected start date of the proposed ER Program).

### Preparation of the ER Program for Guatemala:

The preparation of the ER Program has been scheduled for the period June 2014 – June 2015, (strict period of the preparation with FCPF resources) including technical and financial analysis, a cost-benefit analysis and a legal and institutional assessment of activities to be implemented. A planning team has been formed consisting of representatives of INAB, CONAP, MARN, and MAGA with support from IADB, IUCN and Rainforest Alliance.

### Implementation

The ER Program for Guatemala will run from 2010 to 2050. Actually, Guatemala has since 1996 already implemented nation-wide activities to reduce deforestation and degradation, through Forest Incentives Program PINFOR and through the attribution of Forest Concessions to indigenous communities and private companies in the Mayan Biosphere Reserve. Nevertheless, it was not until 2012 that these programs explicitly had a reduction of greenhouse gas emissions as an objective.

The implementation of VCS JNR in a series of REDD+ Pilot Projects could present an opportunity for attracting private sector investment in the purchase of emission reductions derived from activities implemented by these projects. In spite of the limited scope of the FCPF Carbon Fund (only until 2020), the ER Program will be developed and implemented with a longer-term perspective and an objective to secure financing from carbon markets and other sources that may extend over a longer time frame.

## 5. Description of activities and interventions planned under the proposed ER Program

### 5.1 Analysis of drivers and underlying causes of deforestation and forest degradation, and conservation or enhancement trends

Please present an analysis of the drivers, underlying causes and agents of deforestation and forest degradation. Also describe any policies and trends that could contribute to conservation and enhancement of carbon stocks. Please distinguish between both the drivers and trends within the boundaries of the proposed ER Program, and any drivers or trends that occur outside the boundaries but are affecting land use, land cover and carbon stocks within the proposed ER Program area. Draw on the analysis produced for your country's Readiness Preparation Proposal (R-PP) and/or Readiness Package (R-Package).

#### Analysis of agents, drivers and underlying causes of deforestation and forest degradation

Guatemala has a surface area of 10,889,000 hectares (ha), with a diverse relief. The country's altitude varies from 0 to 4,211 meters above sea level. The land uses defined in the vegetation and land use map (MAGA, 2006) are forests<sup>7</sup> (37.2%); agriculture (27.5%); natural grassland and bush, including MATORRAL (30.6%); wetlands (1.8%); water bodies (1.6%); infrastructure (1.08%); dry zones and mines (0.12%).

The environmental profile of Guatemala (IARNA-URL, 2009)<sup>8</sup> includes a historical analysis of forest use. This analysis describes how the clearing of forests for agriculture has played an important role in the history of Guatemala. Traditionally, forest areas have been perceived as a land reserve, particularly for agricultural expansion. The document gives an estimate of 50% for the forest cover in 1950. At the end of the 1950-2002 periods, the areas dedicated to agriculture, pasture and other land uses were estimated to have increased by 39%, 6% and 5%, respectively. Forest cover underwent a steady loss of about 47% over the same period, taking as the base line 6,974,340 ha. This is clearly a problem linked to the development model and the public policies of the country (IARNA, 2009).

Four departments (Quiché, Petén, Alta Verapaz and Izabal) account for 72% of national forest cover. These departments are part of the above-mentioned REDD+ regions Occidente, Tierras Bajas del Norte and

<sup>7</sup>For the purpose of these assessments, « Forests » were defined as « areas with forest cover and that are utilized to produce forest and/or environmental goods and services. »

<sup>8</sup>[http://biblio3.url.edu.gt/IARNA/serie\\_amb/11.PDF](http://biblio3.url.edu.gt/IARNA/serie_amb/11.PDF)

Sarstun-Motagua (See Table 6). The most recent forest cover estimate produced by INAB, CONAP, UVG and URL<sup>9</sup> indicates that forest cover was 3,722,595 ha, equivalent to 34.2% of the national territory. According to the same source, national forest cover was 3,866,383 ha (35.5%) in 2006. This implies that over 2006-2010, net annual forest loss was 38,597 ha, equivalent to an annual deforestation rate of 1.00%. This is 20% lower than during the 2001-2006 period, when net annual forest loss was 48,084 ha.

**Table No. 4 Guatemala deforestation trends.**

Year	Forest cover: % of Territory (surface area)	Annual forest loss (% & ha)	
1991	47.0% (5.12 million ha)	1.43%	73,100ha
2001	38.1% (4.15 million ha)		
2006	35.5% (3.87 millionha)	1.16%	48,000ha
2010	34.2% (3.72 million ha)	1.00%	38,600ha

Source: Dynamic Process mapping of forest cover. INAB, CONAP, UVG, URL (2012).

The reduction in net forest loss over the 2006-2010 period is explained by the increase in area of regenerating forests. Nevertheless, gross deforestation continued to increase, reaching an area of 132,137 ha annually during the period.

A detailed analysis revealed that 42% of deforestation is concentrated in five fronts (4 in Petén and 1 in Izabal), whereas the remaining 58% affects pine/oak and some broadleaf forests occurring in 110 smaller focal areas, spread over the Centre, the Northeast, the Northwest and the South of the country.<sup>10</sup> Studies of the five fronts and 97 focal areas show that most deforestation is due to land use change to agriculture and urban settlements and to forest fires (which have increased in frequency and intensity in recent years, linked to the El Niño oscillation). Pests and diseases and illegal wood extraction are also considered important.

Among the most important indirect causes of deforestation are: the low supply of employment in rural areas; corruption; cultivation without shade; institutional weaknesses for forest monitoring; weaknesses in financial and other markets and public policies.

The energy needs of the country constitute another important driver, as fuel wood is the primary source of energy for cooking and heating in the poorest rural areas. A 2012 study on wood fuel supply and demand in Guatemala showed that wood fuel consumption amounted to 15,771,187 tones (dry wood), of which 15,418,233 tones were used in the domestic sphere and 352,953 tons in the industrial sector.<sup>11</sup>

Considering that the total fuel wood supply (defined as the sustainable supply that can be obtained from managed natural forests, plantations and residues from timber processing mills) is 10,045,899 tones (dry wood), there is a deficit of 5,725,290 tones. This leads to considerable degradation rather than deforestation, as most fuel wood derives from selective felling in natural forests.

The aforementioned agents and drivers of deforestation are reinforced by structural or underlying causes, including the economic growth model, population growth, poverty, the educational system, the forest culture and land tenure systems, which reinforce deforestation and forest degradation to the extent that they promote economic and livelihood options that are unsustainable from social, economic and

<sup>9</sup>INAB, CONAP, IARNA-URL, UVG. 2012. Memoria técnica Cobertura Forestal 2010 y Dinámica de la Cobertura Forestal de la República de Guatemala. <http://www.sifgua.org.gt/Documentos/Informes/Cobertura/2010/INFORME/Memoria%20Tecnica%20Completa.pdf>

<sup>10</sup>A deforestation front is a forest area over 250 km<sup>2</sup> that shows a major dynamic and intensity of forest loss during the period under consideration (2001-2006). A deforestation focal area is a forest area between 26 and 200 km<sup>2</sup> where deforestation occurs.

<sup>11</sup>INAB, FAO 2012 Estudio de Demanda y Oferta de Leña.

[http://www.sifgua.org.gt/Documentos/Informes/Demanda\\_y\\_Oferta\\_de\\_Le%C3%B1a%20WISDOM%20Guatemala.pdf](http://www.sifgua.org.gt/Documentos/Informes/Demanda_y_Oferta_de_Le%C3%B1a%20WISDOM%20Guatemala.pdf)

environmental viewpoints. This is evidenced by deforestation fronts and focal areas where forest is substituted by livestock raising, agro-industries for export, or, in the absence of other livelihood options, by smallholder farms, and by degradation through illegal harvesting of wood fuel (INAB, FAO 2012 Study on Wood fuel demand and supply).

Studies of the five fronts and 97 focal areas show that most deforestation is due to land use change to agriculture and urban settlements and to forest fires (which have increased in frequency and intensity in recent years, linked to the El Niño oscillation). Pests and diseases and illegal wood extraction are also considered important.

Table No. 5 shows how direct and underlying causes of forest deforestation and degradation will be addressed through the proposed six program REDD+ activities, and land use actions proposed in previous conceptual diagram of the ER Program. (See section 5.3 for more details about the proposed REDD+ activities). The table shows how the causing agents lead the principal drivers of deforestation and degradation above mentioned, why such agents perform these activities, and which REDD+ actions will be used to address them. Section 5.3 also describes the forest policy instruments that support the implementation of the proposed REDD+ actions.

**Table No. 5 Analysis of drivers, causes and deforestation and forest degradation agents and their relationship with REDD+ actions proposed in the ER Program.**

Cause → Why is the agent doing the action?	DIRECT CAUSES				UNDERLYING CAUSES															
	High opportunity cost	Productive factors and market conditions are comparatively present and liquid	Unavailability of financial resources (cash)	Financial market failures	Low supply of rural employment	Plagues	Urban Growth	Economic growth model	High population growth	Poverty	Little harmonization of forest policies	Lack of forest culture	Tenure and land distribution situation	Corruption	Culture of clean crops remains	Institutional weakness to monitor such activities	Lack of access to technical assistance	Intermediary market failures	Failures in public policies	
Agent ↓ Who is executing the action?	POLICY ACTION (subprogram of REDD+ program)																			
Agriculture and commercial farmers (commodities)	- Reforestation using broadleaf species, multiple pine varieties, agroforestry crops and silvopastoral systems, - Strengthening governance at forest lands, - Strengthening competitiveness, - Technical assistance and transference of technology, - Strengthening timber legality, - Forest / Industry regional cluster development, - Market links and international commerce, - Privately owned reserves - Coops and umbrella association based Reserves - Natural Forest Regeneration, - Sustainable natural forest management, - Sustainable forest plantations management.	Land Use change /agriculture	Land Use change /agriculture	n/a	n/a	n/a	n/a	n/a	Land Use change /agriculture	n/a	n/a	Land Use change /agriculture	n/a	Land Use change /agriculture	n/a	n/a	Land Use change /agriculture	n/a	Land Use change /agriculture	Land Use change /agriculture
Subsistence farmers	- Agroforestry, natural forest and forest plantations, - Forest management at indigenous and community based owned lands - Reforestation using tree agroforestry crops and silvopastoral systems, - technical assistance to forest owners and small holders, - Coops and umbrella association based reserves, - Natural Forest Regeneration, - Sustainable natural forest management, - Sustainable forest plantations management.	n/a	n/a	Land Use change /agriculture/forest wildfire	Land Use change /agriculture/forest wildfire	Land Use change /agriculture/forest wildfire	n/a	n/a	n/a	n/a	Land Use change /agriculture/forest wildfire	n/a	n/a	Land Use change /agriculture/forest wildfire	n/a	n/a	Land Use change /agriculture/forest wildfire	n/a	Land Use change /agriculture/forest wildfire	Land Use change /agriculture/forest wildfire
Large-scale livestock (areas greater than 45ha)	- Multisectoral alliances on protecting and monetizing forests value, - Strengthening governance at forest lands, - Community and industrial sustainable forest management concessions in reserves, - Strengthening timber legality systems, - Technical Assistance and Technology transfer, - Forest / Industry regional cluster development, - Market links and international commerce, - Improvement and enforcement of efficient traceability systems	Land Use change /agriculture/ livestock/forest wildfires	Land Use change /agriculture/ livestock/forest wildfires	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	Land Use change /agriculture/ livestock/forest wildfires	Land Use change /agriculture/ livestock/forest wildfires	n/a	n/a	n/a	Land Use change /agriculture/ livestock/forest wildfires	n/a	Land Use change /agriculture/ livestock/forest wildfires	Land Use change /agriculture/ livestock/forest wildfires

Cause → Why is the agent doing the action?	DIRECT CAUSES										UNDERLYING CAUSES									
	High opportunity cost	Productive factors and market conditions are comparatively present and liquid	Unavailability of financial resources (cash)	Financial market failures	Low supply of rural employment	Plagues	Urban Growth	Economic growth model	High population growth	Poverty	Little harmonization of forest policies	Lack of forest culture	Tenure and land distribution situation	Corruption	Culture of clean crops remains	Institutional weakness to monitor such activities	Lack of access to technical assistance	Intermediary market failures	Failures in public policies	
Agent ↓ Who is executing the action?	POLICY ACTION (subprogram of REDD+ program)																			
Ganaderos de pequeña escala (menor a 45ha)	- Agroforestry, natural forest and forest plantations, - Forest management at indigenous and community based owned lands - Reforestation using tree agroforestry crops and silvopastoral systems, - technical assistance and technology transfer to forest owners and small holders, - Technical Assistance and Technology transfer, -Forest / Industry regional cluster development, - Market links and international commerce, - Improvement and enforcement of efficient traceability systems, - Natural Forest Regeneration, - Sustainable natural forest management, - Sustainable forest plantations	Land Use change /agriculture/ livestock	Land Use change /agriculture/ livestock	n/a	n/a	Land Use change /agriculture/ livestock	n/a	n/a	n/a	n/a	n/a	Land Use change /agriculture/ livestock	Land Use change /agriculture/ livestock	n/a	n/a	n/a	n/a	Land Use change /agriculture/ livestock	n/a	Land Use change /agriculture/ livestock
Illegal loggers	- Strengthening patrolling and monitoring, - Improving norms and enforcing policy and law, - technical assistance and technology transfer, - Reforestation using tree agroforestry crops and silvopastoral systems, - Agroforestry, natural forest and forest plantations, - Privately owned reserves, - Coops and umbrella association based reserves	Illegal logging/forest wildfires	n/a	Illegal logging	Illegal logging	Illegal logging	n/a	n/a	n/a	n/a	n/a	Illegal logging	Illegal logging	Illegal logging	n/a	Illegal logging	n/a	Illegal logging	n/a	Illegal logging
Lumberjacks	- Improving efficiency in use of fire wood, - Strengthening patrolling and monitoring, - Improving norms and enforcing policy and law, - Improvement and enforcement of efficient traceability systems, - Municipality owned reserves, - State owned reserves, Coops and umbrella association based reserves, - Natural Forest Regeneration, - Sustainable natural forest management, - Sustainable forest plantations management.	n/a	n/a	illegal selective logging (for energy purposes)	n/a	illegal selective logging (for energy purposes)	n/a	n/a	n/a	illegal selective logging (for energy purposes)	illegal selective logging (for energy purposes)	n/a	n/a	illegal selective logging (for energy purposes)	n/a	illegal selective logging (for energy purposes)	illegal selective logging (for energy purposes)	n/a	illegal selective logging (for energy purposes)	illegal selective logging (for energy purposes)

**5.2 Assessment of the major barriers to REDD+**  
*Please describe the major barriers that are currently preventing the drivers from being addressed, and/or preventing conservation and carbon stock enhancement from occurring.*

The following table summarizes the main problems and challenges to managing and implementing REDD+ in Guatemala.

**Table No. 6 Problems and challenges for managing and implementing REDD+ in Guatemala**

No	Problems for managing REDD+	Problems related to Monitoring, Reporting and Verification (MRV)	Challenges in implementing REDD+
1	Inter-institutional coordination	Quality of information	(Establishing adequate) institutional framework for REDD+
2	Variability in international carbon markets	High operation costs	Establishing adequate legal conditions
3	Complex nature of international standards	Inter-institutional coordination at international level and national capacity	Development of methodologies and tools
4	National benefit sharing arrangements design in State own reserves		Permanence of emission reductions

The principal barriers for making emission reductions cost effective through the forest policy instruments (forestry incentives) are:

- a. Lack of a Forestry Research, Education, Capacity building and Extension program to support the different actors involved in forestry sector development.
- b. Lack of adequate financial instruments for forestry, in terms of terms, guarantees, conditions and interest rates.
- c. Limited budget allocation for incentive schemes to promote protection and restoration of forests for ecosystem goods and services.
- d. Lack of alternatives for the cost effective production and use of fuel wood.
- e. Lack of an agroforestry extension system.
- f. High cost of establishing agroforestry systems in poor and extremely poor areas, where soils are suitable mainly for forest.
- g. Lack of regulations and application of land use planning laws that promote the incorporation of trees in traditional agricultural production systems.
- h. Organizational shortcomings leading to a lack of a competitive wood supply in terms of volume, quality and price.

At SIGAP, the principal constraints to making emissions reductions cost effective through policy instruments related to protected areas are:

- a. Limited budget for controlling the whole of the national protected area system.
- b. Limitations for scaling up sustainable use of forest products.
- c. Lack of means for strengthening community participation in forest management.
- d. Lack of means for strengthening the judicial sector to address high-profile cases, especially the invasion and usurpation of protected areas.
- e. Lack of government authority in certain areas.

**5.3 Description and justification of planned and ongoing activities under the proposed ER Program**

*Please describe the proposed activities and policy interventions under the proposed ER Program, including those related to governance, and justify how these activities will address the drivers and underlying causes of deforestation and forest degradation and/or support carbon stock enhancement trends, to help overcome the barriers identified above (i.e., how will the ER Program contribute to reversing current less sustainable resource use and/or policy patterns?)*

The Guatemalan National Emission Reduction Program –ER-, consists of six REDD+ activities:

1. Incentives and financial mechanisms to increase carbon stocks.
2. Incentives to conservation and sustainable management of natural forests.
3. Incentives to indigenous peoples and community based smallholders.
4. Law enforcement in forest lands.
5. Improved Forest Management.
6. Development of competitively and legality in forestry products value chain.

The ER Program actions will be implemented in the five regions in which the country has been divided by REDD+ (see Figure no. 1). In accordance to the dynamics of forestry coverage and change of differentiated soil use for each of the regions REDD+ of the country with the different REDD+ formalities (avoided deforestation, avoided degradation, and increase in carbon stocks), they will be geographically approached as follows (See Table 7):

**Table No. 7 REDD+ approach per REDD+ regions prioritized**

REDD+ region	REDD+ approach
Tierra Bajas del Norte	Deforestation, increase carbon stocks
Sarstún-Motagua	Deforestation and Degradation
Occidente	Degradation
Centro –Oriente	Increase carbon stocks
Costa Sur	Increase carbon stocks

- a) Reducing emissions from **avoided deforestation, sustainable forest management and increase of carbon stocks** Tierras Bajas del Norte and Sarstún-Motagua regions are primarily selected. As seen in the forest map of cover 2006-2010 (See Annex XIX, Figure No. 1), these regions represent 53.10% of the territory of the country, and have major areas with the largest forest coverage in the country, specifically 70.4% of natural forests. The major deforestation fronts are concentrated in Punta Manabique (Sarstun sub-Motagua) Verapaz and Peten (region TBNG). (See Figure No. 1 and Annex XIX Figure 1). Furthermore, REDD + pilot projects based on avoided deforestation and sustainable forest management started in the projects within SIGAP protected areas (See Annex XIX Figure No.2)
- b) Reducing emissions from **avoided degradation and enhancement of carbon stocks**, Occidente and Sarstún-Motagua regions were prioritized. Both regions envisage strengthening REDD+ existing activities and to scale them up with resources coming from REDD+ performance based mechanisms. Degradation happens because of cultural/ancestral use of wood as main source of domestic energy in rural areas. This is done without efficient use since the forest is the source for family fuel wood.
- c) **Increase of carbon stocks**, has been prioritized for Occidente, Costa Sur and Tierras Bajas del Norte, where the greatest potential for this type of modality is concentrated. This is caused by degradation of soils deforested decades ago, most of it from 1940 to 1980. Costa Sur has agriculture and cattle ranching activities as predominant land use, there are important opportunities for reforestation of banks of rivers (abundant and big water shades in this region), as well as recovering large areas of steep terrains that are degrading, it is no longer suitable for agriculture. Occidente is in the same situation, but agricultural use is predominantly based among smallholders and community based. Tierras Bajas del Norte is a pretty large region, its southern area was deforested in the same period, but these are forestry vocation soils have agriculture/cattle grassing activities that need to be reforested by plantations, agroforestry and/or silvopastoral systems.

## **Planned Actions**

The planned activities have been broken down to identify specific REDD+ land use actions. The following list of land use actions were used to estimate emission reductions in process of being generated. The typical REDD+ actions framed within six REDD+ planned activities are:

- Incentive or voluntary reforestation with broad leaf species.
- Incentive or voluntary reforestation with conifer species (pine).
- Reforestation through agroforestry plantations and silvo-pastoral systems.
- Improvement in the efficiency of fuel wood use.
- Multi-sector alliances for the protection and legal tender of forests.
- Natural regeneration.
- Incentives for conservation and sustainable management of natural forests in privately owned lands.
- Incentives for conservation and sustainable management of natural forests in municipality owned lands.
- Incentives for conservation and sustainable management of natural forests in State owned lands.
- Incentives for conservation and sustainable management of natural forests in conservation areas in association with umbrella groups and cooperatives.
- Agroforestry systems, natural forests and forest plantations from small producers within local communities and Indigenous people.
- Improve the efficiency of fuel wood use
- Strengthening of control and patrols
- Strengthening and improvement of forest standards and auditing compliance.
- Sustainable management in natural forests.
- Sustainable management in plantations.
- Strengthening of forest legality.
- Technical assistance and technology transference to forest producers.
- Development of regional clusters within forest-industry.
- Development of value chains and international commerce.

REDD+ strategic options have been discussed and analyzed in depth. Its relationship to the future policy actions to be implemented, are as the same as future REDD+ planned activities and profiles of potential on the field action is clear and strategically aligned. The strategic framework developed responds to addressing drivers, dealing with agents and solution to the causes of deforestation on a national level approach.

Guatemala has policy instruments that promote the increase in forest coverage through reforestation, agroforestry systems (SAF), agrosilvopastoral systems, natural regeneration, sustainable forest management, and others. These instruments have been implemented through the management's plans of PINFOR and PINPEP. Such plans are expected to continue under the proposed law PROBOSQUE.

These tools, and others like PAFEC, were introduced with the financial support of the State, by means of laws that guarantee funds for paying incentives, and a percentage of the incentives paid for INAB's operational costs. Nevertheless, in order to obtain this percentage, public institutions need to invest in human and financial resources, review and approval farmer incentive applications, and verification of results achieved in the field prior to having received funds. In addition, tools such as PINPEP require large amounts of resources, as the plan works with large number of smallholders dispersed throughout the country.

Guatemala has not been able to achieve its goals in relation to the amount of forestry incentives that is potentially available because of these factors. For the period of 2013-2014, PINPEP demand increased in 13,518 projects equal to an area of 46,468ha, on Tuesday July 29 2014, the Board of Directors of INAB, publicly asked the Congress of the Republic to approve an extension to the budget to fulfill its obligations to 179.819 PINPEP beneficiaries (See Annex XII).

The proposed ER Program includes six REDD+ activities which include several REDD+ actions that are supported by several policy instruments. This will allow appropriate implementation of the REDD+ strategy (See Annex XXII). Among the first level policy instruments (National Laws and long term National



development Plans) i) the Constitution of the Republic of Guatemala, ii) Climate Change Framework Act, iii) Forestry Act, iv) Protected Areas Act, and v) the Katún 2032 National Development Plan. Additional policy actions included are to provide strategy, operational, institutional and program framework.

The previous section 5.1, presented the REDD+ actions expected to be programmatically implemented by REDD+ activities. By using Annex XXII, it is evident that various policy instruments provide framework support to every REDD+ activity implementation (and its actions), first level policy instruments provide framework national support to all the REDD+ activities proposed for the ER Program.

The ER Program proposes a Programmatic **National approach**, which will implement different REDD+ activities in the implementing areas as detailed in the following table.

**Table No. 8 Summary of the REDD+ activities and implementation areas.**

Implementati on areas	REDD+ approach selected	REDD+ activities	Transversal REDD+ activities of the ER Program to be implemented nation wide: <ul style="list-style-type: none"> <li>• Law enforcement at forest lands.</li> <li>• Strengthening competitiveness and legality of forest market oriented activities.</li> </ul>
TierrasBajas del Norte	Avoided deforestation and Enhancing carbon stocks	<ul style="list-style-type: none"> <li>• Incentives and financial mechanisms to enhancing carbon stocks.</li> <li>• Improved Forest Management.</li> <li>• Law enforcement at forest lands.</li> </ul>	
Sarstun-Motagua	Avoided deforestation Avoided degradation	<ul style="list-style-type: none"> <li>• Incentives and financial mechanisms to enhancing carbon stocks.</li> <li>• Incentives to conservation and sustainable management of natural forests.</li> <li>• Incentives to indigenous peoples and community based smallholders.</li> <li>• Improved Forest Management.</li> </ul>	
Occidente	Avoided degradation and Enhancing carbon stocks	<ul style="list-style-type: none"> <li>• Incentives to conservation and sustainable management of natural forests.</li> <li>• Incentives to indigenous peoples and community based smallholders.</li> <li>• Improved Forest Management.</li> </ul>	
Centro Oriente	Enhancing carbon stocks	<ul style="list-style-type: none"> <li>• Incentives to conservation and sustainable management of natural forests.</li> <li>• Incentives to indigenous peoples and community based</li> <li>• Improved Forest Management.</li> </ul>	
Costa Sur	Enhancing carbon stocks	<ul style="list-style-type: none"> <li>• Incentives and financial mechanisms to enhancing carbon stocks.</li> <li>• Improved Forest Management.</li> </ul>	

**5.4 Risk/benefit analysis of the planned actions and interventions under the ER Program**  
*Please explain the choice and prioritization of the planned actions and interventions under the ER Program identified in 5.3 taking into account the implementation risks of the activities and their potential benefits, both in terms of emission reductions and other non-carbon benefits.*

The following table summarizes the analysis of risks and benefits, as well as the potential emissions reductions for each of the strategy options included in the ER Program. These options have been identified among a larger set of options as those being the most viable and as having a good balance between risks and benefits, as well as having a good emissions reductions potential.

**Table No. 9 Summary of the potential emission reduction strategy for each call option included in the ER program.**

REDD+ Modalities	REDD+ Activities	RISKS	BENEFITS
<b>Avoided deforestation</b>	ii) Incentives to conservation and sustainable management of natural forests, iii) Incentives to indigenous peoples and community based smallholders, iv) Governance Strengthening in forest lands) Improved Forest Management, and vi) Promotion of competitively and legality of chain value in forest products.	<ul style="list-style-type: none"> <li>• Difficulty establishing appropriate distribution mechanisms of benefits institutionalized through REDD+ projects.</li> <li>• Increasing land opportunity cost (export crops)</li> <li>• Territorial control for illicit activities</li> </ul>	<ul style="list-style-type: none"> <li>• High potential emission reduction</li> <li>• Protection of area with high levels of biodiversity and cultural - archeological richness /non carbon benefits (SIGAP)</li> <li>• Community participation in forest management activities / high non carbon benefits</li> </ul>
<b>Avoided degradation</b>	iii) Incentives to indigenous peoples and community based smallholders, iv) Governance Strengthening in forest lands, v) Improved Forest Management, and vi) Promotion of competitively and legality of chain value in forest products.	<ul style="list-style-type: none"> <li>• Methodological challenges and establishing joint national MRV</li> <li>• Difficulty of competing with illegal fuel wood trade</li> </ul>	<ul style="list-style-type: none"> <li>• High potential for permanent emissions reductions</li> <li>• Important health benefits / non carbon benefits</li> </ul>
<b>Increase of carbon stocks</b>	i) Incentives and financial mechanisms for increase of carbon stocks, ii) Incentives for conservation and sustainable management of natural forest, iv) Governance Strengthening in forest lands, v) Improved Forest Management, and vi) Promotion of competitively and legality of chain value in forest products.	<ul style="list-style-type: none"> <li>• Limited extension system.</li> <li>• Extension system saturated by demand</li> <li>• Level of methodological complexity for MRV</li> </ul>	<ul style="list-style-type: none"> <li>• High potential for emission reduction</li> <li>• Generation of employment and non carbon benefits.</li> <li>• High social benefits / non carbon benefits</li> </ul>

## 6. Stakeholder information Sharing, Consultation and Participation

**6.1 Stakeholder engagement to date on the proposed ER Program**  
*Please describe how key stakeholder groups have been involved in designing the proposed ER Program, and summarize issues raised by stakeholders, how these issues have been addressed in the ER Program to date, and potential next steps to address them.*

For the full and effective participation of the stakeholders interested in the ER Program proposal, the government used the institutional mechanisms established since 1989 for improving forest government. These mechanisms will be further reinforced by the elaboration and implementation of the ER Program.

### Stakeholder involvement in REDD+ Strategy options promoted by CONAP

The process of establishing the Guatemalan national system of Protected Areas (SIGAP) started in 1989, enabled by article 19 of the Protected Areas Law (Decree 4-89). This law establishes mechanisms for participation of communities in the management of protected areas, through the conclusion of sustainable use concessions contracts between communities or private users and CONAP in the protected areas under the latter's administration, to the extent that this is allowed by the protected area's master plan. During the 1990s, fourteen 25-year concession contracts were signed for areas within the multiple use zone of the Northern Petén (See Annex XIII). The results achieved through the concession contracts to date have surpassed expectations, as they have helped to slowed down the advance of the agricultural

frontier, control illegal logging, generate major sources of employment and increase the revenues of communities holding concessions. They have also helped to develop the technical and administrative capacities of the communities, and most important of all, changed their attitudes to and their perceptions of the forest.

CONAP also uses co-management contracts, through which it involves NGOs – and through them, the communities living in and around the parks – in the management of protected areas (See Annex VI). One of the major intervention strategies planned under the ER Program is to strengthen this process of direct community involvement in emissions reductions activities and in sharing the benefits derived from them. All the pilot REDD+ projects planned, or already under implementation, inside protected areas include community participation and benefit sharing activities and communities have been directly involved in project design and validation, including Free Prior Informed Consent (FPIC) processes.

### **Stakeholder involvement in REDD+ Strategy Options promoted by INAB**

As explained earlier, the policy instruments used by INAB for protection, management and rehabilitation of forest cover include mechanisms for participation and consultation with communities, local government and Development Councils. The strategy options retained under the ER Program will build on this participation of local groups in design, implementation and management of these policy instruments. For example, the PROBOSQUE program, supported by a Law that is being deliberated by the Congress of the Republic, is an initiative that has originated from participatory processes with communities and local governments facilitated by INAB. This program and the other programs that INAB has developed (PINFOR and PINPEP) include participatory mechanisms that the ER Program will build on and strengthen further.

The Sustainable Fuelwood Use Strategy is another one of the options that has benefited from extensive consultation and participation processes, and that has involved grassroots groups, local government, the private sector and relevant government institutions. This participation process is reflected in the design of the Strategy, which will be implemented under the ER Program. Mechanisms for participation during the implementation phase will build on experience in the design phase, and will concern prioritization of intervention areas, activities to be implemented and selection criteria for participants, among others.

The development of the present ER PIN was made possible through the joint efforts of government, civil society, indigenous peoples and local communities that have been involved in the REDD+ Readiness process, and that together form the Group on Forests, Biodiversity and Climate Change (GBByCC, See Annex V), which also held a workshop on the ER PIN.

