


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.

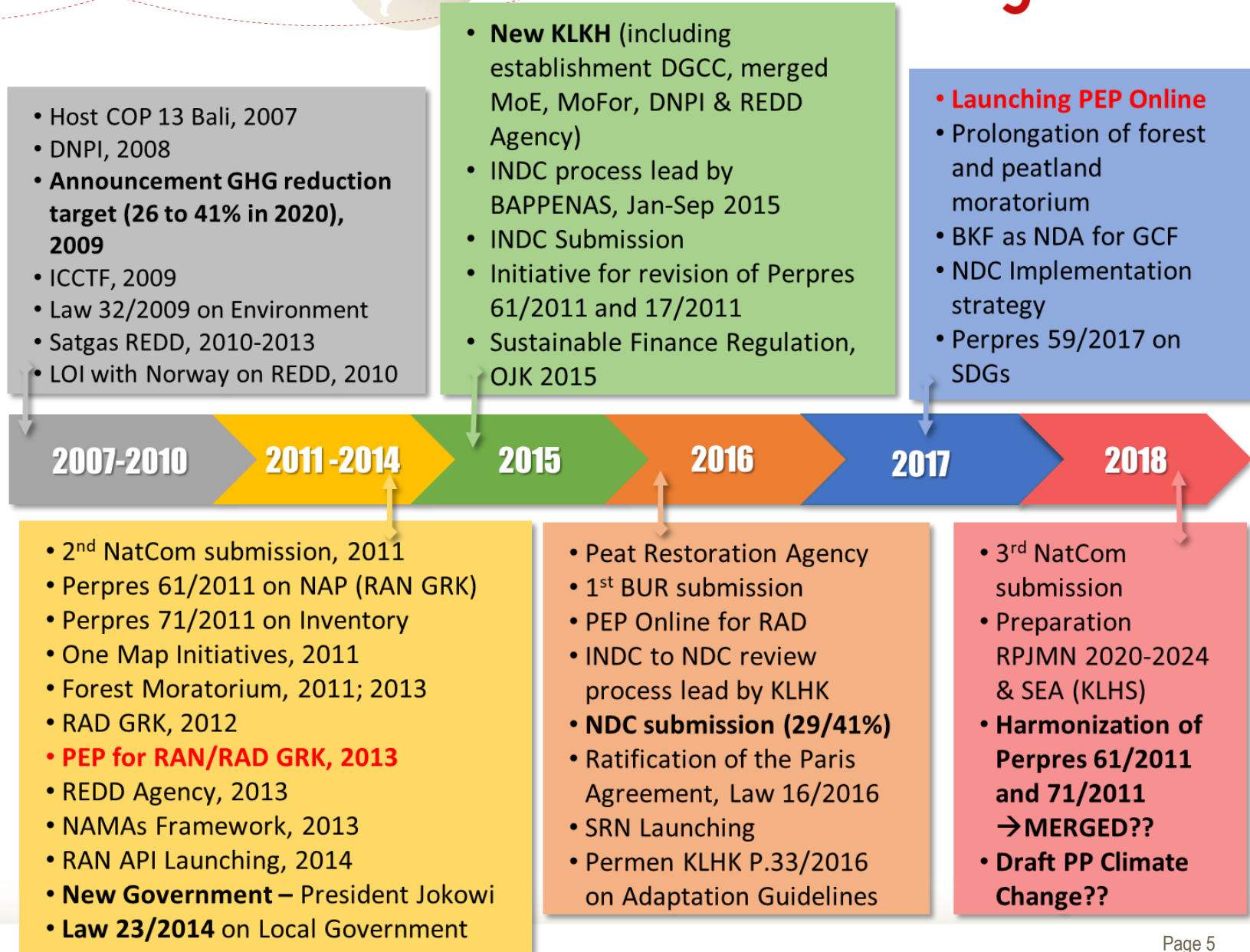
Source: <https://transportknowledgehub.org.uk/guidance-tool/funding-financing-transport-infrastructure-services/>

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 financing options

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



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)

26%
2020



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

29%
2030



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 CO ₂ e) 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

