



Global
Green Growth
Institute

**Government
of Indonesia**

GGGI

Green Growth Program

**Prioritizing Investments:
Delivering Green Growth**

October 2013

FOREWORD

“Through this innovative new Program, we are developing a framework and a suite of tools that can be used to help mainstream green growth into existing planning and investment appraisal processes.”



Dr. Ir. Lukita Dinarsyah Tuwo, M.A.
Vice Minister of National
Development Planning Ministry
GGGI Council Member
Representative

The Government of Indonesia understands the opportunities which a green economy and its potential for sustainable economic growth, job creation and poverty reduction can bring to Indonesia. It also knows that Indonesia has the innovative and opportunistic spirit to deliver a green economy that can be an example to its neighbours and beyond. What is required to advance green growth in Indonesia is a systematic approach with concrete steps that take us from where we are today to our vision for a green economy.

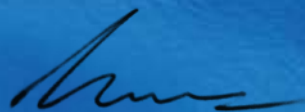
Green Growth represents these concrete steps. What is needed is a roadmap, supported by tools and practical examples on the ground, which can help shift Indonesia towards a green economy. In many respects it is already happening, but we need to extract and champion examples of green growth in all sectors and provinces.

Whilst undoubtedly within Indonesia's capability, green growth is still a challenging task, right now we need to improve processes, governance and incentive structures. With commitment on the ground, coordinated and shared through all levels of government and stakeholders across Indonesia, we will open up the potential to rapidly move towards a green economy.

An aerial photograph of a tropical island. The island is covered in dense green forest. A small white sandy beach is visible on the left side. The water is a vibrant turquoise color, showing the underlying coral reef structure. A small boat with two masts is anchored in the water. The boat has a white cabin and a dark hull. The water around the boat is a deeper blue color.

The Government of Indonesia and the Global Green Growth Institute (GGGI) have embarked on an innovative collaboration together: the 'GoI-GGGI Green Growth Program'. Through this new Program, we are developing a framework and a suite of tools that can be used to help mainstream green growth into existing planning and investment appraisal processes.

I hope the results of this collaboration can inspire other countries to also follow the pathway of green growth as one of the means to achieve sustainable development.

A handwritten signature in black ink, likely belonging to Joko Widodo, the President of Indonesia. The signature is stylized and fluid, written in a cursive-like manner.

October 2013

"What is required to advance green growth in Indonesia is a systematic approach with concrete steps that take us from where we are today to our vision for a green economy."

1

Indonesia's Green Growth Opportunity



Key messages:

- Indonesia's national development agenda is focused on a pro-growth, pro-jobs, pro-poor and pro-environment approach
- A systemic approach with tools and processes are needed to help the implementation of these commitments
- GoI and GGGI are collaborating to demonstrate how the Government's existing planning instruments could achieve green growth outcomes.
- This work will help to create investment opportunities that are attractive to the private sector, in line with Indonesia's ambition to increase both Foreign and Domestic Direct Investment's contribution towards development spending.

Indonesia has largely avoided the global economic slowdown, averaging growth just shy of 6% from 2008 to 2012. Looking forward, the Government of Indonesia (GoI) has set a goal for the country to become one of the top ten largest economies in the World by 2025, and in the top six by the 2050.

Indonesia faces intense pressure to maintain or accelerate growth year on year. This pressure has been particularly visible in the latter half of 2013, with currency instability dominating the headlines and Bank Indonesia downgrading forecasts for short-term growth.

In addition to challenges arising from Indonesia's geographical, cultural and governance complexity, these growth pressures include: increased need for infrastructure and mobility improvements, uneven growth between the islands and between the nation's richest and poorest, rising demand for natural resources and energy, high urbanization levels, issues of landlessness, significant deforestation and peatland degradation, and the need for an enhanced education sector to provide a skilled workforce.

As Indonesia's national development agenda focuses on pro-growth, pro-jobs, pro-poor and pro-environment, delivering the targeted high level growth, and growth that is sustained, the Government has recognized the importance of integrating Indonesia's natural and social well-being into its economic development goals and plans.

