GGGI

The Philippines Country Planning Framework 2021 -2025

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Foreword

The Global Green Growth Institute (GGGI) reaffirms its commitment to support the Republic of the Philippines in its transition toward climate resilient green growth. This commitment is operationalized through the plans outlined in the Country Planning Framework 2021-2025, with an emphasis on an economic recovery strategy that accounts for the impacts of COVID-19 and integrates green growth measures on climate action, green industry (including start-up development), renewable energy, climate-resilient agriculture (including value chain development), and sustainable waste management.

The enormity of the impacts of the COVID-19 pandemic on society and economy underscores, more than ever, the immediate opportunity to embed the climate agenda into *building back better*. Globally, the current public health crisis has resulted in record-high unemployment. Some sectors were exceptionally hard-hit, notably the travel and tourism sectors, resulting in an instant collapse of tourism revenue and employment.

Disruptions in economic activities led to a loss of 332 million full time-equivalent jobs worldwide, about nine percent of which pertain to employment in South East Asia.[i] In the Philippines, about 73.5 percent of households have at least one person who lost his or her job or experienced a reduced workload.[ii] Massive joblessness and income contraction could lead to 1.5 million Filipinos sliding to poverty,[iii] in addition to the 16.7% of Filipinos already living below the National Poverty Line.[iv] Pandemic-related travel restrictions that hampered energy sector supply chains, deployment of personnel and logistics, and construction activities are seen to cause the global decline of renewable electricity capacity additions by 167 GW, 13 percent less than the previous year.[v]

The full impact of the COVID-19 pandemic is still unfolding. Yet, the pressure is already mounting on governments to invest in COVID-19 recovery packages while facing budget shortfalls, rising debt, and declining tax revenues. For countries that can afford recovery packages, there is a crucial choice between designing economic recoveries to restart the brown economy or seizing the opportunity to accelerate the transition to a green economy. The latter approach would be a deliberate choice for green growth development to build back better.

As it enters its 10th year of operation in the Philippine government, GGGI endeavors to continue working closely with the national and local governments, the private sector, and donor agencies in designing and implementing recovery projects that are green, resilient, and inclusive to restart the economy and accelerate climate action. Aligned with the Government's priorities, GGGI's five-year plan is based on its strategic recommendations on achieving green growth and climate action post-COVID-19, which include activities such as promoting renewable energy, gradual phasing out of coal, stimulating green innovation and green jobs, enhancing digitalization aligned with green new deals, aligning climate and green growth strategies, and upgrading health facilities with clean energy, among others.

Leveraging on its track record on policy advisory and investment structuring, particularly with its strategic position of directly working with the local government units (LGUs), GGGI will continue to support the Philippines in mapping out a sustainable post-pandemic future with green growth as the key driver to achieving the Sustainable Development Goals and implementing Paris Climate Agreement.

Dr. Frank Rijsberman
Director-General
Global Green Growth Institute

[i] "ILO Monitor: Covid 19 and the World of Work (sixth edition)," International Labour Organization, 23 September 2020

[ii] "Impact of COVID-19 Pandemic on Households of ASEAN Economies," Asian Development Bank Institute, 16 September 2020

[iii] "Poverty, the Middle Class, and Income Distribution amid Covid-19," Philippine Institute for Development Studies, 4 August 2020

[iv] "2018 Full Year Official Poverty Statistics," Philippine Statistics Authority, February 2021

[v] "Renewable Energy Market Update Outlook for 2020 and 2021," Energy Information Administration, May 2020

Foreword

We entered 2020 with the prospects of becoming an upper middle-income country two years ahead of our 2022 target. Earlier in 2018, we achieved a record low poverty rate of 16.7 percent of the population, lifting around six million Filipinos out of poverty four years ahead of our target. However, COVID-19 disrupted our growth momentum and development trajectory. Supported by the gains from key reforms such as the Comprehensive Tax Reform Program, the Build, Build, Build program and the Rice Tarrification Law, the government is committed to getting back on track while addressing the threats to the ecological integrity and long-term socioeconomic resilience of the country.

The National Economic and Development Authority (NEDA) remains steadfast in pushing for concrete measures and policy reforms to build back better, greener, and smarter. These reforms are anchored on the need to change behaviors, considering the fact that these multiple pressures are consequences of how humans strained the environment beyond its limits. Integral to the government's effort is the inclusion of green recovery measures that not only benefits the economy, but also helps address prevailing environmental issues and challenges that hinder faster and sustained growth.

The Updated Philippine Development Plan 2017-2022, which also serves as the country's resiliency plan, aims to build a healthy and more resilient Philippines as one of its goals for 2022. The Plan identifies specific priorities, interventions, and policy responses that foster green recovery, build socioeconomic resilience, and enable the country's transition to a new and better normal.

The Global Green Growth Institute (GGGI), in consultation with NEDA and other government partners, has formulated the 2021-2025 Country Planning Framework (CPF), which is aligned to the country's recovery and development goals. This document is the platform for collaborative engagement to create more green jobs, promote efficiency, ensure energy and food security, and scale up investments for climate action.

For its part, NEDA will leverage its oversight role in development planning and coordination, investment programming, and its high-level technical capacity to guide and focus the implementation of the CPF. We share the GGGI's ideals that only through strong cooperation and partnership can we truly build a stronger, cleaner, and more resilient green economy towards achieving a *matatag, maginhawa, at panatag na buhay para sa lahat* (strongly-rooted, comfortable, and secure life for all Filipinos) by 2040.

Karl Kendrick Chua
Acting Secretary
National Economic & Development Authority
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Glossary: Figures and Annexes

Abbreviations and Acronyms

ADB	Asian Development Bank
CCC	Climate Change Commission
CPF	Country Planning Framework
DA	Department of Agriculture
DAE	Direct Access Entity
DBP	Development Bank of the Philippines
DFA	Department of Foreign Affairs
DOE	Department of Energy
DTI	Department of Trade and Industry
FPE	Foundation for the Philippine Environment
GCF	Green Climate Fund
GDP	Gross Domestic Product
GGGI	Global Green Growth Institute
GHG	Greenhouse Gas
GOP	Global Operational Priority
GVA	Gross Value Added
IO	Intermediate Outcome
KOICA	Korea International Cooperation Agency
LBP	Land Bank of the Philippines
LCCAP	Local Climate Change Action Plans
LGUs	Local Government Units
MSMEs	Micro, Small, and Medium Enterprises
NCCAP	National Climate Change Action Plan
NDA	National Designated Authority
NDC	Nationally Determined Contribution
ND-GAIN	Notre Dame Global Adaptation Initiative
NEDA	National Economic and Development Authority
NGA	National Government Agency
ODA	Official Development Aid
PDP	Philippine Development Plan
PP&E	Property, Plant and Equipment
PSA	Philippine Statistics Authority
PSF	People's Survival Fund
PV	Photovoltaic
RD&D	Research, Development and Demonstration
RA	Republic Act
RE	Renewable Energy
SDG	Sustainable Development Goal
SCP	Sustainable Consumption and Production
SO	Strategic Outcome
SWM	Solid Waste Management
tCO^2e	Tonnes of Carbon Dioxide Equivalent
UNDP	United Nations Development Programme
US$	US Dollars

Executive Summary

The Country Planning Framework (CPF) is GGGI's planning document presenting the strategic initiatives that GGGI aims to pursue in partnership with the Government of the Philippines. The CPF is formulated based on the national priorities embodied in key policies, while GGGI's organizational priorities are anchored in the GGGI Strategy 2030.

