

# Indonesia Country Planning Framework 2021-2025



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#### **Acronyms**

**BKF** Badan Kebijakan Fiskal (Fiscal Policy Agency)

**BRGM** Badan Restorasi Gambut dan Mangrove (Peatland and Mangrove Restoration

Agency)

**BPDLH** Badan Pengelola Dana Lingkungan Hidup (Environmental Fund Management

Agency)

**CK** Central Kalimantan

**CMEA** Coordinating Ministry of Economic Affairs

**CPF** Country Planning Framework

**EK** East Kalimantan

**ENSO** El Niño-Southern Oscillation

FCPF Forest Carbon Partnership Facility

**FMU** Forest Management Unit

**GCF** Green Climate Fund

**GGGI** Global Green Growth Institute

**GGP** Green Growth Program

**GHG** Greenhouse Gas

GNI Gross National Income
 Gol Government of Indonesia
 GOP Global Operational Priorities
 HCA Host Country Agreement
 HDI Human Development Index
 IPPs Independent Power Producers

KADIN Kamar Dagang dan Industri Indonesia (Indonesian Chamber of Commerce and

Industry)

KLHS Kajian Lingkungan Hidup Strategis (Strategic Environmental Studies)

**LAN** Lembaga Administrasi Negara (State Administration Agency)

**LCDI** Low-Carbon Development Initiative

**LT-LEDS** Long-term Low Emission and Development Strategies

LULUCF Land Use, Land Use Change and Forestry

MEMR Ministry of Energy and Mineral Resources

MoEF Ministry of Environment and Forestry

**MoF** Ministry of Finance

MRV Monitoring, Reporting, and Verification

**NDA** National Designated Authority

NDC Nationally Determined Contribution

**NFV** National Financing Vehicles

**NK** North Kalimantan

Norad Norwegian Agency for Development Cooperation

NTT Nusa Tenggara Timur (East Nusa Tenggara)

**ODA** Official Development Assistance

**PLN** Perusahaan Listrik Negara

**PP** Papua

**PPP** Public Private Partnership

PT. PLN PT. Perusahaan Listrik Negara (State Electricity Company)

PT. SMI PT. Sarana Multi Infrastruktur

**RE** Renewable Energy

**REDD**+ Reducing Emission from Deforestation and Forest Degradation

**RENSTRA** Strategic Plans

**RPPEG** Rencana Perlindungan dan Pengelolaan Ekosistem Gambut (Peat Ecosystem

Protection and Management Plan)

**RPPLH** Rencana Perlindungan dan Pengelolaan Lingkungan Hidup (Environmental

Protection and Management Plan)

**RPJMD** Rencana Pembangunan Jangka Menengah Daerah (Indonesia's Regional Medium-

Term Development Plan)

**RPJMN** Rencana Pembangunan Jangka Menengah Nasional (Indonesia's National

Medium-Term Development Plan)

**RUED** Rencana Umum Energi Daerah (Regional General Energy Plan)

SDGs Sustainable Development Goals
SEA Strategic Environmental Assessment

SEZ Special Economic ZoneSK South KalimantanSO Strategic Outcomes

SPRSI Safeguards, Poverty Reduction and Social Inclusion

**TLFF** Tropical Landscape Finance Facility

WP West Papua

#### **Foreword**

Indonesia is a founding member of the Global Green Growth Institute (GGGI). Both the Government of Indonesia (GoI) and GGGI recognize the importance of growth that is sustainable and equitable. Since 2013, GGGI and the GoI have been working in close collaboration to promote green growth principles among government and the private sector. Green Growth is concerned not only with the rate of economic growth, but also with its quality, that is, the ability of growth to deliver multiple economic, social and environmental benefits that improve the quality of people's lives across all segments of society.

The Gol is committed to climate action and sustainable development. The essence of Indonesia's Medium-Term National Development Plan (RPJMN) 2020 – 2024 is to guide the country's rapid economic progress towards a high-income country (GDP around 20,000-23,000 USD/capita, *Indonesia Maju 2045*), taking into account the carrying capacity of the environment and disaster vulnerability. The incorporation of the Low Carbon Development Initiative (LCDI)<sup>1</sup> and climate resilience as a national priority agenda (National Priority 6) in the RPJMN 2020-2024 are milestones towards applying green growth to its planning, policies and investments.

To achieve Indonesia's green growth aspirations and deliver tangible results with social, environmental, and economic benefits for the Indonesian people, ambitious public and private investments in green projects are needed. The GoI and GGGI recognize that there are still many challenges to overcome to realize Indonesia's green growth ambitions, and that it is vital to realize investment in green projects on the ground to demonstrate that green growth is indeed not only a feasible but also preferable alternative to earlier development scenarios that involved an over-reliance on fossil fuels and over-exploitation of the natural resource base. Indonesia has shown that green growth can play a key role in attracting investments that boost job creation and reduce poverty, contributing to Indonesia's post-COVID 19 recovery.

It is against this background that GGGI presents the CPF 2021 – 2025. The CPF will guide GGGI's activities in Indonesia, directing support where it is most needed. Aligned with Indonesia's RPJMN 2020 – 2024 and LCDI, the CPF articulates how GGGI can contribute through the joint Green Growth Program to accelerate green investments, and promote climate action, sustainable forests, renewable energy, and green industries.

We are grateful to the ministries, development partners and others for their support of, and engagement with, GGGI in the development of this CPF.

We reaffirm our joint commitment to enhancing the effectiveness of GGGI as a key partner in Indonesia's green growth ambitions.

Signed by two parties,

Suharso Monoarfa

Minister for National Development Planning/Head of National Development Planning Agency (BAPPENAS)

Ministry of National Development Planning of the Republic of Indonesia

Dr. Frank Rijsberman Director General

Global Green Growth Institute

10/10/2022

10/10/2022

Date

Date

<sup>&</sup>lt;sup>1</sup> The Low Carbon Development Initiative is a set of inclusive development planning policies and low-carbon investment strategies for the RPJMN 2020-2024 that encourage Indonesia to reduce the and GHG Emissions and its intensity

#### **Executive Summary**

The Country Planning Framework (CPF) is GGGI's planning document presenting the strategic priorities that GGGI aims to pursue in partnership with the Government of Indonesia. It serves as a foundation for the GGGI country program and provides strategic direction to guide GGGI's activities and maximize their positive impact on Indonesia's development goals. The CPF aligns GGGI's vision and goals with Indonesia's commitment to transformational change toward green growth, embodied in the Indonesia's Medium-Term National Development Plan (RPJMN) 2020 – 2024, Indonesia's LCDI, and the country's commitment to SDGs and NDC targets.

As the world's 4th most populous nation and 16th largest economy $^{i}$ , Indonesia has successfully maintained consistent  $\pm 5\%$  per annum economic growth prior to the COVID19 pandemic, benefitting from abundant natural wealth and increasing domestic consumption by a growing population. The country's growing economic prosperity has translated into higher living standards, cutting the poverty rate in half since 1999 to less than 10% in 2019.

Through the RPJMN 2020-2024, the Government of Indonesia seeks to accelerate economic transformation by investing in sustainable infrastructure, human development, and better public services and welfare standards to provide a solid economic foundation towards Indonesia Maju (Indonesia Onward) in 2045. However, achieving the development targets of national strategies and plans for 2020 – 2024 and beyond will require more resources that could increase GHG emissions and threaten the country's natural capital. The Gol has committed to pursuing a sustainable growth model in the LCDI and has begun mainstreaming green growth into government planning processes and policies. It has also integrated the NDCs and SDGs in the RPJMN. In the NDC, the Gol aims to reduce GHG emissions by 29% below business-as-usual projections by 2030 (41% with international support).

