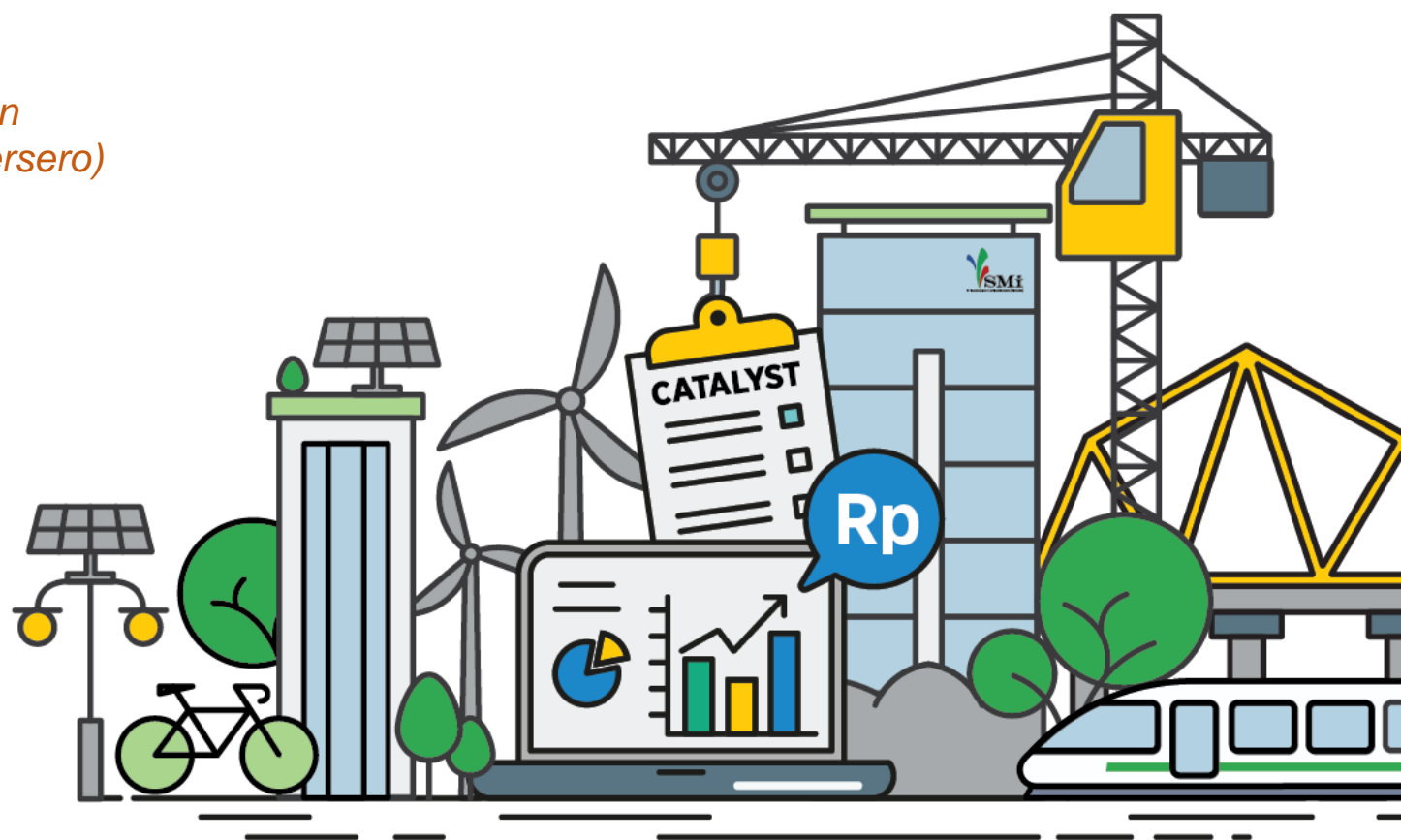


# Role of PT SMI in Addressing Climate Finance for Indonesia's Infrastructure Development

