

Knowledge Sharing Workshop Strengthening the Environment Dimensions of the SDGs in Asia and the Pacific

21-22 February 2018 Bangkok, Thailand



Environment
in SDGs
Asia-Pacific

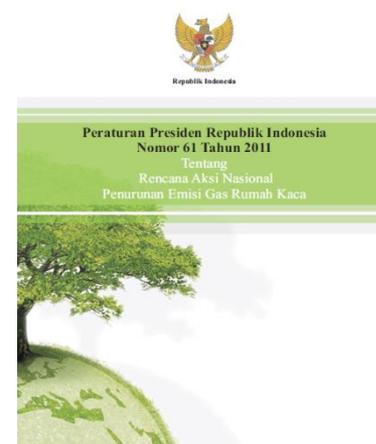
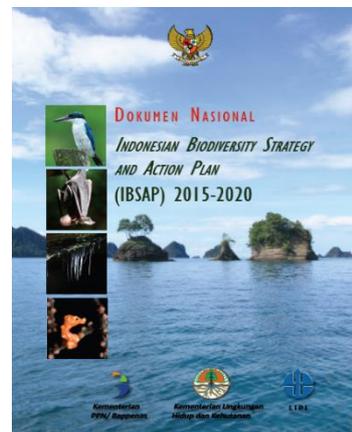
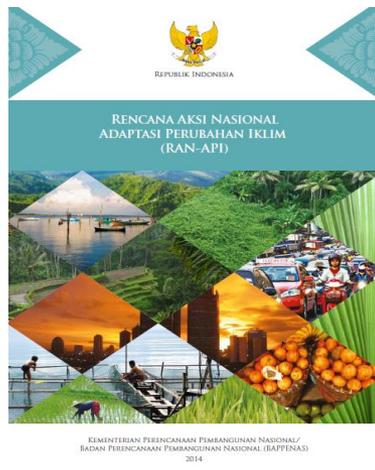
SUSTAINABLE
DEVELOPMENT
GOALS



IN
COLLABORATION
WITH



Sustainable Development Financing *Experiences from Indonesia*



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Bangkok, 21-22 February 2018

REPUBLIC OF INDONESIA



Land area: 699,548 sq mi (1,811,831 sq km);

Total area: ± 5 million sq km

Counted Island: 18.000 (6000 are inhabited)

Coast line: 95.181 km

Natural resources: petroleum, tin, natural gas, nickel, timber, bauxite, copper, fertile soils, coal, gold, silver

President: Joko Widodo

Monetary unit: Rupiah

Language: Bahasa Indonesia
(2015)

Population 242 million

Poverty Rate 11.40%

Per capita income \$5200

Human Dev. Index 0.684



Indonesia's Development Challenges

- ❑ Indonesia's GHG emission is predicted to increase from 2.1 to 3.3 GtCO₂e between 2005 and 2030 (SNC, 2010)
- ❑ Indonesia is vulnerable to changing climate. Potential economic loss due to climate change and climate disaster in 2100 is predicted 7% from GDP (WB,2010, ADB,2010)
- ❑ Indonesia is Mega-biodiversity country. Biodiversity is development capital, but the full potential is undervalued and it is decreasing (MoEF, 2014)

Jeopardizing
Sustainable
Development



Actions on mitigation, adaptation
and biodiversity are part of
Sustainable Development

LONG TERM DEVELOPMENT MISSION, 2005-2025



Vision

"Prosperous, Democratic and Just Indonesia"

Mission

- **Continue Development to achieve Prosperous Indonesia**
- **Strengthen Democratic Pillars**
- **Strengthen Justice in every Aspect of Development**

2004

- Pro-poor (poverty alleviation)
- Pro-jobs
- Pro-growth

2007

- Added by Pro-environment

2014

- Economic Growth 7%

2020

- GHG Emission reduction 26% (+15%)
- Reduced biodiversity loss

Background : Indonesia's commitment to reduce GHG Emissions by 26-41% by year 2020

Revised
29%/41%
Paris Agreement



+ 7% p.a.
GDP growth



- 26/41% GHG
emissions

Indonesia's Commitment in Climate Change Mitigation



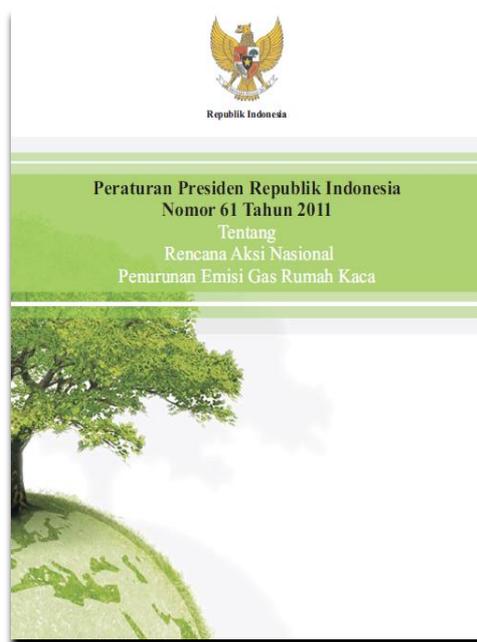
**Reducing 26% (29%) to 41% of GHG Emissions
from Business As Usual in year 2020
(Presidential Regulation No. 61/2011)**

