

CLIMATE FINANCE

Access to Finance and Opportunities in the Transport Sector

- Experience from Indonesia



IEA Energy Efficiency in Emerging Economies Training

Jakarta, 17 July 2018



Structure

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Funding vs Financing

Funding refers to the underlying financial resources or sources of income that pay for the programme or project, usually from taxation or user charges

Financing refers to the financial resources or mechanisms that are used to provide the funding and cover the programme or project costs as they occur.

Source: https://transportknowledgehub.org.uk/guidance-tool/funding-financing-transport-infrastructure-services/

1. Introduction



Climate Financing – a new priority ...

- Adapting to climate change and reducing greenhouse gas emissions at scale requires an unprecedented mobilization of financial resources
- Financing of the necessary activities is being carried out in a complex setting:
 Resources are channeled through bi- and multilateral channels of cooperation and a number of international funds and financing mechanisms
- Climate finance initiatives are heterogeneous, with diverse modes of access and funding priorities
- National public finance systems often face difficulties in absorbing the additional funding and stakeholders often lack a full overview of

2. One decade of Indonesia Climate Change Policy: where do we go?



- Host COP 13 Bali, 2007
- DNPI, 2008
- Announcement GHG reduction target (26 to 41% in 2020), 2009
- ICCTF, 2009
- Law 32/2009 on Environment
- Satgas REDD, 2010-2013
- LOI with Norway on REDD, 2010

- New KLKH (including establishment DGCC, merged MoE, MoFor, DNPI & REDD Agency)
- INDC process lead by BAPPENAS, Jan-Sep 2015
- INDC Submission
- Initiative for revision of Perpres 61/2011 and 17/2011
- Sustainable Finance Regulation,
 OJK 2015

- Launching PEP Online
- Prolongation of forest and peatland moratorium
- BKF as NDA for GCF
- NDC Implementation strategy
- Perpres 59/2017 on SDGs

2007-2010 2011-2014 2015 2016 2017 2018

- 2nd NatCom submission, 2011
- Perpres 61/2011 on NAP (RAN GRK)
- Perpres 71/2011 on Inventory
- One Map Initiatives, 2011
- Forest Moratorium, 2011; 2013
- RAD GRK, 2012
- PEP for RAN/RAD GRK, 2013
- REDD Agency, 2013
- NAMAs Framework, 2013
- RAN API Launching, 2014
- New Government President Jokowi
- Law 23/2014 on Local Government

- Peat Restoration Agency
- 1st BUR submission
- PEP Online for RAD
- INDC to NDC review process lead by KLHK
- NDC submission (29/41%)
- Ratification of the Paris Agreement, Law 16/2016
- SRN Launching
- Permen KLHK P.33/2016 on Adaptation Guidelines

- 3rd NatCom submission
- Preparation RPJMN 2020-2024 & SEA (KLHS)
- Harmonization of Perpres 61/2011 and 71/2011
 → MERGED??
- Draft PP Climate Change??

устым

Indonesia Climate Goals



United Nations Framework on Climate Change (UNFCCC) (Ratification of the KP: Law No.6/1994, and the PA: Law No1.6/2017)







National Action Plan (RAN/RAD GRK):
Presiden Susilo Bambang Yudhoyono
in G-20 and COP 15 Copenhagen, 2009
Reducing 26% (or up to 41) below BAU Scenario
in 2020

NDC – Indonesia Commitment:
Presiden Joko Wododo
in COP 21 Paris, 2015
Reducing 29% (or up to 41) below BAU
Scenario in 2030

National Action Plan (RAN/RAD-GRK)



Sector	Emission Reduction Target (Gton CO2e) by 2020		
	26%	41%	
Forest and Peat Land	0.672	1.039	
Agriculture	0.008	0.011	
Energy and Transportation	0.036	0.056	
Industry	0.001	0.005	
Waste	0.048	0.078	
Total	0.767	1.189	

