



BADAN KEBIJAKAN FISKAL
KEMENTERIAN KEUANGAN RI

Financing Indonesia's NDC

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1. DEVELOPMENT CONTEXT





Indonesian Development Challenges on Climate Change

- ❑ 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 70% from GDP (WB, 2010; ADB, 2010)
- ❑ Indonesia is a mega-biodiversity country. Biodiversity is a development capital, but the full potential is undervalued and it is decreasing (MoEF, 2014)
- ❑ Estimate of the Need to finance Indonesia's NDCs is US\$68 billion for 2016-2020

Jeopardizing Sustainable Development

Indonesia's commitment to reduce 29%-41% of its GHG emissions by 2030 is to be aligned to the national and sectoral development plans for 2015-2020

CLIMATE CHANGE IN INDONESIA'S DEVELOPMENT (NDC2016)



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)

Projected BAU and emission reduction from each sector category

No	Sector	GHG Emission Level 2010*	GHG Emission Level 2030 (MTon CO ₂ e)			GHG Emission (MTon CO ₂ e)		Reduction % of Total BaU		Annual Average Growth BaU (2010-2030)	Average Growth 2000-2012*
						CM1	CM2	CM1	CM2		
1	Energy*	453.2	1,669	1,355	1,271	314	398	11%	14%	6.7%	4.50%
2	Waste	88	296	285	270	11	26	0.38%	1%	6.3%	4.00%
3	1PPU	36	69.6	66.85	66.35	2.75	3.25	0.10%	0.11%	3.4%	0.10%
4	Agriculture	110.5	119.66	110.39	115.86	9	4	0.32%	0.13%	0.4%	1.30%
5	Forestry**	647	714	217	64	497	650	17%	23%	0.5%	2.70%
	TOTAL	1,334	2,869	2,034	1,787	834	1,081	29%	38%	3.9%	3.20%

*Including fugitive

**Including peat fire

Notes: CM1= Counter Measure (unconditional mitigation scenario)

CM2= Counter Measure (conditional mitigation scenario)



2. Climate Public Finance Strategy



Overview of Climate Finance

- **Climate Finance:** *financial resources* invested in *mitigation and adaptation* measures through financial instruments including **loans**, **grants** and **guarantees**, which have helped *leverage additional private finance*
- **Sources:** public, private & intermediaries
- **Instruments:** range of tools, mechanisms and modalities
- **Uses:** mitigation vs. adaptation
- **Readiness:** plan, access, deliver, monitor



Public Sources & Intermediaries

- US\$ 137 Billion, or 42%, of total \$331 Billion climate finance flows in 2014
(Source: CPI Global Landscape of Climate Finance, 2014)

- **Ministries & Government Agencies**

- Bilateral Aid agencies
- Export Credit Agencies
- UN institutions

National strategies &
policy frameworks
conducive to
investment

- **Development Finance Institutions**

- Multilateral Development Banks (MDB)
- National Development Banks (NDB)
- Bilateral Financial Institutions (BFI)