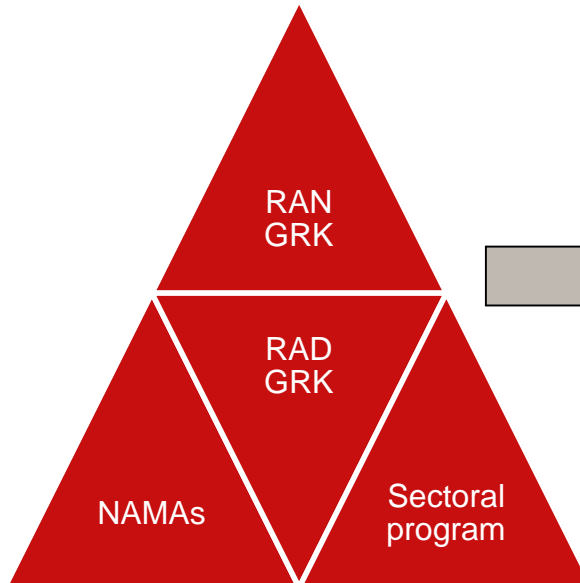


NDC

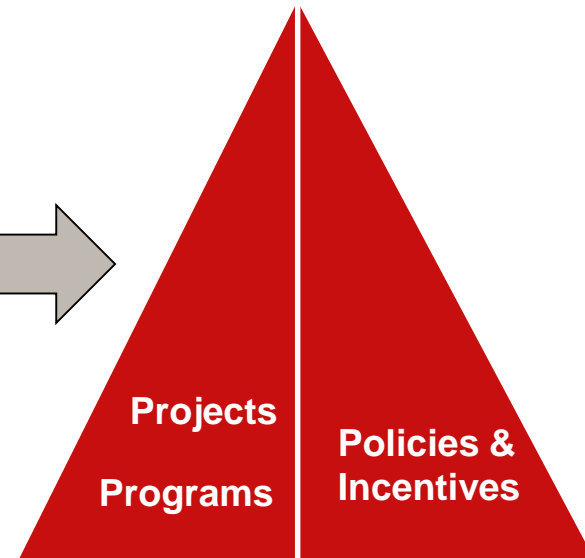
No	Sector	GHG Emission Level 2010*	GHG Emission Level 2030 (MTon CO ₂ e)			GHG Emission Reduction (MTon CO ₂ e)				Annual Average Growth BAU (2010- 2030)	Average Growth 2000- 2012*
			BaU	CM1	CM2	CM1	CM2	CM1	CM2		
1	Energy*	453.2	1,669	1,355	1,271	314	398	11%	14%	6.7%	4.50%
2	Waste	88	296	285	270	11	26	0.38%	1%	6.3%	4.00%
3	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%