The themes that were discussed most in the GBByCC workshop were:

- Whether the implementation focus of the ER Program should be national or sub-national. It was decided that the ER Program would be sub-national and that it would focus on the areas where most of the remaining forest was and where deforestation rates were highest.
- The monitoring and reporting approach and the information available for projecting emissions reductions into the future.

Some of the questions related to these themes could not be completely addressed during the workshop, so it was decided that these would be resolved as the process advanced and more information became available. It was also proposed that consultations would be held to discuss specific technical alternatives with thematic experts prior to implementation of the ER Program.

Because it was not possible to ensure the participation of all the stakeholders in the first workshop, a second workshop was held on 6 February 2014, which focused on indigenous platforms, including the Network of Indigenous Authorities and Organizations, the National Network of Organized Communities benefiting from PINPEP, and the Forestry Alliance. Many suggestions from the participants were included in the ER Program proposal.

### **Stakeholders, especially Indigenous Peoples, involvement in the process of consultation of the ER-PIN program**

Mechanisms for participation during the implementation of the ER program will be built on existing experience. It is important to highlight that given high diversity in Guatemala, INAB, CONAP and MAGA

have strong participation and consultation platforms already established. These platforms have been strongly involved in the National forest management in the design and implementation of several forest policy instruments, these platforms contain the stakeholders of the ER Program and are described in Section 3.2 “sub component 1”.

Several participation and consultation meetings and workshops have been held with ER Program with Indigenous People and local communities, amongst other stakeholders, which are summarized in Table No. 10. These consultation and participation activities with all stakeholders for the development and implementation of the ER Program will continue throughout the program lifetime.

**Table No. 10 Participation and consultation activities held regarding ERPIN**

<b>Date and place</b>	<b>Objective</b>	<b>Sectors participating</b>	<b>Consulted topics</b>
January 15-17, 2014, Antigua Guatemala, Sacatepéquez	First technical workshop to develop ERPIN	Government National NGOs International NGOs Private sector Multilateral agency	Thematic local experts were engaged to discuss the options for each technical issue, to describe the pros and cons of each one, and to reply to questions and proposals
February 6, 2014, Guatemala City, Guatemala	To join efforts between the Government with indigenous peoples and local communities for the ER-PIN development	Government Indigenous peoples and local communities International NGOs	Involvement of stakeholders and participation level Land tenure and resources. Grievance Redress Mechanism
August 14, 2014, Santa Elena, Petén	Workshop to validate the ER-PIN proposal with key stakeholders: REDD+ Group of implementers	Government REDD + Implementers International NGOs Multilateral agency	Communication of the progress of the ERPIN document. Present emissions scenarios for Northern Lowlands Region (Tierras Bajas del Norte) according to methodologies: VCS project VM0015, JNR-VCS and CF Methodological Framework of the Carbon Fund, as well as its implications for the pilot projects.
18 August, 2014, Guatemala City, Guatemala	Workshop to validate the ER-PIN proposal with key stakeholders: local communities and indigenous peoples	Government Indigenous peoples and local communities International NGOs Multilateral agency	Communicate the advance and stage of the ERPIN document. Involve local communities and indigenous peoples.
26 August, 2014, Guatemala City, Guatemala	Workshop to validate the ER-PIN proposal with key stakeholders: civil society and Academy	Government Indigenous peoples and local communities International NGOs Multilateral agency Academy	To communicate and consult the new ERPIN program scheme. Discuss the progress of the new document to present in October 2014

The main issues discussed during the meetings and workshops with stakeholders are:

**a. How will the rights to emissions reduction be addressed**

Emission reductions rights are clearly addressed by the Framework Climate Change Act, article 20. It has been agreed with different stakeholders, that where the State does not own the emission reductions, a power of representation provided by land owners will allow the Government to legally represent them for the purposes of ERPA signature. This instrument will also include a transparent mechanism for benefit sharing under the guidelines of the Carbon Fund or other mechanisms to respond to the requirements of UNFCCC. Such instruments were agreed to be developed during the ER program design.

**b. Adjustment to the Carbon Fund Methodological Framework and the new national program approach**

Stakeholders recognize the need to be nested within sub national jurisdictions (JNR-VCS methodology, scenario 2), this was agreed to be done after ER – PIN is confirmed selected by the CF-FCPF.

**c. On carbon accounting:**

Stakeholders that have an important advance in REDD+ pilot actions under VCS standard, recognized the need to establish a system that avoids double accounting of emission reduction in coordination with Government and the National REDD Strategy. It is also recognized by Pilot REDD+ actions (projects) the

need of securing the volume offered to the CF-FCPF in an ERPA to be signed with the Government of Guatemala.

**d. The importance of building local forest monitoring capacity in communities and indigenous peoples:**

Government institutions should build forestry, social and biodiversity monitoring capacities in local communities and indigenous peoples so they can actively become part of the National Monitoring and Reporting System. Extension services are needed to be implemented.

**e. The rights and knowledge of indigenous peoples:**

In accordance with National legal framework, Guatemala promotes respect for the rights and decisions of indigenous peoples and local communities in REDD+. The Government keeps an open dialogue among all stakeholders to reach agreements. It is important to state that the Indigenous Authorities and Organizations Network<sup>12</sup> of Guatemala publicly requested the Congress the prompt approval of the PROBOSQUE Act proposal, since its social basis have been benefited in different ways by the forestry incentive programs PINFOR and PINPEP.

**6.2 Planned outreach and consultation process**

*Please describe how relevant stakeholder groups will participate in further design and implementation of the proposed ERProgram and how free, prior and informed consultation leading to broad community support for the ER Program and key associated features, including the benefit-sharing arrangement, will be ensured. Please describe how this process will respect the knowledge and rights of Indigenous Peoples and local communities, by taking into account relevant international obligations, national circumstances and laws.*

A big effort has been made to ensure that all the consultation processes at national and local level are clear, inclusive and transparent. Many lessons have been learned by INAB and CONAP during the PINPEP and community concessions consultations processes, as described in section 3.2 (sub component 1b) above.

The most concrete experiences that have been organized so far in this respect are the information and capacity building events that REDD+ Pilot Projects have carried out in their project areas. For example, when Guatecarbon carried out its FPIC process in 2012, it consulted directly with 70% of the population in its project area.<sup>13</sup> Nine community concessions were consulted, through their Boards and General Assemblies. This process reinforced communication between the proponents (CONAP, community concession holders) and partners such as ACOFOP, RA and WCS and approval to go ahead with the REDD+ Project was obtained.

Sotzil and UtzChe, Indigenous Peoples and Forest Community organizations, are involved directly in national REDD+ Readiness, and are actually promoting the participation of other indigenous, community and women's groups that are not yet involved in the national process, through bilateral meetings and the transmission of independent information, enabling their active involvement in the process.

The REDD+ communication platform that is planned to be established under the national readiness process will also be mobilized to share updated information on the ER Program and its implementation.

Guatemala has a legal and institutional framework for citizen participation based on national laws and international agreements, among which the following deserve special mention: the Political Constitution of the Republic of Guatemala, the Decentralization Law (Decree 14-2002), the Law on Urban and Rural Development Councils (Decree 11-2002), the Municipal Code, the Agreement on the Rights of Indigenous Peoples (Peace agreements, 1996); ILO Convention No 169, the UN Declaration on the Rights of Indigenous Peoples, the UN Convention on Biological Diversity, and Law Initiative 3694 on consultation with Indigenous Peoples. In agreement with its legal framework and building on the experiences of other countries in the region, Guatemala has promoted the respect of the rights and decisions of indigenous peoples and local communities during REDD+ Readiness and will continue to do so, maintaining an open dialogue among all the key actors and trying to reach consensus.

<sup>12</sup>Paid public communication, Prensa Libre 31 de julio de 2014 (See Annex XX)

<sup>13</sup>See Annex XIII

## 7. Operational and financial planning

### 7.1 Institutional arrangements

*Please describe the governance arrangements anticipated or in place to manage the proposed ER Program (committee, task force), and the institutional arrangements among ER Program stakeholders (i.e., who participates in this ER Program, and how, including the roles of civil society organizations and forest dependent communities).*

The Proposal of Guatemala's ER Program is developed by the Inter-institutional Coordination Group –GCI- conformed by MAGA, MARN, INAB and CONAP. GCI members (Annex II) are committed to be guidance high level committee for the development and implementation of the National REDD + Strategy and the ER Program. The GCI will continue prevailing as the board of the future ER Program.

The political platform of the GCI, appointed a working group composed of government experts from every institution (technical GCI), which has the technical and financial support from the Inter-American Development Bank –IDB- and the Agency of the United States of America International Development - USAID- through the country program Climate, Nature and Communities in Guatemala –USAID/CNCG- and the Regional Climate Change Program –USAID/RCCP.

The ER Program management unit doesn't exist at this moment, so during preparation process and ER program design, it would be needed to structure a special management unit that. The ER program management unit will have neither administrative, nor technical leadership. The expected activities framework support of the ER program entity supporting MARN, CONAP, INAB and MAGA is:

- Institutional arrangements advisory and legal management, so all arrangements needed are establish between Government institutions, project proponents, project participants and other counterparties involve in multiple REDD+ actions implemented
- Benefit sharing arrangements, advisory and implementation of agreements for benefit sharing, and administration of the financial mechanisms that will allow transparently managing benefits from REDD+ funds raised and monetization through ERPAs signed with multiple bilateral, multilateral, private and other type of counterparties,
- Transactional and Fundraising management, representing government and project proponents when required to manage relationships, present and negotiate terms of ERPAs, as the same as complementary fundraising activities and others that could support generating new sources of funds for the National program, activities and actions to be implemented,
- Communications of REDD+ program at the national and international level with key stakeholders of the REDD+ national program,
- NationalStrategyMonitoring and reporting
  - a. Safeguards accomplishment, guidance, advisory and monitoring,
  - b. Stakeholder consultation, guidance, advisory and monitoring,
  - c. Consolidatednationalemisionreductionsreport
  - d. Attendingannualnationalverifications
  - e. Issuance of Emission reductions to be traded to National Program transactions
  - f. Coordinate with national registry and REDD+ projects nested on issuances

The implementation of REDD+ on the field actions will be lead by INAB, CONAP and MAGA through existing operative / technical mechanisms and special execution units that will be strengthen to establish appropriate install operative capacity:

- PINPEP, PINFOR, PROBOSQUE and technical country level operative structure of INAB, which is lead by the Board of directors of INAB.
- CONAP through its technical / administrative organizational structure at national level which is lead by the office of the Executive Secretary, in cooperation with SIGAP members, co managers and concessionaries.
- MAGA country level technical and administrative organizational structure and its special programs.

As previously describe, the actual policy framework will be strengthen, new policy measures developed and implemented as part of the REDD+ Strategy. Additional funding raised will allow strengthening and

supporting new personnel, equipment and the development of capabilities will be key to guarantee operative capacity on the field, and support the implementation of REDD+ activities and actions by CONAP, MAGA and INAB.

Moreover, governance of ER Program implementation depends of the ability of CONAP, MAGA, INAB and MARN to engage stakeholders that will implement REDD+ actions on the field. (See Annex V).

### **7.2 Linking institutional arrangements to national REDD+ implementation framework**

*Please describe how the institutional arrangements for the proposed ER Program fit within the national REDD+ implementation framework.*

The institutional arrangements for the ER Program are identical with those used for national REDD+ Readiness, and there is no plan to create additional ones. The executive body GCI, which has a political and a technical arm, and the multi-stakeholder platform GBBYCC (both described in section 2.2) are well-established and have clear modus operandi.

### **7.3 Capacity of the agencies and organizations involved in implementing the proposed ER Program**

*Please discuss how the partner agencies and organizations identified in section 3.1 have the capacity (both technical and financial) to implement the proposed ER Program*

The Government of Guatemala has the technical and financial capacity to implement the ER Program, which will be used to scale up and strengthen the policy instruments and institutional mechanisms for sustainable forest management that have been established and implemented over the past 15 years.

**The Ministry of Environment and Natural Resources (MARN)**,<sup>14</sup> is the government entity specializing in environmental and natural goods and services of the Public Sector. It is the REDD+ and UNFCCC focal point.

**The National Forest Institute (INAB)**<sup>15</sup> is a public, decentralized body that has institutional autonomy, legal status, proper resources and administrative independence. It is the main authority for the public administration of forests. It currently has more than 300 employees, who work in 9 regional and 33 sub-regional offices. For 2014, MAGA assigned INAB with a budget of 109,806,729.00 Quetzales, or about USD 14 million.

**The National Protected Areas Council (CONAP)**<sup>16</sup> is a government entity with legal status that reports directly to the Presidency of the Republic through MARN. CONAP is the executive and operational body responsible for overseeing the national protected areas system (SIGAP) and for biodiversity conservation nationwide, including the sea coasts and the airspace. The vision of CONAP is to safeguard the conservation and sustainable use of biological diversity and protected areas of Guatemala, as well as the ecosystem goods and services they provide for present and future generations, through designing, implementing and enforcing the application of policies, rules, incentives and strategies, in coordination with other actors.

Within the protected areas prioritized under the ER Program, CONAP has a strong professional and technical presence, as well as guards and administrative personnel located in regional offices in the departments of Petén, Izabal, Zacapa, Quetzaltenango and Huehuetenango. At central level, CONAP has strengthened its climate change unit (with a director, two technicians and one administrative assistant), which will help to coordinate all REDD+ initiatives in protected areas, with the help of the above-mentioned regional offices. CONAP has a budget of about USD 12 million per year.

**The Ministry of Agriculture, Livestock and Food (MAGA)**<sup>17</sup> is, like CONAP, INAB and MARN, a member of the GCI for REDD+, and like the other GCI members, is establishing strategies, plans and activities for reducing greenhouse gas emissions, as foreseen under the 2013 Climate Change Framework Law. MAGA

<sup>14</sup><http://www.marn.gob.gt>

<sup>15</sup><http://www.inab.gob.gt/>

<sup>16</sup><http://www.conap.gob.gt/>

<sup>17</sup><http://www.maga.gob.gt/>

has various policy tools that support and complement emissions reduction efforts in the land use change sector. Guatemala has about 1.3 million hectares of permanent cash crops (coffee, cocoa, rubber) and about 1.8 million hectares of pasture, together accounting for about 30% of the country's land area. Both cash crop and pasture systems have tree cover, equivalent to between 20 and 50 tCO<sub>2</sub> per ha. MAGA supports these production systems through technical and financial assistance, especially in buffer zones for emissions reduction efforts. MAGA is now developing a proposal to support agro-silvo-pastoral systems in livestock raising areas. This will help to mitigate the emissions from land use change in areas adjacent to those where REDD+ initiatives are developed, especially GuateCarbon and Lacandon in the REDD+ region TierrasBajas del Norte.

MAGA intends to increase the adaptation and mitigation capacity of the agricultural sector in Guatemala vis-à-vis climate change, through appropriate technologies that are environmentally sustainable, taking into account the ecological, biophysical and socioeconomic conditions of the country. With regards to mitigation, MAGA plans to help reduce greenhouse gas emissions originating from agricultural activities. Strategic interventions include increasing forest cover in middle and high watersheds, soil conservation, introduction of agroforestry systems, emphasizing silvopastoral systems, increase in the production of organic fertilizers, productive rehabilitation of land to improve local economies.

To date, these activities have been implemented with domestic budgets and financial incentive systems have already been developed to promote some of them, such as soil conservation and horticulture (PINFRUTA). MAGA also has the technical capacity to implement these programs, and its Climate Change Unit is developing new activities that will be promoted in the field by the National Agricultural Extension System (SNEA), which has offices in all the municipalities of the country. MAGA's Directorate of Strategic Geographic Information and Risk Management (DIGEGR) generate imagery and thematic maps to support planning, monitoring and evaluation of these actions.

The above four institutional members of the GCI have also formed a Forest Mapping Group (GMF) together with the Universities Del Valle de Guatemala and Rafael Landivar. This specialized working group is currently building up its activities to include land use change mapping, as well as the monitoring and evaluation of social and environmental safeguards.

**7.4 Next steps to finalize the proposed ER Program implementation design (REL/FRL, ER Program monitoring system, financing, governance, etc.). Provide a rough timeline for these steps.**

The following Table summarizes the next steps to finalize the ER Program proposal.

**Table No. 11 Design, implementation and Carbon Fund outcome payments**

Description	2012	2013	2014	2015	2016	2017	2018	2019	2020
Design of the information exchange mechanism									
Detailed analysis per REDD+ region of agents and underlying causes of deforestation									
SESA: identification of actors and strategic options									
SESA, Environmental and Social Management Framework (ESMF), Complaints Mechanism(MAR)									
Baseline emissions from deforestation at sub-national									
Emission baselines for degradation and increased carbon stock									
Approval of the MRV system for the ER Program									
Implementation of MRV system									



### 7.5 Financing plan (in US\$ million)

*Please describe the financial arrangements of the proposed ER program including potential sources of funding. This should include both near-term start-up cost and long-term financing. If the proposed ER program builds on existing projects or programs that are financed through donors or multilateral development banks, provide details of these projects or programs, including their financing timeframe. Use the table in Annex I to provide a summary of the preliminary financial plan*

Annex No. IA presents the summary chart of the overall uses and sources of funds estimated for the ER Program during 2010–2020 time period, first decade of the proposed ER program.

The financing plan was developed by defining four different levels of uses identification and quantification, these are:

- **Level 1:** Administration of the ER Program, which includes the National mechanism proposed for monetary benefit sharing, and all administrative support expected for the program management unit described in this document.
- **Level 2:** Policy development, communication, consultation and implementation. Along the document multiple new policy measures are identified to be implemented, most of them are related to forestry sector in REDD+ strategy. In addition, costs related to support implementation of recently approved Climate Change law and the improvement of other existing policies.
- **Level 3:** REDD+ activities carried out by Government institutions providing support to on the field activities implementation. Costs quantified are related to national operations in protected areas by multiple CONAP functionaries and field offices supporting conservation and sustainable management at protected areas. Besides, all technical activities to be carried out by INAB and MAGA that are related to increasing carbon stocks by promoting sustainable livelihoods, reforestation, agroforestry and conservation in private, community and municipal lands at national level.
- **Level 4:** the costs associated to sharing monetary REDD+ finance with land owners through INAB national incentives programs' infrastructure. The benefit sharing was established in accordance to the determination of the margin cost of MRV for INAB, which was estimated to be USD 1.22 / ER. Assuming market price for ERs to be USD 5.00. The remaining USD 3.88 shall be distributed to the land owners in accordance preliminary arrangements agreed with REDD+ pilot project implementers, as the same as Climate Change Law that clearly assign property over emission reductions to land owners (municipalities, private or smallholders).

In order to better understand the process of calculation, assumptions used, as the same as the sources of information identified for all data used in the financing model are presented in Annex I B, where a table will guide reader on how every one of uses and sources contained in the financing plan form were rationalized. There are important issues to highlight:

- a) The overall implementation cost of the ER Program from 2010 to 2020 is USD 488.59 million.
- b) The Government of Guatemala is securing 71% of the total investment required by the ER Program. Nearly 75% of that amount is provided by PINFOR, PINPEP and PROBOSQUE forest incentive programs, all of them funded by Forest Law, PINPEP Law and PROBOSQUE law proposal under current discussion at the Congress of Guatemala. The remaining 25% is related to institutional budget of CONAP and INAB that is secured at their respective institutional budgets. It is important to note that strong commitment of the people of Guatemala is evident by funding, with National budget, an important amount of the overall policies supporting REDD+ implementation. This is, as previously indicated in this document, a behavior that has been present in Guatemala during last fifteen years of PINFOR incentives program implementation.
- c) REDD+ funding is planned to be sourced to support important new policy measures, capacity building, institutional strengthening, and on the field REDD+ activities implemented in poorest rural areas of the country by smallholders, municipalities, and private land owners.
- d) The Global Investment Plan presented in Annex I C presents how ER margin cost is efficient (USD 5.18 / ER) and distributed along the four levels of financing planning, hence supporting policy implementation, REDD+ activities implemented by government, and rural communities, owners and municipalities by sharing monetary benefits.

## 8. Reference Level and Expected Emission Reductions

**8.1 Approach for establishing the Reference Emission Level (REL) and/or Forest Reference Level (FRL)**  
*Please briefly describe how the REL/FRL for the proposed ER Program has been or will be established. Describe how the approach for establishing the REL/FRL is consistent with UNFCCC guidance available to date and with the emerging Methodological Framework of the FCPF Carbon Fund, and with the (emerging) national REL/FRL (or with the national approach for establishing the REL/FRL).*

Guatemala plans to use the Jurisdictional Nested REDD+ as its frame for forest carbon accounting and as a strong method that will allow guarantee of compliance with Methodology Carbon Fund (MF). JNR will allow generation of high-quality, convertible and verified emission reductions that can be given legal value through a variety of market and non-market mechanisms, including the FCPF Carbon Fund. In addition, the JNR standard is supported by the VCS Program to carry out verification and accreditation, (when needed) and registration of emission reductions, will guarantee the permanence of emissions reduction beyond the life of the Carbon Fund, through shared buffer mechanism.

The national reference level is being developed progressively on the basis of the elaboration of sub-national reference levels for the five different REDD+ Regions. The current ER Program proposal will consider the whole country as accounting area with differential activities and treatment of the REDD+ regions. One of the REDD+ Regions, Tierras Bajas del Norte, has already developed a Reference Level based on a voluntary market methodology (Avoided Unplanned Deforestation of the VCS), which will hopefully be independently verified shortly. Reference levels for the other four REDD+ Regions will be developed over the coming two years. A harmonization process guaranteeing the consistency of data, methods, products and transparency of the process across the different REDD+ Regions will allow for the subsequent elaboration of a reliable national reference level.

There is already historical data available on change of land use for the 2001-2010 period and it was used to estimate preliminary reference level for this proposal. Processes to review and improve this land use change information are underway. Geographically explicit degradation data are scarcer, apart from data on fire scars between the 1998-2009 period gathered by the Geospatial Information System for Managing Fires Studies and datasets on the use of fuelwood are also available, although they are not linked to spatially explicit data derived from remote sensing (published in the study Supply and Demand of Fuelwood in Guatemala). Challenges to develop a complete and definitive Reference Level include the facts that the resources required to establish reference levels at the National Level are currently unavailable and that capacity needs to be strengthened at the institutional level to ensure all analysis can be done internally and needs not hiring international experts. The outline of the proposed methodological approach for emissions accounting in Guatemala's ER-Program is presented in table 12.

**Table No. 12 Proposed methodological approach for national emissions accounting under Guatemala's ER-Program**

Emissions / removals source	Data element	General approach, data sources and comments
Deforestation	Activity data	<ul style="list-style-type: none"> <li>• National land cover maps</li> <li>• Landsat TM and ETM imagery from circa 2001, 2006, and 2010</li> <li>• Current accuracy estimates: circa 2001 = 82%, circa 2006 = 92%, circa 2010 = 91%</li> <li>• Reviewing and improving maps</li> </ul>
	Emission factor	<ul style="list-style-type: none"> <li>• National Forest Inventory</li> <li>• Systematic sampling in 2002</li> <li>• Above- and below-ground live tree biomass</li> <li>• 203.2 tCO<sub>2</sub>e/ha</li> <li>• Emission factor under review and improvement</li> </ul>

Forest Degradation	Activity data	<p><b>Fuelwood:</b></p> <ul style="list-style-type: none"> <li>• Non-renewable fraction of biomass harvested (WISDOM model)</li> </ul> <p><b>Fire:</b></p> <ul style="list-style-type: none"> <li>• Fire scar mapping using mid-resolution remote sensing data (LANDSAT, ASTER)</li> </ul> <p><b>Legal logging:</b></p> <ul style="list-style-type: none"> <li>• Extraction rates reported by the National Government applied to Pearson et al. (2014) methodological approach</li> </ul> <p><b>Illegal logging:</b></p> <ul style="list-style-type: none"> <li>• Illegal logging monitoring system will be established with financial assistance from Carbon Fund and more details will follow in the ER-Program development</li> </ul> <p><b>Overgrazing:</b></p> <ul style="list-style-type: none"> <li>• Not a significant driver of degradation in Guatemala</li> </ul>
	Emission factor	<p><b>Fuelwood:</b></p> <ul style="list-style-type: none"> <li>• Average wood density of harvested biomass</li> </ul> <p><b>Fire:</b></p> <ul style="list-style-type: none"> <li>• Biomass estimates from NFI – fraction of biomass combusted will be derive from literature and permanent sample plots if available</li> </ul> <p><b>Legal logging:</b></p> <ul style="list-style-type: none"> <li>• Average wood density of commercial species for ELE, standing live biomass from NFI for LDF, and National statistics on reported infrastructure constructed for logging for LIF; following Pearson et al. (2014) methodological approach</li> </ul> <p><b>Illegal logging:</b></p> <ul style="list-style-type: none"> <li>• Average wood density of commercial species for ELE, standing live biomass from NFI for LDF. An assumption that illegal loggers do not build infrastructure will be made.</li> </ul> <p><b>Overgrazing:</b></p> <ul style="list-style-type: none"> <li>• Not a significant driver of degradation in Guatemala</li> </ul>
Forest carbon stock increase	Activity data	<p><b>Induced regeneration:</b></p> <ul style="list-style-type: none"> <li>• Rates of forest gain from National Land Cover maps</li> <li>• Landsat TM and ETM imagery from circa 2001, 2006, and 2010</li> <li>• Current accuracy estimates: circa 2001 = 82%, circa 2006 = 92%, circa 2010 = 91%</li> </ul> <p><b>Plantations:</b></p> <ul style="list-style-type: none"> <li>• Plantation rates monitored and reported by INAB (including PINPEP, PINFOR, PROBOSQUE and voluntary plantations)</li> </ul>
	Emission factor	<p><b>Induced regeneration:</b></p> <ul style="list-style-type: none"> <li>• Carbon accumulation curve developed for secondary forests based on published literature for Central America and adjacent Mexican states</li> </ul> <p><b>Plantations:</b></p> <ul style="list-style-type: none"> <li>• Revegetation: Carbon accumulation curve developed for secondary forests based on published literature for Central America</li> <li>• Agroforestry: Carbon accumulation curve developed for agroforests based on published literature for Central America</li> <li>• Timber: Published carbon accumulation curves for main timber planted in Guatemala</li> </ul>

In regards to carbon pools to be considered for the final Reference Level, it is planned to consider at least above- and below-ground live biomass. At the moment, it is not planned to include other carbon pools (litter, deadwood, soil carbon, wood products) because of lack of information, but this could be reconsidered later if appropriate. Similarly, it is estimated that emissions related to forest fires and fuelwood will be included. All estimates thus obtained will be integrated in full in the national climate change communications and in subsequent versions of the greenhouse gas inventory of the country.

It is expected that the proposed Reference Level provides information on the impacts of the mitigation actions planned, including the reduction of deforestation, increase in carbon stocks through forest regeneration and reforestation and the reduction of forest degradation associated with fuelwood extraction and forest fires. Additional mitigation activities could be included and monitored subsequently, once methods are improved and more information becomes available.

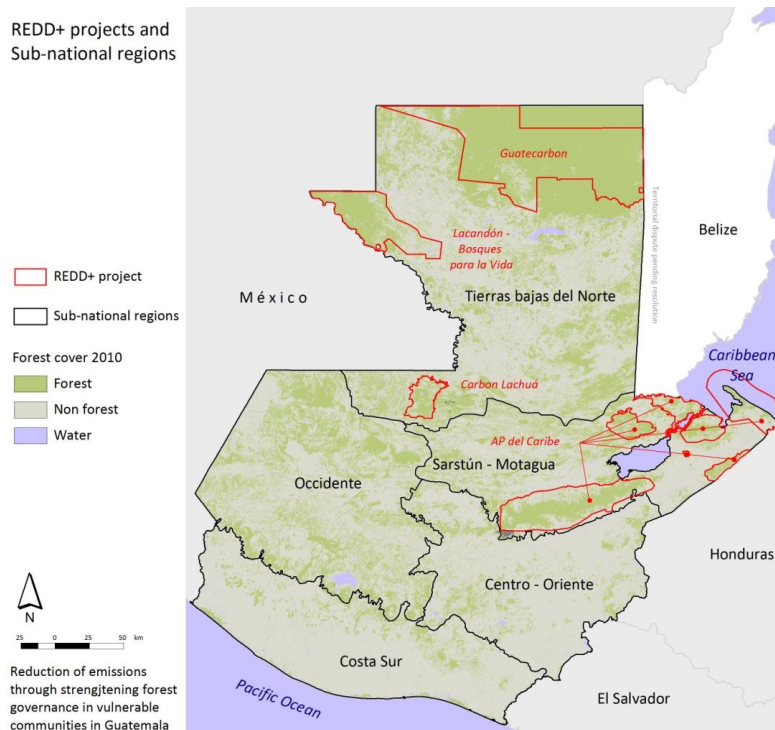
The challenge of nesting of existing VCS REDD+ projects into the ER-Program will be approached from various perspectives: technical and methodological alignments, consistency of the consultation process and safeguard information systems, streamlining benefit sharing instruments, and finally refining the feedback and grievance redress mechanisms. All these components will be addressed in a participatory manner with project proponents and relevant stakeholders, and are expected to be resolved following a step-wise approach as presented in the following Table.

**Table No. 13** Proposed evolutionary process for nesting existing REDD+ projects into Guatemala’s ER-Program

Steps	Tasks	Comments and potential issues	Schedule
Step 1	Review the three VCS JNR scenarios and discussion of implications in each of the existing VCS projects in Guatemala and ER-PIN	Scenario 1 of VCS JNR does not conform with the Carbon Fund’s Methodological Framework as the Jurisdiction is only required to present a baseline estimate, but not MRV. This Scenario is designed to foster REDD+ projects as the Jurisdiction cannot claim carbon credits generation.	October, 2014 to June, 2015
Step 2	Discuss nesting implications related to technical alignments, safeguards requirements, benefit-sharing options, feedback and grievance redress mechanism	Benefit-sharing options likely will not be limited to money disbursement and may include technical agricultural and forestry extension, improved accessibility to credit lines to landholders that aim to reduce emissions from business-as-usual practices, assistance in identifying markets for forestry and agroforestry products, etc.	
Step 3	Select the nesting approach and describe it in the ER Program Document	The selected option should build upon the discussions held at previous steps. Effective feedback and grievance mechanism needs to be developed to accommodate and document potential disagreements.	June to December, 2015
Step 4	Negotiate the proposed nesting approach in the ERPA with the World Bank	The ERPA negotiated with the World Bank’s Carbon Fund will confirm the approach selected.	
Step 5	Grandfathering period for projects to adapt to the REDD+ requirements set out under the ER-Program	Technical and financial assistance will likely be required to allow projects to adapt to the REDD+ requirements set out in Guatemala’s ER-Program	

There currently are four proposed REDD+ projects within the ER-Program’s accounting area: Guatecarbon, Lacandon and Lachua in Tierras Bajas del Norte, and REDD+ Caribe in Sarstun-Montagua (See Figure No. 2). These projects are all at various stages of development, and different technical and methodological adjustments will be required for each in adapting to the carbon accounting approach proposed under the ER-Program.

