

GGGI Ethiopia Country Planning Framework 2023-2027









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Foreward

The Government of Ethiopia has embarked on a long-term development trajectory to enable the country maintain sustainable growth, achieve structural transformation, and attain equitable distribution of wealth and shared prosperity over the long-term. The Long Term Low Emission and Climate Resilient Development Strategy (LT-LEDS) (2021-2050) and the Ten Years Development Plan (2021-2030) and of Ethiopia serves as an umbrella for sectoral and institutional strategic and mid-term plans and a key tool for cooperation fostering inclusive development and building a climate resilient green economy.

The development of the Climate Resilient Green Economy (CRGE) strategy in 2011 set the stage for the Government of Ethiopia to direct its development in a green growth and climate compatible direction. Ethiopia has extensively invested in climate change mitigation and adaption actions and adopted polices and plans that ensure economy-wide integration of climate change agenda.

Ethiopia is one of the few countries that submitted a "1.5°C compatible" updated Nationally Determined Contribution (NDC) and also a Long-Term Low Emission and Climate Resilient Development Strategy (LT-LEDS) to the United Nations Framework Convention on Climate Change (UNFCCC). Building up on the CRGE strategy and NDC, the Ethiopia's LT-LEDS has crafted how new domestic institutional and policy reform on climate change adaptation and mitigation interact with the country's development endeavor and contribute to achieving national development objectives while addressing global calls for climate action. The LT-LEDS is firmly aligned with the national long-term development objectives and goals of Ethiopia and shall play an important role in driving the alignment of the NDCs and near-term actions with longer-term Paris Agreement goals.

The Global Green Growth Institute (GGGI), a treaty based international intergovernmental organization, and Government of Ethiopia have developed a strong partnership, built on joint commitment to achieving the green growth and sustainable development objectives. GGGI is among the key development partner institutions supporting the government of Ethiopia towards achieving the vision of building a climate resilient and carbon neutral economy. GGGI has provided policy advise, resource mobilization and capacity building support to pertinent Government sector ministries including the Ministry of Planning and Development (MoPD) and Ministry of Finance (MoF).

The GGGI Ethiopia Country Planning Framework (CPF) for the period 2023 to 2027, is prepared in close consultation with the key government institutions and well-aligned with key priorities of the government Ethiopia. We therefore strongly support its implementation and believe that the collaboration between the Government of Ethiopia and GGGI shall contribute to the realization of environmentally sustainable and socially inclusive climate resilient economic growth.

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Executive Summary

The engagement of the Global Green Growth Institute (GGGI) in Ethiopia started in 2010, by supporting the Government of Ethiopia in developing its Climate Resilient Green Economy (CRGE) Strategy and advising on the implementation and integration of its concepts and objectives into the Country's Five-year Development Plan 'Growth and Transformational Plan II' (GTP II, 2015-2020). Ethiopia was the first African country to declare its domestic commitment to climate compatible direction through the adoption of CRGE strategy in 2011 and submitted one of the most ambitious and "1.5°C compatible" updated Nationally Determined Contributions (NDCs) following the Paris Agreement. Moreover, with the Long-Term Low-Emission Development Strategy (LT-LEDS), Ethiopia has defined its pathway to net-zero emissions by 2050.

Furthermore, Ethiopia is one of the founding members of GGGI. Confirming its commitment to support the Government of Ethiopia, GGGI opened its office in Addis Ababa in 2012 and has been implementing an assortment of projects and later on developed a guiding and mutually agreed Country Planning Framework (2016-2020) approved by the (then) Ministry of Environment, Forest and Climate Change After frequent consultations with stakeholders and taking best practices from the phased-out Country Planning Framework (CPF), the current CPF outlines the best platform for GGGI Ethiopia's Country Office, and the Federal Democratic Republic of Ethiopia (FDRE) to implement its green growth economic model. The CPF will be GGGI's guiding framework for the year 2023-2027 contributing to the implementation of Ethiopia's Ten Years Development Plan (2021 -2030) while attaining GGGI's Global Strategy 2030. It will also facilitate the realization of building a climate resilient and carbon neutral middle-income economy consistent with the LT-LEDS and in alignment with Ethiopia's updated NDCs.

Considering policy alignment and building on the notable achievements of GGGI in Ethiopia during the past decade, six Programmatic Solutions (green investment, climate action, climate resilient agriculture, sustainable forest management, sustainable mobility, and solar PV) have been identified for the period 2023-2027. Execution of programmatic solutions will range from policy advisory services to direct project implementations.

Gender equality and equity actions are mainstreamed in all identified programmatic solutions for GGGI to support Ethiopia as effectively, by means of developing gender analysis and action plans as suitable.

During this time, GGGI Ethiopia shall remain committed to lead the implementation of existing projects and development of bankable Green Investments projects that support the successful implementation of LT-LEDS and its targets. It will pay extra attention in creating modalities for Public-Private Partnerships (PPPs) and creating awareness for green finance mobilization needs by engaging private actors in the sector. In this regard, GGGI will frame its Climate Action by providing a conducive environment for actors in enhancing knowledge management and supporting the integration and implementation of green policies and strategies.

During this CPF period, GGGI shall provide policy analysis and regulatory support for the promotion and expansion of Climate Resilient Agriculture. Furthermore, it will provide capacity development support to improve institutional coordination and stakeholders' engagement including with Community Based Organizations (CBOs).

In the forestry sector, GGGI will support the execution of the Green Legacy Initiative¹, sustainable forest development, rehabilitation and restoration of degraded forest landscapes contributing to enhanced ecosystem goods and services. GGGI will ensure that women and disadvantaged groups equally benefit from the sector. It also enhances the human and institutional capacities for Measuring, Reporting and Verification (MRV), Gender

¹ It is the initiative of HE Prime Minister Abiy Ahmed, which was launched in June 2019 with the goal of building a green and climate-resilient Ethiopia.

and Social Inclusiveness (GESI), social and environmental safeguards in the planning and implementation process.

