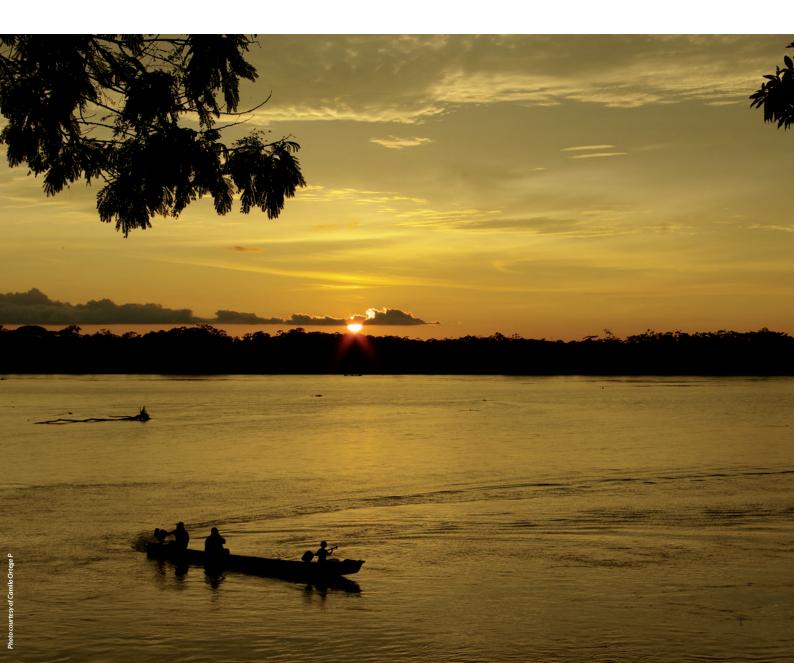


GGGI - Colombia Country Planning Framework 2016-2020





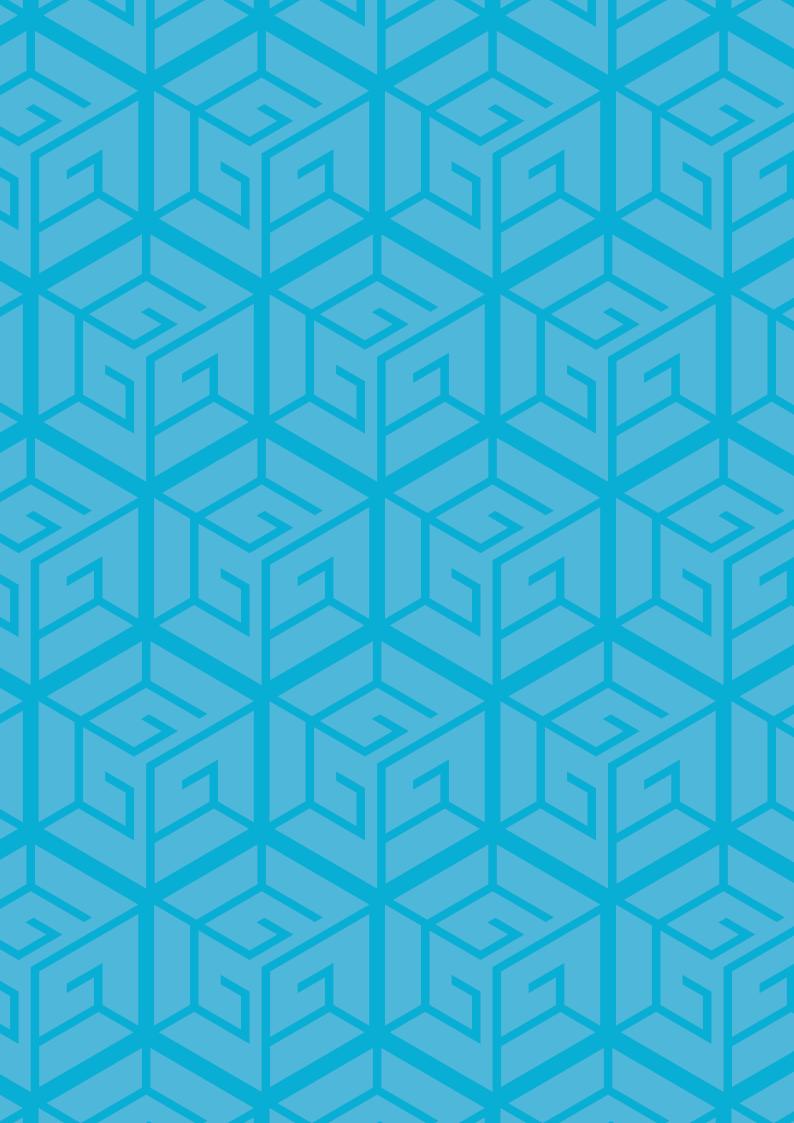


TABLE OF CONTENTS

Introduction to the Country Planning Framework	5
Country Overview	7
Colombia National Priorities	15
GGGI Engagement in Colombia	19
Colombia's Country Planning Framework Analysis	23
Strategic Response	31
Acronyms	37



Introduction to the Country Planning Framework

GGGI's Country Planning Framework (CPF) lays out the green growth objectives that GGGI's interventions aim to support its Member countries in achieving. The CPF objectives are derived from organizational priorities that reflect GGGI's comparative advantage and are in alignment with national goals of economic growth, poverty reduction, social inclusion and environmental sustainability.

The CPF is thus a contextualized planning document for in-country programming and any new project design, aimed at delivering results on-the-ground that will ensure the sustainability of results, the capacity for continued delivery of results, and greatly increase the likelihood of sustained funding.

Given that the heart of GGGI's delivery model lies with the Green Growth Planning and Implementation (GGP&I) division, the CPF broadly reflects integration of the corporate value chain and service offerings from the Knowledge Solutions Division to strengthen the in-country delivery led by the Green Growth Planning and Implementation (GGP&I) Division.

The CPF objectives will require the support of the in-country government, private sector, and other partners in translating corporate goals into in-country strategic

goals, and is contingent on the CPF's adherence of the following key principles:

- Ownership It is co-owned by the government and endorsed by the lead Government counterpart with which GGGI has an agreement with.
- Mutual Accountability It demonstrates commitment in a particular country, given the availability of adequate resources, to achieve agreed objectives.
 By endorsing the CPF, the Government in turn commits to collaborate and provide support in implementing the CPF.
- Alignment It is aligned to national objectives and informed by GGGI's Strategic Plan 2015-2020.
- Leadership Its formulation is led by the country team.

The CPF presents the in-country strategy for the delivery of measurable results against the GGGI Results Framework. The country strategy also accounts for the emerging national and global architecture of development and climate change response, including the post-2015 Development Agenda through the proposed Sustainable Development Goals (SDGs) and the Intended Nationally Determined Contributions (iNDCs) due of all Parties by the time of Decembers COP in Paris. Upon finalization of these goals and commitments, a review and alignment of Colombia's CPF outcomes will be undertaken.



Country Overview

Socio-economic

Colombia has seen over a decade of sustained economic growth, with an average annual GDP growth rate of 4.2% between 2000 and 2014, largely driven by a boom in the extractive industries (oil and coal) and combined with strong domestic consumption and investment. This impressive economic performance is underpinned by sound macroeconomic and fiscal policies, and a marked improvement in national security. The fall in the international price of commodities, however, particularly of oil and minerals, is forcing the Colombian economy to consider alternatives¹. In 2014, the main engines of growth in the Colombian economy were the sectors of construction (including infrastructure), mining, agriculture and services². Official projections for economic growth in 2015 have been revised down from 4.2% to 3.2%, but are still above the regional average³. Expected private and public investment growth rates have been revised down too from the previous period, although the total investment rate is expected to be around 29% of GDP by 20184. Colombia is now confronting the effects of a transition from heavy reliance on extractive industries, and is seeking new engines to sustain economic growth, in particular agriculture, manufacturing and tradable services. While foreign direct investment has almost doubled between 2008 and 2013, the expectation is that this will be lower now that international oil prices have declined.

Colombia's strong economic performance in the recent past has contributed to a significant reduction in overall poverty from 49.7% of the population in 2002 to under a third (28.5%), only twelve years later⁵. Extreme poverty also fell from 13.8% in 2002 to 8.1% in 2014, with which Colombia met targets 1 and 2 of the Millennium Development Goal 1. Despite being among the most dynamic economies in Latin America, income

inequality fell slightly in the GINI index from 57.2 to 53.8°. As a result, Colombia has one of the highest income inequalities in Latin America, and among other upper middle-income countries. In addition, the reduction of poverty in the country is uneven; for example, extreme poverty in rural areas (18%) is six times higher than in the 13 largest metropolitan areas in the country (2.7%)7. Indigenous and afro-Colombian communities, alongside population affected by the armed conflict, such as the displaced population, suffer the worst poverty8.

Employment rates have improved considerably. Between 2002 and 2014, the unemployment rate in Colombia fell from 15.6% to 9.1%. In the first quarter of 2015, the national unemployment rate was 9.8%, with women (13.1%) more likely to be unemployed than men (7.4%)¹0. However, the size of informal sector is very high, in part owing to a high tax burden on employers. A 2014 survey, conducted in the 13 largest cities in Colombia, showed that 48.7% of Colombian workers are employed outside the formal sector, which excludes them from several social benefits and services, as well as formal sources of credit. This rate of informal employment is higher in the rural areas (70%), and even more so in the agricultural sector (86%).

Colombia has a high degree of urbanization, with 75% of the population living in urban areas; by 2020 this figure is expected rise to 78%¹¹. Since 1997, over 5 million people have been displaced by the armed conflict, and have settled hastily in urban areas, exacerbating urban concentration. This poses economic, social and environmental challenges, particularly since this process has been disorganized, often invading protected areas, or in peripheral areas that lack proper transport infrastructure and basic sanitation services¹².

Bogotá.

 $^{^1}$ In 2014, the oil sector contracted by 2%, compared with an average growth of 12.9% in the previous six year period. ANDI. (2014). Colombia: Balance 2014 y perspectivas 2015. Bogotá.

²DANE (2014). PIB trimestral por rama de actividad económica, IV Trimestre. Bogotá.

³The OECD and ECLAC have forecasted an average rate of growth for the region in 2015 between 2 and 2.5%. OECD, United Nations, CAF (2014) "Latin American Economic Outlook 2015: Education, skills and innovation for development". Paris.

 $^{^4\}text{DNP}$ (2015), Basis of the National Development Plan 2014 – 2018 "Todos por un Nuevo País". Bogotá.

⁵DANE (2015) Pobreza Monetaria y Multidimensional: resultados 2014. Bogotá.

⁶DANE (2015) Statistics Bulletin - Mar 2015. Bogotá.

⁷ Ibi

 $^{^8}$ Colombia's population totaled 46.6 million in 2012. About 10% of the population is Afro-Colombian and the share of indigenous people is around 3%.

⁹DANE (2015) Statistics Bulletin - Mar 2015. Bogotá.

 $^{^{10}}$ DANE (2015) Mercado Laboral por Sexo - Trimestre enero - marzo de 2015. Bogotá. 11 DNP (2015) Bases del Plan de Desarrollo 2014-2018 "Todos por un Nuevo País".

¹² OECD/ECLAC (2014). OECD Environmental Performance Reviews: Colombia 2014. Paris.

Environmental

As one of the world's top seventeen megadiverse countries¹³, Colombia has an exceptional wealth of natural resources and biodiversity in terms of land, freshwater, fisheries, forestry and mineral resources. However, this patrimony is under increasing threat from the economic drive of the extractive industries (both regulated and illegal), extensive livestock farming that pushes the agricultural frontier, input-intensive agriculture, infrastructure development, and unplanned urbanization. Moreover, the internal armed conflict has restricted the control and adequate management of protected areas for decades, and the erosion of the rule of law in rural areas and marginal regions has inhibited measures to properly address environmentally damaging activities, such as illegal mining, illegal logging and illicit crop cultivation.