The CPF 2021 – 2025 builds on the successful GGGI-Gol collaboration under the previous 5-year CPF (2016 – 2020). Altogether, from 2016 – 2020 GGGI assisted in preparing more than 50 policies, plans and regulations and in mobilizing commitments of more than USD 220 million in results-based payments from the FCPF Carbon Fund, the GCF and others. These achievements have contributed positively to Gol targets to reduce GHG emissions, mobilize green investments, and create green jobs, while maintaining a stable economic growth rate of around 4-5 percent per year (2015-2019).

Following extensive consultations with government partners, this CPF outlines the areas, or Programmatic Solutions, where GGGI can make significant environmental, social, and economic impacts. Until 2025, the GGGI-GoI Green Growth Program will deliver Programmatic Solutions focusing on Green Investments, Green Growth and Climate Action, Sustainable Forests, Renewable Energy, and Green Industries. With less strategic priority, but within the scope of the Green Growth Program, GGGI may also work on other Programmatic Solutions, including Climate Resilient Agriculture, Coastal Resilience, Waste Management and Green Buildings.

These programmatic solutions were selected to support the GoI to achieve and exceed Indonesia's NDC targets and national green growth goals as described in the RPJMN and LCDI. These programmatic solutions stand out as critical areas of support that GGGI is well-positioned to deliver by focusing on: effective policymaking and planning to drive the transition to a green growth model; mobilizing public and private investment in sustainable and inclusive projects; and enhancing the capacity of government and key institutional actors to develop and implement green growth policies, plans, and attract investments.

The Impact Pathway diagram available in Annex 1 provides a visual summary of the causal linkages and pathways between national targets, programmatic solutions, intermediate outcomes, and strategic outcomes that the GGP3 aims to address between 2021-2025.

<sup>i</sup>World Development Indicators database, World Bank, July 2021.

### **Chapter 1**

Introduction



#### Introduction

### A. GGGI Strategy 2030, GOPs, and Programmatic Solutions

GGGI's Strategy 2030 sets the course for GGGI's service delivery, growth, and expansion from 2021 to 2030. The purpose of Strategy 2030 is to present an ambitious, robust, and clear vision and targets to help accelerate the success of the organization and its mandate to support GGGI Members achieve green growth impacts through low-carbon, socially inclusive, and environmentally sustainable economic development.

To achieve the goals of Strategy 2030, GGGI focuses on five Global Operational Priorities (GOP), presented in Figure 1:

- catalyzing and accelerating access to climate finance and green investments for public and private sectors in member countries:
- supporting members to strengthen policy planning, regulatory frameworks, and institutional capacity to achieve green growth outcomes;
- achieving a sustainable and circular bioeconomy while securing healthy natural systems;
- 4. making cities and communities sustainable, livable, and resilient through green jobs, services, and green infrastructures; and
- 5. accelerating progress towards eradicating poverty and gender inequality.

Programmatic Solutions are a set of defined thematic interventions that GGGI wishes to focus on and replicate or scale up together with government and other partners. They summarize the service offerings that GGGI has had success in delivering. The Programmatic Solutions selected for this CPF are the result of extensive government consultations, aligning GGGI's work in Indonesia with the country's development priorities.

Figure 1. GGGI Global Operational Priorities and Programmatic Solutions

GLOBAL OPERATIONAL PRIORITIES and PROGRAMMATIC SOLUTIONS									
	GLOBAL OPERATIONAL PRIORITIES		PROGRAMMATIC SOLUTIONS 2021-2025						
1	Catalyzing and accelerating access to climate finance/green investments for members' public and private sector	<b></b>	[1]	<b>Green investments</b> (green bankable projects, investment proposals, NFVs, green and climate instruments, carbon-focused engagements)					
2	Supporting our members in strengthening policy, planning and regulatory frameworks and institutional capacity to achieve green growth outcomes	<b>~</b>	[2]	Climate Action (inclusive green growth plans, LT- LEDS, NDC support, MRV system design, climate diplomacy)					
	Achieving a sustainable and circular bio- economy while securing healthy natural systems	<b></b>	[3]	Climate Resilient Agriculture (solar irrigation, RE application in agri value chain, resilient cropping practices, resource conservation)					
3		<b></b>	[4]	Sustainable Forests (REDD+, landscapes financing mechanisms, natural capital markets innovations)					
		<b></b>	[5]	Coastal Resilience (mangroves as ecosystem for livelihoods, aqua-culture, marine issues - fisheries, flood protection and pollution)					
	Making cities and communities sustainable, livable and resilient, supported through green jobs, services and green infrastructure capital market innovations	<b></b>	[6]	Waste Management (circular economies, urban and agricultural waste, wastewater, FSM, waste to resource)					
		<b></b>	[7]	Sustainable Mobility (e-mobility, non-motorized transport)					
4		<b></b>	[8]	Green Buildings (green urban infrastructure norms/standards/ policies, energy efficiency in residential & commercial buildings)					
		<b></b>	[9]	<b>Solar PV</b> (energy transition access and productive use - solar water pumping, solar PV auctions, rooftop, utility scale plants, storage)					
		<b></b>	[10]	<b>Green Industries</b> (green industrial parks, green supply chains, EE in SMEs, labeling and standards)					
5	Accelerating progress in our country programs in poverty eradication and gender equality through our operations	<b></b>	[11]	Cross-cutting in all programmatic solutions					

#### B. Overview of GGGI's operations in Indonesia

Indonesia is a founding Member of GGGI, signing the Agreement on the Establishment of GGGI at the Rio+20 Conference on September 17, 2012, and depositing its instrument of ratification on September 26, 2014. A 2014 presidential decree established GGGI as an international organization operating in Indonesia, and a Host Country Agreement (HCA) was ratified in 2020. The Government of Indonesia (GoI) re-affirmed its commitment to GGGI in 2015, when it became a contributing member providing USD 5 million per year in core funding for three consecutive years.

The present Country Planning Framework (CPF) builds on the results of GGGI-Indonesia CPF 2016 2020, launched in May 2017, and focused on working towards two outcomes, namely (1) inclusive green investment in priority sectors leads to reduced emissions and healthier, more productive ecosystems; and (2) Capable institutions scale up green growth.

As presented on the CPF 2016-2020, the partnership sought to (1) secure investment commitments of at least USD 110 million, leveraged through demonstrations of commercially viable business models in rural and industrial areas, benefiting at least 1 million people; (2) Reduce or avoid 400 million tons of CO2 emission in forested landscapes (non-peat) and 200 million tons of CO2 emission on peat landscapes across 1 million hectares; and (3) Develop 60-100 MW of clean energy and improved sustainable infrastructure in selected special economic zones, contributing up to 1 million tons of CO2 emission reduction a year.

GGGI's operations are guided and overseen by a Steering Committee comprised of government partners and other stakeholders under the auspices of the Ministry for National Development Planning (BAPPENAS). Under the Steering Committee, between 2016 and 2021, GGGI's operations expanded from East and Central Kalimantan to South and North Kalimantan, as well as Papua and West Papua.

In 2019, the Green Growth Program Steering Committee recommended and approved that GGP3 would expand from two pilot provinces (EK and CK) to an additional four provinces (SK, NK, WP and PP). Together, the six provinces represent (1) over 50% of Indonesia's rainforest cover, (2) Indonesia's major actual emission locations, notably, peatlands (CK) and mangroves (EK, NK, WP & PP), (3) those provinces with potential for emissions, notably, large areas of intact rainforests (notably, EK, NK, WP, and PP), pioneering results-based emission payments (EK), (4) high potential for renewable energy electrification (NK, WP, and PP), and/or (5) provinces with a track record of pro-active low carbon development policies guided by prominent public charters for green growth that align with national policies for sustainable and inclusive green growth (SK, WP, and PP). As requested by GGGI government development partners, GGGI also operates in a few other provinces on specific projects that meet at least one of the above five criteria.

GGGI will follow government security guidance including national and regional security protocols for WP and PP. GGGI's provincial staff and secretariat will be embedded in the Dinas Lingkungan Hidup & Kehutanan (PP) and in Bappeda (WP). In all its dealings in WP and PP, GGGI will take carefully and fully into account the political and security issues.