In the transport sector, sustainable mobility is a new concept in Ethiopia and its seamless start will pave the way for its expansion in the future. GGGI shall support in strengthening climate-smart integrated urban planning such as the adoption of electric mobility policy, implementation of climate resilient transport sector strategy, and non-motorized strategy in Addis Ababa and other major cities.

Promoting renewable energy via Solar Photovoltaic (PV) is believed to be a cross cutting instrument across economic sectors in providing sustainable services. GGGI will promote renewable energy technologies and capacity building as well as efficient measures in industry, transport, and agriculture sectors to contribute to the countries green economy development. Overall, GGGI aims to mobilize 80 million USD for investment in renewable energy that will benefit approximately 50,000 people through renewable energy interventions.



1. Introduction

1.1 Introduction to GGGI's Strategy 2030

The GGGI Strategy 2030 sets out GGGI's long-term ambitions to help its Member Countries achieve environmentally sustainable and socially inclusive economic growth, is fully aligned with the Paris Agreement and the UN Sustainable Development Goals (SDGs).

A primary goal of Strategy 2030 is to achieve larger-scale interventions and more impactful results than in previous years through the implementation of six Strategic Objectives (SOs) (see Figure 1) that support Member and partner countries' NDCs and SDG ambitions. These ambitions will be realized through the design and implementation of Global operations as well as country-based programs and projects organized into 11 Programmatic Solutions.

Figure 1: Six Strategic Outcomes (SO)



1.2 Global operational priorities and Programmatic solutions

Within Strategy 2030, GGGI has identified 8 programmatic and non-programmatic Global Operational Priorities (GOPs, see Figure 2), and 11 programmatic solutions for the implementation of country-based programs and projects. GGGI will implement its programmatic interventions under the country and global programs through GOPs 1 to 5. In addition, GGGI will implement GOPs 6 to 8 to improve the effectiveness and efficiency in the way it manages its business and delivers its services to Members.

Figure 2: 5 Programmatic and 3 Non- Programmatic-Global Operational Priorities

Global Operational Priorities

Programmatic Solutions



GOP 1

Catalyzing and accelerating access to climate finance/ green investments for Members' public and private sectors



PS1 Green investments | Green bankable projects, investment proposals, national financing vehicles, green and climate instruments, carbon-focused engagements



GOP 2

Supporting our Members in strengthening policy, planning and regulatory frameworks, and institutional capacity to achieve green growth outcomes



PS2 Climate Actions | Inclusive green growth plans, LT-LEDS, NDC support, MRV system design, climate diplomacy



GOP 3

Achieving a sustainable and circular bioeconomy while securing healthy natural systems



PS3 Climate Resilient Agriculture | Solar irrigations, renewable energy application in agri-value chain, resilient cropping practices, resource conservation



PS4 Sustainable Forest | REDD+, landscapes financing mechanisms, innovation of natural capital markets



PS5 Coastal Resilience | Mangroves as ecosystem for livelihoods, aquaculture, marine issues fisheries, flood protection and pollution



GOP 4

Making cities and communities sustainable, livable, and resilient, supported through green jobs, services, and green infrastructure capital markets innovations



PS 6 Waste Management | Circular economies, urban and agricultural waste, wastewater, FSM, waste to resource



PS7 Sustainable Mobility | E-Mobility, Non-motorized transport



PS8 Green Buildings | Green urban infrastructure norms/ standards/ policies, energy efficiency in residential and commercial buildings



PS9 Solar PV | Energy transaction access and productive use solar water pumping, solar PV auctions, rooftop, utility scale plants, storage



PS10 Green Industries | Green industrial parks, green supply chains, energy efficiency in SMEs, labelling and standards



GOP 5

Accelerating progress in our country programs in poverty eradication and gender equality



Cross-cutting in all programmatic solutions

1.3 Objective of the CPF

The GGGI CPF for Ethiopia, covering the period 2023-2027, is developed with the following objectives: i) focus on national development priorities to ensure government ownership, commitment, and support to GGGI interventions in Ethiopia; ii) ensure strategic alignment between country level interventions and the GGGI GOPs; iii) deliver transformational and impactful programs with measurable attributed and contributed outcomes; iv) develop strong partnerships and facilitate resource mobilization to accelerate green growth adoption; and vi) strengthen linkages with key global development agendas and GGGI's Strategy 2030.

The CPF aligns country level interventions with both the GGGI Strategy 2030 and Ethiopia's priorities outlined in strategic plans such as the Climate Resilient and Green Economy strategy, Ten Years Development plan, the country's updated NDC and the LT-LEDS.

Formulation Process of GGGI Ethiopia CPF

This CPF's formulation process is based on a consultative and participatory approach that engaged a broad range of stakeholders working on climate change and green growth in Ethiopia, particularly on implementing the country's LT-LEDS and NDC. Government ministries and executing agencies, private sector representatives, donors and civil society organizations were engaged and provided inputs, which guided the strategic focus and priorities of the CPF. Frequent bilateral discussions were also held with the Ministry of Planning and Development as a bilateral signatory to the CPF.

The CPF will guide GGGI's efforts to coordinate consistent resource mobilization, policy advocacy, capacity building, and project implementation. The CPF will be implemented in collaboration with appropriate government stakeholders, non-state actors, and development partners. The Ethiopia program impact pathway and its carefully crafted outcomes (Annexes A and B) will guide GGGI's intervention and directly address the priorities of the GoE.

Overview of GGGI operations in Ethiopia and results

Since its establishment in 2012, GGGI has been collaborating with the GoE. Its first official engagement was to assist the GoE in incorporating CRGE concepts and objectives into the country's five-year development plan (GTP II, 2015-2020). Through the adoption of a Climate Resilient and Green Economy (CRGE) strategy in 2011, Ethiopia became the first African country to declare its national commitment to a climate-compatible development path.

Opening an office in Addis Ababa and hosted by the (then) Environment Protection Authority, which later was upgraded to be a ministry for Environment, Forest, and Climate Change (MEFCC), GGGI Ethiopia Country Office formulated its first five-year Country Planning Framework (CPF) 2016 – 2020 focusing on strategic level engagements and embedding technical advisors into the government entities for effective implementation of programs and projects.