Indonesia has a number of national policies to stimulate and catalyze economic growth. At the national level these are the RPJMN and RPJPN (medium- and long-term development plans) coordinated by the Ministry of National Development Planning (BAPPENAS). In addition, the MP3EI (Masterplan for Economic Development) coordinated by KP3EI, provides a plan for accelerating national economic growth. The National Action Plan to reduce greenhouse gas (GHG) emissions as well as Spatial Plans are other important planning instruments which can direct growth. Other important environment and sustainability measures include the Environmental Law 32/2009 on environmental protection and management as well as the recent extension of the moratorium for new licences on primary forests and peatlands early this year.

BAPPENAS is the key agency in charge of coordinating the collective government vision enshrined in the National Medium Term Development Plan (RPJMN, 2010-2014), and is in the second phase of implementation of Indonesia's National Long Term Development Plan (RPJPN 2005-2025) promulgated through Law 17/2007.

As outlined in the RPJMN:

The RPJMN 2010-2014 forms the basis for ministries and government agencies when formulating their respective Strategic Plans (Renstra-KL). Regional governments also must take this medium term plan into account when formulating or adjusting their respective regional development plans. For the implementation of the National Long Term Development Plan, the RPJMN is to be further integrated into the Annual Government Work Plan (RKP) that will then become the basis for formulating the Draft Government Budget (RAPBN).

These plans are broader than just GDP growth and are important for Indonesia's four-track development approach. As yet, there have been no systematic and holistic efforts to develop economic policy in line with the principles of green growth and sustainable development.

2

Mainstreaming Green Growth Into Indonesia's Planning Process

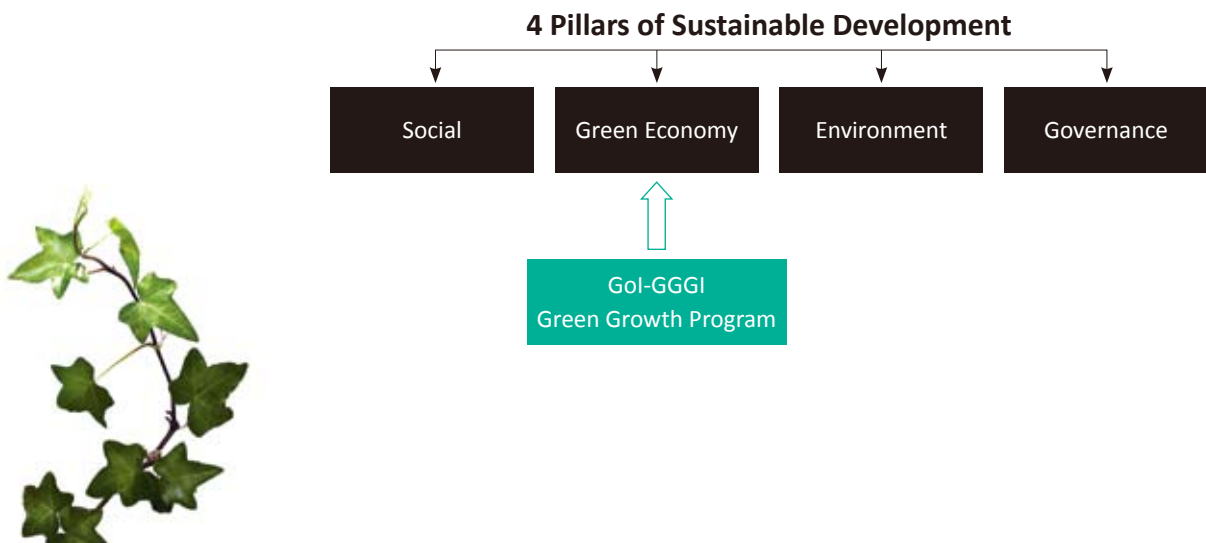


Key messages:

- A systemic framework to measure green growth must be tailored to focus on the policy priorities of Indonesia.
- The starting point to measure green growth, the Green Growth Framework, has been designed in close coordination with key stakeholders and will continue to evolve.
- The Green Growth Framework can also be adapted at provincial and district levels, to ensure relevance to local priorities and stakeholders, including the private sector.
- The Green Growth Assessment Process is a tool in development to support decision makers in projects with high green growth performance through feasibility screening and an assessment of their green growth potential.