GGGI works collaboratively with GoI partners, supporting institutions and processes to mainstream green growth into development plans and policies, leverage investment in climate change mitigation and adaptation actions, and strengthen the capacity of key national and subnational institutions and actors.

The delivery of the GGGI-Indonesia Country Planning Framework 2016 2020, while originally supported by GGGI core funding and the Kingdom of Norway expanded to include support of Denmark (energy), the Green Climate Fund (accessing climate finance), NDC Partnership's Climate Action Enhancement Package (climate action), and New Zealand Aid Program (energy).

# C. Objectives of the CPF and how it fits in the country planning process

GGGI and the government of each member country where it operates jointly develop a five-year Country Planning Framework (CPF) as the foundation for the GGGI country program. The CPF provides strategic direction to guide GGGI's activities and maximize their positive impact on the host country's development goals. In Indonesia, GGP Phase 2 (2016-2020) was the first phase of the program to be guided by a Country Planning Framework.

The CPF for the third phase of the Green Growth Program (GGP Phase 3, 2021-2025) outlines the broad areas of GGGI's support, with a focus on the organization's core strengths in Sustainable Energy, Water and Sanitation, Sustainable Landscapes, and Green Cities. CPF objectives are aligned with GGGI's Strategy 2030, which Indonesia, as a member, has endorsed, and the national priorities of economic growth, poverty reduction, social inclusion, and environmental sustainability.

This CPF has been formulated through consultation with national and sub-national government counterparts as well as with nongovernment national and international development partners<sup>1</sup>. GGGI and GoI take joint ownership of the CPF's programmatic priorities and outcomes. The CPF outcomes reflect Indonesia's commitment to transformational a socially inclusive, green economy. These change towards green growth -robust growth of outcomes are aligned with national development policies and strategies, including the Indonesia's National Medium-Term Development Plan (RPJMN) and Indonesia's Low-Carbon Development Initiative (LCDI), as well as Indonesia's international commitments to achieve the Sustainable Development Goals (SDGs) and the ambitions of its Nationally Determined Contribution (NDC) to the United Nations Framework Convention on Climate Change (UNFCCC).

GGGI is intended to support the Government of Indonesia to mainstream national policy into the provincial planning process, and provide feedback from the provincial planning process into the national planning process. On the programming and implementation process, through the desk study, consultation, and discussion process, GGGI will ensure the alignment of its works with national priorities and planning documents as well as regional priorities and planning documents, including on Regional General Energy Plan (RUED) Implementation Regulation, Strategic Environmental Studies (KLHS) for (Provincial) Planning, Peat Ecosystem Protection and Management Plan (RPPEG), Environmental Protection and Management Plan (RPPLH), LCDI and NDC related support for provincial level.

Gol has integrated 118 of the 169 global SDG targets into the RPJMN (2020 – 2024) with measurable indicators for baselines and targets to monitor progress. The targets are used as guidance by national and subnational government to align their plans, implementation process and progress monitoring with the SDGs, including for the development of Strategic Plans (RENSTRA) and for sub-national government Regional Medium-Term Development Plans. The country goals and targets that GGP3 partners have selected to address in the CPF (2021 – 2025), consolidate at a high level the SDG targets as reflected in the RPJMN.

<sup>&</sup>lt;sup>1</sup> Consultations were carried out from November 2020 to January 2021.

#### D. Past GGGI results and any highlights of evaluations

In GGP Phase 2, GGGI supported the LCDI, forestry and energy background studies for the RPJMN (2020 – 2024), the NDC roadmap, leadership training for government officials, capacity-building of Forest Management Units (FMUs), project feasibility studies for PT. Sarana Multi Infrastruktur (PT. SMI), and the development of a pipeline of project proposals for the Green Climate Fund (GCF) and other investors. Altogether, GGGI assisted in preparing more than 50 policies, plans and regulations and in mobilizing commitments of more than USD 220 million in results- based payments from the FCPF Carbon Fund, the GCF and others.

As a consequence of GGGI's contributions over the course of the Green Growth Program, Indonesia's green project pipelines have significantly increased in size, with notable improvements in the quality of the proposed projects and in the capacity of PT. SMI as an investment channel and of the National Designated Authority (NDA) for GCF within the Ministry of Finance (MoF). Expanding green investment opportunities is key to increasing Indonesia's access to climate finance and private capital and, thus, to Indonesia's efforts to meet its climate and development commitments.

Several lessons learned can be drawn from GGP Phase 2, implemented under the first CPF (2016 – 2020). First, GGGI's embeddedness in key government agencies has proven to be a practical and functional working arrangement with GoI counterparts that enables better targeted support and effective transfer of knowledge and skills the government partners. Second, the close partnership with government agencies helps to build a common understanding of the value of integrating economic development with environmental management, better intersectoral coordination, and trust in GGGI to support greener growth.

Third, government ownership and the shared commitment by GGGI and the GoI to jointly implement the GGP in alignment with national development targets enhances the sustainability of program results. The lessons learned from Phase 2 guide the development of this CPF and its implementation.

The CPF has been informed by five evaluations that were conducted during the period of the GGGI-Indonesia Country Planning Framework 2016 2020, namely:

- Evaluation of Sustainable Landscapes, spanning Burkina Faso, Colombia, Indonesia, Myanmar, and Peru, conducted in 2021 by GGGI's Impact and Evaluation Unit;
- Evaluation of GGGI's Green Growth Program Phase III, commissioned in 2021 by Norad;
- Appraisal of GGGI, primarily focused on Colombia, Indonesia, and Peru, commissioned in 2020 by the Norwegian Agency for Development Cooperation (Norad);
- Evaluation of GGGI's Green Growth Program Phase II, conducted in 2019, by BAPPENAS; and
- Review of GGGI's Program in Indonesia (2012-2017), commissioned in 2017 by Norad.

The 2020 Appraisal commissioned by Norad noted that GGGI's results in Indonesia had been very positive and that GGGI could play an important coordination role between line ministries, and between national and subnational governments. The 2017 Evaluation commissioned by Norad noted that GGGI's program is of high relevance to the Government and that embedding staff in ministries serves to increase effectiveness.

The 2019 Evaluation conducted by BAPPENAS concluded that GGGI's technical support has enhanced GoI's capacity to achieve the NDC and SDGs by incorporating elements of green growth, climate change, GHG emission reductions, and 'Safeguards, Poverty Reduction and Social Inclusion (SPRSI)' in government plans and policies, and by improving Indonesia's access to climate finance.

#### **Chapter 2**

Country Overview and Relevant National Goals and Targets

# **Country Overview and Relevant National Goals and Targets**

#### A. Country overview

Indonesia is the world's fourth most populous nation and 10th largest economy (in Purchasing Power Parity), a diverse archipelago rich in biodiversity and ecosystems that support the livelihoods of millions of people in local communities. The country has achieved consistent economic growth prior to the COVID19 pandemic, benefitting from abundant natural wealth and increasing domestic consumption by a growing population.

The country's growing economic prosperity has translated into higher living standards, cutting the poverty rate in half since 1999 to less than 10% in 2019. However, achieving the development targets of national strategies

and plans such as the LCDI and the RPJMN for 2020-2024 will require more resources that could increase GHG emissions and threaten the country's natural capital. To avoid and reverse the negative impact of rapid economic growth, the GoI has committed to pursuing a sustainable growth model in the LCDI and has begun mainstreaming green growth into government planning processes and policies. It has also integrated the NDCs and SDGs in the RPJMN. In the NDC, the GoI aims to reduce GHG emissions by 29% below business-as-usual projections by 2030 (41% with international support.)