GGGI is considered as a trusted neutral advisor and delivery partner for supporting the CRGE vision in Ethiopia. Although no formal evaluation of the 2016-2020 CPF was available, a situation analysis report of the previous CPF was prepared as part of the second CPF development process which highlighted the following results and achievements during the period:

Green investment

GGGI played a critical role in mobilizing investment commitments both from in-country donors as well as global financiers. GGGI assisted Ethiopia in mobilizing approximately USD 515 million in green investment commitments.² GGGI also assisted in the establishment and operation of the CRGE special financing facility, as well as facilitating accreditation of the CRGE facility by the Green Climate Fund and Adaptation Fund. Furthermore, with GCF support, GGGI has implemented two readiness projects that have developed the capacities of the accredited entity (AE)and National Designated Authority (NDA) in adaptation planning and implementation.

Policy Support

The GOE approved a number of policy documents developed with the support of GGGI. Ethiopia's main Green Growth Strategy, the National Climate Resilient Green Economy Strategy (2011/2012), the Climate Resilient Strategy for Agriculture, Forest, Water, and Energy sectors, and the greening of roadmap policy frameworks for industrial parks are examples of these. GGGI also provided advisory support across sectors, including the implementation of a National Capacity Development Program, the development of a Rural Job Opportunity Creation Strategy, the development of MRV training tools and framework, and the delivery of a study on Payment for Ecosystem Services in the forest sector.

² GGGI Ethiopia 2020-2021 WPB



2. COUNTRY OVERVIEW AND RELEVANT NATIONAL GOALS AND TARGETS

2.1 Country Overview

With a population of over 115 million (2020³), Ethiopia is the second most populous country in Africa. For over a decade, prior to the onset of COVID-19 pandemic, Ethiopia was one of the fastest growing broad-based economies in the world with 9.4% average growth rate (2010/11 -2019/20)⁴. The country's overall economic output heavily depends on rain-fed agriculture which employs more than 70 percent of the population where women contribute 40 percent to the GDP⁵.

The rapid economic growth Ethiopia registered over the past several years was largely a result of government funded large-scale infrastructure developments. Thus, the Home-Grown Economic Reform (HGER) agenda with the central objectives of sustaining rapid growth, maintaining stable macroeconomic environment by reducing debt vulnerabilities and creating adequate and sustainable job opportunities has been domestically initiated. Strong growth has led to a strong increase in resource consumption and GHG emissions, which amounts to 303 MtCO $_2$ eq. Figure 3 provides an overview of Ethiopia's green growth performance.

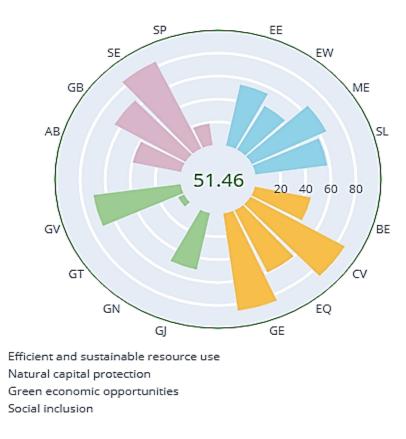
³ https://www.worldbank.org/en/country/ethiopia/overview#1

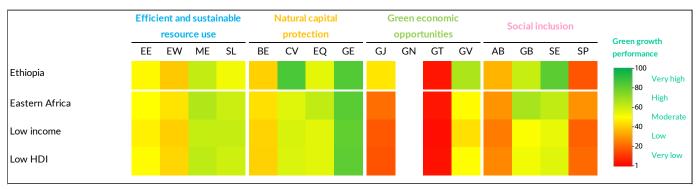
⁴ https://www.worldbank.org/en/country/ethiopia/overview#1

⁵ https://www.usaid.gov/ethiopia/agriculture-and-food-security

 $^{6\ \} Ten\ Years\ Development\ Plan\ of\ Ethiopia:\ The\ Pathway\ to\ Prosperity,\ https://phe-ethiopia.org/wp-content/uploads/2021/04/10_year_plan_english_final.pdf$

Figure 3 - Green Growth Index (GGGI,2021)





Legend:

EF	Efficient and sustainable Energy	GV	Green Investment
EW	Efficient and sustainable water use	GT	Green trade
SL	Sustainable land use	GJ	Green jobs
ME	Material use efficiency	GN	Green innovation
EQ	Environmental quality	AB	Access to basic services and resources
EQ GE	Environmental quality GHG emissions reduction	AB SE	Access to basic services and resources Gender balance
`	,		

2.2 Key Challenges

Ethiopia faces a number of economic and environmental challenges, including poverty, climate change, land degradation, and unemployment.

Poverty reduction

Despite strong economic growth and reduction of poverty by 50 percent since 2000⁷, low incomes, food security and employment remain major challenges in Ethiopia, even though the rate of school enrolment and health care service coverage has strongly improved. Moreover, road and energy infrastructure have been continuously expanded⁸. Nonetheless, Ethiopia still belongs to the group of the Least Developed Countries as poverty is widespread while provision of social services and basic infrastructure is still weak. Economic growth has not managed to ensure fair distribution of wealth and create adequate job opportunities.

Climate change

Climate change poses a great challenge to Ethiopia and its people. As one of the world's most drought-prone countries⁹, Ethiopia faces increasingly unseasonal rain, and in some years even the complete failure of seasonal rain occurrences to which climate change contributes. Ethiopian smallholder farmers and pastoralists have been hit hard due to recurring drought and floods resulting from erratic rainfall. The consequent challenges of climate change such as drought and famines, loss of biodiversity, decline in agricultural production and productivity, scarcity of water, loss of wetlands, and increased incidence of pests and diseases pose a significant threat to the country's economy and human wellbeing. Under some extreme scenarios, the impact of climate change on all sectors could reduce GDP by more than 10% by 2050.¹⁰

Sustainable Management of Natural Resources

Land and water degradation, including deforestation and forest degradation, are Ethiopia's main environmental problems. Loss and degradation of natural resources have caused frequent droughts, floods, serious food and feed deficit, malnutrition and poverty increasing challenges in livelihoods options of local communities and the society at large. Deforestation contributes to land degradation, floods, landslides, soil erosion and water pollution. Dependence on agriculture and dense population in many areas have led to overexploitation of natural resources. Unsustainable agricultural practices have contributed to agricultural land degradation. Soil erosion has been estimated to reduce agricultural GDP by two to three percent. Increasingly irregular rains put additional stress on soil fertility and water availability while lack of proper infrastructure as well as limited knowledge and skills on climate smart agriculture practices among smallholder farmers and pastoralists hamper an effective response to these challenges.