The Green Growth Program is a subset of the Green Economy Pillar of the BAPPENAS framework for sustainable development. It presents an approach to move away from a “brown growth” development path. The Green Growth Program is designed to help Indonesia’s shift towards a green economy through public and private investment.

Figure 1 BAPPENAS framework for Sustainable Development



2.1 What is Green Growth?

Green growth is essentially an approach to achieve a number of simultaneous objectives bringing us closer to achieving true sustainable development: avoid and curb greenhouse gas emissions, build resilience to climate extremes and longer term change, use resources more efficiently, provide sustainable and equitably-distributed increases in GDP and standards of living, and value the often economically invisible natural assets that have underpinned economic success over the centuries. The definition of green growth is still evolving; it is the experience of countries testing what works - and what does not that will further develop and refine this definition.

It is very important to understand that achieving green growth in Indonesia will take time and green growth planning cannot be done all at once. There are multiple definitions and uncertainty in building the best framework of green growth planning and assessment, including identifying green growth priorities, the right sources for data capture and analysis, appropriate selection of performance indicators, and adoption of the best available economic modeling tools. It is necessary to develop a conceptual framework and methodology to determine the most appropriate steps and take the right approach to develop the framework for green growth planning.

2.2 Green Growth Program Objectives

Government of Indonesia and Global Green Growth Institute (GGGI) have developed a program of activity that is aligned and wholly supportive of achieving Indonesia's existing vision for economic development planning.

The aim is to show, using real examples of Indonesia's development and investment plans at national, provincial and district levels, how economic growth can be maintained while reducing poverty and social inequality, maximizing the value of ecosystem services, reducing GHG emissions, and making communities, economies, and the environment resilient to economic and climate shocks.

The joint GoI and GGGI goal is:

"To promote green growth in Indonesia that recognizes the value of natural capital, improves resilience, builds local economies and is inclusive and equitable".

The specific objectives to achieve this goal are:

- To ensure the green growth vision matches or exceeds existing development targets;
- To track the green growth priorities of Indonesia by providing relevant targets and indicators;
- To evaluate the implications of the country's current development path against green growth targets and indicators and assessing projects and potential policy and investment interventions against this baseline;
- To identify the key sectors and high green growth potential projects and investment interventions that will help deliver green growth development;
- To harness private sector engagement and investment in support of delivering green growth opportunities in Indonesia;
- To undertake economic modeling to analyze each project showing their financial returns and identifying any gaps in the incremental spend required to secure green projects.



To achieve this, GGGI works as part of a hybrid team alongside government staff and leading academics and provides technical support, research and capacity building that is in line with Indonesia’s vision and direction. On April 13, 2013, GoI (through BAPPENAS) signed a Memorandum of Understanding (MOU) of mutual collaboration to launch programs and activities for the promotion of green growth in Indonesia.

A program of three complementary work components has been set up to meet these objectives:

1 Greening the planning process	<i>“To mainstream green growth within Indonesia’s economic and development planning processes”</i> <i>“To increase the use of green technology and increase capital investment in green industry”</i>
2 REDD+for green growth	<i>“To support the development of a funding mechanism that disburses REDD+ finance to catalyze green growth”</i>
3 Regional engagement	<i>“To support key provincial governments in prioritizing and implementing green growth”</i>

The combined work of these components will help achieve the objectives and the overarching goal of the Indonesia Green Growth Program.