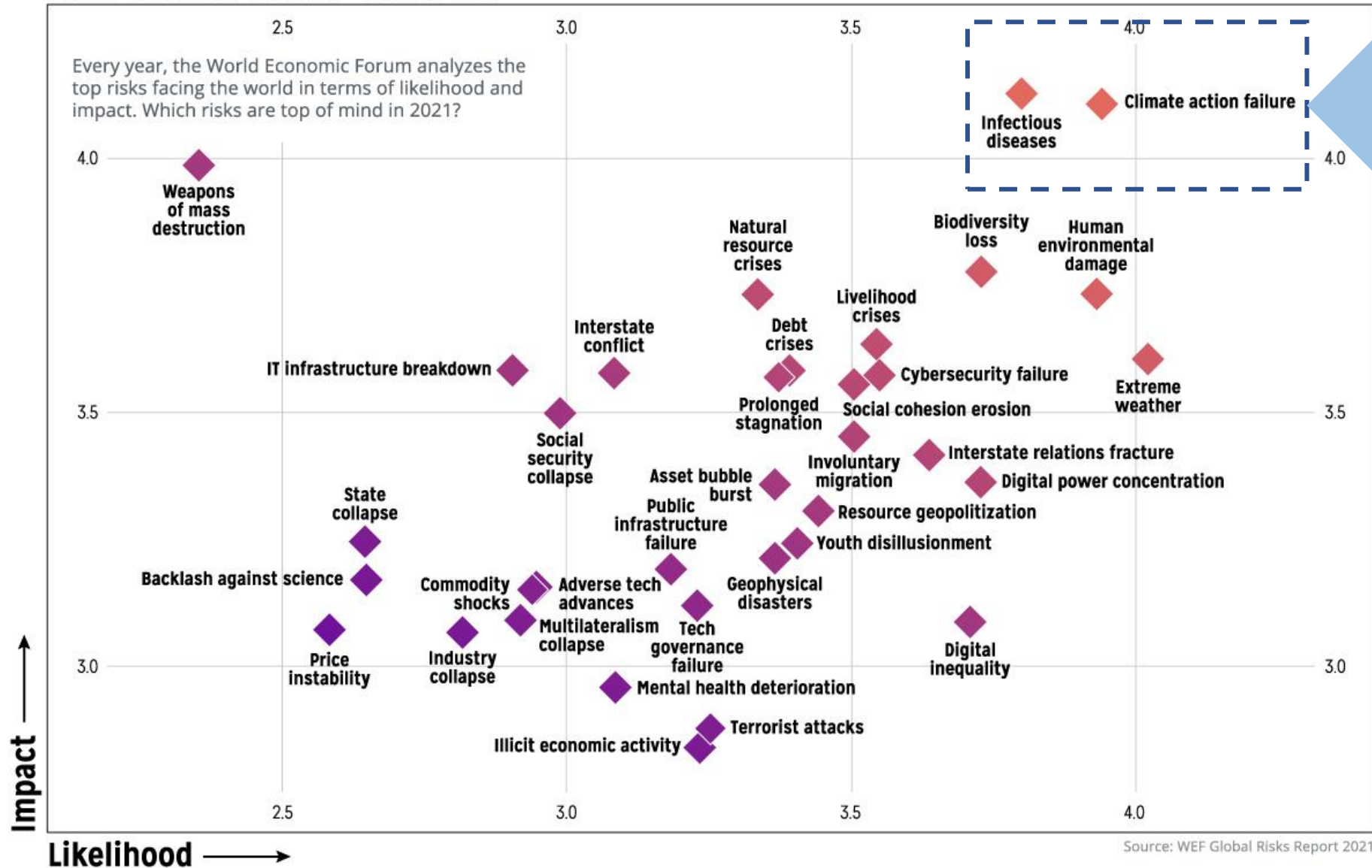
Darwin Trisna Djajawinata  
*Director of Finance and Operation*  
*PT Sarana Multi Infrastruktur (Persero)*