Structural Transformation of the Economy

Agriculture is still the dominant sector in Ethiopia's economy, accounting for more than 80% of exports and about 34% of the country's Gross domestic product (GDP)¹². To achieve the status of a middle-income country, the share of industry, and particularly exportable manufacturing, in total production needs to increase. Even though manufacturing's share of GDP has increased in recent years, it remains very low at around 5%, and

⁷ World Bank, Poverty headcount ratio at \$1.90 a day, https://data.worldbank.org/indicator/SI.POV.DDAY?locations=ET

⁸ Ten Years Development Plan of Ethiopia: The Pathway to Prosperity, https://phe-ethiopia.org/wp-content/uploads/2021/04/10_year_plan_english_final.pdf

⁹ Mera, G.A., 2018. Drought and its impacts in Ethiopia. Weather and climate extremes, 22, pp.24-35.

¹⁰ Ethiopia's Climate Resilient Green Economy (CRGE) Strategy (2011-2019) -Implementation Progress Assessment Report, 08 April 2020, https://www.undp.org/content/dam/ethiopia/docs/Ethiopia%20CRGE.pdf

¹¹ CRS Agriculture and Forest Strategy

¹² Yigezu Wendimu, G., 2021. The challenges and prospects of Ethiopian agriculture. Cogent Food & Agriculture, 7(1), p.1923619.

structural transformation is slow, as indicated in the Ten-Year Development Plan (see section 2.3). The challenge for the future comprises in finding the right balance between public-sector and private-sector investment as well as building know-how and experience in the manufacturing sector based on the establishment of Ethiopia's industrial parks.

Implementing responses to challenges

While policy objectives are defined comprehensively and consistently, there is a gap in policy implementation in many areas. The Ten Years Development plan partially explains this gap by limited government capacity and coordination failure, resource wastage and corruption.¹³ Accessing climate finance is another challenge where there has been no mechanism to track and account the finance mobilized for specific activities. In addition, the frequent restructuring of government institutions (For example the Ministry of Environment, Forest, and Climate Change to Commission and recently to Authority), fractures implementation efforts and diverts focus to institutional arrangements rather than actual policy implementation.

2.3 Policy Landscape

Building on the previous CPF this CPF 2023–2027 positions its programmatic solutions in a way to support Ethiopia's national and sectoral policies, including Climate-Resilient Green Economy (CRGE), Ten-Year Development Plan, Nationally Determined Contributions (NDC), National Adaptation Plan (NAP-ETH), Green Legacy Initiative (GLI), Long-term Low-Emissions Development Strategy (LT-LEDS) and National Forest Sector Development Program. The country's overarching goal of achieving middle-income status in 2030 as defined in the Ten Years Development Plan as well as the goal of establishing a climate-resilient green economy.

Main green growth and climate policies include:

Climate-Resilient Green Economy (CRGE) Strategy. The CRGE Strategy was adopted by the GoE in 2011. It is the bottom line of action plans in various sectors that aim to make resource consumption more sustainable and the economy more climate resilient. Furthermore, it computes the investment required to achieve the specified goals. The GoE has also established and strengthened institutional structures, including the CRGE Facility, which was established in 2012 to support CRGE implementation by mobilizing climate finance from various sources. Building a climate-resilient green economy is also one of the Ten Years Development Plan's ten strategic pillars. Since its launch in 2023, the LT-LEDS (see below) has replaced the CRGE Strategy as the main strategy document to guide green investment planning and policies for decarbonization and climate resilience.

Ten Years Development Plan (TYDP). The plan spans a decade, from 2021 to 2030, and outlines the policies that will be implemented to achieve the overall goal of becoming a middle-income country. It is the successor to the previous frameworks that have defined the country's development framework since 2010, namely the GTP I (2010-2015) focused on agriculture-led growth and the GTP II (2016-2020) focused on modernizing agriculture as well as expanding industry with a primary focus on light manufacturing. The current Ten-Year Development Plan is based on the Home-Grown Economic Reform policy, which shifts the emphasis from government-led economic transformation to private-sector-led economic transformation. Furthermore, climate-relevant performance indicators have been incorporated into the plan to assess both climate change mitigation and adaptation-related progress.

Nationally Determined Contributions (NDC). The GoE, like any other party to the Paris Agreement, is committed to regularly updating its NDC. The most recent update was in 2021 through an economy-wide

¹³ Ten Years Development Plan: The Pathway to Prosperity, https://phe-ethiopia.org/wp-content/uploads/2021/04/10_year_plan_english_final.pdf

¹⁴ Ethiopia's Climate Resilient Green Economy (CRGE) Strategy (2011-2019) – Implementation Progress Assessment Report, 08 April 2020, https://www.undp.org/content/dam/ethiopia/docs/Ethiopia%20CRGE.pdf

 $^{15 \}quad \text{Ten Years Development Plan: The Pathway to Prosperity, https://phe-ethiopia.org/wp-content/uploads/2021/04/10_year_plan_english_final.pdf} \\$

¹⁶ Ethiopia's Updated Nationally Determined Contribution (2021), https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Ethiopia%20First/Ethiopia%27s%20 updated%20NDC%20JULY%202021%20Submission_pdf

analysis using Green Economic Modelling (GEM), which resulted in a significantly revised Business-As-Usual (BAU) pathway and a clearer demarcation of the unconditional and conditional elements of the proposed actions. It has identified interventions for both mitigation and adaptation in agriculture, industry, energy, water, transportation, urban, health, land use, and forestry. There are some mitigation interventions that also provide adaptation benefits, and vice versa.

