



**BADAN KEBIJAKAN FISKAL  
KEMENTERIAN KEUANGAN RI**

# **Climate Mitigation Financing Indonesia's NDC**

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# Financing Indonesia's Climate Mitigation





## Indonesia's Development Challenges

- ❑ Indonesia's GHG emission is predicted to increase from 2.1 to 3.3 GtCO<sub>2</sub>e 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

# Indonesia's Commitment in Climate Change Mitigation



**Reducing 29% to 41% of GHG Emissions  
from Business As Usual in year 2030**

**(Annex to Law No. 16/2016 on Ratification of Paris Agreement)**

Mitigation Sector	Emissions million tCO <sub>2</sub> e in 2020		Reduction as % of BAU
	BAU total	Target 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%
<b>Total emission reductions</b>	<b>2950</b>	<b>767</b>	<b>26.0%</b>

# Financing Indonesia's Climate Mitigation



**Climate Mitigation Financing Requirement is Large  
Recent Estimate of NDC is US\$ 68 Billion for 2016-  
2020**

No.	Sources	Mitigation Needs (in USD)	Annual Mitigation Needs (in USD)
1	Mid-Term Development Plan, 2010	3.7 bn (2010-2014)	925 million
2	Second National Communication, 2009	8.3 bn (26%); 16.8 bn (41%)	0.83 bn –1.68 bn
3	NEEDS/ DNPI – McKinsey Cost Curve, 2009	385.2 bn (2010-2030)	19.26 bn
4	Bappenas, 2011	28.07 bn (RAN-GRK 2010-2020)	2.8 bn
5	CPEIR, 2012	70.5 bn (RAN-GRK until 2020)	7.05 bn

Source: Strengthening Public and Private Climate Finance in Indonesia, 2013



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# INCLUSION OF BUDGET EFFECTIVENESS FOR WIDER 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