Table 1: Country at a Glance Table

Country at a Glance							
Indicator Name	Data	Year	Source				
Population	271 million	2019	World Bank				
GDP per capita, PPP (current international \$)	12,300	2019	World Bank				
World Bank income group classification	Upper-Middle- Income	2019	World Bank				
Poverty gap at national poverty lines (%)	n.a.		World Bank				
Unemployment total (% of total labor force)	4.8	2020	World Bank				
Informal Economy Employment Rate https://ilostat.ilo.org/data/country-profiles/	80.4	2019	ILOSTAT				
Inflation, consumer prices annual %	3.0	2019	World Bank				
Central government debt, total (% of GDP)	31.4	2016	World Bank				
Official Development Assistance (ODA) as a percentage of overall government budget	TBD		Finance Ministry				
Human Development Index (Rank)	111	2018	UNDP				
Gender Inequality Index (Rank)	103	2018	UNDP				
Gini coefficient	39	2018	World Bank				
CO <sub>2</sub> e emissions (metric tons per capita)	2.2	2016	World Bank				
Forest area (% of land area) <sup>2</sup>	49.9	2016	World Bank				
Agricultural land (% of land area)	31.5	2016	World Bank				
Agriculture, value added (% of GDP) Agriculture, forestry, and fishing value added	12.7	2019	World Bank				
Renewable energy consumption (% total final consumption)	37	2015	World Bank				
Fossil fuel energy consumption (% of total)	66.1	2014	World Bank				
Annual freshwater withdrawals, total (% of internal resources)	11	2017	World Bank				
Urban population growth (annual %)	2.3	2019	World Bank				
Urban population (% of total)	56	2019	World Bank				
Sanitation facilities (% of population with access)	n.a.		World Bank				

 $<sup>^{2}\,\</sup>mbox{Forest}$  area in this context refers to forest cover or standing forests.

Environmental Performance Index (Rank)	116	2020	Yale
Global Competitiveness Index (Rank)	36	2018	World Economic
·			Forum
ND-GAIN Adaptation Index (Rank)	97	2018	ND-GAIN
Key baseline data from GGGI strategic outcome targets for the country <sup>3</sup>			Local Data (TBC)

According to GGGI's Green Growth Index, Indonesia can accelerate green growth through investments in green economic opportunities and by addressing concerns in sustainable land use and social protection (Figure 1). The Green Growth Index measures country performance at a 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.

Indonesia has generally performed well with an overall score of 40.81 in 2019, ranking 16 among 35 Asian nations. Among the four green growth dimensions, performance in achieving targets in green economic

opportunities is the poorest. In comparison, Indonesia's score at 12.3 is below the score of most south-east Asian countries, representing an underperformance in green investment, green trade, green jobs, and green innovation (Figure 2).

Herein, perhaps, lies Indonesia's biggest opportunity to achieve its national development targets: Green growth strategies that accelerate investments and innovation to create and target new economic opportunities, reinforcing the trajectory towards a sustainable, socially inclusive economy.

<sup>&</sup>lt;sup>3</sup>For further information on GGGI's Strategic Outcomes, target settings, baseline indicators and more, please refer to the target setting guidelines, Strategic Outcome discussion note, and recent email from Frank.

Figure 2: Distance to targets for the Green Growth Indicators<sup>4</sup>

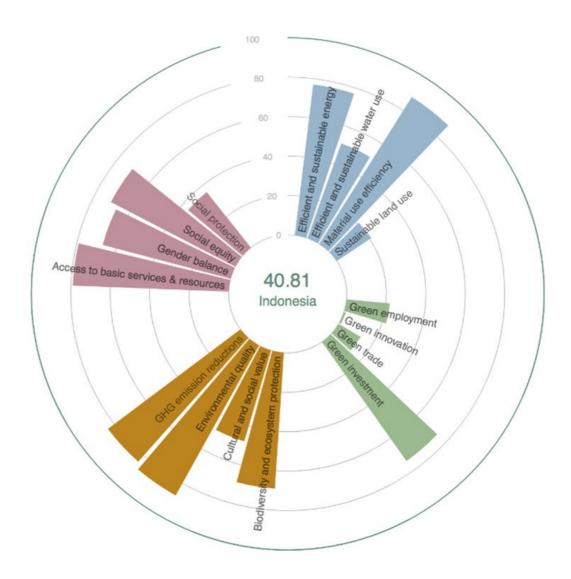


Figure 3: Performance dashboard of indicators for the green growth indicators

	s	fficie sustai esour	inabl	e	Natural capital protection			Green economic opportunities				Social inclusion				
	EE	EW	SL	ME	EQ	GE	BE	cv	GV	GT	GJ	GN	АВ	SE	SP	GB
Indonesia	77.34	51.08	21.57	88.62	87.41	84.29	69.48	48.20	74.06	13.52	22.84	1.00	79.42	71.26	36.32	67.55
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

<sup>&</sup>lt;sup>4</sup> The outer line with a value of 100 is the sustainability target (e.g. SDGs, Paris Climate, Aichi Biodiversity). The closer are the radars to 100, the better the green growth performance of the respective indicators. A value of 100 implies that a country has achieved the sustainability target. So, the diagram is called distance to target.setting guidelines, Strategic Outcome discussion note, and recent email from Frank.

#### Legend:

EE	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
GE	GHG emissions reduction	SE	Gender balance
BE	Biodiversity & ecosystem protection	SP	Social equity
CV	Cultural and social value	GB	Social protection

#### B. Green growth / climate crisis key challenges in country

Rising inequality and unsustainable use of natural capital. Indonesia has enjoyed financial stability and strong economic growth of nearly 6% per year since 2000, but inequality is rising, and the country's development pathway is not environmentally sustainable. Natural capital has been lost at an alarming rate, as renewable forest and marine resources have been overexploited and depleted. Air and water pollution are serious problems especially in major cities. Urban expansion is eating up productive farmland.

GHG emissions are high, largely from land use, land use change and forestry (LULUCF) but increasingly from the use of non-renewable energy sources. Women are especially vulnerable to the social, environmental and economic impacts as a result of their position and roles in families and communities at large.

Vulnerability to climate change. Indonesia is also highly vulnerable to climate change impacts. A majority of the population inhabits low-lying, coastal areas subject to flooding and sea-level rise. Shifts in seasonal rainfall patterns are already affecting agriculture and causing more frequent floods and droughts,

an effect exacerbated by El Niño-Southern Oscillation (ENSO) events, which caused severe crop losses and disastrous forest and peat fires in, e.g., 1997–98 and 2014–16. These adverse impacts are likely to further increase as a result of global warming. This vulnerability contributes in turn to GHG emissions, in a vicious circle, as almost half of Indonesia's emissions come from peatland degradation, and forest and peat fires. It causes significant losses to key economic sectors such as forestry, agriculture, transport and tourism that are severely affected by the fires and smog, as well as impacts to public health.

Post COVID-19 recovery. The direct and indirect effects of climate change threaten to reduce growth. <sup>5</sup> The COVID-19 pandemic poses an additional burden. The challenge is to restore strong economic growth on a greener, more inclusive development pathway that delivers better health, food and energy security, sustainable use of natural resources, and climate change mitigation.

<sup>&</sup>lt;sup>5</sup>See Green Planning and Budgeting Strategy for Indonesia's Sustainable Development. Ministry of Finance, Jakarta, 2014; (2) Low Carbon Development: A Paradigm Shift Towards a Green Economy in Indonesia. Bappenas, 2019.

#### C. Policy landscape

The NDC has set a unconditional target of 29% and a target of 41% conditional on international support, for emission reductions against a BAU baseline, to be achieved by 2030. The bulk of the reductions are to come from the energy and forestry sectors. The investment requirements for achieving the unconditional target are estimated to exceed USD247 billion.

NDC targets come into national strategies and plans through the LCDI and the incorporation of climate resilience, sustainable landscape management, and green growth in the RPJMN 2020-2024. The highest priorities of the RPJMN are improvements to infrastructure, quality of human resources, public services, and people's welfare. Economic growth is targeted at 5.7-6.0 percent per year (adjusted to 4.5-5.5 percent on account of COVID19 impacts). GNI per capita is expected to reach USD6,000 per capita. SDGs are an integral part of the development agenda.