Technical assistance,
financial instruments
& specialized
knowledge

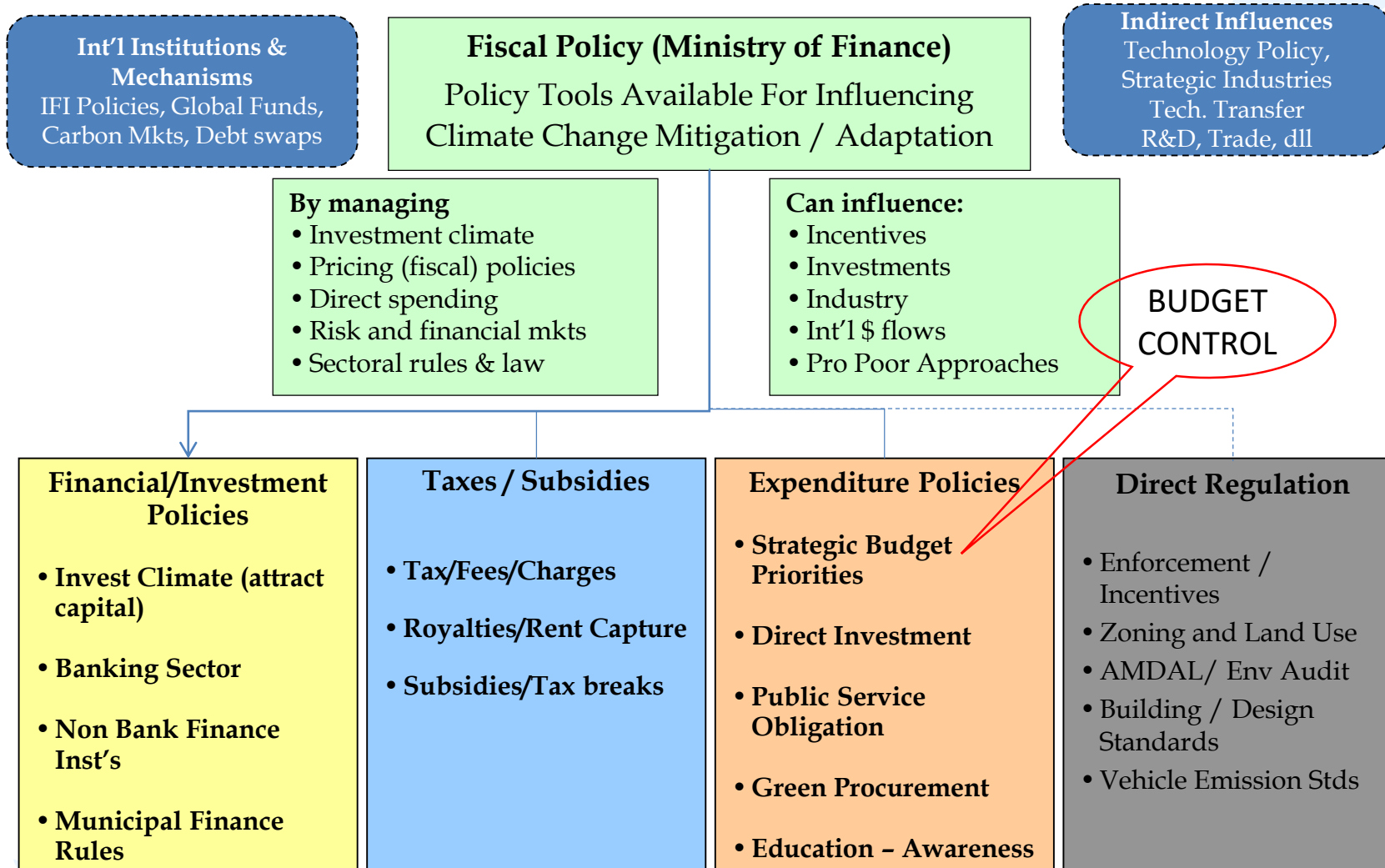
- **Climate Funds**

- Global Environment Facility (GEF)
- Adaptation Fund (AF)
- Climate Investment Funds (CIF)
- Green Climate Fund (GCF)

Grants & loans at
concessional terms
(finite lifetime,
sectoral focus)



Public Finance for Climate Change



Budget 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 29% BAU

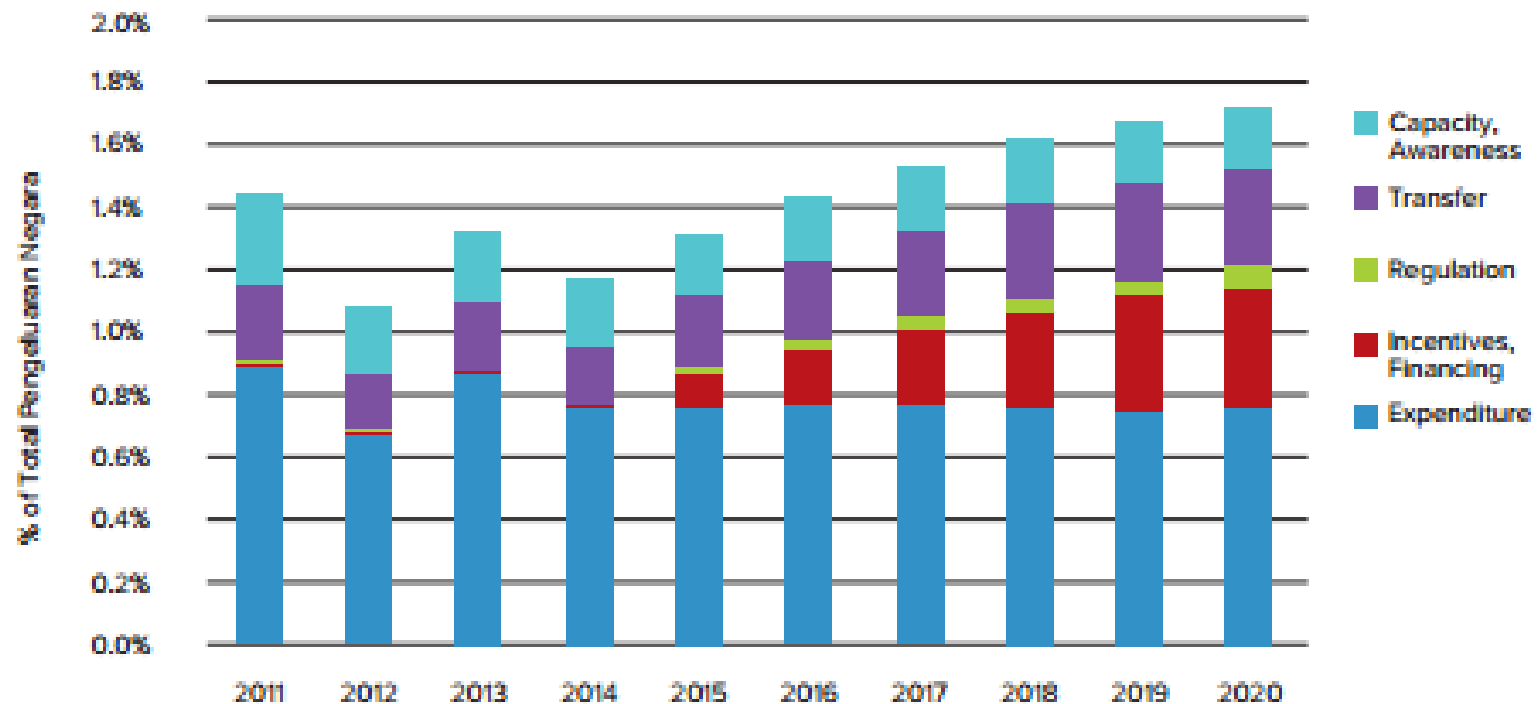
- Forestry, Peat-land & Marine Resources protection
- Agriculture and Irrigation system rehabilitation
- Energy and Industry
- Public Transport, Urban & Regional Infrastructure
- Education and Health
- Disaster Management



