



CAFI: Central Africa Forest Initiative
 Accelerating Reforms in Central Africa
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**Reducing Emissions Through Improved Forestry Management:
 Implementation of a National Scale Certification Process in Gabon**

Participating Organization(s)	
1.	United Nations Development Programme (UNDP)
2.	Ministry of Forest, Seas, Environment and Climate Change (MFME)
3.	National Climate Council (CNC)
5.	National Parks Agency (ANPN)
6.	Agency for the Implementation of Forest-Timber Sector Activities (AEAFFB)
7.	Gabonese Standardization Agency (AGANOR)

Specific Objective of the Fund
Reduce emissions from the forestry sector implementation of a national scale certification process and improved forestry law enforcement in Gabon.

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Programme Title:
Reducing Emissions Through Improved Forestry Management: Implementation of a national scale certification process in Gabon

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-

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Programme Description (limited to 200 words, if it will be published on GATEWAY):

Carbon emissions resulting from forest degradation during selective logging traditionally account for roughly 80% of Gabon’s carbon emissions. It is possible to reduce these emissions by more than 50% by implementing sustainable management plans for logging concessions and through practical measures to improve logging equipment and techniques. Gabon’s Forest Carbon Partnership Facility (FCPF) program has initiated this process. In September 2018, recognizing the importance of forestry sector emissions, President Ali Bongo Ondimba took bold action, declaring that all forest concessions in Gabon must be certified by 2022 or the timber companies would have their permits revoked. This goal of this program document is to reduce emissions from the forestry sector by (1) defining and implementing a national scale forestry certification program, and (2) decreasing illegal logging and non-compliance with national forestry laws through the creation and deployment of an Elite Forestry Law Enforcement Unit within the Ministry of Forest, Sea, and Environment. Successful implementation of these activities could reduce CO₂ emissions by 30 million tons annually by 2025.

Review and approval dates

Submission to the Executive Secretariat

Date:

Independent Review

Date:

Approval by CAFI Executive Board

Date:

Signatures of Participating Organizations and President of the Executive Board

I.	Name of representative	
	Signature	
	Name of Participating Organization	
	Date	
II.	Name of representative	
	Signature	
	Name of Organization	
	Date	

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List of acronyms

AEAFBB	Agency for the Execution of Activities of the Wood Forest Sector [<i>Agence d'Exécution des Activités de la Filière Forêt Bois</i>]
AFD	French Development Agency [<i>Agence française de développement</i>]
AfDB	African Development Bank
AGEOS	Gabon National Space Agency [<i>Agence gabonaise d'études et d'observation spatiale</i>]
ANPN	National Parks Agency [<i>Agence nationale des parcs nationaux</i>]
AOP	Annual Operational Plan
APZ	Agricultural Production Zone
BCPSGE	Bureau of Coordination of the Strategic Plan for Emerging Gabon
CAF	Forest Management Control Project [<i>Contrôle de l'aménagement forestier</i>]
CAFI	Central African Forest Initiative
CNC	National Climate Council [<i>Conseil national climat</i>]
COFIL	Steering Committee [<i>Comité de pilotage</i>]
DG	Director-general/General Directorate
ESMP	Environmental and Social Management Plan
EU	European Union
FCPF	Forest Carbon Partnership Facility
FLEGT	Forest Law Enforcement, Governance and Trade
FPIC	Free, Prior and Informed Consent
FSC	Forest Stewardship Council
GCF	Green Climate Fund
GFCA	Gabon Forest Carbon Assessment
GHG	Greenhouse Gas
Ha	Hectare
HCS	High Carbon Stock
HCV	High Conservation Value
IFT	Tropical Forest Institute [<i>Instituto Floresta Tropical</i>]
INDC	Intended Nationally Determined Contribution
LEDS	Low Emission Development Strategy
M€	Million euros
MAEPA	Ministry for Agriculture, Livestock, Fishery and Food [<i>Ministère de l'agriculture, de l'élevage, de la pêche et de l'alimentation</i>]
MFME	Ministry for Forests, Oceans and the Environment [<i>Ministère de la forêt, de la mer et de l'environnement</i>]
MP	Management Plan
NDC	Nationally Determined Contribution
NEAP	National Environmental Action Plan
NGO	Non-governmental Organization
NIF	National Investment Framework
PNAT	National Land Use Plan
NP	National parks
NRI	Natural resources inventory
PEFC	Programme for the Endorsement of Forest Certification
PMU	Project Management Unit
PNC	National Climate Plan of Gabon [<i>Plan national climat du Gabon</i>]
PSGE	Strategic Plan for Emerging Gabon [<i>Plan stratégique Gabon émergent</i>]
ROSCEVAC	Network of Civil Society Organizations for the Green Economy [<i>Réseau des organisations de la société civile pour l'économie verte en Afrique Centrale</i>]
RPP	Readiness Preparation Proposal
SFI	Sustainable Forestry Initiative
SGG	Secretary-General of the Government
teCO ₂	Tonne-equivalent CO ₂
TFF	Tropical Forest Foundation
TNC	Nature Conservancy
UNDP	United Nations Programme for Development
UNFCCC	United Nations Framework Convention on Climate Change
UNODC	United Nations Office on Drugs and Crime
US\$	US dollar

USAID	United States Agency for International Development
USFS	United States Forest Service
USFWS	United States Fish and Wildlife Service
VPA	Voluntary Partnership Agreement
WWF	World Wildlife Fund

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1. SUMMARY

Gabon is the second most forested country in the world, with 88% (24 million ha) of its area covered by tropical forest (Sannier et al. 2014¹). Forests are the foundation of Gabonese culture and society, conserving biodiversity, providing non-timber products to rural communities and timber to international markets, and maintaining ecosystem services like the storage and sequestration of carbon. Gabon is second only to Malaysia in terms of average density of forest-biomass carbon (Saatchi et al., 2011²) with high levels of carbon above- and below-ground (Poulsen et al. 2016³, Wade et al. 2019⁴). The integrity of the country's forests is a product of its very low annual deforestation rate, between 0 and 1.1%, low human population, historic economic reliance on oil, and commitment to the protection of its natural resources.

The government is pursuing a low emissions development strategy (LEDS) that optimizes economic development while preserving ecosystems and biodiversity. This strategy builds on a strong platform of environmentally responsible policies, including the creation of a network of protected areas that cover 11% of the country, a Forest Code that requires sustainable management, and a commitment to combatting climate change by honouring the UNFCCC Paris Agreement. A national land-use plan under development is considered an integral part of the strategy. This plan will enable Gabon to meet its ambitious objective to develop agriculture - needed for both food security and economic diversification - while ensuring that forests with high carbon and high biodiversity are not converted to crops.

In a heavily forested country with low deforestation like Gabon, sustainable development will hinge on a productive, but well managed forestry sector. Logging occurs across nearly all forests outside of protected areas : in 2015, 150 companies operated with timber licenses that covered 14.3 million ha (Karsenty and Ferron, 2017⁵) or >50% of the total forested area (de Wasseige et al., 2015⁶). Moreover, forestry is the second largest employer after the government (de Wasseige et al. 2009⁷), and the timber industry contributes importantly to GDP and foreign exchange. The country's forestry industry exported roughly 4 million cubic meters of industrial logs in 2000. In 2009, prior to the 2010 log export ban, logging companies produced an estimated 3.4 million m³ of industrial logs, 60% of which was exported making Gabon the world's second largest exporter of tropical hardwoods that year (Blaser et al., 2011⁸; Rana and Sills, 2017⁹). Emissions from selective logging in Gabon are equivalent to 54% of the country's total emissions from deforestation (Umunay et al. 2019¹⁵), thus reducing forest degradation will be an essential component of minimizing carbon emissions.

¹ Sannier C, McRoberts RE, Fichet L-V, Makaga EMK (2014) Using the regression estimator with Landsat data to estimate proportion forest cover and net proportion deforestation in Gabon. *Remote Sensing of Environment* 151(C):138–148.

² Saatchi, S.S., Harris, N.L., Brown, S., Lefsky, M., Mitchard, E.T.A., Salasf, W., et al. (2011). Benchmark map of forest carbon stocks in tropical regions across three continents. *Proc. Natl. Acad. Sci.*, 108, 9899–9904.

³ Poulsen, J.R., S.E. Koerner, Z. Miao, V. Medjibe, L.J.T. White. 2016. Forest structure determines the abundance and distribution of large lianas in Gabon. *Global Ecology and Biogeography* 26(4): 472-485.

⁴ Wade, A.M., D.B. Richter, V.P. Medjibe, A.R. Bacon, P.R. Heine, L.J.T. White, J.R. Poulsen. 2019. Determinants and estimates of stocks of deep soil carbon in Gabon, Central Africa. *Geoderma* 341:236-248.

⁵ Karsenty, A., Ferron, C., 2017. Recent evolutions of forest concessions status and dynamics in Central Africa. *Int. For. Rev.* 19, 1–17.

⁶ de Wasseige, C., Tadoum, M., Eba'a Atyi, R., Doumenge, C., 2015. The Forests of the Congo Basin - Forests and climate change, 6840th ed. Weyrich Belgium.

⁷ de Wasseige, C., Flynn, J., Louppe, D., Hiol, F., Mayaux, 2009. The Forests of the Congo Basin - State of the Forest 2008, Weyrich. Belgium. doi:10.2788/32259.

⁸ Blaser, J., Sarre, A., Poore, D., Johnson, S., 2011. Status of tropical forest management. 2011. ITTO Technical Series, No 38. International Tropical Timber Organization, Yokohama, Japan.

⁹ Rana, P., Sills, E., 2017. Does certification change the trajectory of tree cover in working forests in the tropics ? An application of the synthetic control method of impact evaluation (No. CEnREP Working Paper No. 17-018). Raleigh, NC. doi:10.13140/RG. 2.2.23121.22887.

Recognizing the importance of the forestry sector, *in September 2018 President Ali Bongo Ondimba took an important step towards sustainable forest management by declaring that all timber companies operating in Gabon must certify their concession, or have their permits revoked.*

Forest certification is typically a voluntary process of evaluating and validating forest management practices using a set of pre-determined standards. The standards vary by certifying agency or organization and address issues such as management plans, protection of biodiversity, harvesting and management practices, social/economic impacts and monitoring. Evaluation of the standards is typically performed by an objective, third party and, if successful, results in a certificate of compliance. Certification provides managers with independent recognition of their responsible management practices and potentially improves market access and price points in environmentally-aware markets. The Forest Stewardship Council (FSC) is perhaps the best-known and “gold standard” international certification body of forestry, but others exist including the Program for the Endorsement of Forest Certification (PEFC) and the Sustainable Forestry Initiative (SFI). To date, 3 out of 40 major companies in Gabon are FSC-certified. A recent study found that producers can benefit significantly from FSC certification, earning on average an extra USD 1.80 for every cubic meter of FSC-certified round-wood or equivalent, over and above the certification costs (WWF 2015¹⁰). On average, it took companies six years to break even on their investment in FSC certification; thus, the upfront costs of entering the process can be considerable in the short-term, but good for the bottom line in the long-term.

Forest certification has enormous benefits such as biodiversity conservation, protection of high conservation value forest, and safeguarding the rights of workers, communities, and indigenous peoples, *but additional steps need to be taken to significantly reduce carbon emissions from forestry.* Medjibe et al. (2013)¹¹ found that an FSC-certified concession produced fewer emissions than a non-certified concession in Gabon. A recent study of 23 concessions in the Congo Basin, however, found that FSC-certified and non-certified concessions did not differ in average emissions, with one FSC-certified concession in Gabon emitting higher levels of carbon CO₂ than the other 22 concessions studied (Umunay et al. 2019¹⁵). Throughout the logging process in Gabon, 60% of emissions came from roads, 36% from felling, and 4% from skidding (Umunay et al. 2019¹⁵). One explanation for the failure of certified concessions to reduce emissions may be that FSC criteria and indicators, and associated reduced impact logging (RIL) practices, were not designed to achieve reductions in overall emissions.

By contrast, the concept of RIL-C has been proposed to more explicitly focus on RIL practices that can result in measurable emissions reductions (Griscom et al. 2014¹²). The RIL-C protocol consists of measuring emissions from selective logging by their main sources (felling, skidding, or hauling) to estimate the possible emissions reductions from adoption of improved logging practices (Ellis et al., 2016¹³; Griscom et al., 2014²⁷). Using this protocol, it was estimated that Gabon could reduce its emissions from logging by 62% (Umunay et al. 2019¹⁵). Road-related emissions could be cut by more than half by limiting road widths to that found in one certified concession in Gabon. Additional reductions could be achieved by limiting collateral damage, avoiding the felling of trees that yield no timber, and by better bucking to maximize wood extraction. Thus, RIL-C practices should be explicitly coupled with certification standards, from FSC or other certification organizations, to reduce the negative environmental and social impacts of logging and to minimize CO₂ emissions in Gabon.

Though the Government of Gabon has taken strong policy steps to curb emissions from the logging sector, a four-year investigation by the Environmental Investigation Agency (EIA) recently uncovered significant and deep seeded illegal activities that continue to plague the forestry sector. The report, [Toxic Trade: Forest Crime in Gabon and the Republic of Congo and the Contamination of the US Market](#), documented how illegally extracted timber emerges into supposedly ‘eco-friendly’ international markets. The report also revealed the extent of illegality in the sector including vast areas of forest that were obtained through corrupt means, massively overharvested concessions, millions of dollars of logs in breach of national law, and several millions of dollars lost through tax evasion each year. At its height, illegal logging is estimated to have accounted for 10-15 million tons of CO₂ emissions (Minister L.J. White, pers. com).

Then Kevazingogate ensued, a national scandal in which more than 350 containers of illegal timber were discovered at the port of Owendo waiting to be exported. The containers mysteriously disappeared, leading the President to fire

¹⁰ WWF (2015) Profitability and Sustainability in Responsible Forestry: Economic impacts of FSC certification on forest operators. (Also available at http://wwf.panda.org/wwf_news/?250330).

¹¹ Medjibe, V.P., Putz, F.E., Romero, C., 2013. Certified and uncertified logging concessions compared in Gabon: changes in stand structure, tree species, and biomass. *Environ. Manage.* 51, 524–540. <https://doi.org/10.1007/s00267-012-0006-4>.

¹² Griscom, B., Ellis, P., Putz, F.E., 2014. Carbon emissions performance of commercial logging in East Kalimantan. Indonesia. *Glob. Chang. Biol.* 20, 923–937. <https://doi.org/10.1111/gcb.12386>.

¹³ Ellis, P., Griscom, B., Walker, W., Gonçalves, F., Cormier, T., 2016. Mapping selective logging impacts in Borneo with GPS and airborne lidar. *For. Ecol. Manage.* 365, 184–196.

both the Vice President and the Minister of Forests. High level political support to crack down on illegal activities in the forestry sector resulted in the appointment of Prof. Lee White as Minister of Forests, Sea and Environment. Past reluctance to pursue illegal activities has been replaced with a crusade to root them out by enforcing existing forestry laws, cracking down on corruption, and mobilizing field teams to oversee, audit and investigate logging operations.

Here, we define a program to support the government of Gabon's efforts to: (1) achieve sustainable forest management through certification, while minimizing CO₂ emissions from the forestry sector; and, (2) decrease illegal logging and non-compliance with forestry laws through improved law enforcement. To minimize CO₂ emissions from the forestry sector, a nation-wide forest certification program will be defined and implemented. To improve law enforcement, an Elite Forestry Law Enforcement Unit will be created, trained and deployed.

The program is composed of two objectives, with a combined total budget of 7M USD.

Overall Goals, Specific Objectives and Activities to achieve these goals are described below.

Overall Goal: Meet Gabon's NDP commitment to UNFCCC by implementing national scale 'Natural Climate Solutions' that increase carbon sequestration and decrease carbon emissions through improved land stewardship.

Intended Outcome: Reduce emissions from Gabon's forestry sector through a national scale forestry certification process and improved forestry law enforcement.

Specific Objective 1. Create the enabling conditions to implement a national scale forest certification program

Activity 1.1. Define and implement institutional protocols for policy reform, project implementation, oversight and monitoring

Activity 1.2. Create a registry of operators engaging in the certification process

Activity 1.3. Implement a field oversight and monitoring/audit strategy

Activity 1.4. Define emission monitoring protocols for forestry concessions and validate private sector reporting

Activity 1.5. Support training of government agents and private sector employees to implement and monitor national certification standards

Specific Objective 2. Reduce illegal forestry through improved law enforcement

Activity 2.1. Identify and train 30 agents to serve as an "Elite" Forestry Law Enforcement Unit

Activity 2.2. Deploy 30 agents to serve as an "Elite" Forestry Law Enforcement Unit

Activity 2.3. Support detection and tracker dogs to work with the Elite Law Enforcement Unit

The core assumption of the program is that improved forest management, specifically forest certification, coupled with enhanced national standards that include RIL-C, can significantly reduce emissions from the forestry sector. The program also assumes that improved law enforcement capacity will effectively prevent « cheating » and halt illegal logging, further reducing carbon emissions while increasing tax revenue from the sector.

Coordination and efficient management of the Program will be provided by a Project Management Unit (PMU) staffed with 9 people, equipment and an operating budget to meet the Program's objectives. This unit was defined and funded as part of the 5 yr CAFI 1 program. Thus, no increased funding to support the PMU has been requested.

As the executing agency of the Program, AFD will be responsible for the execution of the program (activities, deadlines and financial monitoring). A manual of procedures, to be endorsed with AFD's No Objection Notice, will detail the conditions and rules of execution of the Program. The PMU will receive requests for funding from the implementing agencies, which the unit must validate payment.

A Program Steering Committee (COPIL) will be established. It will be chaired by a representative of the Ministry of Economy and Finance. Other committee members will include 1 representative from each of the following entities: MAEPA, MFEM, CNC, ANPN, ADAG, and 1 NGO representative. The DG of Environment, UNDP, and CAFI representatives will attend the COPIL as observers.

A feasibility study of this Certification Program was conducted to identify potential risks and mitigation measures (see figures 9-11). Two of the main risks include historically systematic corruption within the forestry sector across central Africa and mismanagement of program funding. Mitigating the risk of corruption will require sustained political

support to weed out compromised individuals, a process to which Gabon has demonstrated commitment at the highest levels and which will be mitigated by strong integration of third-party actors (civil society, NGO's) and reliance on FSC certifying bodies. The potential for program mis-management or fraudulent use of funding will be mitigated by the implementation of rigorous operating procedures endorsed by AFD and by the formation of a strong, competent PMU that will apply these procedures.

The environmental and social risks of the program are limited, as the aim of the entire program is to improve forestry management through FSC certification. FSC certification is the gold standard for forest certification and sets a high bar for social and environmental impact assessments and mitigation.

The development of the Program involved a number of consultations with public, private and civil society actors.

A detailed analysis of the general Gabon context, historical, political, and institutional, has been presented in the CAFI 1 Program Document and the CAFI Investment Framework. As such, we have borrowed heavily from those documents below and refer readers to the documents where additional information is desired.

2. Situation analysis and programme location

→ The regional context

As the second-largest tropical forest massif after the Amazon forest, in 2015 Congo Basin forests covered approximately 241 million ha (FAO, 2015)¹⁴, accounting for 7% of global forests and 22% of tropical forests¹⁵. These forests are shared among six countries: Cameroun (11%), Central African Republic (3.4%), Republic of Congo (12.4%), Equatoriale Guinea (1.3%), Gabon (17.7%) and the Democratic Republic of Congo (54.2%).

The forests of the Congo Basin are relatively intact compared to other tropical forests, including West Africa. Forest cover loss in the Congo Basin has been consistent at 0.23 percent from 1990-2010, whereas rates of forest cover loss are nearly twice as high in the Amazon Basin and Southeast Asia, ranging from 0.41-0.96 percent in the same period¹⁶.

Similarly, the rate of deforestation in the Congo Basin is also low compared to other tropical regions. The net deforestation rate in the Congo Basin increased from 0.09 percent (1990-2000) to 0.17 percent (2000-2005)¹⁷ compared to 0.4 percent in the Amazon¹⁸. The increase in deforestation was due to the DRC, where the rate doubled between the two periods to 0.22% (2000-2005). Rates of deforestation for other Congo Basin countries range from 0 to 0.7 percent.

Most deforestation across the Congo Basin is associated with agriculture and occurs in areas with high population densities. For example, in the DRC, the country with the highest deforestation rate, 92 percent of forest loss takes place near rural villages and along main roads.

Congo Basin and logging

Because of its relatively low rates of deforestation, the Congo Basin is the last source of tropical wood in Africa. The logging sector is an active and important economic driver of several Central African countries¹⁹. Even so, the Congo Basin is a marginal contributor to the global market (5 percent of tropical logs, and 5, 6, and 7 percent of tropical sawn timber, veneers, and plywood)²⁰. In its Strategic Vision, the African Development Fund²¹ proposes increasing the area of logging concessions in Central Africa from 50 to 75 million ha, increasing wood production from 7 million m³ to 15 million m³ by 2030, and increasing primary transformation from 66 percent to 100 percent.

Of the 169 million hectares of dense forest in Central Africa, 47 million (28 percent) are classified as logging concessions - the main type of production forest. Concessions are created through a contract signed between the

¹⁴ FAO, 2015. Global Forest Resources Assessment 2015. Rome, 253 p.

¹⁵ Banque Africaine de développement. 2018. Développement intégré et durable de la filière bois dans le Bassin du Congo: Opportunités, défis, et recommandations opérationnelles. 308 p.

¹⁶ Adapted from de Wasseige et al. 2012.

¹⁷ Wasseige C. de, Devers D., de Marcken P., Eba'a Atyi R., Nasi R., Mayaux P., 2009, Les forêts du Bassin du Congo – État des forêts 2008. Luxembourg, Office des publications de l'Union européenne, 426 p. ISBN 978-92-79-132 11-7, doi: 10.2788 /32456.

¹⁸ Demaze M.T., 2007, La déforestation en Amazonie brésilienne : une rupture apparente entre développement et environnement, Le Mans, 23 p. http://hal.archives-ouvertes.fr/docs/00/30/89/73/PDF/Tsayem_deforestation_Amazonie.pdf.

¹⁹ Banque Africaine de développement. 2018. Développement intégré et durable de la filière bois dans le Bassin du Congo: Opportunités, défis, et recommandations opérationnelles. 308 p.

²⁰ Banque Africaine de développement. 2018. Développement intégré et durable de la filière bois dans le Bassin du Congo: Opportunités, défis, et recommandations opérationnelles. 308 p.

²¹ Banque Africaine de développement. 2018. Développement intégré et durable de la filière bois dans le Bassin du Congo: Opportunités, défis, et recommandations opérationnelles. 308 p.

Government and a private operator that confers the rights to harvest wood in the concession following Government-dictated norms of management. The logging company is responsible for preparing technical documents approved by the forestry department, and then harvests timber following the management rules prescribed in the documents.

Currently, 462 forestry concessions cover an area of 53.4 million hectares in the Congo Basin. The size of concessions is highly variable, with a mean of 100 to 150 ha. Most concessions have an area of 100 to 250 ha, with some concessions in northern Congo exceeding 400,000 ha.

Forest management plans (FMP's)

By employing the concession model, Central African countries' confided the management of production forests to timber companies, with Governments defining logging norms and overseeing their application. More recently, forest management plans (FMP's) that define methods of forest management over 20-30 years are required. The FMP must ensure sustainable forest management – timber production that limits deforestation - while addressing social and environmental sustainability within concessions²². FMPs recommend reduced-impact logging (RIL) practices and facilitate checks on operating activities by regulators^{23,24}. Starting in the 2000's, forest management has been incorporated into the Forestry Codes of Congo Basin, and roughly 60% of logging concessions now have management plans.

There is mixed evidence regarding whether FMP's reduce deforestation and carbon emissions: FMP's in Cameroon reduced carbon emissions from logging operations²⁵; whereas FMP concessions in Congo were associated with greater deforestation because of greater international demand for timber production²⁶, but see²⁷. A recent analysis shows that between 2000 and 2010 deforestation was 74% lower in concessions with an FMP compared to those without²⁸. FMPs reduce deforestation by allowing cycles of timber extraction rotation, thereby avoiding overexploitation of previously logged areas and better regulating access to concessions by closing former logging roads, limiting illegal activities such as slash and burn agriculture, hunting and the illegal harvest of timber or fuelwood.

Timber concessions are unlikely to intrinsically drive deforestation compared with clearcutting for agriculture, mining or energy installations, but their impact in already heavily populated areas can aggravate deforestation, and drive defaunation²⁹.

Congo basin and certification

In concert with forest management, standards for voluntary forest certification have been developed. Whereas FMP's were implemented in the early 2000's, FSC certification took root in 2005. Currently, there are 5 million ha of forest (Gabon, Cameroon, and Republic of Congo) certified under FSC certification.

Certification enables operators to obtain a label for their product that guarantees that they are produced in accordance with the principles of forest management defined by the national government. Certification is based on independent assessments that identify methods of good forest management – according to internationally recognized standards – and is intended as a marketing tool to promote forest products whose origin and mode of production are guaranteed to be sustainable.

Programs like the Program for the Promotion of Certified Forests (PPECF-COMIFAC) have promoted certification, as well as improving industrial logging techniques and bolstering communications regarding sustainable logging <http://www.ppecf-comifac.com/accueil.html>. PPECF focuses on FSC certification, but other certifications such as the

²² Nasi, R, Alain B, van Vliet N. 2012. Managing for timber and biodiversity in the Congo Basin. *Forest Ecology and Management* 268: 103 – 111.

²³ Karsenty A, Garcia Drigo I, Piketty M-G, Singer B. 2008. Regulating industrial forest concessions in Central Africa and South America. *Forest Ecology and Management* 256:7, 1498–1508.