Title	Emissions m tCO ₂ e in 2020		Reduction as % of BAU
	BAU total	RAN GRK reduction	
Forestry and peatland	1344	672	50.0%
Energy and transport	1000	38	3.8%
Agriculture	221	40	18.0%
Industry	134	2	1.8%
Waste water	250	15	5.9%
Total emission reductions	2950	767	26.0%

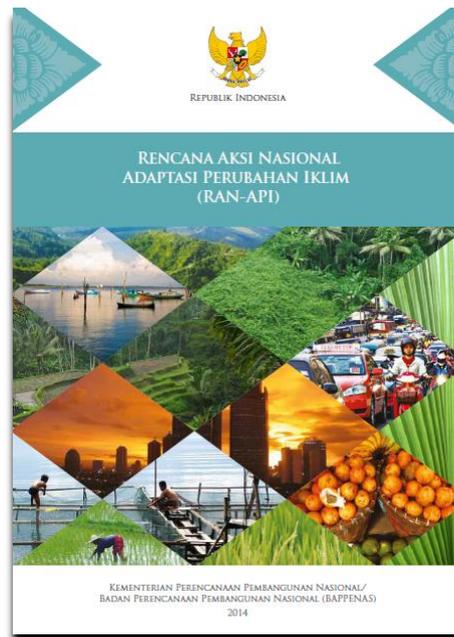


CLIMATE CHANGE AND BIODIVERSITY NATIONAL ACTION PLAN

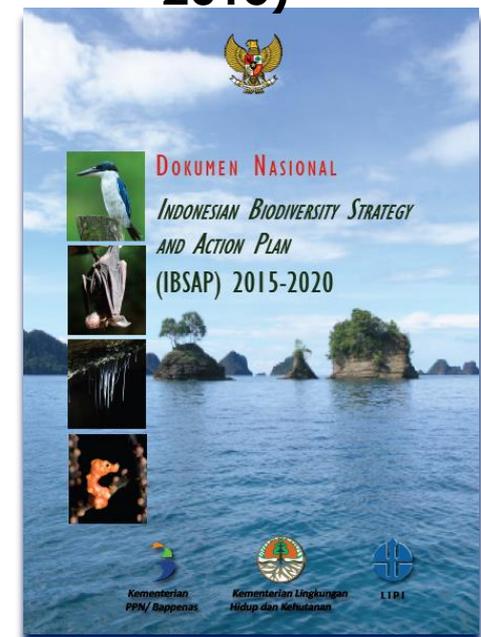
CLIMATE CHANGE MITIGATION ACTION PLAN (2011)



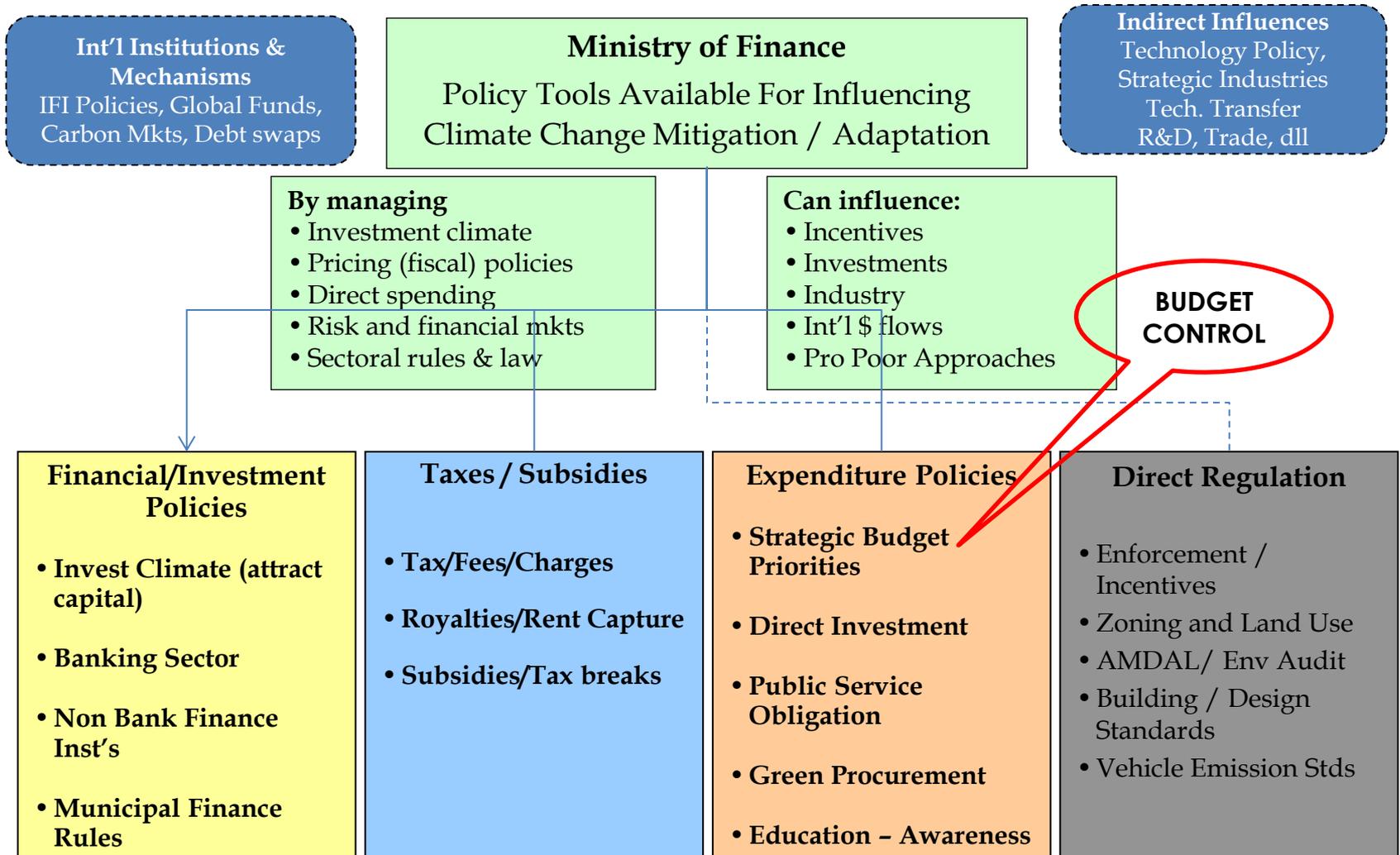
CLIMATE CHANGE ADAPTATION ACTION PLAN (2014)