The RPJMN 2020-2024 recognizes that loss of natural resources and environmental damage have a profoundly negative impact on development, so moving to green growth is necessary to sustain economic progress. This view is reflected mainly at the level of national policies and strategies. Targets for reducing poverty to below 7%, increasing the HDI to 77, and reducing GHG emissions by 27% (by 2024) align with green growth.

Green growth features specifically in the following:

- Low-carbon development covers approaches to sustainable (renewable) energy, ecological restoration, waste management, green industry, and coastal and marine development.
- Climate change mitigation is embedded in national and sub-national strategies, policy for increasing climate resilience, and macroeconomic goals.
- Climate change adaptation is an action under disaster management.
- Natural capital is reflected in natural
- resource sustainability.
- Ecosystem services and ecosystem restoration feature in connection with environmental carrying capacity, forest cover protection, and peatland recovery and restoration.

Of 42 Strategic Priority Projects, most target infrastructure for roads, railways, new cities, and Special Economic Zones (SEZs). The rest cover the energy, mining, forestry (especially watershed recovery), marine fisheries, and manufacturing sectors. In general, the project descriptions would benefit from an enhanced green growth orientation and, without such review, could pose threats to natural capital and climate. The high-level policy goals for green growth thus must be further translated and mainstreamed into the design of such strategic projects.

### D. Specific country goals & targets that GGP3 partners have selected to address in the CPF

The Green Growth Program is tailored around the Gol's own programmatic interventions and policies and designed to support NDC implementation and achievement of the SDGs. The goals and targets of the CPF therefore draw on the development priorities and targets established in the RPJMN and LCDI.

The national and provincial development plans (RPJMN and RPJMD) and capacity building for related government-led processes that contribute to the mainstreaming of the NDC targets and SDGs in policy and planning, provide the overall delivery basis for the GGP Phase 3

in Indonesia. The RPJMN provides the national targets for this CPF.

Further strategic direction is taken from Indonesia's LCDI, led by BAPPENAS, including for demonstration programs in the six focal provinces where GGGI has been provided a mandate to work and in signature landscapes within those provinces.

The table below summarizes the proposed national/sub-national targets adopted from the RPJMN (2020-2024) that GGGI will support the GoI to achieve.

Table 2: National development targets selected for inclusion in the CPF

Parameter or Indicator	Target (2024)	Baseline					
Macroeconomic Goals <sup>6</sup>							
Economic growth rate per year <sup>7</sup>	5.7-6.0 %	4.5-5.5% (2015-19)					
Gross national income (GNI) per capita	\$5,810-6,000	\$3,652 (2015-19)8					
Poverty rate	6.0-7.0 %	9.8% (2020)					
Open unemployment rate	3.6-4.3 %	5.0% (2020)					
Gini ratio	0.360-0.374	0.381 (2020)					
Human development index (HDI)9	75.54	72.19 (2020)					
Climate Change Mitigation <sup>10</sup>							
Overall GHG emissions reduction	27.3 %	24.13% (2020)					
Natural Capital and Ecosystem Services <sup>11</sup>							
Forest cover: protection	65 Mha	55 Mha (2019)					
Forest cover: production	36 Mha	34 Mha (2019)					
Restoration of peatlands	330,000 ha y <sup>-1</sup>	122,833 ha y <sup>-1</sup>					
Restoration of other ecosystems	420,000 ha y <sup>-1</sup>	206,000 ha y <sup>-1</sup>					
Access to clean water <sup>12</sup>		88.6 (2015-17)					
Renewable Energy <sup>13</sup>							
Share of RE in primary energy mix	19.5%	8.6% (2019)					

<sup>&</sup>lt;sup>6</sup>Source: Annex 1 RPJMN 2020-2024: Macroeconomic Goals for 2020-2024

<sup>&</sup>lt;sup>7</sup>To be achieved through increasing productivity, sustainable investment, improving the labor market, and improving the quality of human resources

<sup>&</sup>lt;sup>8</sup>Mean annual income. Source: World Bank at: https://data.worldbank.org/.

<sup>&</sup>lt;sup>9</sup>Sustainable Development Goals (SDGs), gender, social and cultural capital, and digital transformation are mainstreamed in the RPJMN.

 $<sup>^{10}</sup>$ Goals to be reached in 2024, towards achieving the 29% NDC target in 2030 against the BAU baseline. Source: Attachment 1 of RPJMN Table 2.1 Page II.16

<sup>&</sup>lt;sup>11</sup>Source: Attachment 1 of RPJMN Table 2.1 Page II.16

<sup>&</sup>lt;sup>12</sup>Percent of population using at least basic drinking water services (annual mean); source: World Bank at: https://data.worldbank.org/.

<sup>&</sup>lt;sup>13</sup>Goal to be reached in 2024, towards achieving the 23% NDC target in 2025. Source: RPJMN.

### **Chapter 3**

Programmatic Solutions and Intended Results

# Programmatic Solutions and Intended Results

#### 3.1 Overview of selected Programmatic Solutions

Guided by the CPF 2021-2025, GGGI will focus on the following programmatic solutions: Green Investments, Green Growth and Climate Action, Sustainable Forests, Renewable Energy, and Green Industries. GGGI may also work on other programmatic solutions with less strategic priority, for the GoI, as part of the GGP Phase 3, including: Climate Resilient Agriculture, Coastal Resilience, Waste Management and Green Buildings.

These programmatic solutions were selected to support the Gol to achieve and exceed Indonesia's NDC targets and national green growth goals as described in the RPJMN and LCDI. They aim to address strategic green growth challenges and opportunities in Indonesia to i) increase private and public investments in green projects; ii) counter rapidly depleting natural capital and rising GHG emissions; iii) increase access to low-cost renewable energy; and iv) deliver a green recovery from COVID-19.

These programmatic solutions represent GGGI's strength and experience in Indonesia. They build on the previous phases of the Green Growth Program that started in 2013 and respond to the priorities identified by government partners at national and provincial levels for GGGI until 2025. These programmatic solutions stand out as critical areas of support that GGGI is well-positioned to deliver by focusing on:

- a. effective policymaking and planning to drive the transition to a green growth model;
- b. mobilizing public and private investment in sustainable and inclusive projects; and
- enhancing the capacity of government and key institutional actors to develop and implement green growth policies, plans, and attract investments.

In 2019, the GGP Steering Committee mandated the expansion of program activities from four to six provinces. The six provinces are East Kalimantan (EK), Central Kalimantan (CK), North Kalimantan (NK), South Kalimantan (SK), Papua (PP), and West Papua (WP). Based on request from GoI and in close coordination with the GGP Steering Committee, GGGI has also supported the REDD+ results-based payments program in Jambi and renewable energy in other provinces such as NTT since 2017. Under the CPF 2021-2025 and guided by the GGP Steering Committee, GGGI aims to remain flexible to pragmatically respond to Gol requests and needs for support in locations outside of the six focal provinces if funding is available.

GGGI recognizes that the economic impacts of the COVID-19 pandemic create additional risks for successful climate change mitigation, as they divert attention from climate change, reduce government resources, and create socio-economic pressures that may reinforce unsustainable growth trends and approaches. GGGI's work thus needs to be both relevant to the green growth ambitions of the GoI as well as supporting a green COVID-19 response.

GGGI has taken steps to raise funding in order to expand its technical assistance to the GoI.
Successful resource mobilization for the GGP Phase 3 during its implementation will allow to add new activities, locations and recipients of technical support. Any funding raised will be used to implement activities under the programmatic solutions presented below, including those of less strategic priority.

GGGI's impact pathway diagram for the Indonesia Program, available in Annex 1 provides a visual summary of the causal linkages and pathways between national targets, programmatic solutions, intermediate outcomes, and strategic outcomes to reach key country goals and targets in Indonesia.