The Philippines is an archipelagic country with a population of approximately 108 million with more than 7,000 islands. With approximately 60% of the population residing in areas along the coastline, the Philippines is highly susceptible to the impacts of climate change, such as rising sea levels and extreme weather events.

In the past ten years, from 2010 to 2019, the country maintained a strong economic growth with an annual Gross Domestic Product (GDP) growth of 6.4% on average, reaching a GDP per capita of US $3,485 in 2019 from US $2,217 in 2010, making it well placed to soon transition to upper-middle-income country status and further work toward achieving global sustainability targets.

However, economic growth outlook for upcoming years is still unpredictable due to the impacts of the COVID-19 crisis in 2020, coupled with frequent climate events such as typhoons. The successful implementation of an economic recovery is needed, but it is crucial to "green" the recovery to alleviate these climate damages while creating new growth opportunities.

GGGI has been working with the Republic of the Philippines to support the country's transition toward climate-resilient and inclusive green growth. The work achieved under the CPF 2016-2020 was able to produce mitigation benefits of 868,260 tCO^2e, generate 100 green jobs, support green business practices for 307 MSMEs, and structure green investment of approximately US $45.9 million. The CPF 2021-2025 will expand on past interventions focusing on the five Programmatic Solutions that were identified as critical to green growth and estimated to have transformative socio-economic impacts: i) Climate Action; ii) Climate Resilient Agriculture (including value chain development); iii) Waste Management; iv) Solar PV; and v) Green Industries (including start-ups support).

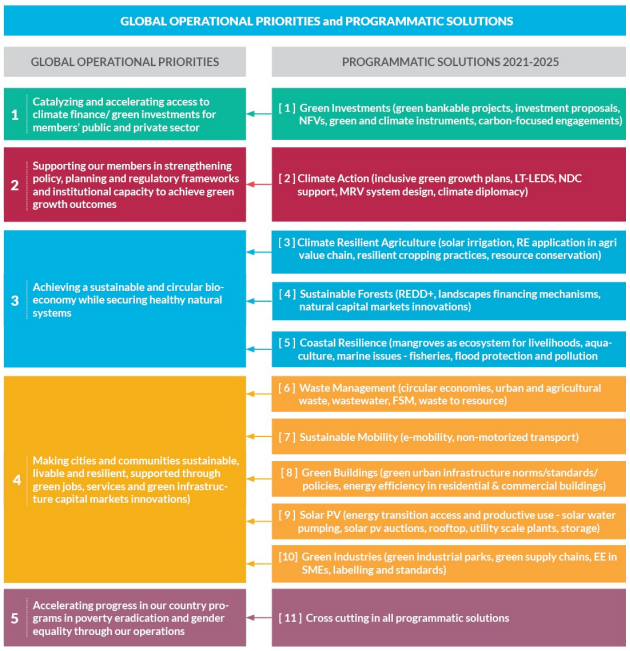
To implement these solutions, GGGI will draw on its global experience working with the National Government Agencies (NGAs) and Local Government Units (LGUs) to accelerate climate adaptation and mitigation interventions in the country. Such interventions include fostering an enabling policy environment, originating impactful and bankable projects, and catalyzing climate finance, with an ultimate aim of the reduction of GHG emissions, creation of green jobs, greater access to sustainable services, and enhanced adaptation to climate change.

Chapter 1: Introduction

1.1 GGGI Strategy 2030, Global Operational Priorities, and Programmatic Solutions

1. The GGGI Strategy 2030 sets out GGGI's long-term ambitions to help its Members achieve environmentally sustainable and socially inclusive economic growth as fully aligned with the Paris Agreement and the UN Sustainable Development Goals (SDGs).
2. To achieve the GGGI Strategy 2030 goals, GGGI will focus on the delivery of the following Programmatic Global Operational Priorities (GOP): 1) catalyzing and accelerating access to climate finance and green investment for members' public and private sectors; 2) supporting GGGI members in strengthening policy planning, regulatory frameworks, and institutional capacity to achieve green growth outcomes; 3) achieving a sustainable and circular bioeconomy while securing healthy natural systems; 4) making cities and communities sustainable, livable, and resilient through supporting green jobs, services, and green infrastructures; and 5) accelerating progress in eradicating poverty and gender inequality through GGGI's country programs. To support implementation at the country level, Programmatic Solutions have been identified for each GOP as presented in Figure 1.

Figure 1: GOPs and Programmatic Solutions



1.2 GGGI's Operation in the Philippines

3. Since 2012, GGGI has supported the Republic of the Philippines in its transition toward climate resilient and inclusive green growth

through partnerships with key NGAs such as the Climate Change Commission (CCC); the National Economic and Development Authority (NEDA); the Department of Trade and Industry (DTI); the Department of Energy (DOE); and the Department of Foreign Affairs (DFA). GGGI's initial intervention in climate adaptation focused on green growth planning, policy analysis, and capacity development for the decentralized LGUs.

4. From 2019, GGGI's intervention has been expanding toward structuring bankable projects and bringing climate finance to the country. GGGI has also strategically pivoted toward hybrid interventions, covering both mitigation and adaptation, with the ambition of contributing to greening industry (e.g. clean energy transition) and creating new economic opportunities, particularly for the poor and marginalized.

1.3 Objectives of the CPF and Strategic Relevance to the Philippine Planning Process

5. The GGGI CPF for the Philippines, covering the period 2021-2025, is developed with the following objectives: i) ensure strategic alignment between country level interventions and the GGGI Global Operational Priorities and Programmatic Solutions; ii) deliver transformational and impactful programs with measurable attributed and contributed outcomes; iii) focus on national development priorities and ensure government ownership, commitment, and support to GGGI interventions in the Philippines; iv) develop strong partnerships and facilitate resource mobilization to accelerate green growth adoption; v) promote internal integration and knowledge sharing by bringing together a cross-selection of GGGI experts to deliver a "One GGGI" approach; and vi) strengthen linkages with key global development agendas and the GGGI Strategy 2030.