Public Finance Instruments for Climate Change



Type of Policy Instruments to Climate Finance



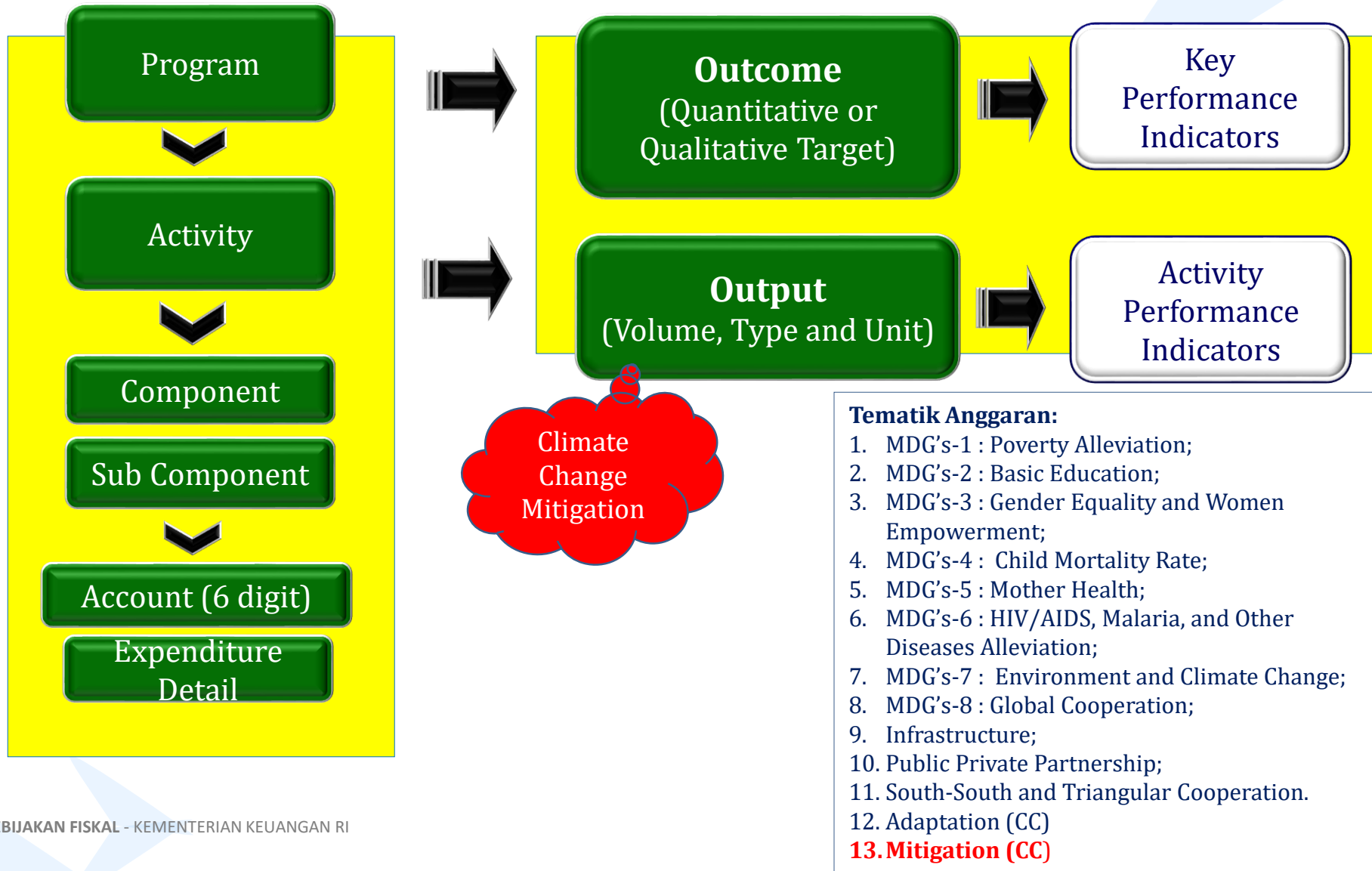
Public Finance for Climate Change



Priorities	Policy Instruments																	
	Direct govt expenditure			Govt to firms, SOEs, CSOs				Via finance institutions			Regulatory controls and promotion							
	Investment budget	Recurrent budget	Special allocations (Prov/Dist)	Grants (Investment/services)	Operating subsidies (e.g. VGF)	Data/information	Tax incentives	Interest rate subsidies	Loan guarantee	Loanable funds	Licenses	Price controls (incl. FITs)	Quotas	Regulating quality	Regulating practices	Regulating governance	Corp. social responsibility	Clarity/public awareness
Natural Resources Protection																		
Forest protection																		
Peatland rehabilitation																		
Coral & marine protection																		
Agriculture																		
CC adapted crops																		
Plantation crops (esp oil palm)																		
Irrigation																		
Energy and Industry																		
Energy and resource efficiency																		
Renewable energy																		
Resource efficiency																		
Fuel pricing																		
Large scale power																		
Sustainable mining																		
Corporate social responsibility																		
Transport and Urban Planning																		
Public transport																		
Waste Management																		
Climate proofing roads/bridges																		
Regional infrastructure																		
Education & Health																		
Green education																		
CC sensitive health services																		
Supporting Policies																		
Disaster reduction/management																		
GE coordination and M&E																		