What we did: Since the beginning of the Green Growth Program in 2013, GGGI has contributed to enhancing financing mechanisms for green growth and helped to design and ready green projects for investors. GGGI's explicit aim is to mobilize initial commitments from financiers or project developers to invest in green and climate projects.

Green investment mobilization is cross-cutting support that GGGI provides to various government and private sector partners in Indonesia. The investment primarily works on two interlinked dimensions – a) Designing and structuring of financial mechanisms that can mobilize climate finance towards green projects and programs in Indonesia and b) Supporting development of green projects pipeline in Indonesia for sustainable landscapes and renewable energy sectors.

# Programmatic Solution 1: Green Investments.

Challenge: The investments required to accelerate Indonesia's progressive transition to low-carbon development and achieve its NDC targets and SDGs cannot be covered by state budget alone, and current private sector financing is insufficient to fill the funding gap.

Based on Gol climate budget tagging in 2018 and 2019, the government spent USD 8.8 billion and USD 5.8 billion respectively on climate actions. From 2018 to 2020, the average annual share of climate budget allocation of the total state budget was 4.3% (FPA, 2020). This is well below the amount needed to meet NDC targets.

Recent examples include technical assistance to the GoI in developing 1) large-scale REDD+ programs in Indonesia (e.g. USD 103.8 million GCF REDD+ Results-Based Payments for emissions reduction between 2014-2016 at the national level, the USD 110 million results based payments World Bank FCPF Carbon Fund in East Kalimantan until 2025, and the envisioned USD 85 million results based payments from BioCarbon Fund ISFL in Jambi); 2) renewable energy project pipeline of more than USD 250 million in the sectors of Bio- waste to energy which includes Palm oil waste to electricity and BioCNG; Biomass energy such as bamboo gasification power plant and co-firing biomass with coal for power generation; Diesel power replacement and/or hybrid power generation using solar arrays; 3) Mobilizing private sector funds for forest conservation and restoration projects within logging concessions sites; and 4) Designing novel financial mechanisms like 'Peat Bonds' with an aim to mobilize large scale finance of at least USD 100 million for peatlands conservation and rehabilitation at a province wide scale.

In parallel, GGGI also coordinates on policy and regulatory frameworks so that policies and investments mutually support one another towards common program impacts.

What we will do under the new CPF: The lessons learnt and results from the GGP Phase 2 provide the foundation for the programmatic focus of green investment activities until 2025. The GGP will continue to support the GoI in designing bankable projects, emission reduction programs and structuring financial instruments to attract, replicate and scale up green investments. In addition to this, GGP shall also work on enabling investments by directly supporting national public financial institutions like PT. SMI and mechanisms like the Indonesia Environment Fund (IEF) of Environmental Fund Management Agency (BPDLH) on strategic aspects like their fundraising and fund disbursement planning, defining

sectoral strategies and conceptualizing new mechanisms and facilities that result in large scale impact (e.g., energy transition mechanism for coal sector).

In similar vein, GGGI will continue to focus on building linkages between national priorities and targets (such as NDC commitments and low carbon development plans and initiatives) and the investment programs. For example, GGGI currently supports the Ministry of Environment and Forestry (MoEF) and the BPDLH to develop investment roadmaps related to NDC that will help inform investment projects within different sectors, especially the forestry sector. Technical assistance for REDD+ programs will continue with the aim to replicate and up-scale successful experience to other provinces.

On the institutional side, as Indonesia's newly launched Environmental Fund Management Agency (BPDLH) will be one of the key institutions to channel climate finance into Indonesia, GGGI will continue to work closely with BPDLH on their strategic planning for fundraising and funds disbursement. This includes helping BPDLH to develop a pipeline of green growth projects. GGGI will support BPDLH to raise and disburse multilateral and national funding for projects that contribute towards achievement of Indonesia's NDC targets.

Under the CPF 2021-25, GGGI will continue expanding its work related to mobilizing private sector commitments and financing to meet the low carbon development and NDC targets of Indonesia. This will include closer cooperation with key stakeholders like Indonesian Chamber of Commerce and Industry (KADIN), PT. SMI, BPDLH, social forestry concession holders and FMUs to leverage private sector funding under blended finance mechanisms.

Moreover, GGGI will seek to establish a consultation platform to facilitate private sector engagement for knowledge sharing, resource mobilization and investments in green growth projects.

Alignment with government targets: GGGI will support the Government of Indonesia to mobilize the funding needed to achieve the conditional NDC target.

Anticipated contributions: GGGI will support the mobilization of investment and strengthening of financial instruments for projects contributing to NDC targets and the SDGs in focal sectors: sustainable forests, renewable energy, and green cities.

Who we will work with: BPDLH, PT. SMI (SDG Indonesia One), MoF/Fiscal Policy Agency (BKF), State Electricity Company (PT. PLN) and Independent Power Producers (IPPs).

# Programmatic Solution 2: Green Growth and Climate Action

Challenge: Indonesia is a climate action leader among emerging middle-income countries, having set ambitious goals in its NDC. However, progress towards achieving GHG emission reductions has been slow. Historically high emissions from deforestation have come down, but emissions from peat degradation and peat fires are still high, while energy sector emissions are rising despite efforts to promote renewable sources. Indonesia ranks among the ten largest GHG emitters in the world. The country is highly vulnerable to climate change, particularly shifts in rainfall and drought affecting agriculture as well as sea- level rise that would impact large parts of the population.

What we did: The GGP in Phase 2 played a key role in supporting the NDC Roadmap and initial planning for an NDC investment framework. Strategic national and provincial polices were supported through a Forestry Background study, especially the RPJMN 2020-2024 and the Strategic Plan for the Ministry of Environment and Forestry (2020-2024). With guidance from BAPPENAS, GGGI has contributed the development of the LCDI and its integration into regional planning.

Preliminary studies were made of options for domestic carbon trading in the energy sector and for international climate finance under Article 6 of the Paris Agreement. Moreover, GGGI supported the development of the national Strategic Environmental Assessment (SEA) Guidelines and capacity building for their adoption by national and subnational governments. GGGI also serves as the GCF Readiness delivery partner for the Nationally Designated Authority in charge of overseeing GCF finance in Indonesia.

What we will do under the new CPF: The GGP in Phase 3 will support completion of the NDC investment framework and will assist provincial governments to access climate finance from national and international sources. Ongoing support will be provided to establish and operationalize international carbon trading and a domestic carbon market. GGGI will continue to serve as the GCF delivery partner, supporting the GoI in their engagement with the GCF to develop, fund and implement climate change mitigation and adaptation projects.

Alignment with government targets: GGGI will assist Indonesia in achieving its NDC climate change mitigation targets, i.e., reduce emissions from 2020-2030 by 29% (unconditional) and 41% (conditional) against the 2030 business as usual scenario, and where possible to raise the ambition.

Anticipated contributions: GGGI will support government partners to achieve NDC emissions reduction targets, especially in the Forestry and Other Land Uses (unconditional: 497 MTonCO2e; conditional: 692 MTonCO2e), and energy sectors (unconditional: 314 MTonCO2e; conditional: 446 MTonCO2e). This will contribute to the Gol's visible progress towards its climate mitigation targets in the forest, landuse and energy sectors.

Who we will work with: BAPPENAS, MoEF, MoF, Coordinating Ministry of Economic Affairs (CMEA), Coordinating Ministry for Maritime Affairs and Investment, Peatland and Mangrove Restoration Agency (BRGM), Ministry of Agriculture, and provincial governments.

# Programmatic Solution 4: Sustainable Forests

Challenge: Indonesia has the third largest area of tropical forest in the world (after Brazil and the DRC). Through government initiatives, the high rate of deforestation since 2000 has been reduced considerably in recent years. However, forests and peatlands remain the largest source of GHG emissions. Forest ecosystem services are critical for human health and nutrition, water security, environmental quality, and economic productivity, but these services are undervalued and threatened. Forest governance is challenging.