6. The CPF aligns country level interventions with both the GGGI Strategy 2030 and the Government's priorities outlined in strategic plans such as the Philippine Development Plan (PDP 2017–2022), the National Climate Change Action Plan (NCCAP 2011-2028), the Philippine Renewable Energy Roadmap (2017-2040), the Micro, Small, and Medium Enterprises (MSME) Development Plan (2017-2022), the Nationally Determined Contribution (NDC), and the Post COVID-19 Recovery Plan. GGGI interventions will focus on structuring bankable projects and strengthening policies that create an enabling environment for the LGUs to ultimately contribute to the reduction of GHG emissions, creation of green jobs, increased access to sustainable services including energy and waste management, and enhanced adaptation to climate change.[1]

1.4 Past GGGI Results and Highlights of Evaluations

7. The partnership between GGGI and the Philippine Government, under the Country Planning Framework (CPF) for 2016 to 2020, has primarily enhanced the adaptation capacity of the country to climate change contributing to climate adaptation, resulting in 2,240 direct beneficiaries while contributing to the larger population of 994,340 in Palawan and 844,059 in Oriental Mindoro. The program produces mitigation benefits of 868,260 tCO^2e^2 with initial investment commitment in place and generated 100 green jobs, while directly supporting the adoption of green business practices in 307 MSMEs. The program mobilized green investment of approximately US $45.9 million[3] and contributed to the operationalization of a domestic financing vehicle[4] capitalized with approximately US $20 million. The following description shows the outcome statements of the CPF 2016-2020 with its key achievements.

[1] This is directly linked to GGGI's Strategic Outcome (SO) anchored in United Nation's Sustainable Development Goals (SDGs). SO1: Reduced GHG emission (SDG13 – Climate action); SO2: Creation of green jobs (SDG8 – Decent work and economic growth); SO3 Increased access to sustainable services (energy, waste management, etc.) (SDG7 – Affordable and clean energy & SDG11 – Sustainable cities and communities), SO6 Enhanced adaptation to climate change (SDG11 & SDG 13)

[2] Assuming the ongoing projects to be completed as planned in 2021.

[3] Solar PV plant (US$ 50M, assuming to structure the project in Bataan), electric tricycle (e-trikes) in Palawan (US$ 0.9M)

[4] People Survival Fund (PSF)

Outcome 1: Climate resilient green growth strategies that promote climate resilience, inclusive growth, and poverty alleviation accepted, adopted, and implemented in participating local government units

8. i) GGGI provided policy advisory and capacity development services to the Provincial Government of Oriental Mindoro, which resulted in the formulation and adoption of the Provincial Ordinances on the "Mandatory Relocation of Vulnerable Communities" and "Standardization of Evacuation Centers" to minimize climate damages. ii) GGGI provided advisory services to the Province of Palawan to establish the New Banua Institute for Resilience and Green Growth (NBIRGG) as a platform for grassroots learning and livelihood to strengthen the adaptation capacity of indigenous communities, which account for almost half of the provincial population of 1 million and are considered among the most vulnerable and marginalized constituents.

Outcome 2: Access to financing for bankable climate resilient green growth investment improved

9. i) GGGI provided technical assistance to the Climate Change Commission (CCC) to create project development and monitoring and evaluation (M&E) tools designed to operate the People's Survival Fund (PSF) and conducted capacity development sessions for LGUs to enhance their ability to prepare proposals to access climate finance, capitalized 1 billion peso, approximately US$ 20 million. ii) GGGI collaborated with the DOE and Asian Development Bank (ADB) to structure the grant funding of 100 units (amounting to US$ 0.91 million) Electric Tricycles for the Municipalities of San Vicente and Brooke's Point in the Province of Palawan to demonstrate sustainable and green transportation. iii) In partnership with the Provincial Government of Bataan, GGGI conducted the techno-commercial study for a Solar Photovoltaic (PV) Project (50MW) to promote clean energy investment. iv) GGGI and the CCC, which is the National Designated Authority to the Green Climate Fund (GCF), secured grants (US$ 1 million) from the GCF for two readiness projects to help the country access international climate finance.

Outcome 3: Institutional capacity to implement climate resilient green growth planning approach improved

10. i) GGGI conducted capacity development activities for LGUs on: a) Local Climate Change Action Plans (LCCAP) preparation to help analyze vulnerabilities to climate change impacts and prioritize local initiatives to improve resilience; b) energy planning that introduced green energy alternatives; and c) tourism planning to promote sustainable and responsible tourism development. ii) GGGI worked with DTI and MSMEs to strengthen their role as engines of inclusive green growth through the Micro Small Medium Enterprises Development (MSMED) Local Action Planning, the introduction of green business practices, the conduct of a case study, and onsite mentoring. iii) GGGI supported the Province of Palawan in the development, adoption, and piloting of the Green City Framework to integrate climate resilience and green growth principles and targets into the Comprehensive Land Use Plans of urbanizing municipalities.

Outcome 4: Green growth priorities and SDGs integrated in long-term national and local development strategies and projects

11. i) GGGI collaborated with the CCC and the Province of Palawan in the development and adoption of the "Palawan Climate Resilience and Green Growth Framework", which integrates climate resilient and inclusive green growth principles in local programs and projects and serves as a basis for local budgetary allocations for the province to implement its own relevant climate change adaptation initiatives. ii) GGGI conducted a technical assessment on tourism development for the Province of Dinagat Islands for incorporation in its Provincial Development and Physical Framework Plan, Provincial Tourism Development Plan, and Annual Investment Plan. iii) GGGI's technical analysis and recommendations on energy planning were also incorporated in the Environment Code of the Province of Bataan.

Chapter 2: Country Overview and National Goals and Targets

2.1 Country Overview

1. Located in South East Asia, the Philippines is a rapidly urbanizing nation with a population of approximately 108 million distributed across an archipelago of more than 7,000 islands. The country has a decentralized form of government with politically autonomous LGUs mandated to deliver devolved services and plans to manage local development. With a sustained average annual growth rate of 6.4% between 2010-2019 and a gross national income per capita of US $3,850 in 2019, it is poised to transition from a lower-middle-income country to an upper-middle-income country. However, in 2019, economic growth slowed to its weakest pace in eight years, mainly due to investment contraction and export growth deceleration. The growth outlook for the next years is even more unpredictable, given the global impacts of the COVID-19 pandemic.[5] The community quarantine measures imposed in 2020 expect to cause economic deceleration and slow down the progress the country is making on poverty reduction, hence prompting a stimulus package to alleviate these economic impacts.

2. The Philippines' green growth performance based on the GGGI Green Growth Index has a score of 55.54 in 2019 (Figure 2). The Index measures performance within the scale of 1-100 in achieving sustainability targets for four green growth dimensions, including i) Efficient and Sustainable Resource Use; ii) Natural Capital Protection; iii) Green Economic Opportunities; and iv) Social Inclusion. The country has performed

Figure 2: The Philippines at a Glance

Indicator Name	Data	Year	Source
Population	108,116,615	2019	World Bank
GDP per capita, PPP (current international $)	9,277	2019	World Bank
World Bank income group classification	Lower-middle income	2019	World Bank

[5] As of October 6, 2020, there are 326,833 confirmed cases reported in the Philippines. This is the highest number in the South East Asian region. More than 50% of the cases were reported from National Capital Region, where the capital city is located.

Figure 2: The Philippines at a Glance (cont.)