BIODIVERSITY ACTION PLAN (Revised 2015)



Ministry of Finance's Fiscal Policy Domain in Climate Financing





Priority Actions for Effective Climate Finance

BUDGET TAGGING:

Tracking climate change-related direct and indirect activities



SCORING & PERFORMANCE-BASED BUDGETING

Prioritization of climate activity based on cost-effectiveness including poverty and gender benefits.

Monitoring effectiveness & efficiency of expenditure.



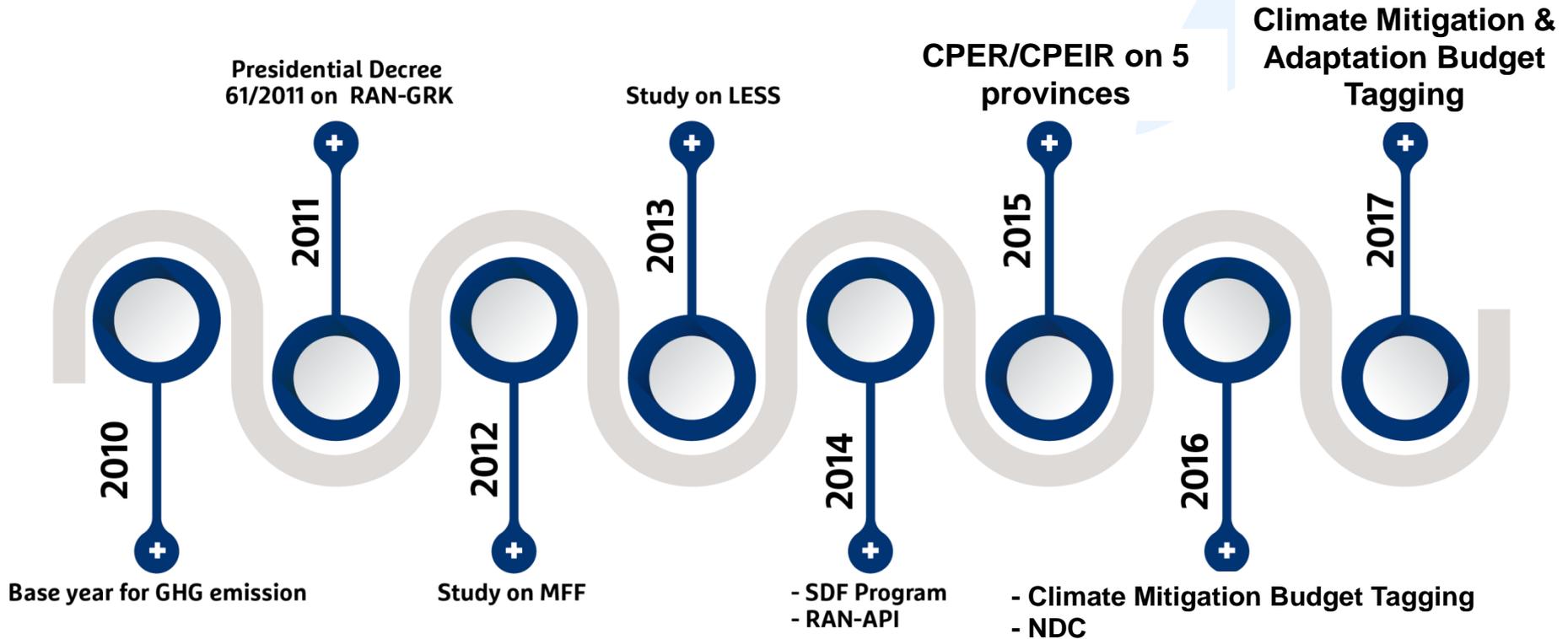
GREEN PLANNING & BUDGETING

Issuance of fiscal policies, and mechanisms for financing prioritized and effective climate change activities.