**Figure No. 2** Proposed REDD+ projects



Tierras Bajas del Norte (TBN) has already developed a VCS JNR baseline for deforestation employing an adaptation of the VCS approved methodology VM00015. Although adjustments to TBN’s baseline are required to conform to the Carbon Fund’s Methodological Framework (CF MF) requirements, an analysis of compatibility between the VCS JNR and the CF MF conducted by Gibbon and Pearson (2014)<sup>18</sup> shows an 85% direct compatibility between the two standards (Table No. 14). The table displays each of the CF MF’s indicators and assigns a color rating to each according to their direct compatibility with the VCS JNR standard.

**Table No. 14 Analysis of compatibility between each of the Carbon Fund Methodological Framework indicators and the VCS JNR standard.**

VCS Element	CF MF indicator and associated color rating											
Scale and ambition	1.1	1.2	2.1									
Scope and methods	3.1	3.2	3.3	4.1	4.2	5.1	6.1	6.2				
Uncertainties	7.1	7.2	8.1	8.2	9.1	9.2	9.3					
Reference levels	10.1	10.2	10.3	11.1	11.2	12.1	13.1	13.2	13.3	13.4		
Measurement, Monitoring and Reporting on ERs	14.1	14.2	14.3	15.1	16.1							
Accounting for Displacement (Leakage)	17.1	17.2	17.3	17.4								
Accounting for Reversals (Non-permanence)	18.1	18.2	19.1	20.1	20.2	21.1	21.2					
Calculation of ERs	22.0	23.0										
Actions to Meet WB and Cancun Safeguards	24.1	24.2	25.1	25.2	26.1	26.2	26.3					
Drivers, Land and Resource Tenure Assessments	27.1	27.2	28.1	28.2	28.3							
Benefit sharing	29.0	30.1	31.2	32.1	33.1							
Non carbon benefits	34.1	34.2	35.1	35.2								
ERPA Signing Authority and Transfer of Title	36.1	36.2	36.3	37.1	37.2	37.3	37.4	38.1	38.2	38.3	38.4	

Rating:
NA
Fully compatible
Likely compatible
Minor gap
Potentially major gap
Incompatible

Source: Gibbon and Pearson, 2014

There are 9 identified issues, including topics of degradation, emissions accounting, projection of emissions and others that need to be addressed in order to conform to the CF MF. Details about these issues are described in Annex XV A. These issues will be addressed in similar manner across the other REDD+ regions.

**8.2 Expected REL/FRL for the ER Program**  
*Please provide an estimate of the REL/FRL for the proposed ERProgram area. Even a very preliminary estimate would be helpful.*

A preliminary estimation of the historical emissions covering the whole country of Guatemala was conducted and reported by five REDD+ regions that have been delineated using physical and socioeconomic characteristics that determine land use change and degradation dynamics. The reference period used is 2001-2010 and activity data used is land cover in circa 2001, 2006 and 2010 (average date of remote sensing data used is 2000.7, 2006.6 and 2010.4 in decimal years). This preliminary report includes emissions and removals related to CO<sub>2</sub> from above- and below-ground live biomass in trees above 10 cm in DBH.

Information used to estimate these preliminary historical emissions includes a) activity data derived from land cover maps in circa 2001, 2006 and 2010 that used LANDSAT TM-ETM images and was published by INAB, CONAP, UVG and URL in 2011<sup>19</sup> and 2012<sup>20</sup> and b) emission factors derived from the National Forest Inventory conducted in 2002-2003 and published by FAO in 2004<sup>21</sup>.

<sup>18</sup>Gibbon, A.E. and Pearson, T.R.H 2014. A Gap Analysis of the FCPF’s Carbon Fund Methodological Framework relative to the VCS Jurisdictional and Nested REDD+ Requirements.

<sup>19</sup><http://www.sifgua.org.gt/Documentos/Informes/Cobertura/Mapa%20de%20cobertura%20forestal%20resolucion%20menor.pdf>

<sup>20</sup><http://www.sifgua.org.gt/Documentos/Informes/Cobertura/2010/INFORME/Memoria%20Tecnica%20Completa.pdf>

<sup>21</sup><http://www.fao.org/forestry/23224-015b0b120eb03aa8b646ce6e3095c7a6a.pdf>

Emission factors estimated indicate that when a transition from forest to non forest occurs the expected average emission is -203.2 t CO<sub>2</sub>e/ha, considering both above- and below-ground live biomass in trees with more than 10 cm DBH. When a transition from non forest to forest occurs we used 164.7 t CO<sub>2</sub>e/ha assuming that the transition is in to an "advanced secondary forest" as defined by the National Forest Inventory. Details of calculation of emission factors can be found in Annex XV B.

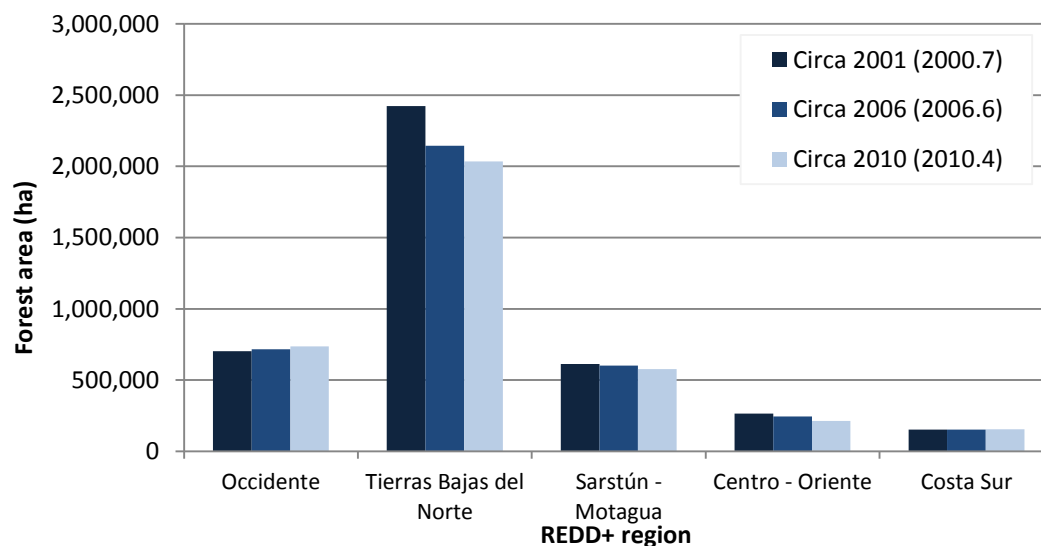
The emissions from deforestation as well as removals from enhancements will be refined with more data collection to add granularity to the emission/removal factors applied. All used information, including GIS layers and forest inventory databases is publicly available, either online or by request to any of the institutional authors. Accuracy and estimates for both, activity data and forest inventory data used to estimate emission factors is included in the official reports associated to the information resources listed above.

Forest area values extracted from the land cover maps in each of the dates available (circa 2001, circa 2006 and circa 2010) are shown in Table No. 15 and Figure No. 3. Full detail of calculations made can be found in Annex XV.C

**Table No. 15 Forest area by REDD+ regions and Guatemala in circa 2001, 2006 and 2010<sup>22</sup>**

Forest area (ha)	Circa 2001 (2000.7)	Circa 2006 (2006.6)	Circa 2010 (2010.4)
Occidente	703,327	715,055	736,248
Tierras Bajas del Norte	2,423,220	2,145,555	2,035,258
Sarstún – Motagua	612,388	601,927	575,630
Centro – Oriente	265,115	244,355	211,922
Costa Sur	150,883	151,322	154,335
<b>Guatemala</b>	<b>4,154,933</b>	<b>3,858,214</b>	<b>3,713,393</b>

**Figure No. 3 Forest area by year and REDD+ region**



Estimated values of forest loss, forest gain, forest loss rate and forest gain rate also extracted from the land cover maps in each of the dates available (circa 2001, circa 2006 and circa 2010) are shown in Table No. 16. Figure No. 4 shows a comparison of the rates of forest loss and gain estimated by REDD region and time period. Full detail of calculations made can be found in Annex XV C

**Table No. 16 Forest loss, gain estimates and yearly rates<sup>23</sup>**

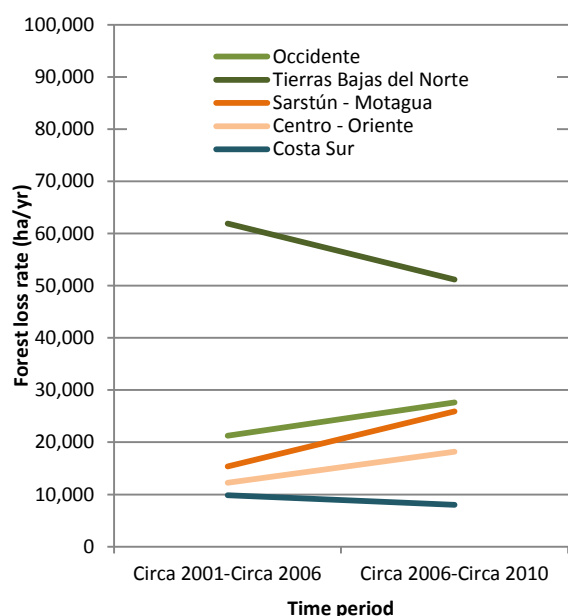
<sup>22</sup> Note that the values for Circa 2001, Circa 2006 and Circa 2010 represent data points in fixed dates corresponding to the average date of the land cover maps used as source. Detailed calculations can be found in Annex XV\_C.

<b>Forest loss (ha)</b>	<b>Circa 2001-Circa 2006</b>	<b>Circa 2006-Circa 2010</b>	<b>Circa 2001-Circa 2010</b>
Occidente	125,367	105,076	161,232
Tierras Bajas del Norte	365,182	194,566	528,641
Sarstún – Motagua	90,774	98,483	142,546
Centro – Oriente	72,226	69,008	107,974
Costa Sur	58,084	30,363	64,757
Guatemala	711,633	497,496	1,005,151
<b>Forest gain (ha)</b>	<b>Circa 2001-Circa 2006</b>	<b>Circa 2006-Circa 2010</b>	<b>Circa 2001-Circa 2010</b>
Occidente	137,094	126,268	194,153
Tierras Bajas del Norte	87,517	84,270	140,680
Sarstún – Motagua	80,313	72,185	105,787
Centro – Oriente	51,465	36,576	54,782
Costa Sur	58,523	33,376	68,209
Guatemala	414,913	352,675	563,610
<b>Forest loss rate (ha/yr)</b>	<b>Circa 2001-Circa 2006</b>	<b>Circa 2006-Circa 2010</b>	<b>Circa 2001-Circa 2010</b>
Occidente	21,249	27,651	16,622
Tierras Bajas del Norte	61,895	51,202	54,499
Sarstún – Motagua	15,385	25,917	14,695
Centro – Oriente	12,242	18,160	11,131
Costa Sur	9,845	7,990	6,676
Guatemala	120,616	130,920	103,624
<b>Forest gain rate (ha/yr)</b>	<b>Circa 2001-Circa 2006</b>	<b>Circa 2006-Circa 2010</b>	<b>Circa 2001-Circa 2010</b>
Occidente	23,236	33,229	20,016
Tierras Bajas del Norte	14,833	22,176	14,503
Sarstún – Motagua	13,612	18,996	10,906
Centro – Oriente	8,723	9,625	5,648
Costa Sur	9,919	8,783	7,032
<b>Guatemala</b>	<b>70,324</b>	<b>92,809</b>	<b>58,104</b>

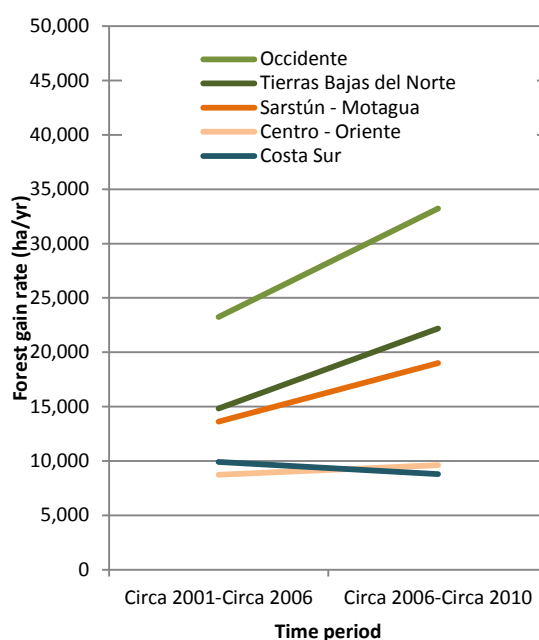
The evolution of forest loss and gain rates in the periods Circa 2001-Circa 2006 and Circa 2006-Circa 2010 is presented in the Figure 4. As shown in the forest loss rate graph, the rate for Tierras bajas de Norte appears to be decreasing slightly, while in all the other regions is moderately increasing, with the exception of Costa Sur. Forest gain is increasing between the two periods in Occidente, Tierras bajas del Norte and Sarstún-Motagua while in Centro-Oriente and Costa Sur is more or less stable.

**Figure No. 4 Forest loss and gain rates by period and REDD+ region**

<sup>23</sup> Note that the values for Circa 2001-Circa 2006 and Circa 2006-Circa 2010 are presented for illustrative value but the REL is calculated using the complete period of circa 2001-circa 2010. The periods are a consecutive and non overlapping delimited by the average date of the land cover maps used as source. Detailed calculations can be found in Annex XV\_C.



Forest loss rate



Forest gain rate

To estimate emissions from forest loss and removals from forest gain, emission factors were derived from the National Forest Inventory<sup>24</sup> that reported values of above-ground biomass of forest and non forest. Below-ground biomass was also estimated using by default equations suggested by IPCC<sup>25</sup>. Complete details of the development of emission factors can be found in Annex XV B. The expected forest loss, forest gain and net yearly emissions are presented in Table 17. (Details of calculations in Annex XV C

**Table No. 17** Expected yearly emissions from forest loss, removals from forest gain and net emissions from forest loss-gain<sup>26</sup>

<b>Emissions from forest loss rate (tCO2/yr)</b>	<b>Circa 2001-Circa 2006</b>	<b>Circa 2006-Circa 2010</b>	<b>Circa 2001-Circa 2010</b>
Occidente	-4,316,798	-5,617,578	-3,376,848
Tierras Bajas del Norte	-12,574,433	-10,401,926	-11,071,840
Sarstún – Motagua	-3,125,642	-5,265,114	-2,985,470
Centro – Oriente	-2,486,967	-3,689,324	-2,261,409
Costa Sur	-2,000,025	-1,623,290	-1,356,276
Guatemala	-24,503,865	-26,597,231	-21,051,844
<b>Capture from forest gain rate (tCO2/yr)</b>	<b>Circa 2001-Circa 2006</b>	<b>Circa 2006-Circa 2010</b>	<b>Circa 2001-Circa 2010</b>
Occidente	3,827,457	5,473,359	3,296,965
Tierras Bajas del Norte	2,443,344	3,652,837	2,388,926
Sarstún – Motagua	2,242,216	3,129,007	1,796,403
Centro – Oriente	1,436,833	1,585,457	930,269
Costa Sur	1,633,864	1,446,760	1,158,278
Guatemala	11,583,713	15,287,420	9,570,841
<b>Total net emissions/removals rate (tCO2/yr)</b>	<b>Circa 2001-Circa 2006</b>	<b>Circa 2006-Circa 2010</b>	<b>Circa 2001-Circa 2010</b>
Occidente	-489,341	-144,219	-79,883
Tierras Bajas del Norte	-10,131,089	-6,749,089	-8,682,915
Sarstún – Motagua	-883,427	-2,136,107	-1,189,067

<sup>24</sup> <http://www.fao.org/forestry/23224-015b0b120eb03aa8b646ce6e3095c7a6a.pdf>

<sup>25</sup> [http://www.ipcc-nggip.iges.or.jp/public/gpplulucf/gpplulucf\\_files/Chp4/Chp4\\_4\\_Annexes.pdf](http://www.ipcc-nggip.iges.or.jp/public/gpplulucf/gpplulucf_files/Chp4/Chp4_4_Annexes.pdf)

<sup>26</sup> Note that the values for Circa 2001-Circa 2006 and Circa 2006-Circa 2010 are presented for illustrative value but the REL is calculated using the complete period of circa 2001-circa 2010. Detailed calculations can be found in Annex XV\_C.



Centro – Oriente	-1,050,134	-2,103,867	-1,331,141
Costa Sur	-366,161	-176,530	-197,997
<b>Guatemala</b>	<b>-12,920,151</b>	<b>-11,309,811</b>	<b>-11,481,002</b>

A preliminary projected national Reference Level based on the annual average net emissions rate of circa 2001-circa 2010 is calculated to be of 11.48 million t CO<sub>2</sub>e/year. Please note that this estimated Reference Level complies with the CF MF by using historic average emissions and does not use estimates of the Reference Level developed using VCS CM0015 methodology for Tierras Bajas del Norte.

A final reference level projecting the historic emissions into the future will be developed by the ER-Program Document phase, when refinements to the input data for forest loss, forest gain, emission factors are completed, and forest degradation emissions are included. We expect that the reference level will be displayed in two time frames: i) until December 31st 2020, which is when the Carbon Fund program is expected to expire; and, ii) until 2030, which is the expected lifetime of Guatemala's ER-Program.

## 9. Forest Monitoring System

### 9.1 Description of approach and capacity for measurement and reporting on ERs

*Please describe the proposed approach for monitoring and reporting the emission reductions attributable to the proposed ER Program, including the capacity of the proposed ER Program entities to implement this approach.*

The National Monitoring System, which is currently under construction, will be used to monitor and evaluate the results of the ER Program, to inform other REDD+ activities and to contribute to the land use change elements of the national greenhouse gas inventories and climate change communications. For the time being, there have been adequate efforts to generate basic activity data maps available, but improvements and refinements are being discussed and hopefully soon will be implemented as a part of a formal effort linked to the MRV. Data to estimate emissions from degradation is also considered, but will be progressively added, to the extent that this is practically possible and cost-effective.

As noted above, the ER Program will follow the requirements of VCS JNR, which is generally aligned with the current UNFCCC guidelines and Methodological Framework (MF) of the FCPF Carbon Fund. The National Forest Monitoring System, and therefore the ER Program Monitoring, will be designed in order to comply with all the applicable MF guidelines (criteria 14, 15 and 16).

The elements currently considered in the monitoring system are: a) changes in forest cover; b) spatial monitoring of vegetation fires; c) national forest inventory system; d) basic statistics and monitoring of timber extraction for domestic use; e) national registry of legal timber harvesting; and f) forest degradation through fuel wood extraction. The methods for each of these elements are still under discussion but there will be adaptations of IPCC Good Practice Guidelines on Land Use, Land Use Change and Forestry and the GOFC-GOLD REDD Sourcebook and its occasional updates to national conditions.

The "+" activities such as sustainable forest management, conservation and increase of carbon stocks, afforestation and reforestation, are also required to be monitored by the National MRV system. In the current preparatory stage, the monitoring of these elements is planned to be progressively integrated into the national MRV system, as the UNFCCC methodological guidelines to address them become available in the coming years.

To be able to monitor the changes in carbon stocks in forests that remain as forests (the land use category from which deforestation comes), the IPCC guides for LULUCF suggests the use of one of two methods: a) Gain-Loss Method; b) Stock-Difference Method. Given the current availability of national information and the analysis of the national capacities necessary to generate the minimum **national** data required, it is clear that Guatemala's MRV system will have to start its emissions monitoring on the basis of a Stock-Difference approach. Since the data used to estimate the historical emissions are based on three points only over two years in time – in other words, the transitions that could have happened in between the periods for which we have data cannot be accounted for Losses and Gains. During the preparatory phase, as monitoring capacity improves and minimum data is generated, an evaluation of the applicability of both methods is

proposed for each particular REDD+ activity since we envisioned the gain-loss approach to be suitable for accounting emissions from degradation practices, especially selective logging and fuel wood extraction.

With regards to reporting, the principles of transparency, consistency, comparability, completeness and precision will constitute the framework for the reporting under the ER Program, as for the national REDD+ Monitoring System. This framework has not yet been clearly defined by UNFCCC, but the existing criteria for reporting the national greenhouse gas emissions inventories will help to define the guidelines to be followed. In regards to verification, the principle of result-based payments suggests that robust control and quality assurance procedures will need to be developed to verify the data used. Therefore, the proposed methodologies will need to be evaluated to identify and characterize possible errors, sources of uncertainty and bias. Taking into account that this ER Program proposal is aligned with the process of creating a national MRV system in the medium term, it is expected that the data generated by these evaluations will allow gradual refinement of the methods used and the overall quality of the information supplied by the system.

The implementation of the ER Program monitoring system will be done through a collaborative arrangement at three levels: (i) the GCI (MARN, INAB, CONAP and MAGA) acting as the Steering Committee; (ii) a group of institutions generating information, consisting of the above-mentioned GCI members, academia and civil society; and (iii) a group of support organizations including academics, civil society, aid-funded technical assistants and others. This is the arrangement that was used for the ongoing program of forest monitoring, which has generated highly positive results to date. It is also proposed to create an Operational MRV Unit, in line with the existing legal framework.

**9.2 Describe how the proposed ER Program monitoring system is consistent with the (emerging) national REDD+ monitoring system.**

In the proposal submitted for preparation of country REDD+ (RPP) a monitoring, reporting and verification approach to generating verifiable information on GHG emission is contemplated. These emissions are linked with forest deforestation and degradation to be comparable with the reference scenario or baseline, and maintain a continuous monitoring of deforestation and forest degradation. The monitoring system is in the early stages of construction, given the need for institutional strengthening and availability of information. Under this context, the monitoring system of the ER-PIN will be a key part in establishing the foundation and serve as part of the first actions of the National Monitoring System.

In addition, to the coordination efforts of current ongoing programs in Guatemala these have been focused on standardizing approaches and compliance with the international agreements set out by the UNFCCC and the Carbon Fund (once the final version of the Methodological Framework was released).

**9.3 Describe how the proposed ER Program monitoring system is consistent with UNFCCC guidance available to date and with the emerging Methodological Framework of the FCPF Carbon Fund.**

The proposed monitoring system has the objective to follow the principles of transparency, consistency, comparability, completeness and precision laid down by the UNFCCC. Although the details of the methods to be used are still under discussion, these will be based on adaptations to national conditions of the methodologies and guidelines suggested in the IPCC Good Practice Guidelines on Land Use, Land Use Change and Forestry and the GOF-C-GOLD REDD Sourcebook as well as the MF of FCPF. It is expected that the reference levels and monitoring processes will be transparent to comply with the minimum requirements still in development by the UNFCCC CP.

**9.4 Describe any potential role of Indigenous Peoples or local communities in the design or implementation of the proposed ER Program monitoring system.**

The role of local actors is considered to be important for the monitoring at parcel and farm level. In practice local communities are already involved in some monitoring activities, for example in the community forestry concessions in the multiple use zone of the Maya Biosphere Reserve and by the communities that are members of FUNDALACHUA, where local people have been actively involved and have undertaken forest monitoring.

Participation of indigenous peoples and local communities in monitoring activities will be actively promoted but it is known that there will be a need to strengthen the capacities of these groups for specific monitoring activities.

Significant progress has already been achieved as described by the Safeguards Committee in the RPP, given the already existent information delivery systems related to transparency in the use of public funds<sup>27</sup>, the legislation on free access to public information<sup>28</sup> and other systems that officially report national statistics including among others: Health Management Information System (SIGSA), statistics of the Ministry of Education, National Information Mechanism on Biodiversity, Decadal Crop Monitoring System, National Territorial Information System (SNIT), System of National Statistics, Forest System of Guatemala (SIFGUA).

**9.5 Describe if and how the proposed ER Program monitoring system would include information on multiple benefits like biodiversity conservation or enhanced rural livelihoods, governance indicators, etc.**

A minimum set of co-benefit indicators is under preparation. This will include periodical information on transparency in fund management, access to information, health, education and income. These indicators will be built using existing statistical platforms such as the ones mentioned in section 9.4. More specific co-benefits monitoring activities are already planned in specific areas, such as the avoided deforestation projects in protected areas and the areas benefiting from the forestry incentives managed by INAB.

On the initiative of INAB and CONAP and with the help of international cooperation partners a conceptual proposal for Payment of Environmental Services (PES) for forests is under preparation, which covers four types of environmental services: sequestration of forest carbon, watershed regulation, biodiversity, and soil conservation.

The databases of PINFOR and PINPEP have richness of information on the beneficiaries of forestry incentives, including their linguistic groups, numbers of beneficiaries, and municipalities. The ER Program monitoring system will allow this data to be used to identify key forest areas for biodiversity and local communities where pressures on forest coverage are high, with a view to better targeting incentives to allow for improved conservation and management of these areas.

Additional efforts are being conducted to support project activities (Guatecarbon, Lacandón) and monitoring data on several different topics is available and can be used to support multiple benefits tracking ER Program.

## **10. Displacement**

**10.1 Activities to address risks of reversal of greenhouse gas benefits**

*Please describe major risks of anthropogenic and non-anthropogenic reversal of greenhouse gas benefits (from e.g., fire, agriculture expansion into forest, changes in commodity prices). Also describe any activities or design features in the proposed ER Program that are incorporated to minimize and/or mitigate the anthropogenic risks or reversals, and how these activities are consistent with the design features of the (emerging) national REDD+ strategy to address risks of reversal.*

It is expected that domestic displacement issues will be minor given that the ER Program covers the whole country and monitoring of emissions will occur throughout the Guatemalan territory. However, to maximize the success of implemented activities and programs, Guatemala shall consider the potential for leakage during the design and implementation phases of the ER Program to prevent displacement from occurring. Most of the ER Program activities will work with local communities to improve their livelihoods *in situ*, which would reduce their dependency on opening new forest areas for subsistence farming. This includes work with smallholders to use agroforestry techniques and agro-ecological practices to improve the productivity of their farms (with agricultural extension provided by MAGA), monitoring and control, rehabilitation of forest coverage through assisted regeneration and enrichment planting.

<sup>27</sup> <http://www.guatecompras.gt/>

<sup>28</sup> Decreto 57-2008, Ley de Acceso a la Información Pública

## 11. Reversals

### 11.1 Description of the potential risks of both domestic and international displacement of emissions(leakage)

*Please describe the potential risks of both domestic and international displacement of emissions from the proposed ERProgram activities. Then also describe how the proposed ERProgram activities will minimize the risk of domestic displacement and international displacement (if applicable), via the design of the proposed ER Program and the ER Program activities and the selection of locations. For sub-national programs, pay special attention to identifying domestic risks of displacement of emissions, the proposed ERProgram activities to mitigate these risks, which otherwise would contribute to fewer net emission reductions generated by the proposed ER Program, and how these activities are consistent with the design features of the (emerging) national REDD+ strategy to address risks of displacement.*

An estimated percentage of emission reductions ER program are used as security stocks or "buffer" in case regressions occur within program areas.

As for reversal risks, the principal ones in order of magnitude of potential damage are:

- a. **Forest fires** during periods of exceptionally dry and hot weather: forest fires are probably the most important reversal risk, especially in the REDD+ regions TierrasBajas del Norte, Occidental and part of Sarstun-Motagua. Experience from previous years shows that large forest fires often coincide with El Niño events (for example in 1998, 2003 and 2005) – events that are projected to become more frequent under most climate change scenarios for Guatemala.
- b. **Extreme natural events** such as hurricanes, tropical storms and torrential rains: although direct physical damage from such events has been rare historically speaking, such events can lead to major forest loss which cause landslides and massive flooding. Examples of those types of events among others include Mitch (1998) and Stan (2005) hurricanes.
- c. **Agricultural expansion** will be one of the most important reversal risks, in spite of the implementation of the ER Program, in particular when the opportunity costs of other land uses are high and, therefore, forest conservation and restoration costly. The REDD+ regions where this risk is most important are TierrasBajasdel Norte and Sarstun-Motagua.
- d. **Pests and diseases** affecting forests, with special emphasis on the pine weevil (*Dendroctonus* sp) could be aggravated by climate change and threaten the permanence of the country's conifer forests. This risk is highest in the REDD+ regions Occidente, Centro-Oriente and to a lesser extent in Sarstun-Motagua.

Among the ER Program activities that **mitigate** these reversal risks are:

- a. Increased investment in forest control and protection and law enforcement
- b. Investments in improvement of forest productivity, forest production scaling up and forest product marketing, with a positive impact on people's livelihoods
- c. Actions to increase timber value-added
- d. Implementation of actions to facilitate marketing of legal wood such as the Electronic Information System on Forest Enterprises
- e. Investments in the improvement and diversification of sustainable income generating activities of local communities
- f. Forest extension and education programs
- g. Implementation of strategies to rationalize fuel wood use and promote fuel wood plantations and agroforestry systems

The ER Program will use tools approved under the VCS JNR standard to evaluate the risk of reversals (non-permanence), in particular using JNR's non-permanence risk tool for jurisdictions and using the AFOLU tool for non-permanence risk of nested REDD+ projects. During the remainder of the ER Program preparation process, the government will assess the alignment of the VCS leakage tools and buffer arrangements with those of the FCPF Carbon Fund, so that a transparent arrangement can be included in any eventual ER Purchase Agreement.

If the requirements of this standard with regards to non-permanency are consistent with those of the FCPF Carbon Fund, the ER Program could use the centralized VCS buffer to manage the risk of non-permanence. These tools would determine the number of credits that would have to be deposited in the account of the common jurisdictional risk buffer. This account would hold non-salable buffer credits to cover the risk of non-permanence associated with jurisdictional programs with nested projects.

## 12. Expected emission reductions

### 12.1 Expected Emission Reductions (ERs)

Please provide an estimate of the expected impact of the proposed ER Program on the REL/FRL (as percentage of emissions to be reduced). Based on this percentage, also estimate the volume of ERs, as expressed in tonnes of CO<sub>2</sub>e, that would be generated by the ER Program:

- a) up to December 31, 2020 (currently the end date of the FCPF)
  - b) for a period of 10 years; and
- the lifetime of the proposed ER Program, if it is proposed to continue longer than 10 years.