What we did: In Phase 2, GGGI supported a major forestry background study for the RPJMN 2020-2024 and the national forest sector strategy (RENSTRA) as well as numerous forest policy studies and advisories. The GGP facilitated development of the first sub-national jurisdictional forest emissions reduction programs, in East Kalimantan and Jambi, for REDD+ payments from the FCPF Carbon Fund and Biocarbon Fund.

Indonesia's proposal for REDD+ results-based payments from the GCF received critical technical assistance from GGGI for the first provincial peatland protection management plan (RPPEG) in Central Kalimantan. GGGI also started the design of a landscape-based approach for sustainable peatland development and restoration, involving community- and business-based approaches. Altogether, more than USD 220 million in forest-related finance was mobilized with assistance from GGP2, and pipeline of projects established to continue investment mobilization in Phase 3.

What we will do under the new CPF: The GGP in Phase 3 will support and strengthen forest policy, planning, investment, and operational capacity at national and provincial levels, contributing to Net Sink FOLU 2030, including continued support for FMUs, social forestry schemes, and provincial REDD+ emissions reduction programs and landscape- based bankable projects able to receive investment from the BPDLH and other sources.

Alignment with government targets: GGGI will support the GoI to achieve its NDC climate change mitigation targets, i.e., reduce emissions from 2020-2030 by 17.2% (unconditional) and 24.1% (conditional) against the 2030 business as usual scenario in Forestry and Other Land Uses sector.

Anticipated contributions: GGGI will support national and subnational government partners to achieve their targets by maintaining the rate of deforestation from mining activities (675,000 ha from 2021-2024), peat deforestation (43,000 ha from 2021-2024), degradation in concession forests (385,000 ha from 2021-2024), and supporting sustainable forest management target area (1,413,000 ha from 2021-2024).

Who we will work with: BAPPENAS, MoEF, BPDLH, six focal provinces, GCF, TLFF, BRGM, national and provincial universities, other national and international development partners.

GGGI will leverage its expertise in the area of sustainable landscapes and forestry to accelerate the adoption of bioenergy solutions that create sustainable and inclusive economic growth with lasting benefits for communities. Sustainable practices in land-use and forest management play a key role in this.

# Programmatic Solution9: Renewable Energy

Challenge: Indonesia is facing multiple challenges to meeting the increasing energy demand of its fast-growing population and economy, and providing equitable access to electricity while achieving its commitment to significantly reduce greenhouse gas emissions.

What we did: Since 2016, GGGI has worked with the GoI and national power producers to mainstream green growth principles in key energy policy processes, plans and investment decisions at the national and

provincial levels, contributing to achieving 23% Renewable Energy (RE) in the energy mix. The support included capacity development, the design of bankable projects and pre-feasibility studies as a basis for renewable energy investments.

What we will do under the new CPF: Building on the results of GGP Phase 2, GGGI's technical assistance will directly respond to government request for support in areas of renewable energy. Aligned with the strategic priorities of the new CPF, we will continue to work on removing policy barriers and gaps to renewable energy investments. This will include support of policy and regulatory reforms, individual and institutional capacity development and knowledge sharing, and the design of bankable projects.

Moreover, as the technological and financial feasibility of solar PV projects has been demonstrated, GGGI intends to assist the GoI in transforming the policy, legal and institutional framework to create an enabling environment for green energy infrastructure that attracts public and private capital. Subject to the availability of funding, GGGI will continue to help enhance the capacity of national and provincial governments, power producers and other partners to design and invest in bioenergy and solar PV projects. The regional focus will be on the provinces EK, CK, NK, SK, PP, WP and Nusa Tenggara Timur (NTT). Opportunities to work in other provinces will be explored with national and internal partners.

Alignment with government targets: GGGI seeks to mobilize funding to expand its activities in renewable energy. This CPF has adopted government targets to guide any new potential projects of the GGP Phase 3, including the renewable energy target in the primary energy mix of 23% by 2025 (as per the NDCs), or 19.5% by 2024 (as per the RPJMN). New projects will be closely coordinated with the GoI to ensure they align with national development priorities and reinforce existing government strategies and actions not only for renewable energy but to also further social and economic development.

Anticipated contribution: GGGI will support national and subnational government partners to accelerate and achieve the target for boosting the share of renewable energy in the primary energy mix.

Who we will work with: GGGI's support builds on a strong network of government and private sector partners. To deliver our program of support, we have been collaborating with the Ministry of Energy and Mineral Resources (MEMR), power producers, PT SMI and the MoF/BKF. GGGI is a partner in the SDG Indonesia One Fund, GGGI has embedded offices in BKF, PT. SMI and MEMR, and in the BAPPEDAs in five provinces, namely EK, CK, NK, Papua and West Papua of the 6 target provinces. GGGI also collaborates closely with the stateowned power utility (PT. PLN) under an MoU to develop clean energy projects in East Nusa Tenggara (NTT) and a Non-Disclosure Agreement.

# Programmatic Solution 10: Green Industries

Challenge: The Gol has taken a number of actions to reform the policy and institutional framework to help realize the regional economic growth potential of secondary cities and SEZs. While the number of dedicated SEZs has grown rapidly, not all have been able to grow and attract investments as anticipated. Barriers such as misaligned national and local regulations and policies remain and adversely affect SEZ-specific investment conditions.

What we did: During GGP Phase 2, GGGI collaborated with the Coordinating Ministry of Economic Affairs (CMEA) and the National Council for Special Economic Zones (NCSEZ) to promote the development of Green SEZs. GGGI helped the GoI to mainstream green growth thinking and policy approaches into SEZ planning processes by designing Green SEZ Guidelines and policies for SEZ investments. Through knowledge products and pre-feasibility studies, GGGI showcased the benefits of green policy interventions and green infrastructure projects.

What we will do under the new CPF: GGGI will continue to provide support to the GoI in designing green SEZ policies and support early project development with the goal to attracting investment to fund green infrastructure projects in selected secondary cities and SEZs. Activities will focus on linking urban areas with ecosystem services, thus complementing the forestrycentered work of GGP Phase 3.

Moreover, our recent work with the GoI on waste management solutions has opened new opportunities to extend the scope of activities relative to our work on programmatic solutions for renewable energy, especially bioenergy.

Alignment with government targets: Overall, this programmatic solution will include technical assistance that is well aligned with the objectives of BAPPENAS' National Urban Policy and Strategy 2045 and the RPJMN 2020-24 which emphasize the untapped regional economic growth potential of secondary cities and SEZs. The RPJMN 2020- 2024 targets an increase of regional GDP

towards national GDP and sees development of Metropolitan areas outside Java as a major factor.

It also targets an increase of the Sustainable City Index (Indeks Kota Berkelanjutan) of the cities in the Metropolitan areas. The focal Metropolitan areas include Palembang, Banjarmasin, Makassar, Denpasar, and the New Capital City Nusantara in East Kalimantan. Moreover, the Government aims to increase the number of operational SEZs from 14 in 2019 to 18 by 2024. The Government sets SEZ investment targets at USD 57.2 billion by 2025.

Anticipated contribution: GGGI will support policy development and mobilization of investment in green infrastructure to enhance urban resilience while reducing the ecological footprint of cities, metropolitan areas, and special economic zones, thus contributing to Indonesia's SDG and NDC goals. In consultation with the Government, GGGI will identify specific SEZs to implement the Green SEZ Guidelines, thereby developing green project pipelines that will contribute to SEZ investment targets by 2025.

Who we will work with: National and regional government stakeholders, including BAPPENAS, CMEA, MoF, MoEF and PT. SMI.

# Cross cutting in all programmatic solutions

Cross cutting programmatic solutions reflect GGGI's commitment to poverty alleviation, gender equality and social inclusion as outlined in the GGGI 2030 Strategy. The CPF integrates related risks and opportunities for the generation of social co-benefits across all other programmatic solutions.