International Climate Finance:

- REDD+
- GCF
- GEF
- Bilaterals
- Technology



3. FISCAL INCENTIVE TO LEVERAGE PUBLIC FINANCE

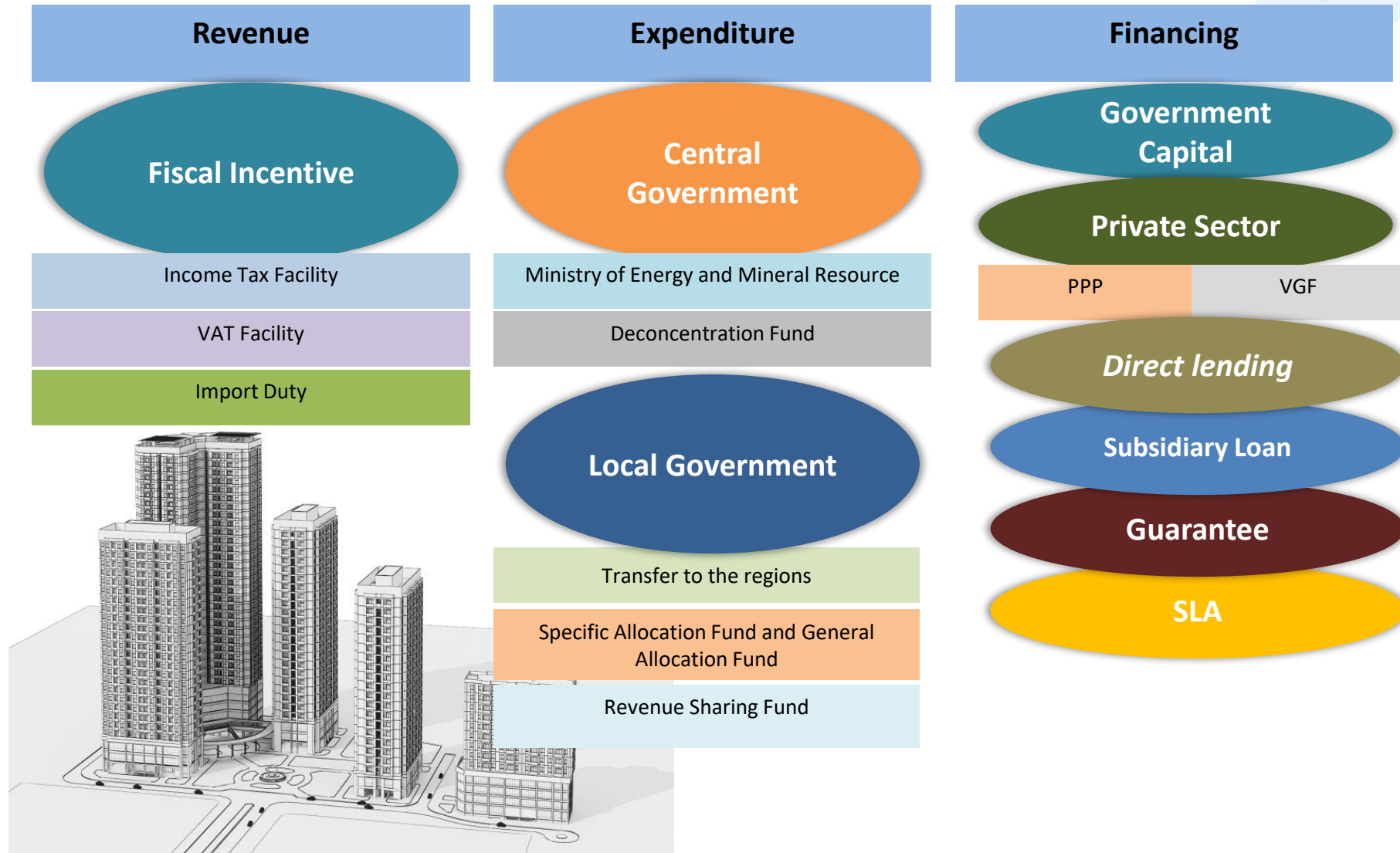


Private Sources & Intermediaries

- US\$ 193 Billion, or **58%**, of total \$331 Billion climate finance flows in 2014
- **Project Developers:** national/regional utilities, independent power producers, renewable energy
- **Corporate Actors:** manufacturers, corporate end-users
- **Private Households:** family level economic entities, high net worth individuals
- **Institutional Investors:** insurance companies, pension funds, endowments
- **Commercial Financial Institutions**
- **Private Equity, Venture Capital & Infrastructure Funds**



Fiscal Policies for Climate Change



Climate Financing Instruments to Leverage Private Sector Investment

Climate change will present institutional investors with some of the most important risks and opportunities they will face for generations to come.