2.3 Green Growth Framework

As a starting point, GoI and GGGI have initiated a discussion with key stakeholders on what represents an appropriate framework for defining what green growth means for Indonesia. Green growth planning in Indonesia needs to be undertaken in an integrated manner and on a comprehensive basis. It will be important to understand the interdependencies between the country’s economic competitiveness drivers and their implications for social development and environmental performance.

Figure 2 sets out the five dimensions of green growth defined with stakeholders during the initial workshop sessions as a basis to further develop the Green Growth Framework. These dimensions need to be considered in planning and designing the future development of Indonesia. These five Indonesia-tailored dimensions of green growth have helped stakeholders understand and measure the intersections across these dimensions.

Figure 2 Green growth Framework for Indonesia: Five dimensions of green growth



The five dimensions of green growth discussed with stakeholders can be defined as:

- **Sustained economic growth** highlights the importance of national, provincial and district economic output (GDP), sustained in such a way that it results in broad-based social development and prosperity. This growth can leapfrog the resource-intensive and environmentally unsustainable model of industrial development pioneered by advanced economies.
- **Healthy and productive ecosystems providing services** highlights growth which sustains natural capital, especially the natural stocks which supply a continuous flow of important ecosystem services. These stocks, such as the provision of clean water, provide essential contributions to economic growth and human well-being but are often omitted from decision making as they are not seen as inputs to economic production. Green growth seeks to address these market failures.
- **Inclusive and equitable growth** highlights growth for the benefit of people, those in urban as well as in rural areas, the affluent as well the marginalized. This dimension is a central objective of green growth, and is highly correlated with economic growth and environmental quality. Countries with higher levels of poverty and inequality are likely to benefit more from green growth interventions.
- **Social, economic and environmental resilience** highlights growth that builds economic, financial, social, and environmental resilience and is about the system's ability to withstand external shocks (e.g. adapting to the physical impacts of a changing climate, diversification of economic sectors, food security, currency and trade stability). Countries that are more exposed to the physical and resource impacts of climate change, and countries which have generated most of their GDP from extractive and resource intensive sectors, are likely to benefit more from green growth interventions.



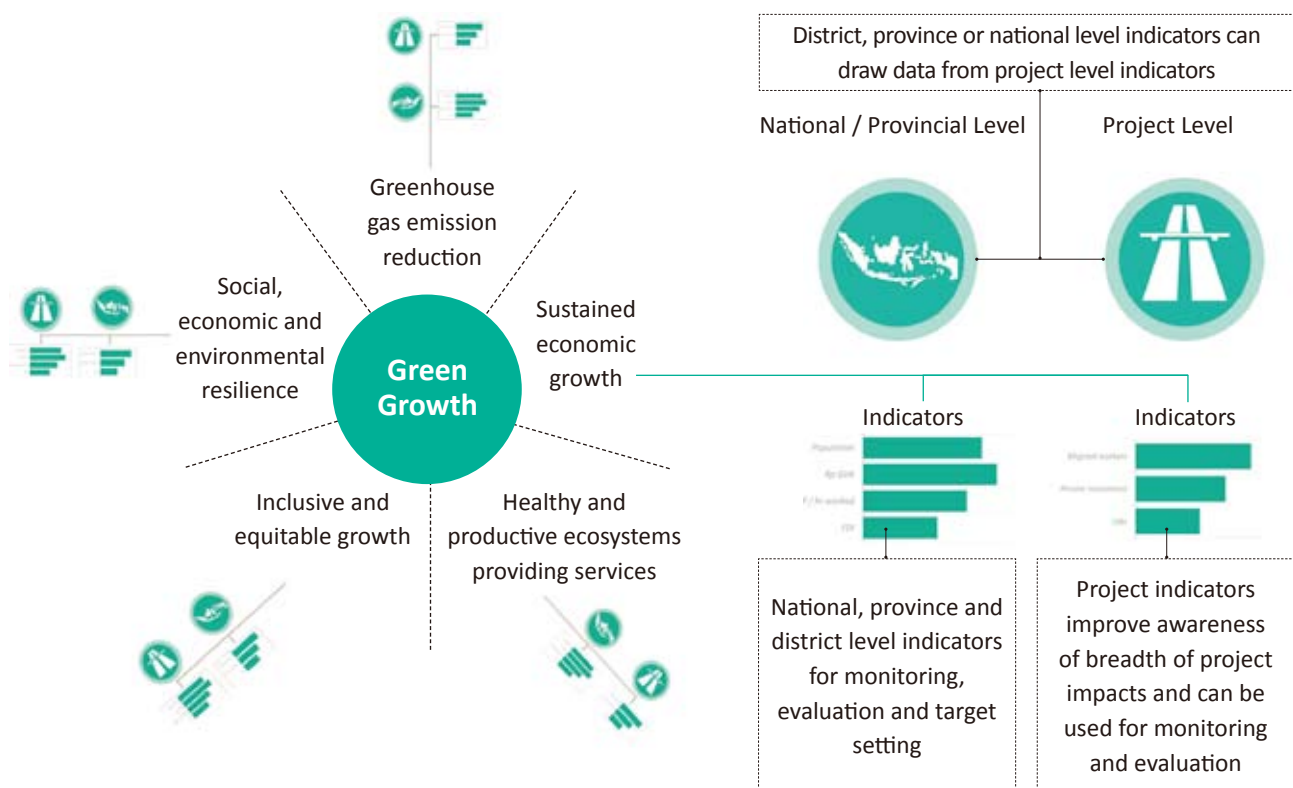
- **Greenhouse gas emission reduction** highlights the importance of a low-carbon growth to contribute to global and national efforts to mitigate climate change and minimize future adverse impacts on local and international society. Countries with higher GHG emissions intensity have greater opportunities for cost-effective emissions reduction and more urgent need for assistance.