Priorities:

- Forestry, Peat-land & Marine Resources protection
- Agriculture and Irrigation system rehabilitation
- Energy and Industry
- Public Transport, Urban & Regional Infrastructure
- Education and Health
- Disaster Management

Milestone Climate Budget Tagging in Indonesia



RAN-GRK

- National Action Plan on GHG Emission Reduction
- ER target 2020 : 26% unconditional – 41% conditional (6 sectors)

RAN-API

- National Action Plan on Climate Adaptation
- To increase resilience on economic, livelihood, ecosystem, and territory

NDC

- Nationally Determined Contribution
- ER target 2030 : 29% unconditional – 41% conditional (6 sectors)

Mitigation Fiscal Framework (MFF)

In 2012, the Fiscal Policy Agency (BKF) conducted a study, the Mitigation Fiscal Framework (MFF), where its initial focus was directed towards climate mitigation in forestry, peatland, energy, and transportation sectors, as their combination covers 93% of national emissions reduction targets.

The arrangement of Mitigation Fiscal Framework/MFF (2012) is used to analyze effectiveness from government budget allocating for mitigation action within forestry, peatland, energy and transportation sectors

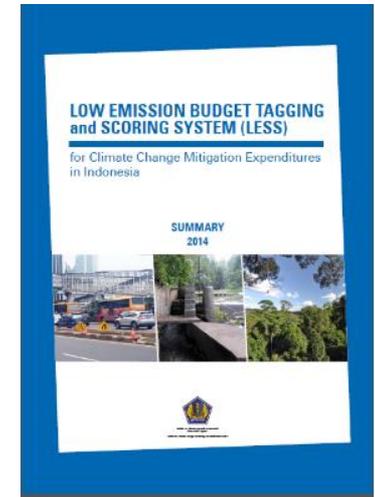
- ❑ The implementation of cross-sectorial RAN GRK creates a massive complexity, it requires a great number of funding and sound coordination among M/I in hope to achieve the emission reduction target : 26% or 41%
- ❑ MFF contribution on this goals are:
 - needed funding resources
 - *the cost-effectiveness* at all mitigation action PI
 - Policies that need to be formulated and reformed
 - *the institutional arrangements* that can be implemented

Source: Fiscal Policy Agency – Ministry of Finance, 2012

Low Emission Budget Tagging & Scoring System

In 2013, BKF produced a study on Low Emissions Budget Tagging and Scoring System (LESS).

- ❑ **LESS** constitutes a study to develop budget tagging and scoring systems toward mitigation expense on climate change at national level;
- ❑ **It aims to identify the total of budget** allocation and realization of climate change mitigation spending and **assessing contribution** at every budget unit on the achievement of emission reduction target.



COMPLETED

1. CPER (*Climate Public Expenditure Review*)

1. Jambi Province

2. Central Java

3. Yogyakarta

2. CPEIR (*Climate Public Expenditure and Institutional Review*)

1. Bangka Belitung Islands
(gender, poverty, and
vulnerability
assessments)

2. NTT

NEXT STEP

Development of CC budgeting mechanism & sound climate policy for sub-national government

- The evaluation of CPER and CPEIR: there are some regions have attention on climate change issues, it is shown through development projects that support climate change adaptation and mitigation policy.
- It requires the role of national government to direct (mainstreaming) regional policy in formulating the strategy for climate change policy including with the preparation and implementation of tagging mechanism on APBD
- Recommendation : It crucially needs to develop climate change budget tagging at sub-national level

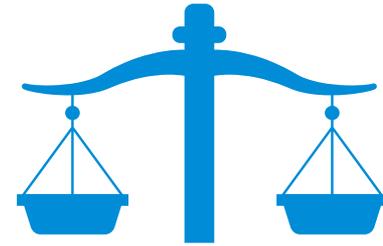
Climate Mitigation Budget Tagging



The Indonesian Ministry of Finance has developed a budget tagging mechanism to mainstream the national budget that correlates with climate change impacts.

Budget tagging is a system that has been developed based on the existing performance based budgeting system. It is also embedded into the national budgeting system.

Budget Tagging firstly implemented on State Budget FY 2016 and 2017 of 6 ministries mandated on RAN-GRK.