While overall CO2 emissions are low and individual emissions per capita are below the world average¹⁴, Colombia's GHG emissions are likely to be following an upward trend¹⁵. The results of 2010 of the most recent GHG inventory showed that agriculture and land use change 58.2% continue to be the largest source of CO2eq emissions, followed by energy 31.8%, industry 3.8%, and solid waste 6.1%.¹⁶

In April 2014, the OECD published its first Environmental Performance Review of Colombia, as part of the country's accession process. The review made a series of specific recommendations to bring Colombia closer to OECD best practices, and stressed the need to steer the economy in a more equitable and environmentally sustainable direction. Brief descriptions of the issues in Colombia's environmental context, which are of relevance to this CPF strategy, are described below.

Deforestation and Ecosystems Degradation

Half of Colombia's land area is covered with forests (59 million hectares), making it the third most expansive

forested area in South America after Brazil and Peru, and the fifth worldwide, in terms of primary forest coverage (8.5 million hectares)¹⁷. This natural capital is under serious threat, mainly due to deforestation caused by expansion of the agricultural frontier, particularly for cattle grazing, infrastructure development, and mining and wood extraction activities¹⁸. Between 1990 and 2010, Colombia lost 6 million hectares of forest, mostly in the Amazon and Andean regions¹⁹. The rate of deforestation has fallen from 310,000 ha in 2000, to 120,933 ha in 2013 ha, but remains high²⁰. Since deforestation is a dynamic process, new scenarios like peace talks can affect social and economic drivers, making deforestation one of the main challenges for Colombia. Despite efforts by government authorities, illegal logging is prevalent in the country with an estimated 40-50% of all timber harvested illegally, especially in primary forests, which is twice the worldwide trend of 20-25%²¹. Other important ecosystems such as high mountain ecosystems, known as páramos (which supply 70% of the water consumed by the Colombian population²²), and marshlands are also being threatened by agricultural activities, mining and urbanization.

Inefficient Land Use and Land Degradation

Colombia has one of the highest degrees of land concentration in the world, and despite a succession of land reforms, a more equitable land distribution remains a critical political challenge, with significant environmental implications²³. A high concentration of land and low property taxes affects land markets and reduces the incentives for productive investments, and leads to low-productivity livestock grazing or to large tracks of land left idle²⁴. In turn, a large portion of Colombia's land is used for purposes for which it is not best suited for. Cattle grazing, in particular, has become one of the main causes of land degradation and extends across 35 million ha, when only 15 million are suited for this activity. Similarly, agricultural activities are confined within 5.3 million ha, when 22.3 million are suited for this purpose²⁵.

¹³ These countries are defined as countries hosting the largest numbers of endemic species. United Nations Environment Program (2010). *Latin America and the Caribbean: Environment Outlook GEO LAC3*. Ciudad de Panamá.

¹⁴ According to the Draft document of the INDCs for national discussion, based on 2010 GHG data, Colombia only contributes with 0.46% of world total emissions. MADS (2015). Contribución prevista y determinada a nivel nacional en materia de Cambio Climático. Bogotá.

 $^{^{\}rm 15}$ To be adjusted with the Third Communication is released to the public.

¹⁶ IDEAM (2015). National Biennial Update Report (BUR). Bogotá.

¹⁷ FAO. 2010

¹⁸ García, H. (2014). Deforestación en Colombia: Retos y Perspectivas. Bogotá: Publicaciones Fedesarrollo. Bogotá.

¹⁹ IDEAM (2014) Primer Informe Anual sobre Deforestación. Bogotá: MADS, Informe del Estado del Medio Ambiente y de los Recursos Naturales Renovables 2010. Bogotá.
²⁰ Ibid.

 ²¹ OECD/ECLAC (2014), OECD Environmental Performance Reviews: Colombia 2014. Paris.
 ²² El Gran Libro de los Páramos. Retrieved from "El gran libro de los páramos" in

http://www.paramo.org/files/El_Gran_Libro_de_los_Paramos.pdf

 $^{^{23}}$ In 2010, 77.6% of rural property was owned by 13.7 % of the population. (Universidad de Los Andes, 2011)

²⁴ Op.Cit.

²⁵ Ibid.

This continued depletion of the natural resource base is closely linked to sustained high rates of poverty in rural areas, as it makes those livelihoods less productive and more vulnerable to increased climate change and natural disasters²⁶.

Water Resources

Colombia is rich in freshwater resources, with more than 49,000m³ per capita, well above the average in Latin America and the Caribbean (7,200m³)²7. However, the threats to Colombia's water are manifold. There is significant contamination in urban basins, due to rapid population growth and the low coverage of residential and industrial water treatment services, as well as the poor planning and implementation of recycling policies. Only 43% of wastewater is treated before going back to water bodies²8. Rough estimations, show that the agricultural sector is responsible for the highest withdrawal of water (82%), in some cases accessed illegally, and often managed inefficiently²9. Water demand is projected to double by 2019, driven by growing agricultural production, particularly for cattle grazing.³0 Good watershed management has been

restricted to those where strong governance exists, making water supply unreliable to consumers in a large percentage of the municipalities of Colombia. Since the 1990's, however, progress has been made in improving water and sanitation services, and enforcing the protection of *páramos* and the river basins, as well as proper waste management from extractive industries. Other rapidly increasing sources of contamination are chemical contamination due to mining activities, particularly mercury.

Air Quality in Urban Centers

Atmospheric pollution in urban centers has risen as a result of higher rates of motorization, a reduction of the quality, and low energy efficiency of the older bus fleet. This has led to greater human exposure to particulate matter and increased the health-related costs from 0.8% of GDP in 2002 to 1.1% in 2009³¹. Solid particles, are - primarily generated by the use of fuels, particularly diesel. To confront atmospheric contamination, a policy for the Prevention and Management of Air Contamination was established in 2010.

The Case for Green Growth in Colombia

Colombia has a vast supply of natural resources, a relatively diverse economic base, an increasingly educated labor force and a more stable and enabling socio-political context. The country is at an important juncture, with valuable opportunities to develop and strengthen growth drivers that promote long-term economic, social and environmental sustainability. Maintaining resource productivity and cost-efficiency, lowering risks and vulnerability, and mitigating the degradation of environmental quality and natural assets, are development objectives which Colombia can prioritize, while improving wealth, social inclusion and environmental quality in the long run.

Safeguarding environmental health and the preservation of the natural resources base, while reducing poverty and increasing social inclusion, is at the forefront of the decisions to be made by Colombia to ensure a greener growth trajectory. Green growth calls for reflection on long-term considerations when making short-term decisions, as well as the assessment of the full value of natural assets, and negative

externalities on the environment. A greener growth will improve people's standard of living, especially for the poorer and marginalized ones that usually are the victims of the degraded environmental quality and natural resources base. It also serves as a framework to better understand the tradeoffs when choosing development options.

According to OECD, green growth is about*: (i) integrating the natural resource base into the same dynamics and decisions that drive growth; (ii) developing ways of creating economic payoffs which more fully reflect the value of the natural capital into the economy; (iii) acknowledging that investment in natural capital is an area in which public policy intervention is most needed because market incentives are weak or non-existent; and (iv) recognizing that innovation is needed to attenuate tradeoffs that arise between investing in (depleting) natural capital and raising consumption or investing in other forms of capital. Integrating these elements into policy is at the heart of green growth.

* OECD (2011). Towards Green Growth. Paris.

²⁶ Leibovich, J., GGGI Consultant (2014). Propuesta de Crecimiento Verde Inclusivo para el sector Agropecuario y Rural en el Plan nacional de Desarrollo (PND) del Gobierno Nacional (2014-2018). Bogotá.

²⁷ IDEAM (2010). Estudio Nacional del Agua 2010. Bogotá.

²⁸ OECD/ECLAC (2014). OECD Environmental Performance Reviews: Colombia 2014. Paris.

²⁹ Ibio

 $^{^{\}rm 30}$ IDEAM (2010). Estudio Nacional del Agua 2010. Bogotá.

³¹ World Bank (2012) Strengthening Environmental and Natural Resources Institutions, Study 2: Environmental Health in Colombia – An Economic Assessment of Health Effects.

The implementation of this policy could be more effective if complemented with a more comprehensive inventory of national emissions, and upgrades in the network of air quality monitoring. For example, at present, less than half of the environmental authorities in the country have sufficient information to know when air pollution levels merit environmental alerts, and only a few cities have emission inventories³².

Vulnerability to Climate Change

Colombia is highly vulnerable to the effects of climate change, and has one of the highest rates of natural disasters in Latin America, mostly of floods and landslides. This situation is further aggravated by deforestation, slash-and-burn agriculture, and building of population settlements in areas at risk³³. Inundations and landslides caused by *La Niña* event in 2010/11, for example, affected over 3 million people, and the country suffered a punishing economic loss (2% of the GDP in 2010). The devastating effects forced the country to reconsider the relationship between environmental and economic policies. This catalyst resulted in the consolidation of the National System for Disaster Risk Management, and to Colombia's further commitments towards addressing Climate Change.

Governance

The Republic of Colombia is a unitary republic comprising of 1,100 municipalities in 32 departments, and one capital district, Bogota. As a Constitutional democracy, Colombians elect the Head of State and members of Congress to serve a four-year period. The next scheduled popular election will take place in October 2015, to elect Departmental Governors, Delegates to Departmental Assemblies, and Municipal Mayors.

Colombia is one of the most decentralized countries in Latin America³⁴. The 1991 Constitution cemented a long process of decentralization of governance, by devolving many political, fiscal and administrative powers to departmental and municipal authorities. National public expenditure and revenues have been progressively decentralized, and departmental and municipal

authorities set local taxes to raise their own revenues. Two of the most important channels to transfer funds to local authorities are the Royalty Sharing System (SGR) and the General Participation System (SGP).

The incumbent president, Juan Manuel Santos, from the Social Party of National Unity, was re-elected in May 2014, with 50.9% of votes in a run-off election, extending his presidency until August 2018. The political priorities of the Santos Administration have been reflected in the National Development Plan 2014 – 2018 "Todos por un Nuevo País", which include peace, education and social equality. Peace negotiations with the FARC guerrilla are progressing and the signature of an agreement is expected for 2016.

In May 2013, during the first Santos Administration, the Organization for Economic Cooperation and Development (OECD) invited Colombia to initiate the route for accession to membership status, and shortly thereafter approved a roadmap to guide this process. Over the past two years, OECD committees have been engaged intensively with Colombian authorities, conducting technical reviews of the country's governance, policies and performance, and proposing recommendations to bring Colombia closer to OECD instruments or best practices³⁵. This collaboration has contributed to the discussion of issues that are now reflected in the National Development Plan 2014–2018, approved by Congress through the Law 1753 of 2015.

Environmental Governance

The 1991 Constitution, and the 1993 Environmental Management Law, established a solid framework for modern and decentralized environmental management. The Ministry of Environment and Sustainable Development (MADS), drafts environmental policies and delegates their implementation to 33 Autonomous Regional Authorities (CARs) operating at a regional level throughout the country. As territorial environmental authorities, the CARs play a fundamental role in environmental enforcement and management, but they often lack adequate planning and implementation capacity, several are underfunded, and their performance is not subject to strict controls³⁶. More recent institutional developments have taken place in the interest of adopting

 ³² OECD/ECLAC (2014). OECD Environmental Performance Reviews: Colombia 2014. Paris.
 33 There is an average of 600 natural disasters reported every year in Colombia (World Bank, 2014).