Jakarta  
August 2021



# Climate Action Failure Along With Infectious Diseases Are The Top Of Mind Risks In 2021

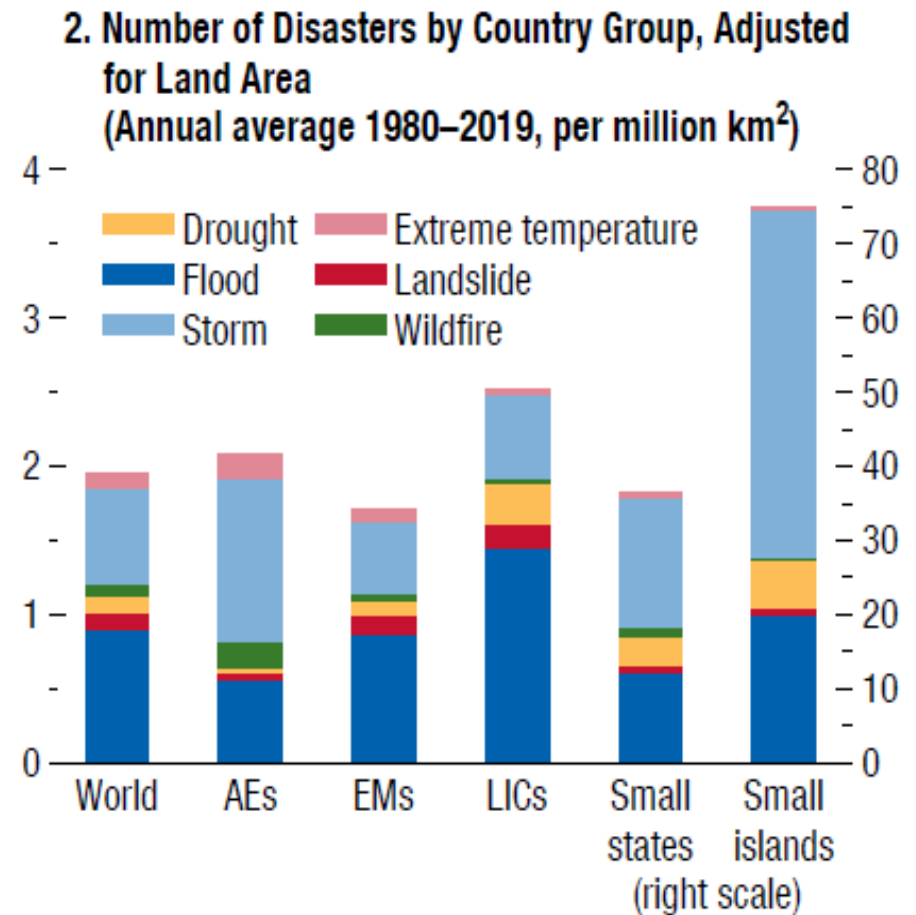
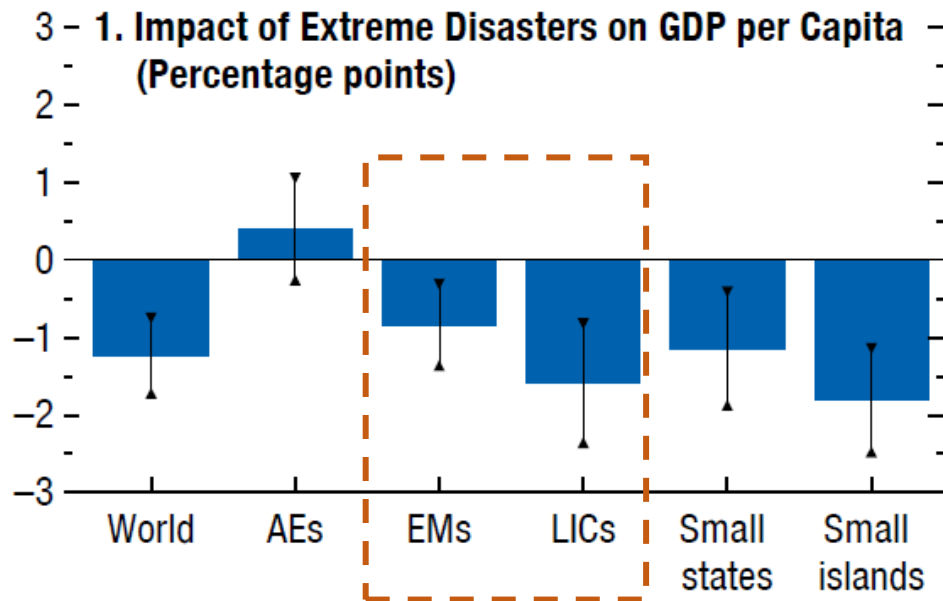
## 2021 Global Risks Outlook



