



# Financing Low Carbon Projects

#### **Darwin Trisna Djajawinata**

Director

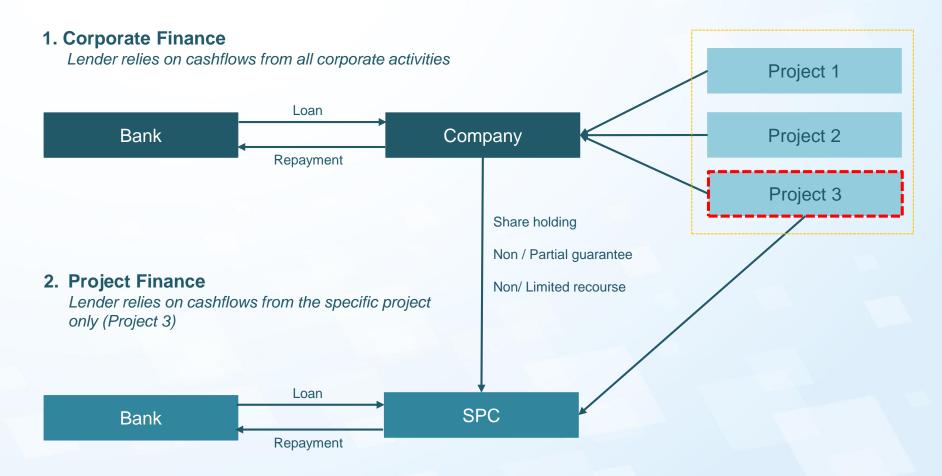
PT Sarana Multi Infrastruktur (Persero)

Accelerating Private Sector Participation Towards Low-Carbon Development in Indonesia: Workshop on Joint Crediting Mechanism

Jakarta, 30 November 2016



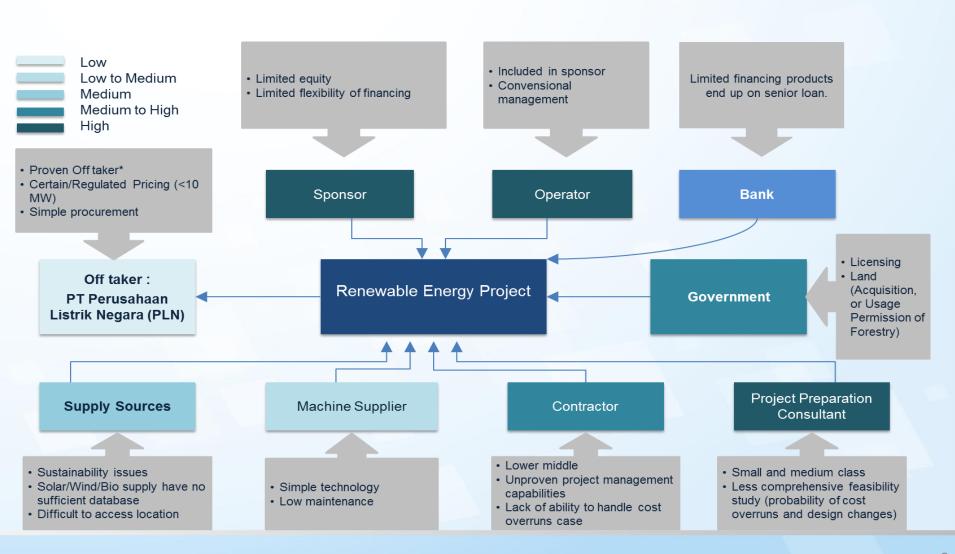
#### **Project Finance and Corporate Finance Structure**



Project Finance is relying on the project's cashflow as the principal repayment source



## Case Study: Key Issues in Renewable Energy Financing in Indonesia – Risk Perspective





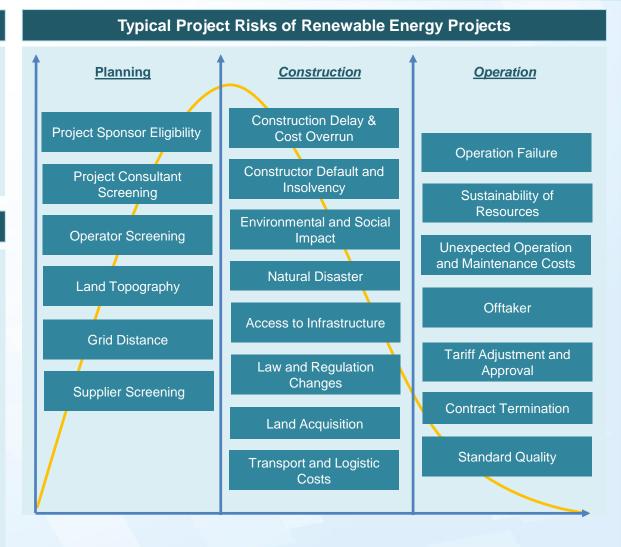
#### **Project Key Considerations and Concerns**

