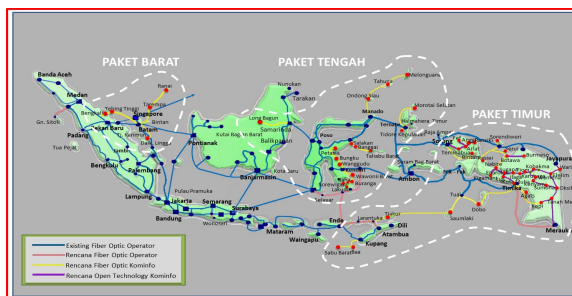




Webinar Preparing and Financing Bankable Infrastructure Projects: Experiences from CDIA and Indonesia

6 September 2018, 9:30 – 10:30 CEST



Transformation - Urban Opportunities - Climate Change (TUrbOCliC)

Cross-sectoral group of the TUEWAS and SNGA network of GIZ





Programme

- **Welcome** - Ms. Eva Ringhof, CDIA Program Coordinator and Joint Speaker of TUrbOCLiC
- **Moderation** – Mr. Thomas Hagedorn, CDIA Capacity Development Adviser
- **Preparing Bankable Infrastructure Projects in Cities** - Ms. Mia Simpao, CDIA Program Management Officer
- **PPP Case Studies from Indonesia** - Mr. Pradana Murti, Head of Project Development at PT Sarana Multi Infrastruktur (PTSMI)
- **Interactive discussion with audience**



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Cities Development Initiative for Asia

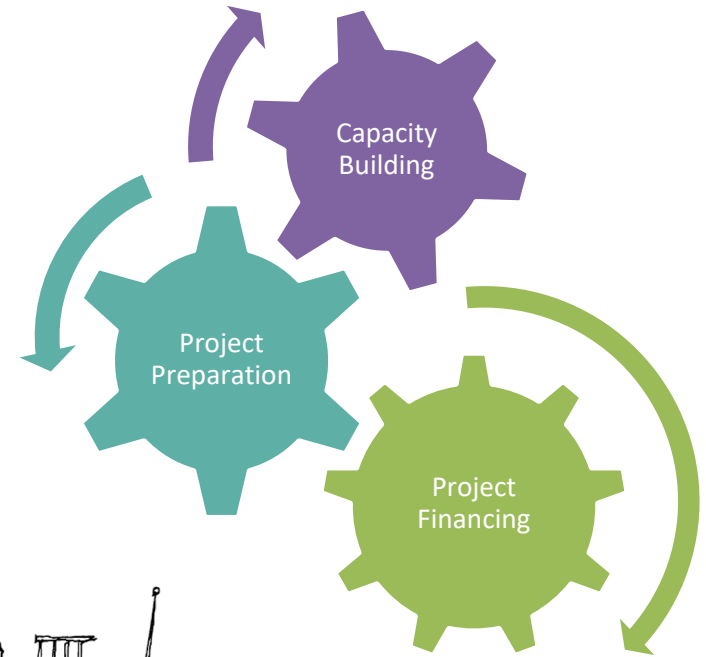
Preparing Bankable
Infrastructure Projects in Cities

Bridging the gap between Development Plans, Projects, and Finance

'It is arguably a lack of bankable projects that prevents sustainable infrastructure investment at scale rather than a lack of finance.' (WWF 2015)

Beyond the **availability** of financing for urban development, its **accessibility** largely depends on the capacities of local governments in developing and managing sustainable urban projects.

Bridging the gap between development plans, projects, and finance brings **capacity building** and **project development** into focus, assessing the needs of cities and establishing project financial feasibility in linking projects to potential financiers.



CDIA bridges the gap

CDIA provides assistance to medium-sized Asian cities to bridge the gap between their development plans and the implementation of their infrastructure investments.

CDIA supports the identification and development of urban investment projects and links them with potential financiers.

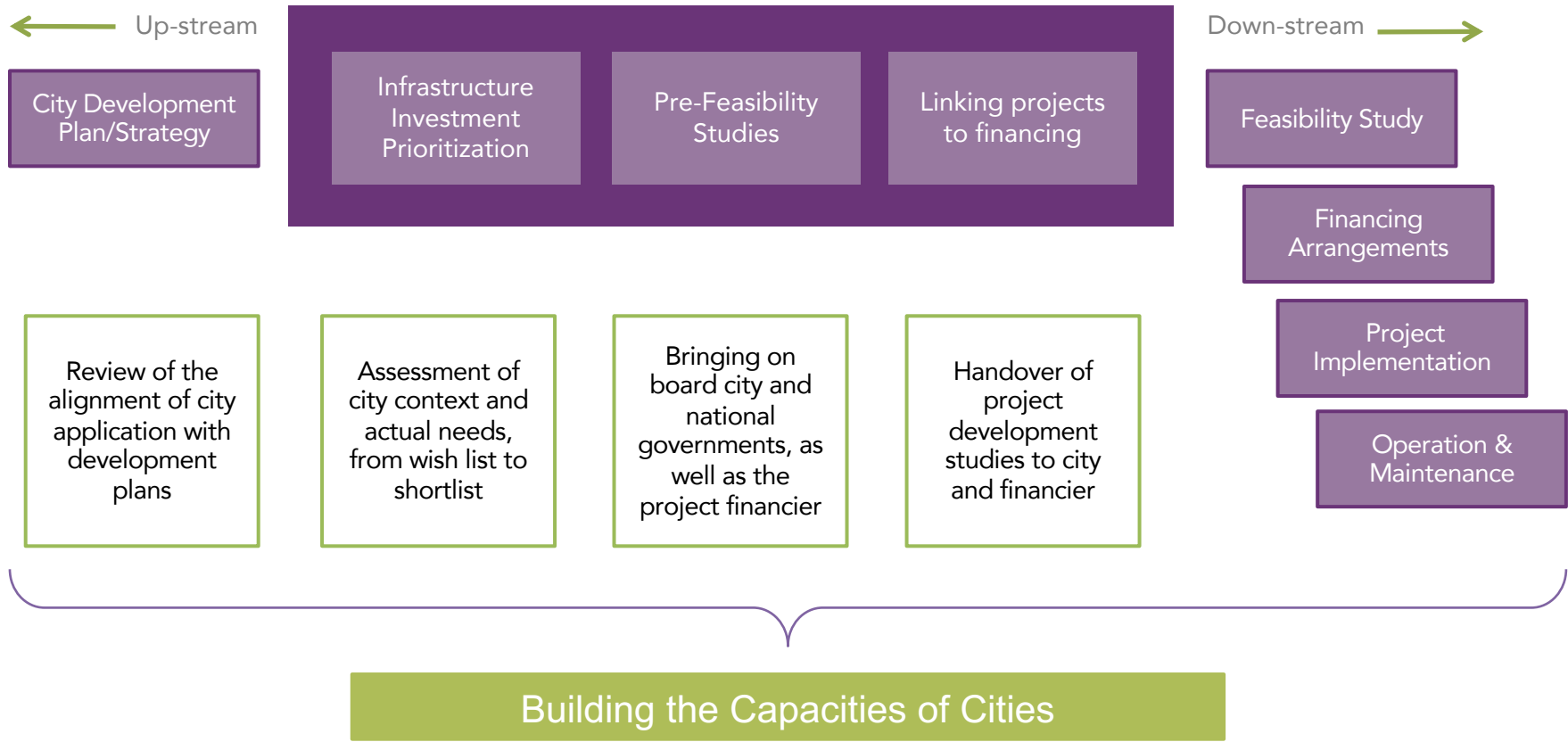
Impact Areas

CDIA supports the identification and development of urban investment projects that emphasize at least two of the following impact areas:

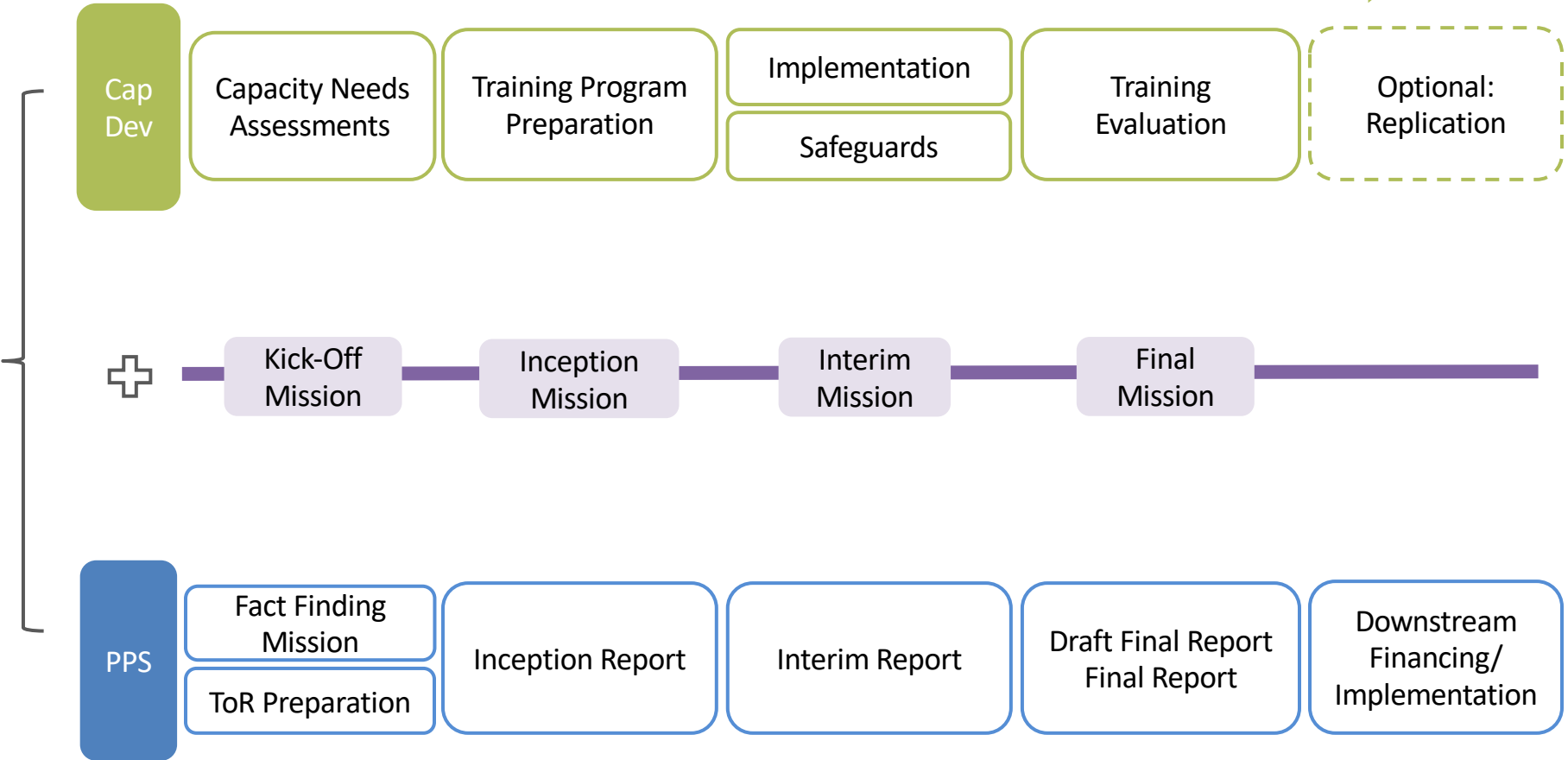
- Urban environmental improvement
- Urban poverty reduction
- Climate change mitigation or adaptation
- Improved governance



CDIA Approach: Preparing Projects for Finance



CDIA Approach: Preparing Cities for Projects



Focused Capacity Development Approach in Practice

Sustainable Wastewater Management (WWM) Project – Tonle Sap II, Cambodia

- **Training design and content in line with capacity needs assessment of PPS cities**— understanding wastewater management (WWM), WWM technologies, O & M, sewer and septic tank designs, and project cost estimates
- **Focused on city and national officials** – 24 participants from PPS cities, 2 from district ministry partners, 4 from the national ministry partners
- **Training in Cambodian context and Khmer language** – tailor-made for the actual needs and context of Cambodian cities in wastewater management
- **Pilot trainings led by PPS Deputy Team Leader** – technical content in line with the CDIA PPS recommendations and strategies
- **Institutionalization of capacity development** – national ministry partner had strong ownership of the training and later on led the initiative, wherein its principles and practices are collated into a national wastewater management guideline



Key Lessons Learned

Preparing Cities to Prepare Projects that are Prepared for Finance

- **Preparation**

Linking projects to finance is not only about the availability and accessibility of funding, but the sound preparation of projects

- **Prioritization**

Cities tend to have various project ideas with its wide range of issues; it is crucial to support the assessment of city context and pressing needs to prioritize project ideas into proposals

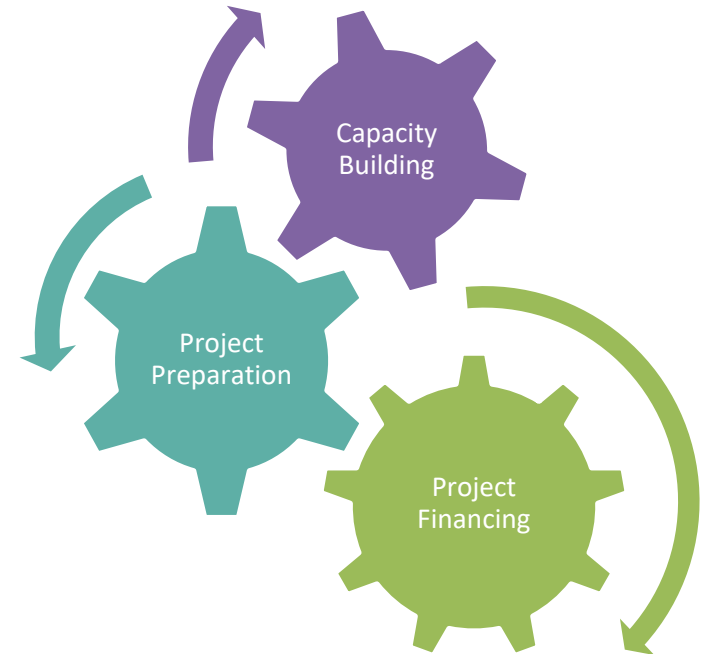
- **Partnerships**

City infrastructure projects are critical to be in line with local and national plans, hence the partnership and support from local and national governments are important. This strengthens the institutionalization and ownership of the project.