Climate change has the potential to affect many sectors in radically different degrees over time, and institutional investors need to have a thorough understanding of the multi-dimensional risks and opportunities that could influence nearly every investment in their portfolios.

- Examines the climate change-related drivers of returns (science, economics, policy, and technology)
- Explores fiduciary duty and climate change
- Explanations of each of the major categories of environmental investing and examines related environmental opportunities

1. Policy Incentives:

- Feed-in tariffs
- Tradeable certificates
- Tax incentives
- Clean energy subsidies

2. Risk Management:

- Guarantees
- Insurance policies
- Contract-based instruments

3. Grants:

- Cash transfers
- In-kind support

4. Low-cost project debt:

- Concessional loans

5. Capital Instruments at commercial terms:

- Project-level market rate debt
- Project-level equity
- Balance sheet financing

Address investor-specific needs

Align public and private interests

Enable scaled-up investments





TAX HOLIDAY

- Regulated in Ministry of Finance Regulation Number 159 year 2015 concerning the Issuance of Corporate Income Tax Reduction Facility.
- Incentive to reduce on corporate income tax from 10% - 100% of the total corporate income tax payable for a period from 5 to 15 years, since the start of commercial production object.
- The requirements to benefit the reduction facility:
 - Investment in pioneer industries;
 - New Capital investment of at least Rp1 trillion;
 - At least 10% of total fund placements in national banks;
 - Established since or after the date of August 15, 2011.



TAX ALLOWANCE

- Regulated in Government Regulation Number 18 year 2015 regarding Income Tax Facilities for Investment in Specific Sectors;
- Granted income tax facilities (including: mining business of petroleum and natural gas and geothermal, smelter, the business field of power generation, as well as business sectors procurement of natural gas and artificial) to investment in areas of certain businesses and / or particular area, in the form of:
 - reduction of net income by 30% (over 6 years)
 - depreciation and amortization
 - the imposition of income tax on dividends paid to SPLN by 10%, or a lower rate according to applicable P3B
 - loss compensation for 5 to 10 years
- Implementation of Government Regulation is set in Minister of Finance Regulation (PMK) Number 89/PMK.010/2015 concerning on Tax Allowances Facility for specific sector and/or areas.



Value Added Tax exemption on capital goods

- Stipulated in Government Regulation Number 31 Year 2007 on Import and / or Delivery of Certain Strategic Taxable Goods Exempt from Value Added Tax.
- This facility is provided, among others for capital goods such as machinery and factory equipment, both in keadan attached or detached, excluding parts

Income Tax borned by the Government (DTP) - GEOTHERMAL

- The tax borne by the Government applied for Geothermal industries that operated by signed contract before the enactment of Law No. 27 Year 2003 on geothermal.
- The magnitude of the amount set annually by the Law on State Budget