National Adaptation Plan (NAP-ETH).¹⁷ The NAP focuses on sectors that are especially vulnerable to climate change. As one of five strategic priorities, it explicitly states the need for climate mainstreaming in the development planning process. During its 15-year implementation period, the plan is guided by "principles of participation, coherent interventions, stakeholder empowerment, gender sensitivity, equitable implementation, and partnership" and focuses on agriculture, forestry, water, energy, transportation, urban, industry, health, and education sectors (2016-2030). In particular, the NAP emphasizes women's empowerment and gender equality, which is consistent with the National Women's Policy.

National Forest Sector Development Program (NFSDP).¹⁸ With 17.35 million hectares of forests covering 15.7% of the national territory and a large expansion of degraded lands suitable for forest restoration, this program is of tremendous priority. It is built around enabling environment and institutional development, sustainable forest production and value chains, forest environmental services, forests and rural livelihoods and urban greening and urban forests. The planned restoration of degraded landscapes through community-based forest management can contribute to the realization of economic, ecological, biodiversity and climate change mitigation and adaption objectives in the forest sector.

Green Legacy Initiative (GLI): Ethiopian Prime Minister HE Abiy Ahmed (PhD) launched the GLI in June 2019. The GLI is a comprehensive response to the effects of climate change and environmental degradation that includes agroforestry, forest sector development, urban greening, sustainable agriculture, and integrated water and soil resource management. Ethiopia's efforts to meet international commitments such as the Paris Climate Change Agreement, the 2030 Agenda for Sustainable Development, and Agenda 2063, among others, are demonstrated by proactively implementing the LGI.

Long-Term Low Emissions and Development Strategy (LT-LEDS): In accordance with the Paris Agreement, Ethiopia has adopted and launched an all-inclusive Long-Term Low Emission Development Strategy (LT-LEDS in 2023 with the goal of putting Ethiopia on a path to net-zero emissions by 2050. Ethiopia's LT-LEDS places a strong emphasis on economic development, employment creation, climate mitigation and adaptation, co-benefits of the SDGs, gender, social inclusion, and climate finance. Being fully aligned with the Ten-Year Development Plan and the Updated NDC, it identifies the policy interventions required to decarbonize the economy as well as the investment costs and benefits arising from implementation. It replaces the CRGE Strategy as the main strategy document for green economic development.

 $^{17 \}quad \text{National Adaptation Plan, 2016 -2030, https://www4.unfccc.int/sites/NAPC/Documents/Parties/NAP-ETH%20FINAL%20VERSION%20%20Mar%202019.pdf} \\$

 $^{18 \}quad National \ Forest \ Sector \ Development \ Program, Volume \ II, https://www.undp.org/content/dam/ethiopia/docs/2018/National%20Forest%20Sector%20Development%20 \ Programme%20Volume%20III%20Synthesis%20report.pdf$

Table 1 - Specific Targets Related to Green Growth

Area	Strategy	Target	Target			
Climate change		'				
			Unconditional	Conditional		
		Total	-56.2 MtCO ₂ eq (-14%)	-277.7 MtCO2eq (-69%)		
		LUCF	-48.4 MtCO ₂ eq (-35%)	-240.1 MtCO ₂ eq (-171%		
GHG reductions relative to business		Energy	-5.1 MtCO ₂ eq (-26%)	-10.5 MtCO ₂ eq (-53%)		
as usual by 2030	NDC	Managed soils	-0.1 MtCO ₂ eq (-1%)	-0.4 MtCO ₂ eq (-4%)		
as asaa. 2, 2000		Industry	1.2 MtCO ₂ eq (+5%)	-3.5 MtCO ₂ eq (-13%)		
		Waste	-2 MtCO ₂ eq (-17%)	-8.6 MtCO ₂ eq (-75%)		
		Livestock	-1.9 MtCO ₂ eq (-1%)	-14.8 MtCO ₂ eq (-8%)		
		Total		tCO ₂ eq (-100%)		
		Energy		tCO ₂ eq (-90%)		
		Transport		1tCO ₂ eq (-91%)		
GHG reductions relative to business	LT-LEDS	Agriculture		1tCO ₂ eq (-48%)		
as usual by 2050	LI-LLD3	Forestry		78 MtCO ₂ eq (-46 <i>7</i> 0)		
		Waste				
		IPPU		tCO ₂ eq (-84%)		
_		1110	-13 IVI	tCO ₂ eq (-33%)		
Forest						
Forest cover in % of country area by 2030	TYDP	From currently	15.5% to 30%			
Energy						
Electricity shares by 2040	NEP	55% hydropowe				
			45% solar PV, geothermal and others			
Power generation capacity by 2030	TYDP	+15,422MW (+	344%)			
Number of electricity customers by 2030	TYDP	+18.5 million (+:	319%)			
Electric power loss by 2030	TYDP	From currently	19.6% to 12.5%			
Transport						
Railway network by 2030	TYDP	+3,297km (+36	6%)			
T	TVDD	Rural transport	services from currently 6	57% to 100%		
Transport service coverage by 2030	TYDP		nsport service from curre			
Economic growth						
			Annual growth	Targeted share in GDP		
		Total GDP	10%			
Economic growth until 2030	TYDP	Agriculture	6.2%	22%		
Leonomic growth until 2030	ווטר	Industry	13%	35.9%		
		Manufacturing	20.6%	17.2%		
		Services	10.6%	42.1%		
Per-capita income by 2030	TYDP	USD 2,220 (+8.5% annually)				
Green jobs						
Jobs through irrigation investment by 2030	TYDP	1.05 million				
Jobs through transport sector development by 2030	TYDP	1.425 million				

Area	Strategy	Target					
Investment requirements							
			Uncond	itional	Conditional		
Climata investment by 2020	NDC.	Total	USD 63.2	2 billion	USD 252.8 billion		
Climate investment by 2030	NDC	Mitigation	USD 55.:	1 billion	USD 220.4 billion		
		Adaptation	USD 8.1 billion		USD 32.4 billion		
	LT-LEDS	Total		US	SD 154.0 billion		
		Transport			USD 14.0		
		Power generation		USD 70.1 billion			
Climate investment by 2050 (net present value)		Energy efficiency		USD 1.3 billion			
		Investment in agriculture		USD 36.0 billion			
		Land-based interventions		U	SD 17.5 billion		
		Waste management		U	SD 15.1 billion		



3. PROGRAMMATIC SOLUTIONS AND INTENDED RESULTS

The Ethiopia CPF focuses on six Programmatic Solutions namely: green investment, climate action, climate resilient agriculture, sustainable forest management, sustainable mobility, and solar PV. These solutions have been identified as critical interventions required to address strategic green growth challenges and opportunities in the country in response to Ethiopia's key challenges and policy priorities.