³⁴ OECD (2015) "Fiscal Decentralization in Colombia: New Evidence Regarding Sustainability, Risk Sharing and "Fiscal Fatigue", Paris.

³⁵ For example, see: Economic Survey (OECD, Jan 2015), Colombia: Policy Priorities for Inclusive Development (OECD, Jan 2015), OECD Environmental Performance Reviews: Colombia 2014 (OECD, Apr 2014).

³⁶ Ibid.



and implementing the increasing climate change agenda. In 2011, Colombia's National Council for Economic and Social Policy (CONPES), approved the *Institutional Strategy for the Articulation of Policies and Actions on Climate Change in Colombia*, a policy that includes an institutional strategy, a funding strategy, and the policy basis to develop

3 main technical strategies: national adaptation plan, low carbon development strategy and REDD+ strategy³⁷. This document has served to provide an institutional framework through which roles and functions of the various government agencies working on climate-related issues have been agreed.

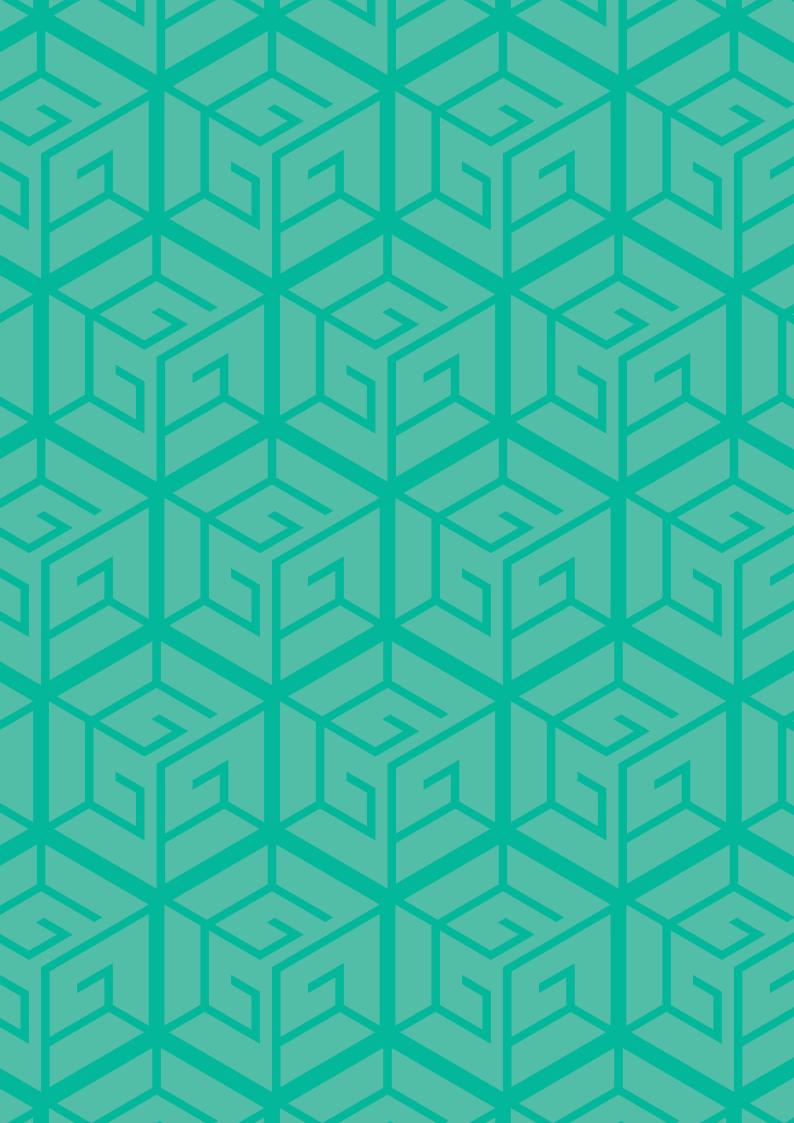
 $^{^{\}rm 37}$ Meirovich, H. (Green Growth Best Practices, 2014). Development of CONPES 3700 – Institutional Strategy for the Articulation of Policies and Actions on Climate Change in Colombia.

Colombia at a Glance

Population; (2015, projected DANE) Area (sq. km); (IAC)	48 million 2,070,408		
GDP (current US\$); (2013, WB) GNI per capita, PPP (current US\$); OECD DAC classification	378.4 billior 7,590 Upper Middle In		
Percentage of population under the national poverty line; (2014, DANE)	28.5%		
Human Development Index; (2014, HDR)	0.711, ranked 98 th		
CO ₂ eq emissions (metric tons per capita); (2015, MADS) ³⁸	4.5		
Greenhouse Gas Emission Intensity; kg per USD of GDP in 2010 (at 2005 purchasing power parities) (IEA)	0.47		
Forest area (% of land) (2010, FAO) Rate of deforestation (ha/year); (2014, IDEAM)	55% 120,934		
Land in cattle grazing (% of land area); (2006, FEDEGAN) ³⁹	33%		
Number of cattle heads per hectare; (2013, Censo Nacional Agropecuario)	0.689		
Estimated increase in the use of energy; per year between 2010 and 2025; (2007, UPME)	2.3%		
Share of renewable electricity (%); (2012, UPME)	4.72%		
Tons of freight transported by road; Tons (equivalent to 73% of total volume); (2013, Anuario Estadístico Ministerio de Transporte)	220,309,000		
Energy use by Sector; (UPME, 2014)	Unidentified Construction Agriculture and mining Transport Industrial Business and Official Residential Total (TJ)	2% 1% 7% 44% 21% 6% 19% 1.094.136	
Availability of freshwater; m³ per year per capita; (IDEAM, 2010)	49,000 m³ per year ı	per capita	
National water demand per sector	Services Industry Livestock Aquatic Domestic Energy Agriculture TOTAL	528 m ³ 1.577 m ³ 2.220 m ³ 2.584 m ³ 2.606 m ³ 6.976 m ³ 19.386 m ³ 35.877 m ³	

³⁸ MADS (2015). Contribución Prevista y Determinada a Nivel Nacional en Materia De Cambio Climático. Anteproyecto para difusión nacional. Bogotá.

³⁹ FEDEGAN 2006.Plan Estratégico de la Ganadería Colombiana 2019





Colombia National Priorities

The importance of green growth, as an approach to economic and social development, has gained momentum in Colombia. This is not only due to the international commitment made by Colombia as signatory of the OECD's Green Growth Declaration (2009)^{40,41}, but also because of the evidence that suggests that Colombia's natural resources are being depleted at a faster rate than they are being restored. This economic growth model is unsustainable from an environmental standpoint, and contributes to a decline of the economy's productivity and competitiveness. At the same time, there is increasing awareness of the actual costs of pollution (on human health, for example), and the risks of ignoring the economic, productive and social effects of climate change, which disproportionally affect the living conditions of the most vulnerable sections of society 42.

The National Planning Department (DNP) is responsible for leading the formulation and implementation of the country's economic, social and environmental strategic vision, including the formulation of Colombia's quadrennial National Development Plans (NPD), the design and evaluation of public policies and the management and allocation of public expenditures. According to the NDP 2014–2018, a green growth development model is an opportunity to enhance the synergy between economic growth and the environment, and generate wealth and wellbeing for all Colombians today, and in the future, through increased efficiency, lower environmental impacts, and greater resilience to a changing climate⁴³.

To make this vision a reality, a crosscutting Green Growth Strategy was included in the NDP 2014–2018 to hasten the pace of transformational change in the country's path towards sustainable development. By incorporating green growth targets in several productive sectors, this strategy engages the leadership of the relevant ministries, as well as other State institutions at national and subnational levels. This Congressionally approved strategy positions the discussion on green growth in Colombia beyond the

realm of the environmental sector and into a strategic, cross-cutting issue affecting economic growth practices going forward.

The Green Growth Strategy, included in the NDP 2014–2018, outlines three overall objectives, each with their respective strategies:

Objective 1: Moving towards low-carbon sustainable growth.

- ✓ Strategy 1: Steer economic sectors towards a more efficient, low-carbon path.
- ✓ Strategy 2: Improve sectorial management to reduce the negative impact of economic development on health and the environment.

Objective 2: Efficient use and protection of natural capital and improvement of environmental quality.

- ✓ Strategy 1: Ensure the sustainable use of marine and land-based natural capital.
- ✓ Strategy 2: Integral territorial planning for sustainable development.
- ✓ Strategy 3: Improve environmental quality, by strengthening the environmental performance of the productive sectors, which in turn improves their competitiveness.
- ✓ Strategy 4: Consolidate a policy framework on Climate Change, and integrate it to environmental, territorial and sectorial planning.
- ✓ Strategy 5: Strengthen institutions and governance to optimize: (i) the performance of the National Environmental System (SINA); (ii) education and investigation related to the environment; and (iii) the generation of environmental information and knowledge.

Objective 3: Achieve resilient growth and reduce vulnerability to disaster risks and climate change.

✓ Strategy 1: Strengthen the risk management processes: Knowledge, Reduction and Management.

 $^{^{\}rm 40}$ OECD. (2009). Declaration on Green Growth [C/MIN(2009)5/ADD1/FINAL]. Retrieved from: http://www.oecd.org/env/44077822.pdf

 $^{^{\}rm 41}$ OECD. (2015). OECD. Retrieved from Green growth and countries: http://www.oecd.org/greengrowth/countries.htm

⁴² DNP and GGGI Colombia (2014) "Hoja de ruta para la implementación de un modelo de crecimiento verde inclusive compatible con el clima del país". Bogotá.

⁴³ DNP (2015) National Development Plan 2014 - 2018. Bogotá.

Colombia National Priorities

- ✓ Strategy 2: Strengthen development planning with criteria on climate change adaptation.
- ✓ Strategy 3: Reduce existing disaster risks, the manifestation of new risks, and lower the impact of disasters on sectores.

The Green Growth Strategy in the NDP 2014-2018 is articulated with other policies for sustainable development, such as the Disaster Risk Management System, the National Climate Change Adaptation Plan, Colombia's Low Carbon Development Strategy, the Low-deforestation Amazon Vision, the Initiative for Sustainable Colombia (forthcoming) and most recently, the Intended National Determined Contributions (iNDCs). All these policies will be critical in providing input in the design and implementation of a climatecompatible, sustainable growth model that becomes the framework for national economic policy. International commitments, with specific targets, have been defined mainly by the iNDCs (published in September of 2015), in which the Government of Colombia commits to a 20% reduction of GHG emissions from the Business as Usual level by 2030. This will imply reducing total estimated emissions from 335 to 268 (Mton CO₂eq), or an