²⁴ Ezzine de Blas De, Pérez MR. 2008. Prospects for reduced impact logging in Central African logging concessions. *Forest Ecology and Management* 256:1509-1516.

²⁵ Cerutti PO, Suryadarma D, Nasi R, Forni E, Medjibe V, Delion S, Bastin D. 2017. The impact of forest management plans on trees and carbon: Modeling a decade of harvesting data in Cameroon. *Journal of Forest Economics* 27, 1-9.

²⁶ Brandt JS, Nolte C, Agrawal A. 2016. Deforestation and timber production in Congo after implementation of sustainable forest management policy. *Land Use Policy* 52, 15–22.

²⁷ Karsenty A, Romero C, Cerutti PO, Doucet J-L, Putz FE, Bernard C, Eba'a Atyi R, Douard R, Claeys F, Desbureaux S, Ezzine de Blas D, Fayolle A, Fomété T, Forni E, Gond V, Gourlet-Fleury S, Kleinschroth F, Mortier F, Robert N, Nguinguiri J-C, Vermeulen C, Carlos deWasseige C. 2017. Deforestation and timber production in Congo after implementation of sustainable management policy: A reaction to the article by J.S. Brandt, C. Nolte and A. Agrawal (*Land Use Policy* 52:15–22). *Land Use Policy* 65, 62-65.

²⁸ Tritsch I, le Velly G, Mertens B, Meyfroidt P, Sannier C, Makak J-S, Hounbedgi K. 2019. Do Forest-Management Plans and FSC Certification Reduce Deforestation in the Congo Basin? AFD Research Papers Series, No. 2019-104, April.

²⁹ Karsenty A, Hardin R. 2017. Forest concessions in Central Africa: an introduction to the Special Issue. *International Forestry Review* 19 (S2).

Pan-African Forest Certification (PAFC) exist and are applied. PASC was initiated in 2000, but then taken over by the Programme for the Endorsement of Forest Certification (PEFC), and is largely viewed as not providing the same environmental guarantees as FSC, particularly as the FSC considers the protection of Intact Forest Landscapes (<https://fsc.org/en/page/intact-forest-landscapes>) - the last remaining large unfragmented forest areas, undisturbed by roads or other industrial infrastructure, in which there has been no industrial harvesting in the past 30-50 years. Some work on Cameroon³⁰, Mexico³¹, and Brazil, Gabon and Indonesia³² has shown that FSC certification reduces deforestation in some certified logging concessions. The estimated effects, however, were rarely statistically different from zero, providing inconclusive evidence of the effect of FSC on deforestation. Similarly, certification of logging concessions had a “negligible” impact on slowing the fragmentation of intact forest landscapes in the Congo Basin³³. FSC certification likely has financial, social³⁴, and or environmental benefits, but examination of its effects on deforestation needs to be further assessed.

A key component of certification is traceability – the ability to trace the history of an activity. Traceability involves two main component: identification of the product by marking and recording of data regarding the product all the way along the production, processing and distribution chain³⁵.

Technological progress in terms of semi-electronic, electronic or DNA-based systems now offers reliable methods of tracing products in real time. One such example is the PALLITRACKS application development by the Cameroonian company, Prosygma after three years of work in the field³⁶. The PALLITRACKS system enables all the traceability data to be centralized on servers that can be accessed by Internet, from harvesting inventory up to invoicing for logs and processed products. Each inventoried and felled tree to be followed, whether it has been processed or not, all the way through to delivery to the customer.

Other models of timber extraction: community forests and the informal sector

Community forests are an alternative to the concession model in which villages manage forests, usually with multiple management objectives, and timber production is limited. Community forests currently only exist in Cameroon (4 million ha) and Equatorial Guinea (107,000 ha).

Two other forms of timber extraction that affect Congo Basin forests include ‘artisanal’ and ‘illegal’ logging. Artisanal logging is conducted manually or with limited mechanical means, such as heavy machinery for skidding wood or building roads. Most artisanal logging is done with a saw or chainsaw, is not reported to the government, occurs outside of concessions, and stays in the local, informal marketplace. Illegal logging, on the other hand, is timber extraction without appropriate permits or that does not respect established standards, such as cutting trees smaller than the minimum harvest diameter or felling non-authorized species.

→ Logging permits in Gabon

In Gabon, forest covers an estimated 23.6 million ha in 2015 (AGESO, 2016)³⁷, making it home to approximately 18 percent of the Congo Basin’s forests. Of this area, approximately 14.3 million ha are located in 150 concessions (SuppMat A). Roughly 7.2 million ha (50 percent) of the concession areas have a FMP’s: 17 percent of concessions are certified and 14 percent are FSC-certified³⁸ (Figure 1; SuppMat B).

³⁰ Panlasigui S, Rico-Straffon J, Pfaff A, Swenson J, Loucks C. 2018. Impacts of certification, uncertified concessions, and protected areas on forest loss in Cameroon, 2000 to 2013. *Biological Conservation* 227: 160-166.

³¹ Goff L, Planter MR. 2018. Does eco-certification stem tropical deforestation? Forest Stewardship Council certification in Mexico. *Journal of Environmental Economics and Management* 89, 306-333.

³² Rana P, Sills E. 2018. Does Certification Change the Trajectory of Tree Cover in Working Forests in The Tropics? An Application of the Synthetic Control Method of Impact Evaluation. *Forests* 9 (3).

³³ Potapov, P., Hansen, M. C., Laestadius, L., Turubanova, S., Yaroshenko, A., Thies, C., ... Esipova, E. (2017). The last frontiers of wilderness: Tracking loss of intact forest landscapes from 2000 to 2013. *Science Advances*, 3(1), 1600821. [doi:10.1126/sciadv.1600821](https://doi.org/10.1126/sciadv.1600821)

³⁴ Cerutti PO, Lescuyer G, Tacconi L, Eba’Atyi R, Nasi R, Tabi Ekebil PP, Tsanga R. 2016. Social impacts of the Forest Stewardship Council certification in the Congo Basin. *International Forestry Review* 18(S1): 1–14.

³⁵ FAO. 2016. Traceability: A management tool for enterprises and governments. Programme FAO FLEGT Technical Paper 1. Rome 55 pgs. ISBN 978-92-5-109423-5

³⁶ FAO. 2016. Traceability: A management tool for enterprises and governments. Programme FAO FLEGT Technical Paper 1. Rome 55 pgs. ISBN 978-92-5-109423-5

³⁷ AGEOS, 2016. Cartographie de l’état du couvert forestier du Gabon en 2015. Libreville, 5 p. [Mapping of the 2015 status of forest cover in Gabon]

³⁸ Karsenty A, Ferron C. 2017. Recent evolutions of forest concessions status and dynamics in Central Africa *International Forestry Review* 19.

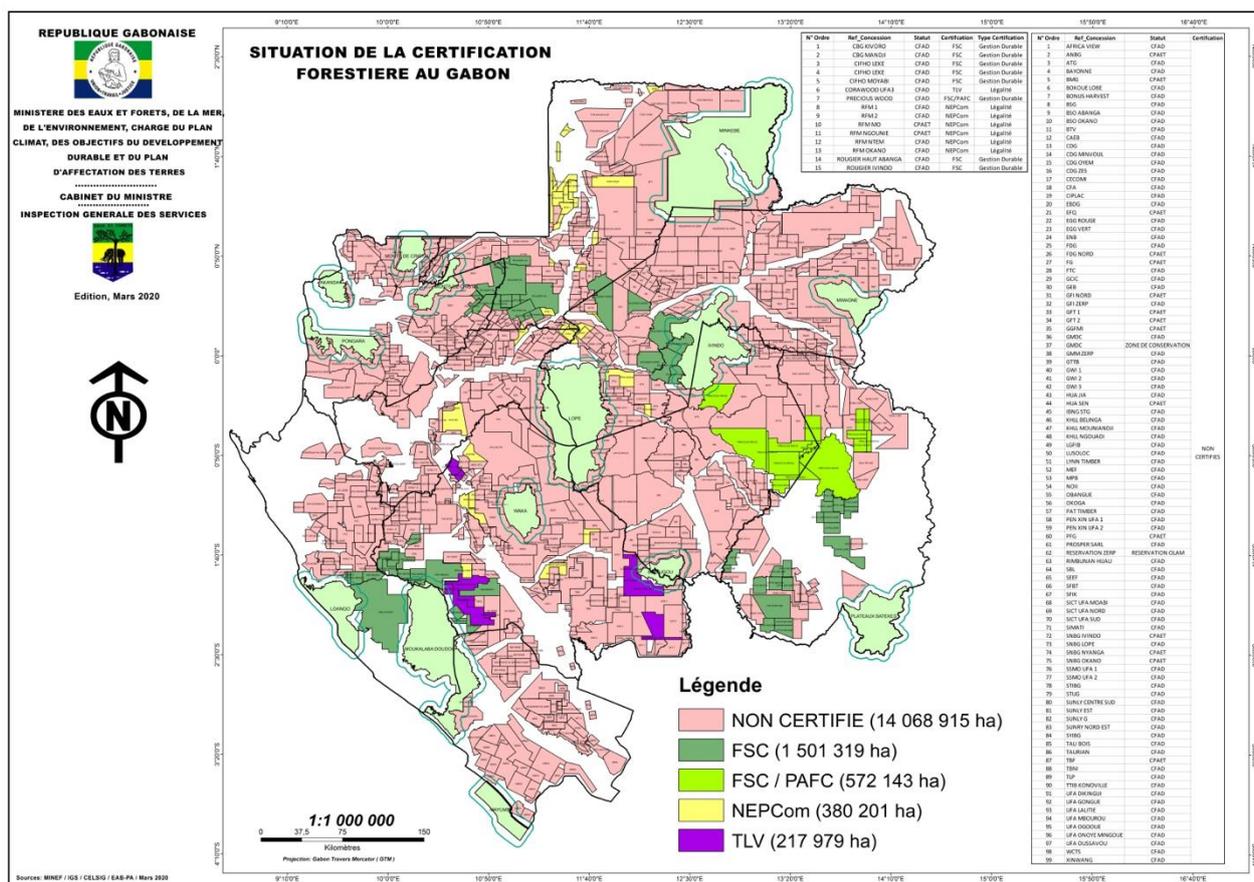


FIGURE 1. MAP OF CERTIFIED FORESTRY CONCESSIONS IN GABON

Timber is the second most important economic sector in Gabon after oil. The timber industry is the largest private sector employer, employing 28% of the working population.

Forest management in Gabon

Beginning in 1996 with its first forest policy, Gabon attempted to increase and optimize the forest sector’s contribution to economic and social development.

In 2001, Gabon updated its Forest Code (Law No 16/01 of 2001) to improve forest governance and management. The main goals of the 2001 Forest Code were to foster: (1) the sustainable development of forests; (2) the industrialization of the Gabonese timber sector; (3) the sustainable conservation of natural resources, and (4) greater local stakeholder involvement in the mangement of Gabon’s natural resources.

As a result of the 2001 law, all forest concession holders must prepare a forest management plan spanning 30 years, which divides the concession into 5-year blocs of almost equal timber volume, and then subdivides these blocs into five smaller annual harvesting lots (AAC) of nearly the same area. The law requires that concessionaires perform a full pre-harvest inventory (all commercial species above 20-cm diameter) and have operational harvesting plans for the AAC before logging is authorized. A harvest rotation system ensures that trees are regenerated during a 25-year fallow period. To harvest a concession, holders must develop an FMP that includes compliance with standards for labor and social services, respecting local people/communities living on harvest site, minimizing impact on biodiversity, and managing wildlife. All registered producers, except for Gabonese nationals, are subject to a quota of production that depends on market fluctuations and the prescriptions of the management plan.

The Ministry of Water and Forests can issue three kinds of permits (Gabon Code Forestier, Loi n°16-01 du 31 décembre 2001; Figure 2).

- (1) Sustainable Forest Management Concession (CFAD). CFAD permits can cover a surface area between 50,000-200,000 ha. One logging company can have multiple CFADs, but can hold no more than a total of 600,000 ha. Before the Ministry awards the concession permit, the company will be issued a temporary license to survey and inventory the landscape, and prepare: a) An analysis of the environment (i.e. mapping, management inventory, ecology diagnostics, socio-economic surveys, etc.); b) Land use planning decisions (i.e. separation

of permits for areas of management, production, ecological interest, scientific interest, etc.); c) Plan for production (i.e. pace of logging, amount of logging of each tree species, harvesting methods, finalized management parameters, etc.), including plans for sustainable development.

- (2) Gré à Gré Permit (PGG). PGG is issued only to nationals for local wood processing in rural forests and is limited to 50 trees in an area predefined by the Ministry.
- (3) Associated Forest Permit (PFA). PFA is a surface permit reserved for nationals only. It is issued for timber harvest in the permanent forest estate, excluding classified national forests. The area of a PFA can be 15,000 ha or less when integrated into a CFAD and 50,000 ha when managed by the titleholder.

Community forests can also be designated in the rural domain and can be harvested for timber for the benefit of the community.

Additionally, like the rest of Central Africa, Gabon has an informal timber market. Despite the existence of several legal forms of artisanal logging (Coupe Familiale, Permis Spécial, Autorisations de Sciage de Long, Droits d'usage coutumiers, Forêts communautaires), they are rarely formerly implemented, and even more rarely monitored in the field³⁹. The informal wood sawing and transformation market is active and generates income and jobs in urban and rural areas, constituting a lever of development for thousands of people separate from the logging concession model⁴⁰.

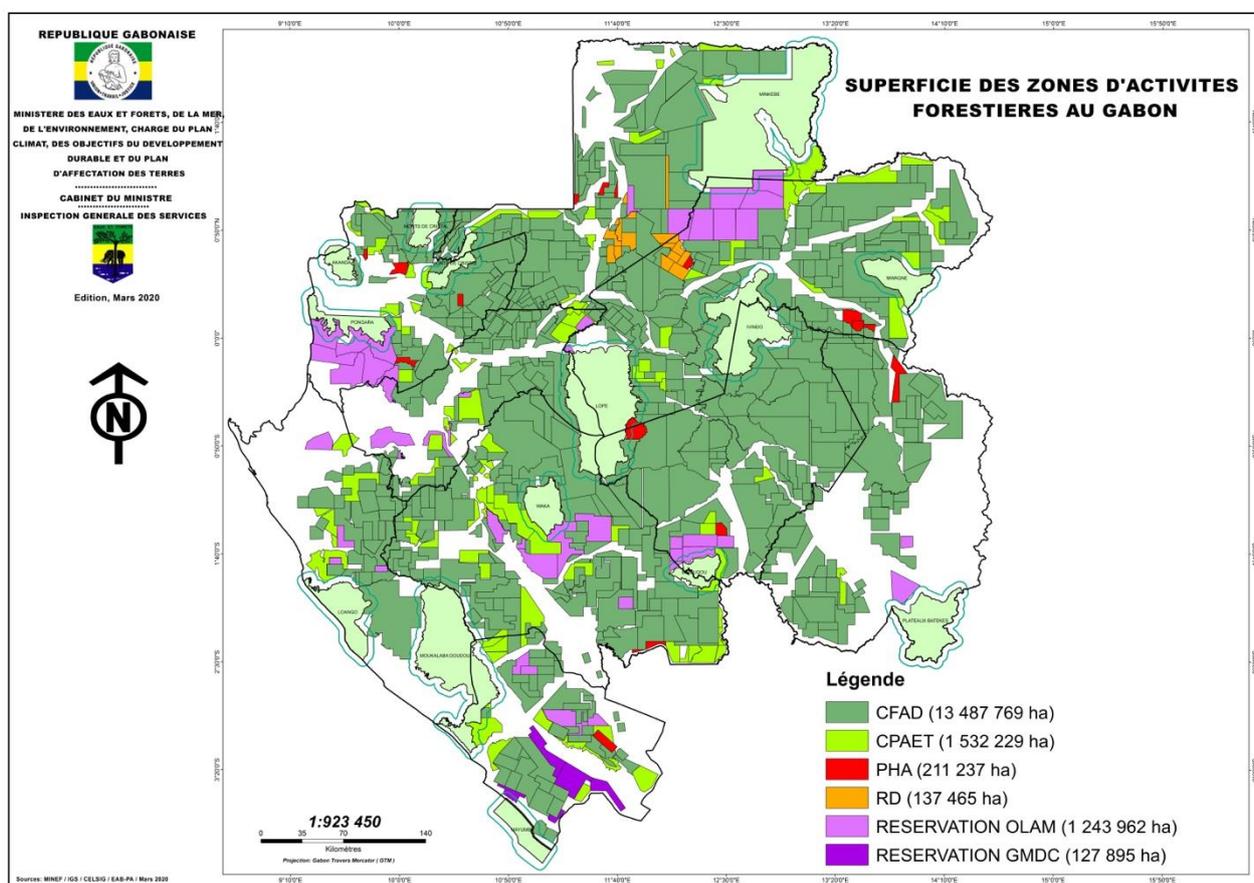


FIGURE 2. MAP OF FORESTRY CONCESSIONS BY PERMIT TYPE IN GABON

In November 2009, Gabon banned the export of unprocessed logs. Gabon was the largest log exporter in the Congo Basin until 2010, and this decision increased the transformation of wood in country from 15 percent in 1993-99 to 100 percent since 2010⁴¹ (SuppMat C). Moreover, the country created a fully developed industrial timber sector, and is

³⁹ Lescuyer, G., Cerutti, P.O., Manguiengha, S.N. et bi Ndong, L.B. 2011 Le marché domestique du sciage artisanal à Libreville : état des lieux, opportunités et défis. Document Occasionnel 63. CIFOR, Bogor, Indonésie.

⁴⁰ Lescuyer, G., Cerutti, P.O., Manguiengha, S.N. et bi Ndong, L.B. 2011 Le marché domestique du sciage artisanal à Libreville : état des lieux, opportunités et défis. Document Occasionnel 63. CIFOR, Bogor, Indonésie.

⁴¹ Banque Africaine de développement. 2018. Développement intégré et durable de la filière bois dans le Bassin du Congo: Opportunités, défis, et recommandations operationnelles. 308 p.

now the largest African exporter of plywood and veneers, thinly sliced hardwood that is laid over produced wood for furniture and floors. The emphasis on transformation means that the current capacity to transform wood is greater than the available timber⁴². Furthermore, the policy has been criticized for having been financially harmful to some companies, reducing tax revenues, and resulting in products that are not competitive on the world market because of the high labor costs in Gabon⁴³.

Since 2011, Gabon has also moved to a model of 'Special Economic Zones' to increase trade, investment, and employment. The Special Economic Zone of Ngok include factories for transforming wood that can transform poor quality wood into products, allowing a greater harvest intensity in the forest.

→ *The potential for reducing emissions*

With up to 20 percent of global greenhouse gas emissions originating from deforestation, forests play a key role in combatting climate change. As such, the international community has recognized that reducing carbon emissions from deforestation and forest degradation⁴⁴ is essential to limiting global warming.

Carbon stocks in the Congo Basin are estimated to be 46,016 millions de tonnes^{45, 46}. Dense forests constitute more than 65% of the stock compared to 35% in other ecosystems.

As the second largest tract of tropical forest, Congo Basin forests are indispensable in the fight against climate change. The potential of reducing emissions in the region comes largely from: (1) maintaining, or even reducing, the generally low deforestation rate as Congo Basin countries develop economically, (2) minimizing forest degradation, through forestry management, reduced impact logging, certification schemes, and halting illegal logging, so that the logging industry is productive, but efficient; and (3) protecting high carbon forests from damage and destruction.

As demonstrated above, deforestation has historically been less severe in the Congo Basin, compared to other regions, but this could change as economic development progresses⁴⁷. Since the start of the 21st century, a surge of land acquisitions for oil palm, and secondary rubber, has occurred in Central Africa. Recent studies have demonstrated that development approaches like the High Carbon Stock (HCS) approach, emphasizing forest protection and climate change mitigation, or the High Conservation Value (HCV) approach, which focuses on safeguarding biodiversity and ecosystems, could provide opportunities for agriculture with zero deforestation through strategic land use planning⁴⁸. Similarly, selection of low carbon forest for development and creation of set-asides can also keep agriculture-associated emissions to zero in some cases⁴⁹.

Whereas deforestation is the removal of trees from land which is then converted to non-forest use, forest degradation is a direct, human-induced decrease in carbon stocks in forests resulting from a loss of canopy cover that is insufficient to be classed as deforestation⁵⁰. Globally, forest degradation affects a much larger area than deforestation, which is the case in the Congo Basin where 28 percent of forests lie in logging concessions.

Pearson et al.⁵¹ estimated total forest degradation emissions of 2.1 Gt CO₂e year⁻¹ in the tropics and subtropics, of which 53% was derived from timber harvest, 30% from woodfuel harvest, and 17% from forest fires. This means that in tropical zones, degradation emissions are equivalent to about a third of those from deforestation.

⁴² Karsenty A, Ferron C. 2017. Recent evolutions of forest concessions status and dynamics in Central Africa International Forestry Review 19.

⁴³ Karsenty A, Ferron C. 2017. Recent evolutions of forest concessions status and dynamics in Central Africa International Forestry Review 19.

⁴⁴ Stern N 2007 The Economics of Climate Change. The Stern Review (Cambridge: Cambridge University Press).

⁴⁵ Wasseige C. de, Devers D., de Marcken P., Eba'a Atyi R., Nasi R., Mayaux P., 2009, Les forêts du Bassin du Congo – État des forêts 2008. Luxembourg, Office des publications de l'Union européenne, 426 p. ISBN 978-92-79-132 11-7, doi: 10.2788 /32456.

⁴⁶ Tchatchou B, Chia EL, Sufo-Kankeu R, Pérez-Terán AS, Tiani AM, Sonwa DJ, Kengoum F, Locatelli B, Mekou YB, Munoh A et Kenfack C. 2015. Changement climatique dans le Bassin du Congo: Informations et connaissances échangées entre les acteurs. Document de Travail 185. Bogor, Indonesia: CIFOR.

⁴⁷ Feintrenie, L. (2014). Agro-industrial plantations in Central Africa, risks and opportunities. *Biodivers. Conserv.*, 23, 1577–1589.

⁴⁸ Austin, K., M. Lee, C.J. Clark, B. Forester, D. Urban, L.J.T. White, P. Kasibhatla, J.R. Poulsen. 2017. An assessment of high carbon stock and high conservation value approaches to sustainable oil palm cultivation in Gabon. *Environmental Research Letters* 12(1): 014005.

⁴⁹ Feintrenie, L. (2014). Agro-industrial plantations in Central Africa, risks and opportunities. *Biodivers. Conserv.*, 23, 1577–1589.

⁵⁰ IPCC. Definitions and methodological options to inventory emissions from direct human-induced degradation of forests and revegetation of other vegetation types. In: Penman J, Gytarsky M, Hiraishi T, Krug T, Kruger D, Pipatti R, Buendia L, Miwa K, Ngara T, Tanabe K, Wagner F, editors. Miura: Institute for Global Environmental Strategies (IGES); 2003.

⁵¹ Pearson TRH, Brown S, Murray L, Sidman G. Greenhouse gas emissions from forest degradation: an underestimated source. 2017. *Carbon Balance and Management* 12: 3. doi: DOI 10.1186/s13021-017-0072-2.

For nine major tropical timber producing countries (including Republic of Congo), emissions from logging were on average equivalent to about 12% of those from deforestation⁵²; but for nine countries with relatively low emissions from deforestation, emissions from logging were found to be equivalent to fifty percent or more of those from deforestation.

Common drivers of forest degradation include timber harvesting (legal and illegal), fuel wood collection, nonstand replacing fires, and animal grazing in the forest (preventing forest regeneration)⁵³. A review of forest degradation in the tropics and subtropics found that 51% of the disturbed area was caused by timber harvesting, 31% by woodfuel harvest, 9% by fires, and 7% by grazing⁵⁴.

The loss of live biomass through timber harvest is due to the immediate damage that occurs by felling selected trees, incidental damage to surrounding trees, and infrastructure built for removing logs out of the forest⁵⁵. The loss of biomass and carbon can be minimized through the application of reduced impact logging (RIL) techniques⁵⁶. Even though logging intensities are relatively low in the Congo Basin compared to other tropical regions, RIL benefits can still be achieved by the preparation of detailed harvest plans to minimize damage from tree extraction routes⁵⁷. Ezzine de Blas and Pérez⁵⁸ argue that RIL practices have not fully been implemented in Central Africa, partially because of the heterogenous behaviors of the logging industry, but that certification shows promising for promoting RIL.

→ **LULUCF sector sequestration and emissions**

The LULUCF sector is by far the country's leading carbon sink (biomass and soil), with average sequestration of 81.1 MteqCO₂/year over the period 1990-2015. However, during the same time, the sector was also the leading source of greenhouse gas (GHG) emissions, with average emissions of 47.3 MteqCO₂/year. Indeed, forest degradation - related specifically to forestry activities - has been the leading source of emissions in the LULUCF sector for several decades.

In 2000, the sector was responsible for approximately 93 percent of Gabon's GHG emissions. These emissions were related to deforestation (6.7MteqCO₂/year) and, above all, to forest degradation (74.3 MteqCO₂/year) (PR, 2015).

Gabon is currently revising its estimated emissions/removals of GHG emissions and rewriting its Nationally Determined Contribution (NDC) for the UNFCCC. These activities were funded by the Preparation Plan (RPP) submitted by Gabon to the Forest Carbon Partnership Facility (FCPF) (see Section 3.3 below).

Older data on the evolution of the contribution of deforestation and degradation to emissions, which will be formally updated before June 2020 in the Gabon FREL, are presented in Table1.