Assumptions made to estimate the potential to reduce emissions include an estimation of avoided deforestation in three projects in the Tierras bajas del Norte REDD+ region, one project in the Sarstún - Motagua REDD+ region and carbon stock enhancement activities that include: Reforestation using broadleaved species, Reforestation using conifer species, Stock enhancement in agroforestry systems and Avoided Degradation for fuelwood production. The details of these assumptions are explained in Annex XV D

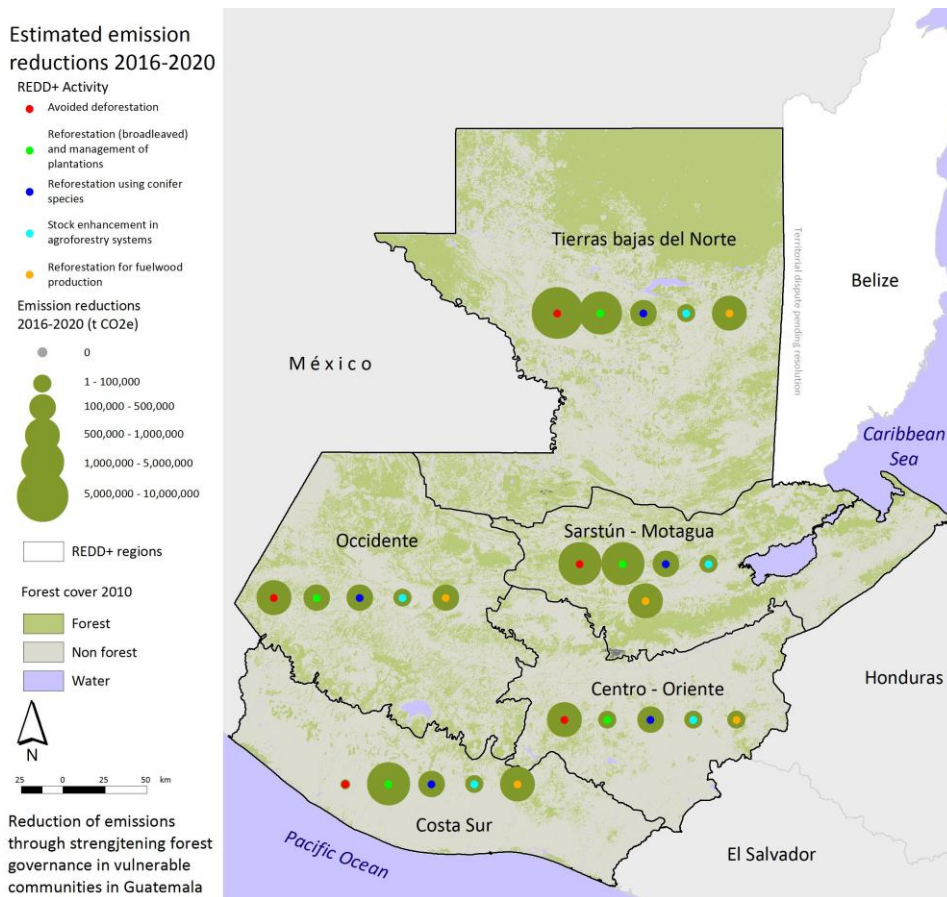
Estimated emission reductions that will improve Reference Level emissions from forest loss and removals from forest gain are presented in Table No. 18 and are consistent with Table 8 presented in section 5.3. Figure No. 5 shows a map with an approximate spatial distribution of projected emission reductions by REDD+ region and REDD activity. Please, take notice that further refinements and descriptions will be made in the ER Program Document phase and that the presented estimates are provisional and will be revised at that stage.

**Table No. 18 Emission reductions per REDD+ region and REDD+ activity**

REDD+ region	Units	Avoided deforestation	Enhancing carbon stocks			Avoided Degradation through reforestation for fuelwood production	Total
			Reforestation using broadleaved species	Reforestation using conifer species	Stock enhancement in agroforestry systems		
Occidente	t CO <sub>2</sub> /year	168,842	29,010	58,969	1,025	31,362	289,208
	2016-2020 (t CO <sub>2</sub> e)	844,212	145,050	294,844	5,124	156,810	1,446,041
Tierras Bajas del Norte	t CO <sub>2</sub> /year	1,420,133	351,901	91,094	480	176,203	2,039,810
	2016-2020 (t CO <sub>2</sub> e)	7,100,663	1,759,503	455,470	2,399	881,013	10,199,048
Sarstún - Motagua	t CO <sub>2</sub> /year	561,914	250,767	95,486	9,319	117,192	1,034,679
	2016-2020 (t CO <sub>2</sub> e)	2,809,572	1,253,836	477,431	46,595	585,961	5,173,395
Centro - Oriente	t CO <sub>2</sub> /year	113,070	13,979	22,959	412	15,113	165,533
	2016-2020 (t CO <sub>2</sub> e)	565,352	69,896	114,797	2,058	75,564	827,667
Costa Sur	t CO <sub>2</sub> /year	0	450,823	27,106	1,509	184,741	664,180
	2016-2020 (t CO <sub>2</sub> e)	0	2,254,115	135,530	7,546	923,706	3,320,898
Total for	t CO <sub>2</sub> /year	2,263,960	1,096,480	295,615	12,745	524,611	4,193,410

Guatemala	2016-2020 (t CO <sub>2</sub> e)	11,319,799	5,482,400	1,478,073	63,723	2,623,054	20,967,048
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**Figure No. 5 Emission reductions and removals by REDD+ region and REDD activity years 2010-2020, to be issued during 2016-2020.**



The estimated emission reductions for the period 2016-2020, calculated to be 4.19 million t CO<sub>2</sub>e/year, represent an effectivity of 36.5 % with respect to the annual national net Reference Level estimated at 11.48 t CO<sub>2</sub>e/year.

**12.2 Volume proposed for the FCPF Carbon Fund**  
*Please explain the portion of the expected ERs that would be offered to the Carbon Fund, and if other carbon finance providers or buyers have been identified to date, the portions of the expected ERs that would be offered to them.*

The total emission reductions to be issued during the period of 2016-2020, estimated to be 20.97 million t CO<sub>2</sub>e do not consider a reserve to set aside to cover possible reversals, displacements and other discounts. **Applying a conservative estimate of 20% for that reserve, 16.77 million t CO<sub>2</sub>e can be offered to the Carbon Fund as the primary source of funding, although other possible buyers will also be considered.**

**13. Preliminary assessment of the proposed ER Program in the context of the national Strategic Environmental and Social Assessment (SESA) and the Environmental and Social Management Framework (ESMF)<sup>29</sup>**

**13.1 Progress on SESA/ESMF**

Please describe the country's progress in the implementation of SESA and the development of the ESMF, and their contribution or relationship to the proposed ER Program.

Guatemala's approach to the ER Program is based on the country's extant forest governance framework and of the implementation of the relevant policy instruments by CONAB, INAB and MAGA. The identification of activities within the ER Program has allowed a more specific identification of the actors that could be subject to environmental and social impacts from its implementation. For the elaboration of the Strategic Environmental and Social Assessment (SESA) (see ToR in ANNEX VII), platforms that can be used for the identification of key ER Program actors and the validation of social and environmental impacts have been identified, such as the PINPEP forest roundtables, community forest concessions, and institutions set up for the co-management of protected areas, among others. The SESA and ESMF would ensure compliance with the relevant IADB safeguard policies and procedures, as well as with the material elements of the Common Approach to Environmental and Social Safeguards of the FCPF (which are based on the World Bank's safeguard policies), in addition to local legislation. In doing so, they would help to guarantee compliance with the safeguards established by UNFCCC.<sup>30</sup>

The ESMF, as a result of SESA, will set out the principles, guidelines and procedures to evaluate and prioritize environmental and social risks, and will propose measures to reduce, mitigate or offset adverse environmental and social impacts and to enhance positive impacts and opportunities projects, activities, policies or regulations of the ER Program. It will also be developed so that it is fully integrated with the consultation process and will identify any further information needed in the field. It will contain:

- a. Procedures for: i) strengthening institutional capacity, ii) assessment and monitoring of environmental and social impact, and iii) compensation claims;
- b. A framework for environmental and social management to address environmental risks and potential impacts, including cumulative impacts and / or indirect multiple activities;
- c. A planning framework to address the effects on indigenous peoples;
- d. Restricting access framework to address any potential land acquisition and / or physical relocation, loss of livelihood or restriction or loss of access to natural resources, including legally designated parks and protected areas; and
- e. Commitment of stakeholders and a framework for resolving complaints to ensure ongoing communication with stakeholders, good faith consideration of their concerns and mechanisms to resolve complaints in accordance with the requirements of the FCPF for Stakeholder Engagement involved.

The following table describes the timeline of the activities to develop SESA and ESMF for 2014-2015 period. Green activities have been completed, those in yellow are developing activities and marked in red are pending activities to be conducted in early to mid 2015

**Table No. 19 Timeline to develop SESA and ESMF**

SESA and ESMF activities	2014	2015
Identify which relevant entities will be responsible for the implementation and supervision of SESA respectively, and agree with them the monitoring process. <b>(Started January 2013 and ended March 2014)</b>		

<sup>29</sup> The SESA is the assessment process to be used in FCPF REDD+ countries during R-PP implementation and REDD+ readiness preparation. The ESMF is an output of SESA that provides a framework to examine the issues and impacts associated with projects, activities, and/or policies/regulations that may occur in the future in connection with the implementation of the national REDD+ strategy but that are not known at the present time.

Identification of stakeholders and their wider participation <b>(Started June 2012 and ended March 2014).</b>		
Identify specific disclosure, communication and consultation mechanisms for SESA, reviewing the sectoral composition, nationwide, of the working groups for REDD+. <b>(It started on May 2014, it's actually finished but the validation process will end on November 2014).</b>		
Developing Terms of Reference SESA and ESMF <b>(Started March 2014 and endend October 2014)</b>		
Identify and describe the positive and negative social and environmental impacts for each strategy option and/or emissions reduction programs with stakeholders. <b>(Will start on January 2015)</b>		
Assess and prioritize the social and environmental risks already identified and agreed at the national SESA workshop, according to the requirements of the R-Package established by the FCPF. <b>(Will start on May 2015)</b>		
Stakeholder analysis and its characterization of the diferent types of land tenure and emission reduction property rights. <b>(Will start on January 2015)</b>		
Identify existing legal/regulatory policies, and capacity deficiencies to mitigate the prioritized social and environmental risks previously identified. Make viable recommendations to remedy them. <b>(Will start on January 2015)</b>		
Environment and Social Management Framework –ESMF-: Develop a plan with INAB, MAGA, MARN, CONAP, and the stakeholders, describing the mitigation measures of the negative social and environmental impacts of the REDD+ activities in the ER Program, in accordance with the applicable Safeguards; and integrated with the consultation process. It will Include: <b>(Will start on July 2015)</b> <ul style="list-style-type: none"> <li>a. A framework for environmental and social management to address environmental risks and potential impacts, including cumulative impacts and/or indirect multiple activities;</li> <li>b. A planning framework to address the effects on indigenous peoples;</li> <li>c. Restricting access framework to address any potential land acquisition and/or physical relocation, loss of livelihood or restriction or loss of access to natural resources, including legally designated parks and protected areas; and</li> <li>d. Commitment of stakeholders and a framework for resolving complaints to ensure ongoing communication with stakeholders, good faith consideration of their concerns and mechanisms to resolve complaints in accordance with the requirements of the FCPF for Stakeholder Engagement involved.</li> </ul>		
Summary of the SESA and ESMF activities and results to be incorporated into the R-Package. <b>(Will start on November 2015)</b>		

**Legend:**

<b>Completed activities</b>	
<b>Activities in progress.</b>	
<b>Pending activities.</b>	

The monitoring units of INAB, CONAP and MAGA will be important platforms for the Environmental and Social Management Framework (ESMF). In fact, these monitoring units have been responsible for generating reports on the social and environmental impacts of the policy instruments that these institutions have implemented in recent years. (See Annex XVI)

The terms of reference prepared for the SESA and the ESMF have been articulated by the above platforms, and have incorporated the methodological guidelines for participation and social inclusion of the FCPF. The basic steps needed for applying this process are: (i) identify REDD+ strategy options (ongoing under the R-PP); (ii) identify the key actors linked to each of these options (also ongoing under the R-PP but this analysis will be deepened under the ER Program); (iii) identify negative and positive social and environmental impacts of the implementation of these REDD+ strategy options (SESA); (iv) establish an Environmental and Social Management Framework (ESMF) to manage the negative impacts identified; (v) establish a mechanism to address and resolve complaints (MAR). As the most fundamental part, the definition of REDD+ strategy options, has already been analyzed in-depth and consensus largely achieved.

The support structures for the National REDD+ Strategy, such as the National Committee on Environmental and Social Safeguards (CNSAS), has a 2013-2014 work plan for furthering the SESA process and developing the ESMF.



### **13.2 Incorporation of SESA outputs and/or outcomes into the proposed ER Program**

*Based on the progress outlined in 7.1, please describe how the proposed ER Program is expected to make use of the outputs and/or outcomes of the SESA process. Provide an analysis of the ways in which activities planned under the proposed ER Program will rely on the measures and procedures included or to be included in the ESMF. Are there likely to be any gaps or issues regarding the compliance of the proposed ER Program activities with applicable safeguard standards, including the UNFCCC safeguards?*

As mentioned in section 13.1, both the SESA and the ESMF are aligned with the activities proposed under the ER Program. The SESA and ESMF will be applied to the ER Program, and will be monitored through existing platforms. For both instruments, the social and environmental monitoring experience of the institutions implementing the ER Program will be used, and their monitoring units will be strengthened by their involvement in monitoring the ER Program.

The results of the SESA and the elaboration of the ESMF will take into account, and will be an integral part of the ER Program, where they will contribute to the application of social and environmental safeguards in the five REDD+ regions of the ER Program. The SESA and the ESMF will also be used iteratively throughout the process of building the overall REDD+ Strategy.

The ER Program and the REDD+ Strategy options are already sufficiently aligned with the UNFCCC safeguards, including re forest governance, participation and consultation processes and the absence of conversion of natural forests to plantations. The safeguards that will require more effort are those linked to REDD+ methodological themes, such as leakage and reversals. Nevertheless, methodological frameworks addressing these more difficult themes are already being used.

The REDD+ Pilots Projects in protected areas are already carrying out their own consultation processes. In 2012, the Free Prior Informed Consent (FPIC) process was held for the GuateCarbon Project. 70% of the population in the project area was consulted, including nine community forest concessions, through their Boards and General Assemblies. Outside the project area, consultations were held with the Social and Economic Development Committees (COCODES), which act as legal representatives of the communities. The process strengthened the communication between the proponents (CONAP, concessionaires) and partners (ACOFOP, RA and WCS), and received approval for the REDD+ Project. For the Lacandon Forest for Life REDD+ Project, FDN and CONAP have already initiative the information and consultation process with the communities and land owners in the project area. In the case of forest policy instruments such as the PINPEP and PROBOSQUE incentive programs, the program beneficiaries were consulted.

### **13.3 Feedback and grievance redress mechanisms**

*Please describe the mechanism(s) that are or will be put in place to resolve any disputes regarding the proposed ER Program.*

The ER Program will use existing platforms created and strengthened by the Government for the resolution of conflicts occurring during the implementation of their various forest policy instruments. For example, INAB has successfully implemented its Institutional Strategy for the Analysis, Resolution and Transformation of Conflicts in the Forest Sector. In the case of the Lachua ecoregion, there is a Steering Committee of the Lachua Model Forest, in which state institutions (INAB, MARN, CONAP), NGOs, community organizations, universities and private companies, meet to discuss and resolve conflicts.

The Secretariat for Agrarian Issues (SAA) of the Presidency of the Republic functions as a mechanism for resolving complaints related to land tenure conflicts nationwide. In case of conflicts inside protected areas, CONAP participates in roundtables convened by SAA. This institution produces a policy report on agrarian conflicts in Guatemala, which includes a section on conflicts addressed and resolved in protected areas.<sup>31</sup> INAB uses Forestry Roundtables and Model Forests as mechanism for addressing and resolving complaints.

These platforms will be the basis for the resolution of conflicts that may occur during ER Program implementation. The Government will establish a specific process to uptake, assess, acknowledge and resolved any complaints by stakeholders, especially Indigenous Peoples and local communities, during the design and implementation of the ER Program. The functioning of these platforms as a grievance redress

<sup>31</sup><http://portal.saa.gob.gt>

mechanism will be evaluated annually to strengthen their capacity to address and resolve conflicts related to the implementation of the ER Program and the REDD+ Strategy more generally, according to the FCPF principles (accessibility, rights compatibility, transparency, capability, amongst others).

## **14. Land and resource tenure**

### **14.1 Rights to territories and land, and mitigation benefits** *Please describe the land use and land tenure context of the proposed ER Program, and if and how rights to territories and land and mitigation benefits from REDD+ are reflected in traditional practices and codified in legal and/or regulatory frameworks.*

There are different types of land tenure in areas where ER Program activities will be implemented, including private property (including people who occupy the land legally but without a formal title, called “poseedores”), community lands, State lands administered by CONAP, State lands given in concession to communities and industries and other users. In Guatemala, the majority of the smallholder farmers are “poseedores”<sup>32</sup> who without formal land title exercise some or all of the rights inherent to private property over their land. They are recognized by the State through a municipal certificate<sup>33</sup>. Each of these forms of land tenure provides certain rights over resources and benefits derived from these, as defined by Guatemalan Law (for example in Article 39 of the Constitution re private property, Law on the Cadaster).

Article 22 of the Climate Change Framework Law (Decree 7-2013) proclaims that the rights, tenure and negotiation over emissions reductions from carbon dioxide and other greenhouse gases, as well as related certificates, belong to the land owners and landholders. These owners include project owners, individuals or legal persons and the State, whether they are owners or recognized users of the land (but without land title) or places where projects are implemented.

The ER Program during its design process must clearly articulate national standardized procedures for benefit sharing. Such process must be designed in accordance to property rights and co-investment mechanisms that are the basis of the REDD+ strategy. Given high diversity of land use in Guatemala at least four procedures for benefit sharing might be applicable to the national benefit sharing process. Those options are presented in the following section.

There are policy tools such as PINPEP that address access to forest incentives to groups that have no title. The associated analyses of land and resource rights will be deepened as part of studies of Component 2 of the National REDD+ Strategy.

Each one of the activity categories of the ER Program has developed alternatives that allow benefits from the management of forest resources to be shared according to different land tenure modalities. Guatemala has a legal framework that facilitates access to benefits from forest management for producers that do not have land title, which account for a significant share of total landholders in Guatemala.<sup>34</sup> The PINPEP forest incentives law was the first one that overcame this barrier, following the first forest incentive instrument, PINFOR that did not allow landholders without title to access forest incentives. Another example of the conduciveness of the Guatemalan legal framework to sharing benefits from forest management with local stakeholders are the forest concessions, which have been introduced under the Protected Areas Law (Decree 4-89) to allow local actors to engage in sustainable forest management for timber and non-timber products, but which also allow concession holders to benefit from emissions reductions resulting from activities they implement.

<sup>32</sup>Land Holder: a person who is not the legal owner of a property, but who some or all of the powers inherent in the domain (Article 23, paragraph p of Decree 41-2005, Registration Act Cadastral Cadastral information) .The PINPEP regulation indicates that to be recognized as land holder, is enough to have a certificate issued by the mayor of the municipality. The certificate must declare that the concerned person is known as a neighbor and holds the land in a peaceful, public, continuous way and in good faith is not aware of complaint of said land by another person.

<sup>7</sup>A land holder without title («poseedor») is defined as a person who without being land owner exercises some or all of the usual property rights over a piece of land (Article 23, sub p of the Decree 41-2005, Cadaster Law). PINPEP rules hold that to be recognized as a land holder without title, all that is needed is a certificate provided by the mayor of the relevant municipality declaring that the person concerned is known as the local occupier of the land in a way that is peaceful, public, permanent and in good faith and that no competing claim on the land is known.

Annex V and XIII provides statistics about landholders without title that have benefited from the PINPEP forest incentives program. CONAP signs cooperation agreements with communities that were present in protected areas before they were declared, in order to regularize their presence and establish a consensual natural resources management regime with them.<sup>35</sup>

In the context of SESA, the evaluation of the forms of land tenure will be addressed on the legal framework of Guatemala, especially in Article 39 of the Constitution and the Cadaster Law, as mentioned above. Also, the Article 22 of the Climate Change Law, proclaims that the rights, tenure and negotiation over emission reductions belong to the legal land owners and landholders. As well, a stakeholder analysis and its characterization of the different types of land tenure and emission reduction rights will be carried out.

## 15. Benefit Sharing

### 15.1 Description of envisioned benefit-sharing arrangement for the proposed ER Program.

*Please describe the benefit-sharing arrangements that are envisioned to be used for this proposed ER Program.*

The benefit sharing processes must provide effective incentives for REDD+ actions and must build support and legitimacy for its mechanisms. To achieve this dual objective, the benefits should be shared beyond a strict focus on effective incentive prescription. The distribution of benefits for REDD+ can be defined as agreements between different stakeholders on the distribution of monetary and non-profit marketing forest carbon.

Proposed scenarios of monetary benefit sharing that are identified for REDD+ actions to be implemented through INAB programs:

- a) INAB mostly incentivizes private/smallholder /municipality property lands. Given that, ERs are property of the land owner and need to be ceded to INAB, so those can be offered to the CF. This is going to be a voluntary process to access to additional services and incentives to be provided by INAB to the owner of the land that is implementing REDD+ actions in context of the ER Program. The specific benefit sharing arrangement needs to be designed for this scenario. Nevertheless, it is expected to be a simplified process, since INAB has a national mechanism already established and operating for the last 15 years providing incentives to reforestation activities. (See Annex XXI –a.-)
- b) Those land owners that voluntarily do not want to cede their ER rights, could access carbon markets directly and not through INAB. In the same way INAB, depending on their final decision would provide or not additional services to those land owners. No need of benefit sharing arrangements are present in this scenario. This is a scenario with low probabilities of happening, given that creating forest carbon projects is prevented by many capital, knowledge, capabilities and other barriers, being the most important the oversupply of voluntary carbon markets. All those barriers prevent land owners to think acting individually as a realistic successful option. (See Annex XXI –b.-)

In the case of CONAP most of protected areas along SIGAP are State owned lands, and some private own lands are also part of SIGAP. Given that, possible monetary benefit sharing mechanisms overseen are:

- a) In case of state owned land CONAP could create benefit sharing arrangements that would be case by case designed depending specific REDD+ actions to be implemented per protected area. This will be planned together with co-administrators and/or concessions, making use of consultation processes and platforms. During the preparation process and collateral ER program design, CONAP will be supported to design and establish official procedures to follow for benefit sharing planning, as to have a standardized structure of financial benefit sharing administration. CONAP has previous experience in such benefit sharing arrangements that are based on funding programmatic initiatives along certain protected areas to be conserved or sustainably managed. Examples of such benefit sharing

<sup>35</sup> <http://www.conap.gob.gt/index.php/servicios-en-linea/noticias/496-entrega-de-acuerdos-de-cooperacion-a-tres-comunidades-del-municipio-de-san-luis-peten.html>

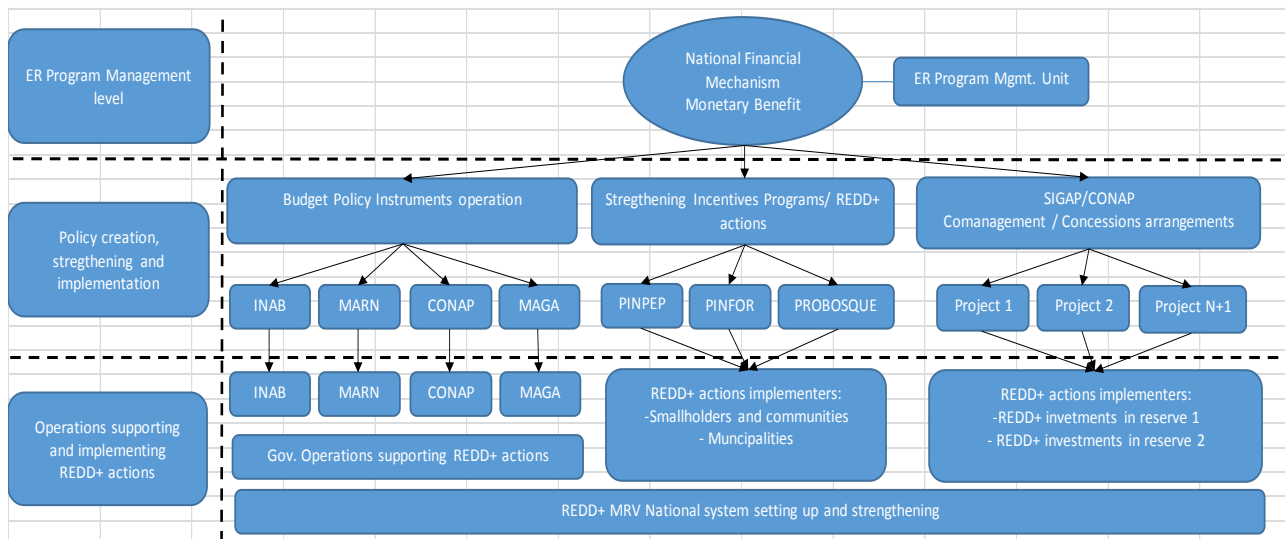
mechanisms for protected areas are: i) Fondo para la Conservación de Bosques Tropicales (FCA) which is funded by an agreement between Guatemala and United States of America related to The Forest Conservation Act (TFCA)<sup>36</sup>, ii) Fundación para la Conservación de la Naturaleza<sup>37</sup> that manages multiple financial funding sources to implement projects focused on conservation, iii) Fideicomiso de Administración e Inversión del Fondo Nacional para la Conservación de la Naturaleza (FONACON)<sup>38</sup> that is a national financing instrument for funding conservation and sustainable management projects executed by different organizations along the country. There are other mechanisms which are present in the country but are not managing multilateral funding.

- b) Second possible arrangement is possible in caselands that are part of SIGAP, but not State owned. This is the case for example of lands put together by the Asociación de Reservas Naturales Privadas (ARNPG)<sup>39</sup> and Municipal protected parks. In those cases land is private or municipal, hence ERs are property of the respective land owner or municipality. In such cases the owner could again cede or provide representation authority to the State, in this last case they can offer to sign contract in representation of the ERs owner. If certain municipality or private owner voluntarily refuses such agreement, they could sell ERs directly to carbon markets. This is not a common and rationale scenario to happen given high uncertainty and barriers to access carbon markets, especially for small / medium land areas.

As previously described, there is need of designing National monetary benefit sharing procedure / structure (see Figure No. 6) during preparation and ER program design. The operation benefit sharing process to source monetary benefits to different participants into the ER Program, is foreseen to be aligned to existing platforms of Government institutions responsible for forest management. Such platforms already include benefit sharing with smallholders (PINPEP), and private, municipality, indigenous peoples and communities (PINFOR). These platforms will be strengthened and adapted to be able to channel resources from emission reductions monetize REDD+ land use actions.

In the context of forestry incentive programs, the Government has developed mechanisms for distributing forest incentives (PINFOR and PINPEP) and has channelled more than USD 230 million to some 900,000 direct beneficiaries over the past 15 years. The experience of PINPEP, operating for the last nine years, is especially relevant given that it reaches out to smallholders (minimum area 0.1 hectare), thereby making forestry incentives accessible to the poorest farmers.

Figure No. 6 Proposed conceptual model for monetary benefit sharing



<sup>36</sup><http://www.fondofcaguatemala.org/>

<sup>37</sup><http://www.fcg.org.gt/>

<sup>38</sup><http://fideicomiso.fonacon.org/>

<sup>39</sup>This is an association of private reserve owners, together they protect 75,000 hectares of natural forest along the country.

<http://www.reservasdeguatemala.org/>

Considering that around half of emission reductions produced by the ER Program will happen through REDD+ actions supported by forest incentive instruments, it would be logical to use the same, proven channels for the distribution of benefits.

The draft act PROBOSQUE presented to the Congress of the Republic recently prepares the next phase of the PINFOR forest incentives program, which finishes in 2017. The draft act proposes a number of reforms to the forest incentive plan, the most important of which concerns payment for forest ecosystem services, including greenhouse gas emission reductions.

The government plans to use the financial and administrative arrangements that CONAP has placed for concessions and co-management arrangements in protected areas to receive and distribute revenues from emission reductions achieved. In order to guarantee additional resources, they will be transferred to strategic partners involved in the implementation of the relevant REDD+ pilot projects in a transparent and performance assessed manner (based on programmed activities that match master plan for relevant protected areas).

### **15.2 Link between the envisioned benefit-sharing arrangement and the activities in the proposed ER Program.**

*Please explain how these benefit-sharing arrangements would support the activities identified in section 5.3 to address the drivers of deforestation and forest degradation. Identify, if possible at this stage, potential issues or constraints that may emerge in development of the ER Program that could need additional progress in order to effectively implement the benefit-sharing mechanisms.*

The benefits from the ER Program activities will be channelled through the country's main policy instruments for maintaining and restoring forest coverage. Using existing mechanisms in Guatemala as described in the previous section, ensures that resources are channelled directly and transparently to address and counteract the causes of deforestation and forest degradation.

The 2013 Climate Change Framework Act has created the conditions for policy instruments of CONAP and INAB – which were established before mitigation of greenhouse gas emissions from deforestation and forest degradation became an issue – to consider account forest carbon and integrate emission reductions activities.

By channeling the funds through financial, administrative and operational arrangements placed by CONAP and INAB over the past 15 years, the ER Program will guarantee that the benefits accrue to the farmers and communities that actually contribute on the ground to emission reductions. Some practical ways in which CONAP has furthered benefit sharing with communities in and around protected areas are described in above section 15.1.

### **15.3 Progress on benefit-sharing arrangements**

*Describe the progress made thus far in the discussion and preparation of the benefit-sharing arrangements, and who has been participating in this process.*

The legal and institutional framework for benefit sharing is described in sections 15.1 and 15.2.

As described in previous sections, consultation has been done with REDD+ implementers (project proponents of REDD+ pilot projects focused on avoided deforestation and reforestation), about the need of previously described arrangements. Implementers' readiness to proceed with the establishment of such arrangements was expressed and formalized, in case the CF – FCPF is interested in signing a Letter of Intent and later ERPA with Guatemala.

The consultation platforms identified in SESA, will be used for the consultation and validation process of the proposed benefit sharing mechanism described in the section 15.1. This will be arranged through a transparent, participative and efficient manner.

The following paragraphs describe the conceptual model for monetary benefit sharing described in Figure No. 6.

The main National financial structure to manage monetary benefit sharing and its macro procedure is needed to be designed during preparation and parallel process of ER program design. Secondary

processes of monetary benefit sharing will be based in already existing benefit sharing processes applied by CONAP and INAB in their different incentive programs (INAB), and through co-management and concession agreements in protected areas (CONAP).

The platform of forestry incentives program has mechanisms for benefit sharing that have been consolidated for the last 15 years. Two of these instruments, PINFOR and PINPEP, have channelled more than USD230 million to some 900,000 small and medium producers, in different forms of incentives for natural forest management, plantations and agroforestry systems. The PINPEP is an innovative tool that the State has developed to provide economic incentives to smallholders, overcoming a significant barrier to this type of land users. The initiative PROBOSQUE Act, which ensures the continuation of PINFOR program, but also includes mechanisms of Payment for Environmental Services will strengthen existing programs and incentives help create more sustainable impacts.