Financiers have different set of requirements and procedures in project preparation, so involving them right at the start of preparing the project optimize the link to finance

- **Practice**

In all these steps of preparing projects for finance, developing the capacities of cities in preparing as well as managing and maintaining infrastructure projects seals its success and sustainability



*'Our struggle for global sustainability
will be won or lost in cities'*

- former UN Secretary-General Ban Ki-moon



SHANGHAI MUNICIPAL
GOVERNMENT
上海市人民政府



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Federal Department of Economic Affairs,
Education and Research EAER
State Secretariat for Economic Affairs SECO

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KFW





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The Webinar Series of GIZ's Working Group Turboclic (Transformation-Urban Opportunities- Climate Change)

6 September 2018

PT Sarana Multi Infrastruktur (Persero)

1 SMI's Assignment & Role

2 Umbulan Water Supply Project

3 Palapa Ring Project

4 SDG Indonesia One

PT SMI as a Catalyst in Accelerating Infrastructure Development

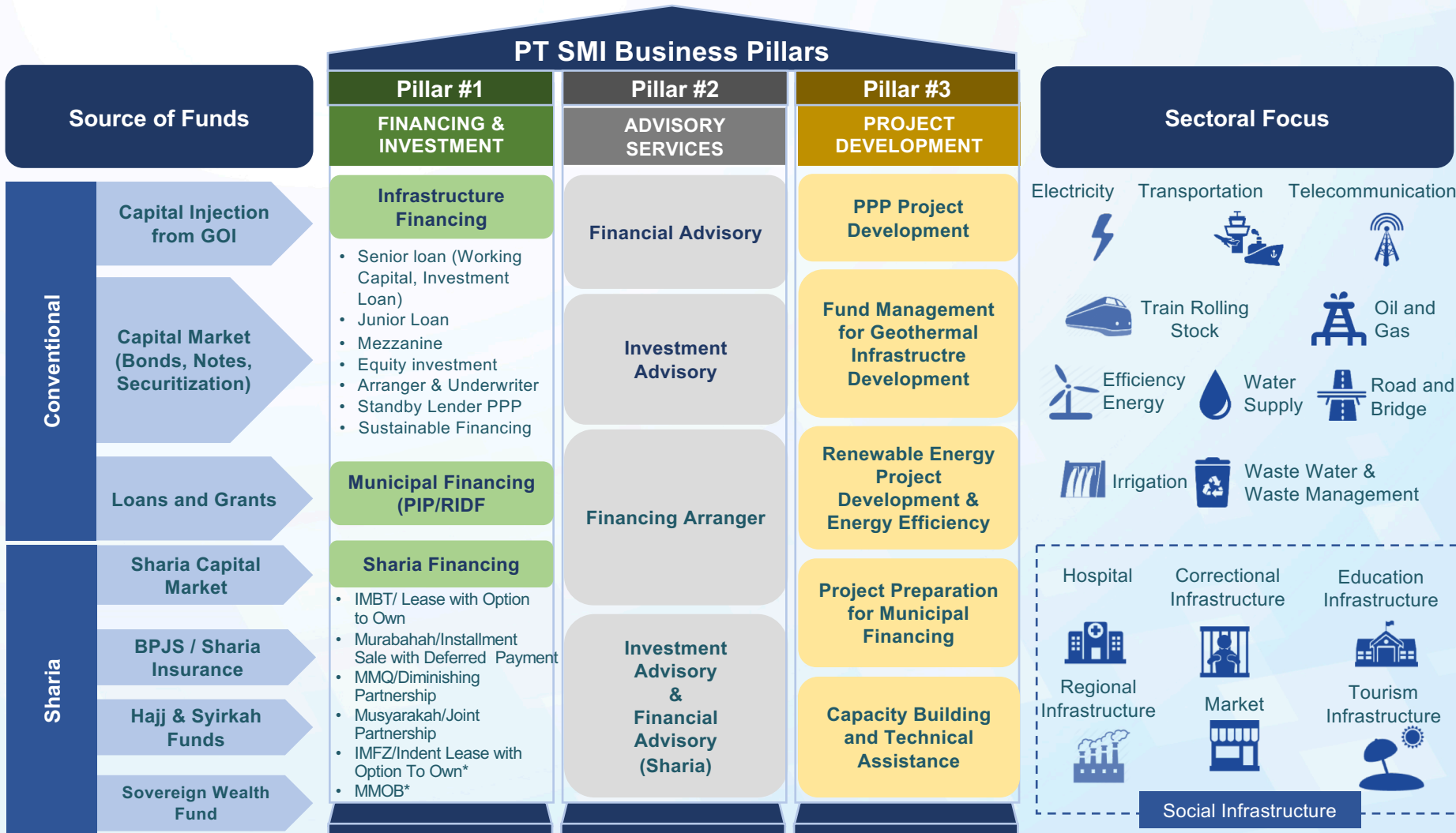
<p>Status</p>	<p>PT Sarana Multi Infrastruktur (Persero) (“PT SMI”) was established in 2009 as a State-Owned Enterprise under the Minister of Finance Regulation No. 100/PMK.010/2009 on Infrastructure Financing Companies</p>
<p>Duties</p>	<p>PT SMI carries the duty of supporting the Government’s infrastructure development agenda for Indonesia through partnerships with private and/or multilateral financial institutions in Public-Private Partnership (PPP) projects. As such, PT SMI can serve as a catalyst in accelerating infrastructure development in Indonesia.</p>
<p>Ownership</p>	<p>100% owned by the Government of Indonesia</p>
<p>Vision</p>	<p>To serve as catalyst in accelerating national infrastructure development</p>
<p>Mission</p>	<ol style="list-style-type: none"> 1. To become a strategic partner that delivers value added contributions to Indonesia’s infrastructure development 2. To develop flexible financing products 3. To offer service excellence backed with good corporate governance

Structure of PT SMI



Government Indonesia





IMBT= Ijarah Muntahia Bittamlik
MMQ= Musarakah Mutanaqisah

MMOB= Mudharabah Muqayyadah on Balance Sheet
IMFZ= Ijarah Mausufah Fiz Zimmah

*Under development process

Assigned by Ministry of Finance, PT SMI is Acted as the Catalyst in the PPP Project Preparation through PDF*