The Program will continue to produce an approach which both has local support and local relevance. Each dimension will then be measured using targets and indicators appropriate to Indonesia at the national, provincial and project levels.

2.4 Measuring Green Growth

The diagram below explains the difference between national, province, district and project level indicators, and how they relate to the Green Growth Framework.

Figure 3 Green Growth Framework: measuring performance



A database of over 280 indicators is currently in development, which has been put together using the following sources:

Table 1 Sources of indicators for measuring green growth

Indonesia specific sources	International sources
<ul style="list-style-type: none"> Center of Statistics (Badan Pusat Statistik/BPS) Indonesia Ministry of Environment Agency for the Assessment and Application of Technology (Badan Pengkajian dan Penerapan Technology/BPPT) ISPO (Indonesia Sustainable Palm Oil) Consultation with local experts 	<ul style="list-style-type: none"> Green Growth Knowledge Platform OECD UNDP UNEP World Bank WWF PwC RSPO

The indicators will provide the following specific uses:

Table 2 Uses for indicators

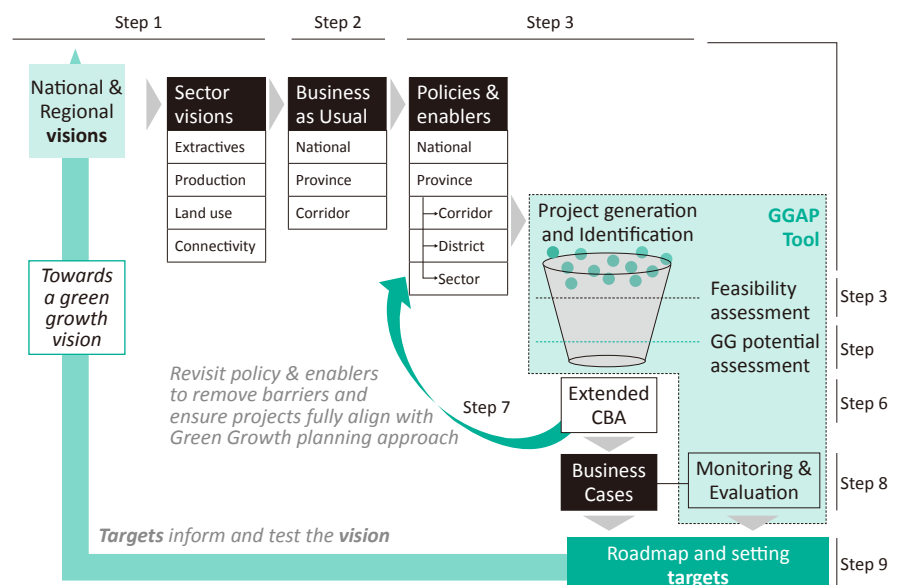
Step Name	Requirement for Indicators
Business As Usual (BAU)	<p>These will be national or provincial level indicators and serve two purposes:</p> <ul style="list-style-type: none"> i Provide important data that will be used in the analysis of projects, for example expected growth in population or wage inflation. ii Provide the background situation to which project performance can be compared, and allow us to assess the effectiveness of projects in achieving the existing vision.
Green growth potential assessment	<p>These will be project level indicators.</p> <p>The purpose of these indicators is to allow comparisons of the green growth potential of different project types. This means they will be more specific than BAU indicators, but not so specific that they are only applicable to individual projects.</p>
Extended cost-benefit analysis (CBA)	<p>These will be project level indicators.</p> <p>These will quantify, wherever possible, the performance of projects. These will be project and performance specific, driven by the type of project.</p>



2.5 Green Growth Assessment Process

The Green Growth Framework is the basis for defining what green growth means for Indonesia with targets and indicators which can be tailored to Indonesia's needs to measure green growth performance. The Green Growth Assessment Process (GGAP), which includes the use of this above framework in its assessment, can be helpful when decision makers want to embed green growth into the planning process. Prioritizing high potential projects through feasibility screening and an assessment of their green growth potential, as well as a monitoring and evaluation, will form part of the supporting GGAP tool. The overall scope and process of this conceptual GGAP is shown in Figure 4.

Figure 4 Green Growth Assessment Process (GGAP)



Current efforts underway

An Extended Cost Benefit Analysis is underway on several projects. The Extended CBA process aims to assess the range of project investment impacts in an integrated and comprehensive way, and applies this assessment process to better understand the project's contribution to green growth outcomes. These outcomes have been expressed in terms of a range of indicators relating to each of the five dimensions of green growth, which demonstrates the scale of the green growth opportunity relating to specific investments or projects. The process of undertaking the Extended CBA can be used to assess the performance of investments and to see if the green growth performance of projects could be further improved.