Four significant changes related to the LULUCF sector's GHG emissions/absorption occurred between 1990-2015:

- Deforestation-related emissions nearly doubled between 2000 and 2015, reaching 12.2 MteqCO₂/year in 2015;
- Forest degradation-related emissions decreased by nearly 78 percent between 2005 and 2015, falling to 17.7MteqCO₂/year in 2015;
- While forest degradation remains the leading source of emissions, its share relative to that of deforestation has declined considerably. In 2015, degradation represented only 56 percent of emissions from this sector, while it totalled 98 percent in 2005; and,
- Emissions from the LULUCF sector fell by more than half between 2005 (80.3 MteqCO₂/year) and 2015 (29.8 MteqCO₂/year) as a result of measures taken by the Government of Gabon.

⁵² Pearson TRH, Brown S, Casarim FM. Carbon emissions from tropical forest degradation caused by logging. *Environ Res Lett.* 2014. doi:10.1088/1748-9326/9/3/034017.

⁵³ GOFCC-GOLD. A sourcebook of methods and procedures for monitoring and reporting anthropogenic greenhouse gas emissions and removals associated with deforestation, gains and losses of carbon stocks in forests remaining forests, and forestation. GOFCC-GOLD Report version COP19-2, (GOFCC-GOLD Land Cover Project Office, Wageningen University, The Netherlands); 2013.

⁵⁴ Hosonuma N, Herold M, De Sy V, De Fries RS, et al. An assessment of deforestation and forest degradation drivers in developing countries. *Environ Res Lett.* 2012;7:1–12.

⁵⁵ Medjibe VP, Putz FE, Starkey MP, Ndouna AA, Memiaghe HR. 2011. Impacts of selective logging on above-ground forest biomass in the Monts de Cristal in Gabon. *Forest Ecology and Management* 262 :9, 1799-1806.

⁵⁶ Putz FE, Zuidema PA, Synnott T, Pen˜a-Claros M, Pinard MA, Sheil D, Vanclay JK, Sist P, Gourlet-Fleury S, Griscom B, Palmer J, Zagt R (2012) Sustaining conservation values in selectively logged tropical forests: the attained and the attainable. *Conserv Lett.* doi:10.1111/j.1755-263X.2012.00242.x.

⁵⁷ Medjibe, V.P., Putz, F.E., Romero, C., 2013. Certified and uncertified logging concessions.

⁵⁸ Ezzine de Blas De, Pérez MR. 2008. Prospects for reduced impact logging in Central African logging concessions. *Forest Ecology and Management* 256:1509-1516.

TABLE 1. ESTIMATED CHANGE IN GABON'S GHG EMISSIONS RELATED TO DEFORESTATION AND DEGRADATION BETWEEN 1990 AND 2015 (CNC, 2016)

Année	1990	2000	2005	2010	2015	Moyenne
Déforestation	6,675,840.00	6,675,840.00	1,390,800.00	333,792.00	12,183,042.00	5,451,862.80
Dégradation	24,400,000.00	74,326,895.70	78,901,895.70	14,446,752.00	17,664,038.40	41,947,916.36
Sequestration	(81,386,874.31)	(81,063,096.07)	(80,978,104.28)	(80,970,009.82)	(81,215,553.37)	(81,122,727.57)
Emissions nettes	(50,311,034.31)	(60,360.37)	(685,408.58)	(66,189,465.82)	(51,368,472.97)	(33,722,948.41)

→ Deforestation trends and main drivers

Thanks to international remote sensing projects and the work of the Gabon National Space Agency (AGEOS), Gabon has a complete map of its forest cover for the years 1990, 2000, 2010 and 2015. It was thus possible to calculate estimates of deforestation and land use changes.

Over the period 1990-2000, the net deforestation rate (forest losses and gains) was estimated at 0.26 percent, or a net loss of forest cover of slightly more than 61,000 ha over 10 years, and an annual deforestation rate of 0.026 percent. This rate is low and remains below the estimates published previously, in particular by the United Nations Food and Agriculture Organisation (FAO). Over that same period, gross deforestation (forest losses) was estimated at slightly more than 100,000 ha, nearly half of which resulted, reportedly, from logging and, particularly, the opening of logging roads (47 percent). Nearly one-third of deforestation was reportedly due to forest conversion to pasture/fallow (36 percent).

A very significant decline in deforestation was observed between 2000-2010, estimated at 0.04 percent over 10 years, or 0.004 percent/year on average. Gross deforestation observed between 2000 and 2010 was approximately 25,500 ha, or one-fourth of that observed during the prior 10 years (1990-2000). This points to a very sharp drop in the conversion of forests to logging roads, pasture/fallow and agriculture.

Over the period 2000-2010, deforestation observed was almost entirely offset by the increase of forest areas on non-forest lands (58 percent due to the spontaneous reforestation of abandoned logging roads). This reduction in the net deforestation rate would appear to be the result of measures taken, such as the revision of the Forest Code in 2001 and the creation of a national parks network (PN) in 2002.

More recently, AGEOS mapped the change in forest cover between 2010 and 2015. In 2015, forest covered 23.6 million ha, or 89 percent of Gabon's territory. Gross deforestation between 2010-2015 was estimated at 96,230 ha, while net deforestation was 59,406 ha (see the table below).

The deforestation observed is associated primarily with logging (33.8 percent) and agroforestry (20.7 percent) and, to a lesser extent, mining (0.2 percent) and the construction of major infrastructure, such as hydroelectric dams (4.5 percent). A broad category, made up of other drivers of deforestation such as urban sprawl, road-building and rural activities, represents approximately two-fifths of the deforestation observed (40.9 percent).

TABLE 2. QUANTIFICATION OF DEFORESTATION DRIVERS IN GABON, 2010-2015 (AGEOS, 2016)

	Losses (Ha)		Gains (Ha)	
	Ha	%	Ha	%
Within forest concessions	32,500	33.8	12,067	34.8
Within agro-industrial concessions	19,896	20.7	709	2.1
Within mining concessions	163	0.2	70	0.2
Major infrastructure (Grand Poubara dam)	4,289	4.5	—	—
Other (including urban centres, roads and rural activities)	39,383	40.9	23,977	62.9
Total	96,230	100	36,824	100

Although variations were noted during these periods, deforestation rates in Gabon appear to be quite limited relative to those of its neighbours in the subregion. Several factors may explain this: low population density, limited development of the agricultural sector and the country's relative prosperity, based on its oil exports.

Compared to its neighbours in Central Africa, Gabon is unique by virtue of its small population, which is largely urban. In 2015, population totalled 1.7 million; 87 percent of inhabitants were urban. The country's average population

density is 6.7 inhabitants/km², but density across large swaths of the territory (30 of 48 departments) is less than 2 inhabitants/km² (DGS, 2015).⁵⁹

This demographic information explains, in particular, why slash-and-burn agriculture and wood-fuel extraction are not important drivers of deforestation and degradation.

Agriculture in Gabon, whether subsistence or on a commercial scale, has been under-developed historically. The amount of agricultural land has been relatively small and yields have been fairly low. In 2000, less than 1 percent of the country's surface area was cultivated, or approximately 250,000 ha.

In addition, agricultural production has declined continuously, falling from 15 percent of GDP in the 1960s to less than 5 percent in 2002 and barely 1 percent in 2010. Agriculture has thus not been a significant driver of deforestation in Gabon in recent decades. The available data corroborate this analysis: the conversion of forests into farmland has been marginal, representing only around 4 percent of total deforestation between 1990-2000 and less than 0.4 percent between 2000 and 2010. However, that trend has changed recently, as 20.7 percent of deforestation observed between 2010 and 2015 is located within agro-industrial concessions.

Without proper land use planning, agricultural intensification will likely continue to serve as a primary cause of future deforestation. Calculated intervention must be an integral component of future mitigation strategies for the country. This challenge is being addressed with the CAFI 1 Program and is expected to be expanded in 2020 with additional investment from the CAFI 2 phase (see CAFI II Avoiding Emissions from Agricultural Intensification concept note and associated ProDoc).

In sum, emissions from the forestry sector remain among the greatest contributors to the country's land-based emissions. It follows that programs aiming to reduce non-obligate emissions from the sector will importantly contribute to Gabon's national emission reduction goals. This program aims to support Gabon's desire to significantly reduce emissions from the forestry sector through the implementation of a national forest certification strategy that promotes RIL-C techniques for forestry operations (Obj 1, Activity 1-5).

➔ *The Government's commitments and challenges to reduce emissions from the LULUCF sector*

Under the objectives set in its Intended Nationally Determined Contributions (INDC), Gabon seeks to reduce GHG emissions by 50 percent by 2025, compared to 2005. As the LULUCF sector is responsible for more than 90 percent of the country's emissions, initiatives in this sector offer a high mitigation potential.

To achieve this, Gabon must address the key challenge of reducing logging-related GHG emissions. Some measures have already been taken, while others are underway or planned, as outlined below.

In 2001, Gabon adopted and implemented a new Forest Code that requires loggers to manage concessions sustainably in order to lengthen rotations (from 15 to 25 years) and reduce logging-related damage. While this measure has helped to reduce emissions related to forest degradation observed after 2005, the challenges to proper implementation of forest management plans remain multiple and complex.

In 2002, Gabon created a network of 13 national parks (NP), prohibiting, in practice, logging on 11 percent of Gabonese territory. Two hunting preserves and two wildlife preserves occupy an additional 1.9 percent of the territory. In implementing this measure, 1.3 million ha of forest concessions were cancelled. However, the ANPN's monitoring of Gabon's network of protected areas remains challenging, particularly because of illegal poaching, small-scale mining and logging.

In 2009, the Government required that 75 percent of raw logs produced in Gabon be processed prior to export. This measure was intended to generate more value-added on national territory in the forest-timber sector. It contributed to professionalizing the sector and to a significant drop in total wood production, thereby reducing emissions.

The revision of the Forest Code, launched in 2015, is being finalized. It aims to incorporate the country's sustainable forest management goals – specifically, the prohibition against the export of raw logs and stricter provisions for implementing forest management plans and preserving natural parks. This new code, which could obtain final approval in 2018, should help strengthen the regulatory framework for reducing emissions from the LULUCF sector.

With a view to reducing forest sector emissions, the Government has also undertaken to reduce the surface area of forest licenses. This reduction of land area in production should automatically reduce total GHG emissions from the LULUCF sector. An audit to determine where and how to reduce surface of production forests is underway.

⁵⁹ General Directorate of Statistics, 2015. Recensement général de la population des logements. Libreville, 247 p. [General census of housing and population.]

Simultaneously, Gabon has been involved in negotiations over the last several years with the European Union to reach an agreement on forest law enforcement, governance and trade (FLEGT), which should make it possible to strengthen control over and traceability of the legality of timber exported from Gabon and, thus, reduce the share of illegally logged wood in the country's exports. Legality of the sector is an imperative first step toward emissions reductions from the sector and provides a foundational step stone for activities outline within this Program Document. The creation of a Registry and transparency data base within the Direction of Forestry (Activity 1.2.1) and evaluation of all existing management plans and analysis of the legality of existing forestry operations (Activity 1.2.3) will reinforce work initiated with the FLEGT program.

RPP/FCPF engagement: In 2017, Gabon engaged submitted its readiness proposal (RPP) to the FCPF and engaged in a process to better understand emissions from the forestry sector and to develop technical protocols to help mitigate non-obligate forestry emissions.

In September 2018 President Ali Bongo Ondimba took an additional, unprecedented step towards ensuring sustainable forestry management, with the goal of meeting Gabon's NDC commitments for reduced emissions from the forestry sector, by declaring that all timber companies operating in Gabon must achieve FSC certifications. FSC certification standards were selected because they are deemed the current gold standard and embrace guidelines for RIL-C and ecosystem scale management (FSC-EC) that surpass those of other certifying bodies. As such the government aimed to convey the seriousness of their conviction to both the private sector and international partners - only the most rigorous of environmental and social standards will be accepted⁶⁰ and become a world leader in the certified timber market.

In order to implement this policy decision, the first workshop on the certification of activities of the forest-wood sector in Gabon was organized by the Ministry of Water and Forests in charge of Environment, with the technical facilitation of the Bureau of Coordination of Strategic Plan for Emerging Gabon (BCPSGE), on 22 and 23 November 2018 and general actions required to achieve the national certification objectives were discussed among government and private sector actors.

Objective 1 of this Program is dedicated to supporting the government to create the enabling conditions for success of the certification policy implementation through support to (1) the definition *and implementation of institutional protocols for policy reform (including technical support for definition of national norms) (PPA 1, Activity 1.1)*; (2) creation of a registry and traceability data base and archive (Activity 1.2); (3) establishment of a field oversight and auditing team (Activity 1.3); and (4) support to the training and capacity building of Ministry officials, field auditors, and private sector employees (Activity 1.5)

In May 2019, the President further demonstrated his commitment to reforming the forestry sector when he fired both the Vice President and the Minister of Forests in connection with illegal activities and corruption. High level political support to crack down on illegal activities was further underscored by the appointment of Prof. Lee White as Minister of Forests, Sea and Environment. Improved enforcement and field monitoring of logging operations will be required to achieve the ambitious initiatives to improve forest management, decrease emissions from the forestry sector and suppress illegality. Objective 2 of this supports these initiatives through the creation and deployment of an elite forestry law enforcement unit.

3. Programme context

3.1. Framework and context

Gabon signed the Joint Declaration of the Central African Forests Initiative (CAFI) on 29 September 2015 in New York, on the sidelines of the General Assembly of the United Nations. As part of its participation in CAFI, Gabon first developed a National Investment Framework (NIF) which was presented to CAFI's Board of Directors on December 7, 2015 and again on April 27, 2017. The NIF was accepted at CAFI's Board of Directors on June 27, 2017 and a Letter of Intent was signed between the Government of Gabon and CAFI. In the Letter of Intent, Gabon committed to reducing its GHG emissions from forests by 50% by 2025 – using 2005 as its reference level. In return, CAFI committed to obtaining and mobilizing funding to support the implementation of the NIF.

⁶⁰ The country could revise this FSC specific certification requirement to include other certification schemes upon future evaluation (e.g. when the certification process is well advanced and the country-specific technical requirements - national certification norms - have been defined (Pre-Activity 1). The creation of the Registry and traceability data bases will allow the Ministry to evaluate concession scale, step-wise, progress toward certification benchmarks and make recommendations for policy modifications if appropriate.

A Program Document to support the first phase of these activities was then developed and approved. We refer to the first phase of Program activities as CAFI I to distinguish it from this Program Document, and other co-occurring Programs that will soon follow. CAFI I defined two specific objectives. These included: (1) developing and implementing, in a transparent and participatory manner, a National Land Use Plan (PNAT) that organizes and optimizes the use of land and forest resources by the various economic sectors of the country; and, (2) establishing a National Forest and Natural Resources Observation System (SNORNF). Details of these activities can be found within the CAFI 1 ProDoc and are, therefore, not further described here.

Optimal land-use planning and effective monitoring of LULUC are interdependent and complementary activities. Both are cross-cutting and multi-sectoral initiatives essential to supporting low-emission development for Gabon. They also provide a platform to reallocate forestry permits where certification is not achieved by existing operators, monitoring deforestation associated with road and other infrastructure development associated with forestry activities, and monitoring emissions from degradation with field based measurements (NRI).

Thus, the PNAT and National Observation System for Natural Resources and Forests (SNORNF) outputs defined in CAFI I will provide the baseline by which emission reductions resulting from activities defined within this Program Document (to which we will refer as ProDoc2_Cert) can be validated. The Program outlined here - ProDoc 2_cert - aims to reduce emissions from the forestry sector through a national scale forestry certification process and improved forestry law enforcement.

Specific linkages between this expanded Program and the mutual goals, objectives and milestones defined within the existing CAFI-Gabon LOI are defined in Figure 3.

TABLE 3. MILESTONES COVERED BY THE PROGRAMME

Milestones covered directly or indirectly by the forest concession programme: 2c, 3d (i, ii and iii), 3f		
Results expected from the programme	LOI milestone to which the programme/direct or indirect contribution is linked	CAFI indicators
Programme's general objective	Direct contribution to Milestone 3d ii (2019): <i>a report on the implementation of management plans showing an increase in the surface area under sustainable management, by percentage of total area under concession, compared to June 2017;</i> Direct contribution to Milestone 3c Indirect contribution to Milestone 3e	Percentage (and geolocation) of hectares of forests under certification
Pre-programme activity. Define national certification standards	Indirect contribution to Milestone 3di	
Pre-programme activity. Hold workshops and dialogue with the private sector and certification bodies for stakeholders' information	Indirect contribution to Milestone 3di	F.E.6: Change in small- and medium-sized business practices to address degradation caused by forestry
Activity 1.1. Define the institutional context for the policy/legal reform, implementation, and project supervision and monitoring	Direct contribution to Milestone 3d i (2019): <i>Finalization and implementation of the legal and regulatory framework for forest management, logging and timber trade, framework adopted based on inclusive exchanges among national stakeholders;</i>	
Activity 1.2. Create a registry of operators/companies that voluntarily agree to participate in identifying the certification process at the national level	Indirect contribution to Milestone 3di	F.E.6: <i>Change of practices by small- and medium-sized businesses to address degradation caused by forestry</i>
Activity 1.2. Conduct a third-party audit of management plans and of existing official documentation	Indirect contribution to Milestones 3dii and 3d iii	F.E.1a Surface area (in ha) and percentage of forests with management plans

		F.E :1.b : Quality of implementation of management plans
Activity 1.3. Implement a supervision and control strategy/audit in the field	Direct contribution to Milestone 3d iii <i>Report on forestry administration capacity-building in monitoring and implementing the laws, specifically including establishing an information system and training for civil servants.</i>	
Activity 1.4. Determine the carbon baseline levels	Direct contribution to Milestone 2 c: <i>Submission of an updated biennial report</i> Indirect contribution to Milestone 3f <i>Establishment of an emissions target reduction by hectare and total emissions from forest degradation for residual forest concessions and development and adoption of an action plan to achieve this target, with improved operating criteria aimed at reducing impacts/hectare on the climate and biodiversity.</i>	
Activity 1.5.	<i>Direct contribution to Milestone 3 c iii: Report on forestry administration capacity-building in monitoring and auditing and logging activities and enforcing forestry laws</i>	
Activity 2.1	<i>Direct contribution to Milestone 3 c iii: Report on forestry administration capacity-building in monitoring and auditing and logging activities and enforcing forestry laws</i>	

3.2. Experience of the participating organizations and lessons learned

The programme, led by the Government of Gabon via the signature of the Minister of Economy and Finance, will be implemented primarily through four organizations/public entities with complementary areas of focus and expertise:

- National Climate Council (CNC);
- Agency for the Implementation of Forest-Timber Sector Activities (AEAFFB);
- Gabonese Standardization Agency (AGANOR); and,
- National Parks Agency (ANPN), which in the coming months is expected to be re-named the National Agency for Conservation of Nature.

Each has relevant experience fully justifying its participation in the Programme's implementation.

➔ **Experience of the Ministry for Forests, Oceans and the Environment, responsible for the Climate Plan (MFME)**

The Ministry for Forests, Oceans and the Environment, responsible for the Climate Plan (MFME), plays a central role in implementing the sustainable forestry policy, in application of the Forest Code (2001), which establishes the administrative arrangements prior to logging.

In terms of forests, MFME is responsible for:

- developing and leading implementation of the forestry policy;
- conducting an ongoing inventory of forest resources;
- protecting and restoring forest ecosystems and conserving their biodiversity;
- promoting forest resources and ecosystems;
- ensuring the consistency and sustainability of the production of forest products; and,
- reconciling development interests with the preservation of forest resources.

The forestry administration plays a central role in the forest management process by ensuring that operators' documents meet requirements, validating land use plans and reviewing and evaluating their implementation.

Provincial directorates at the regional level carry out the responsibilities delegated to the General Directorate of Forestry (DGF). Each provincial directorate is composed of provincial and departmental agencies, including the forest policy agency.

➔ **CNC experience**

The President of the Republic of Gabon created the CNC following the Conference of the Parties on Climate Change in December 2009. Decree No. 0122/PR/MRPICIRNDH, which established and defined the Council's responsibilities, organization and operation, was signed on 23 April 2010.

The CNC is chaired by the President of the Republic. It is composed of the Prime Minister, who serves as vice-chair, and representatives of 12 ministries, who are members. It includes a management committee, a permanent secretariat and nine sectoral technical committees (energy; industry; agriculture, forests and fisheries; transport; waste; awareness-raising; training and research; and telecommunications).

Its main mission is to develop and provide strategic direction for the national climate change policy. Thus, it must be involved in all projects that seek to reduce or minimize GHG emissions from the LULUCF sector.

From its inception, the CNC was responsible to develop Gabon's National Climate Plan (PNC), which was published in 2012. During that process, the Council coordinated interministerial exchanges and international technical assistance. The plan is Gabon's reference document in terms of incorporating climate issues in all sectors key to the country's development (including forests, agriculture, hydrocarbons, energy, mining and housing). A summary description of its content is provided on Page 25 of Gabon's National Investment Framework (NIF).

In late 2011, the CNC was also mandated to draft the terms of reference of a PNAT that addressed the objectives set by the PSGE. The Secretary-General of the Government (SGG) validated the working plan the Council proposed and instructed it to provide technical coordination for development of the PNAT VO. That work began in 2012 and was completed in 2015. During those three years, the CNC provided project management and coordinated all of the work performed by the technical and legal experts involved in drafting the PNAT VO. This thus justifies its subsequent involvement in developing the PNAT.

The CNC serves as Gabon's focal point for the Green Climate Fund (GCF). In that role, in 2017 it received US\$300,000 over six months to build capacity and develop a country framework incorporating project proposals to submit to the GCF. Capacity-building for Gabonese actors included holding training workshops on climate finance and the GCF.

Since 2010, CNC has acquired valuable experience in terms of understanding issues related to climate change, interministerial coordination and land use planning, which fully justifies its participation in this programme.

Finally, the CNC is the technical leader of all interministerial activities related to climate and leads the technical negotiations and project implementation of the current CAFI 1 program. As such, the institutional arrangements and management structures required to implement the CAFI 2 Program are already well established within the CNC. See Sections 7 and 8 of this ProDoc for more information on the CNC roles and responsibilities for the existing CAFI 1 program.

➔ **AEAFFB experience**

The AEAFFB must become the technical operator for implementation of the strategy defined by the Ministry. Created by decree (No. 1400/PR/MEF of 6/12/11), it is a public institution of an administrative nature. Operating under the technical authority of the Ministry of Forestry, Environment and Protection of Natural Resources (MFEPRN), it enjoys administrative and financial autonomy.

It is composed of 40 agents (seconded civil servants). The Agency's structure includes a board of directors, a general directorate and an accounting department.

The Agency's mission is to help promote the activities of the forest and wood products sector by providing technical assistance and advising, particularly in the areas of:

- forest inventory;
- forest management;
- grading;
- forest certification;
- traceability; and,
- economic, political and strategic monitoring.

The Agency's resources include State budget allocations, contributions from development partners, its own resources, and gifts and bequests.

The State's appropriation fell from FCFA 1 billion in 2008 to FCFA 280 million in 2014, making it difficult to implement and monitor the workplan.

AEAFFB will play the role of Agency of execution for field-based oversight and auditing activities defined in Activity 1.3. The Agency will also serve as the Coordinator/host to the committee responsible for promoting structured dialogue among Gabon administrations and private sector operators participating in forest certification.

→ **AGANOR experience**

AGANOR is a public institution of an industrial and administrative nature. It operates under the technical authority of the Ministry of Industry and was created by decree No. 0227/PR/MIMT of 23 June 2014. It has legal status and enjoys administrative and financial autonomy.

AGANOR is the national body for standards, conformity assessment and metrology. Its missions thus include:

- promoting quality in Gabon;
- training and supporting Gabonese companies in their quality processes;
- developing, approving and disseminating Gabonese standards;
- managing the national conformity assessment system;
- managing the national metrology system;
- managing the WTO's national enquiry point on Technical Barriers to Trade;
- managing the CEMAC (Economic and Monetary Community of Central Africa) focal point for metrology; and,
- representing Gabon on international standardization bodies.

AGANOR's structure includes a board of directors, general directorate and an accounting department.

AGANOR will be responsible for all activities related to the definition and formalization of national norms for certification (Pre-Activity 1) and for ensuring the appropriate institutional structures and legal formalities (decree d'application) required to implement a national scale certification program are defined, written and validated (Activity 1).

→ **ANPN experience**

The ANPN was created in 2007 by Law No. 003/2007 of 27 August 2009 on the national parks. It is a public institution of a scientific and environmental nature, with legal status and administrative and financial autonomy. It operates under the administrative supervision of the Office of the President of the Republic, with technical supervision provided by MFME.

The ANPN is responsible to implement the Government's policy to conserve and promote biological resources in the national parks and their buffer zones. More specifically, its primary missions are to ensure the protection of the national parks and their natural resources, develop the national parks network efficiently, and promote the national parks and their resources.

The ANPN is also charged with managing and monitoring the Raponda Walker Arboretum, the Wonga-Wongué Presidential Reserve and Gabon's eight RAMSAR sites. In 2017, Gabon also created a network of 20 protected marine areas, covering 26 percent of the country's Exclusive Economic Zone (EEZ). The ANPN is in charge of managing them sustainably.

In 2017, the Government of Gabon announced its intention to expand the scope of the ANPN's work and change its name to the National Agency for Conservation of Nature. The order specifically assigned forest policing duties to the agency in order to monitor forestry permits and proper implementation of forest land use plans. However, the Government's decision is not yet official. Discussions are underway in the second chamber of the Gabonese Parliament.