3.1 Green investments

The GoE faces a growing challenge of mobilizing domestic resources against the background of increasing public expenditures and a slowly growing tax income. In addition to the government's engagement, attracting national and international private finance to fill the current investment gap identified in the updated NDC is essential. Currently, there is still a lack of significant pipeline of bankable green investment projects because of institutional and technical constraints.

To overcome these barriers, GGGI will support the GoE in i) developing an adaptation finance strategy through research and pilot innovations and disseminate technologies that accelerate transition to sustainable green economy; ii) building a tracking system for LT-LEDS budget providing technical assistance; iii) establishing and operationalizing a governance and coordination structure for engagement with respect to Article 6 of the Paris Agreement as well as support the GoE and private sector entities in mobilizing additional climate finance through generation and transfer of Mitigation Outcomes; and iv) support the relevant public and private accredited entities (e.g., Ministry of Finance) in accessing the private sector facility window of the Green Climate Fund and mobilization from other international climate finance providers; v) enhance the Country's Programming Process including capacities built to enhance gender mainstreaming and the planning and execution of Environment and Social Management Framework (ESMF). In addition, an investment plan as part of the country's long-term low-emission development strategy will be developed to foster green investments.

With these activities, GGGI aims at directly contribute to bringing USD 500M of green finance to the level of investors' commitment within the 5-year CPF period. The achievement of this target shall be supported by at least 10 technical advisory documents and green investment proposals.

3.2 Climate action

As stated in the introduction section, Ethiopia has been promoting climate action through bold political commitments and measures. Building a climate and disaster resilient green economy is one of Ethiopia's TYDP's ten strategic pillars, to which GGGI intends to contribute through effective gender response and socially inclusive climate actions. Furthermore, the updated NDC document includes sector-wide programmatic climate actions, which include a variety of activities that necessitates both domestic and international climate action. GGGI has a comparative advantage in continuing to assist the Ethiopian government in implementing effective climate actions in a wide range of sectors.

As a trusted policy advisor and climate finance delivery partner, GGGI will continue supporting the government in building climate resilient and low carbon economy that ultimately increases climate ambition. Some of the indicative areas of response include but not limited to: i) enhancing knowledge management, information sharing, communication, and networking mechanisms at all levels across programs and all stakeholders including private sector and CSOs; ii) supporting mainstreaming and implementation of climate actions into the national development plans at national, sectorial, and regional levels, iii) exploring further opportunities for low carbon economic development and creating opportunities for green jobs in potential sectors.

To this end, GGGI will contribute to the development of at least 20 technical advisory documents with 3 policies expected to be adopted by the government; preparation of green investment proposals and high-quality concept notes accruing to US\$150 million in climate finance; supporting the upgrading of Ministry of Finance (MoF) for GCF accreditation level from small (up to USD 50 million) to medium size (up to USD 250 million) as well as the reaccreditation of MOF by the Adaptation Fund and facilitating the integration of climate change into the national development plans at national, regional and global levels.

Further, GGGI will work closely with the Ministry of Planning and Development that has been mandated to advancing climate action, Ministry of Agriculture, Ethiopian Forest Development, Environment Protection Agency (EPA) and other line ministries for the realization of national targets through strengthening national, sub-national, and local climate resilient and green growth policy planning, project/program implementation, resource mobilization and institutional frameworks.

3.3 Climate resilient agriculture

Ethiopia's agriculture sector is highly vulnerable to climate change and has remained rainfall dependent. Climate change has resulted in severe loss of crops and livestock production, jeopardizing the country's efforts toward food and nutrition security. Given the importance of agriculture in achieving economic, ecological, social, and environmental sustainability in the country, the Ethiopian government has prioritized it in the Ten Year Development Plan (2021-2030). As a result, the government intends to achieve an average annual growth rate of 6.2% in the agricultural sector by leveraging irrigation facility expansion, agricultural landscape restoration, private sector participation, and increased investment.

GGGI aims to promote climate-resilient agriculture, which drives food and nutrition security, poverty reduction, agricultural landscape restoration, and green job creation, particularly for rural youth and women. To that end, GGGI will collaborate with and support the Ministries of Agriculture, Irrigation and Lowland Areas, as well as other relevant federal and regional stakeholders. GGGI will continue to support the design and implementation of systematic programs that increase the mitigation potential and adaptive capacity of land-use systems, allowing smallholder farmers to widely adopt climate-resilient agricultural practices. As a result, the GGGI aims to create 7,500 green jobs, benefit 80,000 people from improved climate adaptation, restore 20,000 ha of agricultural

landscape, mobilize 35 million USD, and develop five policy documents. Furthermore, GGGI provides robust capacity development support, and strengthens enabling policy and institutional frameworks for effective climate-resilient agriculture implementation.

3.4 Sustainable forest management

GGGI strategic priorities and outcomes are aligned with Ethiopia forest sector development strategy, objectives and targets that include restoration of degraded forest lands, conservation of forest resources and enhancing ecosystems services. The forest sector is expected to contribute to more than 50 percent of the national goal to reduce emissions by $255 \, \text{MtCO}_2\text{e}$ by $2030 \, \text{through massive reforestation}$ and restoration of up to $15 \, \text{million}$ hectares (ha).

GGGI will keep playing its role being a trusted advisory institution and provide technical support to government partners, help mobilize resources, develop and implement forestry projects (such as Climate Resilient Forest and Landscape Restoration (CRFLR) and Korea Forest Services (KFS) overseas development assistance, and others.