# Budgetary Policy Measures for Climate Finance Mobilization

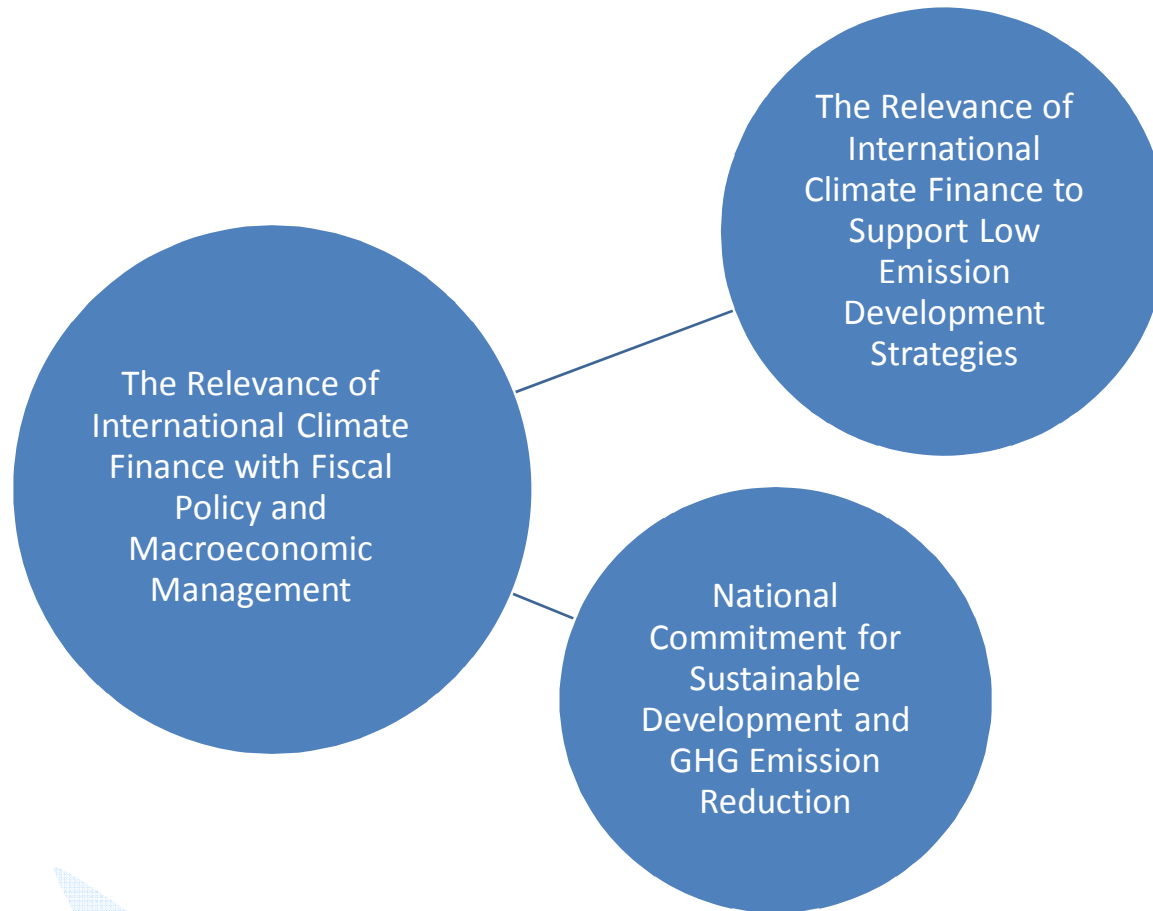


Prioritas	Instrumen Kebijakan																	
	Anggaran Pemerintah Langsung			Pemerintah untuk Perusahaan, UKM & LSM			Melalui Lembaga Keuangan			Regulasi Pengendalian & Pengembangan								
	Anggaran Investasi	Anggaran Berulang	Alokasi Khusus (untuk Prov/Kab)	Hibah/Investasi	Subsidi Operasional	Data/Informasi	Insentif Pajak	Insentif Suku Bunga	Jaminan Pinjaman	Dana Pinjaman	Perijinan	Pengendalian Harga (termasuk FITs)	Kuota	Kualitas Regulasi	Praktek Regulasi	Tata Kelola Regulasi	CSR	Kejelasan/Kesadaran Masyarakat
<b>Perlindungan Sumber Daya Alam</b>																		
Perlindungan Hutan	■	■	■	■	■	■					■		■					■
Rehabilitasi Lahan Gambut	■	■	■															■
Perlindungan Terumbu Karang & Sumber Daya Laut																		■
<b>Pertanian</b>																		
Adaptasi Tanaham Perubahan Iklim	■	■				■				■								
Tanaman Perkebunan (terutama Kelapa Sawit)		■	■							■			■					■
Irigasi Pertanian	■	■	■										■					
<b>Energi dan Industri</b>																		
Energi dan Sumber Daya Efisiensi				■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Energi Terbarukan				■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Efisiensi Sumber Daya				■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Harga Bahan Bakar		■									■	■	■	■	■	■	■	■
Listrik Skala Besar				■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Pertambangan Berkelanjutan				■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Corporate Social Responsibility							■	■	■	■	■	■	■	■	■	■	■	■
<b>Transportasi dan Perencanaan Kota</b>																		
Transportasi Umum			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Pengelolaan Limbah/Sampah	■	■		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Infrastruktur Jalan/Jembatan Tahan terhadap Iklim	■	■		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Infrastruktur Daerah			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
<b>Pendidikan dan Kesehatan</b>																		
Sekolah Hijau																		
Pelayanan Kesehatan yang Sensitif terhadap Perubahan Iklim		■											■	■	■	■	■	■
<b>Kebijakan Pendukung</b>																		
Pengelolaan/Pengurangan Bencana	■	■	■												■	■	■	■
Koordinasi GE dan M&E	■	■	■												■	■	■	■

■ = Kementerian Keuangan  
 ■ = Bappenas  
 ■ = Kementerian / Lembaga  
 ■ = Provinsi / Kota / Daerah  
 ■ = Sektor Swasta & Masyarakat