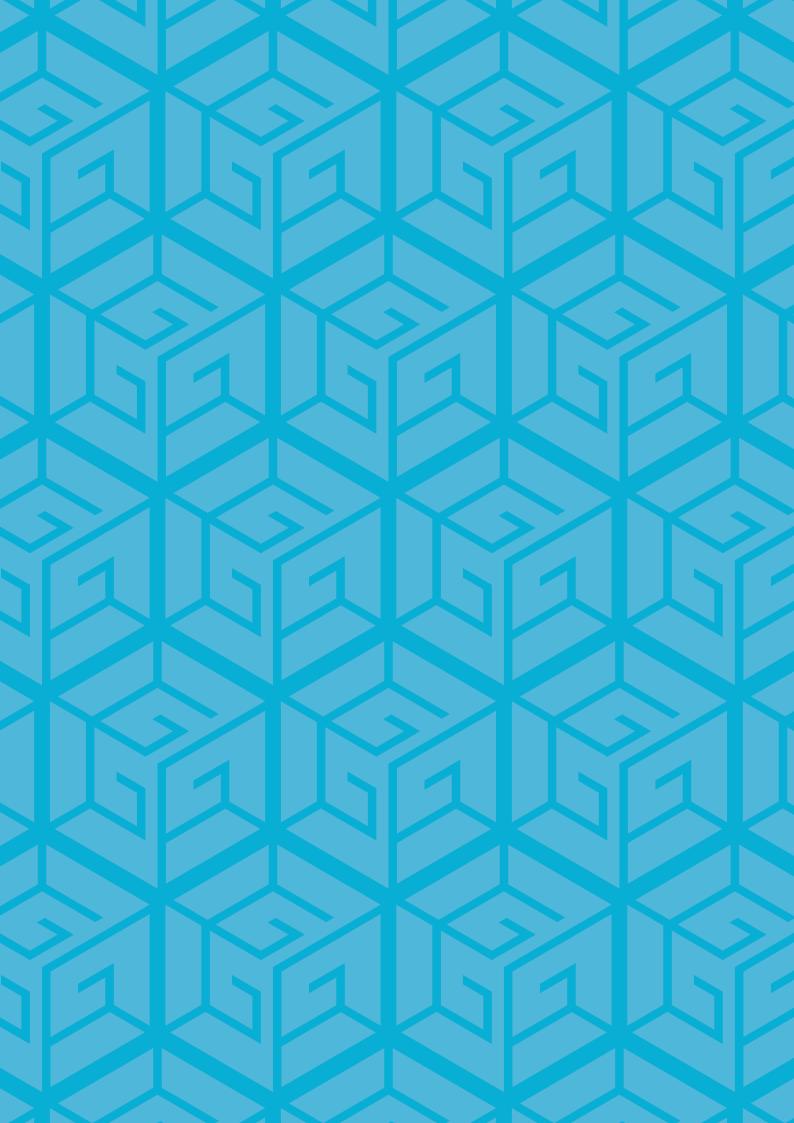
estimated per capita emissions of 5.8 to 4.6 (Ton CO2eq/capita) by 2030. If international support is provided, this target could be increased to $30\%^{44}$.

National Development Plans are adopted every four years; therefore targets proposed are limited to this timeframe. In this sense, the DNP recognizes that the Green Growth Strategy in the current plan is only a first step in a much longer process for the discussion and formulation of a long-term green growth policy with consequent targets. For this purpose, the National Development Plan 2014-2018 includes an article that mandates the government to "define a long-term green growth policy that will determine objectives and targets for sustainable economic growth."

In addition to the objectives defined in this Green Growth Strategy, Colombia has also set a route for International Cooperation 2015 - 2018 (lead by APC-Colombia), which establishes three priorities: i) Conservation and Environmental Sustainability; ii) Sustainable Rural Development and iii) Peacebuilding. All three are definitive for achieving a long-term view of green growth in Colombia.

⁴⁴ Government of Colombia (September, 2015). Intended National Determined Contributions (iNDCs). Retrieved from: http://www4.unfccc.int/submissions/indc/ Submission%20Pages/submissions.aspx.

⁴⁵ Ibid. Article 170.





GGGI Engagement in Colombia

Engagement to Date

GGGI's engagement in Colombia began in 2013, with the purpose of advancing aspects of the country's green growth agenda. This engagement is anchored in two levels of intervention: national and territorial. At the national level, GGGI Colombia supports the National Planning Department (DNP) in the development and implementation of the country's Green Growth Strategy, by mainstreaming green growth into the nationwide planning and financing instruments, and specifically within several strategic sectors, namely agriculture, forestry, transport and energy. Underpinning this effort, is Colombia's recent adoption of green growth as a cross-cutting strategy in the NDP 2014 – 2018, and the implementation of the sectorial green growth targets and environmental policy defined therein.

At the territorial level, GGGI has been supporting the formulation of the Amazon Vision, a sub-national Reducing Emissions from Deforestation and Forest Degradation (REDD)+ initiative aimed at achieving net zero deforestation by 2020 in Colombia's Amazon region⁴⁶. GGGI has partnered with the Ministry of the Environment and Sustainable Development (MADS), to tackle deforestation drivers and enhance other low-carbon, development opportunities in the region. The focus of GGGI's intervention has been on technical assistance in the formulation of the investment plan and the establishment of the institutional arrangements needed for its implementation. This initiative makes Colombia a leading country in REDD+ readiness and implementation, and can serve as a source of useful experiences for South-South collaboration. Through this experience, GGGI is adding to the already existent expertise in Payment for Performance schemes in other countries, and in the implementation of REDD+ at subnational level.

Results and Upcoming Activities

Green Growth Planning and Implementation – During 2014, GGGI increased capacity within the DNP to adopt green

growth as a planning framework and supported the technical discussions and documentation for the green growth chapter included in the current NDP 2014–2018. It also supported the preparation of sector-level green growth options analysis and target setting in the energy, transport and agriculture sectors. In GGGI's current Biennium (2015-2016), collaboration focusses on (i) the implementation of sector-level green growth targets, as defined in the NDP, for these three strategic sectors, and (ii) mainstreaming green growth into a long-term policy with its respective planning and financing instruments.

Amazon Vision - In 2013, a joint declaration was signed between the governments of Colombia, Germany, Norway and the United Kingdom to support Amazon Vision as a low-carbon development approach to Colombia's Amazon forests. Potential resources could amount to approximately USD 100M. In 2014, key government institutions and GGGI worked steadfastly to develop an investment plan that prioritizes activities that tackle the drivers of deforestation in two key departments of the region, Caquetá and Guaviare, in first phase of implementation. This process will be extended to the Departments on Putumayo, Guainía, Vaupés and Amazonas in 2016/17. In the last trimester of 2014, GGGI facilitated the agreement between the Government of Colombia and participating donors, outlining the basic conditions and critical steps required to finalize and launch a payment-for-performance scheme under the German Development Bank's (KfW) REDD+ Early Movers program. This scheme is expected to enter in operation in early 2016.

During the first months of 2015, GGGI supported the inclusion of Amazon Vision as key initiative to meet deforestation targets in the new NDP 2014–2018, and has guided the formulation of the draft investment plan to address drivers of deforestation for the Amazon Region, particularly the departments of Caqueta and Guaviare. This plan is now adopted by the key stakeholder entities responsible for its implementation, and will become the foundation for future engagements with donors and other funding partners.

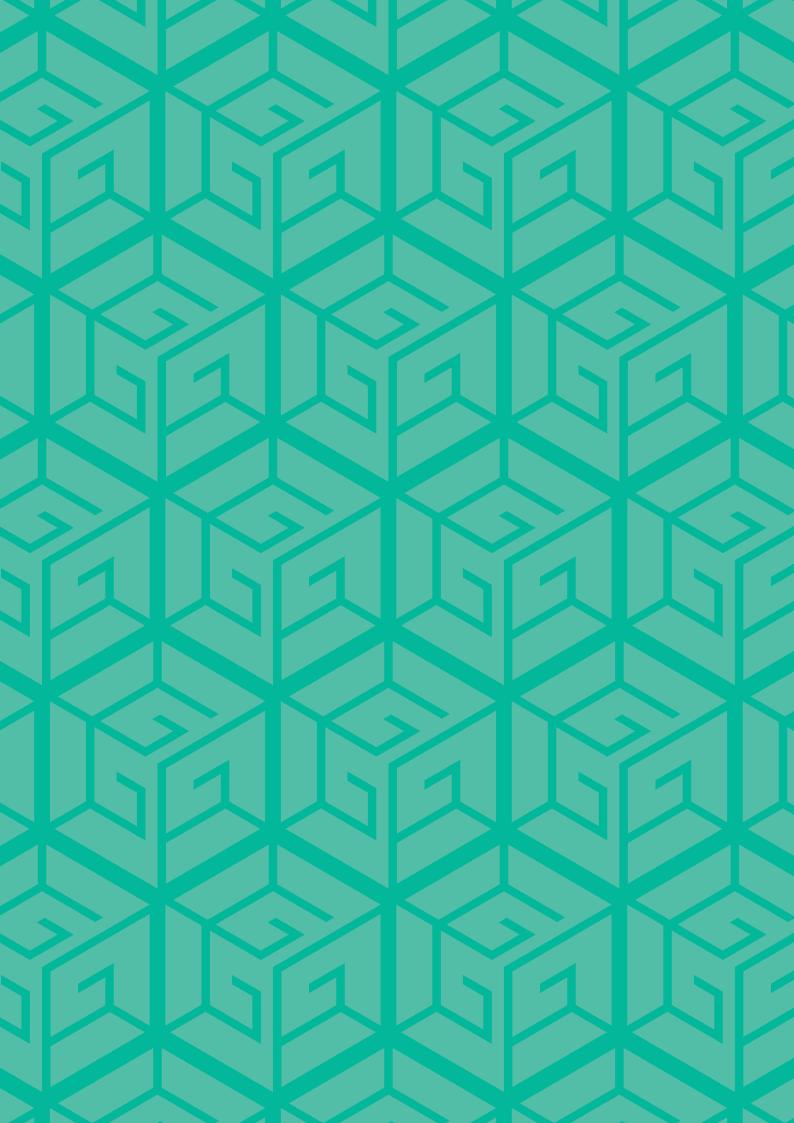
the earlier UN-REDD agenda, because it goes beyond deforestation and forest degradation, and includes the role of conservation, sustainable management of forests and enhancement of forest carbon stocks.

⁴⁶ The REDD+ initiative awards a financial value for the carbon stored in forests, offering incentives for developing countries to reduce emissions from forested lands and invest in low-carbon paths to sustainable development. It complements

Finally, GGGI continues to provide essential technical and strategic guidance for the definition of the institutional arrangements required to operationalize Amazon Vision.

Green Investment Services (GIS) Risk Ex and Energy Efficiency financing support - GGGI has identified energy efficiency as a key area to engage with private sector to enhance the volume of bankable projects seeking financing and getting investments going to clean energy technologies and energy efficiency. Colombia has been selected as a pilot program for launching a Risk Mitigants Information Exchange tool, to create a user friendly web-based product that will facilitate informed decision making for project developers contemplating investment opportunities into energy efficiency and renewable energy projects. In addition, GIS is exploring some potential areas of collaboration in which GGGI could support government authorities to promote renewable energies and energy efficiency. Both of these efforts will continue in 2015 and through 2016 and should lead to additional activities in the coming years.







Colombia's Country Planning Framework Analysis

GGGI's Country Planning Framework for Colombia (CPF) was developed in a series of stages aligned with the Institute's Global Strategic Plan. The work began with a situational analysis of the sectors with which GGGI has engaged with during the last two years, which identifies the main challenges and opportunities for green growth in each sector and the sector-based targets set by the Green Growth cross-cutting strategy in the NDP 2014-2018. The situational analysis was followed by a set of bilateral sectorial consultations on possible areas of focus for GGGI's collaboration. The consultations, between GGGI and representatives from five sectors⁴⁷, were used to adjust the situational analysis, refine definition of issues, and identify common problems. These meetings were also an opportunity to consolidate alliances with the institutions that will be instrumental in implementing Colombia's green growth agenda.

The third stage of the CPF process was a two-day workshop held in May 2015 in Bogotá, which was attended by 30 participants from several Ministries and other governmental agencies. Participants were challenged to validate their sector's situational analysis, and then prioritize the areas where they would like to see collaboration with GGGI. The prioritized areas of intervention were subsequently screened by the GGGI country team, selecting those where GGGI has a mandate⁴⁸, position and capacity to act. Finally, concrete interventions for each area were defined. The combination of careful context analysis, bilateral sectorial consultations, and the validation of the strategic priorities, highlighted several areas of intervention and points of entry for GGGI in Colombia.