3. From Policy to Implementation

PLANNING



IMPLEMENTATION

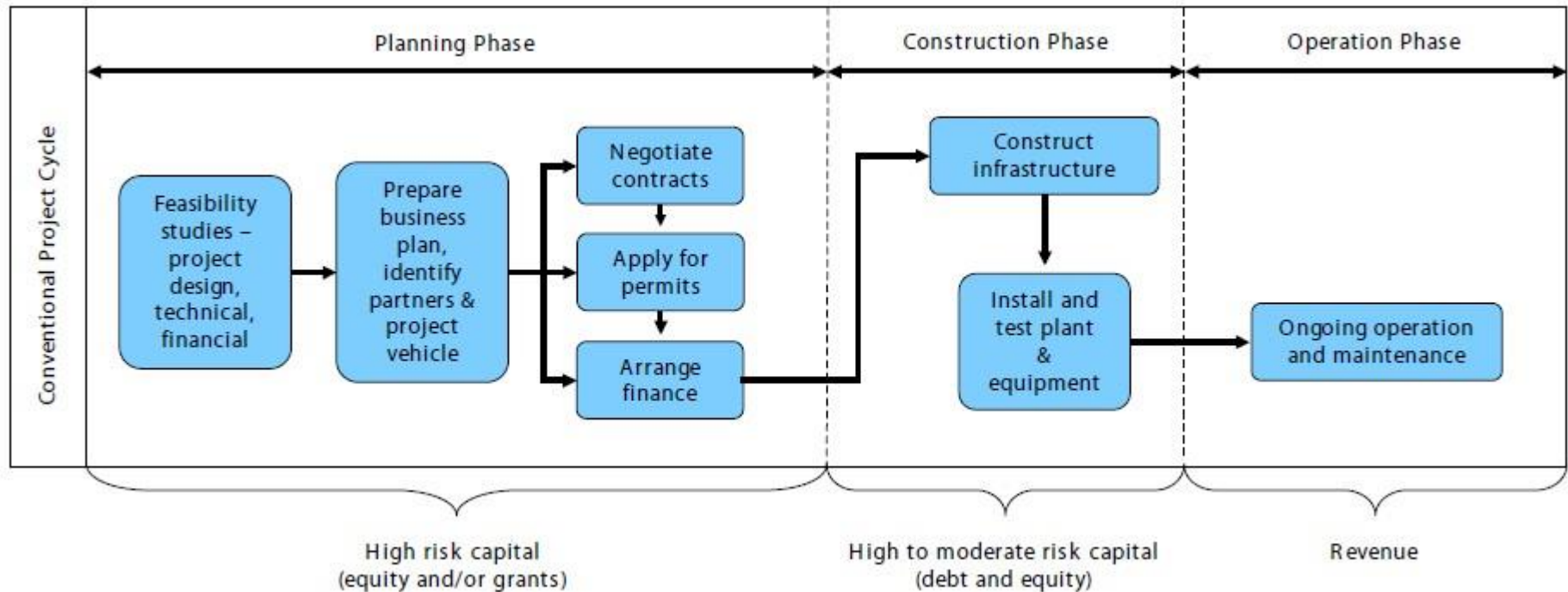


How to finance?



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
Mitigation¹	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
Adaptation³	N/A	Infrastructure
		Coastal zones
		Water supply and flood protection
		Agriculture, forestry, and fisheries
		Human health
		Extreme weather events

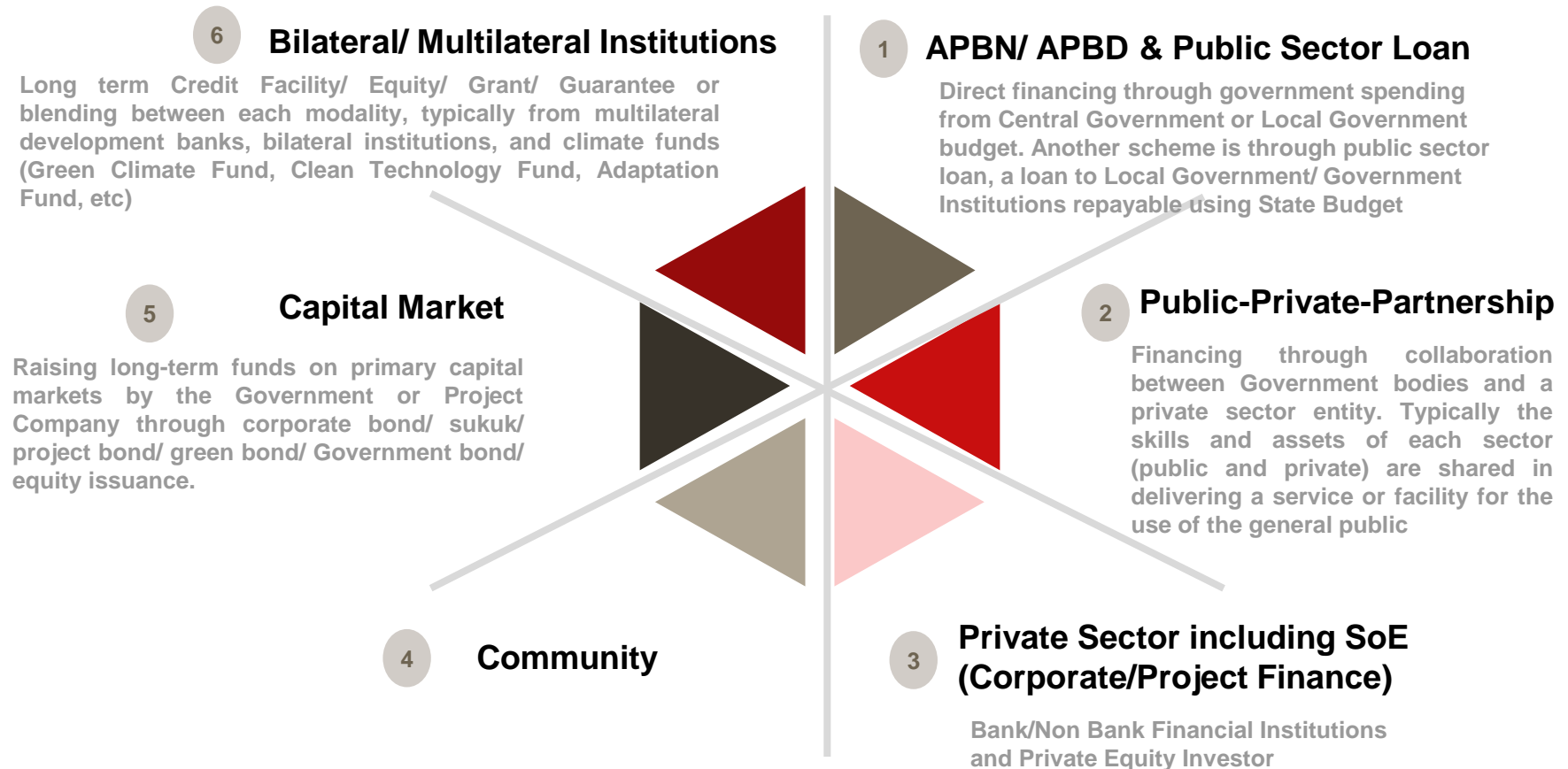
^[1] IFC. Common Principles for Climate Mitigation Finance Tracking