#### **Key Considerations**

- Optimal sharing of risks principle is that risks should be allocated to the party best suited to manage or minimize it
- 2. Having a conducive regulatory environment

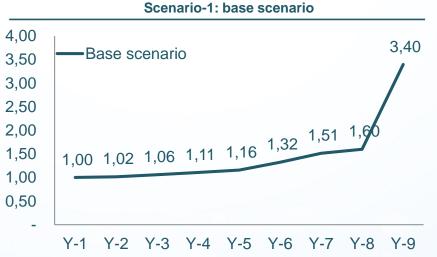
#### **Key Concerns**

- 1. Strong project sponsor
- 2. EPC contractor with good *track* record
- 3. Stable cashflow
- 4. Solid project fundamental
- 5. Suitable financing structure
- 6. Professional parties





### Case Study: Project DSCR vs Project Reliability

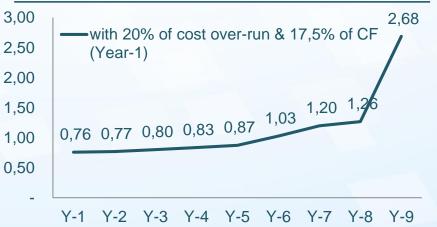


Scenario-2: with 20% of cost over-run

3,00
2,50
2,50
2,00
1,50
1,00
0,80
0,82
0,85
0,89
0,93
1,09
1,26
1,38
1,09
0,50
0,00

Y-1 Y-2 Y-3 Y-4 Y-5 Y-6 Y-7 Y-8 Y-9

#### Scenario-3: with 20% of cost over-run & 17,5% of CF (Year-1)



- The Debt Service Coverage Ratio (DSCR) is the ratio of cash available for debt servicing to interest, principal and lease payments.
- It is a popular benchmark used in the measurement of an entity's (person or corporation) ability to produce enough cash to cover its debt (including lease) payments. The higher this ratio is, the easier it is to obtain a loan.
- The minimum DSCR, particularly for new sector, for the banking acceptance is about 1.4-1.5 x

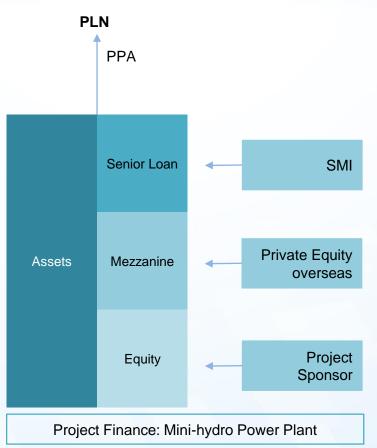


### **Case Study: Improving Project Bankability**

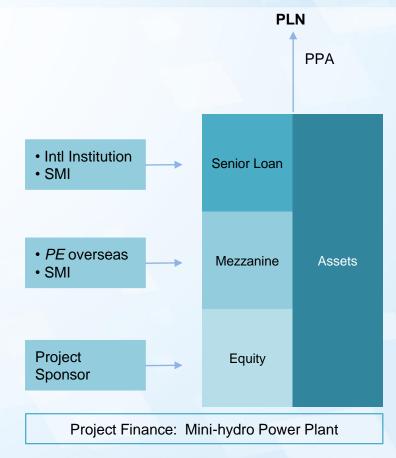
	Indicative Ratio	Remarks
Senior debt	■ Financing size = 30%	<ul> <li>Indicator of project's bankability</li> <li>With mezzanine portion, senior lenders will more secure or comfortable to finance the project</li> <li>Limitation of senior debt portion due to new sector</li> <li>Using cash waterfall mechanism</li> </ul>
Mezzanine	■ Financing size = 40%	<ul> <li>Using bullet payment mechanism for principal</li> <li>Reduce cash flow's burden during senior debt's tenor</li> <li>Using cash waterfall mechanism</li> </ul>
Equity	■ Equity size = 30%	<ul> <li>Equity sponsor still has room for excess cash</li> <li>Using cash waterfall mechanism</li> </ul>