Indicator Name	Data	Year	Source
Poverty incidence	16.6%	2018	PSA[6]
Unemployment total (% of total labor force)	5.1	2019	PSA
Informal Economy Employment Rate	70	2008	ILOSTAT
Inflation, consumer prices annual %	2.48	2019	World Bank
Central government debt, total (% of GDP)	43.43	2014	World Bank
ODA as a percentage of overall government budget	0.4476%	2018	NEDA[7] and DBM[8]
Human Development Index (Rank)	106/189	2018	UNDP[9]
Gender Inequality Index (Rank)	98/162	2018	UNDP
Gini coefficient	44.4	2015	World Bank
CO^2e emissions (metric tons per capita)	1.05	2014	World Bank
Forest area (% of land area)	27.77	2016	World Bank
Agricultural land (% of land area)	41.72	2016	World Bank
Agriculture, value added (% of GDP)	8.82	2019	World Bank
Renewable energy consumption (% total final consumption)	27.45	2015	World Bank
Fossil fuel energy consumption (% of total)	62.43	2014	World Bank
Annual freshwater withdrawals, total (% of internal resources)	17.03	2012	World Bank
Urban population growth (annual %)	1.88	2019	World Bank
Urban population (% of total)	47.15	2019	World Bank
Sanitation facilities (% of population with access)	51.64	2017	World Bank
Environmental Performance Index (Rank)	82/180	2018	Yale
Global Competitiveness Index (Rank)	56/137	2018	World Economic Forum
ND-GAIN Adaptation Index (Rank)[10]	112/181	2017	ND-GAIN
Key baseline data from GGGI Strategic Outcome targets for the country:			
- GHG emission ($MtCO^2e$) per year	149.41 $MtCO^2e$	2016	CAIT[12]
- Green jobs	655,354 jobs	2014	ILO[13]

[6] Philippine Statistics Authority (PSA)

[7] National Economic and Development Authority (NEDA)

[8] Department of Budget and Management (DBM)

[9] United Nations Development Programme (UNDP)

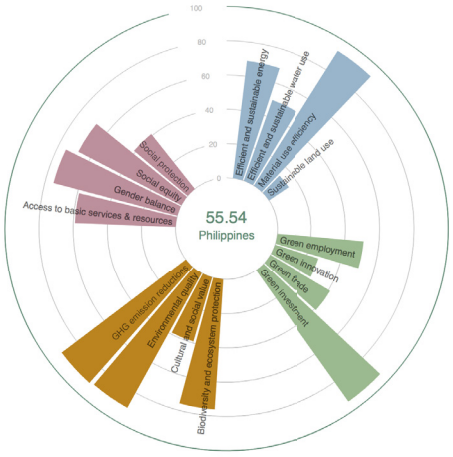
[10] The Notre Dame Global Adaptation Initiative (ND-GAIN) Country Index summarizes a country's vulnerability to climate change and other global challenges in combination with its readiness to improve resilience

[11] ILO Regional Office for Asia and the Pacific. Green jobs mapping study in the Philippines, 2014. The data indicates the status of the year 2014.

[12] CAIT Climate Data Explorer

[13] International Labour Organization (ILO)

Figure 3: Green Growth Performance in 2019



	Efficient and sustainable resource use				Natural capital protection				Green economic opportunities				Social inclusion			
	EE	EW	SL	ME	EQ	GE	BE	CV	GT	GT	GJ	GN	AB	SE	SP	GB
Philippines	69.71	50.93	14.10	93.27	90.32	91.33	76.81	39.26	94.61	41.05	51.96	27.05	59.58	68.79	41.94	75.21
South-Eastern Asia	66.34	52.05	16.63	75.83	86.21	75.58	72.12	58.39	75.25	20.81	43.87	11.86	65.54	69.98	46.99	65.47
Lower middle income	67.92	44.41	17.71	82.28	77.97	84.39	55.94	57.59	64.21	10.11	26.32	16.92	48.49	56.98	40.59	52.11
Medium HDI	69.68	45.83	16.27	82.19	80.08	83.08	62.14	59.81	66.60	10.71	30.12	15.76	51.49	59.94	43.82	58.63

Codes:

EE Efficient and Sustainable Energy
EW Efficient and Sustainable Water Use
SL Sustainble Land Use
ME Material Use Efficiency
EQ Environmental Quality
GE GHG Emissions Reduction
BE Biodiversity Ecosystem Protection
CV Cultural and Social Value
GV Green Investment
GT Green Trade
GJ Green Employment
GN Green Innovation
AB Access to Basic Services and Resources
SE Social Equity
SP Social Protection
GB Gender Balance

well in National Capital Protection with a need for improvement in the area of Green Economic Opportunities (particularly in green innovation) and Efficient and Sustainable Resource Use (particularly in sustainable land use). In comparison to its peer region of South East Asia, the Philippines has performed generally well. It ranks 3rd (third) in Asia in the 2019 Green Growth Index.[14] However, it is important to note that the analysis shows the country lags significantly behind compared to the European region. The Philippines has enormous opportunities to further improve its performance in achieving sustainability targets in the SDGs, Paris Climate Agreement, and Aichi Biodiversity Targets.

2.2 Key Challenges

3. The 2020 Global Climate Risk Index[15] ranked the Philippines as the 4th (fourth) most affected country in terms of extreme weather events from the period 1999–2018. As an archipelago, it has extensive areas susceptible to rising sea levels, with almost 60% of the total population residing along coastlines. A significant number of Filipinos draw their livelihood from agriculture, the sector that is most affected by climate change and where poverty is most prevalent. Strengthening climate adaptation thus continues to be an increasingly dire priority as extreme weather events cause significant adverse humanitarian and economic impacts, especially for nations that are coping with COVID-19 impacts. The country implements programs to curb GHG emissions – although it contributes negligibly to global levels – because it has a significant stake being one of the most vulnerable nations to climate change impacts. The CPF 2021-2025 has identified the following key challenges that require a national-level strategic approach:

Expansion of coal power plants / Limited energy access

4. The country has the highest rate of electricity in Asia[16] for residential customers at Php8.96/kWh, generated largely by fossil-fuel. Coal is the dominant (and expanding) source of electricity with a 55 percent share in gross power generation as of 2019. Around 1.6 million[17] households have no access to electricity, which is necessary for equitable growth. Solar energy is a viable and affordable alternative but remains untapped by LGUs mainly due to a weak enabling policy environment and lack of capacity to structure bankable projects.

Low productivity of MSMEs and poverty in agriculture value chain

5. Agriculture productivity continues to decline as it contributes only about 9.2% of gross value added (GVA)[18] and accounts for 22.52%[19] of national

[14] GGGI 2019 Green Growth Index (http://greengrowthindex.gggi.org/)

[15] The Global Climate Risk Index 2020 analyses to what extent countries and regions have been affected by impacts of weather-related loss events.

[16] Second only to Japan (source: International Energy Consultants, 2018)

[17] Based on the Household Electrification 2020 Monitoring Dashboard of the DOE EPIMB as of end of 2019.

[18] Source: As of 2019, The Philippine Star, https://bit.ly/3fUu0Km

[19] Source: As of Oct 2020, Trading Economics, https://bit.ly/2VpAg3b

employment. Therefore, poverty incidence is highest among farmers and fisherfolks. MSMEs in the agricultural sector face growth challenges due to limited working capital and technical capacity. Poverty remains widespread in rural areas where people compete for a small set of economic opportunities and contend with the inherent vulnerability to climate change, practice of unsustainable land use, and lack of investment opportunities.