Guatemala has more than 20 years of experience implementing co-management and concessions in protected areas. Such figures have been implemented in collaboration with communities, NGO's co-managers, and private forest industries. Under these mechanisms, not only monetary benefits are distributed. Moreover, communities have access to sustainable use of timber and non-timber forest resources, and the development of activities consistent with the management categories of protected areas. The REDD+ pilot projects will propose, case by case, mechanisms of investment that are aligned to directly finance REDD+ activities that are in line with local policies in SIGAP, as the same as the master plan of every protected area. Examples of this kind of mechanisms that are already operating in Guatemala with multilateral funding were presented in section 15.1.

Monetary benefits from ER program will be directly sourced to land use activities generating emission reductions, based on the following criteria:

- a) Only REDD+ actions being part of a program REDD+ activity of the REDD+ strategy can be funded.
- b) Given that, existing policy instruments of Incentives and protected areas are going to be used for benefit sharing, only the REDD+ activities approved and qualified by those instruments and their leading implementer institutions (CONAP and INAB) can be sharing benefits from the ER program.
- c) All the ERs estimated and to be monitored, reported and verified included in the ER program comply with a) and b).

## **16. Non Carbon Benefits**

### **16.1 Expected social and environmental benefits**

*Please describe the environmental and social benefits, other than emission reductions, that the proposed ER Program is planning to achieve; and any other ways in which the ER Program would contribute to broader sustainable development.*

The implementation of the ER Program will generate important social and environmental benefits in the five REDD+ regions, where it will be implemented. Figure 1 and Annex XIX (Figures 2, 3, 5, and 6) of the section 4.1 demonstrate graphically that the REDD+ regions retained under the ER Program, Tierras Bajas del Norte, Sarstun-Motagua and Occidente account for 90% of the country's forest area and already harbor a number of REDD+ Projects in protected areas. These REDD+ regions also include areas with extreme poverty, lack of employment and high consumption of fuel wood, which are key areas not only for reducing deforestation but also for solving social problems.

The two main axes of intervention of the ER Program, inside and outside protected areas, strongly emphasize poverty reduction, employment creation and community participation in forest management and biodiversity conservation. Various non-carbon benefits will be prioritized for the different REDD+ strategy options and ER Program elements. These non-carbon benefits priorities will be discussed with and validated by the relevant stakeholders for each of the ER Program elements during its elaboration. All the prioritized non-carbon benefits will be monitored systematically by CONAP and INAB. With the ER Program financial resources, the Government of Guatemala will be able to optimize these non-carbon benefits by implementing the REDD+ activities

The biodiversity benefits of the ER Program, despite systematic monitoring by CONAP, will not be easy to ascertain and verify in a five year program, because of the stochastic nature of biological processes. But biodiversity is an important non-carbon benefit of the ER Program, as witnessed by the selection of the most biodiverse REDD+ regions for the ER Program, and the selection of the protected areas within these REDD+ regions for REDD+ Pilot Projects promoted by international nature conservation organizations

The following table integrates the non-carbon benefits which are applicable to all the REDD+ activities proposed.

**Table No. 20 Non-carbon benefits of the ER Program**

<b>REDD+ Activities</b>	<b>Non-carbon benefits</b>
<b>Incentives and financial mechanisms to increase carbon stocks.</b>	<ul style="list-style-type: none"> <li>• Employment creation for more than 5,000 families.</li> <li>• Per each dollar invested by the Government of Guatemala, the private sector invests two dollars.</li> <li>• Family Economic Income.</li> <li>• Commercial timber production.</li> <li>• Employment generation for vulnerable groups such as women.</li> <li>• Food production in areas with food security problems.</li> </ul>
<b>Incentives to conservation and sustainable management of natural forests.</b>	<ul style="list-style-type: none"> <li>• Conservation of critical water conservation areas.</li> <li>• Conservation and protection of five RAMSAR sites seven biomes, 14 life zones, about 15 thousand described and recorded species; and 40% of the Maya Forest.</li> <li>• 80% of vulnerable municipalities with large Indigenous People populations are included in the ER Program.</li> <li>• Conservation of over 180 archaeological sites and Indigenous People sacred places.</li> </ul>
<b>Incentives to indigenous peoples and community based smallholders.</b>	<ul style="list-style-type: none"> <li>• Development and improvement of community organizations and Indigenous Peoples.</li> <li>• Family Economic Income.</li> </ul>
<b>Law enforcement in forest lands.</b>	<ul style="list-style-type: none"> <li>• Institutional strengthening.</li> <li>• Reduction of illegal logging.</li> </ul>
<b>Improved Forest Management.</b>	<ul style="list-style-type: none"> <li>• Commercial timber production.</li> <li>• Conservation and protection of five RAMSAR sites seven biomes, 14 life zones, about 15 thousand described and recorded species; and 40% of the Maya Forest.</li> <li>• 80% of vulnerable municipalities with large Indigenous People populations are included in the ER Program.</li> <li>• Conservation of over 180 archaeological sites and Indigenous People sacred places.</li> <li>• Generation of employment of at least 5,000 families and vulnerable groups.</li> </ul>
<b>Development of competitively and legality in forestry products value chain.</b>	<ul style="list-style-type: none"> <li>• Institutional strengthening.</li> <li>• Per each dollar invested by the Government of Guatemala, the private sector invests two dollars.</li> <li>• Commercial timber production.</li> <li>• Employment creation.</li> </ul>

In October 2010 in Nagoya, during the 10<sup>th</sup> Conference of the Parties to the Convention on Biological Diversity, Guatemala was declared to be part of the so-called Megadiverse countries that harbor 70% of the biodiversity of the planet, although they only cover 10% of the planet's surface area.<sup>40</sup>(See Annex XVII).The Guatemalan protected areas system (SIGAP) covers 32% of the country and over half of its forests, which is very high in comparison to most other countries. The Maya Biosphere Reserve, which is in TierrasBajasdel Norte, one of the REDD+ regions under the ER Program, measures over 2 million hectares and covers 19% of Guatemala, thus constituting the largest protected area in Central America. It accounts for 60% of the SIGAP's total area and contains 35% of the remaining forest in the country. The GuateCarbon REDD+ Pilot Project, located in the MBR's multiple use zone, harbors 717,331.6 hectares of forest certified according to the standards of the Forest Stewardship Council (FSC).

This is also an area of high archeological and historical value, with REDD+ activities contributing to the protection of prime Maya archaeological sites such as the Tikal National Park, which is a UNESCO World Heritage site.<sup>41</sup>

Other biodiversity hotspots included under the ER Program are the LachuaEcoregion and the protected areas near the Caribbean coast.

The second main axis of intervention of the ER Program, the scaling up of forest incentive schemes and other forest policy instruments managed by INAB, has important socioeconomic benefits, because of its focus on the involvement of smallholder farmers without land title. The draft law PROBOSQUE (See Annex XVIII), which represents the next phase of the PINFOR forest incentive scheme that runs out in 2017, aims to generate more than 900,000 rural non-farm jobs in the protection and rehabilitation of forest cover – a number that does not take into account any value-added activities based on forest goods and services that the incentives would promote. This would be achieved through an investment of USD 60 million per year (Q 470 million), the sum of the direct payments that would be made to land owners and holders for forest protection, production and restoration activities.

During the 2017-2037 implementation period for PROBOSQUES, a public investment of USD 1,000 million (Q. 8,000 million) is expected to leverage private investment worth about USD 1,860 million(Q 15,000 million) in forest protection, production and restoration. Although the PROBOSQUES law will become operational only later on in the ER Program period, it will contribute substantially to the social and environmental benefits of the latter. A 40% increase of the social and environmental benefits generated by INAB historically is expected.

Figure 7 below shows the optimization of non-carbon benefits of different REDD+ activities under the second category of ER Program activities. This shows that from 2014 to 2023, more than USD 460 million will be generated through employment creation and production of commercial timber, mainly resulting from the investments of PROBOSQUE

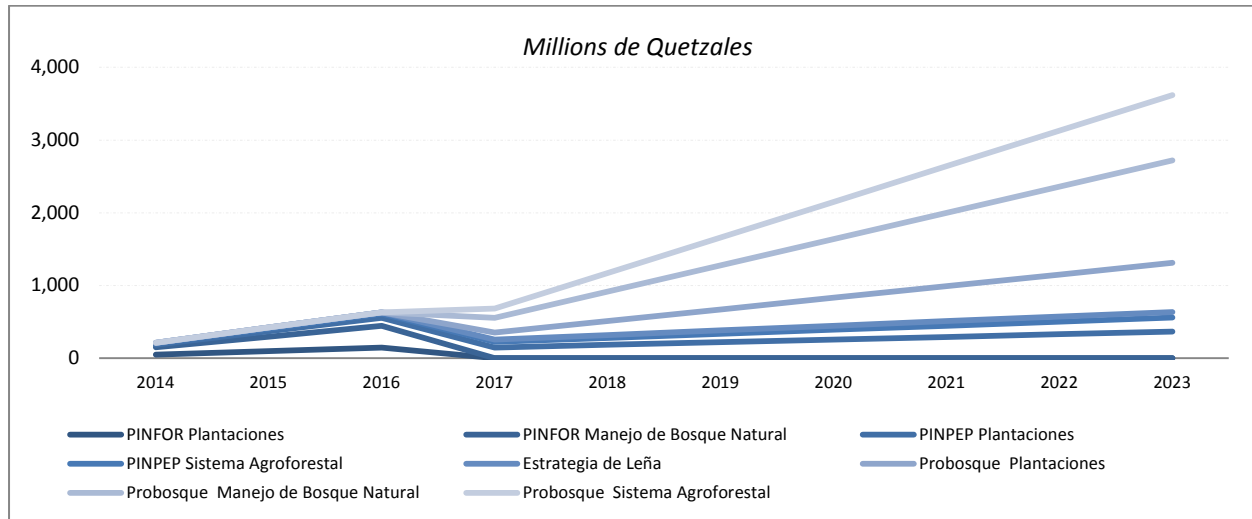
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<sup>40</sup>There are 19 mega-diverse countries : 9 in America, 4 in Africa and 6 in Asia.

<sup>41</sup>[http://www.prensalibre.com/noticias/Deforestacion-dana-patrimonio\\_0\\_1111688876.html](http://www.prensalibre.com/noticias/Deforestacion-dana-patrimonio_0_1111688876.html)



**Figure No. 7 Non-Carbon Benefits optimized by REDD + actions in forest incentive programs.**



**16.2 Diversity and learning value**  
*Please describe the innovative features of the proposed ER Program and what learning value the proposed ER Program would bring to the FCPF Carbon Fund.*

Guatemala’s ER program is singular and unique in terms of diversity. There are basic conditions that set framework to high diversity, such as: i) Guatemala is a multi - cultural country, having 24 different ethnic groups, ii) Guatemala has fourteen different live zones, everyone hosting unique biodiversity, iii) Along this ER Pin document, it is evident that given high basic diversity present in the country, singular and multiple policy measures, programs and land use actions are done along the country.

The propose scheme shown in Annex XXI provide conceptual levels of diversity that the ER Program in Guatemala will be related to. There are two figures that conceptually provide diversity that is being related to through policy instruments / measures related to protected areas and forest law:

- a. **Policy Level:** Many laws, policy instruments and policy measures have been mentioned along the ER program idea here presented. Complementary and independent policy effectiveness and performance will be able to be evaluated, both for protected areas, and for forest activities regulated by the forest law (first level policies). Second level policies interact, those policies are mentioned and describe in previous section 3.1. Various policies are integrated to integrally approach deforestation drivers. Diversity of policies operating over an integral and programmatic approach is being supported through the ER Program.
- b. **REDD+ Activity/Actions Level:** There are six REDD+ activities conceptualized as key programmatic components of the REDD+ strategy. REDD+ activities are in case of Guatemala real programmatic concepts, that bundles many REDD+ land use actions. Table No. 5 and 8, presents high diversity of Land use actions that are being implemented on the field supported by the group of policies interacting programmatically. High country diversity previously describe, sets framework for high diversity of land use actions that are concordant to diverse culture, social, and productive conditions of the country.
- c. **Country Implementers of REDD+ actions:** The Guatemalan laws and policies for land use, including protected areas and forests, have been developed and implemented through long participatory processes. All related policy instruments and measures aligned to laws account for great recognition and broad support along the country. Moreover, policy instruments such as PINFOR, PINPEP, SIGAP, Co management and concessions have been excellent framework for co investment, co implementation and collaboration between the State, communities based organizations, small and medium enterprises (SMEs), Cooperative groups, corporates, community concessions, and industry concessions, between other actors that visually are represented in Tables 5 and 8. This is the third level of high diversity present on Guatemala ER Program, which is present on land use action being implemented on the field.

Given that ER program in Guatemala aims to be one of the most diverse worldwide, it is also considered that Guatemala's ER Program must be proposed as one to be studied in terms of lessons learned that can be systematized at three diversity levels here described.

## 17. Progress on registries

**17.1 National registry**  
 Please include a short description of the relationship of the proposed ER Program to national REDD+ activity management arrangements, and if the proposed ER Program will be part of any system to track REDD+ or other emissions reduction activities (e.g., a REDD+ registry).

Articles 22 and 23 of the 2013 Climate Change Framework Law have established the legal basis for the registration of ER Program activities under a National REDD+ Register. This National REDD+ Register would need to be linked to the National Information System on Climate Change established by Article 9 of the same law. While this national register is under preparation, the government considers using other temporary platforms that can deliver this service, such as Markit and some others.

During the implementation of the ER program, it is important that the Government has completed the process of establishing the Register of regulated emissions and removals normed in the Climate Change Act. Thus, it will be the official platform for the National REDD+ Register for the ER Program. This will be linked to the strengthening of the monitoring systems of the institutions involved, who will provide basic information to the National Information System on Climate Change and the Registry.

## 18. List of acronyms used in the ER-PIN

Please include an explanation of any institutional or other acronyms used. Add arros as necessary.

Acronym	Description	Acronym	Description
ACOFOP	Association of Forest Communities in the Petén	DIGEGR	Geographic strategic information and risk management Office
AFOLU	Agriculture, Forestry and Other Land Use	DIPRONA	Nature protection division of the National civil Police
AGEXPORT	Association of Exporters of Guatemala	ER	Emission reduction
ANACAFE	National Coffee Association	ERPA	Emission Reductions Payment Agreement
ANAM	National Association of Municipalities	ER-PIN	Emissions Reductions Program Idea Note
ASAZGUA	Sugar Association of Guatemala (ASAZGUA)	ESMF	Environmental and Social Management Framework
BCEF	Biomass Conversion and Expansion Factors	FAO	Food and Agriculture Organization
BEF	Biomass Emission Factor	FCPF	Forest Carbon Partnership Facility
CACIF	Coordinating Committee of Agricultural, Commercial, Industrial and Financial Associations	FDN	Fundación Defensores de la Naturaleza, an NGO
CAG	Chamber of Agriculture of Guatemala (	FEGAGUATE	Ranchers Federation of Guatemala
CALMECAC	Fundación para el Desarrollo Integral del Hombre y su Entorno	FLEGT	Forest Law Enforcement, Governance and Trade
CARE	Non Governmental Organization	FONTIERRAS	Land Fund
CC	Climate Change	FPIC	Free, Prior Informed Consent
CEA	Environmental Studies Centre	FUNDAECO	Fundación para el Ecodesarrollo y la Conservación, an NGO
CECON	Centre for Conservation Studies	FUNDALACHUA	Fundación Lachua, an NGO
CEMAT	Mesoamerican center for appropriate technology studies	GBByCC	Platform on Forests, Biodiversity and Climate Change
CEMEC	CONAPs Center for Monitoring and Evaluation	GCI	Inter-institutional Coordination Group (for Climate Change)
CIG	Chamber of Industry of Guatemala	GHG	Greenhouse Gases
UNFCCC	United Nations Framework Convention on	GIS	Geographic information system

	Climate Change		
CNSAS	National Committee for Environmental and Social Safeguards	GOFC	Global Observations of Forest and Land Cover Dynamics
COCODE	Community Development Council	Ha	Hectare
CODI	PINPEP Steering Committee	IADB	Inter-American Development Bank
COMUDE	Municipal Development Council	IARNA	Institute of Agriculture, Natural Resources and Environment
CONAP	National Council on Protected Areas	ICC	Climate Change Institute (Private)
MINEX	Ministry of Foreign Affairs	IGN	National Geographical Institute
MINFIN	Ministry of Finance	INAB	National Forest Institute
MNCC	National Climate Change Roundtable	IPCC	Intergovernmental Panel on Climate Change
MRB	Maya Biosphere Reserve	ITO	International Labor Organization
MRV	Monitoring, reporting and verification	IUICN	International Union for the Conservation of Nature
NGO	Non-governmental Organization	JNR	Jurisdictional and Nested REDD+ (JNR) Framework
OACDH	Oficina del Alto Comisionado de las Naciones Unidas para los Derechos Humanos	KUKULCAN	Kukulcan Foundation
PAFFEC	Program on Family Agriculture to Strengthen Peasant Economies	LB	Base Line
PD	Project Document	LULUCF	Land use, land-use change and forestry
PDD	Project Design Document	SAA	Secretary for Agrarian Affairs
PGN	General Prosecutor's Office	SAF	Agroforestry Systems
PINFOR	Forest Incentive Program	SEGEPLAN	Planning and Programming Secretariat of the Presidency
PINFRUTA	Programa de Incentivos a la Fruticultura	SEISNEF	Electronic Information System on Forest Industries
PINPEP	Forest Incentive Program for Smallholders (including those without land title)	SESA	Strategic Environmental Assessment
PNDRI	National Integrated Rural Development Policy	SIFGUA	Guatemala's Forest Information System
PPM	Portable Pixel Map	SIGAP	Guatemala Protected Areas System
PROBOSQUE	Proposed Law introducing a new Forest Incentive Program (relay of PINFOR which runs out in 2017)	SIGSA	Health Management Information System
PES	Payment for Environmental Services	SNEA	National Agricultural Extension Systems
RA	Rainforest Alliance, an NGO	SNIT	National Territorial Information System
RBSM	Sierra de las Minas Biosphere Reserve	TNC	The Nature Foundation
REDD	Reduction of Emissions from Deforestation and Degradation of Forests	UN	United Nations
REDD+	Reduction of Emissions from Deforestation and Degradation of Forests; Conservation, sustainable management and enhancement of forest carbon stocks in developing countries	URL	Rafael Landívar University
REL	Reference emission level	USAC	University of San Carlos de Guatemala
RGP	General Land Ownership Register	UVG	University del Valle de Guatemala
RIC	Cadaster	VCS	Verified Carbon Standard
R-PP	National REDD+ Readiness Proposal	WCS	Wildlife Conservation Society
SAA	Secretary for Agrarian Affairs	WWF	World Wildlife Funds
MF	Forest management	ZUM	Multiple Use Zones (in Protected Areas such as Maya Biosphere Reserve)
MICC	Indigenous Climate Change Roundtable		

## ANNEXES

### Annex I. Design, implementation and Carbon Fund outcome payments Guatemala ER Program 2010-2020 preparation and implementacion budget. Annex I A ER Program CF form

Expected uses of funds	Description	Breakdown per year										TOTAL	
		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10		
REDD+ Programs and activities LEVEL 2 AND 3	Average Fixed Cost of technical and field activities by Government Institutions INAB and CONAP	\$ 2,065,692.31	\$ 2,065,692.31	\$ 2,065,692.31	\$ 2,065,692.31	\$ 2,065,692.31	\$ 2,065,692.31	\$ 2,065,692.31	\$ 2,065,692.31	\$ 2,065,692.31	\$ 2,065,692.31	\$ 2,065,692.31	\$ 20,656,923.08
MRV REDD+ National system LEVEL 3	Cost of National MRV INAB-CONAP-MAGA						\$ 2,722,828.80	\$ 3,143,065.35	\$ 3,631,225.11	\$ 4,194,736.35	\$ 5,833,376.74		\$ 19,525,232.35
ER program management unit - LEVEL 1	Cost of administration of the ER Program and Monetary Benefit sharing mechanism						\$ 569,720.82	\$ 695,947.58	\$ 792,819.21	\$ 984,701.85	\$ 1,296,917.93		\$ 4,340,107.39
National Forest Incentives Payment - LEVEL 3	Incentives payed and to be payed by INAB, PINPEP, PINFOR and PROBOSQUE	\$ 28,816,925.00	\$ 19,512,754.32	\$ 24,612,921.48	\$ 30,256,410.26	\$ 6,883,184.98	\$ 13,766,369.97	\$ 20,649,554.95	\$ 24,669,866.54	\$ 38,117,502.64	\$ 51,565,138.75		\$ 258,850,628.89
CONAP REDD+ Operational Budget - LEVEL 3	Cost of Institutional operations along SIGAP implementing REDD+ measures and supervision	\$ 5,769,230.77	\$ 5,769,230.77	\$ 5,769,230.77	\$ 5,769,230.77	\$ 5,769,230.77	\$ 5,769,230.77	\$ 5,769,230.77	\$ 5,769,230.77	\$ 5,769,230.77	\$ 5,769,230.77	\$ 5,769,230.77	\$ 57,692,307.69
INAB REDD+ Operational Budget - LEVEL 3	Cost of Institutional operations national level along PINFOR, PINPEP and PROBOSQUE development, promotion, supervision and certification	\$ 3,004,869.85	\$ 3,004,869.85	\$ 3,004,869.85	\$ 3,004,869.85	\$ 3,004,869.85	\$ 3,004,869.85	\$ 3,004,869.85	\$ 3,004,869.85	\$ 3,004,869.85	\$ 3,004,869.85	\$ 3,004,869.85	\$ 30,048,698.47
MARN REDD+ Operational Budget - LEVEL 3	Cost of operating climate change activities related to REDD+ national coordination	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00	\$ 2,500,000.00

MAGA REDD+ Operational Budget - LEVEL 3	Cost of coordinating REDD+ activities related to MAGA	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00	\$ 2,500,000.00
ER Program preparatory measures LEVEL 1	Cost of Preparatory measures					\$ 3,850,000.00	\$ 3,850,000.00	\$ 3,850,000.00					\$ 11,550,000.00
Policy measures Forestry Law - REDD+ LEVEL 2	Development, preparation, consultation, approval and start up process of new policies at country level PINPEP, PROBOSQUE, etc					\$ 10,108,717.95	\$ 10,108,717.95	\$ 10,108,717.95					\$ 30,326,153.85
REDD+ actions in Protected areas LEVEL 3	Cost of implementing conservation and management, community development activities on the field at protected areas in REDD+ pilot projects	\$ 1,260,000.00	\$ 1,260,000.00	\$ 1,260,000.00	\$ 1,260,000.00	\$ 1,260,000.00	\$ 1,260,000.00	\$ 1,260,000.00	\$ 1,260,000.00	\$ 1,260,000.00	\$ 1,260,000.00	\$ 1,260,000.00	\$ 12,600,000.00
Policy measures Climate Change Law MARN LEVEL 2	Cost of implementing policy measures related to Climate change law by MARN						\$ 607,692.31	\$ 607,692.31	\$ 107,692.31	\$ 107,692.31	\$ 107,692.31	\$ 107,692.31	\$ 1,538,461.54
ER Benefit sharing to REDD+ actions line	Monetary Benefit sharing with land owners						\$ 3,631,565.56	\$ 4,932,792.64	\$ 6,444,338.19	\$ 8,189,203.26	\$ 13,263,115.16	\$ 13,263,115.16	\$ 36,461,014.82
Other costs													
<b>Total uses</b>	Suma de costos rel. Con REDD+	\$ 41,416,717.93	\$ 32,112,547.24	\$ 37,212,714.41	\$ 42,856,203.18	\$ 33,441,695.86	\$ 47,856,688.33	\$ 56,587,563.70	\$ 48,245,734.28	\$ 64,193,629.33	\$ 84,666,033.82	\$ 84,666,033.82	\$ 488,589,528.07

FCPF Carbon Fund ER-PIN Guatemala Agust 8th, 2014

Expected sources of funds	Description												
Government Operational Budget Secured	Government operational budget INAB and CONAP	\$ 8,774,100.62	\$ 8,774,100.62	\$ 8,774,100.62	\$ 8,774,100.62	\$ 8,774,100.62	\$ 8,774,100.62	\$ 8,774,100.62	\$ 8,774,100.62	\$ 8,774,100.62	\$ 8,774,100.62	\$ 8,774,100.62	\$ 87,741,006.16
Grants	Grants by FCPF, USAID, GIZ, others REDD+ preparation					\$ 3,850,000.00	\$ 3,850,000.00	\$ 3,850,000.00					\$ 11,550,000.00
Revenue from sale of Emission Reductions (not contracted)	ERPA (To be raised)						\$ 21,825,860.60	\$ 21,825,860.60					\$ 43,651,721.20
Revenue from sale of Emission Reductions (contracted)	ERPA CF FCPF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 11,394,416.38	\$ 13,918,951.60	\$ 15,856,384.12	\$ 19,694,036.92	\$ 25,938,358.69	\$ 86,802,147.71	\$ 86,802,147.71
Guatemala Forest Incentives Budget	Incentives budgeted by Forestry law, PINPEP, and PROBOSQUE	\$ 28,816,925.00	\$ 19,512,754.32	\$ 24,612,921.48	\$ 30,256,410.26	\$ 6,883,184.98	\$ 13,766,369.97	\$ 20,649,554.95	\$ 24,669,866.54	\$ 38,117,502.64	\$ 51,565,138.75	\$ 258,850,628.89	\$ 258,850,628.89
<b>Total sources of funds</b>		\$ 37,591,025.62	\$ 28,286,854.94	\$ 33,387,022.10	\$ 39,030,510.87	\$ 19,507,285.60	\$ 59,610,747.56	\$ 69,018,467.77	\$ 49,300,351.28	\$ 66,585,640.18	\$ 86,277,598.05	\$ 488,595,503.96	\$ 488,595,503.96
													\$ -
<b>Net revenue before taxes (=total sources - total uses)</b>		\$ (3,825,692.31)	\$ (3,825,692.31)	\$ (3,825,692.31)	\$ (3,825,692.31)	\$ (13,934,410.26)	\$ 11,754,059.24	\$ 12,430,904.06	\$ 1,054,617.00	\$ 2,392,010.85	\$ 1,611,564.23	\$ 5,975.89	\$ 5,975.89

**Anexo I B. Assumptions**

**CALCULATION ASSUMPTIONS AND IDENTIFICATION OF INFORMATION SOURCES**

No.	Expected Uses/Sources of Funds	Description	Assumptions	Source of Calculation	Source of Information
<b>EXPECTED USES OF FUNDS</b>					
1	REDD+ Programs and activities LEVEL 2 AND 3	Average Fixed Cost of technical and field activities by Government Institutions INAB and CONAP	Average cost of staffing and their on the field operations, providing technical assistance, patrolling & control and improving governance. For protected areas average cost of Guatecarbon REDD+ pilot project was used	a) INAB costs (see Financial Plan ER PIN. Xls, sheet "Costos Adicionales"), b) CONAP costs (same file, see sheet "ER Cost Prot Areas)	INAB costing study for REDD+ Implementation, Guatecarbon REDD+ project managing and implementation budget
2	MRV REDD+ National system LEVEL 3	Cost of National MRV INAB-CONAP-MAGA	Margin cost of ER MRV through INAB was studied based on activities costing this is yearly multiplied by the number of ERs monitored and issued to CF from carbon enhancements	See excel file Financial Plan ER PIN, sheets: a) "ERs MRV Cost", b) "Costos adicionales" and linked basis calculations	INAB costing study for REDD+ implementation
			Cost of MRV for Protected Areas is determined based on projected annual cost of MRV for Guatecarbon REDD+ project and projected for the rest of REDD+ pilot projects along TBN REDD+ region	See excel file Financial Plan ER PIN, sheet "ERs Cost Prot Areas"	Guatecarbon REDD+ project average cost of management and implementation
			Cost of MRV for MAGA is projected to be 25,000 USD per year for measuring carbon stocks	See excel file Financial Plan ER PIN, sheet "ER Program"	Estimated cost provided by office of Climate Change at MAGA
3	ER program management unit - LEVEL 1	Cost of administration of the ER Program and Monetary Benefit sharing mechanism	Administrative cost was assumed to be 5 % over total contracted volume	See excel file Financial Plan ER Pin, sheet "ER Issuance" which is the amount of Ers and sheet "ER Program" for market price estimation	Calculations according to assumptions and data sources indicated
4	National Forest Incentives Payment - LEVEL 3	Incentives payed and to be payed by INAB, PINPEP, PINFOR and PROBOSQUE	From 2011 to 2013 data comes from Office of National Budget assigned and executed by INAB providing Forest incentives through PINFOR and PINPEP. 2014 is the projected execution for current year. From 2015 to 2020, an optimization model was developed for maximizing carbon enhancements using land uses, from that, optimum areas to be incentivized determined the amount of incentives per year to be paid	See excel file Financial Plan ER PIN, sheets: a) "proyec.costos.con.mod.optimo", b) PINPEP (costos.base), c) PINFOR (costos.base)	INAB costing study of REDD+ implementation

5	CONAP REDD+ Operational Budget - LEVEL 3	Cost of Institutional operations along SIGAP implementing REDD+ policy measures and supervision	75% of the Annual budget of CONAP (Q.60,000,000) is financing operations directly related to implementing policy measures and supervision at national level of REDD+ along SIGAP	See excel file Financial Plan ER PIN sheet ER Program CF form	CONAP climate change office
6	INAB REDD+ Operational Budget- LEVEL 3	Cost of Institutional operations national level along PINFOR, PINPEP and PROBOSQUE development, promotion, supervision and certification	Total budget of INAB during 2013 was used as reference of average operational cost implementing PINFOR and PINPEP at national level	See excel file Financial Plan ER PIN sheets: a) PINPEP (costos.base), c) PINFOR (costos.base)	INAB costing study for REDD+ implementation
7	MARN REDD+ Operational Budget - LEVEL 3	Cost of operating climate change activities related to REDD+ national coordination	Budget for the National REDD+ focal point office in MARN is 250,000 USD per year	See excel file Financial Plan ER PIN sheet ER Program	MARN climate change office
8	MAGA REDD+ Operational Budget - LEVEL 3	Cost of coordinating REDD+ activities related to MAGA	Budget for the REDD+ office in MAGA is estimated to be USD 250,000 per year	See excel file Financial Plan ER PIN sheet ER Program	MAGA climate change office
9	ER Program preparatory measures - LEVEL 1	Cost of Preparatory measures	Budget of preparatory measures, including RPP, support form CF process and multiple donors providing country support for REDD+ preparation	Preparatory process	MARN, IADB and CNCG/USAID
10	Policy measures Forestry Law - REDD+ LEVEL 2	Development, preparation, consultation, approval and start up process of new policies at country level PINPEP, PROBOSQUE, etc	Budget developed for the all policy measures related to implementing REDD+ by INAB at National Level, the amount is assumed to be spent in three years period, starting 2016	See excel file Financial Plan ER PIN sheet "Costos Adicionales"	INAB costing study of REDD+ implementation
11	REDD+ actions in Protected areas LEVEL 3	Cost of implementing conservation and management, community development activities on the field at protected areas in REDD+ pilot projects	Average cost of Guatecarbon project was used as reference to project the cost associated to all REDD+ pilot project which are in the same REDD+ region	See excel File Financial Plan ER PIN sheet "ERs Cost Prot Areas"	Guatecarbon REDD+ project average cost of management and implementation
12	Policy measures Climate Change Law MARN LEVEL 2	Cost of implementing policy measures related to Climate change law by MARN	Average cost of operating national REDD+ registry, as the same as setting up cost of National System of Climatic information, and the National REDD+ Registry	See excel file Financial Plan ER PIN sheet "ER Program"	MARN climate change office