PPP Project		Contracting Agency	Project Value	Government Support	Status
Palapa Ring**	West Package	Ministry of Communication and Informatics	Rp 1.28 Trillion	<ul style="list-style-type: none"> Govt Guarantee through IIGF 	Construction
	Middle Package		Rp 1.38 Trillion		
	East Package		Rp 5.09 Trillion		
Water Supply System Umbulan		East Java Province	Rp 2.05 Trillion	<ul style="list-style-type: none"> Viability Gap Funding (VGF) Govt Guarantee through IIGF Partial construction from Public Works 	Construction
Water Supply System Lampung		PDAM Way Rilau Bandar Lampung City	Rp 1,3 Trillion	<ul style="list-style-type: none"> Viability Gap Funding (VGF) Govt Guarantee through IIGF Partial construction from Public Works 	Financial Close
Water Supply System West Semarang		PDAM Tirta Moedal Semarang City	Rp 1.2 Trillion	<ul style="list-style-type: none"> Viability Gap Funding (VGF) Govt Guarantee through IIGF Partial construction from Public Works 	Winning bidder announced
Regional Public Hospital Sidoarjo		Sidoarjo District	Rp 350 Billion	-	Pre-qualification
LRT Medan		City of Medan	Rp 16,87 Trillion	<ul style="list-style-type: none"> Viability Gap Funding (VGF) Govt Guarantee through IIGF 	FBC Drafting
Regional Public Hospital Dr. Pirngadi Medan		City of Medan	Rp 546 Billion	-	FBC Drafting
Water Supply System Pekanbaru		PDAM Tirta Siak Pekanbaru City	Rp 478 Billion	-	FBC Drafting
Sam Ratulangi Teaching Hospital		Ministry of Research and Higher Education	Rp 387,23 Billion	-	Due Diligence
Hang Nadim Airport		Batam Indonesia Free Zone Authority	-	-	PDF Agreement Drafting
E-Government		Ministry of Social Affairs	-	-	PDF Agreement Drafting

* PDF: Project Development Facility

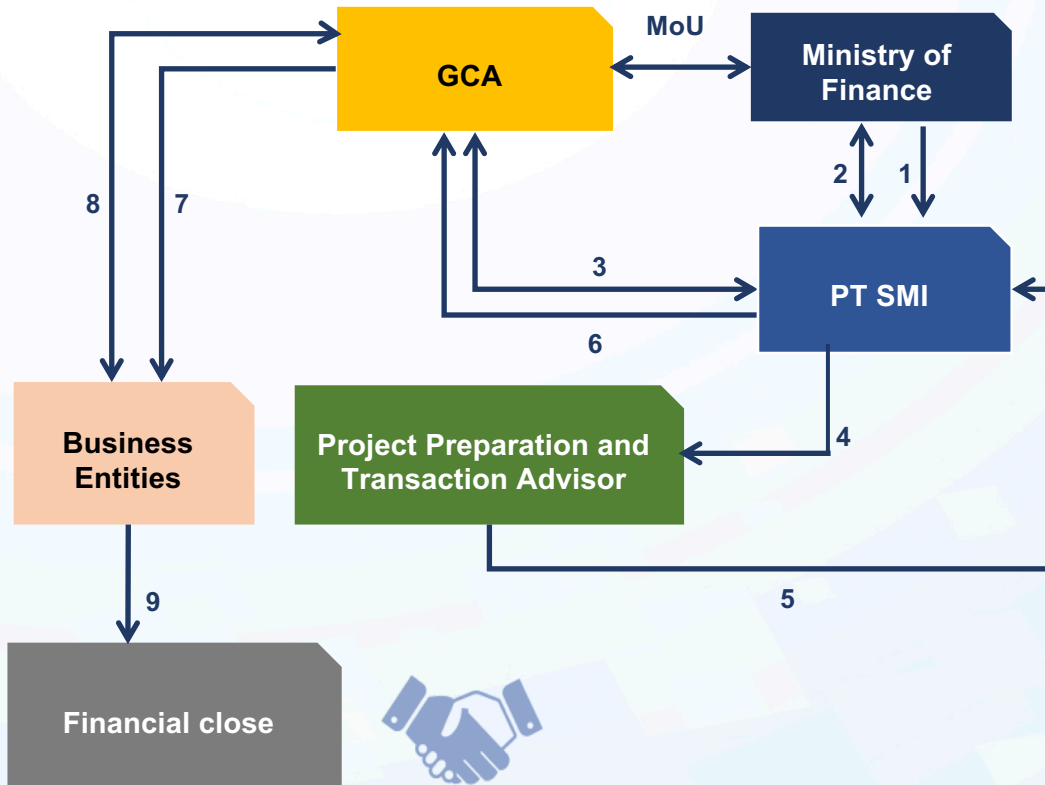
** Palapa Ring project uses availability payment scheme as a return investment mechanism

Portfolio Distribution Across Indonesia



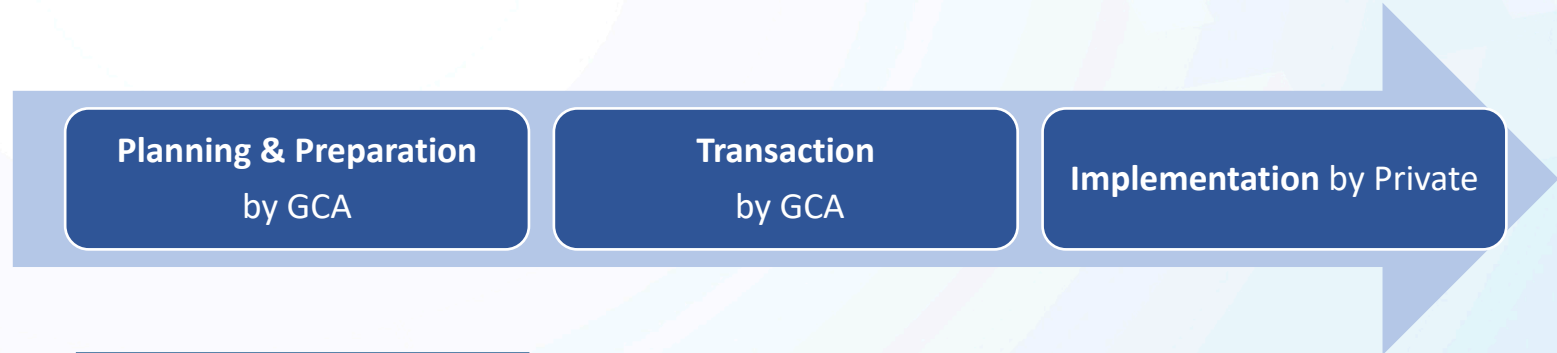
75 projects | Financing and Investment ● **10 projects** | Project Development ● **18 projects** | Advisory Services ● **2 projects** | Equity ●

SMI Assignment by Ministry of Finance According to Regulation PMK 265/2015



Keterangan:

1. The Ministry of Finance assign PT SMI through a decree of Directorate General of Budget Financing and Risk Management Ministry of Finance (DJPPR)
2. Agreement between DJPPR - SMI
3. Agreement between GCA and PT SMI
4. PT SMI provides Transaction Advisor
5. Consultant prepares the updates of Project Preparation Document and deliver it to PT SMI
6. PT SMI Delivers updated document of project preparation and advisory assistance for the tender to GCA
7. GCA procurement of business entity facilitated by PT SMI and Project Preparation and Transaction Advisors
8. GCA signed the agreement with the business entity
9. Business entity obtained Financial Close



- Planning:**
- Project selection
 - Project prioritization
- Preparation:**
- Business Case
 - Govt Support Identification & Approval Process
 - Location Determination & Licensing Process
 - Market Sounding