Structural Challenges to Green Growth in Colombia

The sectorial analyses and consultations highlighted several common issues confronting a vision for green growth in Colombia. First and foremost, the concept of green growth is relatively new in Colombia, and has yet to be mainstreamed across the governmental and the private sectors, and among public opinion. As a result, the level of understanding how green growth combines environmental sustainability with economic growth, poverty alleviation and social inclusiveness is low. Secondly, there is a tendency towards inertia from decision-makers both in the public and private realms, largely as a result of the struggle between short and long-term objectives, which makes it more difficult to adopt a growth model that requires a long-term perspective. Thirdly, there is a misalignment between the economic sectorial policies and the country's aspirations on environmental performance, revealing poor inter-sectorial coordination. Finally, there is a general sense of ineffectiveness in the existing measures and instruments that would promote green growth, combined with a lack of adequate information or indicators to improve policy decisions.

On the basis of this structural context and taking into account the inputs from the CPF analysis, GGGI's Colombia team and our Colombian counterparts identified three main challenges where GGGI's comparative advantage can best be applied:

- 1 Weak leadership, institutional drive and capacity to advance green growth.
- 2 Unsustainable practices and inadequate sectorial policies reduce long-term competitiveness in strategic economic sectors (transport, energy and agriculture) and territories.
- 3 Failure to evolve the forestry sector's potential as an engine of green growth.

Weak Leadership, Institutional Drive and Capacity to Advance Green Growth

Integrating sectorial goals within the Green Growth Strategy in the NDP has been the most significant step made by Colombia thus far in considering economic growth and environmental objectives at the same level of decision-making. If Colombia wants to see

 $^{^{\}rm 47}$ Agriculture, energy, environment, transport and national planning.

⁴⁸ GGGI's mandate is defined in its GGGI Strategic Plan 2015 – 2020: Accelerating the Transition to a New Model of Growth. GGGI, November 2014.

transformational changes in growth opportunities and a development path that is low-carbon, resilient and sustainable, the scope of the current targets defined in the NDP are narrow. Furthermore, as the recent OECD review of Colombia's environmental performance asserts, existing green growth oriented policies do not constitute a coherent and comprehensive green growth policy framework⁴⁹. Indeed, the mandate to formulate a long-term green growth policy is within the current NDP, and represents a critical task for the Colombian government. The development of this policy will require a sound understanding of drivers of green growth and how to monitor and assess them.

The implementation of the current Green Growth Strategy is in its initial stages, and faces common challenges related to the involvement of high-level decision-makers, and the inter-sectorial coordination and cooperation that green growth inherently calls for. Many existing coordination mechanisms, such as interministerial and inter-sectorial agendas, are not always effective. Hence, most public policy and investment planning takes place at the sectorial level, with very little integration of considerations derived from assessments related to trade-offs between various interventions and policy options, nor of the aggregated, long-term impacts associated to these. Consideration on how these plans and policies get implemented at the territorial level is also limited, creating a big disconnect between what is promised at the national and international level, versus what gets implemented at the local level.

Although Colombia has a carefully designed Environmental Information System, which has to be enhanced by strengthening its economic and social components and consolidating environmental accounting⁵¹.

Currently, the Colombian government is being supported by the "Accounting Wealth and Valuation of Ecosystem Services" initiative or WAVES (World Bank), in strengthening institutional capacities for the development of environmental accounts, specifically those related to water, forests and ecosystems; and the integration of information derived from these accounts into decision-making tools. This is a step forward in the right direction, and one which will contribute to long-term green growth planning and implementation.

This lack of systematic analytical instruments to assess where the country stands in terms of green growth, or how policies are effectively advancing towards it, has to be overcome. The linkage between economic indicators used for macro-economic policy and green growth indicators should be built, including those that reflect resource productivity, environmental quality, competitiveness and green jobs, to mention some. Credible information and solid analytical evidence on the benefits of green growth options before it has incidence in sector-level strategic decisions and plans is indispensable. Likewise, public and political support, necessary for the adoption of a green growth model, will also depend on the availability of this type of evidence.

Any advance towards green growth has to be supported by the alignment of private and public financing towards greener growth options, particularly in areas of clean energy, energy efficiency, sustainable productive systems, and sustainable transport, among others. In light of this, efficiency in environmental public spending is an important condition to attain long-term, green growth results. Public expenditure efficiency, alignment with development objectives and a revision of taxes and subsidies to discourage negative externalities, is a solid foundation for a greener growth development framework. This will require adjustments in instruments such as territorial transfers, compensation mechanisms, and public investment allocations.

Some key instruments to align public financing with green growth objectives includeare: standards and technologies selected in infrastructure investment projects, green growth criteria into public investment projects, and the coordination of environmental investment with other mechanisms of public expenditure⁵². Other instruments for public investment allocation, such as the Environmental Compensation Fund (FCA), the Compensation for the loss of biodiversity Fund, and the General Royalties System, face challenges in prioritization, efficiency and results monitoring. To advance towards a greener growth, these instruments will have to be improved.

The Colombian government is already promoting intersectoral coordination through a National System for Climate Change (SISCLIMA). Led by the National Planning

⁴⁹ OECD/ECLAC (2014). OECD Environmental Performance Reviews: Colombia 2014. Paris.

⁵⁰ Ibid.

⁵¹ Ibid



Department (DNP) this system articulates ten ministries at the technical political level, to provide guidance on the implementation and evaluation of policies, plans and programs related to climate change. Within the SISCLIMA, a Financial Management Committee is responsible for guiding the development of a national financial strategy for climate change, including financial strategies developed at national, sectoral and regional level. This effort indeed will help optimize the use of international and national climate funds to address national mitigation and adaptation priorities. It will also help leverage traditional financing towards green growth goals. Furthermore, Colombia is currently one of the recipient countries of the Climate Finance Readiness project financed by the Government of Germany and implemented by UNDP, UNEP and WRI. This readiness effort will be focusing on i) strengthening national capacities, ii) financing information and monitoring, iii) project development and iv) capacity building for

financial institutions. As a result of this process, Colombia would be enabled to access international funding through performance-based mechanisms as well through international financing institutions such as the Green Climate Fund.

Long-term competitiveness in strategic economic sectors reduced through unsustainable practices and policies

In the process of mainstreaming green growth in Colombia, it is essential to involve the sectors that are strategic to the economy, that can provide a basis for long-term greener growth potential, and that government counterparts and GGGI have prioritized during the CPF process. Considering GGGI's mandate and comparative advantages in its four thematic areas, and positioning so far in Colombia, the primary areas of intervention are

within the transport, energy and agriculture economic sectors⁵³. A fourth sector, namely forestry, will be addressed in the following section.

Transport

The transport sector is one of the most strategic in the economy, because of its impact on most productive activities. Moreover, this sector is fundamental in Colombia's Strategy for Low Carbon Development, since it is the largest consumer of energy, and is responsible for 12% of the total greenhouse gas emissions (GHG)⁵⁴ of the country. There are two areas in this sector where interventions from a green growth perspective are possible: freight logistics and urban mobility.

Freight Logistics

Colombia's road network infrastructure is insufficient to meet the country's needs and is highly vulnerable to extreme weather associated with climate change⁵⁵. Despite these shortcomings, a growing percentage of the country's freight is transported by road (70% of total volume). This trend is unsustainable, given that road freight transport is expensive, a sizeable energy consumer, and an important source of Colombia's greenhouse gas emissions⁵⁶. Indeed, the cost of Colombia's domestic freight transport is among the highest in the world, which has significant impact on the productivity and competitiveness, particularly in exportoriented economic sectors⁵⁷.

To address these challenges, the Colombian government has a number of initiatives to modernize transport logistics, eliminate bottlenecks, and adopt multimodal transport systems. This includes increasing investment in transport infrastructure, but no longer prioritizing shorter distances and higher speeds, but rather focusing on interventions that have lower environmental impact, and higher energy and cost efficiency. These ambitions are included in the NDP 2014 - 2018, and are articulated with instruments such as the National Logistics Plan, the Multimodal Transport Plan, and the restoration of navigability of the Magdalena River.

Urban Mobility

Recent trends in transport project a rise in demand for freight and passenger transport, between 3 and 4% per year. Private vehicle usage, particularly motorcycle use, is expected to rise by more than 10% per year. While 50% of journeys occur in public transport, this percentage is falling as a result of the significant rise in motorcycle journeys (212% increase between 2000 and 2010)⁵⁸. Given the concentration of vehicles in urban areas, it is estimated that almost half of the total GHG come from urban areas, and these would rise substantially with higher levels of motorization. There is a social dimension to this in that Colombia has seen an increase in the mortality rate due traffic accidents by 1% per year between 2004 and 2013⁵⁹.

To respond to the pressures of motorization, and address the ensuing rise in congestion, contamination and accidents, the government is providing financial and technical assistance, on a national and subnational level, to modernize and improve public transport with intelligent transport systems to increase efficiency. It is also promoting the participation of sustainable modes of organized transportation that facilitates public, low-cost mobilization options. In practice, city authorities are finding that there are institutional and financial complications when implementing these types of service provisions, which can only be addressed if the entities and private companies responsible for managing logistical and contractual operations are technically and administratively strong.

Energy

The energy mix in Colombia is comparatively "green", with hydropower accounting for 67% of all electric energy in 2013. Although this makes the matrix relatively low in carbon emissions, it also makes Colombia vulnerable to the effects of climate change. This exposure could encourage an adoption of more reliable, relatively cheap energy sources in the future, mostly coal-based. Based on the registry for energy supply projects by September 2014, 88.7% are hydropower based, followed by 7.8% of thermal. This gives the impression that the diversification

 ⁵³ GGGI's thematic areas are: Water, Land Use, Energy and Sustainable Cities
 ⁵⁴ Amounting to 20 million tons of CO2 equivalent in 2009. Hidalgo, D., GGGI Consultant (Nov 2014). Crecimiento Verde Inclusivo en el sector del Transporte en Colombia. Bogotá.

 $^{^{55}}$ For example, damages to transport infrastructure experienced during the Niña event in 2010-2011 represented losses of 0.8% of GDP. Ibid.

 $^{^{56}}$ In 2009, road freight transport was responsible for 90% of the transport sector's greenhouse emissions, and consumed 35% of oil-derived products (transport fuels). Ibid.

 ⁵⁷ OECD/ECLAC OECD Environmental Performance Reviews: Colombia 2014, (2014)
 ⁵⁸ Hidalgo, D., GGGI Consultant (Nov 2014). Crecimiento Verde Inclusivo en el sector del Transporte en Colombia. Bogotá.

⁵⁹ Instituto de Medicina Legal y Ciencias Forenses (2013). *Comportamiento de muertes por accidentes de transporte 2013*. Bogotá.

of Colombia's matrix under a "business as usual" scenario is likely to create a more carbon-intensive matrix in the long run. 60 The NDP 2014-2018 highlights the strategic need to diversify the country's energy mix, and proposes the evaluation of mechanisms to encourage investment in technological alternatives to reach a more reliable balance of energy sources. Furthermore, these initiatives will take into account OECD's recommendations to integrate low carbon intensity options, such as renewable energy sources, which has the potential to grow considerably in Colombia. In line with the proposed sustainable development goal 7, the NDP includes the target of ensuring access to electrical energy for all by 201861.

Energy Consumption and Energy Efficiency
During the period 2010–2025, overall energy
consumption is expected to rise by 2.3% per year⁶²,
slightly lower than the annual GDP growth rate. However
is estimated that only 40% of the energy produced is used,
with nearly 60% of energy losses, equivalent to 5,200
million USD. In 2014, Colombia's demand for electric
energy grew at its fastest rate in the last decade (4.4%),
and consumed 63,571 GWh, led by the 5% increase
in the demand from the regulated market (residential
and small business sectors). Electric energy demand is
primarily coming from the residential (46%), industrial
(30%) and commercial (23%). Based on potential energy
consumption scenarios defined by UPME, a possible
reduction of 8% in electricity could be achieved by 2020⁶³.