Since 2009, the ANPN has received additional financing, allowing it to make major progress in combatting poaching. Its annual expenditures rose from approximately US\$4.2 million in 2010 to nearly US\$20 million in 2016. Funding from the State budget has been stable for several years, at around US\$5.8 million, but contributions from international donors have increased.

The ANPN currently has 830 employees. Its executive secretariat in Libreville employs 128 agents, who implement the national parks policy. They are divided among the following units: communications, finance, technical (including the national parks *gendarmerie* and canine unit), operations, human resources, natural resources inventory (NRI) project, and the Gabon Bleu programme. In the field, the ANPN employs 700 agents across the 13 national parks and other protected areas.

The ANPN has established many international technical and financial partnerships over the last 10 years. Its main partners include the European Commission (EC), the Global Environment Fund (GEF), the U.S. Government through several of its agencies (specifically, the U.S. Agency for International Development (USAID), the U.S. Forest Service (USFS) and the U.S. Fish and Wildlife Service (USFWS)), the World Bank, the Agence Française de Développement (AFD), the United Nations Development Programme (UNDP), the United Nations Office on Drugs and Crime (UNODC), and international non-governmental organizations and local associations.

The ANPN has carried out several projects and activities that fully justify its involvement in this programme:

- Natural Resources Inventory (NRI)

The ANPN has been involved in quantifying biomass and forest carbon in Gabon since 2011. The country's first carbon stock estimate was conducted with funding from the Moore & Packard Foundation. The initial results were published by SAATCHI in (2011).⁶¹

Subsequently, in 2012-2013, the ANPN undertook a project to assess forest carbon stocks in Gabon (GFCA). This led to the founding of a network of permanent, one-hectare forest plots across the country, based on a systematic, random sampling design. The project benefited from technical support from the U.S. SilvaCarbon programme,⁶² the University of California/Los Angeles, Duke University, Leeds University and Olam-Gabon.

In 2013, the ANPN finalized the NRI's first phase, collecting data on 104 plots. Preliminary data analysis has already provided several significant results (Republic of Gabon 2013).⁶³

As part of that effort, field teams have been trained to set up and conduct the permanent forest plot inventory. The ANPN has acquired solid experience in managing and coordinating field teams and in managing, processing and conducting scientific interpretations of that data.

The NRI program, currently funded under CAFI 1, will support completion of the field work required to verify emissions as reported by forestry operators, as defined in Activity 1.4.

- Law enforcement

ANPN has significant experience in the identification, training, and deployment of integrated law enforcement and anti-poaching missions across the entirety of the Gabon territory. The Agency has a total of 16 Conservateurs within the National Park network. These Conservateurs, with oversight from the Technical Director and Executive Secretary, manage a total of 530 ecoguards, each of which averages approximately 21 field/patrol days per month. Of these, 150 ecoguards and/or Conservateurs have official police jurisdiction mandates allowing them to make arrests and seizures of illicit goods (e.g. bushmeat, ivory, wood). ANPN works in close collaboration with other law enforcement units in Gabon, including the affectation of 47 gendarmes and 11 marines into the ANPN anti-poaching/trafficking activities. Gendarmes and marines working in ANPN mixed units are trained and have authorization to carry arms. The ecoguard, gendarmes, and military forces are trained during two annual training sessions facilitated led by organizations such as the US Marines, US Fish and Wildlife Service Law Enforcement Agents, and British military experts. Finally, the Agency has created and deployed a rapid response elite force, a mixed unit composed of ecoguards, gendarmes and police, trained in intelligence gathering and skilled in tactical operations.

3.3. Existing initiatives and programmes with the same objectives

→ **Governance and forest management initiatives and programmes**

Several governance and forest management projects are underway in Gabon. Specifically, the AFD is managing two ambitious projects: the project to support the forest and wood products value chain and the forest management control project (CAF).

The first has a budget of €10 million and is funded by a five-year debt conversion agreement (2016-2021). It aims to establish a consultation framework for the actors in the industry and support changes within it. The project is implemented by the MFME, through the AEAFB, the agency responsible for carrying out activities in the forest and wood product industry. Its specific objectives are to: i) create a consultation framework bringing together the public and private actors; ii) provide the industry with a permanent structure (the *Maison du bois*), which is to become the

⁶¹ SAATCHI. S.S. et al. 2011. Benchmark Map of Forest Carbon Stocks in Tropical Regions across Three Continents. PNAS, University of California, 5 p.

⁶² Cf. <http://www.silvacarbon.org/>

⁶³ Republic of Gabon. Gabon Forest Carbon Assessment : 1st Technical Report. Libreville – Republic of Gabon, October 2013. 25p.

centre for promoting the industry's products; and, iii) support logging and wood processing companies in adapting to the requirements of the economic climate and in accessing financing for their investments.

The CAF project has a budget of €12 million, financed by a debt conversion agreement, and is implemented with the participation of the AFD. The project, initially planned to last for five years, began in 2014 and has been extended to seven (through 2021). It seeks to build the capacity of the MFME in terms of monitoring and controlling logging to ensure sustainable management of forest areas. This involves increasing the material resources of five provincial water and forest directorates, as well as building the technical capacity of the MFME and its decentralized forest control departments (200-300 agents trained).

The CAF project worked with the ANPN and Conservation Justice, an NGO, to undertake specific, targeted control and forest policing actions. It has already identified several dozen forest operators who are not complying with forest legislation, their management plans and their annual operational plans (AOP) (over an area of nearly 2 million ha of forest permits). These matters are being reviewed and could lead to penalties on and withdrawal of permits from the logging companies involved.

In 2017, in addition to the two projects referred to above, Gabon also submitted its readiness preparation proposal (RPP) to REDD+, which was validated by the Forest Carbon Partnership Facility. Implementation of the RPP will complement this Programme at several levels:

- Field assessment and test of a robust methodology for estimating GHG emissions linked to forest degradation; and,
- Development and implementation of a national strategy to reduce emissions linked to logging. A "Green Gabon" certification strategy is planned for those logging concessions taking steps to reduce emissions.

Last, implementation of the RPP should contribute, directly and indirectly, to achieving several forest governance milestones included in the Letter of Intent signed with CAFI. Specifically, achieving Result 3 of the RPP will make it possible to achieve Milestone 3.f of the letter: "Establish a target on reduced per hectare emissions and total emissions from forest degradation from remaining logging concessions and develop and adopt an action plan to achieve this target, including improvements in logging criteria to reduce climate and biodiversity impact per hectare."

Since 2004, Gabon has experimented with a certification system specifically designed for the environmental, socio-economic, cultural and legal conditions of the country. The Pan African Forest Certification (PAFC) is the Gabonese system for the certification of good forest management and wood and forest products traceability from sustainably managed forests. This certification system was developed and is managed by the PAFC Gabon NGO. Gabon became the first African member of the Programme for the Endorsement of Forest Certification (PEFC) alliance. PEFC endorses national forest certification systems developed through multi-stakeholder processes and tailored to local priorities and conditions (<https://www.pefc.org/>). In Gabon nearly 600,000 ha of forest are already certified by PEFC; the first sustainable forest management certificate PAFC Gabon was issued in 2018 to the company Precious Woods and was followed by two PEFC chain of custody certificates to ensure traceability between the certified forest concession and timber products.

Professional unions have also been established in Gabon. The Union of Industrial Foresters of Gabon and Aménagistes (UFIGA) is a professional union created in 2003 to study and defend the economic interests of its members. UFIGA's members consist of most of the major companies operating in Gabon including Cora Wood Gabon, Precious Woods, Thebault and Rougier (<https://www.ufiga.org/nos-adherents>). UFIGA's goal is to unify its members, defend the interests of the sector, and improve the conditions for forest management and development of a competitive wood processing industry.

A second union, the Union of Asian Industrial Foresters of Gabon (UFIAG), promotes timber trade between Gabon and Asia. In October 2019, UFIAG and UFIGA signed a commitment to forest certification. Both unions committed to supporting the Global Green Supply Chain (GGSC) initiative and to finalize at least the certification of the traceability and legality of wood audited by a third party within the next three years. They also undertook to promote further wood processing, increase the use of wood and its added value, increase the local employment rate and improve the living standards of the Gabonese people. These commitments will enable Gabon to significantly increase the area of certified forests, improve forest governance and increase the availability of legal timber products on the markets.

In terms of forest governance, the EU provided €1.5 million to finance the FLEGT-IP 2014-2019 project. Its main objective is to build the capacity of the trade associations in the logging sector in Central and West Africa to improve the private sector's integration in the FLEGT action plan. The international technical association for tropical wood (ATIBT) manages the project from Gabon.

It seeks to strengthen participation in and support of the private sector for negotiations underway between the Government of Gabon and the EU on a voluntary partnership agreement (VPA-FLEGT). In that regard, the project may

contribute to achieving Milestone 3.c of the Letter of Intent signed with CAFI: “An ambitious plan to fight illegal logging is elaborated, validated in a participatory way and progressively implemented, notably based on concrete progress in the negotiation process of the VPA between Gabon and the EU.”

The EU is also financing civil society under a forest governance project in Gabon. This involves support for efforts to combat illegal logging in Gabon through €330,000 in financing for Conservation Justice over 36 months (2017-2019). The project is intended to help identify the main illegal logging operators based on clear evidence of their activities, facilitate their apprehension, pursue legal action, enforce rulings and create awareness among the public, local populations and logging operators of legislation in force and effective implementation of the law.

3.4. Lessons learned from prior experiences and initiatives

From the programs and initiatives implemented to date, Gabonese authorities have gained experience regarding program attributes that necessary for success of the national scale certification program. Gabon has succeeded in the preliminary implementation of large-scale multi-disciplinary efforts including the completion of PNATO, the completion of the first stage of over 200 forest plots to demonstrate competence for implementation of the *Système national d’observation des ressources naturelles et des forêts*. These initiatives are now being expanded within the CAFI I program. With respect to forestry, Gabon is embarking into new territory to significantly reform the sector nationally. Many lessons have been learned from the successes and failures of past efforts to improve forest legality and transparency, and also from private sector operators who have successfully navigated the FCS certification system. We organize the lessons learned from this range of experiences into broad categories below:

Communication and interdepartmental coordination. The CNC, which spearheaded the development of the PNC and the PNAT V0, and currently coordinates CAFI I, has experienced firsthand the challenge and necessity of coordinating formal and structured dialogue to promote communication, collaboration, and data sharing in cross-disciplinary and multi-ministerial initiatives. The program structure defined within this ProDoc leans on lessons learned from these experiences by retaining the CNC as the coordinator of program management and implementation, and thus in charge of ensuring communication and collaboration among partner institutions.

With respect to communication and coordination between the administration and private sector, the Agence “exécution des activités de la Filière Forêt-Bois has experience coordinating the structured dialogue platform that will be required to ensure program success. Success has already been demonstrated through the AFD-supported *Projet d’Appui à la Filière Forêt-Bois* and lessons learned will be applied throughout this Program implementation.

Training, equipment, coordination and monitoring of field teams. The ANPN has a rich and varied experience in the field, most notably with the hiring, training and deployment of over 530 ecoguard who spend, on average, 21 days in the field per month. Furthermore, ANPN has successfully established an unprecedented number of permanent forest plots (over 200 to date) and conducted hundreds of kilometers of wildlife and biodiversity surveys to define the spatial distribution of biodiversity, endangered species, and improve knowledge of forest structure and dynamics. As such, the ANPN management teams are well prepared to conduct law enforcement initiatives defined within Objective 2 of this Program, continue to work with CNC and other partners to monitor forest emissions associated with logging through field-based data collection, and to provide training and supervision of field teams. This Program includes budgetary lines for the acquisition of field equipment as well as the recruitment of staff to supervise and monitor activities for both the ANPN and AEAFB. Equipment requirements will be defined based on the experiences of ANPN field teams, with knowledge of the types of field gear (tents, backpacks, etc.) best suited to withstand Gabon’s tropical forest habitat.

Stakeholder consultations, including civil society and the private sector Gabonese authorities recognize the importance of consulting as widely as possible with a project’s stakeholders, including those who are not directly involved but may be affected. The lessons learned through the participatory processes, particularly during validation of Gabon’s national environmental action plan (NEAP) in 2000 and consultations starting in 2015 as part of the revision of the Forest Code, confirmed the authorities’ commitment to involving civil society and the private sector during certification.

Project and management unit governance The Government and the entities involved in the Programme are fully aware of the major issues related to good project governance. All – from the CNC to ADAG and ANPN— have had prior experience implementing ambitious and complex projects that require optimal coordination, development and application of strict procedures, regular delivery of activity reports to a PMU in charge of overall coordination, and other aspects fundamental to proper execution and monitoring of activities.

Forest certification

Gabon has only recently begun taking steps toward creating the enabling conditions for a national scale certification program. Several initial conversations and evaluations have been achieved, including a workshop organized by the MFME, in collaboration with the BCPSGE. Emerging lessons learned from these initial discussions include: 1. Certification takes time, and requires significant upfront costs before revenue generated from increased wood value results in improved profit margins for companies – thus, funding mechanisms to offset these initial costs can improve potential for success. 2. Certification is often viewed as a step-wise, incremental process – thus, Gabon may want to develop acceptable benchmarks for operators against which successful participation in the program can be judged. 3. Lessons from the nine companies already certified or advanced in the certification process should be included in discussions of national certification standards (see pre-activity).

4. General and specific objectives and intervention strategy

Goal: The overall goal of this Program is to support Gabon's NDP commitment to UNFCCC by implementing national scale "Natural Climate Solution" that increase carbon sequestration and decrease carbon emissions through improved land stewardship.

The Program specifically aims to reduce emissions from the forestry sector through a national scale forestry certification process and improved forestry law enforcement.

→ **Objective 1: Design and Implement a National Scale Certification Process for Gabon**

Gabon is the second most forested country in the world, with 88% (24 million ha) of its area covered by tropical forest. Gabon is second only to Malaysia in terms of average density of forest biomass carbon with high levels of carbon above- and below-ground. The integrity of the country's forests is a product of its very low annual deforestation rate, between 0 and 1.1%, low human population, historic economic reliance on oil, and commitment to the protection of its natural resources. Carbon emissions resulting from forest degradation during selective logging traditionally make up 50-80% of Gabon's carbon emissions, accounting for 60 million tons of CO₂ annually. This program aims to reduce these emissions by more than 50%, in keeping with the government's political commitment, by implementing sustainable management plans for logging concessions and requiring forest certification that integrates RIL-C measures for all forestry operators in Gabon.

→ **Objective 2 – Create and Deploy an Elite Forestry Law Enforcement Unit**

In 2017, ANPN and the CAF program, funded by AFD, joined forces to audit forestry concessions in the Provinces of Estuaire, Ogooué-Ivindo and Woelu-Ntem. Some of the field audits were designed to follow up on hidden camera videos shared with ANPN by EIA (released in 2019 in the Toxic Trade report) to verify in the field statements made on camera. AFD, USFWS and the Gabonese Government funded the missions, which were authorized by a Presidential mandate. The missions found evidence of annual losses to tax evasion on the order of \$50 million and an illegal forestry industry of approximately \$200 million per year. At its height in 2017, illegal logging accounted for 10-15 million tons of CO₂ emissions. The elite unit that conducted the missions became known as "Section 64" – because it is comprised of 62 men and women and 2 tracker dogs (see <https://www.youtube.com/watch?v=GmREP4mwbCA>).

The Ministry ceased these audit missions, but political support for suppressing illegal logging resulted in the appointment of Prof. Lee White as Minister of Forest, Sea and Environment. AFD funding of forestry patrols, however, has ended and additional funding is necessary to implement the anti-illegal logging program.

4.1. Detailed presentation of Programme activities

Result 1: The enabling conditions exist to ensure forestry concessions in Gabon are certified

*Two Pre-program Activities are imperative to achieving nationwide certification of forestry concessions in Gabon. These activities set the foundation for program implementation and partner communication, and thus cannot be postponed until formal acceptance of the program. These include **defining the National Norms/Standards for Certification**⁶⁴ and **promoting structured dialogue among actors, including government administrations, private***

⁶⁴ Though all certification labels define global standards for forestry, they also allow for, and even depend on, nationally determined forest stewardship standards and context specific interpretations of standards. The definition of national standards for

sector operators/unions, and certification bodies. Though these activities will begin prior to prodoc validation, budget lines to support their continuation throughout the 4 yr program duration have been retained.

Activity 1.1. Define and implement institutional protocols for policy reform, and project implementation, oversight and monitoring

As Gabon embarks on national scale certification, several meetings and workshops will be conducted to promote collaboration and communication among stakeholders and to clearly define institutional arrangements and project implementation protocols. Legal reform must be transparent and the system for oversight and monitoring of logging operations must be formalized. Importantly, the implication of private sector operators into regular and structured dialogue will be imperative to successful policy implementation. As such, we will support regular workshops and meetings to:

1. Define institutional arrangements among government partners— including the SGG and MFME, the CNC and government implementation Agencies (including ANPN, AEAFFB, and the AGNOR).
2. Determine the legal process by which the certification mandate will be applied. Early discussions suggest the appropriate legal process will likely be a “Decree d’Application’, which will need defined and written (*note this activity is an extension of pre-program activity 1, during which technical discussions to define Gabon’s national certification norms will be completed*).
3. Delineate the project implementation and field oversight structure (AFD+MFME+CNC+ANPN+ AEAFFB + AGNOR, third party collaborators (FSC, IFT) and civil society).
4. **Facilitate structured dialogue and information exchange** among government administrations and private sector operators and unions (*note this is an extension of pre-program activity 2⁶⁵*).
5. Given the significant externalities and the high degree of coordination required among Agencies, operators, and international actors (ASI,TFF, FSC, etc.) a technical expert and coordinator will be hired to provide punctuated support to the Program and to ensure alliance linkages and coordination of multi-actor activities.

Gabon will prevent case-by-case interpretations of criteria by third party auditors and certifying bodies that may or may not meet the country’s high environmental standards and production goals. Furthermore, current certification standards have rather loose “recommendations” for topics such as emissions reductions and forest monitoring requirements, planning and use of agricultural and conservation zones, requirements for social benefit sharing, and wildlife management and hunting regulations. Thus, a primary output of the first phase of this program will be hosting a workshop composed of scientists, foresters, certification representatives, ministry officials, NGO’s, and civil society representatives to discuss and agree upon National Certification Standards. Following the verbal adoption of the standards during the retreat, a technical committee, composed of both forestry experts and legal counsel, will be nominated and convened to produce the technical and policy documents required to formalize national norms.

Gabon is strongly considering adopting FSC-EC and RIL-C as the easiest pathways toward developing national certification norms. More discussion will be required to work out questions related to agricultural production within concessions and socio-economic and community benefit-sharing requirements. Other areas in need of more precise national guidance include : minimum standards for environmental impact assessments (EIA) and management plans (including reforms in the national management plan adoption process), frequency of environmental audits, carbon monitoring protocols, and requirements for enforcement of wildlife laws.

Over the past several months, FSC has developed its national standards for Gabon. The document is currently being validated. However, it is entirely possible the national certification standards defined by Gabon will surpass those outlined by the FSC document. We propose conducting a technical workshop in which international experts, forestry operators, and Ministry officials evaluate and discuss the proposed FCS norms for Gabon as a strawman by which Gabon National Certification Norms are defined and validated. We propose a UNDP facilitated workshop be held in Gabon with secretariat or other pre-funding sources to ensure this important step of program implementation is completed in a timely but thoughtful manner, and provides the enabling conditions for companies and FSC to move forward with meaningful feedback and consultation from Gabon partners and experts.

⁶⁵ As of March 15, 2020, the Ministry of Forest has facilitated meetings with UFIGA, the Chinese syndicat and the Gabonese syndicat. Concerns of the private sector operators regarding specific abilities to meet the FSC certification standards have been exchanged. As such, the Ministry has committed to completing an evaluation of the status of all permits with respect to certification and document legality (see Activity 1.2) and to have prepared a technical document comparing the relative strengths and weaknesses of various certification schemes, with a view to making a recommendation about whether to extend certification options more broadly and/or evaluate potential for differential implementation timelines for different categories of operators. Though the Ministry is engaged in this dialogue and evaluation, the decision will ultimately rests with the Head of State.

Activity 1.2. Create a registry of the operators/companies engaging in the national-scale certification process.

As a first step toward implementation of national-scale forest certification, Gabon will develop a registry for operators intending to engage in the certification process. The registry will be retained within the DGF at the Ministry of Forests, Sea and Environment. It will be coupled with a well-organized archive that retains formal documentation and facilitates the monitoring of stepwise progress toward each concession-level certification process.

To date, three companies hold an FSC certification, six companies have completed the initial diagnosis process, and three companies have committed to certification. These companies, in theory, could achieve certification within the timeline articulated by the President. Their registration process with the Direction of Forestry should be straightforward. However, once Gabon has defined its national certification standards (see footnote 23), even already certified concessions may need to demonstrate progress toward achieving additional benchmarks to retain certification. These additional standards were not previously required for certification but may be imposed by national norms to reduce emissions from the forestry sector (e.g. implementation of RIL-C and FSC-EC methodologies).

Many small companies will not be able to commit to the upfront costs of certification and may opt out of the registry process⁶⁶ (The average total cost of attaining certification is estimated as US\$ 4.95 per m³ of certified roundwood production [withholding some management plan and infrastructure development costs] and US\$ 11.58 per m when all management plan and base camp costs are included⁶⁷. These estimates are similar to those of PPEFC, which estimates that upfront costs of certification to be approximately US\$11.76 per⁶⁸ in tropical Africa). Thus, Gabon needs to plan for the potential negative impacts of requiring certification(see footnote 22), such as an increased incentive for smaller companies to harvest as much wood as possible, as fast as possible, before their existing permits expire⁶⁹.

Finally, many existing concession management plans and permits were approved through corrupt processes and some management plans were falsified. To remedy this situation, and to ensure the new registry and archive process is composed only of legally obtained and approved documentation, all existing management plans and other formal documentation (e.g. environmental and social impact assessments) will be evaluated to initiate the creation of the certification registry.

By creating a certification registry and identifying companies not engaged in certification, Gabon can adopt strong field oversight, monitoring and auditing protocols to ensure company compliance (see Activity 1.3).

Several specific sub-activities will be implemented.

1. Register all operators intending to achieve certification to continue operating in Gabon.

The government will formally notify the General Director of each forestry company of the requirement that all concessions be certified and invite each company to submit its intent to comply or withdraw its permits. Letters and information packets will be hand delivered by Government Agents. It is assumed that follow-up letters, phone calls and frequent in person visits will be necessary.

An official registry of operators intending to comply with certification standards will be created and these operators will be treated as ""private sector partner"" for the duration of this project.

2. Create Ministry level protocols to a) maintain, approve and archive documentation as provided by forestry operators, and b) define benchmarks by which companies registered in the certification process can be monitored and held accountable for progress.
3. Conduct a third party audit of existing management plans and formal documentation – diagnostics step of certification

⁶⁶ Though German funds are available to offset some of the upfront costs of certification, they will not be sufficient to support all active operators. In parallel, there has been informal discussion regarding the potential to engage additional private sector partners (e.g. Olam) to help pre-finance some of these upfront costs of certification at a 5,000x/m³. But, these discussions have not been formalized and no commitments have been made.

⁶⁷ WWF, 2015.

⁶⁸ PPEFC 2017

⁶⁹ One avenue for decreasing negative incentives, and promoting continued engagement of companies unable to commit to certification in the forestry sector, could be the creation of incentives that encourage companies to shift their business models from forestry exploitation toward wood transformation, production of wood-based building materials, and waste recapture (under-developed aspects of the current timber harvest and export chain). Hiring an incubator/accelerator to facilitate the development of additional transformation sites/business models could decrease the risk of inefficient wood -transformation at provincial scales while also decreasing transportation costs and thus improving overall profit margins.

An initial step of the Registry process will consist of a diagnosis and examination of all existing formal documentation provided by forest operators. Gabon's CAF project⁷⁰ (Contrôle de 'Aménagement Forestier) has completed much of this document review. Preliminary CAF evaluations suggest that several active forestry operations are harvesting timber with falsified management plans that were not developed for their specific concessions, e.g. some management plans were copied verbatim from other concessions and adopted without review by the Ministry. For example, a management plan for a land-locked concession in Gabon includes a section dedicated to sea turtle conservation. Other plans include production targets for timber species that exist in much lower abundance than the concession from which the targets were copied. Managers struggle to meet these erroneous targets, resulting in the harvest of size classes of trees that should not be cut and promotion of unsustainable forestry practices.

Without careful review of all existing management plans and other formal documentation, such as environmental and social impact assessments, Ministry officials will be unable to accurately assess the current status of concession operations and may fail to reform the sector. Improved knowledge of the existing state of legality and compliance will also importantly facilitate the establishment of concession-specific, stepwise benchmarks for certification.

This sub-activity will expand upon CAF's work to complete a full assessment of all forestry documentation within the first several months of project implementation. When faulty documentation is identified, operators will either lose their permits or be required to resubmit all documentation for re-approval. Validated management plans and reviewed documentation will be uploaded into the Registry system and archive.

4. Review Ministry protocols for management plan approval.

Given the existence of falsified management plans, a core assumption of this activity is that the process for validating management plans at the Ministry must be improved and mechanisms for preventing future corruption developed. A full evaluation of the management plan approval process will be conducted in concert with management plan review. If required, the Ministry will reform the management plan approval process to close loopholes that contributed to past document falsification and corruption (e.g., a third-party observer could be appointed to the management plan validation commission). Civil Society and third party observers will be strongly engaged in this initiative.