Each step is briefly described below:

Step 1 : Visioning	The process needs to be vision-led and build upon the existing strategies and priorities of Indonesia and key stakeholders as expressed through key national and regional planning documents. These visions will provide the context for assessing BAU for each sector.
Step 2 : Business as Usual (BAU)	BAU scenarios provide data that will be used in the analysis of projects and provide the background situation to which project impacts can be compared, and allow us to assess the green growth effects of projects.
Step 3 : Project Identification	Step 3 identifies the projects which have the potential to achieve existing visions in a greener way.
Step 4 : Feasibility Assessment	Projects will be initially filtered against a set of feasibility criteria to determine any immediately insurmountable barriers to project implementation.
Step 5: Green Growth Potential Assessment	Green growth potential will be assessed to identify which projects will perform well against the green growth framework, and whether or not greener alternatives are available that achieve the outcomes of the existing design and therefore overarching vision. The first step of this assessment is to map all of the green growth performance of each of the projects, and then consider options for adjustments or re-designs to achieve greener outcomes.
Step 6 : Extended Cost Benefit Analysis (CBA)	An extended Cost Benefit Analysis is undertaken on high-potential green growth projects identified in Steps 4 and 5. A typical CBA looks at direct financial investment costs and social, economic, and environmental costs and benefits of projects in order to compare options for achieving a certain goal. The extended CBA attempts to quantify, where possible, the contribution of the project to green growth. It is often used in the application of Multi-Criteria Analyses, providing the social, economic, and environmental valuations needed to support decision making.
Step 7 : Redesign of Enabling Conditions	A revisiting of Step 3: Project Identification is then undertaken to see if the green growth performance of projects could be further improved. This may be achievable by altering the enabling environment or policies or by re-designing the project itself. This process is demonstrated by the feedback arrow after the Extended CBA in Figure 4. Intervention such as adopting economic instruments, incentive schemes, and regulation may be required to enhance the green growth performance of the projects.
Step 8 : Business Case Development	Business cases go beyond recommending green growth priority interventions and target individual decision makers and processes within government to encourage their uptake. A monitoring and evaluation process is necessary when pursuing green growth projects to ensure the costs and benefits of projects and interventions are sustained and measured.
Step 9 : Roadmap	A roadmap will collate together all of the projects with high green growth performance in a coherent and logical plan, linked to the vision and targets. This will cover the short, medium and long-term and show how projects influence progress towards realising visions in these timeframes.