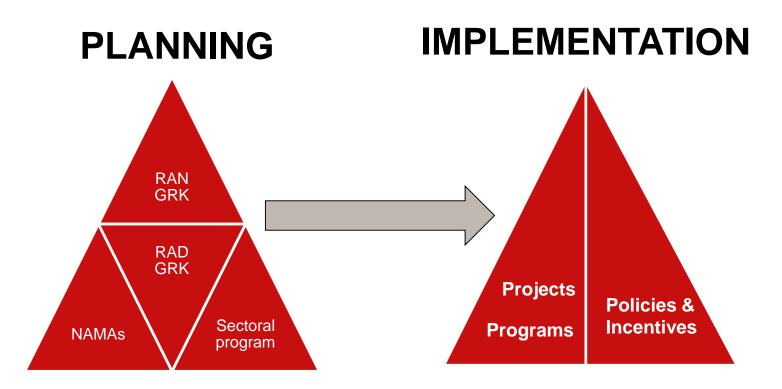


NDC

		GHG Emission Level 2030		GHG Emission Reduction			Annual	Average			
No	Sector	Emission Level 2010*	(MTon CO₂e)		(MTon CO₂e) % of Total		tal BaU	Growth	Growth		
		MTon CO₂e	BaU	CM1	CM2	CM1	CM2	CM1	CM2	(2010- 2030)	2000- 2012*
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	IPPU	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	17.2%	23%	0.5%	2.70%
	TOTAL	1,334	2,869	2,034	1,787	834	1,081	29%	38%	3.9%	3.20%





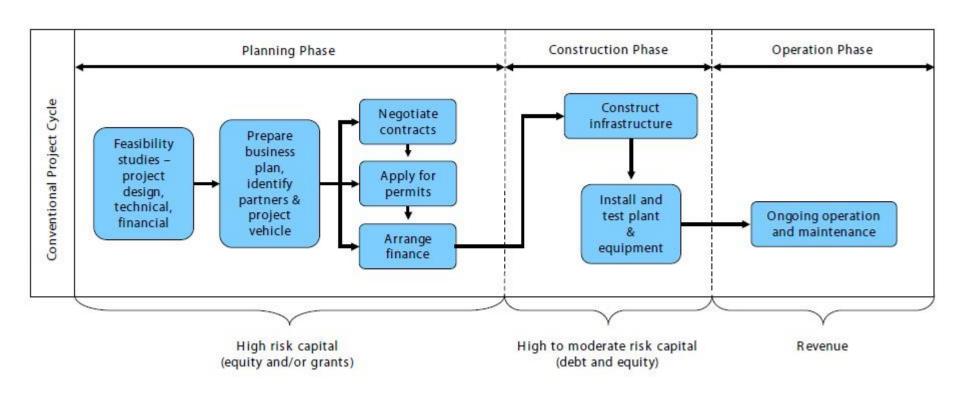


How to finance?

4. Financing a Climate Project



CONVENTIONAL PROJECT CYCLE



Source: Guidebook to Financing CDM Projects, The UNEP Project CD4CDM

5. Financing Needs (Indonesia)



Measure	Financing needs	Sector		
Mitigation ¹	IDR 100,000 – 140,000 billion per year in 2020 (Ministry of Finance, 2012 ²)	Renewable Energy Lower-carbon and energy efficient generation AFOLU Non-energy GHG reductions Waste and waste water Transport Low-carbon technologies Cross-cutting issues		
Adaptation ³	N/A	Infrastructure Coastal zones Water supply and flood protection Agriculture, forestry, and fisheries Human health Extreme weather events		

III IFC. Common Principles for Climate Mitigation Finance Tracking

^[2] CPI, 2014. The Landscape of Public Climate Finance in Indonesia

World Bank, 2010. Economics of Adaptation to Climate Change - Synthesis Report.



6. Option to finance climate projects



Long term Credit Facility/ Equity/ Grant/ Guarantee or blending between each modality, typically from multilateral development banks, bilateral institutions, and climate funds (Green Climate Fund, Clean Technology Fund, Adaptation Fund, etc)

5 Capital Market

Raising long-term funds on primary capital markets by the Government or Project Company through corporate bond/ sukuk/ project bond/ green bond/ Government bond/ equity issuance.