Minister of Finance
Regulation No.143/2015



Architecture & Performance Indicator

Transparent

User friendly

Tracking

Accountable

Mandatory Key Line Ministries in Carbon Emissions Reduction



MINISTRY OF ENVIRONMENT AND FORESTRY



MINISTRY OF AGRICULTURE



MINISTRY OF ENERGY AND MINERAL RESOURCES



MINISTRY OF TRANSPORTATION



MINISTRY OF PUBLIC WORK AND SETTLEMENT



MINISTRY OF INDUSTRY

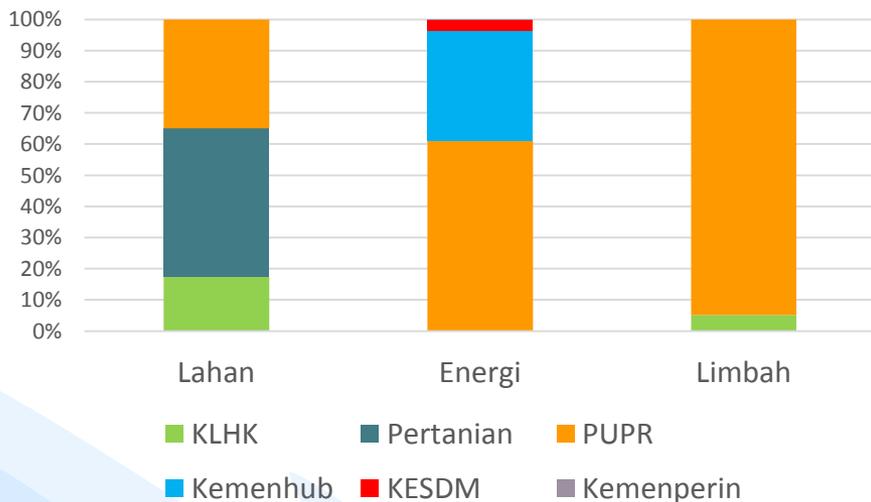
Climate Mitigation Budget Tagging

BUDGET ALLOCATION FOR CLIMATE MITIGATION (BILLION RUPIAH)

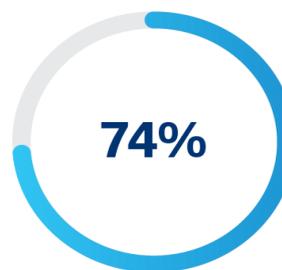
- APBNP 2016
(Revised State Budget)
- APBN 2017
(State Budget)



	Ministry of Agriculture	Ministry of Environment and Forestry	Ministry of Energy and Mineral Resources	Ministry of Industry	Ministry of Transportation	Ministry of Public Works and Housing	TOTAL
APBNP 2016	4.266	1.620	2.174	54	21.004	43.235	72.351
APBN 2017	4.838	1.459	3.520	43	23.880	48.054	81.794
Output 2016	21	42	25	13	100	62	263
Output 2017	27	19	29	13	39	32	159



Mitigation Budget in 2016 Relevant to Mitigation Action Plan

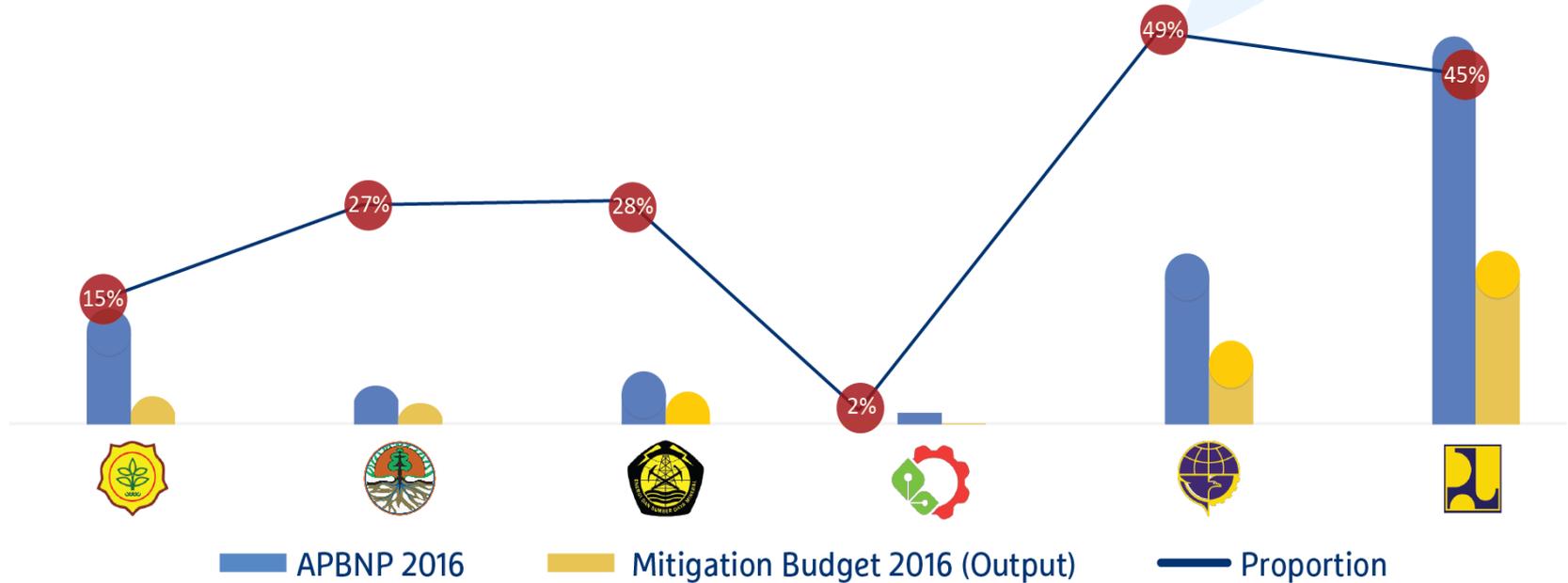


- Budget Relevant to RAN-GRK
- Additional Budget



Climate Mitigation Budget Tagging Results

MITIGATION BUDGET VS TOTAL BUDGET (2016)