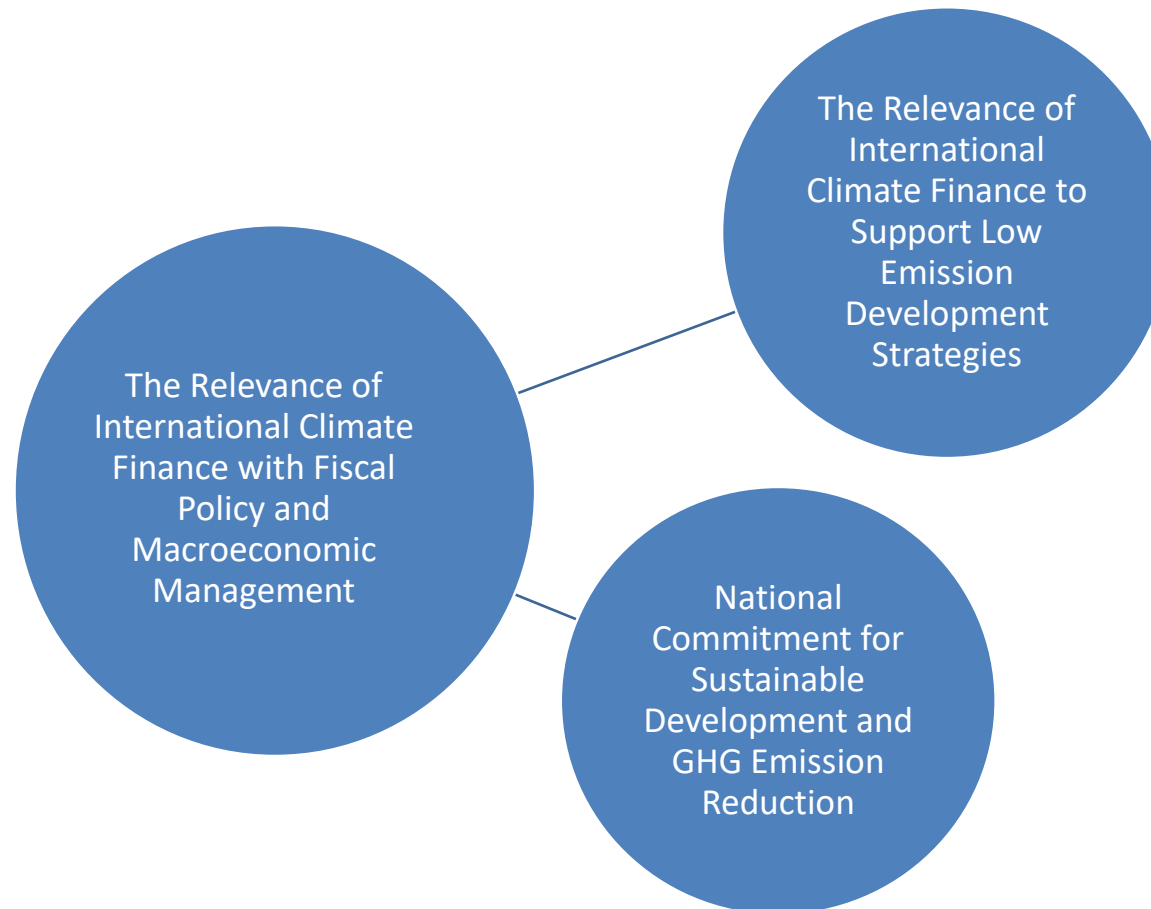
Exemption on capital goods import duty

- Regulated in PMK 176/2009 188/2015 on BM exemption on the import of machinery and Goods and Materials for the Construction / Industrial Development in capital investments.
- Terms of provision of facilities:
 - Capital goods is not produced in the country.
 - Has been produced in the country but have not met the required specifications.
 - Has been produced in the country but the amount is not sufficient for the industry.

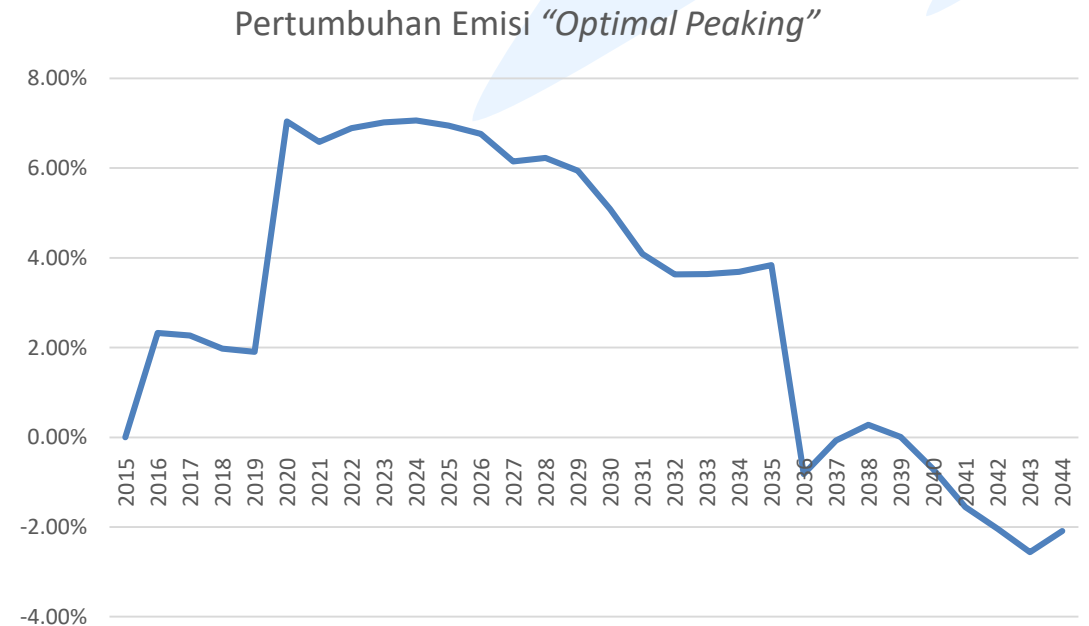
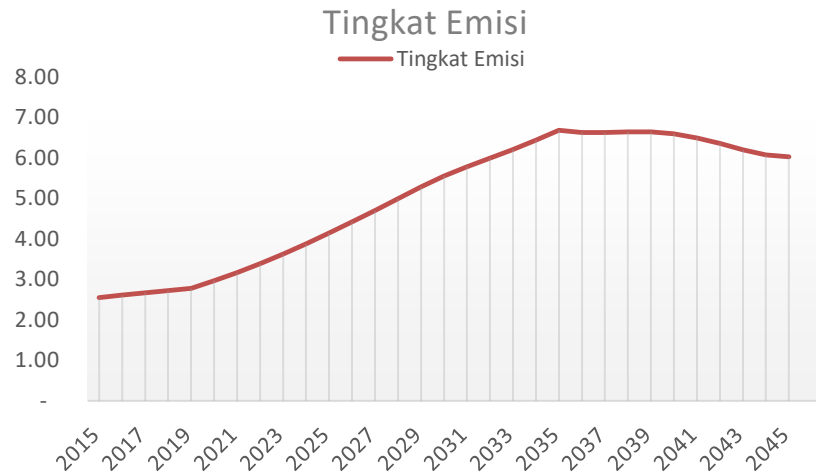
4. Accessing International Climate Finance



III. Accessing International Climate Finance



BKF's MODELLING of CLIMATE CHANGE IN INDONESIA'S NDC 2016



2005 data showed that emissions of peat (0.83 Gt CO₂e) tops the list of all the sectors, followed by the energy sector (0.37 Gt CO₂e), the forest sector (0.29 Gt CO₂e), the waste sector (0.17 Gt CO₂e), agriculture (0.05 Gt CO₂e) and industrial sectors (0.03 Gt CO₂e). The total national emissions in 2005 amounted to 1.76 Gt CO₂e.