The government has promoted policies, including tax incentives that favor energy efficiency. These efforts are complimented with international cooperation funds, such as the United States Agency for International Development (USAID), the World Bank, and United Nations Industrial Development Organization (UNIDO), as well as private finance available for the same purpose. Despite the availability of funds and lines of credit, businesses are not using them to the extent expected.

There is a mix of reasons for this slow uptake of incentives: energy efficiency is not considered part of the "core business model" of companies. Rather, it is seen

as an operational issue, not a strategic and nor a key factor for competitiveness or rise in profits. For these reasons, it is not a priority at the management level. In contrast, more attention is given to the issue of energy tariffs. These barriers from the private sector side are exacerbated by the lack of technical capacity to assess, gauge and structure energy efficiency projects, both in the public and private sectors. Competencies such as the evaluation of projects, risk assessments, process engineering and ISO50001 regulations, measure of carbon footprint, and cost-benefit analysis, are neither widespread nor strong through companies or institutions. This capacity gap prevents energy efficiency projects from reaching sound bankable stages, which in turn makes financing more limited.

Non-conventional Renewable Energy (NCRE) NSE only amount to 4.72% of renewable energy in Colombia, despite a reduction in the cost of NSE technologies worldwide, and a clear potential for growth in this area. NSE are expected to play a role in the ambition to provide electricity to 100% of the country by 20178. NSE account for 20% of electricity generated in non-interconnected zones, and the rest comes from diesel generators or small hydropower plants. The government decreed Law 1715 in 2014, to increase the use of NCRE, improve energy efficiency, reduce GHG and improve the reliability of energy supply. Some of the instruments proposed by this law include (i) the establishment of the Fund for Non-conventional Sources of Energy and Energy Efficiency (FENOGE) and (ii) the promotion of privatepublic initiatives for the development and management of programs and projects to encourage energy efficiency. 65

Land use

According to the Rural Mission, which serves as a think tank on rural development under the leadership of the DNP, Colombia's poverty gap between the urban and rural areas has grown in the last decade. Rural poverty is partially explained by the low levels of income generation from agricultural activities, which is reflected in the poor performance of this sector in Colombia⁶⁶. In the last 15

⁶⁰ Rodríguez, J., GGGI Consultant (2014). Propuesta de Crecimiento Verde Inclusivo para el sector de energía eléctrica en el Plan Nacional de Desarrollo. Bogotá.

⁶¹ The proposed sustainable development goal 7 is: "Access to affordable, reliable, sustainable and modern energy for all" and the goal of the NDP 2014-2018 is "Electrical Energy for All" (page 560)

⁶² UPME (2015). Plan Energético Nacional 2006 – 2025: Contexto y Estrategias, (2007) and UPME, Plan Energético Nacional: Ideario Energético 2050. Bogotá.

⁶³ UPME (2014). *Proyecciones de demanda de energía eléctrica*. Retrieved from: http://www.siel.gov.co/siel/documentos/documentacion/Demanda/UPME_Proyeccion_demanda_energia_electrica_Marzo2015.pdf

 $^{^{64}}$ At present, 94% of the country has access to electricity as part of the National Interconnected System (NIS), and 1.76% lies in non-interconnected zones. Rodríguez, J.(2014) and UPME (2014)

 $^{^{65}}$ UPME (2014b), Plan Indicativo de Expansión De Cobertura Eléctrica 2013 – 2017. Bogotá; and Law 1715, 13 May, 2014.

⁶⁶ DNP (2015). Misión para la Transformación del Campo Colombiano. Retrieved from: https://www.dnp.gov.co/programas/agricultura/Paginas/mision-para-la-transformacion-del-campo-colombiano.aspx. Bogotá.

years, the agricultural sector has grown on average by 2.5% per year, which is far below the growth rates of the economy as a whole (4.5%), and is 2.5 times lower than in other countries in the region such as Peru and Brazil^{67.} The low-income generating activities, social exclusion, displacement and violence have encouraged migration from rural to urban areas and a noteworthy migration of settlers to regions in the agricultural frontier with natural forests. In addition to this, the misalignment between land suitability and its actual use perpetuates low levels of productivity and efficiency, evidenced by the excessive use of fertilizers, agrochemicals and water. If left unchecked, these trends will result in increased of GHG emissions from agricultural activities, the everexpanding low productivity cattle grazing and continued deforestation of natural forests.

Unsustainable agricultural practices

Around 38,3 million hectares of Colombia's land is dedicated to cattle grazing (Vs 3,6 M ha dedicated to agriculture), an activity and extension that has been growing continuously in recent decades. It is estimated that only 19,3 million ha of this area is suited for grazing, and from the other 19 million, 10 must be used for forestry and 9 for agriculture. Cattle ranching represents 3,6% of Colombia's GDP, and 27% of the agricultural sector one.68 Extensive cattle grazing is not only low in productivity (4.5 Lt milk/cow/day Vs 13 Lt in Argentina, or 25 in the USA), it is also one of the main contributing factors to Colombia's degradation and deforestation of land, greenhouse gas emissions, and contamination of water. In general terms, unsustainable, extensive cattle grazing practices in Colombia have the following environmental impacts⁶⁹: (i) high GHG emissions and biodiversity loss due to slash and burn deforestation and clearing of land; (ii) chemical fertilization and use of pesticides, (iii) organic and chemical contamination of water, and (iv) transformation of land and water biomes, (such as lakes and wetlands) with subsequent loss of natural ecosystems; among others.

Tax incentives and government subsidies tend to support the concentration of ownership of land, even if it is underutilized, which gives way to market inefficiencies and increased inequalities. In this sense, the adjustment of the financial incentives that encourage extensive cattle grazing can stimulate more intensive, low-carbon and sustainable practices.

The primary effort underway to address this threat is the Colombian Sustainable Livestock Project, an initiative of the Colombian Federation of Cattle Ranchers (FEDEGAN), the Center for Research on Sustainable Agricultural Production Systems (CIPAV), the Fund for Environmental Action and Childhood (Action Fund) and The Nature Conservancy (TNC). The project is financed with contributions from grant from the Global Environment Fund (GEF) and the UK, administered by the World Bank (WB), and financial and in-kind contributions of the four partners. This project is providing piloting experience to improve the livestock production business through friendly environmental practices; integrating silvopastoral systems and conservation of native forest trees on the farm. Lessons learned from this experience will inform and guide further actions towards the formulation of bankable projects that would lead to scaling up sustainable cattle ranching practices, which promote sustained rural development, increased farmer income and mitigate current environmental impacts.

Financial Incentives in the Agricultural Sector
The agricultural sector receives significant support from
the Ministry of Agriculture and Rural Development
such as access to special lines of credit, capital subsidies
(for example the Incentive for Rural Capitalization,
which covers up to 40% of credit payments by small
farmers), and subsidies for agricultural insurance and
irrigation. Many of these mechanisms of support are
channeled through the Agricultural Sector Finance Fund
(FINAGRO), and are intended to increase productivity
and incomes for agricultural activities, but do not take
into account their environmental impact⁷⁰. Uptake of
these credit lines and financial incentives however
continues to be low and concentrated in already
better-off areas. On the other hand, a number of

⁶⁷ OECD (2014). Better Policies Series - Colombia: Policy Priorities to Boost Productivity and Social Inclusion 2014. Bogotá.

⁶⁸ FEDEGAN. PEGA 2019. y Murgueitio, E. Reconversion Ambiental y Social de la Ganadería Bovina En Colombia: Fundación CIPAV. Bogotá.

⁶⁹ Ibio

⁷⁰ García Romero y Calderón Etter, (2013) and OECD/ECLAC OECD Environmental Performance Reviews: Colombia 2014, (2014).

implicit subsidies increase environmental pressure, such as is the case for water tariffs and fertilizer prices. As a consequence, and in light of the OECD's recommendations on this issue, there is an important opportunity to optimize agricultural subsidies to ensure they have fewer negative environmental impacts⁷¹.

Weak and Underdeveloped Forestry Sector

Exploitation of Colombia's forestry resources have been poorly managed and seriously degraded without creating lasting wealth, jobs or a solid economic base. Of the 114 million hectares of the country, 60.7 million (53.3%) are estimated to be covered by natural forests, yet most of these are not available for commercial development given the poor infrastructure conditions and sector development. As a result, the participation of legal timber and non-timber forest products in the overall economy remains miniscule. Moreover, illegal timber has been estimated at roughly 40% of the total timber consumed nationally.⁷²

There are 17 million hectares as suitable for forestry⁷³, but only 2.06 % were being used for commercial plantations⁷⁴. Although deforestation rates have declined in the past fifteen years, they continue to be high and a real risk that they increase once again is latent. The country's Amazon Region holds the largest deforestation hotspots, and if current trends continue, 1.8 million ha of additional forest would be lost in the Amazon Region - an average of 85,000 ha per year⁷⁵. On the other hand, although Colombia is a net exporter of wood and wood products, current timber plantations in the country amount to a total of 477 thousand ha, when the potential lays around 17 million ha⁷⁶. Between 2000 and 2008, silviculture and the extraction of wood contributed only 2.26% to the agricultural sector's GDP, and 0.21% to national GDP. According to the World Bank, between 2004 and 2013, forestry rents stayed unchanged at 0.3% of GDP, while neighboring Brazil's were 1.5% of GDP in 2013⁷⁷.

Both deforestation, and the untapped development of sustainably used timber and non-timber forest products, are associated to the institutional and policy-related weaknesses that prevent the effective management and protection of the country's forestry potential, both at national and subnational levels. These include, for instance: (i) the distribution of critical responsibilities across several authorities, whom are not effectively coordinated and do not share a common vision of the sector. There are three Ministries with direct incidence on the forestry sector: MADS, Ministry of Agriculture and Ministry of Commerce; (ii) poor performance control and promotion functions at the sub-national level by the CARs and local authorities, in effectively implementing of the; (iii) the ineffectiveness of the sector's key economic instruments to promote reforestation and forestry development, for instance, the Forestry Incentive Certificate (CIF); (iv) lack of adequate integration of forest planning and management instruments.

Furthermore, the infrastructure and technical capacity of the timber value chain is precarious. Roads, mills and processing facilities are inadequate and scarce, and technical and business competencies in the sector are rather limited. This limits substantially the productivity and market competitiveness of these products. These and other factors have resulted in a limited advancement in the implementation of the National Forestry Development Plan (PNDF) and other related forest policies for the promotion of a forest-based economy. While Colombia is an Early Mover of Reduced Deforestation and Degradation and is advancing in the formulation and early implementation of the it's REDD+ strategy, the enabling conditions and institutional capacities are still limited and thus us the financing going through REDD+ schemes to help curb deforestation rates.

 $^{^{71}}$ OECD/ECLAC OECD Environmental Performance Reviews: Colombia 2014, (2014).

⁷² BANCO MUNDIAL (2006). Fortalecimiento de la Gobernabilidad y Aplicación de la Legislación Forestal. Confrontando un Obstáculo Sistémico al Desarrollo Sostenible. Washington, D.C.

⁷³ The National Corporation for Forestry Research and Development (CONIF)

⁷⁴ IDEAM (2014) Primer Informe Anual sobre Deforestación. Bogotá; MADS (2010), Informe del Estado del Medio Ambiente y de los Recursos Naturales Renovables. Bogotá; Proexport. (March 2012). Sector forestal en Colombia 2012. Retrieved from http://www.inviertaencolombia.com.co/Adjuntos/Perfil_Forestal_2012.pdf

 $^{^{75}}$ Government of Colombia, (2015) Colombia's Low Deforestation Development Vision for the Amazon (draft). Bogota.