Limited capacity to access the climate finance

6. With a population of over 108 million, the Philippines is the most densely populated of all global climate disaster hotspots. However, domestic sources of climate funding remain paltry at about 7% of the national budget. LGUs have limited capacity to develop proposals to justify green investment and the country lacks technical and institutional capacity to bring in international climate finance, which requires further support from international communities.

Waste management crisis

7. Based on 2018 data[20], the Philippines is the 3rd (third) largest generator of solid waste per year among Southeast Asian countries, with only Thailand and Indonesia producing more. As 14.66 million metric tons of waste were produced in 2014, the National Solid Waste Management Commission projected that the country will produce 16.63 million metric tons in 2020 or a 13.44 percent increase. While the Ecological Solid Waste Management Act of 2000 (or Republic Act No. 9003) provides the legal mandate for proper waste management, actual implementation remains weak and faces an increasing number of challenges in light of population growth and rapid urbanization in the country's growth centers.

Post COVID-19 recovery

8. The COVID-19 pandemic is causing significant economic losses, and the path to recovery is expected to be even more challenging as the Government confronts weaknesses in the health system, sustained infection in major cities, and an uncertain prospect of a vaccine. The imposition of Enhanced Community Quarantine in the entire island of Luzon has displaced about 1.19 million[21] Filipino workers and caused economic losses estimated at Php 94.3 million for the agriculture sector; Php 486.97 billion for manufacturing; Php 12.81 billion for mining and quarrying; Php37.93 billion for construction; Php 86.29 billion for retail; and Php 60.25 billion for tourism. Given this, the Government's efforts for the remainder of 2020 and 2021 will focus on a phased recovery approach to the new normal.

2.3 Policy Landscape

9. Building on GGGI's previous interventions, the CPF 2021-2025 aligns with relevant government policies in the areas of: i) inclusive growth, which aims to sustain poverty alleviation and equity, as embodied in the Philippine Development Plan (PDP 2017-2022); ii) climate change adaptation and mitigation as pronounced in the National Climate Change Action Plan (NCCAP) 2011-2028 and NDC Targets; iii) solar energy development in support of the National Renewable Energy Roadmap (2017-2040); iv) MSME development to create jobs and generate income as envisioned in the MSME Development Plan (2017-2022); and (v) the Ecological Solid Waste Management Act of 2000 (RA 9003). In addition, the overarching policy landscape will be framed in pursuit of post COVID-19 recovery as the Government, through the "We Recover as One Plan," delicately treads the balance between economic recovery and health protection to help the country transition to a post-pandemic scenario.

[20] Source: As of Sep 2020, https://bit.ly/3qmhyYr

[21] As of 12 April 2020; "We Recover As One Plan"; Inter-Agency Task Force Technical Working Group for Anticipatory and Forward Planning

[22] NEDA is still in the process of monitoring and evaluating the current plan targets of the country, taking into account the adverse impact of COVID-19.

2.4 Specific Country Goals and Targets

Inclusive growth

10. The Philippine Development Plan (PDP 2017-2022)[22] envisages the Philippines as an upper-middle country by 2022 with a GDP growth rate of 7-8% in real terms, coming from an economic expansion by 50%[23] and increase in per capita income from US $3,550 in 2015 to at least US $5,000 in 2022. National poverty incidence is targeted to decline from 21.6% (2015) to 14% (2022), while target reduction in rural poverty incidence is from 30% (2015) to 20% (2022). The PDP aims to reduce the unemployment rate from 5.5% in 2015 to 3.5% in 2022.

Climate change adaptation and mitigation

11. The NCCAP 2011-2028 will comprehensively address the climate change risks and anticipated impacts through the development and implementation of long-term plans and strategies in the thematic priority areas of: i) food security; ii) water sufficiency; iii) ecosystem and environmental sustainability; iv) human security; v) climate-smart industries and services; vi) sustainable energy; and vii) capacity development.

Solar energy development

12. The National Renewable Energy Roadmap (2017-2040)[24] aims to increase renewable energy (RE) installed capacity to at least 20GW by 2040 through: i) the acceleration of RE positioning; ii) the creation of a conducive business environment; iii) reliable and efficient infrastructure; iv) the promotion and enhancement of a research, development and demonstration (RD&D) agenda; and v) other activities, including technical capacity building. For solar development, the aspirational target is 1,528 MW installed capacity, after considering fiscal and non-fiscal incentives set out by the Renewable Energy Act of 2008 (Republic Act No. 9513), PV technological advances, and supporting policy mechanisms, such as Renewable Energy Portfolio Standards, Green Energy Option Program, Community-based Net Metering Program, and Green Energy Tariff/Green Energy Auction Program.

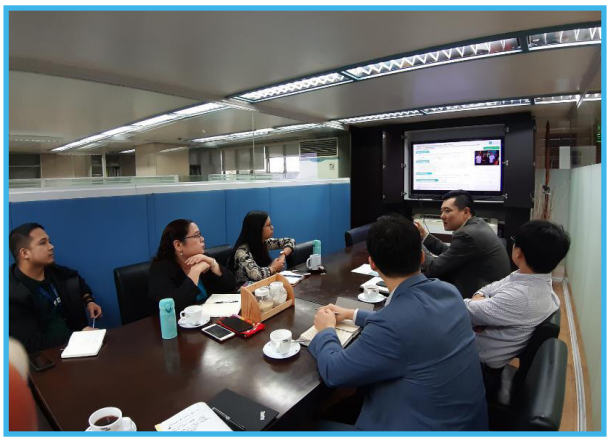
MSME development

13. The MSME Development Plan (2017-2022) aims to achieve "more globally competitive MSMEs that are regionally integrated, resilient, sustainable, and innovative thereby performing as key drivers of inclusive economic growth" through three focus areas: i) business environment, which aims to regulatory requirements and regulatory procedures, and access to finance; ii) business capacity, which will strengthen human capital development and innovation and technological competitiveness of MSMEs; and iii) business opportunities, to broaden access to markets. Five strategic goals underpin the vision and support the three focus areas: i) improved business climate; ii) improved access to finance; iii) enhanced management and labor capacities; iv) improved access to technology and innovation; and v) improved market access.

[23] From 2016 baseline figures.