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

^[3] World Bank, 2010. Economics of Adaptation to Climate Change - Synthesis Report.



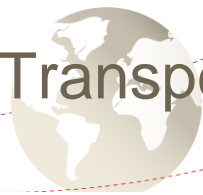
6. Option to finance climate projects





Public Fund	PPP	Private Sector including SoE	Community	Capital Market
<ul style="list-style-type: none"> • 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; 	<ul style="list-style-type: none"> • Promoted by the GoI; • 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 quality is still an issue; • Some projects are already implemented in water sector, telecommunication and other infrastructure projects; • Climate related projects are in preparation, e.g. transport 	<ul style="list-style-type: none"> • 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 is more preferred; • Some activities in climate related projects are already implemented for example: POME, Geothermal, Solar PV. 	<ul style="list-style-type: none"> • Structure needs to be improved; • Small scale activities related to mitigation and adaptation; • CSR contribution 	<ul style="list-style-type: none"> • Green Bond initiative is already promoted by IFC and OJK; • Difficulty: Find ready to finance projects as underlying. • GoI just issued Green Sukuk Bond (Islamic Bond)

7. Example in the Transport Sector



URBAN RAILWAY CITY OF MEDAN, NORTH SUMATERA

1. General Information



Government Contracting Agency	: Mayor of Medan
Implementing Unit	: Local Development Planning Agency, City of Medan
Preparation Agency	: 1. Local Development Planning Agency, City of Medan 2. Ministry of National Development Planning
Estimated Project Cost	: USD 477.40 million
Estimated Concession Period	: 35 years
Location	: 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

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 GoI	-
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 Multi- modes)
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



Scope: Sustainable Urban Transport Programme

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 (\pm 20 programs)

- Develop concept and dedicated lane for BRT in 5 cities, estimated investment cost is IDR 3 Trillion
- Provide social engineering



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

SUTRI NAMA

IDR 77 Bn
(NAMA Facility - TA)

IDR 119 Bn
(NAMA Facility - FC)

IDR 238 Bn
(matching fund)
from GoI

INDOBUS

IDR 98 Bn
(SECO - TA)

Cost estimation

IDR 3 trillion
(IDR 600 bn/city)

APBN

APBD

Funding potential

BUMD
(???)

BUMN
(???)