⁷⁶ Leibovich, J. (2014). Propuesta de Crecimiento Verde Inclusivo para el sector agropecuario y rural en el Plan Nacional de Desarrollo 2014 – 2018. Instituto Global de Crecimiento Verde (GGGI). Bogotá, diciembre 2014.

 $^{^{77}}$ IDEAM, Estudio Nacional de Agua 2010 (2010) and World Bank Data, Forestry profits (% of GDP) 2015, and OECD/ECLAC OECD Environmental Performance Reviews: Colombia 2014, (2014)

⁷⁸ OECD/ECLAC OECD Environmental Performance Reviews: Colombia 2014, (2014)



Strategic Response

Evidence of the costs and benefits of greener growth options, both on the ground and at the sector level, are the foundation for accelerating Colombia's transition towards sustainable development. The mandate provided through the Article 170 of the Law 1753 of the NDP 2014-2018 is a strong step forward in that direction that creates the political and regulatory basis for advancing towards more ambitious, strategic and long-term green growth objectives. These indeed will align with GGGI's global strategy.

Extensive in-country consultations with key government counterparts revealed the need to provide tangible results to build a strong case for green growth. This gives GGGI a clear mandate to help position green growth as a framework for decision-making, while leveraging short-term opportunities for long-term competitiveness within strategic economic sectors. Implementation of programs and investments to strengthen the development of the Forestry Sector as an engine of growth is paramount if Colombia wants to diversify its economic base to one that relies on the sustainable use of its vast natural wealth.

Colombia has fallen short in making significant steps towards long-term green growth objectives. This is mainly due to the weak coordination and cooperation among government agencies, a general lack of capacity to define and follow-through on long-term goals, and the inability to translate policy into actionable, financed plans with appropriate implementation and monitoring mechanisms.

In that sense, GGGI's strategic response is to ensure that existing green growth approaches in sectorial and local policies and plans, are effectively implemented and monitored, and use the lessons and evidence they can offer to build a stronger case for a cross-cutting, overarching, greener approach to economic development. Furthermore, this programing framework will ensure that Colombia also fulfills its peace building targets, which are very closely aligned with green growth goals and the local agendas that will target reconciliation and reintegration of ex-combatants. This response builds upon the progress

and results obtained so far with GGGI's work plan and budget for Colombia since 2013.

Within this context, the CPF for Colombia foresees GGGI's support to the Government of Colombia in its transition towards green growth, by generating an impact in:

- i the technical capacity, coordination capabilities and political will for long term, green growth oriented decision-making and planning;
- ii leveraging short-term opportunities for long-term competitiveness within strategic economic sectors (transport, energy, and agriculture) and territories; and
- iii strengthening the development of forest-based activities as real engines of green growth.

These overarching goals will be attained by focusing our actions in the following outcomes described below:

Outcome 1 - The Government of Colombia makes progress in the definition and institutional articulation of a green growth vision, with long-term policies and financing alignment needed for its implementation. The purpose of this strategic objective is to support the Colombian government build on the progress already made through the inclusion of a crosscutting Green Growth Strategy in the National Development Plan 2014-2018, and fulfill its intention to develop a planning framework for long-term economic development in line with green growth growth related policies, such as the Low-Carbon Development Strategy, the National Adaptation Plan, the National REDD+ strategy and the Sustainable Colombia Initiative⁷⁹. In close collaboration with other agencies supporting related efforts, such as UNEP, the World Bank (i.e. through its WAVES program and country program), and the OECD, as well as others, GGGI will support the National Planning Department (DNP), the Ministry of Environment and Sustainable Development (MADS), and other government institutions, to define policy, planning and financial instruments that contribute to the achievement the green growth sectorial objectives defined in the NDP. The primary potential

activities will be prioritized. The Initiative is coordinated by APC and facilitated with support from IDB. Various ministries are involved in its development.

 $^{^{79}}$ The Sustainable Colombia Initiative is a proposal to leverage funding for rural development, peace building and environmental sustainability that is being advanced with the interest of promoting investments in areas where post-conflict

beneficiaries of these are both poor rural families and urban dwellers, as they are the hardest hit by the effects of the unsustainable growth path of the current model, such as climate change, air, water and soil pollution and resource degradation. GGGI support would potentially be in: i) the mainstreaming of green growth criteria and long-term objectives into planning and financing tools and approaches to ensure that decision-makers align their policies and finances towards those objectives. ii) elaboration of green growth indicators suitable for Colombia including those that reflect the relationships between resource productivity, environmental sustainability, green jobs and social inclusion; iii) revision of environmental expenditure accounts and public investment instruments and provide recommendations for alignment with green growth targets; iv) enhancement of economic instruments to internalize environmental externalities into private activities (productive and infrastructure); v) support the articulation and dialogue among different government agencies, both at the national level and between national and local level, to help build common understandings of green growth benefits, and overcome tradeoffs and other challenges; and finally, vi) support in the development of a long-term green growth policy, including the investment plans and institutional arrangements for its implementation.

Outcome 2 - Strategic sectors increase investments generating evidence of the benefits of green growth approaches. The targets under Objective 1 of the Green Growth Strategy in the NDP 2014–2018 seek to improve the performance of each sector, with higher levels of competitiveness, lower environmental impacts and increased focus on poverty reduction and social inclusion. Green growth approaches in some of these sectors will highly benefit urban populations (transport, energy and housing) and rural ones (sustainable agricultural practices), primarily improving quality of life conditions for segments marginalized from basic services or dependent on natural resources as their main livelihood. These sectorial aspirations are latent opportunities to prepare bankable projects that channel public and private financial resources into pilot initiatives, policies, programs and necessary investments to achieve green growth targets.

Consistent with the sectorial targets in the current NDP, GGGI will consider supporting the following actions as per demand and means, such as: i) improving investment criteria for prioritized transport infrastructure investment plans and transport logistics; ii) provide recommendations for the formulation and implementation of instruments that promote energy efficiency and the reduction of particulate matter emissions in the transport sector; iii) identify key entry points to remove bottlenecks in the development and financing of energy efficiency projects, mainly in industrial and residential sectors; (iv) support in removing barriers and transferring best practices for the adoption of non-convention sources of energy (NSE) projects, especially in non-interconnected zones; v) support efforts to improve policy and financing frameworks for sustainable housing, particularly for low-income population; and vi) provide advisory in the enhancement of economic and financial instruments and policy⁸⁰ for the promotion of sustainable agricultural practices, which are socially inclusive and leads to poverty reduction.

For all the three sectors discussed above, GGGI can support the exchange of best practices with other national or local government through the Green Growth Knowledge Platform or Best Practice platforms, as well as other communication channels, in close coordination with the mechanisms that for that purpose has the Presidential Agency for Cooperation (APC) and any other official instruments. Exchange of experiences could range from direct inputs to programs such as Amazon Vision or others of the like, to overall lessons learned from Green Growth Planning, Implementation and Financing. For implementing these exchanges, some partners with which GGGI already collaborates and would continue to do so include the World Resources Institute, the New Climate Economy, the Clinton Foundation, The Nature Conservancy, WWF, and others.

Outcome 3 - Forestry sector becomes engine of green growth. This outcome is an essential component in the development of a green economy in the medium- to long-term in Colombia. Effective management of the forest sector, which includes the sustainable exploitation

 $^{^{80}}$ These include the Incentive for Rural Capitalization (ICR) for sustainable agriculture and cattle grazing, the Forestry Incentive Certificate and Payment for Ecosystem Services schemes.

of timber and non-timber products, as well as its conservation and protection, could position this sector as a potential engine of economic growth, of national income and a source of employment. Main beneficiaries of an invigorated forestry sector primarily are the inhabitants of rural forested areas, including peasant and indigenous communities, for which forests are their main livelihood, both as subsistence living or as profit-driven enterprises. Other potential beneficiaries are communities that have degraded their forested areas but continue to heavily depend on subsistence-living or low-productivity agriculture.

Building over past and current efforts by agencies such as Sinchi Institute, FAO, GIZ, Conservation International, WWF and other national NGOs working on reduced deforestation and forest-based development Particular actions could be in the range of: i) secure funding agreement is in place and finalize the operationalization and institutionalization of the Amazon Vision; ii) support the implementation of the National REDD+ Strategy, including other jurisdictional-level projects or international payment-for-performance agreements; iii) revision on the progress made by the National

Forest Development Plan (NFDP) and other past forest policies and norms in order to propose a set of options to overcome the bottlenecks that prevent or limit their implementation; iv) assessment of market flaws, institutional barriers and regulatory weaknesses that restrict the development of forest-based activities and the private sector's engagement in the generation of socioeconomic benefits from forests; v) identification of strategic actions that will contribute to meeting the NFDP and other related policies within the framework of the NDP 2014-2018; vii) support the design or revision of a set of economic and financial instruments to promote forestry activities and increased investments in forestbased enterprises; viii) support the strengthening of forest governance; and ix) promote and support the structuring of projects that will induce ecosystem and forest-based enterprises, leading to increased investments in forested areas.

In the following Table, the aforementioned GGGI strategic outcomes are mapped against Colombia's strategic objectives in the *National Development Plan*: 2014-2018 and GGGI's thematic priorities and value chain.

Strategic Outcomes		NDP 2014 – 2018 Target	GGGI Thematic Priority GGGI Value Chain	
1	GoC makes progress in the definition and implementation of a green growth vision, with longterm strategies for economic growth	Article 170: Government has committed to establishing a long-term green growth policy	• Cross-cutting	Green Impact Assessment Sector/Sub-sector strategy & planning
2	Strategic sectors increase investments generating evidence of the benefits of green growth approaches	 Quality transport services for all (p.144) - National Logistics Plan; Multimodal Transport Plan Electrical energy for all (p. 186) - Plan Indicativo de Expansión de Cobertura; Planes de Energización Rural Sostenible, PERS 	Green City Development (Transport) Energy Land-Use	 Green Impact Assessment (Green City) Sector/Sub-sector strategy and planning (Energy; Land-Use)
3	Forestry sector becomes engine of green growth	Reduce annual deforestation rate (p.571) through Amazon Vision among other policies Colombia's REDD+ strategy	• Land-Use	Design, financing and implementation (i.e. policy preparation)

The Colombia CPF outcomes will contribute to GGGI's corporate goal in "strengthening of national, sub-national, local green growth planning, financing and institutional framework" and "increased green investment flows". The program responds to the following Sustainable Development Goals (SDGs).

- SDG #2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture
- **SDG #7:** Ensure access to affordable, reliable, sustainable and modern energy for all
- SDG #8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
- **SDG #9:** Build resilient infrastructure, promote sustainable industrialization and foster innovation
- **SDG #11:** Make cities inclusive, safe, resilient and sustainable
- **SDG # 13:** Take urgent action to combat climate change and its impacts
- SDG #15: Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss

Outcomes 1 and 2 targets contribution towards SDGs #7, #8, #9 and #11.

SDG #7: Affordable and clean energy. This outcome is relevant for targets related tio the expansion of infrastructure and technology uptake to provide clean energy and energy efficiency and ensuring universal access to affordable, reliable and modern energy services. It is particularly relevant to attain target 7.2 on increasing the proportion of renewable energy within the overall energy matrix.

SDG #8: Growth and Employment. The program aims to integrate green growth as a cross-cutting strategy in the National Development Plan 2014-2018 through the development of green growth instruments in specific sectors. Hence, it is relevant to sub-target 8.3 "promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small-, and medium-sized enterprises, including through access to financial services".