3

Collaborating to Deliver Green Growth



Key messages:

- GoI and GGGI are engaged in a collaborative process to shape Indonesia's green growth vision and objectives.
- The engagement process is designed to interact with national and provincial interests, the public and private actors, and civil society.
- Stakeholder engagement and capacity building lie at the heart of the green growth transformational process at national and provincial levels.

Engaging stakeholders to deliver change

The Green Growth Program is aligned and wholly supportive of achieving Indonesia's existing vision for economic development planning. It is vital that this green growth planning process is stakeholder driven and nationally owned.

The Program itself was officially launched in June 2013, which was attended by representatives of the Government of Indonesia, development partners, businesses and NGOs.

The stakeholder engagement process has involved a number of key milestones already involving both national and provincial level stakeholders. Various workshops including methodology, business, sector, and provincial workshops have brought Indonesia's academic experts and government officials together to test the green growth planning approach.



The increasing role of the private sector

To achieve annual average economic growth of 6.3-6.8%, IDR 12,000 to IDR 12,500 trillion (around USD 1.2 trillion) will be needed cumulatively over five years. Given inflation, this is broadly consistent with investment levels seen in the last few years; totaling 10,300 trillion. Of this, the government is expected to provide around 18%. Clearly, the private sector will play a large role in maintaining overall investment levels; Foreign Direct Investment (PMA) will play a substantial role (reaching around 1-2% of GDP in recent years) as will Domestic Direct Investment (PMDN), whether from retained earnings or financial markets and financial institutions.

Capacity building objectives

The capacity building objectives aim to enhance capacity in using a range of tools and methodologies to help mainstream green growth planning into existing economic development planning processes and improve the availability of trainers and materials.

Through the Program, long-term technical support to stakeholders in Indonesia will allow for effective transfer of skills drawing upon both international and local knowledge and experiences.



4

Roadmap to Deliver Green Growth



Key messages:

- A roadmap will bring together project analyses, a study of green industry/enterprise opportunities and macro level analysis which are all already underway.
- It provides a guide to mainstream green growth to stakeholders that will allow stakeholders to recognise and act on problems that require their response.
- It helps to prioritise actions upon agreed issues and focus areas since a Green Growth Roadmap helps to identify what is needed in the short, medium and long term to achieve the vision for a green economy in the context of sustainable development in Indonesia.

The Program will bring together a coherent Roadmap to Green Growth and link the visioning work, the work on measuring green growth, and the extended CBAs of projects. It will be an indication – by way of examples - of how to advance green growth in Indonesia through a systematic approach.

The Roadmap will link together the macro-economic opportunity of green growth with the micro-level project and policy interventions that will help deliver this opportunity. The Roadmap will set out timeframes for implementation of the various projects and policy interventions at both macro- and micro-levels.

The performance of the Green Growth Program itself will be tracked through establishing a clear monitoring and evaluation framework, and developing a suite of relevant performance and process indicators and targets to help track progress against the Green Growth Roadmap.



Through the implementation of this joint Program, Government of Indonesia and GGGI aim to place green growth at the heart of economic planning and decision-making.





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