# Climate Action Failure Could Negatively Effect GDP Per Capita

Emerging market (EMs) and low income countries (LICs) are more exposed to climate change costs than advanced economies (AEs)

## Heterogeneous Effects and Frequency of Weather-Related Natural Disasters



Sources : Sources: EM-DAT (Emergency Events Database); and IMF staff calculations.

Note: Error bars in panel 1 represent 90 percent confidence intervals. In panel 2, for each year, the number of disasters is added up and divided by the total land area of the country group, then averaged over years. Small states are defined as territories with land area under 30,000 square kilometers (for reference, Haiti is 27,750 square kilometers).

AEs = advanced economies; EMs = emerging market economies; LICs = low-income countries.

# PT SMI's Concrete Steps to Support Climate Finance Projects in Indonesia

## Strategic Direction of PT SMI's Climate Finance

1. Making PT SMI's climate finance **consistent with low emission**, climate-resilient pathways
2. **Taking steps to end finance for carbon-intensive** fossil fuel based-energy
3. **Mobilizing private sector climate finance**, promoting climate PPP's, as well as project preparation
4. **Scaling up international climate borrowings and enhancing the impact** (through SDG Indonesia One)
5. **Defining, measuring, and reporting** PT SMI's climate finance

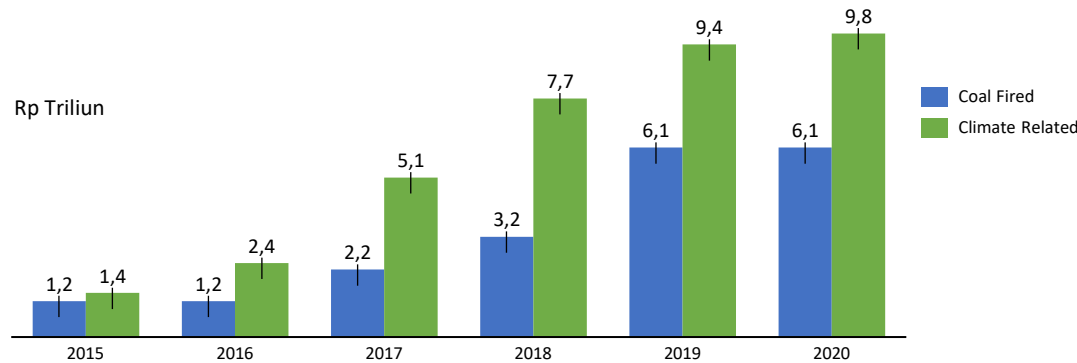
## Concrete Action of PT SMI's Climate Finance

- 1 **Sustainable Financing**  
Established **Sustainable Finance Division** (2016) to finance RE-projects related
- 2 **Green Climate Fund (GCF)**  
PT SMI as **the first accredited entity** in South-East Asia
- 3 **SDG Indonesia One (SIO)**  
**Blended Finance Platform** (October 2018) to support Sustainable Development Goals (SDGs), including support for green projects
- 4 **Green Bond & Impact Report**  
**Issued the 1st corporate green bond & impact report in Indonesia**
- 5 **Environmental and Safety Management Frameworks (ESMF)**  
The development and implementation of **Guidelines of Environmental and Safety Management Frameworks (ESMF)**