## Our case: financing Structure in RE project (e.g: Mini-hydro Power Plants)



- · SMI as a Senior Lender
- · PE as a Mezzanine Lender



- SMI and International Institution (Co-financier) as a Senior Lender
- On the next stage: PE overseas & SMI as a Mezzanine Lender



### **Typical Financing Structure of Renewable Energy Projects**

PT SARANA MULTI INFRASTRUKTUR (PERSERO)				
	Typical Financing Mix	Financing Institutions	Source of Funds	
	Debt	<ul> <li>Banks</li> <li>International Banks</li> <li>Large Domestic Banks</li> <li>Local Branch of Foreign Bank</li> <li>Small-to-medium Domestic Banks</li> </ul>	e.g. deposits (mostly short term for domestic banks) & capital market	
		ECAs	e.g. government, private investors	
		Multilaterals/bilaterals	e.g. multilaterals/ bilaterals member countries, capital market	
	Sub-Loan	Infrastructure Financing Institutions (PT SMI/IIF)	e.g. Government, multilaterals/ bilaterals, private investors & capital market	
	Mezzanine Convert	<ul> <li>Strategic Investors</li> <li>Private Equity / Hedge Funds</li> <li>Infrastructure Financing</li> <li>Institutions (PT SMI/IIF)</li> </ul>	e.g. private investors, multilaterals/bilaterals, capital market	
Equity				
	Grant	<ul><li>Donors</li><li>Multilaterals/bilaterals</li></ul>	e.g. climate funds, green funds, adaptation/mitigation funds, multilaterals/bilaterals funds	



Conventional

Sharia\*

**Capital Injection** 

from GOI

**Capital Market** 

(Bonds, Notes,

Securitizatio)

**Loans and Grants** 

**Sharia Capital** 

Market

**BPJS**, Sharia

Insurance

Hajj & Syirkah

**Funds** 

Sovereign Wealth

**Fund** 

#### **Our Business Model**

#### **Sources of Funds FINANCING &** INVESTMENT

#### Infrastructure **Financing**

- Senior loan (Working Capital, Investment Loan)
- Junior Loan
- Mezzanine
- Equity investment
- Arranger & Underwriter
- Standby Lender PPP

#### **Municipal Financing** (PIP/RIDF)

**IMBT/Lease** with **Option to Own** 

Murabahah/Installment Sale with Deferred **Payment** 

> MMQ/Diminishing **Partnership**

MMOB/Restricted Investment

#### CONSULTATION **SERVICES**

**PT SMI Business Pillars** 

**Public Sector** Advisorv

**Training & Capacity** Building

Investment Advisory (Conventional and Sharia)

**Financial** Advisory (Conventional and Sharia)

#### **PROJECT DEVELOPMENT**

**Project Development** Facility (PDF)

**PPP Project** 

#### **PDF & Donor Funds** Management

Renewable Energy Project (Geothermal Exploration)

#### **TA & Donor Funds** Management

Municipal Projects

**Technical Assistance** 

**Donor Funds** Management

#### **Sectoral Focus**

Electricity Transportation Telecommunication









Rolling Stock of Trains











Irrigation



Waste Management



Infrastructure



Region Infrastructure



Correctional



Market



Education Infrastructure





Social Infrastructure

<sup>\*</sup> Islamic Business Unit is expected to be operational at the end of 2016





## Sustainable Financing

#### **Focus**

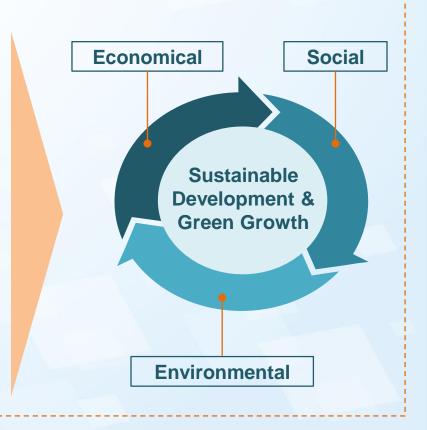
- New & Renewable Energy
- Energy Conservation
- Waste Management