# Role of Ministry of Finance in the International Climate Finance





# GCF In International Climate Landscape

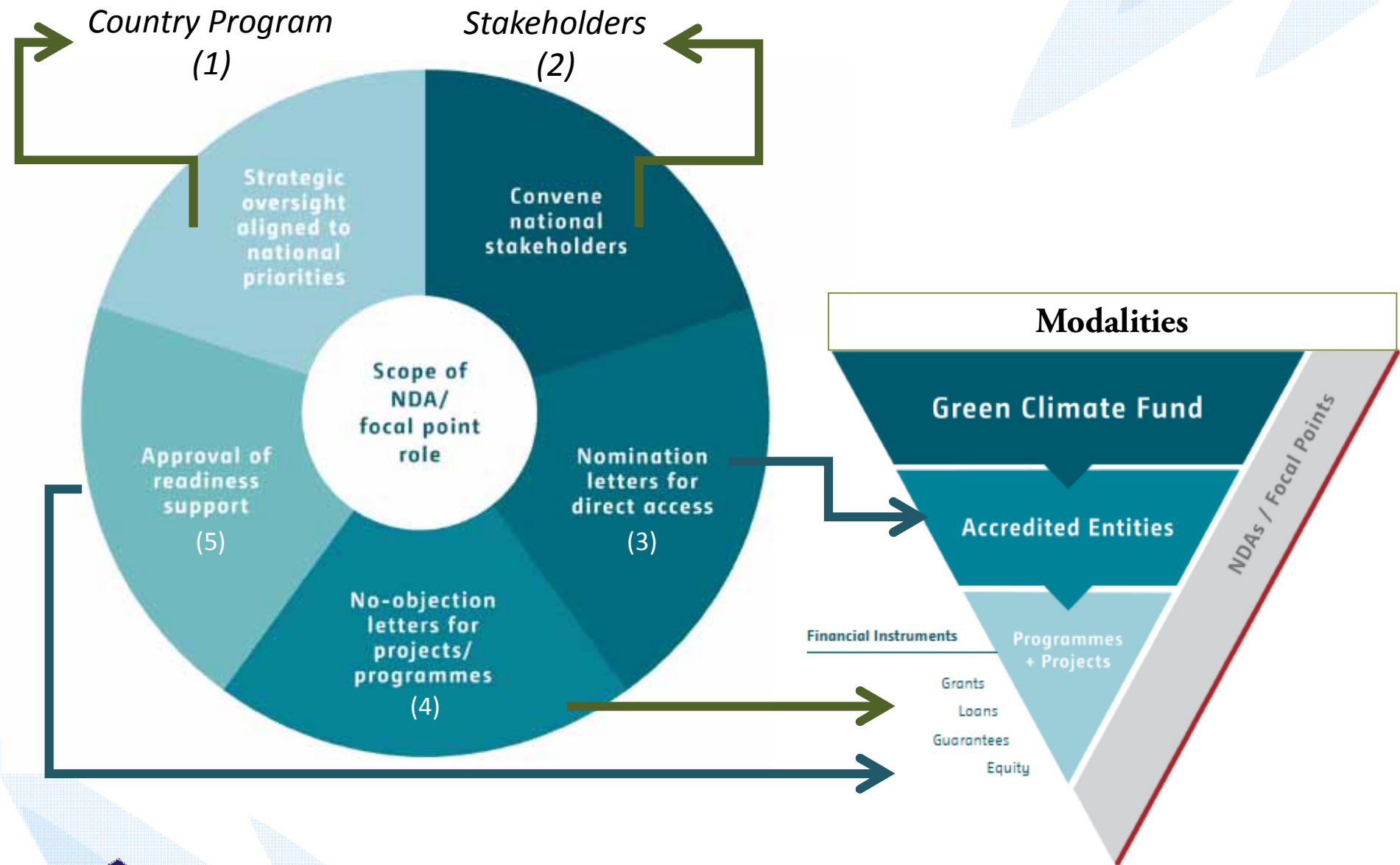


Paris Agreement:

- “59. Decides that the **Green Climate Fund** and the **Global Environment Facility**, the entities entrusted with the operation of the Financial Mechanism of the Convention, as well as the Least Developed Countries Fund and the Special Climate Change Fund, administered by the Global Environment Facility, shall serve the Agreement” “60. *Recognizes* that the **Adaptation Fund** may serve the Agreement, subject to... ”;
- “54. Prior to 2025 the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement shall set a new collective quantified goal from a floor of **USD 100 billion per year**, taking into account the needs and priorities of developing countries;”
- “115. *strongly urges* developed country Parties to scale up their level of financial support, with a concrete roadmap to achieve the goal of jointly **providing USD 100 billion annually by 2020** for mitigation and adaptation while significantly increasing adaptation finance from current levels and to further provide appropriate technology and capacity-building support; ”



# Ministry of Finance as the Indonesian NDA of GCF



## Indonesian Country Concept Note 2016

Sector	Main Program / Activities	
Forestry and Peat Land	<ul style="list-style-type: none"> <li>• Development of forest management unit</li> <li>• Planning for use and improvement of forest estate use.</li> <li>• Development of environmental service utilization</li> <li>• The enactment of forest estate</li> <li>• Rehabilitation and reclamation of forests and lands in priority watersheds</li> </ul>	<ul style="list-style-type: none"> <li>• Social forestry development</li> <li>• Forest fire control</li> <li>• Investigation and guarding of forest</li> <li>• Development of conservation areas, essential ecosystem&amp; protected forest development program</li> <li>• Improvement of plantation forest business.</li> </ul>
Agriculture	<ul style="list-style-type: none"> <li>• Land optimization</li> <li>• Application of Crop Production Technologies</li> <li>• Use of organic fertilizers and bio pesticide</li> <li>• Estate crops area development (oil palm, rubber, cacao) in non-forest land/abandoned land/degraded land/ Other Use Areas (APL)</li> </ul>	<ul style="list-style-type: none"> <li>• Use of animal manure/urine and agricultural waste for biogas</li> <li>• Peat land management for sustainable agriculture</li> <li>• Development of farming land management in abandoned &amp; degraded peat lands to support plantation, livestock and horticulture sub-sectors</li> </ul>
Energy and Transportation	<ul style="list-style-type: none"> <li>• Energy conservation partnership program</li> <li>• New and renewable energy supply and management</li> <li>• Biogas utilization</li> <li>• Use of natural gas as fuel for urban public transport</li> </ul>	<ul style="list-style-type: none"> <li>• Use of connections to houses supplied with natural gas through pipes.</li> <li>• Post-mining land reclamation</li> <li>• Bio-diesel utilization</li> </ul>
Industry	<ul style="list-style-type: none"> <li>• Application of process &amp; technology modification in cement industry</li> <li>• Energy conservation and audit to form industrial management system in 8 industry sectors, namely: cement, steel, pulp and paper, glass and ceramics, fertilizers, petrochemicals, food and drinks, textile, textile products as well as basic chemicals industries.</li> <li>• Elimination of Ozone Depleting Substances in refrigerants, chillers, and fire extinguishers</li> </ul>	
Waste Management	<ul style="list-style-type: none"> <li>• Waste management in TPS (temporary transfer station) 3R (Reduce, Reuse, Recycle) &amp; TPA (final disposal)</li> <li>• Urban waste water management</li> </ul>	





# Thank You

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