No.	Expected Uses/Sources of Funds	Description	Assumptions	Source of Calculation	Source of Information
<b>EXPECTED SOURCES OF FUNDS</b>					
13	Government Operational Budget Secured	Government operational budget INAB and CONAP	Actual operational budget of INAB and CONAP related to REDD+ policy implementation and supporting REDD+ activities on the field is included	Actual budget of INAB and CONAP	Offices of Climate Change at CONAP and INAB
14	Grants	Grants by FCPF, USAID, GIZ, others REDD+ preparation	The sum of funding committed by donors supporting the REDD+ preparation process in Guatemala, USAID, WB/IADB, GIZ, between others	RPP process budget and expected CF FCPF support	IADB
15	Revenue from sale of Emission Reductions (not contracted)	ERPA (To be raised)	During the first decade of ER program execution, volumes produced by protected areas between 2011 and 2015 are not offered to CF FCPF, this volume shall be commercialized	Estimation done and included in Excel file Financial Plan ER PIN sheet "ERs Issuances"	Official estimation presented by Guatemala in the ER PIN
16	Revenue from sale of Emission Reductions (contracted)	ERPA CF FCPF	The total volume offered to the CF FCPF and the margin cost calculated to be 5.19 USD	See excel file Financial Plan ER PIN sheet "ER Program"	All Financing Plan and estimations calculated
17	Guatemala Forest Incentives Budget	Incentives budgeted by Forestry law, PINPEP, and PROBOSQUE	The total amount of incentives to be paid by Government of Guatemala, if REDD+ strategy is supported by CF FCPF	See Excel file Financial Plan ER PIN, sheets: a) ER Program, b) proyec.costos.con.mod.optimo.	Optimization model for forest incentives program having REDD+ financial mechanisms support

### Anexo I C Guatemala ER Program 2010-2020 preparation and implementacion budget: Global Investment Plan

GLOBAL INVESTMENT PLAN 2010-2020 NATIONAL REDD+ PROGRAM GUATEMALA					
	Total budget (USD)	SOURCES (USD)			ERs Margin cost (USD / ER)
		Guatemala counterpart	ER monetization	Donations	
<b>Government Budget Items</b>	<b>407,669,873.75</b>	<b>346,591,635.05</b>	<b>49,528,238.71</b>	<b>11,550,000.00</b>	<b>1.97</b>
REDD+ Programs and activities LEVEL 2 AND 3	20,656,923.08		20,656,923.08		
MRV REDD+ National system LEVEL 3	19,525,232.35		19,525,232.35		
ER program management unit - LEVEL 1	4,346,083.28		4,346,083.28		
National Forest Incentives Payment - LEVEL 3	258,850,628.89	258,850,628.89			
CONAP REDD+ Operational Budget - LEVEL 3	57,692,307.69	57,692,307.69			
INAB REDD+ Operational Budget- LEVEL 3	30,048,698.47	30,048,698.47			
MARN REDD+ Operational Budget - LEVEL 3	2,500,000.00		2,500,000.00		
MAGA REDD+ Operational Budget - LEVEL 3	2,500,000.00		2,500,000.00		
ER Program preparatory measures - LEVEL 1	11,550,000.00			11,550,000.00	
<b>REDD+ Policy measures and actions budget lines</b>	<b>44,464,615.38</b>	<b>-</b>	<b>44,464,615.38</b>	<b>-</b>	<b>1.77</b>
Policy measures Forestry Law - REDD+ LEVEL 2	30,326,153.85		30,326,153.85		
REDD+ actions in Protected areas LEVEL 3	12,600,000.00		12,600,000.00		
Policy measures Climate Change Law MARN LEVEL 2	1,538,461.54		1,538,461.54		
<b>ER Benefit sharing to REDD+ actions line</b>	<b>36,461,014.82</b>	<b>0</b>	<b>36,461,014.82</b>	<b>0</b>	<b>1.45</b>
<b>Total</b>	<b>488,595,503.96</b>	<b>346,591,635.05</b>	<b>130,453,868.91</b>	<b>11,550,000.00</b>	<b>5.18</b>
<b>Sources by percentage of total</b>	<b>100%</b>	<b>71%</b>	<b>27%</b>	<b>2%</b>	

<b>Overall ERs 2010 - 2020 (# ERs)</b>	<b>25,170,229</b>	<b>100%</b>
<b>Margin cost per ER (USD / ER)</b>	<b>5.18</b>	
<b>Market price for REDD+ Ers (USD / ER)</b>	<b>5</b>	
<b>Amount of ERs offered to CF (# ERs)</b>	<b>16,747,912</b>	<b>67%</b>
<b>Amount of ERs to be monetized (# ERs)</b>	<b>8,422,317</b>	
<b>Value to be Monetized after CF ERPA (USD)</b>	<b>43,651,721</b>	

#### Additional Clarifications:

- The above chart provides the Global Investment Plan identifying sources of funding for the first decade of the ER Program only. The ER program lifespan remains 2010 – 2050
- The term “Overall ERs 2010 – 2020”, indicated in blue light colored chart represents the overall volume of ERs estimated to be produced by Guatemala during 2010 – 2020 period of time.
- The term “Amount of ERs offered to CF”, indicated in blue light colored chart represents the estimated amount of ERs to be delivered by Guatemala to the CF, during the Reference Period 2016 – 2020.
- The term “Amount of ERs to be monetized”, indicated in blue light colored chart represent the overall amount of emission reductions that are not offered to the CF, because they are not coincident to what Guatemala could deliver to the CF, during the Reference Period (2016 – 2020). This is given by the fact that ER Program of Guatemala, as stated along the ER PIN, started in 2010, rather than 2016.

## Annex II. ER-PIN's approval letter



*Ministra*

MINISTERIO DE AMBIENTE Y RECURSOS NATURALES  
GUATEMALA, C.A.

Guatemala, 16 de mayo de 2014  
Oficio MI-441-2014/MMMK-jycr

Ingeniero  
Manuel Benedicto Lucas López  
Secretario Ejecutivo del Consejo  
Nacional de Áreas Protegidas  
Su despacho

Ingeniero  
Josué Morales Dardon  
Gerente del Instituto Nacional de Bosques  
Su Despacho

**ASUNTO:** Autorización para presentar y negociar el Proyecto "Programa de Reducciones de Emisiones del Sector Forestal y de Áreas Protegidas de Guatemala ante el Fondo del Carbono del Forest Carbon Partnership Facility (FCPF) del Banco Mundial en Alemania el 16 de junio de 2014".

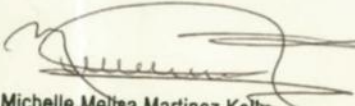
Señores Secretario Ejecutivo y Gerente:

Me dirijo en seguimiento al Marco del Grupo de Coordinación Interinstitucional y en cumplimiento al artículo 20: Reducción de Emisiones por Cambio de Uso de la Tierra y en el artículo 22: Proyectos de Mercado de Carbono, del Decreto 07-2013, Ley de Cambio Climático, del cual el Ministerio de Ambiente y Recursos Naturales (MARN), es el Ente Rector, les comunico que se ha revisado el trabajo que se ha desarrollado para la formulación del proyecto de título: Reducción de Emisiones a través del Fortalecimiento de la Gobernanza Forestal en Comunidades Vulnerables de Guatemala, como Programa de Reducción de Emisiones a nivel de idea (ERPIN).

El Ministerio de Ambiente y recursos Naturales (MARN), como Punto Focal REDD+ y del Fondo colaborativo del Carbono Forestal (FCPF) del país, considera adecuado y brinda la autorización técnica y de gestión para la presentación y negociación del proyecto de referencia al Instituto Nacional de Bosques (INAB), a través de su Gerente y al Consejo Nacional de Áreas Protegidas (CONAP), a través de su Secretario Ejecutivo, como principales impulsores de la iniciativa, reservándose este Ministerio las gestiones políticas.

Esta autorización obliga a brindar informes de avance constantes y efectivos ante el Grupo de coordinación Interinstitucional (GCI), tanto en su segmento técnico como político y a los órganos de dirección de ambas instituciones de Gobierno, la junta Directiva del INAB y el Consejo del CONAP.

Agradeciendo su atención al presente, cordialmente,

  
Michelle Melissa Martinez Kelly  
Ministra de Ambiente y Recursos Naturales



Cc: Archivo

20 Calle 28-58 Zona 10 Edificio MARN  
PBX: 2423-0500  
<http://www.marn.gov.gt>

**Annex III. Climate Change Act: “Ley Marco para Regular la Reducción de la Vulnerabilidad, la Adaptación Obligatoria ante los Efectos del Cambio Climático y la Mitigación de Gases de Efecto Invernadero” (Decreto 07-2013) .**

<http://www.marn.gob.gt/documentos/LeyCambioClimatico7-2013.pdf>

**Annex IV. Convenio de Coordinación Interinstitucional para la Conservación y Manejo Sustentable de los Recursos Naturales –GCI.**

[..\..\..\..\..\Dropbox\12 sept 14 Gt ERPIN anexos \(1\)\anexo IV Convenio GCI\Convenio MARN-MAGA-INAB-CONAP.pdf](..\..\..\..\..\Dropbox\12 sept 14 Gt ERPIN anexos (1)\anexo IV Convenio GCI\Convenio MARN-MAGA-INAB-CONAP.pdf)

**Annex V. Actors that constitute governance support platforms of the REDD+ process in Guatemala**

Sector	GCI	GBByCC	CNSAS	Grupo de implementadores REDD
<b>Gobierno central</b>	Consejo Nacional de Áreas Protegidas (CONAP) Instituto Nacional de Bosques (INAB) Ministerio de Agricultura, Ganadería y Alimentación (MAGA) Ministerio de Medio Ambiente y Recursos Naturales (MARN)	CONAP INAB MAGA MARN Ministerio de Energía y Minas (MEM) Ministerio de Finanzas Públicas (MINFIN) Ministerio de Relaciones Exteriores (MINEX) Secretaria de Planificación y Programación de la Presidencia (SEGEPLAN)	CONAP INAB MAGA MARN	CONAP INAB MAGA
<b>Gobierno local – municipalidades</b>			Asociación Nacional de Municipalidades de la Republica de Guatemala – ANAM	Municipalidades
<b>Programas Sectoriales</b>		Programa Forestal Nacional		
<b>Academia</b>		Centro de Estudios Conservacionistas (CECON), Universidad de San Carlos de Guatemala -USAC Facultad de Agronomía, Universidad de San Carlos de Guatemala -USAC Centro de Estudios Ambientales (CEA), Universidad del Valle de Guatemala -UVG Instituto de Agricultura, Recursos Naturales y Ambiente (IARNA/URL), Universidad Rafael Landívar –URL	USAC URL	

Sector	GCI	GBByCC	CNSAS	Grupo de implementadores REDD
<b>Organizaciones no gubernamentales nacionales</b>		CALMECAC* CEMAT* FCG Fundación Defensores de la Naturaleza -FDN* Fundación para el Ecodesarrollo y la Conservación - FUNDAECO* KUKULCÁN* Mesa Nacional de Cambio Climático Nacionales	FDN FUNDAECO	FDN FUNDAECO FUNDALACHUA CALMECAC
<b>Organizaciones no gubernamentales internacionales</b>		Conservación de la Naturaleza - UICN Rainforest Alliance -RA* ThaNatureConservancy-TNC* Unión Internacional para la <u>Wildlife Word Fund –WWE</u>		CARE Fundación Oro Verde RA UICN
<b>Comunidades locales y pueblos indígenas</b>		Ak'Tenamit* Alianza Nacional de Organizaciones Forestales Comunitarias* Asociación de Comunidades Forestales de Petén - ACOFOP* ASOCUCH* Autoridades Indígenas de los 48 Cantones de Totonicapán COGMANGLAR Enredémonos FEDERAFOGUA FUNDALACHUA* Mesa Indígena de Cambio Climático de Guatemala* Red de Autoridades Indígenas Sotzil* Utz'Che*	CMIB FUNDAMAYA UtzChé  Representantes de la Alianza Nacional de Organizaciones Forestales Comunitarias: ENREDEMONOS y FUNDALACHUA	Asociación de Comunidades Forestales de Petén -ACOFOP FUNDALACHUA Sotzil  Representante de la Alianza Nacional de Organizaciones Forestales Comunitarias de Guatemala, la cual aglutina más de 300 organizaciones de base comunitaria: Utz'Che´

Mujeres			Ak Tenamit Mujeres en Café	
Sector privado		<u>Asociación de Azucareros de Guatemala (ASAZGUA)</u> Asociación Gremial de Exportadores de Guatemala (AGEXPORT)* <u>Asociación Gremial de Productores de Soya (AGRESOYA)</u> Asociación Nacional del Café (ANACAFE) <u>Cámara de Comercio de Guatemala (CCG)</u> <u>Cámara de Industria de Guatemala (CIG)</u> <u>Cámara del Agro de Guatemala (CAG)</u> <u>Comité Coordinador de Asociaciones Agrícolas, Comerciales, Industriales y Financieras (CACIF)</u> <u>Federación de Ganaderos de Guatemala (FEGAGUATE)</u> <u>Gremial de Palmicultores de Guatemala (GREPALMA)</u> Gremial Forestal de Guatemala Sector Financiero : Grupo de Occidente a través de Eneogocios Occidente	CACIF CCG Eneogocios de Occidente Instituto Privado de Investigación sobre Cambio Climático – ICC	Asociación Gremial de Exportadores - AGEXPORT Eneogocios de Occidente Gremial Forestal adscrita a la Cámara de Industria
<b>Notas sobre el GBBYCC:</b>				
Las instituciones/organizaciones que aparecen señaladas con (*), pertenecen a la Mesa Nacional de Cambio Climático.				
Las instituciones/organizaciones subrayadas en este cuadro aún no participan de lleno en el GBBYCC, por lo que se planea tener acercamientos con ellas para promover que se integren de forma activa al grupo.				

## **Annex VI. Co-management Agreements of Protected Areas**

- Coadministración Parque Nacional Laguna Lachuá  
[..\..\..\..\Dropbox\12 sept 14 Gt ERPIN anexos \(1\)\anexo VI SIGAP coadministracion\Coadministradores\Coadministracion lachua.pdf](..\..\..\..\Dropbox\12 sept 14 Gt ERPIN anexos (1)\anexo VI SIGAP coadministracion\Coadministradores\Coadministracion lachua.pdf)
- Coadministración Refugio de Vida Silvestre Punta de Manabique  
[..\..\..\..\Dropbox\12 sept 14 Gt ERPIN anexos \(1\)\anexo VI SIGAP coadministracion\Coadministradores\Administracion Punta de Manabique.pdf](..\..\..\..\Dropbox\12 sept 14 Gt ERPIN anexos (1)\anexo VI SIGAP coadministracion\Coadministradores\Administracion Punta de Manabique.pdf)
- Coadministración Reserva Protectora de Manantiales Cerro San Gil  
[..\..\..\..\Dropbox\12 sept 14 Gt ERPIN anexos \(1\)\anexo VI SIGAP coadministracion\Coadministradores\Coadministracion Cerro San Gil.pdf](..\..\..\..\Dropbox\12 sept 14 Gt ERPIN anexos (1)\anexo VI SIGAP coadministracion\Coadministradores\Coadministracion Cerro San Gil.pdf)
- Coadministración Parque Nacional Sierra de Lacandón  
[..\..\..\..\Dropbox\12 sept 14 Gt ERPIN anexos \(1\)\anexo VI SIGAP coadministracion\Coadministradores\Convenio de CONAP y FDN.pdf](..\..\..\..\Dropbox\12 sept 14 Gt ERPIN anexos (1)\anexo VI SIGAP coadministracion\Coadministradores\Convenio de CONAP y FDN.pdf)
- Acta comité directivo proyecto REDD+ GuateCarbon  
[..\..\..\..\Dropbox\12 sept 14 Gt ERPIN anexos \(1\)\anexo VI SIGAP coadministracion\Acta conformacion comite GuateCarbon.pdf](..\..\..\..\Dropbox\12 sept 14 Gt ERPIN anexos (1)\anexo VI SIGAP coadministracion\Acta conformacion comite GuateCarbon.pdf)

## **Annex VII. Terms of Reference of SESA/ESMF and MAR**

### **SESA/ESFM Terms of Reference:**

[..\..\..\..\Dropbox\12 sept 14 Gt ERPIN anexos \(1\)\anexo VII TdR SESA, ESMF y GRM-MAR-5. Diseño e implementación del SESA y ESMF 19-07-14.docx](..\..\..\..\Dropbox\12 sept 14 Gt ERPIN anexos (1)\anexo VII TdR SESA, ESMF y GRM-MAR-5. Diseño e implementación del SESA y ESMF 19-07-14.docx)

### **GRM/MAR Terms of Reference:**

[..\..\..\..\Dropbox\12 sept 14 Gt ERPIN anexos \(1\)\anexo VII TdR SESA, ESMF y GRM-MAR-6. Mecanismos de Atención a Reclamos-MAR- 19-07-14.docx](..\..\..\..\Dropbox\12 sept 14 Gt ERPIN anexos (1)\anexo VII TdR SESA, ESMF y GRM-MAR-6. Mecanismos de Atención a Reclamos-MAR- 19-07-14.docx)

## **Annex VIII. Statistical Bulletin INAB 2013 (PINPEP, PINFOR)**

[..\..\..\..\Dropbox\12 sept 14 Gt ERPIN anexos \(1\)\anexo VIII estadisticas PINFOR PINPEP\BOLETIN ESTADISTICO - DEPARTAMENTO DE INCENTIVOS FORESTALES 1998-2013.1.pdf](..\..\..\..\Dropbox\12 sept 14 Gt ERPIN anexos (1)\anexo VIII estadisticas PINFOR PINPEP\BOLETIN ESTADISTICO - DEPARTAMENTO DE INCENTIVOS FORESTALES 1998-2013.1.pdf)



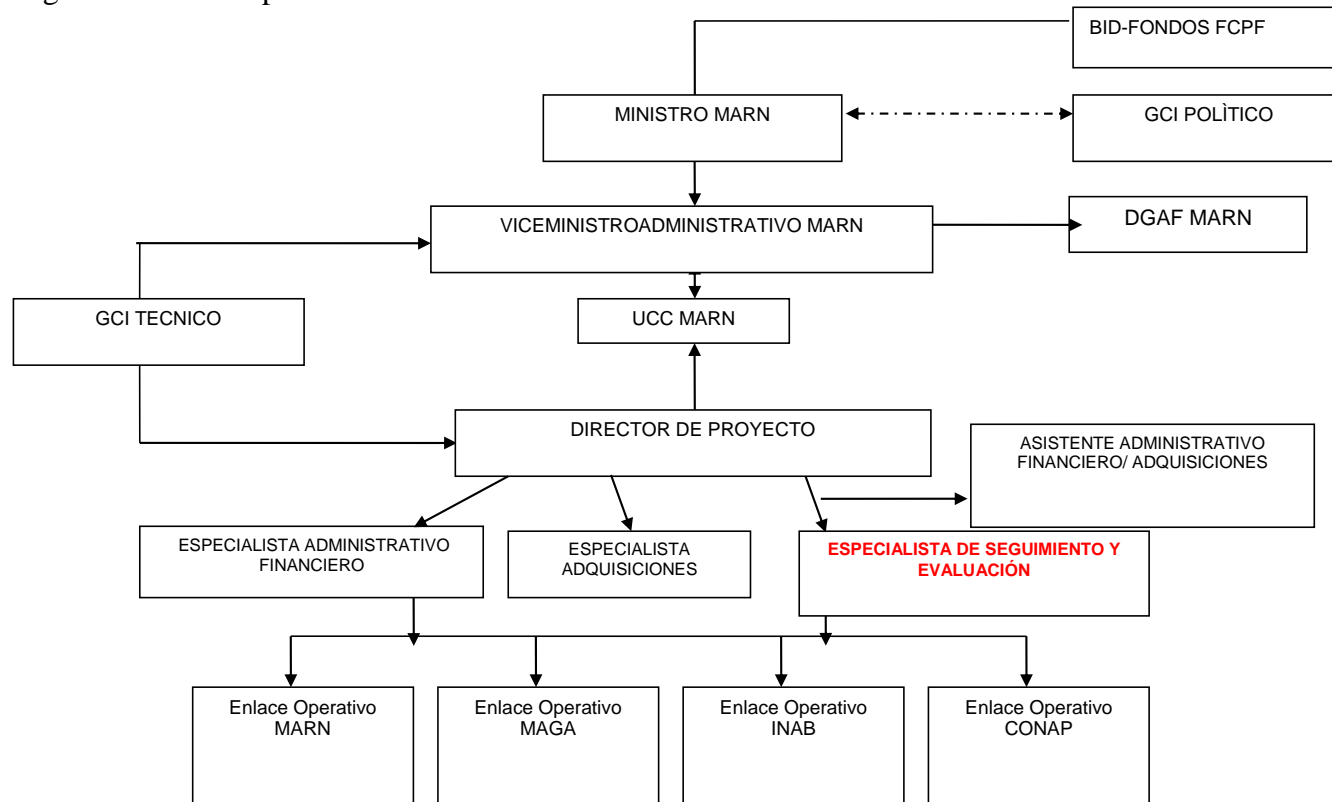
**Annex IX. RPP Guatemala, component 5**  
**Summary table of budget preparation process.**

Summary of Readiness process budget

Componentes	2014	2015
Component 1: Organization and Consultation	32,000.00	614,000.00
Component 2: REDD+ Strategies	14,000.00	650,000.00
Component 3: Develop a National Forest Reference Emission Level and/or a Forest Reference	34,400.00	1,259,000.00
Component 4: Design Systems for National Forest Monitoring and Information on Safeguards	8,000.00	120,000.00
Implementation unit	64,932.00	209,592.00
Unforeseen	0.00	381,600.00
<b>Total US\$</b>	<b>153,332.00</b>	<b>3,234,192.00</b>

### Annex X. RPP Guatemala, component 6 Monotoring and evaluationFigure

RPP monitoring and evaluation plan



## Annex XI. Policies and Programs Summary

Política /programa	Resumen y pertinencia para el programa ER
Política /programa	Resumen y pertinencia para el programa ER
Ley Marco para Regular la Reducción de la Vulnerabilidad, la Adaptación Obligatoria ante los efectos del Cambio Climático y la Mitigación de Gases de Efecto de Invernadero, Decreto 07-2013.	<p><a href="http://www.marn.gob.gt/documentos/LeyCambioClimatico7-2013.pdf">http://www.marn.gob.gt/documentos/LeyCambioClimatico7-2013.pdf</a></p> <p>Su objetivo es establecer las regulaciones necesarias para prevenir, planificar y responder de manera urgente, adecuada, coordinada y sostenida a los impactos del cambio climático en el país. Crea: A. Consejo Nacional de Cambio Climático como ente regulador con participación pública y privada. B. El Sistema Nacional de Información sobre Cambio Climático adscrito al Ministerio de Ambiente y Recursos Naturales.</p>
“Ley de Incentivos Forestales para Poseedores de Pequeñas Extensiones de Tierra de Vocación Forestal o Agroforestal –PINPEP–“. Decreto 51-2010	<p><a href="http://www.inab.gob.gt/Documentos/Legislacion/Ley%20PINPEP0001.pdf">http://www.inab.gob.gt/Documentos/Legislacion/Ley%20PINPEP0001.pdf</a></p> <p>Crea el programa de incentivos forestales PINPEP para dar participación a los poseedores de pequeñas extensiones de tierras de vocación forestal o agroforestal, en los beneficios de los incentivos económicos en materia forestal. Incorpora la modalidad de establecimiento y mantenimiento de sistemas agroforestales, fomentar la equidad de género, generar empleo en el área rural, fomentar la biodiversidad forestal, propiciar el mejoramiento del nivel de vida de las comunidades, aumentar y asegurar los bienes y servicios provenientes del bosque para satisfacer la necesidad de leña, vivienda y alimento. Así como contribuir con la gestión socioambiental y territorial para la mitigación y adaptación a los efectos de la variabilidad y cambio climático, fortaleciendo la resiliencia de los ecosistemas forestales para apoyar los esfuerzos nacionales en materia de seguridad alimentaria, protección civil, gestión de recursos hídricos, desarrollo rural integral y reducción de riesgos a desastres naturales.</p>
Anteproyecto de Ley de Fomento al Establecimiento, recuperación, restauración, manejo, producción y protección de bosques en Guatemala (PROBOSQUE).	<p>Proyecto de ley que propone continuar el incentivo forestal en el país a partir del 2017 por otros 30 años. Entregado por el Presidente de la República al Congreso en febrero del 2014. PROBOSQUE amplía el alcance del PINFOR original al ser más incluyente socialmente.</p>
Ley de Áreas Protegidas y su reglamento	<p><a href="http://www.conap.gob.gt/phocadownload/Centro_Documentacion/legislacion/ley%20de%20areas%20protegidas%20decreto%204-89-2.pdf">http://www.conap.gob.gt/phocadownload/Centro_Documentacion/legislacion/ley%20de%20areas%20protegidas%20decreto%204-89-2.pdf</a></p> <p>Para asegurar el funcionamiento óptimo de los procesos ecológicos esenciales y de los sistemas naturales vitales para el beneficio de todos los guatemaltecos, crea el Consejo Nacional de Áreas Protegidas y el Sistema Guatemalteco de Áreas Protegidas – SIGAP.</p>
Ley Forestal	<p><a href="http://www.inab.gob.gt/Documentos/Legislacion/ley_forestal.PDF">http://www.inab.gob.gt/Documentos/Legislacion/ley_forestal.PDF</a></p> <p>Declara de urgencia nacional y de interés social la reforestación y la conservación de los bosques, para lo cual se propiciará el desarrollo forestal y su manejo sostenible. Esta ley da vida al Instituto Nacional de Bosques y al Programa de Incentivos Forestales PINFOR.</p>
Ley del Registro de Información Catastral	<p><a href="http://www.ric.gob.gt/normativa/ley-del-ric">http://www.ric.gob.gt/normativa/ley-del-ric</a></p> <p>Da vida al Registro de Información Catastral- RIC, como autoridad competente en materia catastral, que tiene por objeto establecer, mantener y</p>