[24] The National Renewable Energy Roadmap 2017-2040 is part of the Philippine Energy Plan 2017-2040 (Volume 2, Sectoral Plans and Roadmaps, pp. 9-21)

[25] "Solid waste mismanagement in the Philippines," Inquirer, 18 May 2019



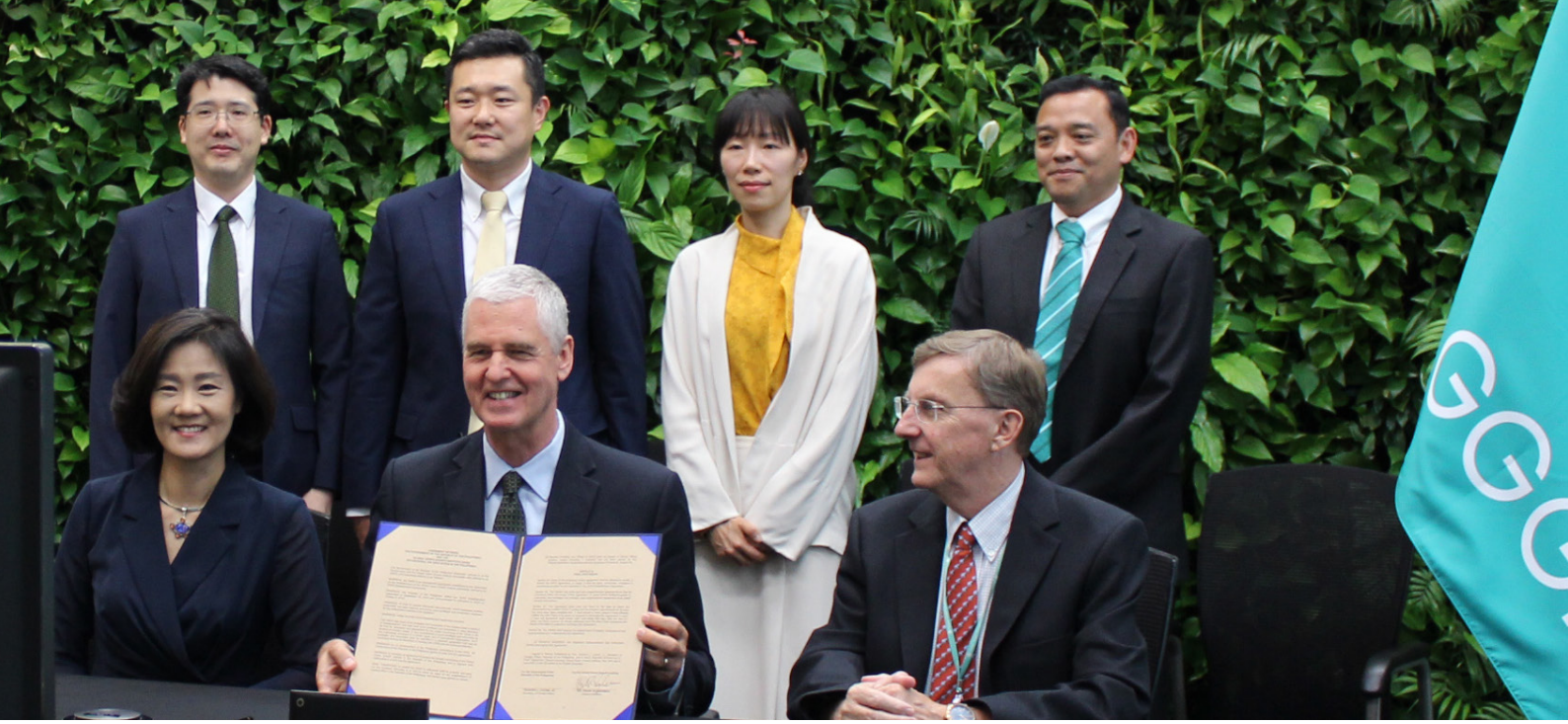
Improved solid waste management

14. The Ecological Solid Waste Management Act of 2000 (RA 9003) provides a systematic, comprehensive, and ecological waste management program that protects public health and the environment through the adoption of best practices in handling waste. It also presents the potentials and benefits of recycling in both solid waste management (SWM) and in poverty reduction (Aquino, et al., 2013). Policies addressing specific aspects of SWM are also in place, but the problem of improper waste disposal, operation of landfills in critical areas, and increasing waste volumes, among others, persist.[25]

Post-COVID-19 pandemic recovery

15. The "We Recover as One Plan"[26] outlines the Government's response to the COVID-19 pandemic to support economic recovery and transition to a new normal. It underscores the importance of food security and recommends financial support to farmers, fisherfolk, and enterprises in 2020 and 2021, while intensifying research and development for agriculture. It recommends financial support programs for MSMEs affected by national emergencies, capacity building to develop their resilience, and more innovations through digital solutions for businesses, skill development, supply chain management, and formulating business continuity plans. To address unemployment and underemployment, the plan emphasizes the retooling of the labor force and improvement of social safety nets for those whose income has been severely affected by the pandemic.

[26] The "We Recover as One Report" does not articulate specific goals or targets for development planning. It reports on the impacts of COVID-19 and the community quarantine implemented, based on the online rapid assessment from 3-7 April 2020, and provides recommendations on the policies, strategies and programs to mitigate losses of businesses and consumers for them to adapt to the "new normal" state of economic activities.



Chapter 3: Programmatic Solutions and Intended Results

3.1 Overview of the Programmatic Solutions

1. The Philippines' CPF focuses on five Programmatic Solutions[27], namely: i) Climate Action; ii) Climate Resilient Agriculture; iii) Waste Management; iv) Solar PV; and v) Green Industries. These solutions have been identified as critical interventions needed to address strategic green growth challenges and opportunities in the country responding to i) the expansion of coal power plants and limited energy access; ii) low productivity and poverty in the agriculture value chain; iii) limited capacity to access climate finance; (iv) the waste crisis, and iv) post COVID-19 recovery.
2. These programmatic solutions are envisioned to have transformative socio-economic impacts as they promote growth in under-served areas. They increase access to affordable and clean energy while creating green employment opportunities and raising income among rural workers in the value chain of agriculture-based enterprises and MSMEs. In pursuing these programmatic solutions, GGGI builds on almost a decade of experience in the Philippines and solid cooperation with key National Government partners, such as the CCC, DTI, NEDA, and DOE, and its familiarity in working with LGUs given the decentralized governance structure of the country. GGGI brings a global perspective in pursuing these solutions based on lessons learned from its other Members and its extensive network of international experts. GGGI is also a key partner for the Government in the area of resource mobilization and forging co-financing cooperation with development partners to support scale and replication.
3. For better understanding of the overall five-year planning of the CPF, the impact pathway diagram in Annex 1 provides a visual summary, which will help to explain the causal linkages and pathways between programmatic solutions, intermediate outcomes,[28] and strategic outcomes[29] to reach the key country goals and targets in the Philippines.

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[27] Please refer to 'Figure 1. GGGI Global Operational Priorities and Programmatic Solutions' (p.2) for the full list of Programmatic Solutions.

[28] Intermediate outcomes describe key outcomes that GGGI has set targets for in Strategy 2030 relating to policy adoption and finance mobilized (from financing instruments and investment projects) within each selected programmatic solution that GGGI aims to achieve during the CPF period.

[29] Strategic Outcomes reflect the key aspects of poverty reduction, social inclusion, environmental sustainability and economic growth. These end goals are directly aligned to the national development goals of Member and partner country governments to whom GGGI aims to contribute. The SOs are intended as a framework for common planning, monitoring and communications both at GGGI country program level and the organization level.