#### **Product**

- Loan
- Grant
- Quasi Equity Facility
- Technical Assistance

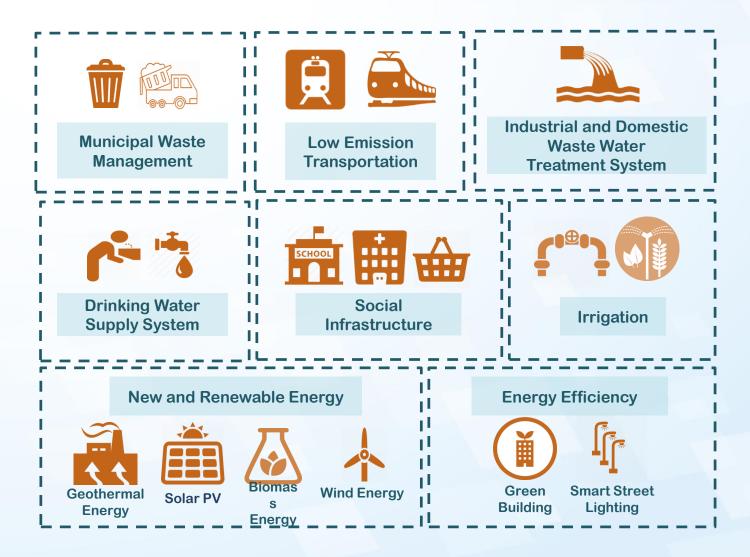
#### **Strategy**

- Create strategic relationship with potential clients
- Create strategic cooperation with multilateral institutions
- Coordination with government institutions





#### PT SMI Eligible Sectors for Sustainable Finance





#### PT SMI has Implemented Environmental and Social Safeguard

#### PT SMI ESS Architecture

#### **Policy**

Compliance of the Environmental and Social Rules and Regulations

**ESS Governance and Management System** 

**Risk Categories** 

Biodiversity and Natural Resources Management

Land Acquisition and Resettlement

Indigenous People and Cultural Heritage

**Gender Policy** 

Consultation and Grievance Handling Mechanism



#### **Procedures**

#### **Evaluating E&S Risk**

**Transaction Screening** 

**Risk Identification** 

**E&S** Due Diligence

**Conditions of Financing** 

#### **Monitoring E&S Risk**

Reviewing Client/ E&S
Performance

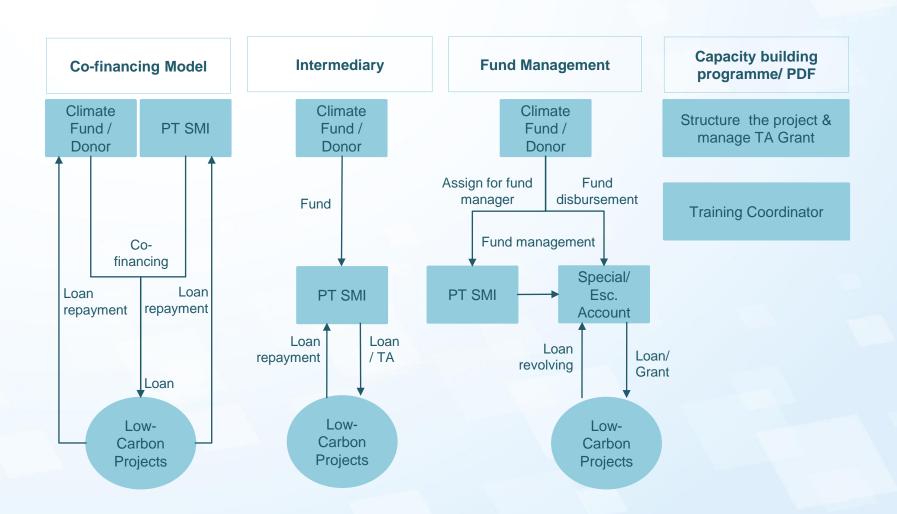
**Managing non-Compliance** 

Continuous capacity and capabilities improvement

**Monitoring and Reporting** 



#### **Generic Partnership Model With International Institutions**





#### **Partnerships in Climate Change Programs**

i.e. Renewable Energy



USD100 million Credit Facility

€400 thousand USD5 million

Technical Assistance Programme Aggrement

Quasi Equity Facility



Geothermal Energy Development Climate
Technology
Fund (CTF)\*
Grant USD49 million

Global Environment Facility (GEF) Grant\* USD6,25 million



**Grant for Loan** USD6-8 million

Sustainable Urban Transport (BRT)\*\*



Regional
Infrastructure
Development Fund
Loan USD500 million



**SECO** 

Grant USD3 million
TA & Project
Preparation



**Accredited Entity** 

Low-emission and climate-resilient development\*

In Accreditation Phase II



Wind Energy Development di Lombok

- ) Preparation Phase
- \*\*) Planned





## **THANK YOU**

#### **Contact Us:**

PT Sarana Multi Infrastruktur (Persero)

Sahid Sudirman Center, 48th Fl.