5. Deploy field auditors and 3rd party observers to verify information reported in management plans.

Following initial desk review of all active concession documentation, field teams will be deployed to verify that field operations comply with official documentation. Field-level evaluations will be conducted by the audit teams described in Activity 1.3 with participation of third-party observers and civil society representatives for transparency.

6. Reinforce capacity of civil society to act as third-party observers in the process of management plan review and audit.

Activity 1.3. Implement Field Oversight and Monitoring/Audit Strategy

To ensure oversight and enforcement of government standards and decrease opportunities for 'cheating', forestry officers must monitor logging activities, with an initial aim of preventing the potential negative incentives (described above) of the national certification policy and overseeing companies phasing out their permits. A longer term, more permanent aim of the field agents will be to verify information provided by operators within management plans and monitor progress in achieving certification benchmarks defined in the registration process.

A team of 10 field auditors will be hired and trained to regularly audit forestry operators. The agents will be housed within the AEAFB, and may include and/or consist of regionally based Ministry Agents. Results of field audits will be transmitted to the Direction of Forest and archived within the Registry and traceability system. Specific sub-activities to achieve field oversight and monitoring of forestry operations include :

1. Identify and train field auditors to ensure: (1) operators not seeking certification comply with existing laws as they close their permits; (2) operators seeking certification comply with benchmarks and

⁷⁰ <http://caf gabon.com>

agreements as defined within the registry process ; and, (3) information provided by company management plans is authentic and can be verified in the field.

Forestry operations and reduced impact logging techniques are extremely technical in nature. As such, all field auditors must complete an intensive, field-based training program to ensure they are technically able to conduct audits. Training experiences in the conservation sector of Gabon indicate that approximately half of the initial recruits will complete the training program with an acceptable level of mastery. Therefore, 20 candidates will be recruited with the intention of retaining the top ten recruits as full time field auditors. Candidates for this program may be recruited from the Ministry, private sector or general population and will be employed and managed by the AEAFFB.

Technical training of auditors will be reinforced as a national-scale certification training program is defined and implemented (See Activity 1.5). Further, to ensure credibility and continual training of the AEAFFB auditing protocols, an alliance will be fostered between AEAFFB and an independent, internationally accredited service (e.g. Accreditation Services International (ASI)). This will ensure the highest of standards are implemented within the Government auditing process whilst remaining independent of the FSC auditing process.

2. Establish reporting protocols for field auditors to inform enforcement agencies and the DGF of non-compliant operators.
3. Equip audit technicians with field supplies.

All selected field monitoring and oversight teams will require basic field gear (e.g. tents, backpacks, headlamps) to work in remote forest locations for extended periods of time. Additional technical supplies will be required for their work (e.g., water quality test kits, dbh tapes, GPS units), recording of information, and communication of infractions (e.g., computers and phones). Worn equipment will need to be replaced as the program progresses.

4. Deploy teams to the field.

Teams of 3-4 people will be deployed to the field for a minimum of 14 days per month for the duration of this program. Two vehicles will be purchased and maintained to transport the auditing teams to the field.

Activity 1.4. Define emissions monitoring protocols for forestry concessions and validate private sector reporting⁷¹

1. Conduct a technical carbon workshop to define protocols and private sector requirements for monitoring emissions from forestry operations.

FCPF is funding a partial evaluation of carbon emissions associated with logging in Gabon. This work is evaluating multiple methodologies for measuring and monitoring emissions from forestry operations. In parallel, the government is implementing the National Resource Inventory (NRI) , with support from CAFI 1. Intensification of the NRI's field protocol within logging concessions could be an additional, complimentary approach to estimating and monitoring change of forest carbon stocks. Furthermore, the CAFI Secretariat is providing technical support to Gabon as part of its' recent result-based payment agreement with Gabon (referred to as CAFI 3), specifically supporting the completion of Gabons' FREL. With information from these multiple initiatives, government officials have requested a multi-partner workshop to discuss the advantages and disadvantages of various monitoring protocols, to inform the method selected to monitor emissions from forestry operations.

2. Support a carbon monitoring unit to conduct field-based verification of forest monitoring protocols and carbon emissions as reported by private sector operators.

Gabon must have confidence in private sector emissions reports to include them in reporting to the UNFCCC and for results-based payments with respect to reduced emissions resulting from the national

⁷¹ FCPF and CAFI 1 are currently supporting a partial evaluation of carbon emissions associated with logging in Gabon as part of the preparatory process for determining a baseline for emissions reduction payment, as negotiated with Norway - often referred to as CAFI 3. It is unclear at this stage how much additional data will be required to technically support this process, nor are future monitoring and validation requirements well defined.

forestry certification policy. To ensure the government has the capacity to verify emissions reporting from private sector operators, a carbon monitoring unit will be created and housed within the AEAFFB. The field methodologies and protocols will be defined and adopted as part of the technical workshop defined in Activity 1.4.1. The carbon monitoring units will be linked to the NRI initiative as appropriate.

Activity 1.5. Support training of Ministry officials, field auditors and private sector employees to define, implement and monitor national certification standards.

The lack of training of forestry technicians, forest managers, and operations staff, particularly with respect to RIL, RIL-C and FCS-EC standards, has constrained improved forestry management globally. Gabon's large scale certification program will require significant training and capacity building at all levels of the forestry sector – from Ministry officials responsible for the review and approval of company management plans to auditors of forestry operations to private sector employees responsible for activities that lead to high residual damage and increased emissions when not properly implemented.

To build the human capacity required to implement, audit, and monitor the national scale certification program, Gabon will engage in two parallel training programs; outlined as sub-activities below⁷².

1. Establish a certification training school and forestry demonstration site at Booué⁷³.



PHOTO: GABONESE STUDENTS AT TFF BRAZIL

Gabon will invest in the development of a National Certification Training Center and Certified Demonstration Site at Booué. The training center will be based within the National School of Forestry (ENEF) and will replicate the TFF/ITF⁷⁴ 'modular' intensive training approach. Training modules will focus on technical aspects of the certification process and emphasize "hands-on" learning through "learning-by doing". By coupling an intensive training center with a forestry school and forestry demonstration site, the program will use the harvest process as a real world classroom, following the harvest cycle from inventory and mapping through each step of removal (road and skid trail

planning, felling, skidding, landing, and transformation) to markets⁷⁵. Timber harvested from the demonstration site during training courses will be certified, and sold to help finance the training center in the long-term, thus improving the financial sustainability of the program.

Investment by the government in the creation and management of a certification training center could offset the upfront private sector costs of achieving and maintaining certification by offering courses free-of-charge or at low cost.

⁷² Additional co-financing may be sought to reinforce management capacity of government agencies and private sector partners responsible for implementation of certification activities. Example priority management capacity interventions could include support for improved Human Resource capacity, financial management capacity, and inventory management systems. This may also provide natural linkages between the AFD funded ADEFAC program and improved forest management capacity activities defined within this ProDoc.

⁷³ The costs of completing the training school and demonstration site at Booué is currently being discussed with other donors, including BAfD and USFS. Should non-CAFI funding sources fail to be identified, the Government of Gabon would consider this as a potential project under the CAFI 3 Investment Framework in the future.

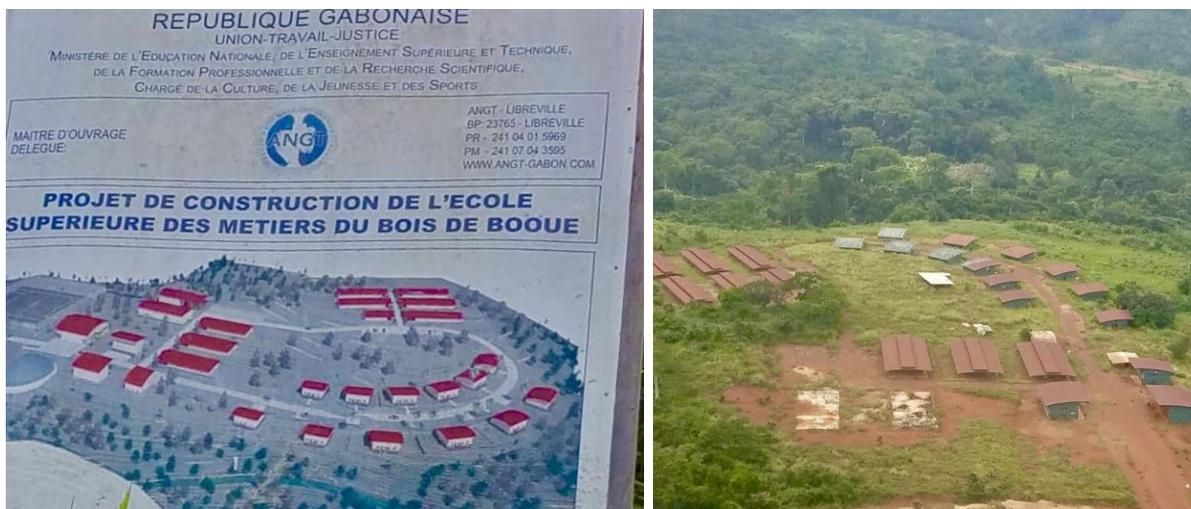
⁷⁴ The Tropical Forest Foundation (TFF) is an international, non-profit, educational institution committed to advancing environmental stewardship, economic prosperity, and social responsibility through sustainable forest management (SFM). For 20 years, TFF has fostered dialogue and alliances among industry, government, and academia, as well as the research and conservation communities to improve tropical forest management and increase the economic value of these forests. TFF is widely recognized for the establishment of demonstration models and training schools to teach the principles and the advantages of sustainable forest management. TFF regional programs have become synonymous with the promotion and training of Reduced Impact Logging (RIL). Rather than simply talk about what others could or should do, TFF trainers provide on the ground support to actively make a difference in rainforest conservation and forest management.

⁷⁵ The training center framework developed within this ProDoc meets program regional objectives defined within the ADEFAC project, supported by AFD. Specifically, one of the main components identified by the ADEFAC program concerns the organization of **continuous training programs** to support specific skills development throughout the forest-wood sector (from logging to final processing and placing on the market). This is precisely the goal of the Certification Training Center activities defined here. Further, by providing this training service to both private sector and government actors, the program meets ADEFAC program priorities to support joint public-private sector activities.

- The training center will include concessionary rights to demonstration sites, following appropriate forestry permitting processes, and be equipped with requisite machines and tools for logging operations. As with all forestry operations in Gabon, the forestry demonstration sites will be required to comply with national certification standards and will become FCS certified.
- The training center will also include demonstration carbon monitoring plots and modules on forest carbon estimation, carbon markets and the reporting of emissions reductions to UNFCCC.

Discussions with the Tropical Forest Institute (IFT)⁷⁶ in Brazil and the USFS indicate that the establishment of this training center/demonstration site model typically takes ~3 years to establish. We thus propose a rapid start training model be implemented in parallel to the establishment of the national training center (see activity 1.5.2). Pedagogical materials developed during the rapid start activities will be directly transferred to the Certification Training Center and the training of trainers for the center will be conducted as part of the rapid start training program described below.

The Ministry of Forest has selected Bououé for the ENEF Certification Training Center because it capitalizes on an existing, partially completed education structure, originally intended to serve as an *Ecole des Métiers du Bois*, prioritized as a government initiative in 2011. Construction of the School started in 2013, but was halted in 2015 due to financial challenges of the country.



AERIAL PHOTO OF BOUEE TRAINING CENTER

The school has a capacity of 200 students. It covers 7-8 hectares and includes:

- 7 duplex villas (14 apartments with 4 bedrooms) for teachers, R + 1
- 4 executive villas with 3 bedrooms
- 3 classroom buildings (19 classrooms)
- 3 administrative buildings (Administration, Commerce / Bookshop / Docu., Infirmary)
- 2 workshop buildings for technical training, classroom and upstairs offices, R + 1
- 5 dormitory buildings for students, double rooms with shower room
- Amphitheater and catering, R + 1
- 1 guard station

⁷⁶ The process by which a training partner/organization is selected will follow AfD regulations for competitive bidding and selection.



EXAMPLE OF EXISTING BUILDING CONDITIONS

Bouee, where the school is located, is a small town situated on the Ogooué River, in the province of Ogooué-Ivindo. It is the capital of the Lopé department. Forest surrounding the zone are composed of a complex landscape of logging concessions and protected areas, serving as an ideal site for the technical training of Ministry Agents. The region is accessible by road and rail.



Forests in proximity of the school are composed of a mix of Protected Areas (Lope)

2. Establish and deploy a rapid start certification training program, following the TFF/ITF model⁷⁷.

Because the Government has an ambitious timeline for program implementation, provision of training opportunities for both government and private sector actors is relatively urgent and cannot await the completion of the Boué training center. Thus, a mobile team of international forestry expert trainers (composed of representatives from USFS and TFF/ITF) will reinforce government technical capacity and support private sector operators by providing modules on site in active forestry concessions.

The training team will begin the immediate transfer of requisite skills while the training center is under construction. To establish the training team as quickly as possible, the government will subcontract this activity to TFF/ITS, which already possesses significant international training experience. TFF/ITS has the protocols and staff to implement technical training modules, evaluate assessments, and make recommendations for companies interested in forest engineering, planning, harvesting, and certification. TFF/ITF sometimes offers training modules free of direct charge, including the trainer's time and basic training materials, but participating companies (or countries) must cover travel costs, per diem and

⁷⁷ The potential for 12 Gabonese Government and private sector operators to do a study tour of two ITF sites currently active in Brazil and Guyana (<https://ftcigy.com/>) is currently being discussed as a potential contribution to these efforts by the USFS.

accommodations for the trainer(s) (<https://www.tff-indonesia.org>). The government would like to implement a version of this model in country.

The ITF program estimates that 60% of their existing program materials are directly transferable to the Gabon forestry context, whereas other training materials will need to be modified for Gabon's training needs. The trainers will require a two month tour of concessions in Gabon to discuss operations with the government and private sector and modify existing training materials.

To ensure sustainability of the training program and the transfer of skills to Gabonese trainers (who would eventually run the Booué training center), international expert trainers will be paired with teachers from the National School of Forests (ENEF) and/or Gabonese forestry technicians identified during the planning phase of this Activity. Training skills and materials will be fully transferred to the Gabonese counterparts.

Result 2: A 30 member Elite Forestry Law Enforcement Unit, including a canine division, is operational

Activity 2.1. Identify and train 30 agents to serve as an "Elite" Forestry Law Enforcement Unit

In response to illegal forestry activity and deep-seeded corruption within the entire forestry sector, the Minister of Forest, Sea, and Environment has requested that an Elite Forestry Law Enforcement Unit be established and trained to enforce Gabon's forest laws and dismantle criminal networks illegally trafficking in wood, ivory, and other illicit forest-based products. The unit will be composed of 30 illite members, who will be based in Libreville and serve as a rapid response, highly mobile team capable of responding to information that is provided by intelligence gathering networks and field agents. The units should not be confused with the regionally based forestry agents charged with maintaining general management and oversight of activities. Rather, it is more comparable to a "special ops" team. The team, provided with canine support (see Activity 2.3) will also randomly search export containers at ports, train stations and logging yards.

Technical training of agents to identify illegal wood or non-timber forest products (Iboga) will be coupled with more typical law enforcement strategies, including intelligence gathering, search techniques, human rights, and appropriate recording and documentation of information required for the prosecution of perpetrators. This will require strong collaboration and integration of all existing Law Enforcement Services in Gabon.

The Elite Unit will be furnished with detection and tracking dogs to uncover and confiscate illegal materials. Specific sub-activities include :

1. Recruit and hire 30 agents to build the Elite Forestry Law Enforcement Unit in collaboration with appropriate law enforcement actors in Gabon.

Recruits for the enforcement unit may come from the Ministry (e.g., high-performing agents from the DG Forests, DG Environment, DG Industry) and/or new graduates of the National School of Forestry (ENEF) or other Gabonese law enforcement agencies. The unit will be housed either within the Agence Filiere du Bois, ANPN, or the Inspection Générale des Services, depending on final institutional agreements and mandates to be completed in Activity 1.1 . Monthly bonuses, based on performance measures like the seizure of illegal products, arrests, and patrol time, will be paid to agents to encourage pride in the unit, incentivize ethical conduct, and reward the high risk responsibilities associated with 'elite force' activities.

2. Train the Elite Enforcement Unit, piggybacking off of existing law enforcement training programs in Gabon.

Supported by US and British Military and Wildlife Law Enforcement Agencies, ANPN has designed and implemented a program to crack down on wildlife trafficking and illegal forestry operations. Should this special force unit not be retained within ANPN, technical advisors from ANPN will transfer lessons learned to whichever implementation Agency is deemed appropriate, with significant continued training and oversight from the United States military trainers currently working with the ANPN "elite vetted unit". Existing training materials will be modified and integrated into the traing of the elite forestry enforcement unit.

Activity 2.2. Deploy 30 officers to serve as an Elite Forestry Law Enforcement Unit

The elite forestry enforcement unit will be equipped with field equipment (e.g. tent, sleeping pad, headlamp, waterproof backpack, phone equipped with LEM apps and satellite connection capacity, etc.) and a dedicated fleet of Toyota Land Cruisers (rugged 4 x 4 vehicles for which parts and mechanics are readily available in Gabon) will be purchased to transport teams to the field. The elite units will also require vehicle fuel and maintenance/repair, food and provisions and per diem.

Activity 2.3. Support detection and tracker dogs to work with the Elite Forestry Law Enforcement Unit

A canine unit of two detection dogs will be established to detect illegal goods. Products such as ivory, pangolin scales, iboga, and illegally harvested timber products are often hidden in logging camps or shipping containers, and detection dogs are much more effective at finding them than humans. The canine unit will be kenneled at a secure building in the National School of Forestry at Cap Esterias. To protect the dogs and provision them with clean water, an independent generator and water pump system are required. Additional consumable supplies such as dog food, training rewards, leashes/harnesses, travel crates will be replenished as needed. At the kennel site, security guards and "kennel hands" feed, water, walk and groom the dogs, as well as cleaning their kennels and monitoring their safety. Two dog handlers guide the dogs through search exercises and training program. One driver resides near the dog kennels to enable rapid deployment in response to intelligence. The cost of the canine unit is estimated based on ANPN's canine unit.

4.2. Sustainability of results after funding ends

We provide an activity by activity sustainability assessment below⁷⁸:

→ National scale certification process

Activity 1.1. The definition and implementation of the requisite institutional protocols for policy reform, as well as the technical groundwork for developing the certification process and determining national certification standards, will require no additional funding following their completion. Funding of employees engaged in protocol and policy reform development have not been requested, and once the policy is in place, only small scale funding to support continued dialogue among private sector and gabon administration will be required. These will be absorbed by the Ministry functioning budget.

Activity 1.2. It is assumed that, once created, the certification registry and traceability systems within the DGF will be similarly sustainable - salaries for employees managing the databases have not been requested. Continued funding will thus come from core state-funded budget lines. Similarly, the third party audit of existing management plans to identify falsified documentation will be a one-off activity. The process will be rendered sustainable by developing new protocols and procedures for management plan approval at the Ministry level, including the involvement of third party observers and mechanisms for improved transparency. These activities will in fact require initial support to ensure 3rd party support, printing, archiving, and traceability systems are professionalized. Following the initial work, however, government agents involved in managing the data base will be retained on Ministry budget lines and future forestry management plans will also be examined by FSC 3rd party auditors. Thus, each concession will receive regular 3rd party audits which will reinforce sustainability of this process by defraying direct costs of private sector oversight – with partial costs being passed onto the private sector operators through FCS audits.

During the certification process, the role of the government is strictly to ensure the enabling conditions for the private sector to achieve certification. The costs associated with certification are the sole responsibility of the private sector. The government is not responsible for the long term funding of these activities. Financial sustainability originates from the increased product value in international markets and higher profits for the private sector. Risks associated with this assumption have been included in the risk assessment framework.

Once all concessions in Gabon are certified, the cost of maintaining and implementing field audits (Activity 1.3) should be greatly reduced. The government will continue to oversee logging operations, but costs will be defrayed by the fact that operators not seeking certification will have ended their permits and the frequency of field oversight missions can be defrayed by FSC third party audits. The government anticipates that these costs (Activity 1.3), coupled with the continual costs of forest carbon monitoring (Activity 1.4), will be sustained partially by taxes that were previously lost

⁷⁸ The CAFI 3 Investment Framework has yet to be written and will require an inclusive and transparent, multi-ministerial, prioritization process. As such, we must employ caution with respect to making future commitments from CAFI 3 funding. However, it is anticipated that priority activities defined within the CAFI 2 funding cycle will be retained as high priorities for Gabon into the future.

to corruption and fraud. Should this funding source be inadequate, the government is committed to continued funding of these activities from result-based payments generated from reduced emissions from the forestry sector (CAFI 3).

Support requested to provide immediate training and capacity building to implementation agencies, Ministry agents and private sector employees (Activity 1.5) will be largely transferred to the Certification Training Center and Demonstration Site by year 5 of the Program. The long term financial sustainability of the Certification Training Center will be supported by two avenues (1) revenue generated from wood products produced at the forestry demonstration site; as has been successfully demonstrated by similarly designed forestry training programs internationally⁷⁹, and (2) training models developed by the training center will eventually be provided at a negotiated cost to neighboring countries and/or private sector operators seeking continuous training for their staff; thus generating additional revenue for the school/training center and securing financial sustainability of the program into the future.

→ **Elite forestry law enforcement unit**

The Elite Forest Law Enforcement Units described in Objective 2 of this Program will initially be hired, trained and deployed with these Program funds. By year 4, it is anticipated that revenue generated from fines, fees, increased tax revenue generated from legally harvested products and/or confiscated illegal products will provide long term funding security for activity continuation. In the (hopeful) event that the presence of elite units sufficiently dissuades illegal harvest of timber such that fines and confiscated product do not cover the cost of enforcement unit retention, the government is committed to paying the salary and deployment costs from the CAFI 3 investment framework, as the security of forest resources is critical to ensuring Gabon meets the emissions reduction commitments defined within its NDC and CAFI LOI agreements.

⁷⁹ In other countries (e.g. Indonesia), TFF has partnered with the Ministry of Forest Education and Training Centers to institutionalize the training programs for forestry companies as well as District level forest administrations. As part of this program, they have worked with USAID and private sector buyers to establish a forest-market linking mechanism, by which buyers agree to accept products made only from logs origination in the collaborating forest concessions annual operating areas. Conditions, including establishment of certification, annual third party audits, etc. are connected to these agreements. Agreements such as this are expected to facilitate the long term financial sustainability of the training center.

5. Results Framework

Based on the theory of change presented in Gabon's NIF, this Programme aims to produce outcomes that will help generate positive impacts: improving the GHG inventory in the LULUCF sector, along with development co-benefits. However, the impacts also depend on external factors, not all of which are within the Programme's control. The figure below presents the NIF impact indicators and underscores the significance of the PNAT and the SNORNF in achieving the objectives.