3.2 Programmatic Solutions, Strategic Outcomes, and Intermediate Outcomes

Figure 4: Programmatic Solutions, Strategic Outcomes, and Intermediate Outcomes

Programmatic Solution	Strategic Outcome[30]		Intermediate Outcome[31]	
Climate Action	SO1: GHG emission reduction (attributed)	157,000 tons CO^2e[32]	IO2: Increased green investment flows	5 concept notes submission to GCF (3 adaptation and 2 mitigation)
	SO6: Enhanced adaptation to climate change (attributed)	37,500 people benefited[33]	IO3: Improved multidirectional knowledge sharing and learning between countries on green growth	NDA capacity development
Climate Resilient Agriculture	SO2: Creation of green jobs (attributed)	2,200 jobs created[34]	IO1: Strengthened national, sub-national, and local green growth policy planning, financing, and institutional frameworks	Policy development in Oriental Mindoro
	SO6: Enhanced adaptation to climate change (attributed)	11,000 people benefited[35]	IO2: Increased green investment flows	Business development of micro enterprises in Oriental Mindoro
	SO6: Enhanced adaptation to climate change (contributed)	430,000 people benefited[36]	IO3: Improved multidirectional knowledge sharing and learning between countries on green growth	Local and national capacity development
Waste Management	SO1: GHG emission reduction (attributed)	270,000 tons CO^2e[37]	IO2: Increased green investment flows	Investment project on waste management and/or waste-to-energy

[30] GGGI aims to deliver program and project impacts through six 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

[31] GGGI supports the delivery of Strategic Outcomes (SO) through the achievement of the following three Intermediate Outcomes (IO): 1) strengthened national, sub-national, 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.

[32] Assumption: Bottom-up attributed estimation for 1 energy project of 5 MW ground-mounted utility scale and top-down attributed estimation for 1 transport project of USD 5M investment mobilized (using the Target Attribution Impact multiplier for e-mobility & sustainable public transport infrastructure (SO1))

[33] Assumption: Top-down contributed estimation. Assuming 3 adaptation project concept notes (USD 5M per project) are approved (using the Target Attribution Impact multiplier for enhancement of climate smart agriculture (SO6))

[34] Assumption: Top-down attributed estimation. Assuming USD 4.8M investment mobilized (using the Target Attribution Impact multiplier for enhancement of agricultural value chains (SO2))

[35] Assumption: Direct beneficiaries calculation assumed for the KOICA-GGGI project

[36] Assumption: Indirect beneficiaries calculation assumed for the KOICA-GGGI project

[37] Assumption: Top-down attributed estimation. Assuming USD 5M investment mobilized, using the Target Attribution Impact multiplier for waste management (agri/industry) (SO1)

Figure 4: Programmatic Solutions, Strategic Outcomes, and Intermediate Outcomes (cont.)

Programmatic Solution	Strategic Outcome		Intermediate Outcome	
Solar PV	SO1: GHG emission reduction (attributed)	820,000 tons CO^2e[38]	IO1: Strengthened national, sub-national, and local green growth policy planning, financing, and institutional frameworks	Enabling policy and regulatory environment to support solar PV investment
	SO3.1: Clean and affordable energy (contributed)	31,500 people benefitted tons[39]	IO2: Increased green investment flows	Investment project on utility-scale and/or off-grid solar
Green Industries	SO2: Creation of green jobs (attributed)	12,500 jobs created[40]	IO2: Increased green investment flows	Green and inclusive start-up development and financing

Programmatic Solution 2: Climate Action

4. This programmatic solution will support the country's climate agenda and enabling conditions to support it, particularly climate finance (e.g. from Green Climate Fund) through the formulation of climate resilient and green growth policies; strengthening national mechanisms, capacities, and institutional governance; and developing project proposals for green investment projects. This solution seeks to transform the domestic and international climate financing environment in the country through the continuing preparation of strategic proposals with key stakeholders. This contributes to the climate adaptation and mitigation agenda of the Government to reduce climate change impacts while reducing GHG emissions. In accordance with the commitment of linking climate action, sustainable development goals and environmental justice, GGGI will further focus on socio-economic co-benefits as a prerequisite for fostering political will and public support for green transformations. Subject to the Government's agreement, GGGI will mainly work with the CCC as the Natiocnal Designated Authority (NDA), and Land Bank of the Philippines (LBP), Development Bank of the Philippines (DBP), Foundation for the Philippine Environment (FPE) as the Direct Access Entities (DAEs), while also exploring cooperation with concerned NGAs and project proponents. In order to address any forms of inequalities, GGGI will employ a broad stakeholder participation and innovative approaches towards the empowerment of women, youth, indigenous people, the informal actors and/or any other vulnerable and socially excluded groups relevant to the climate actions.
5. In addition, in line with the priority areas listed in the NCCAP 2011-2028, GGGI will also look for intervention under the theme of **Green Buildings** from two perspectives: 1) transitioning towards green buildings introduce solutions that increase the resilience of vulnerable communities to the frequent extreme weather events, and 2) greening the building industry reduces resource intensity from construction and operation of buildings, contributing to numerous environmental outcomes, including reduction of GHG emissions.

Programmatic Solution 3: Climate Resilient Agriculture

6. GGGI will work primarily with the CCC, DTI, Department of Agriculture (DA), and NEDA to develop and implement projects that will promote food security, create decent jobs, and generate income in the agriculture value chain, especially for smallholder farmers who are situated upstream in the value chain and considered to be one of the poorest groups in the Philippines. This work

[38] Assumption: Bottom-up attributed estimation. Assuming USD 50M investment mobilized (equivalent to 50 MW generation) for solar PV

[39] Assumption: Bottom-up contributed estimation. Assuming USD 20M investment mobilized (equivalent to 20 MW generation) from policy ordinance for rooftop solar PV

[40] Assumption: Assuming USD 25M on financing green and inclusive business and start-ups on Agricultural Value Chain (USD 7M), Solar PV (USD 7M), and Waste Management (USD 11M)

includes providing support related to property, plant and equipment (PP&E), in order to directly boost income generation within the sector and ensure unhampered movement of goods and services. Through PP&E intervention, GGGI may bring promotion of sustainable consumption and production (SCP), such as rainwater catchment practice. The first project on Climate Resilient Agriculture is the KOICA-GGGI co-financed "Climate Resilient and Inclusive Green Growth for Poor Rural Communities: Accelerating Implementation in the Agriculture Value Chain" in the Province of Oriental Mindoro, which aims to improve the productivity of selected MSMEs through the promotion of higher value product processing through a green and efficient production process; development of broader market access through business model enhancement and business matching; and adoption of evidence-based climate policies to reduce vulnerability to extreme weather events. This intervention aims to transform the socio-economic landscape in Oriental Mindoro as it creates inclusive employment along the value chain of the selected agriculture-based enterprises thus contributing to poverty alleviation. It is also envisioned to have broader regional and national impacts in support of the post-COVID19 recovery plan of the Philippines in terms of income generation for marginalized workers and ensuring the availability of food supply. The project model is intended to be scalable and replicable such that this may be introduced as an "off the shelf" intervention for provinces with similar agriculture value chain structures. Since the equality and social situation in the country has significant implications on the adoption and sustainability of climate resilient practices, GGGI will ensure that assessments are conducted on the proposed actions/practices in order not to reinforce existing forms of inequalities; contribute towards the improvement of women's use of agricultural inputs including tenure of and access to natural resources; and support in strengthening the enabling environment including integration of inclusion perspectives in Philippines agricultural related national plans and strategies.