The proportion of mitigation budget toward the total of APBPN 2016 (2,082.9 trillion IDR) is 2,47%. Meanwhile, if it is only compared with the budget of six ministries, the proportion of mitigation budget reaches 39%

Current Agenda: Climate Adaptation Budget Tagging in 2018 and Biodiversity in 2019

Enabling conditions for climate resilience

Nationally Determined Contribution (NDC)

Ecosystem & Landscape Resilience

Economic resilience

Social and Livelihood Resilience

- Certainty in spatial planning and land use
- Land tenure security
- Food security
- Water security
- Renewable energy

- Ecosystem conservation and restoration
- Social forestry
- Coastal zone protection
- Integrated watershed management
- Climate resilient cities.

- Sustainable agriculture and plantations
- Integrated watershed management
- Reduction of deforestation and forest degradation
- Land conservation
- Utilization of degraded land for renewable energy
- Improved energy efficiency and consumption patterns

- Enhancement of adaptive
- Development of community capacity and participation;
- Ramping up disaster preparedness programmes
- Identification of highly vulnerable areas
- Improvement of human settlements, provision of basic services, and climate resilient infrastructure development.
- Conflict prevention and resolution.

Climate Change Mitigation: AFOLU (Agriculture, Forestry, Land-Use), Energy, Waste, Industry

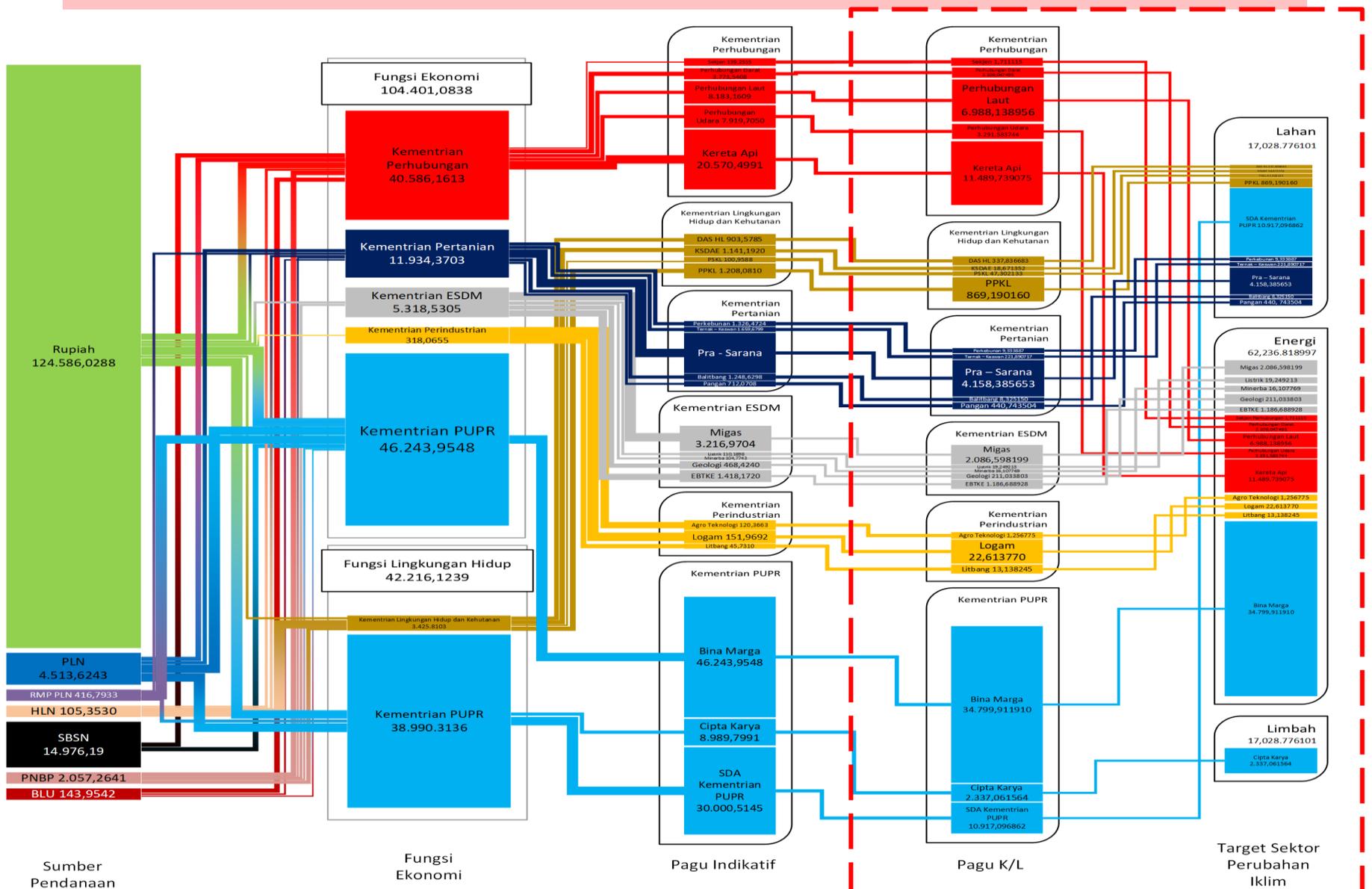


Climate Change Adaptation: Agriculture, Water, Energy Security, Forestry, Maritime and fisheries, Health, Public Services, Infrastructure, Urban System