Jl. Jend. Sudirman No. 86, Jakarta 10220

Indonesia

(62-21) 8082 5288 (hunting),

(62-21) 8082 5288 (fax)

Website: www.ptsmi.co.id

Email: corporatesecretary@ptsmi.co.id

#baktiuntuknegeri



#### Roles of PT SMI in Addressing Sustainable Development Issues in Indonesia

Infrastructure The only SOE with focus mandate in Infrastructure Finance **Development Financing** Company The business sectors are very relevant to sustainable **Supports** development actions, including renewable energy and **Mitigation** Actions transportation 3 Roles of PT SMI in Future role as a Development Bank with a broader **Future Role as** Addressing eligible sectors will allow SMI to contribute more a Development Sustainable significantly in addressing sustainable development Bank **Development** issue; Issues in Indonesia significant role in supporting Plays relevant **Supporting** infrastructures in sustainable development projects as Impact to well as reducing emission in order to achieve global **Global Target** target in sustainable development goals (e.g.: climate change mitigation).



#### Partnership between AFD and PT SMI

**Renewable Energy and Climate Change Projects** 







## Credit Facility Agreement (CFA)

- Financing of Renewable Energy and Climate Change Investments
  - Loan Facility :USD100 million
  - o Tenure: 10 years
  - o Grace Period: 3 years
  - Project size max: USD50 million
  - Loan size max: USD25 million for each project
- At least 50% of the facility must be dedicated to Renewable Energy investments and the rest is for Climate Change investments
- Renewable Energy: hydropower, geothermal, biomass, solar, wind mills, etc.
- Climate Change: Mitigation & Adaptation

## Quasi Equity Facility (QEF)

- This facility will target either innovative or riskier projects
  - o Facility: USD5 million
  - At least 3 projects to be financed with the QEF
- This facility will be provided by means of de-risking mechanism for PT SMI or interest-rate subsidy
  - First Loss Mechanism (FLM)
  - Cost Overrun Junior Debt Mechanism (CJD)
  - Interest Free Loan for Innovation (IFI)
  - Innovative Equity Mechanism (IEM)

#### Technical Assistance Programme (TAP)-MoU

- This programme amounting to maximum EUR 400,000 will support the two facilities
- TAP will build up PT-SMI's capacity to originate, finance, and monitor more Renewable Energy and Climate Change investments
- Scope:
  - Support PT-SMI in appraising and assessing Renewable Energy and Climate Change investments
  - Assist PT-SMI in upgrading its Environmental and Social Risk Management System (ESMS)
  - Promote Renewable Energy and Climate Change investments in Indonesia



#### Cooperation in fostering geothermal development in Indonesia



- The aims of CTF & GEF grant:
  - 1. To support Government of Indonesia in unearthing geothermal potential through risk sharing mechanism
  - 2. To encourage investor participation in developing geothermal project
  - 3. To leverage the geothermal fund that's been managed by PT SMI

- The World Bank channeled grant from Clean Technology Fund and Global Environment Facility to support the Geothermal Energy Upstream Development Project where Government plays important role to absorb the risk of exploration phase
- Government participation during the exploration phase can significantly decreasing the risk of geothermal development which could encourage private sector participation in the exploitation phase
- Some prerequisite arrangement that should be fullfilled before the grant could be effectively granted:
  - ✓ Government should contribute in co-financing scheme
  - ✓ PT SMI act as the Implementing agency
  - ✓ The grant should be utilized only for government drilling scheme in certain greenfield area determined by Gol



#### Collaboration to Promote Development of Green Projects



Strategic Partnership between SMI and Global Green Growth Institute:

Collaboration to promote programs, research and joint activities in support of the development of green projects.



#### **Mandalika PV Project**



PT SMI and GGGI will support the preparation of feasibility study of Solar PV Power Plant in Mandalika Tourism Special Economic Zone

Location	Lombok, West Nusa Tenggara
Developer	Indonesia Tourism Development Corporation
Area	1.255 Ha
Sector	Eco-Tourism & MICE
Estimated Energy Demand	110 MW by 2030