4 Community

1 APBN/ APBD & Public Sector Loan

Direct financing through government spending from Central Government or Local Government budget. Another scheme is through public sector loan, a loan to Local Government/ Government Institutions repayable using State Budget

Public-Private-Partnership

Financing through collaboration between Government bodies and a private sector entity. Typically the skills and assets of each sector (public and private) are shared in delivering a service or facility for the use of the general public

Private Sector including SoE (Corporate/Project Finance)

Bank/Non Bank Financial Institutions and Private Equity Investor

Source: Gan Gan Dirgantara, GIZ Indonesia, 2017

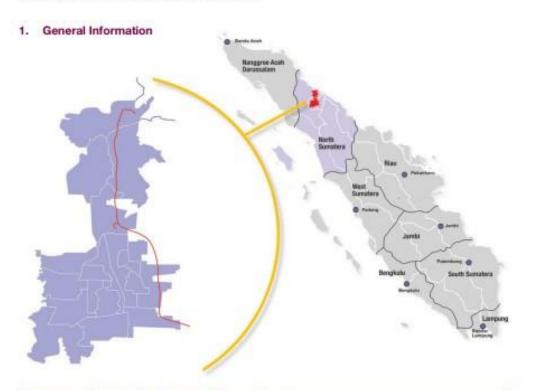


Public Fund PPP Private Sector including SoE APBN/APBD; Public Loan, it will decrease in the next 5 years; RAN/RAD GRK activities are financed by APBN/APBD Allocation for climate related projects is not priority; Promoted by the Gol; Availability payment and VGF scheme is promoted; Regulatory framework is still need to be strengthened; Role of IIGF in guarantee scheme is significant; Project preparation and other infrastructure projects; Climate related projects are already implemented in water sector, telecommunication and other infrastructure projects; Climate related projects are in preparation, e.g. transport Private Sector including SoE Prime mover banks already promoted by OJK; Difficult to find bankable projects; Banks are not comfortable yet to finance climate related projects (guarantee issue); Corporate Finance Community Structure needs to be improved; Small scale activities activities activities related to mitigation and adaptation; CSR Corporate Finance Corporate Finance Some activities in climate related projects are already implemented for example: POME, Geothermal, Solar PV.					
 Public Loan, it will decrease in the next 5 years; RAN/RAD GRK activities are financed by APBN/APBD Allocation for climate related projects is not priority; Project preparation quality is still an issue; Some projects are already implemented in water sector, telecommunication and other infrastructure projects are in preparation, e.g. transport Public Loan, it will decrease in the next 5 years; RanlyRAD GRK activities and VGF scheme is promoted; Regulatory framework is still need to be strengthened; Banks already promoted by OJK; Difficult to find bankable projects; Banks already promoted by OJK; Difficult ofind bankable projects; Banks are not comfortable yet to finance climate related projects Corporate Finance is sue); Corporate Finance is sure; Some activities in climate related projects are already implemented for example: POME, Geothermal, Solar PV. 	Public Fund	PPP		Community	
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7. Example in the Transport Sector



URBAN RAILWAY CITY OF MEDAN, NORTH SUMATERA



PPP Scheme

Project's Objective: The urban railway will stretch from southwestern part to Northeastern part of Medan City which accommodate integration between LRT and BRT to improve accessibility and connectivity in Medan

: Mayor of Medan
: Local Development Planning Agency, City of Medan
 1. Local Development Planning Agency, City of Medan 2. Ministry of National Development Planning
: USD 477.40 million
: 35 years
: Medan, North Sumatera

Source: PPP, Infrastructure Projects Plan in Indonesia, Bappenas, 2017

Sustainable Urban Transport Indonesia (SUTRI NAMA)



	SUTRI NAMA	INDOBUS			
Timeframe	2017 – 2022				
Funding		Grant			
Technical Assistance	Technical Assistance	Technical Assistance			
Financial Component	Financial Component	-			
Matching Fund	Matching Fund from Gol	-			
Source of Fund	NAMA Facility: BMU DE and BEIS UK (formerly DECC UK)	SECO (Swiss)			
Implementing Partner	Ministry of Transportation Secretary General (cq. Centre for Sustainable Transport Management)	Ministry of Transportation Director General Land Transport (cq. Directorate Transportation and Multimodes)			
Objective	Transforming urban transport in Indonesia with a mix of investment measures and capacity-building provided through a national sustainable urban transport program	Selected Indonesian Cities include in their urban transport structures BRT as mass rapid transit backbone and base for integrated urban transport systems contributing to an improvement of the cities' liveability and reduction of traffic congestion			

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SUTRI NAMA

INDOBUS

Overarching Objective

SUTRI NAMA aims at cities in Indonesia to contribute to climate change mitigation through sustainable transport policies and infrastructure projects supported by a national urban transport program with a mix of **investment measures** and **capacity-building**