Way Forward



CLIMATE FISCAL LANDSCAPE 2017



1. Use of Proceed

Eligible Green Projects: (1) Renewable Energy; (2) Energy Efficiency; (3) Resilience to Climate Change for Highly Vulnerable Areas and Sectors/ Disaster Risk Reduction; (4) Sustainable Transport; (5) Waste to Energy and Waste Management; (6) Sustainable Management Natural Resources; (7) Green Tourism; (8) Green Buildings; (9) Sustainable Agriculture.

2. Process for Project Evaluation and Selection

The project selection will refer to the data resulted from budget tagging process.

3. Management of Proceeds

The net proceeds of each Green Bond or Green Sukuk will be managed within the Government's general account in accordance with sound and prudent treasury management policy. Upon request from the Line Ministries, the Green Bond and Sukuk proceeds will be credited to a designated account of the relevant ministries for funding exclusively projects as defined in the Framework. Pending application to Eligible Green Project proceeds will be held in cash in the Government's general account at Bank Indonesia

4. Reporting

The Report will contain at least:

- A list and brief description of the projects to which Green Bond and Green Sukuk proceeds have been allocated;
- The amount of Green Bonds and Green Sukuk proceeds allocated to such projects.
- An estimation of the beneficial impact arising from the implementation of Eligible Green Projects. Reporting is expected to include measures of the reduction in greenhouse gas emissions, reduction in resource consumption, the number of parties that benefit from projects funded and other appropriate measures taking into account the nature of the project

Sukuk Program Terms & Conditions

Item	Details
Issuer	Perusahaan Penerbit SBSN Indonesia III
Obligor	The Government of the Republic of Indonesia, represented by the Ministry of Finance
Format	Rule 144A / Regulation S
Currency	US Dollar
Program Size	USD 25 billion Trust Certificate Issuance Program
Sukuk Structure	Wakala
Obligor Ratings	Baa3 (Positive) by Moody's / BBB- (Stable) by S&P / BBB (Stable) by Fitch
Expected Issue Ratings	[Baa3 by Moody's / BBB- by S&P / BBB by Fitch]
Issuance Amount	Benchmark size
Tenor	<ul style="list-style-type: none"> • 5- year and 10- year • Longer-dated tranche may be included subject to investor feedback
Listings	<ul style="list-style-type: none"> • NASDAQ Dubai • Singapore Exchange Securities Trading Limited ("SGX-ST")
Clearing Systems	DTC, Euroclear and Clearstream
Governing Laws	<ul style="list-style-type: none"> • Declaration of Trust, Transfer Undertaking, Purchase Undertaking, Costs Undertaking, Agency Agreement and the Trust Certificates are governed by English Law • Purchase Agreement, Procurement Agreement, Lease Agreement, Wakala Agreement, Servicing Agency Agreement, and Substitution Undertaking are governed by Indonesian Law
Joint Lead Managers and Bookrunner	Abu Dhabi Islamic Bank PJSC, CIMB Investment Bank Berhad, Citigroup Global Markets Inc., Dubai Islamic Bank PJSC, and The Hongkong and Shanghai Banking Corporation Limited
Co-Managers	PT. Bahana Securities, PT. Danareksa Sekuritas, PT. Trimegah Sekuritas Indonesia Tbk.
Second Party Opinion Provider on Green Framework	Center for International Climate Research

Indonesia's Commitment to Climate Change

Strong commitment to combat climate change whereby the country is susceptible to climate-induced disasters

Background of Commitment

Commitment	<ul style="list-style-type: none"> • 2016 Paris Agreement - committing to a low-carbon and climate-resilient future • Establishment of Nationally-Determined Contribution
Climate and Environmental Protection	Extensive tropical landscape and seascape with high biodiversity, high carbon stock values and energy and mineral resources
The President's <i>Nawacita</i> Programme	The "Nine Agenda Priorities" - President's priority actions shifting to a low-carbon and climate-resilient development path

Environment Commitment and Objectives

The development of National Action Plans on Mitigation, Adaptation, and Biodiversity strategies solidifies Indonesia's direction towards climate-resilience
<ul style="list-style-type: none"> • Indonesia has designed Budget Tagging process to identify green projects involving 7 line ministries in 2016 and 2017 which will increase to 17 line ministries for 2018 • State Budget expenditure on green projects was US\$ 5.3 bn, US\$ 6.0 bn, and US\$ 8.6 bn in 2016, 2017 and 2018 (running number), respectively
Indonesia intends to develop financing instruments in the form of Green Bond or Green Sukuk to finance and refinance green projects and assets
Republic of Indonesia's Green Bond and Green Sukuk Framework is awarded the Medium Green shading from CICERO. This Framework includes a broad range of project categories across a range of line ministries to support its NDC. This allows for the possibility of light, medium and dark green project types, all of which are necessary to meet the climate change challenge