TABLE 4. IMPACTS FRAMEWORK OF GABON'S NIF ON THE LULUCF SECTOR'S GHG EMISSIONS AND DEVELOPMENT CO-BENEFITS

Impact 1: Reduction of GHG emissions from deforestation and forest degradation and increase in carbon storage in biomass				
Impact indicator (5 years)	Reference situation	Targets after 5 years	Verification	Assumptions and critical conditions
LULUCF sector emissions limited and absorption increased	Year 2005 emissions and Gabon's INDC trend-based scenario (PR, 2015)	LULUCF emissions reduced 50% by 2025	Updated SNORNF data and biennial UNFCCC reports	<ul style="list-style-type: none"> Funding for conservation and sustainable forest management will continue and increase and will have real effect in the field Agricultural expansion and mining developments will avoid conversion of HCV/HCS areas to the extent possible Optimal interministerial coordination will make it possible to resolve conflicts and finalize an PNAT that integrates low-emission development objectives An operational SNORNF will provide for effective surveillance of the LULUCF sector, involving transmission of deforestation warnings to the agencies in charge of the forest police Nation-wide forest certification and implementation of RIL-C criteria will result in a reduction of emissions from the forestry sector Improved Law Enforcement will result in 'better' actors and significant decrease of emissions associated with illegal logging.
Impact 2: Development co-benefits				
Impact indicator	Reference point	Objectives after 5 years	Verification	Assumptions and critical conditions
Poverty rate reduced	Approximately 30% of the population lived below the poverty line in 2013	<p>X reduction in the poverty rate</p> <p><i>* CNC to set objectives after in-depth consultation</i></p>	Poverty rate survey, World Bank data	<ul style="list-style-type: none"> Production and gas prices stabilize at a level favourable to the Gabonese economy Economic diversification provides positive results in terms of jobs and increased income for the population Poor rural residents benefit from new opportunities linked to agricultural expansion, forestry and development of the mining sector Forest certification, and associated socio-economic requirements of private sector operators will improve livelihoods of forest dependent people living within or near logging concessions

TABLE 5. PROGRAMME RESULTS FRAMEWORK

Activities	b (2016)	Post-program situation	Outputs	Output indicators and means of verification
Objective 1. : Design and Implement a National Scale Certification Process for Gabon				
Effect 1. All forestry concessions in Gabon are certified				
Higher order outcome indicators:				
• All wood exported from Gabon is certified				
• National standards and legal reform required to formalize mandated certification are validated				
• Populations living in or near logging concessions express satisfaction with the certification process				
• Transparency of Ministry officials and forestry operators				
• Emissions from the forestry sector are reduced by 50%				
Activity 1.1. Define institutional context for policy legal reform, project implementation, oversight and monitoring	CAF and FLEGT programs provide framework for forest legality but do not specifically address forest certification	Policy is written defining legal mandate and institutional arrangements for oversight and monitoring of forestry operations	Outcome 1. Decree d'application	Decree d'application text
Activity 1.2. Create a Registry of the operators/companies seeking certification	Though forest certification has been mandated, no formalized process by which companies engage in the process has been defined.	A formal certification registry exists and archives created where progress toward benchmarks transparently stored.	Outcome 2. Forest Certification Registry	Certification Registry archived documentation; including validated management plans, environmental impact assessments, etc.
	Lack of transparent process by which management plans are approved. Falsified management plans exist.	All forestry concession management plans are validated with a transparent process that includes third party observers	Outcome 3. All forestry concession operate with legal management plans	Concession management plans. Process documentation is archived
Activity 1.3. Implement Field Oversight and Audit Strategy	Forestry Agents at the Ministry are poorly trained and unmotivated to conduct technical audits. Corruption within the sector is significant.	Corruption within the forestry sector is significantly reduced. Forestry Agents conduct regular field missions to audit forestry concessions for compliance.	Outcome 4. Technical audits by the are conducted at least once annually for all forestry concessions.	Audit Reports
Activity 1.4. Define emissions monitoring protocols for forestry concessions and validate private sector reporting	Technical discussions regarding monitoring and reporting protocols for forestry concessions are in progress. No government process exists for validating reporting from private sector.	MRV process is well defined. Private sector emissions reporting validated by government agents	Outcome 5. MRV protocols exist and private sector reporting regularly verified by government agents.	MRV protocols Concession scale annual reports feed into national monitoring data base

Activity 1.5. Support technical training of government Agents and private sector employees to implementation and monitoring national certification standards	At government level, insufficient technical capacity exists to verify if RIL protocols are implemented. At forestry level, insufficient technical capacity to implement RIL techniques at all phases of the harvesting and transformation process.	Technical capacity of the entire forestry sector is enhanced	Outcome 6. Technical capacity for implementation and monitoring of RIL, RIL-C, and FSC-EC is enhanced	Number of trained government Agents and forestry personnel
Objective 2 – Create and Deploy an Elite Forestry Law Enforcement Unit				
Effect 2. A 30 member Elite Forestry Law Enforcement Unit, including a canine division, is operational				
Higher order outcome indicators :				
· Availability of Law Enforcement Data				
· Availability of Prosecution Data				
Activity 2.1. Identify and train 30 Ministry officers to serve as an "Elite" Forestry Law Enforcement Unit, and extension and continuation of « Section 64 ».	An elite unit of 62 individuals had been formed, but reluctance within Ministry to conduct missions resulted in a pause in operations - then funding ran out. Thus, no Elite units are operational.	30 Elite, well trained Forestry Law Enforcement Agents will be operational and training protocols formalized	Outcome 7. An Elite Forestry Law Enforcement Unit exists and is operational.	Names of 30 Agents Training manual
Activity 2.2. Deploy 40 Ministry officers to serve as an "Elite" Forestry Law Enforcement Unit	Lack of funding and political support resulted in pause in field coverage/activities.	Political will for forestry law enforcement is high and sustainable funding secured. Enforcement Agents are operational in the field.	Outcome 8. Sustainable funding provided by results of enforcement efforts - e.g. fines and proceeds from seized wood and taxes collected from increased declaration of legally harvested timber from the private sector	Field reports Prosecution/legal documentation of convictions and fines. Ministry budget
Activity 2.3. Support detection and tracker dogs to work with the Elite Law Enforcement Unit	2 tracker dogs are on loan from ANPN when needed. No Forestry specific canines exist	Two detection and tracker dogs are trained to identify forestry specific products including protected wood and non-timber forest products (Iboga).	Outcome 9. Capacity to identify illicit forest products, ivory and other illegal products by law enforcement agents is enhanced.	Seizure data

6. Workplan, activities planned and budget

The programme implementation workplan is presented below. For each activity, it indicates the implementation periods, budgets planned, organizations responsible for implementation and implementing partners and notes whether tenders and procurement are planned.

TABLE 6. PROGRAM WORKPLAN

Objective 1: Create the enabling conditions for the implementation of a National Scale Forest Certification Program																			
Sub-activity	Yr. 1				Yr. 2				Yr. 3				Yr. 4				Implementing Agency	Linking program	
	Q1	Q2	Q3	Q4															
Activity 1.1. Define institutional context and protocols for policy/legal reform, steering committee, field oversight and audits																			
Formalize institutional arrangements among government institutions																		CNC	CAF
Write 'decrees d'application' - legal framework for certification requirement																		AGNOR	CAF
Define project implementation and field oversight arrangements																		CNC	CAF
Facilitate structured dialogue among government administrations and private sector operators																		AEAFFB	AFB
Hire punctuated expert consultant																		CNC	CAF
Facilitate communication and information exchange among Government Agencies and NGO partners.																		CNC	CAF
Activity 1.2. Create registry of operators engaging in the certification process																			
Register all operators intending to continue operations in Gabon with optic of achieving certification.																		MFME	CAF
Create Ministry level protocols to																		MFME	CAF
Hire consultant																		MFME	CAF
Train Agents to maintain and monitor registry and traceability systems																		MFME	CAF
Conduct a third party audit of existing management plans and other formal documentation.																		MFME/CNC	CAF
Hire consultants																			
Conduct field assessments																		MFME/CNC/AEAFFB	CAF
Review Ministry protocols for management plan validation and approval.																		MFME	CAF
Reinforce capacity of civil society to engage in management plan review as third party observers.																		MFME/CNC/AEAFFB	CAF
Activity 1.3. Implement field oversight and monitoring/audit strategy																			
Identify and train field auditors																		AEAFFB	AFB
Recruit and train 10 technicians																		AEAFFB	AFB
Transport among field sites during training process																		AEAFFB	AFB
A technical forestry consultant/expert will be hired																		AEAFFB	AFB
Work with ASI to develop an accreditation alliance and continued training program																			
Establish reporting protocols for field auditors																		AEAFFB/MFME	AFB
Equip audit technicians with field supplies																		AEAFFB	AFB
Deploy teams to the field.																		AEAFFB	AFB
Purchase 2 vehicles																		AEAFFB	AFB
Activity 1.4. Define emission monitoring protocols for forestry concessions and validate private sector reporting																			
Conduct a technical carbon workshop to define protocols for monitoring emissions																		CNC/AEAFFB/ANPN	AFB
Support a carbon monitoring unit to conduct field based validation of reported emissions																		CNC/AEAFFB/ANPN	AFB
Hire and train teams																			
Deploy field teams																		CNC/AEAFFB/ANPN	AFB
Equip field teams with requisite field kit and supplies																		CNC/AEAFFB/ANPN	AFB
Purchase 1 vehicle to move teams among sites																		CNC/AEAFFB/ANPN	AFB
Activity 1.5. Support training of government agents and private sector employees to implement and monitor national certification standards																			
Establish a Certification Training School at Booue																		MFME	NA
Establish and deploy a near term 'mobile' certification training team																		AEAFFB	AFB
Purchase vehicles for use																		AEAFFB	AFB
Identify and furnish guest house																		AEAFFB	AFB

Objective 2. Reduce illegal forestry and enforce private sector compliance with improved law enforcement														
Activity 2.1. Identify and train 30 agents to serve as an "Elite" Forestry Law Enforcement Unit														
Identify 30 Individuals to serve as the Elite Forestry Law Enforcement Unit													ANPN/AEAFFB	CAF
Train Elite Unit													ANPN/AEAFFB	CAF
Activity 2.2. Deploy 30 agents to serve as an "Elite" Forestry Law Enforcement Unit														
Equip Elite Law Enforcement Unit													ANPN/AEAFFB	CAF
Purchase 4 4x4 Toyota Land cruisers														
Purchase field equipment													ANPN/AEAFFB	CAF
Provide operational field costs for law enforcement													ANPN/AEAFFB	CAF
Activity 2.3. Support detection and tracker dogs to work with the Elite Law Enforcement Unit														
Purchase 2 trained detection and tracker dogs from South Africa													ANPN/AEAFFB	CAF
Ensure appropriate kennel, health and sanitation arrangements for detection dogs													ANPN/AEAFFB	CAF

TABLE 7. PROGRAMME IMPLEMENTATION WORKPLAN AND BUDGET

Reducing Emissions Through Improved Forestry Management: Implementation of a national scale certification process in Gabon that includes FSC-EC and RIL-C practices/protocols.

Specific Goal

Reduce emissions from Gabon's forestry sector through improved forest management.

Activity	Year of Execution									Participating Organizations	
	Yr 1			Provisional Budget Estimation					Agency Responsible		
	Yr 2	Yr 3	Yr 4	Yr 1	Yr 2	Yr 3	Yr 4	Total project			
Objective 1. Create enabling conditions for successful implementation of a national scale certification program											
Activity 1.1. Define institutional context and protocols for policy/legal reform, steering committee, field oversight and audits				\$1,981,360.00	\$1,154,980.00	\$597,380.00	\$569,380.00	\$4,403,100.00			
Activity 1.2. Create registry of operators engaging in the certification process				\$155,200.00	\$146,000.00	\$96,000.00	\$96,000.00	\$493,200.00	CNC	SGG, CNC, MFME, AGNOR, AEAFFB, ANPN	
Activity 1.3. Implement field oversight and monitoring/audit strategy				\$333,000.00	\$100,000.00	\$100,000.00	\$100,000.00	\$633,000.00	MFME	AEAFFB, Civil Society, FSC, Private Sector	
Activity 1.4. Define emission monitoring protocols for forestry concessions and validate private sector reporting				\$398,380.00	\$232,200.00	\$182,200.00	\$182,200.00	\$994,980.00	AEAFFB	Civil Society, Third Party Auditors	
Activity 1.5. Support training of government agents and private sector employees to implement and monitor national certification standards				\$384,180.00	\$191,180.00	\$219,180.00	\$191,180.00	\$985,720.00	CNC	MFME, ANPN, TNC, AEAFFB	
				\$710,600.00	\$585,600.00	\$0.00	\$0.00	\$1,296,200.00	MFME	USFS, USAID, IFT, ENEF	
Activity 2.1. Identify and train 30 "Elite" Forestry Law Enforcement Agents											
Activity 2.2. Deploy 30 Agents to serve as an "Elite" Forestry Law Enforcement Unit				\$339,000.00	\$180,000.00	\$339,000.00	\$180,000.00	\$1,038,000.00	ANPN/AEAFFB	USFWS, USFS, Others TBD	
Activity 2.3. Support detection and tracker dogs to work with the Elite Law Enforcement Unit				\$506,200.00	\$261,200.00	\$306,200.00	\$261,200.00	\$1,334,800.00	ANPN/AEAFFB	USFWS, USFS, Others TBD	
Total				\$104,000.00	\$54,000.00	\$54,000.00	\$54,000.00	\$266,000.00	ANPN/AEAFFB	USFWS, USFS, Others TBD	
Management Fees (@7%)				\$2,930,560.00	\$1,750,180.00	\$1,296,580.00	\$1,064,580.00	\$7,041,900.00			
Program Total				\$205,139.20	\$122,512.60	\$90,760.60	\$74,520.60	\$492,933.00			

TABLE 8. BUDGET SUMMARY OBJETIVE 1⁸⁰

	Yr 1	Yr 2	Yr 3	Yr 4	Total
Objective 1: Create the enabling conditions for the implementation of a National Scale Forest Certification Program	\$1,981,360.00	\$1,254,980.00	\$597,380.00	\$569,380.00	\$4,403,100.00
Activity 1.1. Define institutional context and protocols for policy/legal reform, steering committee, field oversight and audits	\$155,200.00	\$146,000.00	\$96,000.00	\$96,000.00	\$493,200.00
Training/Seminars/Workshops	\$30,200.00	\$21,000.00	\$21,000.00	\$21,000.00	\$93,200.00
Personnel/Labour: Consultants	\$125,000.00	\$125,000.00	\$75,000.00	\$75,000.00	\$400,000.00
Activity 1.2. Create registry of operators engaging in the certification process	\$333,000.00	\$100,000.00	\$100,000.00	\$100,000.00	\$633,000.00
Contracts	\$100,000.00	\$0.00	\$0.00	\$0.00	\$100,000.00
Equipment/Materials: Expendable	\$10,000.00	\$0.00	\$0.00	\$0.00	\$10,000.00
Personnel/Labour: Consultants	\$40,000.00	\$0.00	\$0.00	\$0.00	\$40,000.00
Training/Seminars/Workshops	\$133,000.00	\$75,000.00	\$75,000.00	\$75,000.00	\$358,000.00
Travel	\$50,000.00	\$25,000.00	\$25,000.00	\$25,000.00	\$125,000.00
Activity 1.3. Implement field oversight and monitoring/audit strategy	\$398,380.00	\$232,200.00	\$182,200.00	\$182,200.00	\$994,980.00
Contracts	\$100,000.00	\$100,000.00	\$50,000.00	\$50,000.00	\$300,000.00
Equipment/Materials: Expendable	\$40,600.00	\$40,600.00	\$40,600.00	\$40,600.00	\$162,400.00
Equipment/Materials: Non expendable	\$128,200.00	\$10,000.00	\$10,000.00	\$10,000.00	\$158,200.00
Personnel/Labour: Consultants	\$20,000.00	\$0.00	\$0.00	\$0.00	\$20,000.00
Personnel/Labour: Professional staff	\$48,000.00	\$48,000.00	\$48,000.00	\$48,000.00	\$192,000.00
Training/Seminars/Workshops	\$22,700.00	\$0.00	\$0.00	\$0.00	\$22,700.00
Travel	\$38,880.00	\$33,600.00	\$33,600.00	\$33,600.00	\$139,680.00
Activity 1.4. Define emission monitoring protocols for forestry concessions and validate private sector reporting	\$384,180.00	\$191,180.00	\$219,180.00	\$191,180.00	\$985,720.00
Contracts	\$50,000.00	\$0.00	\$0.00	\$0.00	\$50,000.00
Equipment/Materials: Expendable	\$20,300.00	\$20,300.00	\$20,300.00	\$20,300.00	\$81,200.00
Equipment/Materials: Non expendable	\$78,000.00	\$0.00	\$28,000.00	\$0.00	\$106,000.00
Personnel/Labour: Consultants	\$20,000.00	\$0.00	\$0.00	\$0.00	\$20,000.00
Personnel/Labour: Professional staff	\$144,000.00	\$144,000.00	\$144,000.00	\$144,000.00	\$576,000.00
Training/Seminars/Workshops	\$12,000.00	\$0.00	\$0.00	\$0.00	\$12,000.00
Travel	\$59,880.00	\$26,880.00	\$26,880.00	\$26,880.00	\$140,520.00
Activity 1.5. Support training of government agents and private sector employees to implement and monitor national certification standards	\$710,600.00	\$585,600.00	\$0.00	\$0.00	\$1,296,200.00
Contracts	\$480,000.00	\$480,000.00	\$0.00	\$0.00	\$960,000.00
Equipment/Materials: Non expendable	\$125,000.00	\$0.00	\$0.00	\$0.00	\$125,000.00
Equipment/Materials: Premises	\$36,000.00	\$36,000.00	\$0.00	\$0.00	\$72,000.00
Travel	\$69,600.00	\$69,600.00	\$0.00	\$0.00	\$139,200.00

⁸⁰ The detailed budget may be found in the document's Annex.

TABLE 9. BUDGET SUMMARY OBJECTIVE 2

Objective 2. Reduce illegal forestry through improved law enforcement	\$949,200.00	\$495,200.00	\$699,200.00	\$495,200.00	\$2,638,800.00
Activity 2.1. Identify and train 30 agents to serve as an "Elite" Forestry Law Enforcement Unit	\$339,000.00	\$180,000.00	\$339,000.00	\$180,000.00	\$1,038,000.00
Personnel/Labor: Consultants	\$78,000.00	\$0.00	\$78,000.00	\$0.00	\$156,000.00
Personnel/Labor: Professional staff	\$180,000.00	\$180,000.00	\$180,000.00	\$180,000.00	\$720,000.00
Training/Seminars/Workshops	\$81,000.00	\$0.00	\$81,000.00	\$0.00	\$162,000.00
Activity 2.2. Deploy 30 agents to serve as an "Elite" Forestry Law Enforcement Unit	\$506,200.00	\$261,200.00	\$306,200.00	\$261,200.00	\$1,334,800.00
Equipment/Materials: Expendable	\$151,200.00	\$151,200.00	\$151,200.00	\$151,200.00	\$604,800.00
Equipment/Materials: Non expendable	\$245,000.00	\$0.00	\$45,000.00	\$0.00	\$290,000.00
Travel	\$110,000.00	\$110,000.00	\$110,000.00	\$110,000.00	\$440,000.00
Activity 2.3. Support detection and tracker dogs to work with the Elite Law Enforcement Unit	\$104,000.00	\$54,000.00	\$54,000.00	\$54,000.00	\$266,000.00
Contracts	\$50,000.00	\$0.00	\$0.00	\$0.00	\$50,000.00
Equipment/Materials: Expendable	\$18,000.00	\$18,000.00	\$18,000.00	\$18,000.00	\$72,000.00
Personnel/Labor: Professional staff	\$36,000.00	\$36,000.00	\$36,000.00	\$36,000.00	\$144,000.00
Total Direct Costs	\$2,805,560.00	\$1,625,180.00	\$1,171,580.00	\$939,580.00	\$6,541,900.00
Project Management Fees	\$196,389.20	\$113,762.60	\$82,010.60	\$65,770.60	\$457,933.00
Total Program Costs	\$3,001,949.20	\$1,738,942.60	\$1,253,590.60	\$1,005,350.60	\$6,999,833.00

7. Methodology

The expected duration of the Program is four years. Program objectives and activities stem from the priorities set by the Gabon government and considers the milestones of the letter of intent signed with CAFI (Figure 3).

The approaches and methodologies promoted for the implementation of the Program's activities and the achievement of objectives are based on lessons learned from the CAFI 1 Program.

→ *Inter-Agency and partner coordination*

Due to the national scale of the Program, the mandate to implement activities defined within are separated among multiple government Agencies. The Ministry of Forest, Sea and Environment is the Ministerial Program lead and all activities related to registration of private sector operators in the certification process and review of all existing management plans will be implemented by Ministry Agents within the DGF.

The National Climate Council will be responsible for overall project implementation, following protocols and arrangements already defined and implemented for the CAFI I Program. The Climate council will be responsible for coordination of all other Agency partners and will provide appropriate Agency subcontracts for implementation of the activities for which they are held responsible. As an inter-ministerial government council, the CNC is well placed to ensure appropriate protocols, agreements and communication platforms are established and implemented among all Program partners. General implementation Agency arrangements will be as follows: AEAFFB will be responsible for implementation of all activities providing coordination, oversight and monitoring of private sector operators. AGNOR will be responsible for implementation of all activities related to national scale definition of norms or standards for certification. ANPN, through the IRN units, will retain responsibility for any scientific activities linked to field monitoring forest carbon plots and could play an important role in the development and training of the forestry law enforcement special unit. They will also develop a sub-unit to support AEAFFB with field technical support for verification of emission reporting from concessionaires.

Activities defined within this Program will be formally linked and funded through two existing AFD country Programs including Project d'Appui a la Filiere Foret-Bois (AFB) and the CAF Program.

8. Management and coordination arrangement

This Programme is led by the Government of Gabon, via the signature of the Minister of Economy and Finance, and by AFD, acting as the Programme's implementing partner agency. The participating organizations involved in implementation include the CNC, AEAFFB, AGNOR and ANPN. CNC will continue to host the Programme's PMU.

→ *UNDP's role and duties as implementing partner*

In keeping with its procedures and in collaboration with Gabonese stakeholders, the AFD will establish an agreement setting out the conditions precedent upon signing and successive disbursements. The PMU will draft a procedures manual laying out the Programme's framework, conditions and implementation rules, which the steering committee (COFIL) will validate. These documents will define the AFD's terms of engagement in this Programme.

As the Programme's implementing agency, the AFD will be responsible to manage the funds provided by CAFI and disbursements to the PMU. The AFD may authorize direct payments by the PMU (for limited amounts, to be set in the procedures manual) or directly pay the invoices submitted by the private companies hired (specifically, service providers and consultants), based also on thresholds set by the procedures manual. Payments will be made after the PMU confirms that the service was provided. To that end, it will apply its rules and procedures, which involve close supervision to confirm that Programme implementation is in compliance, both technically and financially.

The AFD will issue "no objection opinions," allowing the activity plans and related procurement to proceed.

The PMU will report to the AFD quarterly, transmitting activity and financial reports, along with all accounting information required for future disbursements.

→ *Programme steering committee (COFIL)*

A COFIL will be established and will operate throughout the Programme's duration, meeting at least once every six months. It will be chaired by a representative of the Ministry of Economy and Finance. Other committee members will include one representative from each of the following entities: Direction of Forests, AEAFFB, AGNOR, CNC, the syndicate of forestry/economic operators, and one NGO representative. The DG of Environment, AFD, and CAFI representatives will attend the COFIL as observers.

The COPIL will be responsible for guiding the Programme. Its tasks will thus include:

- Approving annual work plans and budgets;
- Providing strategic guidance by approving requests to refocus activities and reallocate budgets;
- Reviewing implementation progress by approving annual activity and financial reports;
- Reviewing annual activity reports before transmitting them to the CAFI Executive Board; and,
- Granting discharge to the PMU management.

→ Programme Management Unit (PMU)

A PMU will be established when the Programme launches and will operate throughout its duration. It will be composed of a seven-person team, housed at the CNC. The team will include a national coordinator, technical assistant at the international level, two junior staff, procurement manager, administrative and financial manager, CAFI monitoring/evaluation and reporting manager, secretariat manager and driver. The PMU will have computer equipment, two vehicles and a budget sufficient to meet its operating needs and perform its duties.

The national coordinator will be responsible to the COPIL and AFD to ensure that the Programme operates properly and that funds are used as intended.

The AFD will disburse funds directly to the PMU. The latter will receive funding requests from the implementing agencies, which it will validate before issuing payment, either directly or via the AFD (as explained above in the section, “AFD’s role and duties as implementing partner”).

The PMU’s primary tasks include:

- Drafting the procedures manuals;
- Programming annual activities and budgets (Programme estimate);
- Managing the staff under its responsibility;
- Coordinating activities with the implementing agencies and external service providers;
- Managing procurement;
- Monitoring and evaluating Programme implementation, based on the COPIL’s decisions;
- Centralizing and reviewing the implementing agencies’ activity reports;
- Developing and transmitting Programme activity reports to the COPIL; and,
- Centralizing accounting information and preparing accounting reports.

Through the CAFI 1 Programme, the PMU has a specific budget to rent office space throughout the project’s duration and hire independent external consultants to conduct a mid-term Programme review and semi-annual financial audits. It may also issue calls to tender, as needed, allowing it to use consultant services on specific occasions to address potential shortcomings or ensure that certain objectives are achieved.

→ Implementation of activities

The CNC, AEAFB, AGNOR and ANPN will implement the Programme activities.

The ANPN, AEAFB and AGNOR will receive the budgets needed to carry out the activities for which they are directly responsible. However, the PMU must review all expenditures requiring tenders. This applies, in particular, to the purchase of vehicles and equipment, as well as international expertise that may be needed on occasion to carry out certain activities. The ANPN, AEAFB and AGNOR will develop the terms of reference for calls for tenders, which they must transmit to the PMU for review and validation before publication.

In terms of monitoring activities and accounting management, the ANPN, AEAFB and AGNOR will designate an individual responsible for these tasks. In each agency, that person will be responsible for preparing activity and accounting reports and communicating with the PMU.

9. Feasibility, risk management and sustainability of results

This Programme was reviewed by a consultant hired by CAFI in collaboration with the main Gabonese stakeholders (MFME, responsible for the Climate Plan, CNC and ANPN). Other national and international partners were invited to provide their expertise during Programme development and consolidation to ensure the relevance and feasibility of the activities planned.

The results expected and the details of the activities were discussed, modified and validated by the implementation entities concerned and the AFD, particularly in view of their experience and operational capacities.

The Programme activities were calibrated in terms of the budget, human resources and supplies/equipment to ensure feasibility and achievement of the results expected. Risks that could compromise the Programme's feasibility are presented below.

➔ **Risk management**

A detailed but non-exhaustive evaluation of the program's risks is presented below. In summary, the proposed program will require sustained high-level political support and strong public-private sector collaboration and engagement. We perceive the political risks to be relatively low in view of the close links between the activities outlined within the program document and the political priorities of the Government – as first detailed in the Gabon NIF and elaborated within the Gabon RPP. However, there is a much greater political risk of program failure should the well-documented and systematic corruption within the forestry sector in central Africa not be confronted. Mitigating this risk will require sustained political support to weed out corrupt individuals; a process to which Gabon has demonstrated commitment at the highest levels. This program institutional framework outlines structural arrangements that ensure strong integration of civil society and third party observers, including FSC and other certifying bodies, International NGO's and National Civil Society advocates, to mitigate the risk of corruption during program implementation. Program activities such as the support of third party monitoring teams and the creation of an elite forestry law enforcement division is planned and has a budget.

On a technical level, the risks of the program are low to medium. The technical guidelines required to implement a national scale certification process are defined and several private sector operators are well advanced in the process. Indeed, the FSC certification body is well advanced in the definition of the FSC Gabon norms, which will serve as the technical foundation for the national certification norm setting process. Methods and Gabon context specific requirements for achieving certification will be defined in a pre-project workshop (using the FSC Gabon interpretation as the strawman by which national norms will be established and validated by the Government) and the RIL-C methodologies to be implemented nation-wide have been well tested in Gabon. Where human resource capacity is deemed to be too limited to implement the program, external technical support from existing partners and international consultants will be required. However, a progressive program of capacity building and transfer (both at the Ministerial and private sector levels) is planned and has a budget.