Furthermore, GGGI assists the GoE in realizing the vision of the National Forest Sector Development Strategy (NFSDS) to capitalize on Ethiopia's significant forest resources, attract foreign investment (both donor and PPP), and transform Ethiopia's forestry sector in a way that catalyzes GDP growth, creates jobs, contributes to self-sufficiency in forest products, and improves environmental services. GGGI will contribute to the country's sustainable forest development by focusing on the implementation of existing plans including i) supporting in creating an enabling environment and institutional development including the development of a gender action plan and environment and social safeguard management plan governing the implementation of the strategy; ii) promoting sustainable forest resources management, production and value chains; iii) Enhancing Forest environmental services including Payment for Ecosystem Services (PES), forests and rural livelihoods, and urban greening and urban forests; Iv) supporting forest landscape rehabilitations and restorations, promoting and implementing commercial forestry and agroforestry practices.

To this end, GGGI Ethiopia will strive to conserve and restores more than 30,000 ha of forest landscapes, produce 5 advisory technical documents, mobilize about 15 million USD, develop and implement 3 forestry projects and benefit more than 50,000 people.

3.5 Sustainable mobility

In Ethiopia, urbanization is at its starting phase especially in secondary cities such as regional capitals and economic centers. The country has a unique opportunity to avoid traditional unsustainable urbanization patterns through the integrated sustainable cities development approach. ²⁰ One of the GHG emissions reduction strategies in Ethiopia is to electrify the energy demand of the vehicles used for public and freight transport. In this regard, there has been notable achievements including increased participation of private investors and the introduction of renewable energy services such as railways to enable the transport sector to be green and climate resilient.

During the 5-year period of the CPF, GGGI's response towards sustainable mobility will be aligned with the country's Transport Sector Plan-Goal Five: Creating a Climate Resilient Transport and Infrastructure Services ¹⁹. GGGI's interventions will support strategic directions set by the Ministry of Transport and Logistics and specifically contribute in i) Strengthening the enabling environment of climate-smart integrated urban planning such as the adoption of electric mobility policy; ii) support in enhancing implementation of a climate-resilient transport sector strategy.

¹⁹ Transport Sector Ten Year Perspective Plan (2020-2030). Ministry of Transport

²⁰ NEP, National Energy Program, Ministry of Water, Irrigation and Energy

GGGI will produce two policy recommendations, as well as several advisory documents and technical reports. Other intervention areas, such as providing technical assistance in the implementation of non-motorized transportation strategies and increasing the engagement of public and private actors in mobilizing green investments, will be investigated based on the interest of various donors active in Ethiopia's transportation sector.

3.6 Solar PV

Although Ethiopia has abundant clean and diversified renewable energy sources, 92% of the power source of the country is based on hydropower, which is vulnerable to climate change and there should be robust interventions to mix power generation with other renewable energy sources (solar, geothermal, wind and others) in line with the SDG7. According to the National Energy Program (NEP)²⁰, only 44% of the country has access to electricity (33% from grid and 11% from off grid) and 56% of the nation is not electrified.

Through the Solar PV programmatic solution, GGGI Ethiopia will support relevant stakeholders to enhance the power generation mix of renewable energy and nationwide access to electricity for lighting, productive use, water supply access, and agricultural productivity. During the 5-year CPF period, GGGI's role in resource mobilization and pulling the private sector with evidence-based energy efficient green investments from other Country's experience will be an aligned response to the GoE's call for collaboration. GGGI will intervene in the preparation of innovative green energy investment projects; preparations of policy documents and provide technical support to enhance the power generation mix by strengthening the involvement of the private sector. In addition, GGGI will support Ethiopia's efforts in the energy sector through the implementation of renewable energy projects for enhancing access to electric power, provision of customized capacity development in the energy sector, fostering the creation of green jobs and increasing women's access to sustainable services and economic opportunities in this sector. In this regard, the GGGI aims to create green jobs for 4000 people, mobilize 80 million USD, benefit about 50,000 people, and develop three policy documents.

Annex A- Country programmatic solutions and indicators

Programmatic Solution	Strategic Outcome ²¹	Intermediate Outcome ²²
PS1. Green Investment		IO1: Strengthened national green growth policy planning, financing, and institutional frameworks • 10 technical advisory document and reports developed and endorsed IO2: Increased green investment flows • USD 500m (in total) mobilization support
PS1. Climate Action	SO6 Enhanced adaptation to climate change contribute to improving resilience of 1.2 million people (50% women)	 IO1: Strengthened national, sub-national, and local green growth policy planning, financing, and institutional frameworks 20x policy outcomes (technical reports, policies) where 3 are expected to be adopted by the government of Ethiopia; IO2: Increased green investment flows \$150M USD mobilized Supporting the upgrading of Ministry of Finance (MoF) for GCF accreditation level from small (up to USD 50 million) to medium size (up to USD 250 million) as well as the reaccreditation of MOF by the Adaptation Fund IO3: Improved multidirectional knowledge sharing and learning between countries on green growth 10x capacity development events of Ethiopia's NDA, NIEs/EEs and subnational counterparts organized. Climate change knowledge portal and data base established within the NDA

Programmatic Solution	Strategic Outcome ²¹	Intermediate Outcome ²²
PS3. Climate Resilient Agriculture	SO1: Reduced GHG emissions · 200,000 tons CO2e (attributed) SO2: Creation of green jobs · 7,500 people (attributed) · 25,000 people (contributed) SO5: Adequate maintenance of natural capital · 20,000 ha of agricultural landscape restored (attributed) · 175,000 ha of agricultural landscape restored (contributed) SO6: Enhanced adaptation to climate change · 80,000 people benefited (attributed) · 2.5 M people benefited (contributed)	 IO1: Strengthened national, regional state, and local green growth policy planning, financing, and institutional frameworks 5x policy outcomes (technical reports, policy frameworks and strategies) developed and endorsed. IO2: Increased green investment flows \$15M USD mobilized IO3: Improved multidirectional knowledge sharing and learning between countries on green growth 15x capacity development events organized for Ethiopia's Ministry of Agriculture, Environmental Protection Authority, Ministry of Irrigation and Lowlands, Ministry of Women and Social Affairs and regional counterparts IO4: Green growth solutions support in reducing poverty and achieving gender equality 3x climate resilient agriculture and gender-responsive projects mobilize \$35M USD