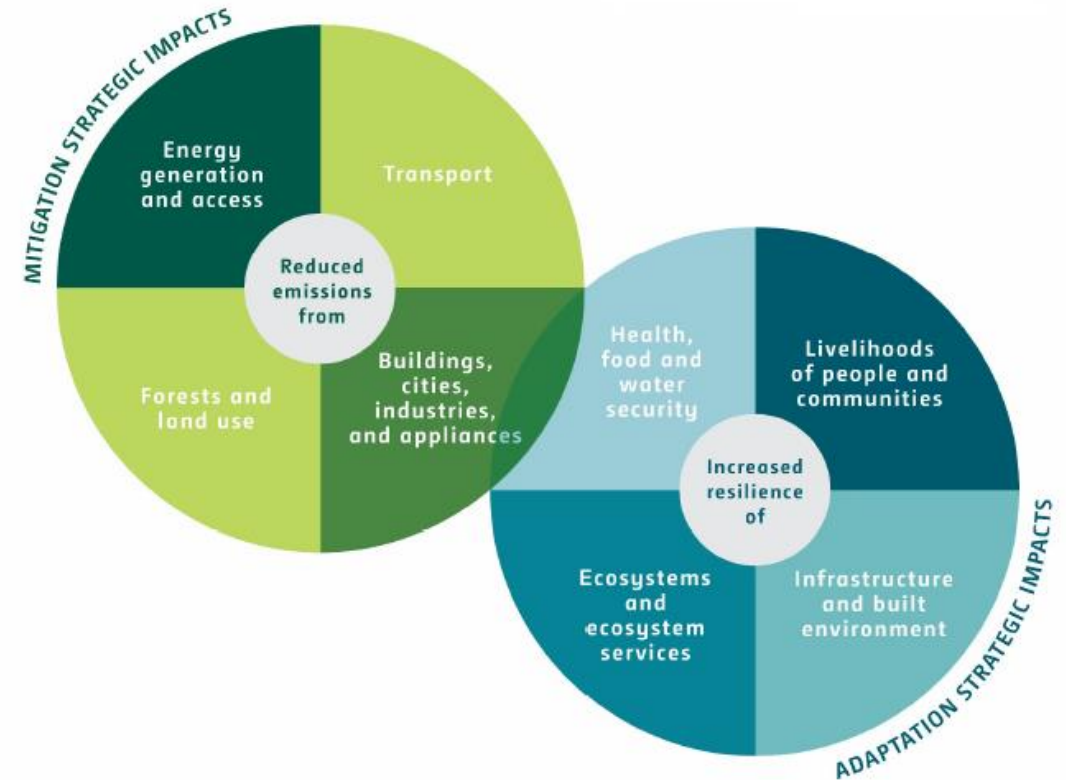
Uses of Proceed from Climate Financing

91%
mitigation

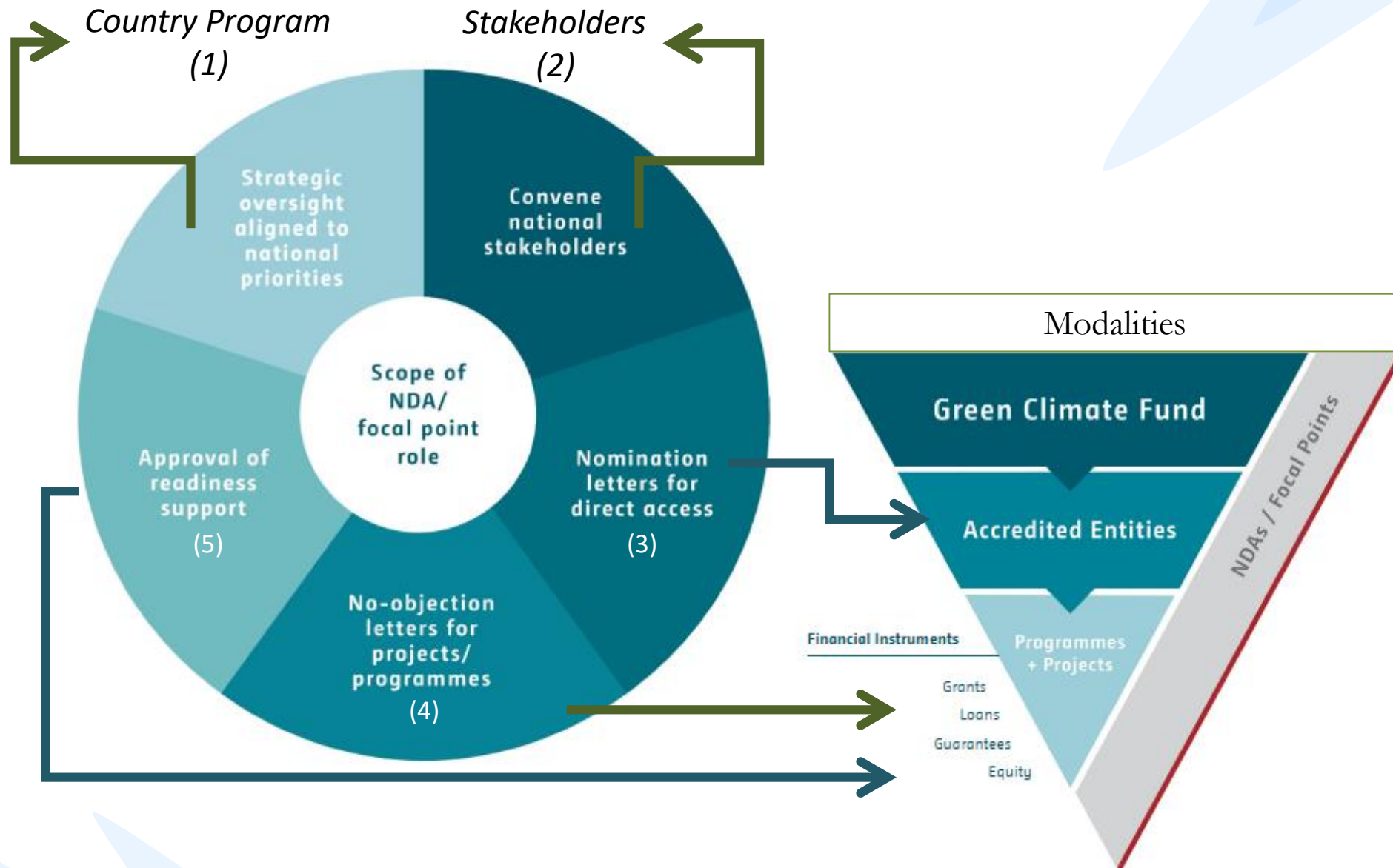
- Renewable energy generation
- Energy efficiency in industry and buildings
- Sustainable transport
- AFOLU & livestock management