National Level

- Establish Steering Committee (chaired by MoT)
- Establish integrated Multimode Transport Policy
- Establish single and integrated Public Transport (BRT) Authority
- Establish *Technical Support Unit* (TSU)
- Develop Funding Mechanism
- Develop Monitoring, Reporting and Verification (MRV) system

- Develop framework for BRT system

Sub National Level

- Implement pilot MRV
- Implement funding mechanism
- Support the development of transportation pipeline in cities (± 20 programs)
- Develop concept and dedicated lane for BRT in 5 cities, estimated investment cost is IDR 3 Trillion
 - Provide social engineering

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Investment cost estimation for BRT with dedicated lane and potential source of finance



IDR 77 Bn (NAMA Facility - TA)

IDR 119 Bn (NAMA Facility - FC)

IDR 238 Bn (matching fund) from Gol

INDOBUS

IDR 98 Bn (SECO - TA) **Cost estimation**

IDR 3 trillion

(IDR 600 bn/city)

APBN

APBD

Funding potential

BUMD (???)

BUMN (???)

PPP (???)

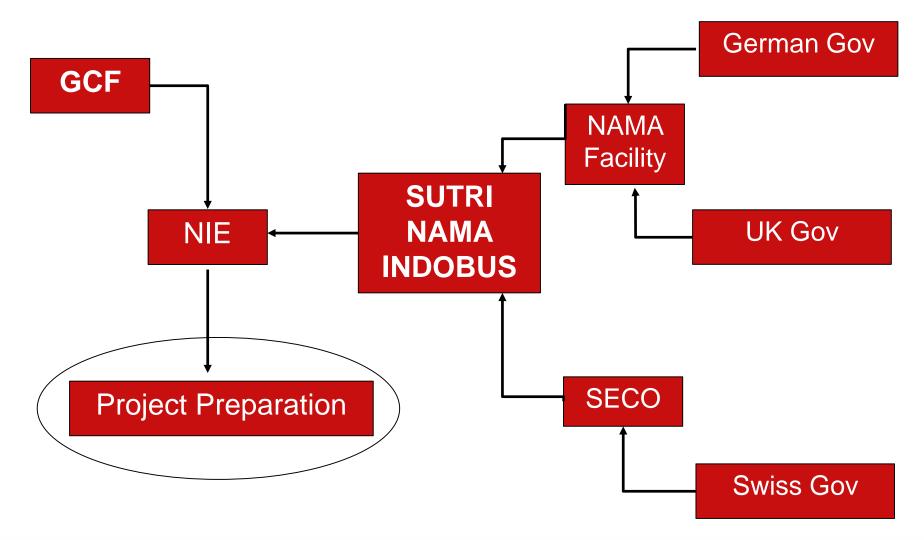
Transfer to LGs (???)

Loan (???)



Opportunities of the SUTRI NAMA to access Project Preparation Facility from GCF





Major Climate Finance Institutions in Indonesia



Institution	Governance	Sectors Covered	Financial Instruments	Direct Access
Indonesian Climate Change Trust Fund (ICCTF)	A Trust Fund established under Perpres 61/2011	Principally works cross- sectoral: Adaptation and Resilience, Energy, LULUCF	Grant / Project Management	No direct Access
PT S <u>a</u> rana Multi Infrastruktur (PT SMI)	A state-owned company established under the Ministry of Finance	Primarily Renewable Energy, and to a lesser extent transport, waste sector	Equity participation / Loan / Grant	NIE to the GCF
KEMITRAAN	Non-profit, grant-making foundation	Primarily Adaptation and REDD	Grant / Project Management	NIE to the Adaptation Fund, GCF accreditation (undergoing)
BLU Environment	TBD	Likely will have a main focus on REDD+	TBD	No
Indonesian Biodiversity Conservation Trust Fund (KEHATI	Non-profit, grant-making foundation		Grant / Project Management	No
MCAI	A Trust Fund established under Perpres 61/2011	Improved Land and natural resource management; Renewable Energy	Grant / Loan	No
Indonesian Infrastructure Finance (IIF)	A state-owned company established under the Ministry of Finance	Primarily Renewable Energy, and to a lesser extent transport, waste sector	Equity participation / Loan / Grant	Accreditation to the GCF undergoing

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Other Opportunities?





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