- Prefeasibility Study
- Priority List

- Transaction:**
- Pre-Qualification
 - Request for Proposal
 - Evaluation
 - Bid Award
 - PPP Agreement Signing

- Final Business Case

- Implementation:**
- Design
 - Financial Close
 - Construction
 - Operation & Maintenance
 - Transfer

- Documents:**
- Principle Approval of Government Support
 - Tender
 - PPP Agreement

1 SMI's Assignment & Role


2 Umbulan Water Supply Project

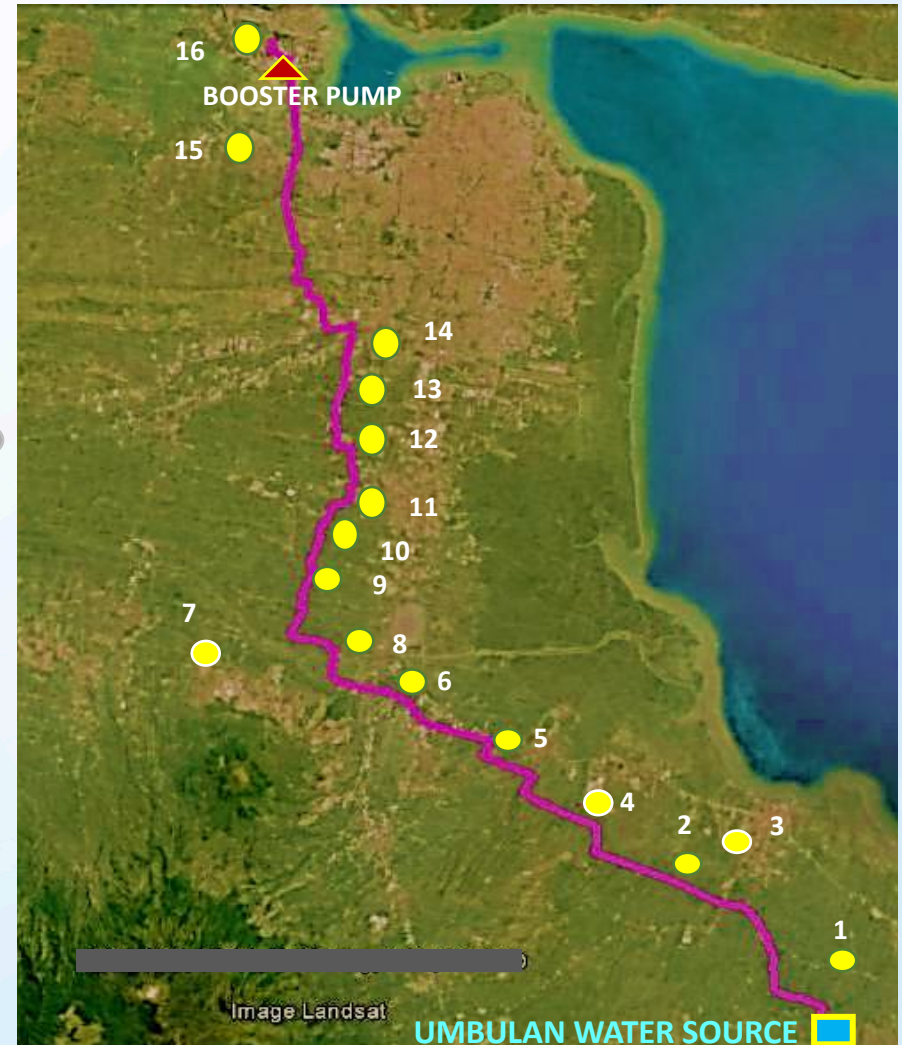
3 Palapa Ring Project

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Case Study – Umbulan Water Supply Project Overview

Project Profile

Project Owner	
Sector	Water Supply
Name of Project	Umbulan Water Supply System
GCA	East Java Provincial Government
Type of Bidding	Solicited
Form of Cooperation	Build-Operate-Transfer (BOT)
Project Description	Development of clean water supply in the province of East Java with a capacity of 4000 lps. The clean water supply will be addressed to municipal town of Pasuruan, Sidoarjo, Surabaya, Gresik
Production Capacity	4,000 liter per second
Offtakes	16 offtakes unit
Total Capex by Business Entity	IDR 2,050 Triliun (Bidder Offer)
Construction Period	2 years after effective date
Concession Period	25 years since COD
Bulk Water Tariff	IDR 2.370/m ³ (PPP Company-PDAB) IDR 2.444/m ³ (PDAB-PDAM)
Proposed Viability Gap Funding (VGF)	IDR 818,01 M (After Negotiation)
Project IRR	12%



Case Study – Umbulan Water Supply Milestones & Completion Times*

Transaction Stage**

Implementation Stage

Government

Business Entity

Pre Qualification	Pre-bidding documents	Bidding Documents Addendum I-IV 1on1 Meeting With bidders	Final Bidding Doc	Offering doc	Evaluation	Determining the winner	Signin g of PPP Agreement	Finan cial Close	Const ruction	COD
2011	Feb 2012	Feb 2012 – Sep 2015	30 Sep 2015	25 Nov 2015	Nov-Des 2015	4 Feb 2016	Mei 2016	Des 2016	2016-2019	Juli 2019

Bid Winners:
CONSORTIUM of PT MEDCO GAS INDONESIA –
PT BANGUN CIPTA KONTRAKTOR

As of now

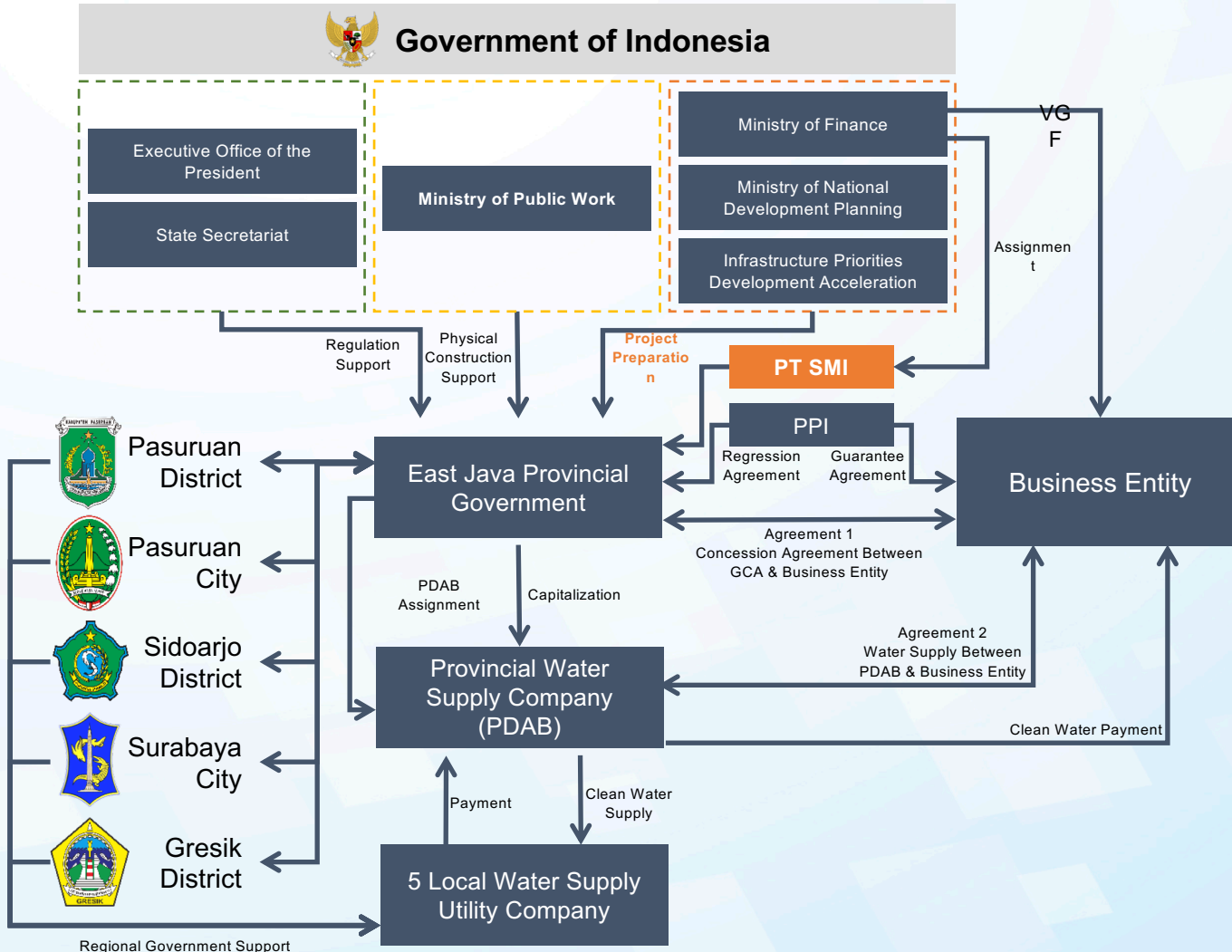
Shortlist of Bidders:

1. Consortium of Medco dan PT Bangun Cipta Kontraktor
2. Consortium of Sound Global Ltd, China CAMC Engineering Limited, dan PT Manggala Purnama Sakti
3. Consortium of PT Amerta Bumi Capital, PT Bakrieland Development Tbk, Beijing Enterprise Water Group Ltd.

*Project Development process is conducted in parallel in the transaction stage

** PT SMI is involved after GCA publishes prequalification document

Case Study – Umbulan Water Supply Umbulan Project Structure



Information:

Project structure contains:

- Concession Fee regulates GCA and Business Entity rights & obligations for Umbulan Water Supply, but not consist of sale and sell activity
- Tariff payment was regulated in water purchase agreement between Provincial Water Supply Company (PDAB) and Business Entity
- PPP Agreement also sets GCA Guarantee to Business Entity in event of default

Case Study – Umbulan Water Supply Risk Management in Project



No	Provincial Government Risk	Mitigation
1	Demand quota of bulk drinking water is not met	Fines to the enterprise
2	Quality of bulk drinking water is below Ministry of Health Regulation 492/2010	Fines to the enterprise
3	The absorption of PDAM is below the quota	Implementation of take or pay principle to PDAM (90% minimum charge)
4	PDAM late or do not pay tariff	Support of district / city government (included in PKS)

City government risk & PDAM:

- The failure of the construction and operation of the distribution network
- Bulk drinking water is not absorbed by the society
- PDAM failed to pay bulk drinking water tariff concordant to the quota in PKS (take or pay)

Main Risk of GCA	Risk Allocation	Procedures for Setting in the Agreement
Raw Water Quantity	GCA	One of tariff component with the fixed cost method (do not affect quantity)
Raw Water Quality	GCA	Compensation for additional processing fee
Demand Risk	GCA	Tariff formula with the Fixed Cost and Variable Cost. Fixed Cost must be paid although of less absorption

Note: Risk of GCA is guaranteed by PT PII

Main Risk of Business Entity	Risk Allocation	Procedures for Setting in the Agreement
Financing Risk	Business Entity	Penalties/termination if BE failed to get funding
Construction Risk	Business Entity	Delay Penalties
Operating Risk	Business Entity	Performance Failure Penalties

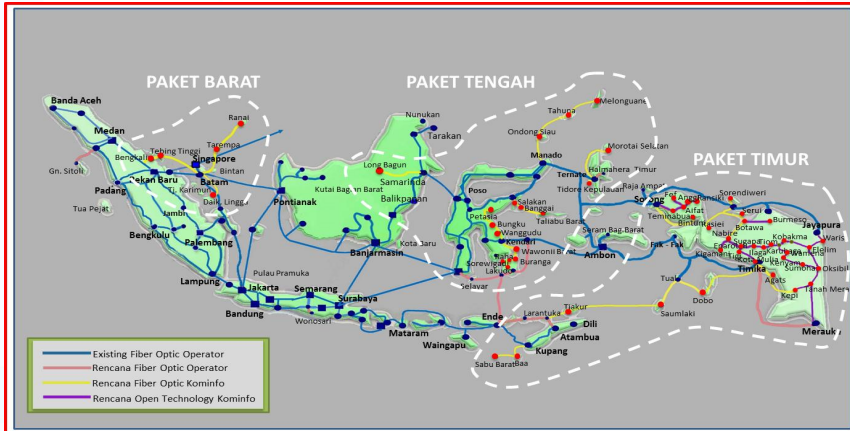
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Case Study - Palapa Ring PPP Project Profile



FINANCIAL HIGHLIGHT

Capex	West Package: USD 92.504.000 ≈ Rp 1,28 Trillion Center Package: USD 99.250.000 ≈ Rp 1,38 Trillion East Package: Rp 5.097.926.900.000,- * note: USD 1 ≈ Rp 13.800
Concession Period	18 months construction+ 15 years concession of each package
Post Tax Target WACC	- West and Center Package: 12,5% (DER 80:20, Equity Return 20%, Senior debt rate 14%) - East Package: 12,5% (DER 80:20, Equity Return 25%, Senior debt rate 12,3%)

PROJECT RATIONALITY

Technology	Optical fiber network or microwave (if the geographic conditions are too complex)
Telecommunications Needs	National telecommunication backbone system
Government Role	Area that not discovered are complex contour area, with small scale of potential user

PROJECT STATUS

Availability Payment	Principal approval from Ministry of Finance has been obtained at October 6 th 2015
Guarantee	Principal approval from IIGF has been obtained at November 20 th 2015 (West and Center package) and May 20 th 2016 (East package)
Project Status	- West Package : Financial Close at August 11 th 2016 and currently in operation phase - Center Package : Financial Close at September 29 th 2016 and currently in construction phase - East Package : Financial Close at March 29 th 2017 and currently in construction phase