Programmatic Solution	Strategic Outcome ²¹	Intermediate Outcome ²²
PS4. Sustainable Forests	SO1: Reduced GHG emissions 3Mtons CO2e (contributed) SO2: Creation of green jobs · 3,000 peoples (attributed) and 2,000 peoples (contributed) SO5: Adequate maintenance of natural capital · 30,000 ha forests conserved and restored (attributed) and 30,000 ha estimate contributed to country plans SO6: Enhanced adaptation to climate change · 25,000 peoples (attributed) and 25,000 peoples (contribution)	IO1: Strengthened national, sub-national, and local green growth policy planning, financing, and institutional frameworks • 5x policy advisory technical reports developed and endorsed IO4: Green growth solutions support in reducing poverty and achieving gender equality • 15M USD mobilized through development and implementation of 3x forestry projects
PS7. Sustainable Mobility		IO1: Strengthened national, sub-national, and local green growth policy planning, financing, and institutional frameworks • 2x Policy recommendations and advisory documents developed and endorsed

Programmatic Solution	Strategic Outcome ²¹	Intermediate Outcome ²²
PS9. Solar PV	 SO1: Reduced GHG emissions 15Mtons CO₂e (attributed) and 10Mtons CO₂e (contributed) SO2: Creation of green jobs 4,000 peoples (attributed) and 2,000 peoples (contributed) SO3: Increased access to sustainable services 20,000 peoples (attributed) and 20,000 peoples (contribution) SO4: Improved air quality 500 tons CO₂e (attributed) and 300 tons CO₂e (contributed) SO6: Enhanced adaptation to climate change 25,000 peoples (attributed) and 25,000 peoples (contribution) 	IO1: Strengthened national, sub-national, and local green growth policy planning, financing, and institutional frameworks

²¹ Strategic Outcomes (SO): 1) GHG emissions reduction; 2) Creation of green jobs; 3) Increased access to sustainable services; 4) Improved air quality; 5) Adequate supply of ecosystem services; 6) Enhanced adaptation to climate change.

²² Intermediate Outcomes (IO): 1) strengthened national, subnational, and local green growth policy planning, financing, and institutional frameworks; 2) increased green investment flows; and 3) improved multidirectional knowledge sharing and learning between countries on green growth.

Annex B- CPF Impact Pathway Diagram

Programmatic		Intermediate Outcomes Strategic Outcomes				
Solutions	Policy	Financing instruments	Investment Projects	Attributed Impacts	Contributed Impacts	Country Goal & Target
Green Investments	10 technical advisory document and reports on Green investment prepared and national GI engagement strategy adopted.	Accrediting/ re-accrediting national green financing institutions approved by international climate funding channels	500M USD in Green investment mobilized	See below	See below	FINANCIAL RESOUCES: CRGE: USD 51 billion for LT-LEDS capital investment by 2030 (net present value) GHG REDUCTIONS: NDC: 68.8% net reduction from the
Climate Action	20 technical advisory documents prepared, 3 policy documents adopted by GOE	Gender Readiness Fund established within CRGE Facility. Upgrading of Ministry of Finance (MoF) for GCF accreditation level from small (up to USD 50 million) to medium size (up to USD 250 million)	Investment proposals mobilize 150M USD	See below	SO6: contribute to improving resilience of 1.2 million people (50% women)	NDC: 68.8% net reduction from the 2030m BAU projection NDC: Reductions (277.MtCO2e) 2030 BAU emissions: Land Use Change and Forestry: 240.1 MtCO2e, Livestock: 14.8 MtCO2e, Industry: 3.5 MtCO2e, Energy: 10.5 MtCO2e, Waste: 8.6 MtCO2e,
Climate Resilient Agriculture	Prepare 5x policy outcomes (technical reports, policy frameworks and strategies)	Incentive schemes to attract private sector investment established	3x climate resilient agriculture and gender- responsive projects mobilize \$35M USD	SO1: 200,000tons CO ₂ e reduction SO2: 7,500 green jobs created SO5: 20,000 ha of agricultural landscape restored SO6: 80,000 people with enhanced adaptation	SO2: 25,000 green jobs created SO5: 175,000 ha of agricultural landscape restored SO6: 2.5M people with enhanced adaptation	FOREST COVER:
Sustainable Forests	Sustainable forest production and value addition strategy, regulation and guidelines adopted.	Forest environmental services including Payment for Ecosystem Services (PES) adopted by GoE	15M USD funding mobilized	SO1: 3Mtons CO ₂ e reduction SO2: 3,000 green jobs created SO6: 25,000 people with enhanced adaptation SO5: 30,000 ha forests conserved and restored	SO1: 3Mtons CO ₂ e reduction SO2: 2,000 green jobs created SO6: 25,000 people with enhanced adaptation SO5: 30,000 ha forests conserved and restored, contributed country plan	10YP: Forest Coverage from 15.5% to 30% by 2030.

Sustainable Mobility	2 policy recommendations developed and adopted by GoE on electric mobility and non-motorized transport. PPP modalities on Green investments devised and adopted by GOE.	See below	See below	See below		
Solar PV	3 policy outcomes developed for solar PV tariff.	Climate funds accessed.	80M USD Investment project on Solar power generation for off grid and on grid for lighting and productive use	SO1: 15Mtons CO ₂ e reduction SO2: 4,000 green jobs created SO3: 6,000 people with sustainable energy services SO6: 6,000 people with enhanced adaptation	SO1: 10Mtons CO ₂ e reduction SO2: 2,000 green jobs created SO3: 5,000 people with sustainable energy services SO6: 5,000 people with enhanced adaptation	RENEWABLE ENERGY: NEP: 45% from solar PV, geothermal and others and 55 percent from hydropower by 2040.



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