	<p>actualizar el catastro nacional. Define los diferentes tipos de propiedad, propietario, poseedor legal y tierras comunales.</p>
Ley de Acceso de Información Pública	<p><a href="http://www.segeplan.gob.gt/laip/downloads/LAIP_comentada.pdf">http://www.segeplan.gob.gt/laip/downloads/LAIP_comentada.pdf</a></p> <p>Su objetivo es garantizar a toda persona interesada, sin discriminación alguna, el derecho a solicitar y a tener acceso a la información pública en posesión de las autoridades de Gobierno central y descentralizado, así como garantizar la transparencia de la administración pública y de los sujetos obligados y el derecho de toda persona a tener acceso libre a la información pública. Es una herramienta clave para el proceso de divulgación del programa ER.</p>
Política Forestal	<p><a href="http://www.segeplan.gob.gt/downloads/clearinghouse/politicas_publicas/Recursos%20Naturales/Politica%20Forestal%20de%20Guatemala.pdf">http://www.segeplan.gob.gt/downloads/clearinghouse/politicas_publicas/Recursos%20Naturales/Politica%20Forestal%20de%20Guatemala.pdf</a></p> <p>Su objetivo es “incrementar los beneficios socioeconómicos de los bienes y servicios generados en los ecosistemas forestales y contribuir al ordenamiento territorial en tierras rurales, a través del fomento del manejo productivo y de la conservación de la base de recursos naturales, con énfasis en los forestales y los recursos asociados como labiodiversidad, el agua y los suelos; incorporando cada vez más la actividad forestal a la economía del país en beneficio de la sociedad guatemalteca.</p>
Política Agraria	<p><a href="http://www.segeplan.gob.gt/downloads/clearinghouse/politicas_publicas/Desarrollo%20Agropecuario/Pol%C3%ADtica%20Agraria.pdf">http://www.segeplan.gob.gt/downloads/clearinghouse/politicas_publicas/Desarrollo%20Agropecuario/Pol%C3%ADtica%20Agraria.pdf</a></p> <p>Su objetivo es transformar la situación agraria de Guatemala, promoviendo la certeza jurídica sobre la propiedad, posesión y tenencia de la tierra, su acceso y la resolución de los conflictos agrarios, para que conjuntamente con el uso de otros activos productivos, se mejoren las condiciones de vida de la población del área rural y se propicie el desarrollo rural integral, dentro de una sociedad multicultural</p>
Política Nacional de Desarrollo Rural Integral – PNDRI-	<p><a href="http://www.segeplan.gob.gt/downloads/clearinghouse/politicas_publicas/Desarrollo%20Rural/Pol%C3%ADtica%20Desarrollo%20Rural%20Integral.pdf">http://www.segeplan.gob.gt/downloads/clearinghouse/politicas_publicas/Desarrollo%20Rural/Pol%C3%ADtica%20Desarrollo%20Rural%20Integral.pdf</a></p> <p>Para su desarrollo se revisó la Política Agraria, su objetivo es lograr un avance progresivo y permanente en la calidad de vida de los habitantes de los territorios rurales, a través del acceso equitativo y uso sostenible de los recursos productivos, medios de producción, bienes naturales y servicios ambientales, para alcanzar el desarrollo humano integral sostenible en el área rural.</p>
Política de Diversidad Biológica	<p><a href="http://www.segeplan.gob.gt/downloads/clearinghouse/politicas_publicas/Recursos%20Naturales/Politica%20Nacional%20de%20Diversidad%20Biologica.pdf">http://www.segeplan.gob.gt/downloads/clearinghouse/politicas_publicas/Recursos%20Naturales/Politica%20Nacional%20de%20Diversidad%20Biologica.pdf</a></p> <p>Su objetivo es promover una gestión transversal y efectiva de la diversidad biológica guatemalteca, enfatizando su conservación y uso sostenible; valorando a la misma como factor crucial en el desarrollo humano integral transgeneracional.</p>
Política Nacional de Cambio Climático	<p><a href="http://www.segeplan.gob.gt/downloads/clearinghouse/politicas_publicas/Recursos%20Naturales/Politica%20Nacional%20de%20Cambio%20Clim%C3%A1tico%20Guatemala.pdf">http://www.segeplan.gob.gt/downloads/clearinghouse/politicas_publicas/Recursos%20Naturales/Politica%20Nacional%20de%20Cambio%20Clim%C3%A1tico%20Guatemala.pdf</a></p> <p>Su objetivo es que el Estado de Guatemala, a través del Gobierno Central, las municipalidades, la sociedad civil organizada y la ciudadanía en general, adopte prácticas de prevención de riesgo, reducción de la vulnerabilidad y mejora de la adaptación al cambio climático, y contribuya a la reducción de emisiones de gases de efecto invernadero en su territorio, coadyuve a la mejora de la calidad de vida de sus habitantes y fortalezca su capacidad de incidencia en las negociaciones internacionales de cambio climático.</p>
Estrategia Nacional de Diversidad Biológica y Plan	<p><a href="http://www.conap.gob.gt/phocadownload/Centro_Documentacion/diversidad_biologica/pndb-endb-2010-22.pdf">http://www.conap.gob.gt/phocadownload/Centro_Documentacion/diversidad_biologica/pndb-endb-2010-22.pdf</a></p>

de Acción 2012-2022	Herramienta desarrollada para implementar la Política Nacional de Diversidad Biológica, dandotambién efectivo cumplimiento al Artículo 64 de la Constitución Política de la República que declara deinterés nacional la conservación, protección y mejoramiento del patrimonio natural de la Nación
Plan de Desarrollo Nacional Katún 2032	<a href="http://www.segeplan.gob.gt/2.0/index.php?option=com_content&amp;view=article&amp;id=1359&amp;Itemid=372">http://www.segeplan.gob.gt/2.0/index.php?option=com_content&amp;view=article&amp;id=1359&amp;Itemid=372</a>  Plan Nacional de Desarrollo de 20 años en proceso de construcción por la Secretaria de Planificación y Programación de la Presidencia de la República de Guatemala. La iniciativa K'atun: Nuestra Guatemala en el 2032 es un ejercicioindicativo de planificación, impulsado en elmarco del Sistema de Consejos de Desarrollo, referida a objetivos,aspiraciones y lineamientos de política, que conforman unavisión global de transformación y desarrollo nacional equitativoy sustentable, desde el territorio y la demografía.Corresponde a una visión consensuada del país y de los grandesdesafío.
Plan de Acción Interinstitucional para la Prevención y Reducción de la Tala Ilegal en Guatemala	<a href="http://www.inab.gob.gt/Paginas%20web/plandeaccion.aspx">http://www.inab.gob.gt/Paginas%20web/plandeaccion.aspx</a>
Programa de Agricultura Familiar para el Fortalecimiento de Economías Campesinas (PAFFEC).	<a href="http://web.maga.gob.gt/wp-content/uploads/pdf/home/programa_agricultura.pdf">http://web.maga.gob.gt/wp-content/uploads/pdf/home/programa_agricultura.pdf</a>
Concesiones forestales	Dentro de la ZUM se encuentran “Unidades de Manejo”, las cuales han sido otorgadas a grupos comunitarios residentes y no residentes, y a empresas industriales locales. Las Unidades de Manejo son áreas territorialmente definidas y administradas por el Consejo Nacional de Áreas Protegidas (CONAP), con un régimen especial de uso, que pueden ser otorgadas para co-administración bajo la figura legal de “concesión” para el aprovechamiento y manejo de recursos naturales, que impliquen sostenibilidad, protección, conservación y mejora. La concesión se rige por un contrato de largo plazo e implica la elaboración de planes de manejo, estudios de impacto ambiental y planes de ordenamiento territorial, los cuales son aprobados y supervisados por CONAP para asegurar su cumplimiento y operación (CONAP, 2001).  A la fecha CONAP ha concesionado catorce Unidades de Manejo que se encuentran en diferentes condiciones, doce son de tipo comunitario y dos de tipo industrial, abarcando una extensión de más de 500,000 hectáreas.
Estrategia Nacional de Producción Sostenible y Uso Eficiente de la Leña	<a href="http://www.sifgua.org.gt/Documentos/Informes/Estrategia%20lena%20140812.pdf">http://www.sifgua.org.gt/Documentos/Informes/Estrategia%20lena%20140812.pdf</a>

## Annex XII

### INAB Board of Directors Request of budget expansion to meet PINPEP commitments



**Instituto Nacional de Bosques**  
Más bosques. Más vida

#### LA JUNTA DIRECTIVA DEL INSTITUTO NACIONAL DE BOSQUES A LA OPINIÓN PÚBLICA HACE SABER QUE:

- a) El 17 de noviembre de 2010 el Congreso de la República de Guatemala aprobó el Decreto 51-2010 "Ley de Incentivos Forestales para Poseedores de Pequeñas Extensiones de Tierra de Vocación Forestal o Agroforestal -PINPEP-".
- b) El Artículo 7 de ésta Ley establece que, el Estado por medio del Instituto Nacional de Bosques -INAB-, en coordinación con el Ministerio de Finanzas Públicas -MINFIN-, otorgará incentivos para el manejo de bosques naturales, establecimiento y mantenimiento de plantaciones forestales y sistemas agroforestales a grupos organizados, comunidades, municipalidades y personas individuales, en tierras de vocación forestal o agroforestal que no cuenten con título de propiedad.
- c) El Artículo 8 indica que, "El Estado a través del Ministerio de Finanzas Públicas, destinará anualmente una partida equivalente hasta el uno por ciento (1%) y no menor del cero punto cinco por ciento (0.5%) del presupuesto de ingresos ordinarios del Estado del ejercicio fiscal correspondiente, los que se trasladarán al INAB para otorgar incentivos Forestales a poseedores de pequeñas extensiones de tierra de vocación forestal o agroforestal".
- d) En el año 2012 se entregó por primera vez el incentivo forestal a 77,177 beneficiarios, con un monto total de Q.42,006,086.46 por la ejecución de 2,456 proyectos de reforestación, sistemas agroforestales y manejo de bosque natural en un área de 8, 933.36 hectáreas.
- e) En el año 2013 el Congreso de la República de Guatemala aprobó un presupuesto de Q.64,748,826.00, con lo cual se benefició a 98,939 personas por la ejecución de 7,634 proyectos con un área de 26,969 hectáreas.
- f) Al no aprobarse el anteproyecto del presupuesto para el año 2014 presentado por el Ministerio de Finanzas Públicas, por un monto de Q.123,482,683.00; el PINPEP continúa con el mismo presupuesto del año 2013, siendo éste de Q.64,748,826.00; sin embargo, la demanda aumentó a 13,518 proyectos con un área de 46,468 hectáreas; para lo cual es necesario un monto de Q.121,954,254.00 para cubrir dicha demanda.
- g) Actualmente se tiene un déficit estimado de Q.57,205,427.77 para cubrir la demanda total de proyectos y cumplir con el otorgamiento de los incentivos, según lo establecido en el Artículo 10 del Decreto 51-2010 del Congreso de la República.
- h) El Programa de Incentivos Forestales para Poseedores de Pequeñas Extensiones de Tierra de Vocación Forestal ó Agroforestal -PINPEP-, es un instrumento de la Política Forestal del país y junto al Programa de Incentivos Forestales -PINFOR- se convierten en mecanismos que fortalecen las posibilidades de atraer otros recursos financieros en el marco de las iniciativas globales de mitigación al cambio climático, incluyendo de manera especial el proceso REDD.

#### POR TANTO

#### LA JUNTA DIRECTIVA DEL INSTITUTO NACIONAL DE BOSQUES

#### SOLICITA:

Al honorable Congreso de la República de Guatemala, aprobar la ampliación presupuestaria por un monto de cincuenta y siete millones doscientos cinco mil cuatrocientos veintisiete quetzales con setenta y siete centavos (Q.57,205,427.77), que permitirán cumplir con las obligaciones contraídas con 179,819 beneficiarios del PINPEP, quienes ya han realizado trabajos de establecimiento y mantenimiento de plantaciones forestales, sistemas agroforestales y manejo de bosques naturales en 46,468 hectáreas, correspondientes a 13,518 proyectos establecidos a nivel nacional.

ANUNCIO

ENSA LIBRE  
Guatemala, martes 29 de julio de 2014

**Annex XIII**  
**Forest concession contracts within the**  
**Maya Biosphere ReserveZone**

- **Contratos de concesiones, ejemplos**

**AFISAP** [..\..\..\..\..\Dropbox\12 sept 14 Gt ERPIN anexos \(1\)\anexo XIII contratos concesiones forestales\Contrato AFISAP.pdf](#)

**ÁRBOL VERDE.** [..\..\..\..\..\Dropbox\12 sept 14 Gt ERPIN anexos \(1\)\anexo XIII contratos concesiones forestales\Contrato Arbol Verde.pdf](#)

**Anexo XIV. Proceso de Consulta, Libre, Informada y Previa del proyecto**  
**REDD+ GuateCarbon.**

<b>GuateCarbon REDD+ project Free, prior and informed consultation process (FPIC)</b> <b>Hipervínculo al document</b>	
<i><b>FPIC design and planning process</b></i>	All the qualitative criteria of VCS and CCB standards were consider: general sections G3, G5, community section CM11, climate and biodiversity section. Quantitative criteria on annex 5 of the VCS standard were also used.
<i><b>Preparation of information to share</b></i>	This process began with meetings within the framework of the Project Guidance Committee, where it was agreed the importance to comply with standards and the most appropriate way to share project materials. A train the trainers process was developedfor CONAP and ACOFOP staff. At the same time communities and concessions sample to be consulted.
<i><b>Meetings and consultation workshops</b></i>	The FPC process was conducted through meetings with boards, assemblies and community development committees- COCODES. Seventeen meetings and consultation workshops were held and registered
<i><b>Resultanalysis</b></i>	Workshops and meetings results were sorted out and analyze. The FPIC process and results was systematize and given back to the communities through a published document.

## Annex XV REL and emission reduction support files

### Annex XV A. Compatibility issues between current VCS JNR baseline applied to Tierras Bajas del Norte, the Carbon Fund Methodological Framework, and proposed actions to address them.

Topic	Description of issue and proposed actions	Carbon Fund MF indicator
Inclusion of degradation	Since emissions from degradation are expected to contribute to more than 10% of total emissions in ER-Program's Reference Level and activities related to address degradation problems are planned, degradation needs to be included in the reference level of Guatemala's ER-Program as mandated by the CF MF.	3.3
Emissions accounting method	TBN employs VCS approved methodology VM00015. An assessment of compatibility of this methodology with IPCC accounting methods is needed, and adjustments to methodological approach employed if necessary.	5.1
Uncertainty estimation	Estimates of uncertainty will have to be revised using Monte Carlo simulation.	9.1 and 9.2
Projection of emissions	TBN baseline projections of ascending trends of deforestation will be revised to project historical averages of deforestation rate.	13.1 and 13.4
Community participation	Documentation of the efforts to engage local communities in monitoring and reporting needs further preparation.	16.1
Social and environmental safeguards	UNFCCC safeguards outlined in Decision 1/CP.16 are already respected. But further assessment is required to ensure all World Bank social and environmental safeguards are met. Additional safeguard assessments of issues related to land and resource tenure regimes are likely to be required during the ER Program phase.	24.1 and 28.1
Feedback and Grievance Redress Mechanism	Further assessment of established instruments will be conducted to verify their compatibility with the requirements for feedback and grievance mechanism (FGRM) related to legitimacy, accessibility, predictability, fairness, rights compatibility, transparency, capability to address grievances, and resource allocation for the operation of FGRM. Based on this assessment, plans to strengthen Guatemala's proposed FGRM will be made during the ER-Program phase, consistent with the R-PP process.	26.1
Benefit Sharing	Improvements to the consultation process to accurately inform Guatemala's benefit-sharing plan is required and will take place by the ER-Program phase. We anticipate that monetary and non-monetary benefits will be included in the plan.	31.1
Data sharing	Data related to the ER-Program will need to be translated into several of the local languages by the time the ERPA agreement is signed with the World Bank.	37.3



## Annex XV B Emission factors

## FACTOR DE EMISIÓN PARA PÉRDIDA DE BOSQUES

Variable	Variable (english)	Unidad	Valor	Fuente del dato	Comentarios	Vínculo
Carbono dentro de bosques biomasa aérea	forest AGB	t de biomasa seca	62.0	Inventario Forestal Nacional 2002-2003	Página 47, cuadro 18	<a href="http://www.fao.org/forestry/23224-015b0b120eb03aa8b646ce6e3095c7a6a.pdf">http://www.fao.org/forestry/23224-015b0b120eb03aa8b646ce6e3095c7a6a.pdf</a>
Carbono fuera de bosque biomasa aérea	nonforest AGB	t de biomasa seca	15.9	Inventario Forestal Nacional 2002-2003	Página 47, cuadro 18	<a href="http://www.fao.org/forestry/23224-015b0b120eb03aa8b646ce6e3095c7a6a.pdf">http://www.fao.org/forestry/23224-015b0b120eb03aa8b646ce6e3095c7a6a.pdf</a>
Carbono dentro de bosques biomasa subterránea	forest BGB	t de biomasa seca	13.3	Calculado a partir del dato del IFN 2002-2003 usando $Y = \exp[-1.0587 + 0.8836 \cdot \ln(ABD)]$	La ecuación usada proviene del Annex 4A.1, TABLE 4.A.4, Good Practice Guidance for Land Use, Land-Use Change and Forestry	<a href="http://www.ipcc-nggip.iges.or.jp/public/gpplulucf/gpplulucf_files/Chp4/Chp4_4_Annexes.pdf">http://www.ipcc-nggip.iges.or.jp/public/gpplulucf/gpplulucf_files/Chp4/Chp4_4_Annexes.pdf</a>
Carbono fuera de bosque biomasa subterránea	nonforest BGB	t de biomasa seca	4.0	Calculado a partir del dato del IFN 2002-2003 usando $Y = \exp[-1.0587 + 0.8836 \cdot \ln(ABD)]$	La ecuación usada proviene del Annex 4A.1, TABLE 4.A.4, Good Practice Guidance for Land Use, Land-Use Change and Forestry	<a href="http://www.ipcc-nggip.iges.or.jp/public/gpplulucf/gpplulucf_files/Chp4/Chp4_4_Annexes.pdf">http://www.ipcc-nggip.iges.or.jp/public/gpplulucf/gpplulucf_files/Chp4/Chp4_4_Annexes.pdf</a>
Carbono equivalente dentro de bosques biomasa aérea	CO2 forest AGB	t CO2e	227.3	Calculado usando forest AGB *44/12		
Carbono equivalente fuera de bosque biomasa aérea	CO2 nonforest AGB	t CO2e	58.3	Calculado usando nonforest AGB *44/12		
Carbono equivalente dentro de bosques biomasa subterránea	CO2 forest BGB	t CO2e	48.8	Calculado usando forest BGB *44/12		
Carbono equivalente fuera de bosque biomasa subterránea	CO2 nonforest BGB	t CO2e	14.7	Calculado usando nonforest BGB *44/12		
Carbono equivalente total en bosques	CO2 forest AGB+BGB	t CO2e	276.1	Calculado sumando CO2e forest AGB+ CO2e forest BGB		
Carbono equivalente total fuera de bosques	CO2 nonforest AGB+BGB	t CO2e	73.0	Calculado sumando CO2e nonforest AGB+ CO2e nonforest BGB		
Factor de emisión estimado	emission factor	t CO2e	-203.2	Calculado restando CO2e nonforest total - CO2e forest total		

## FACTOR DE EMISIÓN PARA GANANCIA DE BOSQUES

Variable	Variable (english)	Unidad	Valor	Fuente del dato	Comentarios	Vínculo
Carbono dentro de bosques biomasa aérea	forest AGB	t de biomasa seca	53.2	Inventario Forestal Nacional 2002-2003	Página 48, cuadro 19, usando el valor ponderado nacional para bosque secundario avanzado que se asume es un valor cercano al de bosques recién convertidos desde no bosque	<a href="http://www.fao.org/forestry/23224-015b0b120eb03aa8b646ce6e3095c7a6a.pdf">http://www.fao.org/forestry/23224-015b0b120eb03aa8b646ce6e3095c7a6a.pdf</a>
Carbono fuera de bosque biomasa aérea	nonforest AGB	t de biomasa seca	15.9	Inventario Forestal Nacional 2002-2003	Página 47, cuadro 18	<a href="http://www.fao.org/forestry/23224-015b0b120eb03aa8b646ce6e3095c7a6a.pdf">http://www.fao.org/forestry/23224-015b0b120eb03aa8b646ce6e3095c7a6a.pdf</a>
Carbono dentro de bosques biomasa subterránea	forest BGB	t de biomasa seca	11.6	Calculado a partir del dato del IFN 2002-2003 usando $Y = \exp[-1.0587 + 0.8836 \cdot \ln(ABD)]$	La ecuación usada proviene del Annex 4A.1, TABLE 4.A.4, Good Practice Guidance for Land Use, Land-Use Change and Forestry	<a href="http://www.ipcc-nggip.iges.or.jp/public/gpplulucf/gpplulucf_files/Chp4/Chp4_4_Annexes.pdf">http://www.ipcc-nggip.iges.or.jp/public/gpplulucf/gpplulucf_files/Chp4/Chp4_4_Annexes.pdf</a>
Carbono fuera de bosque biomasa subterránea	nonforest BGB	t de biomasa seca	4.0	Calculado a partir del dato del IFN 2002-2003 usando $Y = \exp[-1.0587 + 0.8836 \cdot \ln(ABD)]$	La ecuación usada proviene del Annex 4A.1, TABLE 4.A.4, Good Practice Guidance for Land Use, Land-Use Change and Forestry	<a href="http://www.ipcc-nggip.iges.or.jp/public/gpplulucf/gpplulucf_files/Chp4/Chp4_4_Annexes.pdf">http://www.ipcc-nggip.iges.or.jp/public/gpplulucf/gpplulucf_files/Chp4/Chp4_4_Annexes.pdf</a>
Carbono equivalente dentro de bosques	CO2 forest AGB	t CO2e	195.1	Calculado usando forest AGB *44/12		
Carbono equivalente fuera de bosque biomasa aérea	CO2 nonforest AGB	t CO2e	58.3	Calculado usando nonforest AGB *44/12		
Carbono equivalente dentro de bosques biomasa subterránea	CO2 forest BGB	t CO2e	42.6	Calculado usando forest BGB *44/12		
Carbono equivalente fuera de bosque biomasa subterránea	CO2 nonforest BGB	t CO2e	14.7	Calculado usando nonforest BGB *44/12		
Carbono equivalente total en bosques	CO2 forest AGB+BGB	t CO2e	237.7	Calculado sumando CO2e forest AGB+ CO2e forest BGB		
Carbono equivalente total fuera de bosque biomasa aérea y subterránea	CO2 nonforest AGB+BGB	t CO2e	73.0	Calculado sumando CO2e nonforest AGB+ CO2e nonforest BGB		
Factor de emisión estimado	emission factor	t CO2e	164.7	Calculado restando CO2e nonforest total - CO2e forest total		

**Annex XV C general calculations**

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**Annex XV\_D assumptions emission reduction**

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Assumptions made to estimate emission reductions per REDD+ region and REDD activity

**Avoided deforestation**

- For Tierras Bajas del Norte the deforestation risk map constructed for the reference region (using the VM0015 methodology, VCS) was used to identify the areas to be deforested between 2011-2020 using the amount of deforestation projected to occur using the average value of between circa 2001-circa 2010 in concordance with the guidance of the CF MF. The resulting projected deforestation within the three projects (Guatecarbon, Bosques para la Vida-Lacandon and Carbon Lachuá) in the REDD+ region was calculated and then an effectivity of 60% of deforestation reduction assumed. Calculations are presented in Table A01.

Table A01. Calculated avoided deforestation emissions for the Guatecarbon, Lacandon and Lachuá projects in the Tierras Bajas del Norte REDD+ region

Year	Forest to non Forest (ha)			Emissions (emission factor = 203.2 tCO <sub>2</sub> e/ha) tCO <sub>2</sub> e			Emission reductions (60% effectivity rate) tCO <sub>2</sub> e		
	Guatecarbon	Lacandón	Lachuá	Guatecarbon	Lacandón	Lachuá	Guatecarbon	Lacandón	Lachuá
2011	8,587	13,588	0	1,744,895	2,761,177	0	1,046,937	1,656,706	0
2012	6,341	6,827	107	1,288,572	1,387,291	21,726	773,143	832,375	13,036
2013	5,384	5,967	465	1,094,043	1,212,531	94,458	656,426	727,519	56,675
2014	5,240	5,632	580	1,064,672	1,144,426	117,848	638,803	686,656	70,709
2015	4,971	4,961	430	1,010,101	1,008,163	87,289	606,061	604,898	52,373
2016	6,441	3,219	491	1,308,799	654,107	99,761	785,279	392,464	59,857
2017	6,777	3,781	764	1,377,086	768,315	155,265	826,252	460,989	93,159
2018	6,687	3,650	771	1,358,780	741,633	156,710	815,268	444,980	94,026
2019	9,174	3,355	866	1,864,132	681,740	175,876	1,118,479	409,044	105,526
2020	8,305	3,061	898	1,687,635	622,085	182,514	1,012,581	373,251	109,508
Average annual emission reductions 2016-2020 (tCO <sub>2</sub> e/yr)							911,572	416,146	92,415
Emission reductions for 2016-2020 based on average annual * 5 years (tCO <sub>2</sub> e)							7,100,663		

- For Sarstún-Motagua the average annual deforestation between circa 2001-circa 2010 was calculated, then converted to emissions and projected for the period 2011-2020 (this simplified method was used because there is no deforestation risk map available). An effectivity of 60% of deforestation reduction was assumed. Calculations in Table A02.

Table A02. Calculated avoided deforestation emissions for the Caribbean Protected Areas project in the Sarstun-Motagua REDD+ region

Variable	Circa 2001- Circa 2006	Circa 2006- Circa 2010	Circa 2001- Circa 2010
Forest loss (ha)	30,672	26,693	44,716
Fores loss rate (ha/yr)	5,199	7,024	4,610
Average annual emission reductions (tCO <sub>2</sub> /yr)	-1,056,132	-1,427,063	-936,524
	Average annual emission reductions at 60% effectivity rate (tCO <sub>2</sub> e/yr)		-561,914
	Emission reductions for 2016-2020 based on average annual * 5 years (tCO <sub>2</sub> e)		-2,809,572

- For Occidente and, Centro - Oriente a 5% effectivity value was used to make room for eventual REDD+ projects, still not planned or identified. Calculations are presented in Table A03.

Table A03. Calculated avoided deforestation emissions for projects (not identified or planned in the Occidente and Centro-Oriente REDD+ regions

Forest loss (ha)	Circa 2001-Circa 2006	Circa 2006-Circa 2010	Circa 2001-Circa 2010
Occidente	125,367	105,076	161,232
Centro - Oriente	72,226	69,008	107,974
Forest loss rate (ha/yr)	Circa 2001-Circa 2006	Circa 2006-Circa 2010	Circa 2001-Circa 2010
Occidente	21,249	27,651	16,622
Centro - Oriente	12,242	18,160	11,131
Emissions from forest loss (tCO <sub>2</sub> /yr)	Circa 2001-Circa 2006	Circa 2006-Circa 2010	Circa 2001-Circa 2010
Occidente	-4,316,798	-5,617,578	-3,376,848
Centro - Oriente	-2,486,967	-3,689,324	-2,261,409
	Average annual emission reductions at 5% effectivity rate (tCO <sub>2</sub> e/yr) for <b>Occidente</b>		-168,842
	Emission reductions for 2016-2020 based on average annual * 5 years (tCO <sub>2</sub> e) for <b>Occidente</b>		-844,212
	Average annual emission reductions at 5% effectivity rate (tCO <sub>2</sub> e/yr) for <b>Centro - Oriente</b>		-113,070
	Emission reductions for 2016-2020 based on average annual * 5 years (tCO <sub>2</sub> e) for <b>Centro - Oriente</b>		-565,352

- For Costa Sur there is no projected avoided deforestation since the REDD+ region is already almost completely deforested.

## Reforestation and stock increase activities

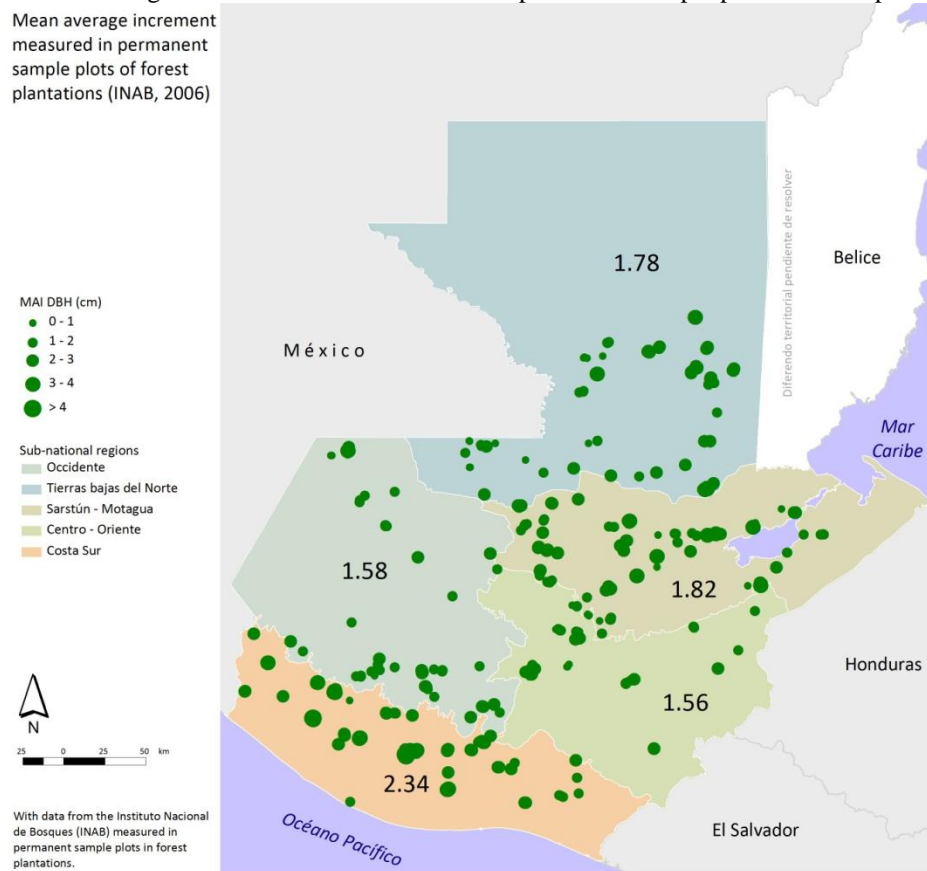
We annual values of reforestation and stock increase activities included go from 2010-2020 by REDD+ region. Different tree plantation densities where used for the activities related to reforestation and the activity of stock enhancement in agroforestry systems. This areas and densities are presented in Table A04

Table A04. Stock increase activities by type and REDD+ region

REDD+ region	Reforestation (broadleaved) and management of plantations	Reforestation using conifer species	Stock increase in agro-forestry systems	Reforestation for fuelwood production
Tree density	500 trees/ha	500 trees/ha	50 trees/ha	500 trees/ha
Occidente (ha/year)	370	925	131	400
Tierras Bajas del Norte (ha/year)	1,480	1,110	44	1,600
Sarstún - Motagua (ha/year)	925	1,110	795	1,000
Centro - Oriente (ha/year)	185	370	54	200
Costa Sur (ha/year)	20	185	65	800

To estimate growth we used an unpublished database of permanent measurement plots established in plantations and with data collected by INAB. The database contains information on mean annual increment (MAI) in diameter at breast height (DBH) and is geographically referenced. We estimated the MAI DBH by REDD+ region by averaging the values of the permanent plots within each of the REDD+ regions. The map in Figure A01 shows the location of permanent plots and the MAI-DBH average value for the REDD+ regions.

Figure A01. Mean average increment in DBH measured in permanent sample plots of forest plantations



We projected the growth of DBH using the corresponding average MAI value and then estimated the accumulated biomass using the equations:

For conifer species<sup>42</sup>:  $Y = EXP(-1,170 + 2,119 * LnD)$

For broadleaved species<sup>43</sup>:  $Y = 42,69 - 12,8 (D) + 1,242 (D2)$

where Y = above-ground biomass in kilograms and D= Tree diameter at breast height in centimeters.

Tables A05 and A06 presents estimations of growth in DBH and CO2e by year and broadleaved/conifers species.

Table A05. Estimations of growth in DBH and CO2e by year and REDD+ region for broadleaved species

Year	DBH increment using average MAI values (cm)					Dry biomass by tree in kg (using $Y = 42,69 - 12,8 (D) + 1,242 (D2)$ )					tCO2e/ha assuming 500 trees/ha (using biomass by tree (kg)*0.5*44/12*500/1000)				
	Occidente	TBNG	Sarstún Motagua	Centro - Oriente	Costa Sur	Occidente	TBNG	Sarstún Motagua	Centro - Oriente	Costa Sur	Occidente	TBNG	Sarstún Motagua	Centro - Oriente	Costa Sur
0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1	1.58	1.78	1.82	1.56	2.34	25.6	23.8	23.5	25.7	19.5	23.4	21.9	21.5	23.6	17.9
2	3.16	3.56	3.64	3.12	4.68	14.6	12.9	12.6	14.8	10.0	13.4	11.8	11.5	13.6	9.2
3	4.74	5.34	5.46	4.68	7.02	9.9	9.8	9.8	10.0	14.0	9.1	8.9	9.0	9.2	12.9
4	6.32	7.12	7.28	6.24	9.36	11.4	14.5	15.3	11.2	31.7	10.5	13.3	14.1	10.2	29.1
5	7.9	8.9	9.1	7.8	11.7	19.1	27.1	29.1	18.4	62.9	17.5	24.9	26.6	16.9	57.7
6	9.48	10.68	10.92	9.36	14.04	33.0	47.7	51.0	31.7	107.8	30.2	43.7	46.8	29.1	98.8
7	11.06	12.46	12.74	10.92	16.38	53.0	76.0	81.2	51.0	166.3	48.6	69.7	74.4	46.8	152.4
8	12.64	14.24	14.56	12.48	18.72	79.3	112.3	119.6	76.4	238.3	72.7	102.9	109.6	70.0	218.5
9	14.22	16.02	16.38	14.04	21.06	111.8	156.4	166.3	107.8	324.0	102.5	143.3	152.4	98.8	297.0
10	15.8	17.8	18.2	15.6	23.4	150.5	208.4	221.1	145.3	423.2	138.0	191.0	202.7	133.2	388.0

Table A06. Estimations of growth in DBH and CO2e by year and REDD+ region for conifer species

Year	DBH increment using average MAI values (cm)					Dry biomass by tree in kg $Y = \exp \{- 1.170 + 2.119 * \ln(D)\}$					tCO2e/ha assuming 500 trees/ha (using biomass by tree (kg)*0.5*44/12*500/1000)				
	Occidente	TBNG	Sarstún Motagua	Centro - Oriente	Costa Sur	Occidente	TBNG	Sarstún Motagua	Centro - Oriente	Costa Sur	Occidente	TBNG	Sarstún Motagua	Centro - Oriente	Costa Sur
0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1	1.58	1.78	1.82	1.56	2.34	0.8	1.1	1.1	0.8	1.9	0.7	1.0	1.0	0.7	1.7
2	3.16	3.56	3.64	3.12	4.68	3.6	4.6	4.8	3.5	8.2	3.3	4.2	4.4	3.2	7.5
3	4.74	5.34	5.46	4.68	7.02	8.4	10.8	11.3	8.2	19.3	7.7	9.9	10.4	7.5	17.7
4	6.32	7.12	7.28	6.24	9.36	15.4	19.9	20.8	15.0	35.5	14.2	18.2	19.1	13.8	32.5
5	7.9	8.9	9.1	7.8	11.7	24.8	31.9	33.4	24.1	56.9	22.7	29.2	30.6	22.1	52.2
6	9.48	10.68	10.92	9.36	14.04	36.5	46.9	49.2	35.5	83.8	33.4	43.0	45.1	32.5	76.8
7	11.06	12.46	12.74	10.92	16.38	50.5	65.1	68.2	49.2	116.1	46.3	59.6	62.5	45.1	106.5
8	12.64	14.24	14.56	12.48	18.72	67.1	86.3	90.5	65.3	154.1	61.5	79.1	83.0	59.8	141.3
9	14.22	16.02	16.38	14.04	21.06	86.1	110.8	116.1	83.8	197.8	78.9	101.6	106.5	76.8	181.3
10	15.8	17.8	18.2	15.6	23.4	107.6	138.5	145.2	104.7	247.3	98.6	127.0	133.1	96.0	226.7

<sup>42</sup> Used in the National Forest Inventory (<http://www.fao.org/forestry/23224-015b0b120eb03aa8b646ce6e3095c7a6a.pdf>, page 47) and cited to come from Brown, S. 1996. A Primer for Estimating Biomass and Biomass Change in Tropical Forests. FAO. S. Brown 200 SW 35th St Corvallis, Oregon 97333, USA.