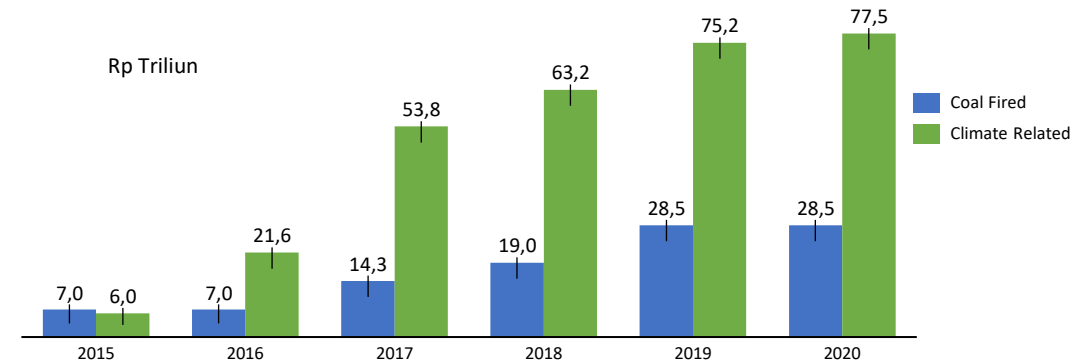
# Financing Commitment and Project Cost

## Coal-Fired vs Climate Related Projects\*

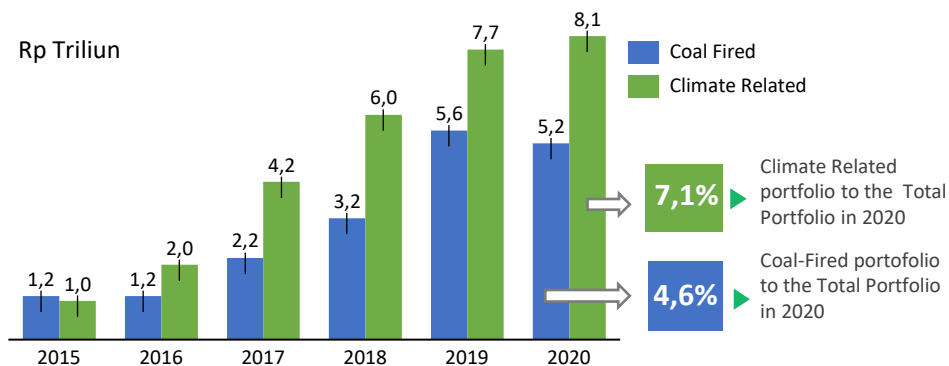
### Cumulative Commitment



### Financed Project Cost

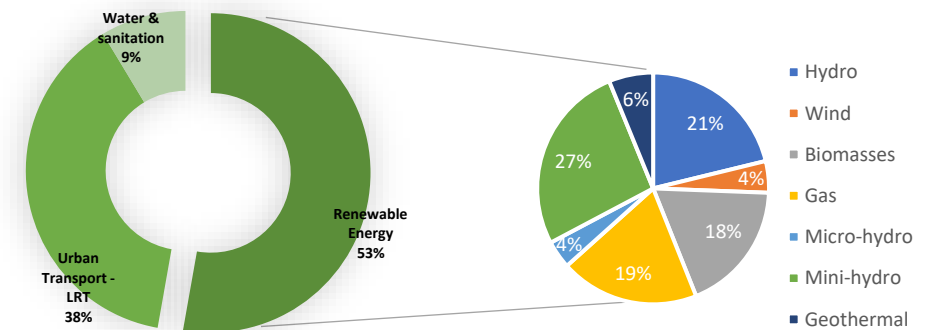


### Active Commitment Portfolio by End of the Year



Climate Related Projects are projects that financed by PT SMI and contributed to the reduction of carbon emission and greenhouse effect.