PARTNERSHIP STRUCTURE

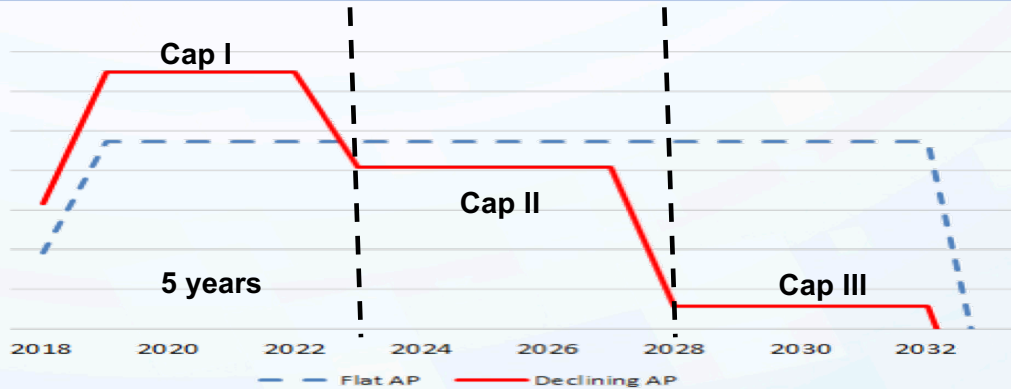
GCA	Ministry of Telecommunication and Informatics (assisted by BP3TI)
Private Role	Design, Build, Operate, Financing

Case Study - Palapa Ring PPP Project Availability Payment Scheme

Availability Payment Formula

$$AP\ SLA = CCRP + OPEX$$

- CCRP = (debt and interest payment) + equity repayment
- CCRP = capital cost recovery payment
- Opex = operation and maintenance cost (includes cable cut fee, and opex value includes annual adjustment inflation)
- AP SLA formula not included VAT



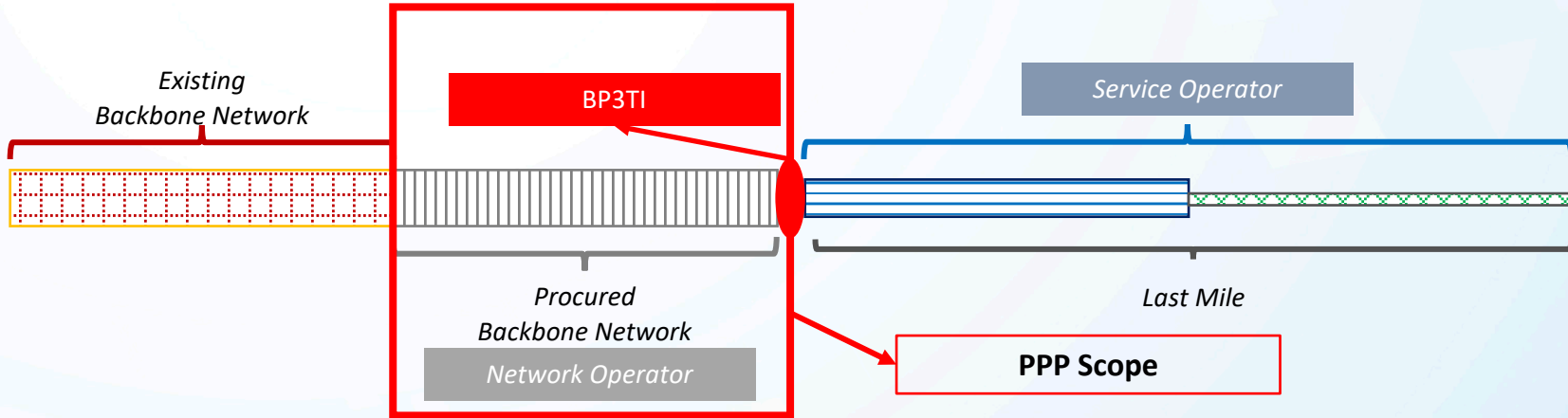
Assumption

Debt To Equity Ratio (DER)	80 : 20
Debt	<ul style="list-style-type: none"> • Tenor (after COD) ; 10 years • Interest Rate: 12.3% - 14 % • Grace Period : 1.5 years
Cost Of Equity	20 %
WACC	12.5 %
Inflation Rate	7 %
Concession Period	15 years

Availability Payment Provision

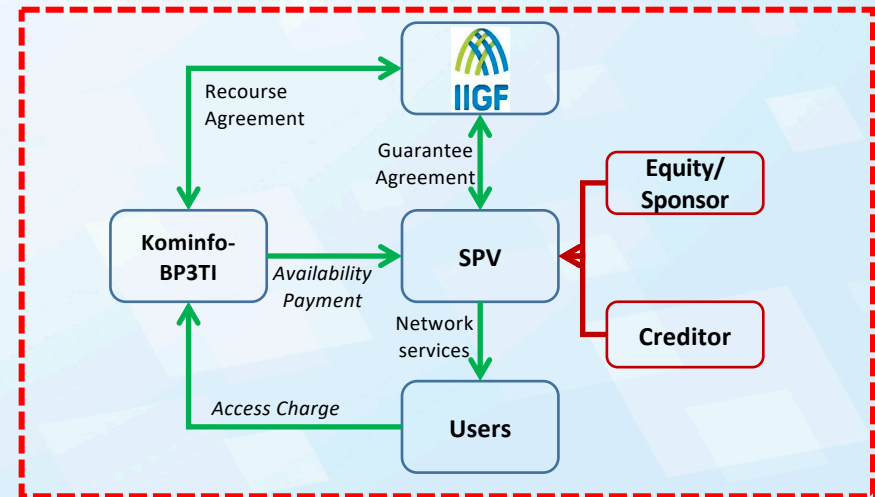
- Availability Payment paid after the construction has finished and ready for commercial operation
- Availability Payment are paid monthly in Rupiah
- Availability Payment based on actual Service Level Agreement of every city
- USD-IDR currency exchange rate risk borne by private sector

Case Study - Palapa Ring PPP Project Project Structure



Struktur Kerja Sama

- | Role | Responsibilities |
|----------------------|---|
| GCA Role | <ul style="list-style-type: none"> Ministry of Telecommunication and Informatics (delegated to BP3TI) GCA shall have the obligation to pay periodic payment (AP) to the SPV |
| SPV Role | <ul style="list-style-type: none"> Preparation technical design and civil works Procure and operate backbone network Financing through concession period |
| Access Charge | <ul style="list-style-type: none"> <i>Access Charge</i> as collected from network user shall be treated as BP3TI revenue and shall not affected the amount of AP <i>Demand Risk</i> shall be the risk of GCA. |