Examples of social co-benefits most relevant to GGGI's work include 1) access to services for underserved communities (e.g. access to electricity and water); 2) economic empowerment through green jobs and improved livelihoods, particularly for women, youth and informal sector actors; and 3) increased resilience and adaptation for the most vulnerable communities and groups.

# Other programmatic solutions

While the main focus of GGP Phase 3 is to support government partners to achieve national targets through the abovementioned Programmatic Solutions, the following Programmatic Solutions are also relevant to the success of GGP. Although supporting activities under these solutions are anticipated to be less pronounced than the others, the GGP will be sufficiently flexible to respond to emerging opportunities and requests from government partners in the following areas.

#### Programmatic Solution 3: Climate Resilient Agriculture

More than 27 million Indonesian households nearly one third of the labor force—work in agriculture, accounting for around 15 percent of national GDP. Climate change impacts current farming practices and hampers efforts to improve production, and these will add to GHG emissions if not done in a climate-smart way. On the other hand, climate-resilient agricultural development can achieve food security goals sustainably and without further loss of natural ecosystems.

GGP3 activities are expected to focus on (1) mobilizing finance for climate-smart agricultural business models, including community-based enterprises in need of access to micro-finance, within resilient landscapes that also include forests and coastal ecosystems; and (2) designing enabling policies, incentives, and knowledge-based solutions for more efficient, climate-resilient agricultural supply chains linked to natural capital. Bappenas is expected to be the key government partner for these activities, though other ministries as well as provincial partners will be engaged as appropriate.

# Programmatic Solution 5: Coastal Resilience Programmatic Solution 6: Waste management

Coastal ecosystems and marine resources are vitally important to Indonesia's economy, accounting for up to 25% of GDP and more than 20% percent of the workforce. Nearly two thirds of the nation's population and most of its urban areas are located in coastal areas vulnerable to climate change. Overfishing and destructive fishing practices are serious problems, not only for the marine environment and biodiversity but also for health, nutrition, and employment in coastal communities. Market access is challenging for many remote island communities, especially in the eastern region of the country.

As in the agriculture sector, GGP3 activities are expected to focus primarily on mobilizing finance and improving climate-resilient supply chains for marine fisheries. Protection of sensitive and valuable coastal ecosystems will also be a priority in the context of planning, enabling, and investing in resilient landscapes.

Climate-smart practices in the agriculture and fisheries sectors will both strengthen resilience and reduce GHG emissions from farmlands and coastal ecosystems. With a green growth approach, Indonesia can meet its food security needs and commodity export targets from existing farmland and fisheries while at the same time protecting vital terrestrial and marine ecosystem services and the natural capital that sustains them.

#### Programmatic Solution 6: Waste management

Improving waste management is a target priority in the recently enacted RPJMN 2020 – 2024. The National Policy and Strategy on Household and Household-like Waste Management (Jakstranas) sets municipal waste management targets through reduction and handling activities until 2025.

Furthermore, a recent initiative launched by BAPPENAS on Hazardous Waste Management in Indonesia highlights the growing need to invest in safe management of hazardous waste, particularly increased medical and B3 waste due to COVID-19. LAN has prioritized capacity-building to help achieve these targets.

GGP3 activities will aim to strengthen hazardous waste management by increasing the capacity of central and regional governments to plan and design regulatory frameworks, support the synchronization of hazardous waste data management, develop business models and identify sources of funds to support the operationalization of management—both by government and nongovernment, and develop communication strategy and public awareness- raising program.

#### Programmatic Solution 8: Green Building and Energy Efficiency

GGGI has supported BAPPENAS with an energy sector background study to support the RPJMN (2020-2024). Policy recommendations to improve buildings and urban energy efficiency center on the development of financing mechanisms to promote retrofitting schemes for buildings to meet higher energy efficiency targets. GGGI will pragmatically support targeted interventions linked to priority Programmatic Solutions, or, where appropriate, seek to pursue stand-alone Green Building projects based on requests from government partners

# 3.2 Intermediate Outcomes and Strategic Outcomes

The Impact Pathway diagram below (table 3) provides an overview of the Intermediate Outcomes and Strategic Outcomes (Impact) that the GGP3 aims to address between 2021-2025. The quantitative targets shown for the Programmatic Solutions and are

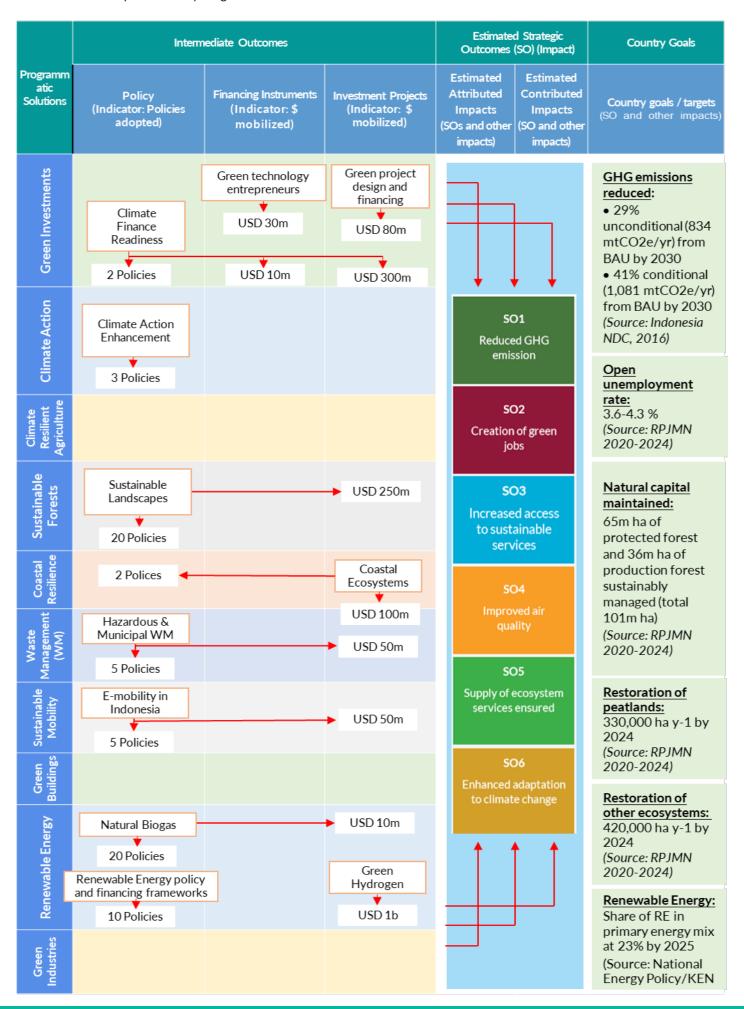
indicative. Achieving these targets will depend significantly on funding and other resources made available by GGGI's donors and partners to implement projects. More funding will allow GoI and GGGI to raise ambitions and increase these targets.

**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. GGGI's Intermediate Outcomes (IO) include: 1) strengthened national, sub-national, and local green growth policy planning, financing, and institutional frameworks, i.e., "Policy"; 2) increased green investment flows, including "Financing Instruments" and "Investment Projects"; and 3) improved multidirectional knowledge sharing and learning between countries on green growth. IO 3 is a cross-cutting outcome and is therefore not presented as a stand-alone IO category in the impact pathway.

**Strategic outcomes** (or other important non- SO impacts) that GGGI's work will contribute to, with estimated targets perhaps reflecting a relevant portion of a national goal/target. In line with the SO Guidelines, these impacts include 2 types: attributed impacts and contributed impacts.

Attributed impacts are those that caused mostly by GGGI's work – typically from investment projects. Contributed impacts are those that GGGI contributes to along with many other actors. They can often be expressed in the form of a relevant subset of an overall national goal or target. Typically, contributed impacts are used for GGGI's work on policies or financing instruments, where attributable impacts are difficult to estimate. GGGI's Strategic Outcomes (SO) include:

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.





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