7% adaptation

- Water supply management
- Climate-resilient infrastructure
- Coastal protection
- Disaster risk reduction
- AFOLU & natural resource management



Ministry of Finance as the Indonesian NDA of GCF



The International Climate Landscape

Fund	Fund Type	Fund focus	Pledge (USD mln)	Deposit (USD mln)	Approval (USD mln)	Number of projects approved	Date reported
Adaptation for Smallholder Agriculture Program	Multilateral	Adaptation	366.46	326.44	285.00	36	05/2016
Adaptation Fund	Multilateral	Adaptation	565.02	562.50	337.25	52	12/2016
Amazon Fund	Multi Donor National	REDD+	1'036.83	1'036.83	572.94	85	12/2015
Australia's International Forest Carbon Initiative	Bilateral	REDD+	216.27	67.06	159.04	10	10/2015
Biocarbon Fund	Multilateral	REDD+	360.60	360.60		0	10/2015
Clean Technology Fund	Multilateral	Mitigation - General	5'567.00	5'396.00	4'665.11	92	12/2015
Congo Basin Forest Fund	Multi Donor Regional	REDD+	186.02	164.65	83.11	37	10/2015
Forest Carbon Partnership Facility Carbon Fund	Multilateral	REDD+	1'071.19	764.79	207.20	45	04/2016
Forest Investment Program	Multilateral	REDD+	639.00	526.00	343.15	29	12/2015
GEF Trust Fund (GEF 4)	Multilateral	Multiple Foci	1'082.98	1'082.98	953.03	235	09/2015
GEF Trust Fund (GEF 5)	Multilateral	Mitigation - General	1'350.00	776.74	868.13	239	09/2015
GEF Trust Fund (GEF 6)	Multilateral	Multiple Foci	1'101.12	1'078.05	216.66	65	09/2015
Germany's International Climate Initiative	Bilateral	Multiple Foci	1'081.84	1'081.84	1'368.12	362	10/2015
Global Climate Change Alliance	Multilateral	Multiple Foci	326.15	326.15	347.07	50	10/2015
Global Energy Efficiency and Renewable Energy Fund	Multilateral	Mitigation - General	169.50	163.50	89.07	11	10/2015
Green Climate Fund	Multilateral	Multiple Foci	10'265.90	2'858.02	172.43	25	04/2016
Indonesia Climate Change Trust Fund	Multi Donor National	Multiple Foci	21.01	11.21	9.51	5	10/2015
Least Developed Countries Fund	Multilateral	Adaptation	963.66	961.87	863.80	214	09/2015
MDG Achievement Fund	Multilateral	Adaptation	89.50	89.50	89.52	18	10/2015
Norway's International Climate and Forest Initiative	Bilateral	REDD+	1'607.82		304.68	7	10/2015
Partnership for Market Readiness	Multilateral	Mitigation - general	126.50	106.50	51.95	30	04/2016
Pilot Program for Climate Resilience	Multilateral	Adaptation	1'117.00	1'117.00	974.31	81	12/2015
Scaling Up Renewable Energy Program	Multilateral	Mitigation - General	528.00	526.00	224.78	35	12/2015
Special Climate Change Fund	Multilateral	Adaptation	351.28	346.28	285.46	66	03/2016
UK's International Climate Fund	Bilateral	Multiple Foci	6'002.00	1'318.00	1'793.03	159	10/2015
UN-REDD	Multilateral	REDD+	270.76	259.05	240.07	27	05/2016

Source: climatefundsupdate.org, accessed in July 2016





Thank You

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