Case Study - Palapa Ring PPP Project Risk Allocation



RISKS

Licenses



Access to Location



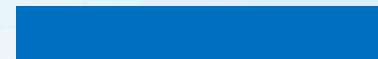
Change of Law



Force Majeure



AP Payment Default



SLA Compliance



SPV Responsibility

GCA Responsibility

SPV and GCA Responsibilities


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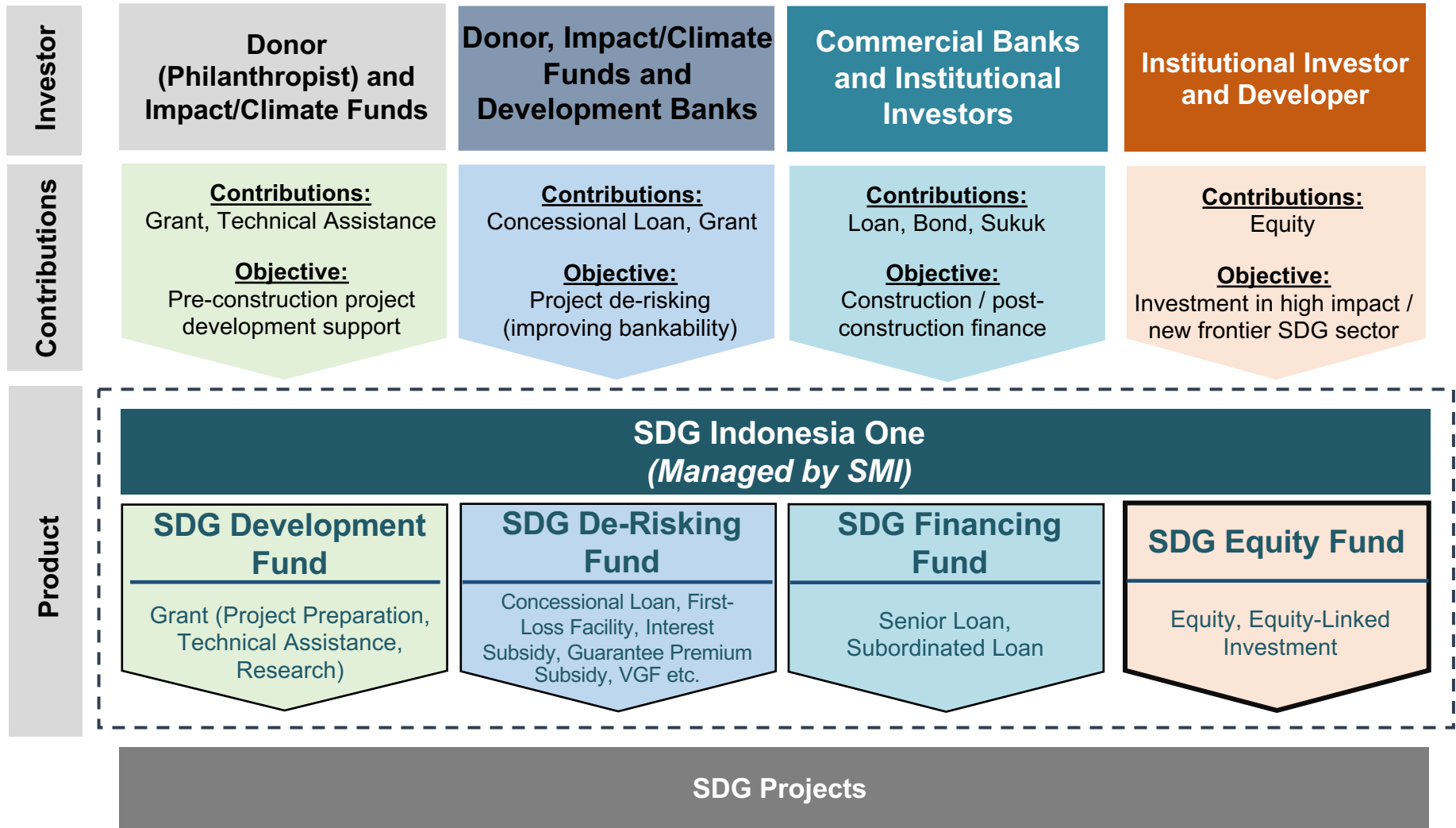
4 SDG Indonesia One

SDG Indonesia One Concept Note

Fund Name	SDG Indonesia One
Use of Proceeds	<p>14 Sustainable Development Goals <i>Today PT SMI obtain the mandate to focus only on infrastructure sector; therefore, it is permitted only to get involved in the 14 out of 17 SDGs</i></p> 
Priority Sector	Renewable energy and urban infrastructure (transportation, water and waste management)*
Role of the Fund	<ul style="list-style-type: none"> • Wholesale financing support to projects (development, construction, de-risking) • Link project activity with the most suitable investors • Channel development finance via centrally-managed funds
Project Location	Indonesia
Product Type	Grant, Loan and Equity, Technical Assistance, Capacity Building, Research
Structure	Pooled in PT SMI as the financial intermediary, fund manager, sponsor investor and implementing agency. Special purpose vehicle will be set up for SDG Equity Fund.
Value Proposition	PT SMI is 100% owned by the Government of Indonesia with extensive experience and strong track record in infrastructure project investments in Indonesia. PT SMI is the first financial institution accredited in Southeast Asia by the Green Climate Fund (GCF).
Source of Capital	Green investors, sustainable investing fund, SDG investors, sovereign wealth funds, international agencies, philanthropist, DFIs, climate funds, institutional investors, commercial banks.

*Potentially Can Be Expanded

SDG Indonesia One Provides End-to-End Financing Support to Project Development



“PT SMI to Become a Local Strategic Partner on the Ground”

SDG Indonesia One Value Proposition

SDG Indonesia One Value Proposition

For Indonesia

- 1 Mobilize and private investments to tackle sustainability issues (poverty, climate change, infrastructure, etc.)
- 2 Increase access of to financial resources to fund development projects
- 3 Reduce fiscal burden in financing infrastructure projects

For Investors/Donors/Philanthropists

- 1 Gain access to rapidly growing markets in Indonesia
- 2 Take advantage of the risk mitigation measures offered by blended finance
- 3 Mitigate exposures and accelerate implementation by engaging PT SMI as a local strategic partner

Strategic Partnerships of PT SMI with Multilateral/Bilateral Organizations in the Area of Blended Finance

 <p>WORLD BANK GROUP RIDF Loan – USD100 million Subordinated loan to IIF - USD 200 million</p>	 <p>ASIAN DEVELOPMENT BANK ADB Subordinated loan to IIF – USD 100 million</p>	 <p>AIIB ASIAN INFRASTRUCTURE INVESTMENT BANK AIIB RIDF Loan - USD100 million</p>
 <p>CTF Grant USD49 million for geothermal projects</p>	 <p>GEF Grant USD6.25 million for geothermal projects</p>	 <p>CDIA “Linking Cities’ Infrastructure Investment Projects to Finance” Capacity Building</p>
 <p>UNDP Technical Assistance Wind Power - USD 300,000</p>	 <p>AFD AGENCE FRANÇAISE DE DEVELOPPEMENT AFD Loan USD100 million, Grant USD5 million, & TA EUR400,000 for RE & EE</p>	 <p>NEW ZEALAND FOREIGN AFFAIRS & TRADE NZ Aid Programme TA – NZD2,13 million</p>
 <p>Schweizerische Eidgenossenschaft Confédération suisse Confederazione Svizzera Confederaziun svizra SECO - State Secretariat for Economic Affairs (SECO) Grant USD3 million</p>	 <p>GREEN CLIMATE FUND PT SMI as the first Accredited Entity in South East Asia to channel Green Climate Fund to promote and develop renewable energy and climate projects</p>	 <p>PT SMI has developed and implemented 10 principles in Environmental and Social Safeguards</p>
 <p>CLIMATE POLICY INITIATIVE Climate Policy Initiative (CPI) Technical Assistance USD 200,000</p>		

Thank You

PT Sarana Multi Infrastruktur (Persero)

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Indonesia Infrastructure Library
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#BaktiuntukNegeri



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- **Interactive discussion with audience**