The most significant risk identified was potential risk of conflicts among private sector operators and Government officials during the implementation of the program – particularly in the first 2 years of the program. Private operators do not broadly support for the timeline imposed by government to achieve certification by 2022; suggesting that upfront costs and documentation required make this deadline almost impossible to achieve for any company not already on a certification pathway. Private sector operators also expressed concern regarding the government selection of FCS as the certifying body at the exclusion of other certification schemes. Private sector operators consulted requested the government consider inclusion of other certification schemes as long as the nationally defined norms are achieved.

Risks related to fraud, corruption or financial mismanagement will be mitigated by setting up a PMU to monitor and comply with the procedures of AFD, the Program's implementing partner. In addition, the COFIL will regularly monitor the management of the budget. Finally, an independent financial audit will be conducted annually by an internationally renowned firm to ensure the proper use of Program funds.

Some of the risks associated with the program originate in the policy choice itself. Though these are not directly related to the program, we include them in the risk assessment matrix. These include the risk that FSC certification no longer permits exploitation of IFL (intact forest landscapes) and potential local and national scale socio-economic risks of the policy.

TABLE 10. RISK ASSESSMENT AND MITIGATION : REALISM

GABON CAFI 2 RISK ASSESSMENT			Risk rating	Mitigation	Timing for Mitigation	Risk rating after mitigation
	Risk components considered	Description	1- 4			
1 - REALISM						
OPERATING ENVIRONMENT RISKS						
Country Risk						
	<i>Politics & Governance</i>	The GoG is deeply committed to Sustainable Development and has embarked on a high-level political and strategic sustainable and green development strategy. The proposed project to implement the government requirement of forestry certification is simply another testament to this high-level strategic support for sound forest management.	1	No mitigation required.	N/A	1
	<i>Recent country history, political stability tenets, quality of government and commitment of the government towards the project</i>	Gabon has just been through a complex election followed by the Presidents health crisis. A new government is in place and the President's health continues to improve. Yet, political tensions remain, Ministers are changed regularly. Should the current Minister of Forests, Sea, and Environment in charge of the Climate Plan be replaced, it could significantly slow program implementation	1	No mitigation required. Technical teams will be hired and trained immediately to ensure private sector engagement, monitoring and oversight are in place such that program targets remain on schedule.	N/A	1
	<i>Clear government leadership and engagement in favor of the project</i>	Several Ministers and Agencies are actively engaged in the development and implementation of the project and strong leadership will be taken directly by the Minister of Forest, Sea, Environment in Charge of the Climate Plan.	1	No mitigation required.	N/A	1
	<i>Society</i>	Rural poverty and historical marginalization from national conservation policy coupled with limited access to information in much of the country could lead to conflictual situations with respect to all forest policy initiatives.	2	A critical component of the Program, which will require certification of all forestry concessions in Gabon, will require social impact assessments and safeguards are taken by private sector operators (as is required by FCS certification process). Further, civil society and third-party observers will be engaged in all stages of the program aimed at bringing operators into compliance with national laws. It is thus likely that the process of certification, itself, will mitigate the risk of forest dependent populations being marginalized.	Throughout Project	1
	<i>Security</i>	Gabon has been a historically stable country and risk of insecurity is low.	2	The activities have been designed to ensure that even if the political situation becomes tense or complex, technical activities (occurring predominately in the field and with the support of external technical experts) can be conducted on schedule.	N/A	1
	<i>Civil Society Capacity</i>	Understanding of the challenges of forest & natural resources monitoring and conducting oversight of private sector operators are understood by the larger, better organized and internationally supported NGOs. However, Gabonese civil society has very limited financial, technical or human resource capacity to contribute to these efforts without additional technical and financial support.	2	Funds to support capacity building of civil society participants have been included in the budget.	Throughout Project	1

GABON CAFI 2 RISK ASSESSMENT			Risk rating	Mitigation	Timing for Mitigation	Risk rating
	<i>Systemic Fraud & Corruption</i>	Fraud and corruption have been highlighted as an obvious risk throughout Africa, and recently very specifically within Gabon's forestry sector. Though the Government takes reform of these systems seriously and has demonstrated willingness to remove and even imprison government officials engaged in corruption, complete reform will not happen overnight.	3	A strict process of organizational and financial accountability will be established. The process of hiring and capacity building of program managers will be completed in collaboration with the CAFI Steering committee. A code of conduct will be developed, adhered to, and audited by 3rd parties. With respect to the forestry sector more specifically, the inclusion of civil society and third party observers throughout the process will limit potential for government and industry corruption.	Throughout Project	1
	<i>National-scale Economic Risk of Policy Implementation</i>	Potential short term economic loss of forestry revenue associated with inability of operators to achieve certification, and thus loss of forestry permits, could be greater than anticipated.	3	The Ministry intends to do a full review of the state of the program policy implementation and ability of operators to comply by June 2020. Should policy modifications be required, new recommendations will be made to the President at that time. The President alone will make the decision to modify policy definitions or timelines to mitigate this risk if needed.	December 2020	1
	<i>Economic Management</i>	Weak institutional capacity to manage and account for funds using internationally accepted verification and reporting standards could lead to difficulties with the economic management of program funds.	3	Due to the relatively low capacity and training opportunities for Gabon Nationals in internationally accepted financial management and reporting standards, it is expected that technical support and oversight will be provided by a trained program manager. An AFD-CNC management unit has been created to implement the CAFI 1 program and will serve as the foundation for ensuring smooth implementation and financial oversight of this program.	Throughout Project	1
PROJECT RISKS						
<i>Design Risk</i>						
	<i>Technical Complexity</i>	The entire project, from start to finish, requires a high degree of technical understanding of forestry and forest monitoring techniques for which current national capacity is limited. This represents a fundamental risk.	3	The program contains a strong technical training component at three levels: Ministerial, private sector, and civil society.	Throughout Project	1
	<i>Complexity of the project</i>	Both the forestry certification and monitoring components of this project require the collection of data that span a range of disciplines (social, environmental, climate, biological, economic.) and these data must be integrated into determinations of private sector compliance – decisions that will likely have political, economic and legal impacts. Complexity, by definition, is inherent to land-use and policy reform.	3	The integration of targeted technical support at each phase of the program, coupled with the tailored and progressive capacity reinforcement and transfer components of this project should importantly mitigate the technical complexity risk. Political and economic complexity risks inherent to reform will be navigated by strong and open communication among the Minister of Forest and Presidential level government officials. This transparency and communication will be facilitated by regular briefings among program staff and the Minister.	Throughout Project	1

GABON CAFI 2 RISK ASSESSMENT			Risk rating	Mitigation	Timing for Mitigation	Risk rating
	<i>Geographic Dispersion</i>	This project covers the entire territory of Gabon and entails collaboration and several scales (national policy reform, provincial and district scale impacts for forestry operators and the villages they support, village scale where community forests may be a factor).	2	The project has been designed to specifically address cross-scale dispersion risks through the development and integration of committees and the integration of civil society representatives.	Throughout Project	1
	<i>Design Flexibility</i>	Criteria for FSC certification, e.g. potential of FSC to exclude intact forest landscapes, could diverge from Gabon national norms, and thus prevent national scale implementation of the program.	2	Gabon is in the process of defining IFL at a national scale and will be taking this into account for all permits, where concessions of operators hoping to achieve certification lie within areas defined as IFL, permit swaps will be considered. If FSC becomes untenable the government will obviously reconsider the policy.	Throughout Project	1
	<i>Design Flexibility</i>	Though methodologies for improved forest management and monitoring are widely available and broadly agreed upon in the academic community, the risk of attempting to apply methods that do not meet the context specific situation of Gabon could put the validity of the certification process at risk.	2	An early activity in the program is to define National Norms/Standards by which certification can be achieved. A workshop of international and national experts will ensure that rigorous regulations are applied while taking the specific Gabon context into careful consideration.	Throughout Project	1
	<i>Arrangement Complexity</i>	The majority of the Actions proposed within the program lie squarely in the mandate of the Ministry of Forest, Sea, and Environment in charge of Climate Plan. There is thus very limited risk of institutional complexity constraining program implementation.	1	No mitigation required. Institutional arrangements among the Ministry, private sector, civil society and donor partners will be formalized as the first activity outlined in the program document.		1

TABLE 11. RISK ASSESSMENT AND MITIGATION : USE OF THE COUNTRY'S SYSTEMS

Gabon CAFI 2 RISK ASSESSMENT			Risk rating	Mitigation	Timing for Mitigation	Risk rating
2 - USE OF THE COUNTRY'S SYSTEMS						
STAKEHOLDER RISKS FOR THE OPERATION						
<i>Stakeholder Risk</i>						
	<i>Donor Relations</i>	The multiplicity of potential and engaged donor organizations with sometimes disparate institutional objectives represents a risk that inadequate coordination or communication among funding agencies and Gabon could result in strained relationships or a breakdown between Gabon and donor organizations.	2	The complexity of coordinating multiple sources of technical and financial support has been acknowledged by all parties engaged in this CAFI initiative. The creation of the CAFI Secretariat and Board of Directors coupled with the direct lines of feedback between CAFI and Gabon should mitigate this risk. Further, the development of complimentary programs (e.g. CAF, FLEGT, and Germany funded certification support) will be assessed during the ProDoc development phase of program design.	Throughout Project	1
	<i>Private Sector</i>	The upfront financial obligations required for achieving certification may prevent some operators from being able to comply with mandated certification.	3	During Activity 1.1 of the program, a structured and facilitated dialogue among government administrations and private sector partners will be supported to ensure flexibility and communication where intent is good and progress is being made. Activity 1.2 provides opportunities for each operator to complete and action plan, based on the individual context of the private sector operator. Additional co-financing options for operators in general good standing (making good faith	Throughout the project	2

Gabon CAFI 2 RISK ASSESSMENT				Risk rating	Mitigation	Timing for Mitigation	Risk rating
					attempts to move toward agreed upon benchmarks) will be pursued.		
		<i>Private Sector</i>	Market response to certification may not meet the increased revenue expected to offset upfront costs of certification	2	Gabon will continue to work with private operators and donors to identify co-financing options and/or create subsidies	Throughout project	1
		<i>Multi-Ministerial Relations</i>	The majority of the Actions proposed within the program lie squarely in the mandate of the Ministry of Forest, Sea, and Environment in charge of Climate Plan. There is thus very limited risk of institutional complexity constraining program implementation.	1	No mitigation required	N/A	1
		<i>Local Communities</i>	Local communities may fail to support program implementation, due to real or perceived economic costs of potential job losses associated with companies inability to achieve certification	2	Many of the companies most at risk of losing concessionary rights due to lack of policy compliance actually hire very few people and the financial benefits of logging are not well distributed to local communities (most logging companies fail to pay the community tax required by law). Within this context, the strong socio-economic requirements of FSC certification will likely increase local community access to economic, education, and health benefits. Thus, no mitigation is required.	Throughout the project	2
OPERATING ENVIRONMENT RISKS							
Technical risk							
		<i>Teams: enough people for the size of the technical and financial management components</i>	The ambitious goal of achieving national scale forestry certification for Gabon will require highly engaged and technically competent human resources at all levels of program design. There is a risk that we will be unable to identify and train a merit based recruited group of national and international human resources to implement the activities with sufficient speed to meet the Presidential goal of achieving certification for all concessions by 2022.	3	Technical capacity building is included in all of the program actions, and benchmarks and processes by which companies will be judged in good standing will be defined early in the process. If political ambition and technical capability fail to align, the Minister of Forest, Sea and Environment will mitigate any conflicts this may cause at higher political scales.	Throughout Project	2
		<i>Team members - verified competences</i>	The evaluation of competences for such a large human resource base represents a huge undertaking and will require specialists with knowledge of the value of qualifications presented in CVs. A risk of inadequate recruitment exists.	2	The program Coordinator will be charged with ensuring appropriate specialists are identified and consulted during the hiring process to ensure ToRs clearly state the required core competencies for each position and that CVs are reviewed by experts capable of ensuring the best candidates to fill the positions are hired.	Throughout Project	1

TABLE 12. RISK ASSESSMENT AND MITIGATION : PREPARATION FOR PROCUREMENT

CAFI 2 RISK ASSESSMENT			Risk rating	Mitigation	Timing for Mitigation	Risk rating
3 - PREPARATION FOR PROCUREMENT						
OPERATING ENVIRONMENT RISKS						
<i>Institutional Risk (Sector / Multi-Sector Level)</i>						
	<i>Ownership</i>	The CAFI 2 certification program was envisioned and written entirely by Gabon National leaders with consultation and concertation with multiple Ministers and Agency Directors. Risk of lack of country ownership of this program is extremely low.	0-1	No Mitigation required	Throughout Project	0-1
	<i>Accountability & Oversight</i>	Lack of well-developed ToRs with clear attribution of responsibilities among actors could result in a situation in which activities lack supervision and individual actors' accountability. This represents risk of not achieving desired outputs.	2	Cross institutional arrangements have been defined and a dedicated program oversight committee will be established prior to program implementation. The CAFI program Coordinator will also serve to ensure accountability and oversight of all activities and financial management.	Throughout Project	1
	<i>Institutional Capacity</i>	Existing Institutional Capacity to implement activities as outlined in the CAFI 2 certification program is weak, which represents a significant program risk.	3	As previously outlined, an integral component of the program design is establishing a strong training and capacity building implementation plan. This will include training of Ministry Agents to conduct environmental audits and oversight, technical training of the private sector to implement RIL techniques, training of civil society to engage and actively participate in the process as 3 rd party observers, etc. Transfer of technical competencies to Ministry Agents and ENEF faculty is of critical importance to the success of this program	Throughout Project	1
	<i>Institutional Fraud & Corruption</i>	Lack of institutional capacity, undefined responsibility chains and lack of project management and implementation protocols that meet international standards represent significant opportunities for institutional fraud or corruption to occur during project implementation. Fraud and corruption within the Ministry of Forests and Private Sector have been well identified.	3	A strict process of organizational and financial accountability will be established, building on lessons learned from CAFI 1 program implementation. The process of hiring and capacity building of program managers will be completed in collaboration with the CAFI Steering Committee and a strict code of conduct will be developed and adhered to, and audited by 3 rd parties as appropriate. These steps and program oversight will limit corruption and fraud temptation at the scale of program implementation and management. Mitigating fraud and corruption within the broader forestry sector will be achieved by (1) inclusion of third-party observers throughout the process of certification and (2) the creation of an Elite and well trained forestry law enforcement unit dedicated to weeding out illegal and illicit activities that occur at higher, more organized scales of the sector.	Throughout Project	1
	<i>Decision Making</i>	The CAFI 2 Certification Program concept was designed by high-level Gabon national officials with legal mandate to make decisions. Lack of decision-making mandate is of little to no risk to project success.	0-1	No mitigation required	N/A	0-1

		<i>Policy</i>	All outcomes, outputs and activities defined within the CAFI 2 Certification Program Document are integrally linked with the Gabon National Development Strategy and national policy development. Outputs will directly impact Gabon national forestry and climate policy.	0-1	No mitigation required	N/A	0-1
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➔ Programme sustainability

The Program has been designed in such a way as to strengthen the capacity of the institutions involved so that they can sustain the results achieved at the end of the Program. An assessment of the feasibility and relevance of maintaining any staff engaged and / or mobilized under the Program will be conducted by the PMU in collaboration with the Implementing Agencies, before the end of the Program. During this time, partners will identify priority financial needs to maintain and / or reorient key positions for sustainability of results. Though various external and inter-agency funding solutions will be discussed, it is likely, funds for sustainability of the Program will be made available from performance based payments to Gabon for reduced emissions from the forestry sector (CAFI 3).

10.Environmental and social management: risks and mitigation measures

Reflections on environmental and social management were conducted during the program development process. None of the activities foreseen in the Program are directly associated with significant risks environmental or social impacts.

The Program does not involve field interventions, infrastructure construction works or other activities that may have significant negative impacts on ecosystems, biodiversity or lifestyles and livelihoods or local populations. In particular, the Program will not result in population displacements (relocation / resettlement) or attacks on local communities.

On the contrary, detailed environmental and social impact assessments will be required for each forestry concession during the certification process. This will minimize and mitigate impacts that may result from forestry operations. Environmental and social management is therefore fully integrated into the Program.

A multi-stakeholder information and consultation process, including forest dependent populations, is planned as an integral part of the Program – in keeping with the forest certification process. Further, civil society representatives are expected to play an integral role as 3rd party observers throughout Program implementation.

Environmental and Social Guarantees	Guarantees by the Program
The actions complement the objectives of National Forest Programs and international conventions and agreements.	The Program is consistent with the country's objectives for sustainable forest management and with Gabon's international agreements on forests.
Transparent and effective forest governance structures that consider national legislation and sovereignty.	The Program is carried by the Government, so it takes full account of national legislation and sovereignty.
Respect for the knowledge and rights of indigenous peoples and members of local communities, considering international obligations, the country's situation and its laws, and knowing that the UNGA has adopted the United Nations Declaration on indigenous peoples' rights	The Program will require all forestry concessions in Gabon to be certified (potentially FCS) or lose permits. Forest certification, by definition, integrates strong social safeguards into the development of management plans and requires social impact assessments be completed for local communities. As such, Forests certified for their sustainable management have been demonstrated to provide far greater benefits to communities than uncertified forests, and integration of forest dependent populations into the management planning process and approval is required.
Full and effective participation of relevant stakeholders, particularly indigenous peoples and local communities.	Indigenous peoples and local communities will actively participate in the Program, through the social impact assessment and management plan validation process, as well as inclusion into the Program as 3rd party observers throughout the process.
The actions carried out are compatible with the conservation of natural forests and biological diversity, so that these actions are not used for the conversion of natural forests.	The Program aims to strengthen the conservation of forests and their biodiversity by reducing the impacts of forestry exploitation on Gabon's forests and the biodiversity they store. The certification process will tighten environmental regulations throughout the sector and require a percentage of HCV forest areas within concessions be identified and protected, from harvest. Certified forests will not be permitted for conversion, with the exception of agricultural intensification (at small scales) that may be required to help meet the food security needs of local populations living within forestry concessions.
Actions to manage the risks of resumption of emissions	The Program will reduce emissions from the forestry sector.
Actions to reduce the displacement of emissions	The Program has a national dimension and will not displace emissions within Gabon. It is possible that operators opting out of the certification process will attempt to purchase permits and retain business as usual harvesting practices in neighboring countries, however.

11. Control, evaluation and information

The Programme will be subject to monitoring, control and evaluation in accordance with AFD rules and best international practices (OECD). A monitoring and evaluation plan will be developed prior to the Programme launch and then implemented, evaluated and, if necessary, modified annually.

The plan will organize the monitoring and technical and financial evaluation of the implementation of Programme activities, based on the indicators presented in the Programme's Results Framework. The PMU, COFIL and AFD will use it to ensure strict monitoring and evaluation at all steps of the process.

In addition to the monitoring and evaluation plan, a methodological guide to monitoring/evaluation will be prepared. It will provide guidance and clear direction to the agencies, teams and external consultants charged with implementing the activities.

The PMU's monitoring and evaluation manager will be responsible for those activities on an ongoing basis. That person will receive and regularly analyse the activity reports prepared by the implementation agencies and consultants to assess achievement of the results set for each Programme activity and sub-activity.

The monitoring and evaluation manager will also be responsible to implement the specific activities laid out in the monitoring and evaluation plan. The manager will thus supervise preparation of the Programme's mid-term and final reviews, which will be written by the consulting firms hired through a call for tenders. S/he will provide all of the information and data requested for these evaluations, serve as a key contact for the AFD and COFIL to present the annual progress reports, including the quarterly Programme progress reports to the AFD, and also be responsible to communicate with CAFI on the reporting related to the milestones in the Letter of Intention.

12. Consultation plan scheduled and/or consultations held

→ Consultations held

The Government of Gabon began developing this Programme in 2019.

During the initial phases of development, consultations were held with various ministries (including forests and agriculture), as well as national and international technical partners.

Based on some of those comments and recommendations, certain activities were modified to improve their relevance, ensure their feasibility and guarantee the Programme's overall consistency, in order to achieve the objectives.

In June-July, an international consultant retained by the CNC met with several Gabonese actors to help develop the Programme and ensure its feasibility. The consultations confirmed the relevance and feasibility of the activities, specified their content and developed their rationale.

13. Legal framework

The Programme is managed by the Government of Gabon, which will ensure that it complies with the country's laws and regulations at all levels. The AFD has an office in Libreville, Gabon, working under a bilateral cooperation agreement with Gabon. The AFD collaborates, in full transparency, on various projects with the Gabonese authorities. The legal document that constitutes the legal basis of the relationship between the AFD and the Government of Gabon is presented in the Annex.

14. ANNEXES

14.1. Annexe 1. Detailed programme budget

Reducing Emissions Through Improved Forestry Management: Implementation of a national scale certification process in Gabon.													
Goal: Meet Gabon's NDP commitment to UNFCCC by implementing national scale 'Natural Climate Solutions' that increase carbon sequestration and decrease carbon emissions through improved land stewardship													
Reduce emissions from Gabon's forestry sector through improved forest management and implementation of a national scale certification program													
Objective 1: Create the enabling conditions for the implementation of a National Scale Forest Certification Program													
Sub-activity	Description	Budget category	Unit	No. of units	Cost per unit	Cost by year (USD)				Total USD	Budget notes	Implementing Agency	Linking program
						Yr. 1	Yr. 2	Yr. 3	Yr. 4				
Activity 1.1. Define institutional context and protocols for policy/legal reform, steering committee, field oversight and audits													
Formalize institutional arrangements among government institutions	Hold meetings among upper level government officials to formally define and validate institutional arrangements, roles and responsibilities among all government actors.	Training/Seminars/Workshops	meeting	6	600	\$3,600	\$0	\$0	\$0	\$3,600	Provide 1 coffee break and 1 lunch (@\$40/person) x 15 Pax = \$600/meeting	CNC	CAF
Write 'decree d'application' - legal framework for certification requirement	Hold a 10 day workgroup of 5 people to write legal text required to formally define terms of certification obligation for all forestry concessions and define conditions for demonstration of compliance.	Training/Seminars/Workshops	meeting	10	200	\$2,000	\$0	\$0	\$0	\$2,000	Work group of 5 people x 10 days. Provide 1 coffee break and 1 lunch (@\$40/person) = 200/day = \$2,000	AGNOR	CAF
Define project implementation and field oversight arrangements among AEAFFB, CNC, AFB, ANPN, AGNOR, and civil society partners.	Hold meetings among AEAFFB, the GoG implementation Agencies responsible for forestry and law enforcement activities, NGO technical partners, and third party observers to formalize financial disbursement and partnership agreements.	Training/Seminars/Workshops	meeting	6	600	\$3,600	\$0	\$0	\$0	\$3,600	6 meetings x 15 Pax/meeting. Provide 1 coffee break and 1 lunch @\$40/person/meeting = \$600/meeting	CNC	CAF
Facilitate structured dialogue among government administrations and private sector operators	To ensure consistent and structured dialogue among actors, a formalized committee/organization will be created. The organization will be coordinated by the AEAFFB, and will include government administrators, private sector partners and the syndicate.	Training/Seminars/Workshops	meeting/yr.	6	1500	\$9,000	\$9,000	\$9,000	\$9,000	\$36,000	A \$1,500 forfeit/meeting will be provided to support purchase of supplies (notebooks, pens, printed material), coffee, water and pastries, etc.	AEAFFB	AFB

Hire punctuated expert consultant	Hire punctuated expert consultant to ensure partner synergies and coordination among international and national actors, and provide technical support for program implementation as required (e.g. knowledge of forestry sector and certification regionally).	Personnel/Labor: Consultants	yr.	1	125,000	\$125,000	\$125,000	\$75,000	\$75,000	\$400,000	It is assumed that during the first two years of the Program, significant technical and coordination support will be required to ensure coordination among international and national actors, and provide technical council and support to implementation Agencies. Over time, it is assumed much less technical support will be required.	CNC	CAF
Facilitate communication and information exchange among Government implementation Agencies and NGO partners.	Support monthly meetings among Government implementation Agencies (AEAFFB, ANPN, AGNOR) and NGO/Civil Society partners/observers to ensure strong communication and monitoring of activity implementation.	Training/Seminars/Workshops	meeting	12	1,000	\$12,000	\$12,000	\$12,000	\$12,000	\$48,000	Provide coffee, water, soda, paper, sandwiches for monthly collaboration building meetings (\$1,000/meeting) x 12 meetings/year = \$12,000/yr. x 4 years = \$48,000.	CNC	CAF
Sub-total						\$155,200	\$146,000	\$96,000	\$96,000	\$493,200			
Activity 1.2. Create registry of operators engaging in the certification process													
Register all operators intending to continue operations in Gabon with optic of achieving certification by 2022.	The GoG will formally notify, in writing, the DG of each forestry operation of Gabon's requirement for all concessions to meet certification by 2022 and invite each to submit their intent to comply, or withdraw their permits. Letters and information packets will be hand delivered by Government Agents. It is assumed follow up letters, phone calls and persistent in person visits will be necessary. An official registry of operators intending to comply with certification standards will be created and these operators will be treated as private sector partners for the duration of this project.	Equipment/Materials: Expendable	coms	1	10,000	\$10,000	\$0	\$0	\$0	\$10,000	Includes printing of letters and informational flyers, phone credits, driver and delivery agents transport and other outreach materials	MFME	CAF