PPP
(???)

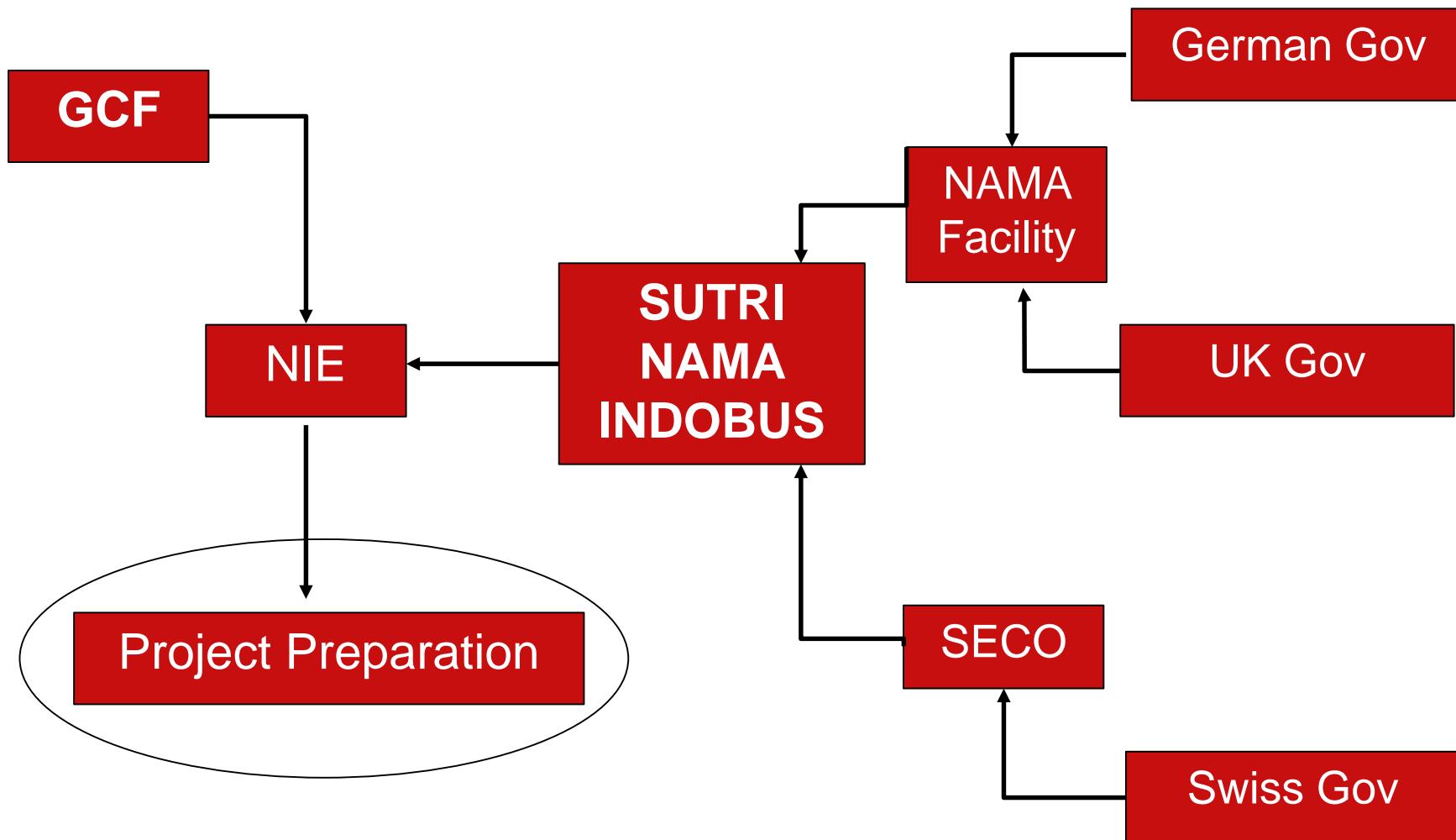
Transfer to LGs
(???)

Loan
(???)



GREEN
CLIMATE
FUND

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 Sarana 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



Other Opportunities?



Thank you!



2010

2015

2020

2025

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