<sup>43</sup> Used in the National Forest Inventory (<http://www.fao.org/forestry/23224-015b0b120eb03aa8b646ce6e3095c7a6a.pdf>, page 47) and cited to come from Brown, S., A.J.R. Gillespie, A.E. Lugo. 1989. "Biomass Estimation Methods for Tropical Forests with Applications to Forest Inventory Data". Forest Science 35:881-902

Using increments in CO<sub>2</sub>e estimated by REDD+ region and annual area planted we estimated removals by stock increase activities by year, presented in Table A06. Detailed calculations made to produce this table can be found in Annex ZZ05 and Annex ZZ06.

Table A06. Estimate removals by stock increase activities by year and REDD+ region

Year	REDD+ region	Reforestation (broadleaved)	Reforestation using conifer species	Stock increase in agro-forestry systems	Reforestation for fuelwood production	Total
2016	Occidente	11,181	30,909	395	12,087	54,572
2016	Tierras Bajas del Norte	182,058	47,748	190	69,889	299,885
2016	Sarstún - Motagua	131,258	50,050	3,719	46,767	231,794
2016	Centro - Oriente	5,375	12,034	158	5,810	23,378
2016	Costa Sur	257,342	14,208	646	79,056	351,251
2017	Occidente	17,992	42,849	636	19,451	80,928
2017	Tierras Bajas del Norte	241,242	66,193	304	111,503	419,241
2017	Sarstún - Motagua	172,574	69,385	5,919	74,437	322,315
2017	Centro - Oriente	8,652	16,683	255	9,353	34,943
2017	Costa Sur	305,127	19,697	996	121,924	447,744
2018	Occidente	26,907	56,863	951	29,088	113,809
2018	Tierras Bajas del Norte	305,780	87,841	448	164,659	558,729
2018	Sarstún - Motagua	216,980	92,077	8,719	109,650	427,425
2018	Centro - Oriente	12,954	22,139	381	14,004	49,479
2018	Costa Sur	353,337	26,138	1,428	174,767	555,670
2019	Occidente	37,925	72,983	1,340	41,000	153,247
2019	Tierras Bajas del Norte	379,156	112,743	625	229,359	721,883
2019	Sarstún - Motagua	266,948	118,179	12,119	152,405	549,651
2019	Centro - Oriente	18,282	28,416	538	19,764	66,999
2019	Costa Sur	401,935	33,548	1,941	237,584	675,008
2020	Occidente	51,046	91,240	1,803	55,184	199,273
2020	Tierras Bajas del Norte	651,268	140,945	832	305,602	1,098,647
2020	Sarstún - Motagua	466,076	147,741	16,119	202,703	832,638
2020	Centro - Oriente	24,634	35,524	725	26,632	87,515
2020	Costa Sur	936,374	41,940	2,536	310,376	1,291,225
	<b>Total</b>	<b>5,482,400</b>	<b>1,478,073</b>	<b>63,723</b>	<b>2,623,054</b>	<b>9,647,249</b>

#### Annex XV\_E\_removals calculations

[..\..\..\..\..\Dropbox\12 sept 14 Gt ERPIN anexos \(1\)\anexo XV REL and emission reduction support files\Annex XV\\_E\\_removals calculations 2015-2020.xlsx](#)

#### Annex XV\_F\_ruber

[..\..\..\..\..\Dropbox\12 sept 14 Gt ERPIN anexos \(1\)\anexo XV REL and emission reduction support files\Annex XV\\_F\\_rubber.zip](#)

## **Annex XVI. Social and Biodiversity Monitoring**

Documento: Sistematización del proceso de Consulta Libre, Informada y Previa (CLIP) del Proyecto REDD+ de la ZUM de la RBM –GUATECARBON. [..\..\..\..\Dropbox\12 sept 14 Gt ERPIN anexos \(1\)\anexo XIV CLIP Guatecarbon\2012 CLIP GuateCarbon.pdf](..\..\..\..\Dropbox\12 sept 14 Gt ERPIN anexos (1)\anexo XIV CLIP Guatecarbon\2012 CLIP GuateCarbon.pdf)

Documento: CONAP, WCS. 2013. INFORME CONSOLIDADO MONITOREO DE LA GOBERNABILIDAD EN LA RESERVA DE BIOSFERA MAYA. [..\..\..\..\Dropbox\12 sept 14 Gt ERPIN anexos \(1\)\anexo XVI monitoreo social\Informe RBM encuesta socioeconomica 2001.pdf](..\..\..\..\Dropbox\12 sept 14 Gt ERPIN anexos (1)\anexo XVI monitoreo social\Informe RBM encuesta socioeconomica 2001.pdf)

Carta de Secretaría Ejecutiva del CONAP sobre reducción de riesgo producto GuateCarbon. [..\..\..\..\Dropbox\12 sept 14 Gt ERPIN anexos \(1\)\anexo XVI monitoreo social\GuateCarbon permanencia.pdf](..\..\..\..\Dropbox\12 sept 14 Gt ERPIN anexos (1)\anexo XVI monitoreo social\GuateCarbon permanencia.pdf)

### **Esquemas de atención a pueblos indígenas y mujeres del CONAP e INAB.**

Para responder a las demandas de las mujeres y los pueblos indígenas, el INAB cuenta con una Estrategia institucional de equidad de género con pertinencia étnica. La cual se basa en el marco jurídico nacional e internacional, experiencias institucionales y el contexto general del sector forestal, la estrategia se enfoca en contribuir al desarrollo integral a través de la participación de hombres y mujeres con igualdad de oportunidades en los servicios internos y externos que presta el Instituto Nacional de Bosques. Sus objetivos son fortalecer la atención a pueblos indígenas sobre las demandas forestales, viabilizar y potenciar la reforestación, conservación, protección, manejo y uso sostenible de los bosques y la biodiversidad a través de los programas de incentivos forestales.

[..\..\..\..\Dropbox\12 sept 14 Gt ERPIN anexos \(1\)\anexo VIII estadísticas PINFOR PINPEP\Estrategia Pueblos Indígenas Final Marzo 2014.pdf](..\..\..\..\Dropbox\12 sept 14 Gt ERPIN anexos (1)\anexo VIII estadísticas PINFOR PINPEP\Estrategia Pueblos Indígenas Final Marzo 2014.pdf)

[..\..\..\..\Dropbox\12 sept 14 Gt ERPIN anexos \(1\)\anexo VIII estadísticas PINFOR PINPEP\Versión última Género 25 de marzo.pdf](..\..\..\..\Dropbox\12 sept 14 Gt ERPIN anexos (1)\anexo VIII estadísticas PINFOR PINPEP\Versión última Género 25 de marzo.pdf)

En el caso del CONAP en cumplimiento con el Acuerdo Gubernativo 260-2013, integro dentro su estructura la Unidad de Género, adscrita a la Secretaría Ejecutiva. La cual está encargada de coordinar el proceso de institucionalización de las políticas de género que promueven el desarrollo integral de las mujeres con pertinencia cultural, a nivel interinstitucional y con los actores locales que forman parte de la administración de los recursos naturales y diversidad biológica patrimonio natural de la nación. Actualmente el CONAP desarrolla numerosas acciones enfocadas hacia la conservación y uso sostenible de la diversidad biológica y las áreas protegidas de Guatemala, buscando asegurar el funcionamiento óptimo de los procesos ecológicos esenciales y de los sistemas naturales vitales para el beneficio de las presentes y futuras generaciones de guatemaltecos y guatemaltecas, sin distinción alguna, sean hombres o mujeres, indígenas o no indígenas, niños o niñas, adolescentes, jóvenes, adultos o ancianos, o personas con capacidades especiales.

[..\..\..\..\Dropbox\12 sept 14 Gt ERPIN anexos \(1\)\anexo XVI monitoreo social y de biodiversidad\RBM nforme Gobernabilidad 20130919 FINAL-1.pdf](..\..\..\..\Dropbox\12 sept 14 Gt ERPIN anexos (1)\anexo XVI monitoreo social y de biodiversidad\RBM nforme Gobernabilidad 20130919 FINAL-1.pdf)



## Annex XVII. Guatemala a Megadiverse Country

Guatemala pais Megadiverso.

[..\..\..\..\Dropbox\12 sept 14 Gt ERPIN anexos \(1\)\anexo XVII Guatemala pais Megadiverso\Convenio sobre diversidad BAJA.pdf](#)

Nota Filipinas

[..\..\..\..\Dropbox\12 sept 14 Gt ERPIN anexos \(1\)\anexo XVII Guatemala pais Megadiverso\nota-de-filipinas-prueba-que-guatemala-es-miembro-grupo-de-megadiversos.pdf](#)

## Annex XVIII

### Act Proposal PROBOSQUE

Documento propuesta PROBOSQUE.

[..\..\..\..\Dropbox\12 sept 14 Gt ERPIN anexos \(1\)\anexo XVIII PROBOSQUE\PROYECTO DE LEY PROBOSQUE \(10 septiembre 2013\).pdf](#)

Guatemala, jueves 7 de agosto de 2014  
PIENSA LIBRE

#### Respetables Señores (as) Diputados (as) Congreso Nacional de la República de Guatemala

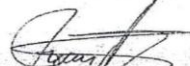
La Alianza Nacional de Organizaciones Forestales Comunitarias de Guatemala, ANOFCG instancia nacional que integra a más de 250 organizaciones locales que representan legítimamente a más de 50,000 familias campesinas e indígenas organizadas para el manejo sostenible de más de 427 mil hectáreas de bosques y tierras comunales, en todo territorio nacional de Guatemala.

Expone que dado que cada año se registra una deforestación bruta de más de 132,000 hectáreas por diversas causas, alcanzando incluso, áreas protegidas legalmente establecidas. Todas las comunidades de la ANOFCG con nuestras acciones, contribuimos a la conservación de los suelos, a mantener la alta biodiversidad del país, a garantizar el ciclo hidrológico que contribuye a adaptarnos mejor como país ante la variabilidad del clima como consecuencias del cambio climático global, dado que somos uno de los países más vulnerables del mundo.

Hacemos del conocimiento de ustedes y de la opinión pública en general, que a través del Programa de Incentivos Forestales (PINFOR) y el Programa de Incentivos Forestales para poseedores de pequeñas extensiones de tierra de vocación Forestal o Agroforestal (PINPEP), se ha propiciado el mejoramiento del nivel de vida a través de la generación de empleo en el área rural, se ha asegurado la provisión de bienes y servicios provenientes del bosque satisfaciendo de esta manera las necesidades de leña, vivienda, infraestructura rural y alimentos de las comunidades que han sido beneficiadas con éstos programas de incentivos, que fomentan la plantación, el manejo sostenible y la conservación de los bosques.

Así mismo hacemos saber que por la importancia y el impacto que éstos dos Programas han tenido sobre las comunidades del área rural; solicitamos respetuosamente al Honorable Congreso Nacional de la República de Guatemala, la urgente aprobación de la Propuesta de Ley PROBOSQUE, así mismo la participación en las mesas de diálogo que elaborarán su Reglamento. La iniciativa fue entregada públicamente al Presidente del Organismo Legislativo, el día 19 de febrero del año en curso por parte del Presidente de la República de Guatemala, la cual le dará continuidad al único instrumento hasta ahora implementado en el País para incentivar la reforestación, el manejo sostenible y la conservación forestal, reduciendo de esta manera la presión sobre nuestros bosques naturales y a mejorar las acciones encaminadas para su protección.

Esta iniciativa presenta una prioridad para las comunidades que viven de los bosques, pero no es una iniciativa en beneficio exclusivo para las comunidades, sino además de las ONG's ambientales, los empresarios, las municipalidades, la academia y otras instancias interesadas en la gestión ambiental en general y el fortalecimiento del sector forestal en particular.



Juan Morales Cordero  
Presidente Juan Morales Cordero

Alianza Nacional de Organizaciones Forestales Comunitarias de Guatemala  
E-mail: [alianzaofcguate@gmail.com](mailto:alianzaofcguate@gmail.com) Tel. 5321-9324



### Annex XIX. Maps.

Figure No. 1 Forest cover dynamics in Guatemala 2006-2010



Figure No.2 Location of REDD+ Pilot Projects focused on avoided deforestation approach in Guatemala.

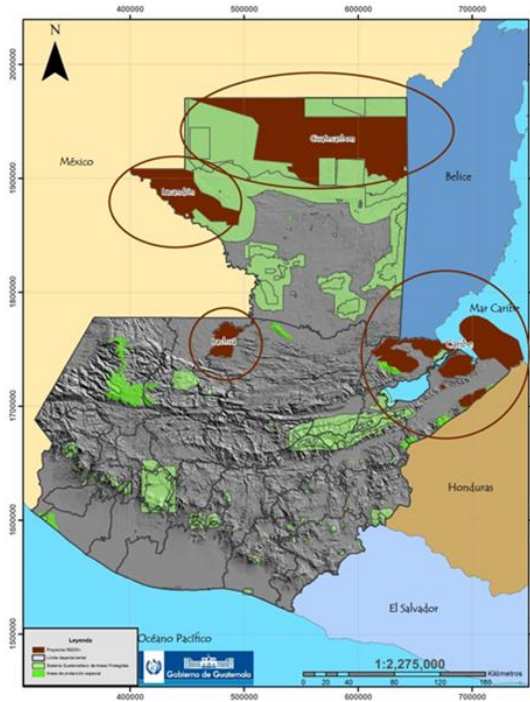


Figure No.3. Incidence of extreme poverty in Guatemala.

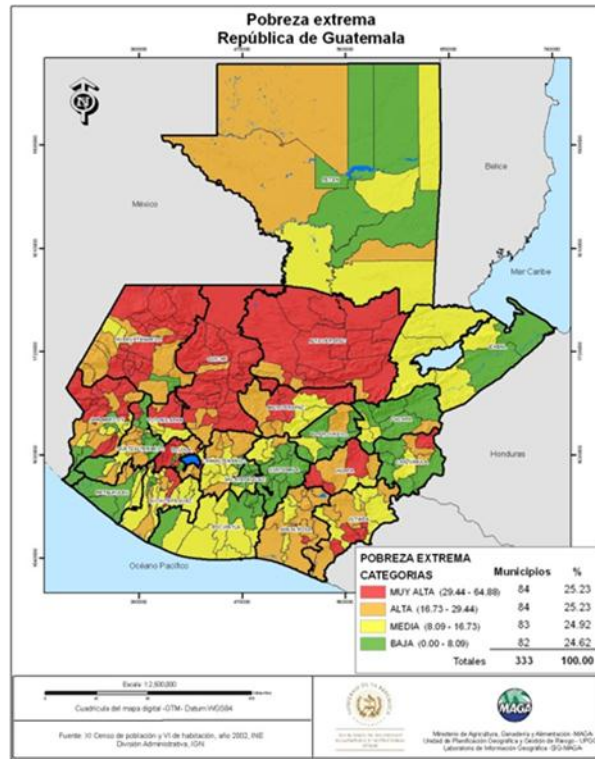


Figure No.4 Index of theinsecurity of employment in Guatemala

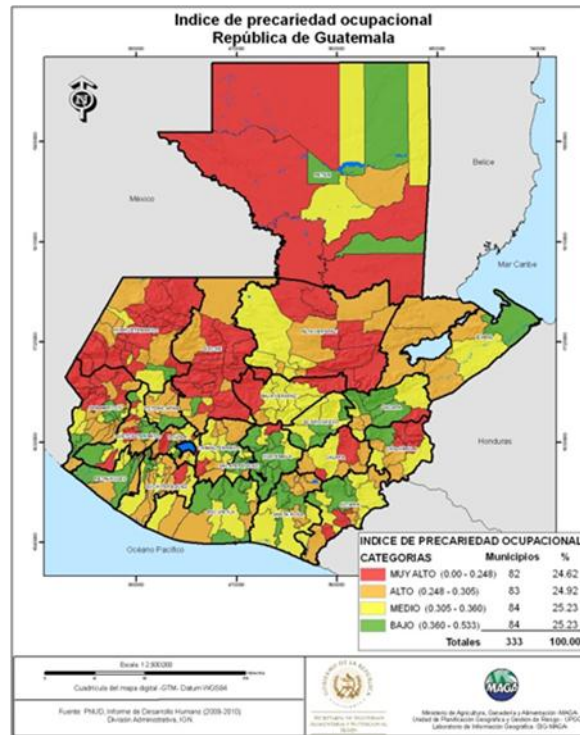


Figure No. 5 Equilibrium between Supply and Demand of Fuel wood

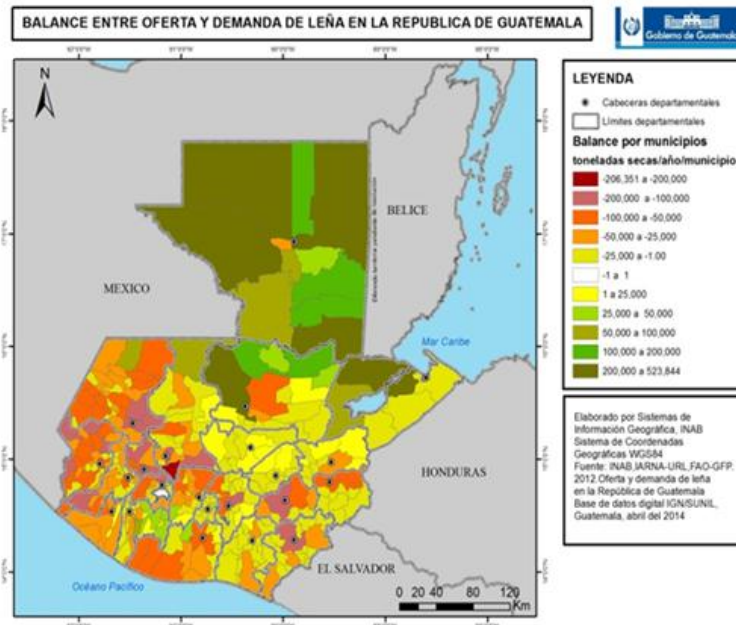
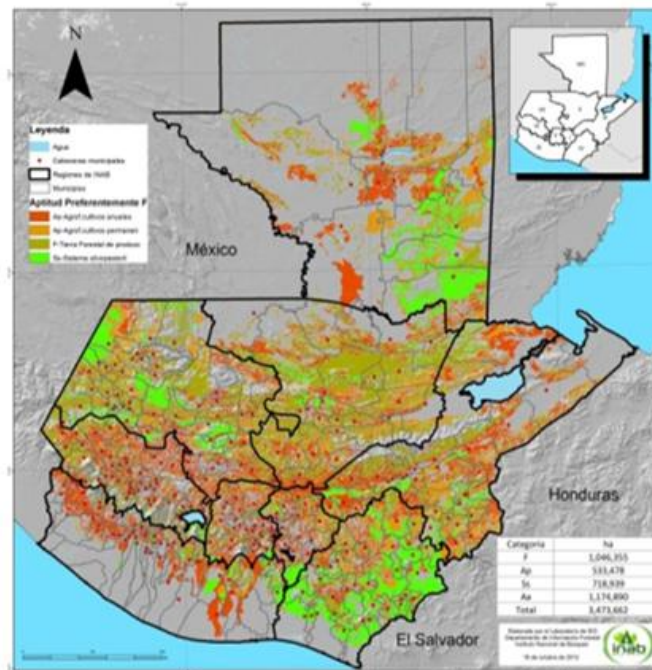


Figure No. 6 Location of areas prioritized by the PINFOR-PINPEP forest incentive programs and new Law proposal PROBOSQUE

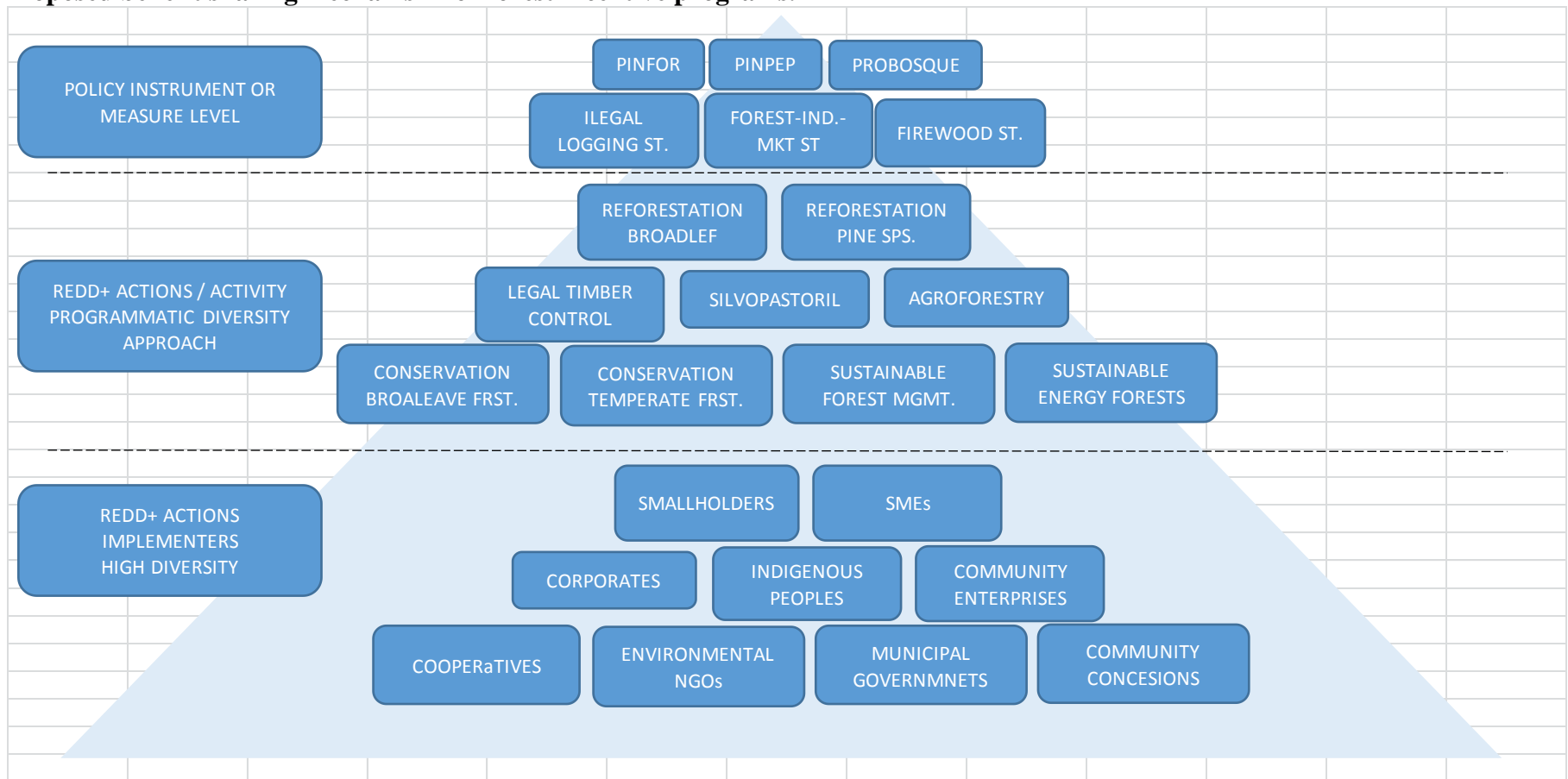


**Annex XX**  
**Technical Cooperation Agreement (Grant Signed)**

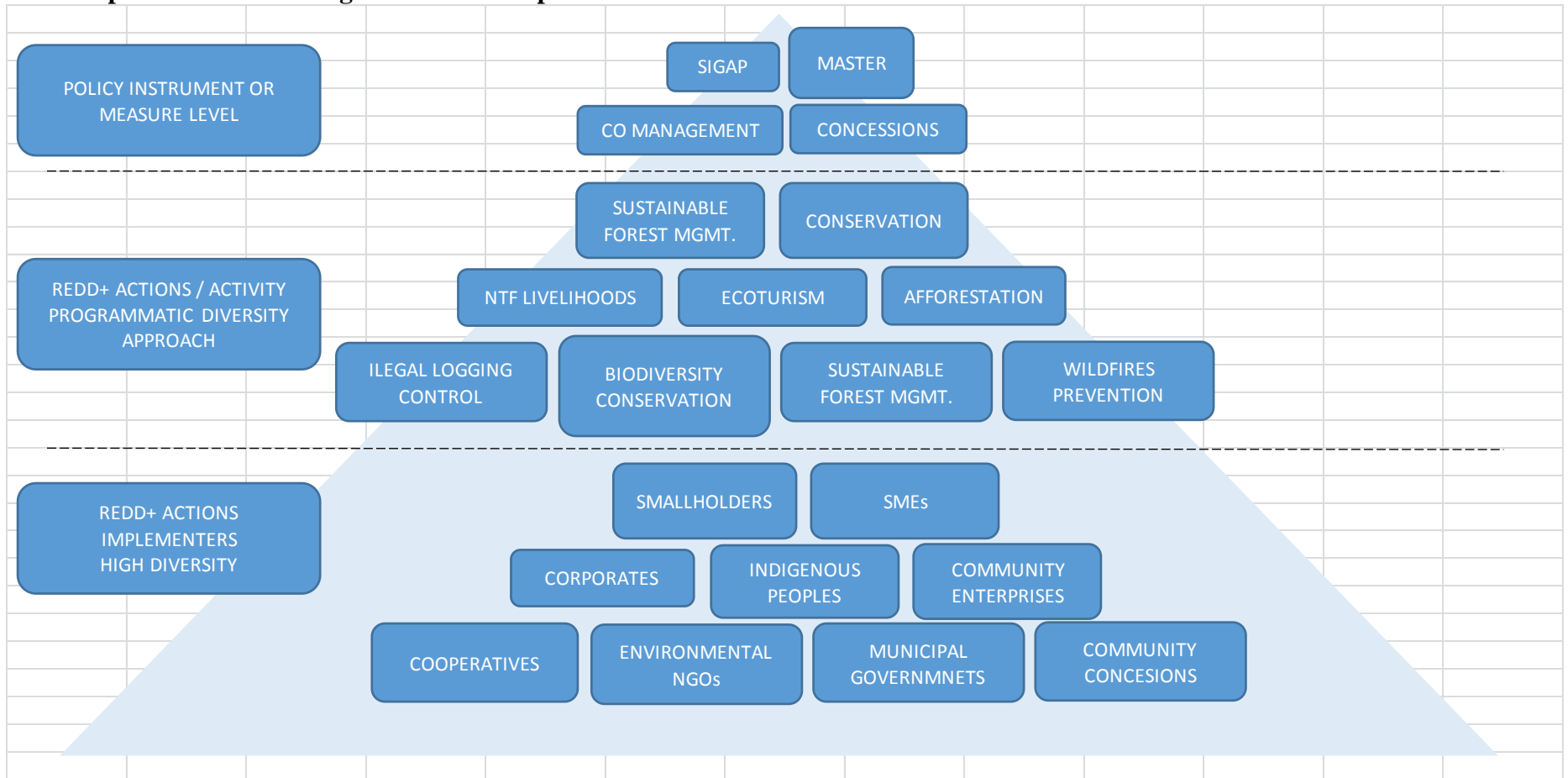
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## Annex XXI Distribution of Benefits Diagrams

### a. Proposed benefit sharing mechanism for forest incentive programs.



**b. Proposed benefit sharing mechanism for protected areas.**



## Annex XXII

### Political Instruments that support REDD+ activities included in the Guatemala ER Program.

Policy instruments	REDD+ Activities					
	1. Incentives and financial mechanisms to enhancing carbon stocks.	2. Incentives to conservation and sustainable management of natural forests.	3. Incentives to indigenous peoples and community based smallholders.	4. Law enforcement at forest lands.	5. Improved Forest Management.	6. Strengthening competitiveness and legality of forest market oriented activities.
Constitution of the Republic of Guatemala						
Climate Change Framework Law						
Forestry Law						
Protected Areas Law						
Katún 2032 National Development Plan						
Energy Policy 2012-2027						
National Policy on Integrated Rural Development -PNDRI-						
National Competitiveness Agenda						
National Strategy for Sustainable Use of Firewood						
Communal Land Regulation						
National Conservation Strategy and Communal Lands						
National Action Plan to Combat Illegal Logging						
Regulation of the Forestry Incentives Program -PINFOR-						
Incentive Program for Small Producers Law –PINPEP Law-						
Proposed Law to Promote Forest Management and Forest Recovery (PROBOSQUE)						
INAB’s institutional Climate Change Agenda, National biodiversity Strategy and action Plan						
Policy and Regulation of Protected Areas Co-Management						
Climate Change Agenda for Diversity biological and Protected Areas						
Program family agriculture and rural economy -PAFFEC-						
National System of Rural Extension (SNRED)						
Policy and promotion of integrated livestock						
Program to promote fruit growing (PROFRUTA)						
Strategic Plan for climate Change of the Ministry of Agriculture –MAGA-						