Programmatic Solution 6: Waste Management

7. This programmatic solution supports the country's systematic, comprehensive, and ecological waste management program. GGGI's strategic and narrowed-down focus will be i) originating and engaging innovative startups who promote/ adopt circular economy approaches and facilitate investment in them, which will create employment opportunities, and ii) exploring potentials in LGUs to facilitate investment in waste-to-energy as an emerging technology option for power generation, if the technology option is feasible in the local context. The waste sector offers important sources of income especially for low-skilled and informal workforce in the country, as such GGGI will use inclusive approaches of not only involving waste pickers associations on decisions around feasible technologies but also facilitate the environmental and social safeguards analysis/frameworks for waste management; support the incorporation of youth empowerment and social inclusion criteria in waste management planning; and propose the development of business models that improve sanitation to underserviced communities.

Programmatic Solution 9: Solar PV

8. This programmatic solution will focus on promoting solar PV technology as a cleaner and more affordable alternative to fossil-based electricity to contribute to GHG reduction while supporting equitable energy access. GGGI initiatives under this programmatic solution will include technical advisory services for selected LGUs and MSMEs

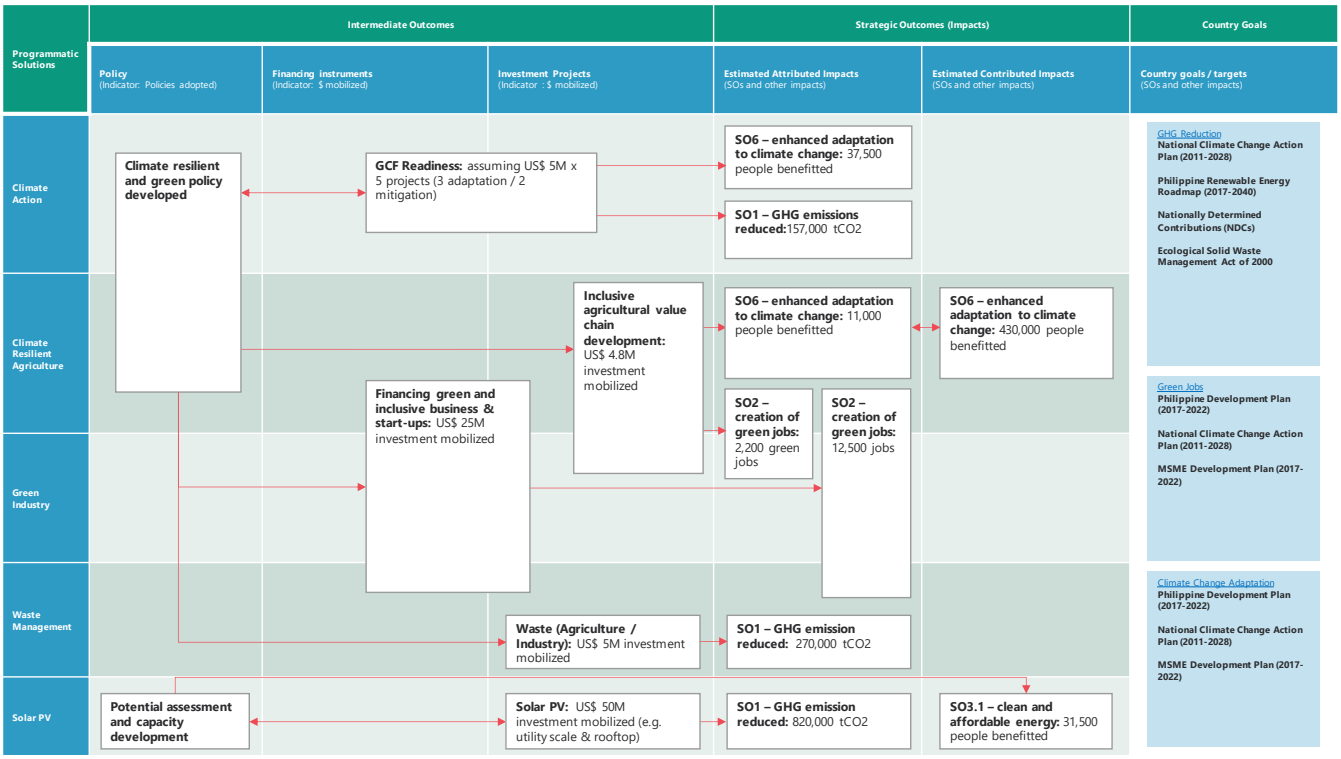
[41] GGGI normally makes a deliberate "exit" from a specific project at the point where proven initial investment commitment is secured (See Evaluation of GGGI's Green Investment Services, http://gggi.org/site/assets/uploads/2020/03/GGGI-Green-Investments_Main-Evaluation-Report_FINAL.pdf).

to develop inclusive policies that will support solar energy auctions and increased investment for solar PV installations (both utility-scale and off-grid) along with the provision of relevant capacity development interventions (e.g. targeted to distribution utilities). To demonstrate the actual technology, GGGI will originate and facilitate the structuring of solar PV investment projects that among others - creates green jobs, improve access to finance, enhance skills development in the sector and contribute towards health and other welfare benefits, support households with limited access to electricity to cope with the digitalization in other areas in the country, support policy development that encourages such project structuring, and assist with sourcing potential investors.[41] Working closely with the DOE and relevant LGUs, the GGGI approach to this solution is envisioned to be "modular" such that it facilitates easier replication and adoption in other LGUs.

Programmatic Solution 10: Green Industries

9. This programmatic solution will center on fostering the development of green businesses and start-ups to generate climate change adaptation and mitigation outcomes, as well as green jobs. The intervention can be based on the assumption that a creation of a well-designed incubation and acceleration facility, backed by seed funding and a platform from the early design stage, will unlock the potential of private sector funding to flow into early-stage climate and green innovations for the Philippines. In order to make this happen, GGGI is well-positioned to bridge the gap between the government and international finance instruments by working with the Philippine Government on fostering a strong enabling environment for investment. This initiative includes the development of a green new deal plan or policy brief to create a stimulus package for nurturing green MSMEs, resulting in the creation of green jobs. From the perspective of capacity enhancement, this can be aligned with GGGI's Green Innovation Fund as well as GGGI's annual *Greenpreneurs*[42] initiative to supercharge innovative green start-ups. Lastly, GGGI will also explore how to link this concept to boost "farm tourism" with the aim of increasing the income and livelihoods of farmers and fisherfolks, in line with government priority.

Annex 1: Impact Diagram Pathway



[42] www.greenpreneurs.co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