SDG #9: Industry, innovation and infrastructure. Particular relevance to target 9.4 associated with the upgrade of

infrastructure and retrofitting of industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes

SDG #11: Sustainable cities and communities. The program will contribute to target 11.2 about providing access to safe, affordable, accessible and sustainable transport systems for all.

SDG #13: Climate Action. Efforts under outcome 1 and 2 will primarily help with target 13.2 about integrating climate change measures into national policies, strategies and planning and 13.4 on mobilizing financial resources to support mitigation actions in developing countries.

Outcomes 2 and 3 of the Colombia CPF addresses SDG#2, #13 and #15.

SDG #2: Zero Hunger. This SDG is particularly important in the context of green growth in Colombia. GGGI's framework could be relevant to meet target 2.3, on doubling agricultural productivity and income levels for small scale producers, as well as target 2.4, to ensure the sustainability and resilience of food production systems while contributing to the maintenance of ecosystems and gradually improve the quality of the land and soil.

SDG #13: Climate Action. Outcome 3 will also support resource mobilization and contribute with target 13.4, through the work under Amazon Vision, support with the REDD+ strategy, private initiatives, among others.

SDG #15: Ecosystems and forests. In the context of SDG #15, the program is relevant to sub-targets 15.2 "promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and increase afforestation and reforestation globally"; "integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts"; and 15.b "mobilize significant resources from all sources and at all levels to finance sustainable forest management and provide adequate incentives to developing countries to advance such management, including for conservation and reforestation". Through the design and implementation of the Amazon Vision, the program aims to strengthen institutional capacity of the forestry sector at national and sub-national levels.

The Colombia CPF outcomes will contribute to GGGI's corporate goal in "strengthening of national, sub-national, local green growth planning, financing and institutional framework" and "increased green investment flows". The program responds to the following Sustainable Development Goals (SDGs).

- **SDG #7:** Ensure access to affordable, reliable, sustainable and modern energy for all
- SDG #8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
- **SDG #9:** Build resilient infrastructure, promote sustainable industrialization and foster innovation
- SDG #11: Make cities inclusive, safe, resilient and sustainableSDG #15: Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss

Outcomes 1 and 2 targets contribution towards SDGs #7, 8, 9 and 11.

SDG #7 - Affordable and clean energy - This outcome is relevant for targets related ti the expansion of infrastructure and technology uptake to provide clean energy and energy efficiency and ensuring universal access to affordable, reliable and modern energy services.

SDG #8 - Growth and Employment. The program aims to integrate green growth as a cross-cutting strategy in the National Development Plan 2014-2018 through the development of green growth instruments in specific sectors. Hence, it is relevant to sub-target 8.3 "promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small-, and medium-sized enterprises, including through access to financial services".

SDG #9 –Industry, innovation and infrastructure. Particular relevance to target 9.4 associated with the upgrade of infrastructure and retrofitting of industries to make them sustainable, with increased resource-

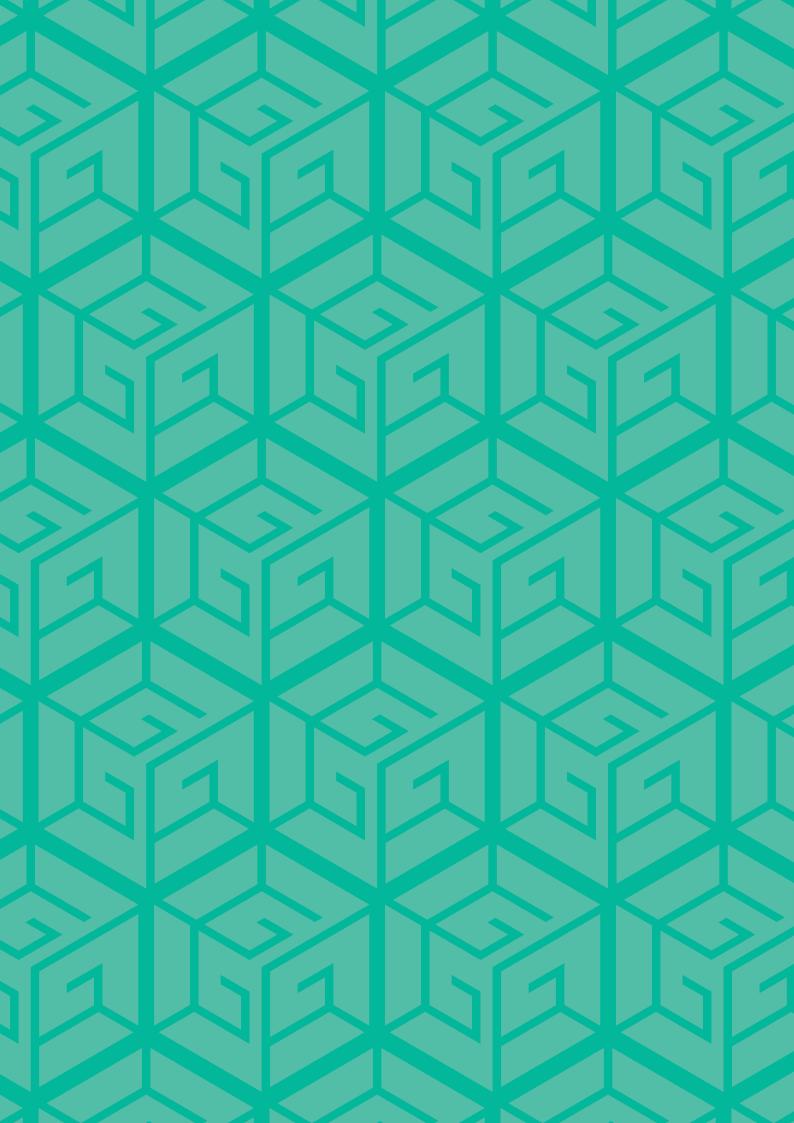
use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes

SDG #11: Sustainable cities and communities. The program will contribute to target 11.2 about providing access to safe, affordable, accessible and sustainable transport systems for all.

Outcomes 2 and 3 of the Colombia CPF addresses SDG #2 and 15.

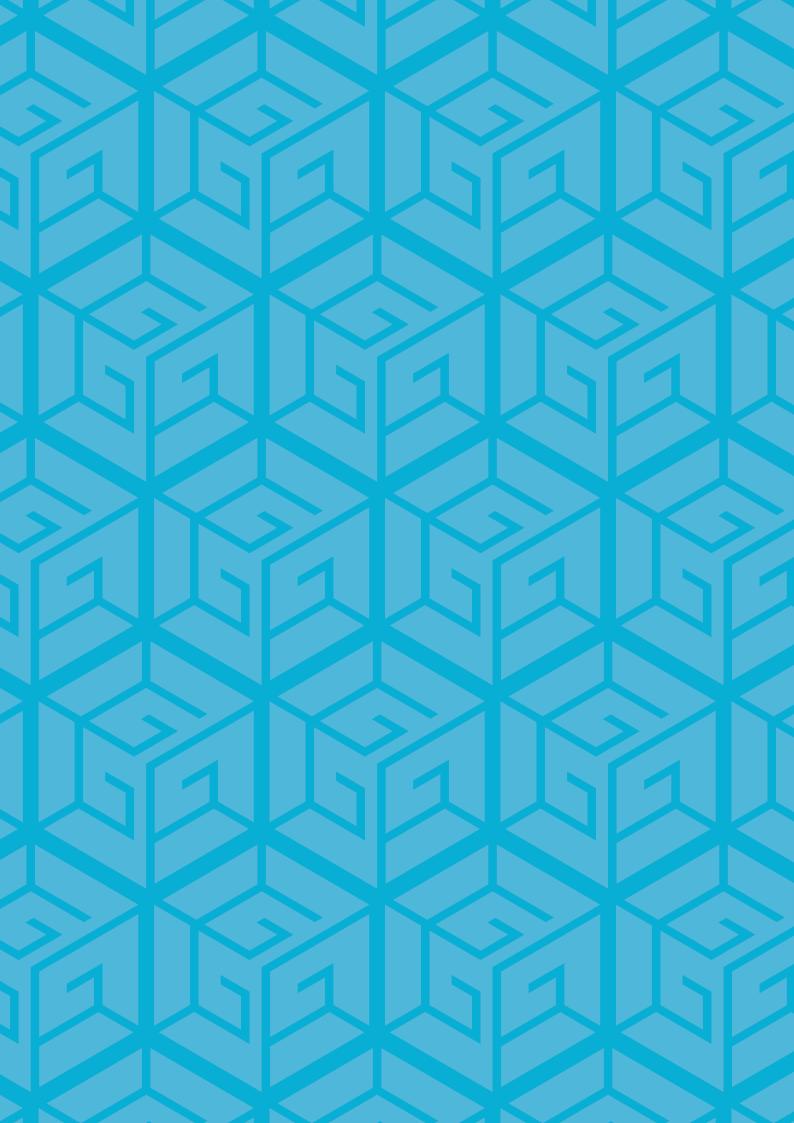
SDG #2: Zero Hunger. With the intention of halting hunger, providing food security and increasing improved nutrition and sustainable agriculture, this SDG is particularly important in the context of green growth in Colombia. GGGI's framework could be relevant to meet target 2.3, which implies doubling agricultural productivity and income levels of food producers on a small scale, particularly women, indigenous peoples, family farmers, ranchers and fishermen, through secure and equitable access to land, other resources and production inputs and knowledge, financial services, markets and opportunities to add value and to nonagricultural jobs; as well as target 2,4, to ensure the sustainability and resilience of food production systems while contributing to the maintenance of ecosystems and gradually improve the quality of the land and soil.

SDG #15 - Ecosystems and forests. In the context of SDG #15, the program is relevant to sub-targets 15.2 "promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and increase afforestation and reforestation globally"; "integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts"; and 15.b "mobilize significant resources from all sources and at all levels to finance sustainable forest management and provide adequate incentives to developing countries to advance such management, including for conservation and reforestation". Through the design and implementation of the Amazon Vision, the program aims to strengthen institutional capacity of the forestry sector at national and sub-national levels.



Acronyms

ANDI	Asociación Nacional de Empresarios (National Business Association)	ICR	Rural Capitalization Incentive (Incentivo de Capitalización Rural)
APC	Agencia Presidencial de Cooperación	IEA	International Energy Agency
	(Presidential Agency for Cooperation)	IDEAM	Instituto de Hidrología, Meteorología y Estudios
CAR	Corporación Autónoma Regional (Autonomous Regional Corporation)		Ambientales (Hydrology, Meteorology and Environmental Research Institute)
DANE	Departamento Administrativo Nacional de Estadística (National Administrative Department of Statistics)	MADS	Ministerio de Ambiente y Desarrollo Sostenible (Ministry of Environment and Sustainable Development)
DNP	Departamento Nacional de Planeación (National Planning Department)	OECD	Organization for Economic Co-operation and Development
ECLAC	United Nations Economic Commission for Latin America and the Caribbean	PND	Plan Nacional de Desarrollo (National Development Plan)
FAO	Food and Agriculture Organization of the	UNDP	United Nations Development Programme
	United Nations	REDD	Reducing Emissions from Deforestation and
FARC	Fuerzas Armadas Revolucionarias de Colombia		Forest Degradation
	(Revolutionary Armed Forces of Colombia)	SGP	Sistema General de Participaciones (General
FCA	Fondo de Compensación Ambiental		Participations System)
	(Environmental Compensation Fund)	SGR	Sistema General de Regalías (General Royalties
HDR	Human Development Report - United Nations		System)
	Development Programme	SINA	National Environmental System
IGAC	Instituto Geográfico Agustín Codazzi (Geographic Institute Agustín Codazzi)	WB	World Bank







Follow our activities on Facebook and Twitter





www.gggi.org