Indonesia's Approach for the Green Framework

The Republic of Indonesia has developed a Green Bond and Green Sukuk Framework under which it plans to finance or refinance Eligible Projects via the issuance of Green Bonds and Green Sukuk	
Use of Proceeds	Proceeds will be used exclusively for spending in the form of budget allocation/subsidies/projects for new financing or the refinancing of Eligible Green Projects
Process for Project Evaluation and Selection	National Development Planning Agency and the Ministry of Finance will review and approve projects/budget allocation/subsidies within the State Budget.
Management of Proceeds	The Ministry of Finance shall manage the allocation process within the Government's general account.
Reporting	The Ministry of Finance will prepare and publish a report annually and initially on the date no more than 1 year after the inaugural Green Bond or Green Sukuk issuance.

9 Eligible Green Sectors

- Renewable Energy
- Clean Technology for Power Plant
- Resilience to Climate Change for Highly Vulnerable Areas and Sectors / Disaster Risk Reduction
- Sustainable Transport
- Waste to Energy and Waste Management
- Sustainable Management Natural Resource
- Green Tourism
- Green Building
- Sustainable Agriculture

THE REPUBLIC OF INDONESIA

GREEN BOND AND GREEN SUKUK FRAMEWORK

I. INTRODUCTION

BACKGROUND

Indonesia is strongly committed to combating climate change and is also one of the nations most susceptible to climate-induced disasters. As such, Indonesia has made a number of commitments to step up its climate change adaptation and mitigation priorities.

As part of a responsible and committed global community, Indonesia has ratified the Paris Agreement in 2016 and submitted its Nationally Determined Contributions (NDCs). It sets out Indonesia's commitment to a low carbon and climate resilient future. For 2020 and beyond, Indonesia aims to reach archipelagic climate resilience from comprehensive adaptation and mitigation programs, and disaster risk reduction strategies.

Indonesia has a pivotal role in combating climate change. Its extensive tropical landscape and seascape with high biodiversity, high carbon stock values and energy and mineral resources are all contributing factors for the nation to be at the forefront of climate action and environmental protection. Furthermore Indonesia's position close to the global ocean conveyor system make it particularly vulnerable to natural disasters that will likely to be exacerbated by climate change.

Eligible Green Projects must fall into at least one of the following sectors:

Eligible Sectors	Further Detail of Eligible Green Projects
Renewable Energy	<ul style="list-style-type: none"> • Generation and transmission of energy from renewable energy sources: include offshore and onshore wind, solar, tidal, hydropower, biomass and geothermal • Research and development of products or technology (“R&D”) for renewable energy generation, include turbines and solar panels
Energy Efficiency	<ul style="list-style-type: none"> • Improvement of the energy efficiency of infrastructure, which results in an energy consumption of at least 10% below the average national energy consumption of an equivalent infrastructure • Research and development of products or technology (“R&D”) and their implementation that reduces energy consumption of
Green Tourism	<ul style="list-style-type: none"> • Developing new tourism areas in line with Green Tourism Principles • Optimization of supporting infrastructure to support sustainable tourism (i.e. water treatment, energy efficiency) • Developing tourism resiliency against climate change risk
Green Buildings	<ul style="list-style-type: none"> • Developing green buildings in line with <u>GreenSHIP</u> developed by Green Building Council Indonesia (“GBC Indonesia”), which contains six categories: <ul style="list-style-type: none"> – Appropriate Site Development – Energy Efficiency and Conservation – Water conservation
	<ul style="list-style-type: none"> – Material & resources cycle – Air quality & leisure air (water indoor health & comfort) – Building & environment management
Sustainable Agriculture	<ul style="list-style-type: none"> • Developing sustainable agriculture management and methods, such as organic farming, less pesticides, Research and Development (“R&D”) on climate resilient seeds, and energy efficient on agriculture • Subsidy mechanism for agriculture insurance

	underlying asset, technology, product or system(s); including LED lights, improved chillers, improved lighting technology, and reduced power usage in manufacturing operations
Resilience to Climate Change for Highly Vulnerable Areas and Sectors/ Disaster Risk Reduction	<ul style="list-style-type: none"> • Research leading to technology innovation with sustainability benefits • Food security • Flood mitigation • Drought management • Public health management
Sustainable Transport	<ul style="list-style-type: none"> • Developing clean transportation systems • Transportation network upgrade to higher climate resilient design standards
Waste to Energy and Waste Management	<ul style="list-style-type: none"> • Improving waste management • Transforming waste to renewable energy source • Rehabilitation of landfill areas
Sustainable Management Natural Resources	<ul style="list-style-type: none"> • Sustainable management of natural resources which substantially avoids or reduces carbon loss / increases carbon sequestration (through planting of new forest areas and/or replanting of degraded areas, the use of drought / flood / temperature resistant species). • Habitat and biodiversity conservation (through sustainable management of land use change, sustainable management of agriculture/fisheries/forestry, protection of coastal and marine environments, pest management



Thank You