Create Ministry level protocols to a) maintain, approve and archive documentation as provided by forestry operators, and b) define benchmarks by which companies registered in the certification process can be monitored and held accountable for progress.	The DGF will house the certification registry and traceability archives, building upon systems currently being designed. Protocols to retain these data bases and archives will need to be defined and training of appropriate Agents will be required. Workshops and meetings with private sector, NGO partners, and DG Forest will ensure transparency in system design and ensure consultation process.	Training/Seminars/Workshops	meeting	5	600	\$3,000	\$0	\$0	\$0	\$3,000	5 technical workgroups will be held with representatives of GoG, private sector, and NGO partners (units = 30pax). Provide 1 coffee break and 1 lunch (@\$20/person) = \$600/meeting	MFME	CAF
	Consultant to facilitate registration and help design audit protocols and train appropriate Ministry Agents to implement the system.	Personnel/Labor: Consultants	month	4	10,000	\$40,000	\$0	\$0	\$0	\$40,000	Estimated @ 10,000/mo. per consultant	MFME	CAF
	Train Agents to maintain and monitor registry and traceability systems	Training/Seminars/Workshops	Workshop	3	10000	30000	0	0	0	\$30,000	An estimated 3 training workshops will be conducted to reinforce capacity of Ministry Agents responsible for registry and traceability systems. Where system linkages between Ministry and private sector traceability systems are required, training may include foresters and NGO partners where appropriate.	MFME	CAF
Conduct a third party audit of existing management plans and other formal documentation – diagnostics step of certification.	Hire 3rd party consultants to complete evaluation of existing documentation for all concessions as a first step to identifying illegal or fraudulent operations and determine the likelihood and individual operators will be able to comply with certification requirements.	Contracts	Forfeit	1	100,000	\$100,000	\$0	\$0	\$0	\$100,000		MFME/CNC	CAF

	Conduct field assessments/validation of information provided in management plans and other formal documentation presented by private sector.	Travel	Forfeit/yr.	1	50,000	\$50,000	\$25,000	\$25,000	\$25,000	\$125,000	Training and field support for the AEAFB audit teams are included within Activity 1.3. This budget line is intended to support civil society and 3rd party observers for process transparency.	MFME/CNC/AEAFB	CAF
Review Ministry protocols for management plan validation and approval.	Support structured reflection regarding reform of the management plan validation process	Training/Seminars/Workshops	Forfeit	1	25,000	\$25,000	\$0	\$0	\$0	\$25,000		MFME	CAF
Reinforce capacity of civil society to engage in the process of management plan review and audit as third party observers.	Identification and training of civil society partners	Training/Seminars/Workshops	Forfeit	1	75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$300,000		MFME/CNC/AEAFB	CAF
Sub-total						\$333,000	\$100,000	\$100,000	\$100,000	\$633,000			
Activity 1.3. Implement field oversight and monitoring/audit strategy													
Identify and train field auditors to ensure (1) operators not seeking certification comply with existing laws as they close permits (2) operators seeking certification comply with benchmarks and agreements as defined within the registry process and (3) information provided by company management plans can be field verified.	Recruit and train a team of 10 technicians to conduct audits of active forestry concessions. It is assumed that recruitment will identify approximately 20 individuals, of which 10 will be retained.	Training/Seminars/Workshops	Pax	15	1,500	\$22,500	\$0	\$0	\$0	\$22,500	Estimated training costs as follows: Food @ \$20/d/Pax x 20d = \$400/Pax; travel to training facility @ \$100/Pax; equipment and supplies (rite in rains, measuring tapes, pack packs, GPS units, basic sampling supplies, cameras, tents etc. @ \$1,000/Pax = 1500/Pax x 15 Pax = \$22,500	AEAFB	AFB

	Transport among field sites during training process	Travel	site	4	3,000	\$12,000	\$0	\$0	\$0	\$12,000	Assumes bus or large van rental for all trainees and trainers + gas and chauffer time @ \$3000/site x 4 sites = \$12,000	AEAFFB	AFB
	A technical forestry consultant/expert will be hired to identify and train the oversight and monitoring teams	Personnel/Labor: Consultants	month	2	10,000	\$20,000	\$0	\$0	\$0	\$20,000	1 expert consultant @ \$10,000/month x 2 months = \$20,000	AEAFFB	AFB
	Work with ASI (or other) to develop an accreditation alliance and continued training program	contracts	Forfeit/yr.	1	100,000	\$100,000	\$100,000	\$50,000	\$50,000	\$300,000		AEAFFB	AFB
Establish reporting protocols for field auditors to inform enforcement agencies and the Direction of Forests when operators are found out of compliance.	The identified consultant will work with local partners to ensure clear protocols and mandate are integrated into the training process such that appropriate Government Agencies are informed and responsive to infractions recorded by field auditing teams.	Training/Seminars/Workshops	meeting	2	100	\$200	\$0	\$0	\$0	\$200	Provide coffee, water, soda (basic hospitality) for monthly collaboration meetings (\$100/meeting) x 2 meetings = \$200	AEAFFB/MFME	AFB
Equip audit technicians with field supplies	Audit technicians will require basic field gear (e.g. tents, backpacks, headlamps) to work in remote forest locations for extended periods of time. Additional supplies will be required to support technical work (e.g. water quality testing supplies, dbh tapes, GPS units), recording of information, and effective communication of infractions (e.g. computers and phones). Much of this will require replacement in following years of the program and are thus considered consumable supplies.	Equipment/Materials: Non expendable	\$/team	2	14,100	\$28,200	\$10,000	\$10,000	\$10,000	\$58,200	Estimated costs include 1 computer (\$2000) + an assortment of field sampling and water quality supplies (~\$10,000) + 3 telephones (with 4 G capacity for sending and receiving of information from field) @ \$700/unit x 3 = (\$2100) = 14,100/team x 2 teams = \$29200. An estimated \$10,000/yr. has been included to replace consumable equipment (sampling equipment annual) and tents (2 year field life span), etc.	AEAFFB	AFB
Deploy teams to the field.	Teams of 3-4 people will be deployed to the field a minimum of 14/d/month for the duration of this program.	Travel	Pax	8	3,360	\$26,880	\$33,600	\$33,600	\$33,600	\$127,680	Daily rate of \$20/d x 14/d/month x 12 months = \$3360/yr./Pax x 8 Pax = \$26,880/yr. x 4 yrs. = \$127,680.	AEAFFB	AFB

	2 vehicles will be purchased to facilitate movement of field monitoring and audit teams among sites	Equipment/Materials: Non expendable	\$/veh..	2	50,000	\$100,000	\$0	\$0	\$0	\$100,000	1 4x4 Toyota land cruiser with bench seats @ \$50,000/vehicle x 2 = \$100,000	AEAFFB	AFB
		Equipment/Materials: Expendable	\$/veh../yr.	2	20,300	\$40,600	\$40,600	\$40,600	\$40,600	\$162,400	Fuel: 1000 liters/month @ \$1,2/liter = \$1,400/veh.. + Maintenance vehicles @ \$350/veh.../mo. = \$4,200/yr./veh.. + Vehicle insurance + tracker annual fees @ \$500/veh.../yr. + trackers @ \$100/mo./vehicle = 1,200/veh../yr. Total cost per vehicle/yr. = \$20,300	AEAFFB	AFB
	Salary bonuses and primes	Personnel/Labor: Professional staff	\$/yr./Pax	8	6,000	\$48,000	\$48,000	\$48,000	\$48,000	\$192,000	The technical nature of this auditing program, coupled with the amount of time auditors will be required to spend in the field will require that bonus for over-time, field hardship and responsibility be added to salaries. We estimate an extra \$500/mo./agent x 8 agents = 6,000/yr./agent x 8 agents = \$48,000/yr.	AEAFFB	AFB
Sub-total						\$398,380	\$232,200	\$182,200	\$182,200	\$994,980			
Activity 1.4. Define emission monitoring protocols for forestry concessions and validate private sector reporting													
Conduct a technical carbon workshop to define protocols and requirements for monitoring emissions from forestry operations.	Workshop retreat to define carbon monitoring, reporting and verification standards and protocols	Training/Seminars/Workshops	Pax	12	1,000	\$12,000	\$0	\$0	\$0	\$12,000		CNC/AEAFFB/ANPN	AFB
	International Travel and	Travel	Pax	3	10,000	\$30,000	\$0	\$0	\$0	\$30,000		CNC/AEAFFB/ANPN	AFB
	Lodging	Travel	Pax	15	200	\$3,000	\$0	\$0	\$0	\$3,000		CNC/AEAFFB/ANPN	AFB
	MRV consulting support	Personnel/Labor: Consultants	Pax	2	10,000	\$20,000	\$0	\$0	\$0	\$20,000		CNC/AEAFFB/ANPN	AFB

	IRET support	Contracts	Forfeit	1	50,000	\$50,000	\$0	\$0	\$0	\$50,000	Subcontract to IRET	CNC/AEAFB/ANPN	AFB
Support a carbon monitoring unit to conduct field based validation of forest monitoring protocols and emissions as implemented and reported by private sector operators.	Hire and train 2 teams of 4 individuals to conduct field verification of protocols and emissions reporting from private sector operators	Personnel/Labor: Professional staff	Pax/yr.	8	18,000	\$144,000	\$144,000	\$144,000	\$144,000	\$576,000	2 teams of 4 people @1,500/mo./person = 18,000/yr./Pax. x 8 = \$144,000/yr.	CNC/AEAFB/ANPN	AFB
	Deploy field teams to verify implementation of monitoring programs and verify emissions reporting from private sector	Travel	cost/Pax/yr.	3360	8	\$26,880	\$26,880	\$26,880	\$26,880	\$107,520	8 Pax @ \$20/d x 14d/m x 12 mo. = \$26,880/yr.	CNC/AEAFB/ANPN	AFB
	Equip field teams with requisite field kit and supplies	Equipment/Materials: Non expendable	cost/team/yr.	14,000	2	\$28,000	\$0	\$28,000	\$0	\$56,000	Average cost of personal field kit (tents, backpacks, rain gear, GPSs, rite in rain @ 1,000/person) + Team gear (calipers + tape measures + sat phone + soil sampling gear , in reach etc. @ \$10,000/team) = \$14,000/4 person team. To be replaced in Yr. 3 of project.	CNC/AEAFB/ANPN	AFB
	Purchase 1 vehicle to move teams among sites	Equipment/Materials: Non expendable	Veh..	1	50,000	\$50,000	\$0	\$0	\$0	\$50,000		CNC/AEAFB/ANPN	AFB
		Equipment/Materials: Expendable	Forfeit	1	20,300	\$20,300	\$20,300	\$20,300	\$20,300	\$81,200	Fuel: 1000 liters/month @ \$1,2/liter = \$14,400/veh.. + Maintenance vehicles @ \$350/veh.../mo. = \$4,200/yr./veh.. + Vehicle insurance + tracker annual fees @ \$500/veh.../yr. + trackers @ \$100/mo./vehicle = 1,200/veh.../yr. Total cost per vehicle/yr. = \$20,300	CNC/AEAFB/ANPN	AFB
Sub-total						\$384,180	\$191,180	\$219,180	\$191,180	\$985,720			
Activity 1.5. Support training of government agents and private sector employees to implement and monitor national certification standards													

Establish a Certification Training School at Booue	Support to this activity is being discussed with other partners. Should other, non-CAFI funding sources fail to be identified, the Government of Gabon would consider this a potential project under the CAFI 3 Investment Plan.									\$0		MFME	NA
Establish and deploy a near term "mobile" certification training team to improve capacity of Government Agents and private sector employees to implement and monitor the implementation of this national certification program	Success of this certification program is dependent on the human capacity of the forestry sector to implement and monitor improved forestry techniques. Managers will be trained in planning and management plan implementation and operators (from sawyers through sawmill) in RIL-C and FSC-EC technical procedures that can be implemented with existing equipment and resources (e.g. harvest planning, etc.). During the first two years of the program trainers will be working with national homologues to provide a "training of trainers".	Contracts	month	12	40,000	\$480,000	\$480,000	\$0	\$0	\$960,000	Estimated cost of securing international forestry trainers to engage with the program @ \$10,000/mo. x 4 full time trainers. Subcontract to professional forestry training center.	AEAFFB	AFB
		Travel	1 round trip/yr.	4	3,000	\$12,000	\$12,000	\$0	\$0	\$24,000	One round trip, full fare economy ticket will be provided annually to each trainer to return to their country of origin. Estimated cost @ \$3,000/ticket x 4 trainers.	AEAFFB	AFB
	Deploy training team to active concessions to support employee and government technical training in the field	Travel	trainer days/yr.	1440	40	\$57,600	\$57,600	\$0	\$0	\$115,200	\$40/d x 4 trainers x 30 d/mo. x 12 months = 57600	AEAFFB	AFB
	Purchase vehicles for use	Equipment/Materials: Non expendable	Veh..	2	50,000	\$100,000	\$0	\$0	\$0	\$100,000	1 Toyota 4x4 Double cabin	AEAFFB	AFB

	A guest house in Libreville will be rented and furnished to ensure trainers have a place to base themselves when creating training materials and recovering between field missions.	Equipment/Materials: Premises	rent	12	3,000	\$36,000	\$36,000	\$0	\$0	\$72,000	A case de passage will be rented in LBV to serve as a home base for trainers. Estimated rent for a 3-4 bedroom apartment in Libreville Gabon is 3,000/month	AEAFFB	AFB
	Furnish guest house	Equipment/Materials: Non expendable	Forfeit	1	25,000	\$25,000	\$0	\$0	\$0	\$25,000			
Sub-total						\$710,600	\$585,600	\$0	\$0	\$1,296,200			
Objective 1 Subtotal										\$4,403,100			
Objective 2. Reduce illegal forestry and enforce private sector compliance with improved law enforcement													
Sub-activity	Description	Budget category	Unit	No. of units	Cost per unit	Cost by year (USD)				Total USD	Budget notes		
						Yr. 1	Yr. 2	Yr. 3	Yr. 4				
Activity 2.1. Identify and train 30 agents to serve as an "Elite" Forestry Law Enforcement Unit													
Identify 30 Individuals to serve as the Elite Forestry Law Enforcement Unit	Provide a monthly bonus to Special Unit Officers to reinforce incentive for ethical implementation of national forestry laws and provide appropriate compensation for increased responsibilities associated with the position.	Personnel/Labor: Professional staff	\$/Pax/yr.	30	6,000	\$180,000	\$180,000	\$180,000	\$180,000	\$720,000	\$500/mo. x 12 mo./yr. = \$6000/Pax/yr. This will be defined as a function of the formalized salary system reform within MinEf, and only as special unit officers meet specific training and evaluation benchmarks.	ANPN/AEAFFB	CAF
Train Elite Unit - in collaboration with ANPN and with technical support of existing law enforcement training program and partners	Provide support for food and lodging of 30 Elite offers during training	Training/Seminars/Workshops	\$/day	90	900	\$81,000	\$0	\$81,000	\$0	\$162,000	\$30/d/Pax x 30 Pax = \$900/d x 90 d = \$81,000. Retraining will occur every other year, with new people being added to the force as required during those intervals	ANPN/AEAFFB	CAF
	Hire Expert Consultants to conduct training	Personnel/Labor: Consultants	\$/Pax	2	39,000	\$78,000	\$0	\$78,000	\$0	\$156,000	Expert consultant trainers will require \$10,000/month salary and \$100/d (\$100/d x 30d = 3,000 per diem/month). Total monthly cost per trainer + 13,000 x 3 months = \$39,000/trainer x 2 trainers = \$78,000	ANPN/AEAFFB	CAF
Activity 2.2. Deploy 30 agents to serve as an "Elite" Forestry Law Enforcement Unit													
Equip Elite Law Enforcement Unit	Purchase 4 4x4 Toyota Land cruisers	Equipment/Materials: Non expendable	1 Toyota land cruiser	4	50,000	\$200,000	\$0	\$0	\$0	\$200,000		ANPN/AEAFFB	CAF

	Provide field equipment: Each Forestry Law Enforcement Agent will be equipped with field kit required to support foot patrols into the forest and camping in remote sites (tent, sleeping pad, headlamp, waterproof backpack, phone equipped with LEM apps and satellite connection capacity, rite in rain, etc.).	Equipment/Materials: Non expendable	cost/Pax/yr.	30	1,500	\$45,000	\$0	\$45,000	\$0	\$90,000	Average cost of personal field kit (tents, backpacks, rain gear, GPSs, mobile phone with integrated GIS, Cameras, and LEM apps @ 1,500/person) x 30 Pax = \$45,000. Due to the field nature of this post, most equipment needs refurbished or replaced every 2 years.	ANPN/AEAFFB	CAF
Provide operational field costs for law enforcement	Support transport costs including vehicle fuel, maintenance, insurance and GPS trackers for Law Enforcement fleet	Travel	\$/veh../yr.	4	27,500	\$110,000	\$110,000	\$110,000	\$110,000	\$440,000	Fuel: 1500 liters/month @ \$1,2/liter = \$21,600/veh..; Maintenance vehicles @ \$350/veh.../mo. = \$4,200 + Vehicle insurance annual fees @ \$500/veh.../yr. = \$ 500/veh.. + tracker fees @ \$100/mo./vehicle = \$1,200/veh... Total cost per vehicle/yr. = \$27,500	ANPN/AEAFFB	CAF
	Provide consumable supplies (e.g. food, batteries, medical supplies) for field missions	Equipment/Materials: Expendable	\$/Pax/yr.	30	5,040	\$151,200	\$151,200	\$151,200	\$151,200	\$604,800	20/d x 21d/months x 12 months = \$5040/yr./Pax	ANPN/AEAFFB	CAF
Activity 2.3. Support detection and tracker dogs to work with the Elite Law Enforcement Unit													
Purchase 2 trained detection and tracker dogs from South Africa	Dog purchase and transport to Gabon: 2 detection dogs will be supported to facilitate Law Enforcement officers. Dogs will be trained to identify illegal goods that, experience has demonstrated, are often hidden at logging camps and shipped with wood containers across central Africa - including ivory, pangolin scales, iboga, illegal timber species, etc.	Contracts	\$/dog	2	25,000	\$50,000	\$0	\$0	\$0	\$50,000	Subcontract to professional dog training center. Cost estimate based from costs of training and purchase of existing canine units at ANPN.	ANPN/AEAFFB	CAF

Ensure appropriate kennel, health and sanitation arrangements for detection and tracker dogs	The Canine Units will be kenneled at a secure building in the Gabon School of Forestry compound, Cap Esterias Gabon. The School Forestry is underfunded, and regularly fails to pay electrical bills. As such, to ensure the security of the dogs as well as regular and clean access to water, an independent generator and water pump system is required. We request support for their general maintenance . Additional consumable supplies such as dog food, training rewards, leashes/harnesses, crates for vehicles etc. will also be replenished on an as need basis.	Equipment/Materials: Expendable	\$/Year	1	18,000	\$18,000	\$18,000	\$18,000	\$18,000	\$18,000	\$72,000	Dog food (\$6,000/year), cleaning products (\$2,000/yr.), grooming products (\$1,000), training rewards and leashes (\$2,000), medications (\$4,000), other (\$3,000) Total: \$18,000.	ANPN/AEAFFB	CAF
	Ensuring the health and safety of a sniffer dog/tracker unit requires a team of people, based at the kennel site, and the dog handlers. At the kennel site, security guards and kennel-aids ensure the safety of the dogs. Aids are responsible for feeding, watering, cleaning kennels, walking and grooming dogs. Two handlers are trained to guide dog through searches and maintain a rigorous training program. One driver resides near the kennels to ensure rapid deployment in response to information as needed.	Personnel/Labor: Professional staff	\$/Pax/yr.	3	12,000	\$36,000	\$36,000	\$36,000	\$36,000	\$36,000	\$144,000	2 handlers + 1 kennel hand for security and kennel work @ \$1,000/mo. Pax = 12,000/yr./Pax.	ANPN/AEAFFB	CAF
Objective 2 Subtotal											\$2,638,800			

Program total (Obj1 + Obj2)	\$7,041,900
Management Fees (@ 7%)	\$492,933
Total Program Cost:	\$7,534,833

14.2. Annexe 2. Detailed PMU budget

The existing Project Management Unit, housed within the National Climate Council, has an existing budget of 1,377,000 USD (CAFI 1) and employs 9 individuals responsible for CAFI program implementation. The PMU is collectively responsible for ensuring the administrative and human resources management assigned to the PMU; coordinating CAFI program activities with Entities, partners and institutions; executing and ensuring the management and monitoring of the CAFI procurement plan; monitoring the implementation of the Program (benchmarks); developing annual workplans and budgets with the entities, implementing the decisions of COPIL; centralizing activity reports from various implementing agencies of the Implementing entities; and consolidating the accounting elements and prepare the accounting reports. These 9 individuals are currently funded from the CAFI 1 agreement as outlined in Table 1. A full PMU approved budget is provided in Table 2.

In addition, the CAFI 1 budget provided the necessary technical equipment and support to ensure CAFI program coordination and implementation including:

- IT equipment: 8 computers
- Office furniture (desks etc.)
- Acquisition of an accounting management system - TOM2PRO
- Acquisition of internet supplies and services

Table 1. Approved PMU staff budgets as revised by the CAFI 1 COPIL

	Initial approved budget (KUSD)	Adjusted budget (COPIL 1) (KUSD)
	2029,8	2226
3.1. PMU Staff	2029,8	1903
National Coordinator	282	252
International level technical assistant	400,8	334
Procurement services agent	210	180
Reporting and monitoring agent	210	150
Financial officer	150	210
3.4 Other costs not initially planned	0	323
AGEOS coordinator	0	90
ANPN coordinator	0	60
Acquisition of the accounting system and Licenses (5 years) and training	0	53
Currency risk	0	120

Table 2. CAFI 1 approved budet to ensure the efficient and transparent coordination and management of programme activities

NB: all costs are in k \$	UN Categories	Unit	Quantity	Unit price	Total 5 yr Cost	Yr1	Yr2	Yr3	Yr4	Yr5	Total
	3353.8	PMU	765,0	612,0	615,6	630,6	528,6	3362,8			
3.1. PMU staff	2,029.80	426,0	426,0	429,6	429,6	327,6	2038,8				
Engagement of a national coordinator	1. Staff costs and other staff costs	Forfait hm	60,0	4,7	282,0	56,4	56,4	56,4	56,4	56,4	282,0
Hiring an international level technical assistant (A1 and A2)	1. Staff costs and other staff costs	Forfait hm	24,0	16,7	400,8	200,4	200,4	400,8			
Estimated budget for an international level technical assistant (A3 to A5)	1. Staff costs and other staff costs	Forfait hm	30,0	16,7	501,0	204,0	204,0	102,0	510,0		
Engagement of two juniors already present at the CNC	1. Staff costs and other staff costs	Forfait hm	120,0	1,5	180,0	36,0	36,0	36,0	36,0	36,0	180,0

Hiring of a responsible for procurement	1. Staff costs and other staff costs	Forfait hm	60,0	3,5	210,0	42,0	42,0	42,0	42,0	42,0	210,0
CAFI monitoring and evaluation manager	1. Staff costs and other staff costs	Forfait hm	60,0	3,5	210,0	42,0	42,0	42,0	42,0	42,0	210,0
Hiring of an administrative and financial manager	1. Staff costs and other staff costs	Forfait hm	60,0	2,5	150,0	30,0	30,0	30,0	30,0	30,0	150,0
Secretarial engagement	1. Staff costs and other staff costs	Forfait hm	60,0	1,0	60,0	12,0	12,0	12,0	12,0	12,0	60,0
Hiring a driver	1. Staff costs and other staff costs	Forfait hm	60,0	0,6	36,0	7,2	7,2	7,2	7,2	7,2	36,0
3.2. Purchase of equipment / vehicles, operation and maintenance		343	191,0	38,0	38,0	38,0	38,0	343,0			
IT equipment for 8 people	3. Equipment, vehicles and furniture, including depreciation	Forfait materials	8,0	5,0	40,0	40,0	0,0	0,0	0,0	0,0	40,0
Other equipment	3. Equipment, vehicles and furniture, including depreciation	1,0	21,0	21,0	21,0	0,0	0,0	0,0	0,0	21,0	
Depreciation and material replacement 20% per year in A2-A4	3. Equipment, vehicles and furniture, including depreciation	Forfait materials	4,0	8,0	32,0	0,0	8,0	8,0	8,0	8,0	32,0
Purchase of two 4x4 vehicles	3. Equipment, vehicles and furniture, including depreciation	Forfait vehicule	50,0	2,0	100,0	100,0	0,0	0,0	0,0	0,0	100,0
Vehicle maintenance, fuel and insurance	3. Equipment, vehicles and furniture, including depreciation	forfait annuel	10,0	15,0	150,0	30,0	30,0	30,0	30,0	30,0	150,0
3.3. Operating budget and specific missions of the PMU		770	148,0	148,0	148,0	163,0	163,0	770,0			
Operating budget for coordination	7. General operating costs and other direct costs	Forfait annuel	5,0	16,0	80,0	16,0	16,0	16,0	16,0	16,0	80,0
Rental of premises	7. General operating costs and other direct costs	Forfait annuel	5,0	32,0	160,0	32,0	32,0	32,0	32,0	32,0	160,0
Budget for other workshops	4. Contractual services	2,0	15,0	30,0	0,0	0,0	0,0	15,0	15,0	30,0	
Budget for consultancies according to needs	4. Contractual services	Forfait	1,0	250,0	250,0	50,0	50,0	50,0	50,0	50,0	250,0
Budget for independent mid-term evaluation	4. Contractual services	Forfait	1,0	50,0	50,0	10,0	10,0	10,0	10,0	10,0	50,0
Budget for annual financial audits	4. Contractual services	Forfait	10,0	20,0	200,0	40,0	40,0	40,0	40,0	40,0	200,0
TOTAL Result 3 - PMU		3,142.80	0,0	765,0	612,0	615,6	630,6	528,6	3151,8		