### Climate Related Projects Portfolio Breakdown in 2020

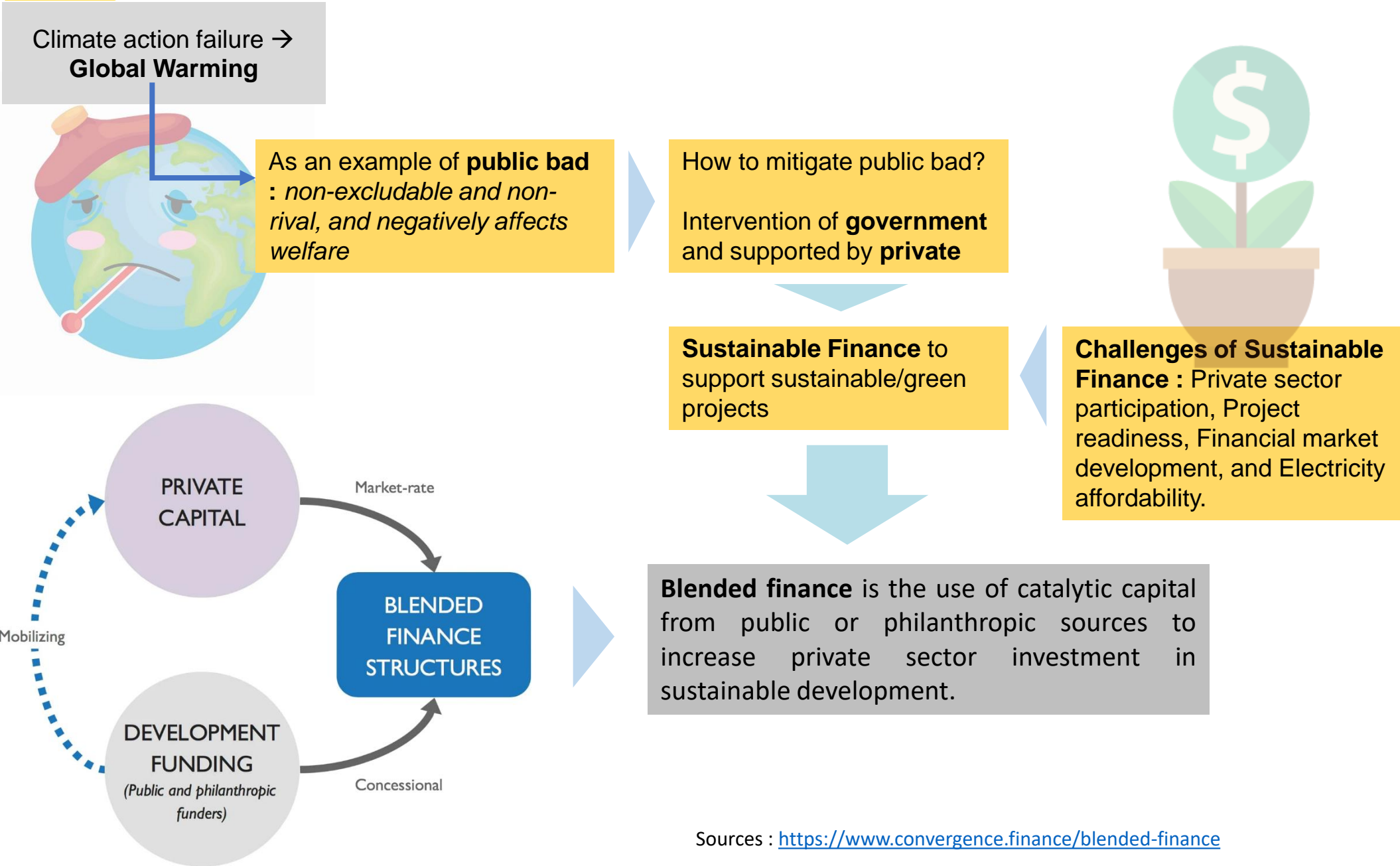


- PT SMI is committed to support sustainable development. One of the way to achieve it is by implementing moratorium on financing electricity projects based on coal or coal fired power plant and switched to climate related project that contributes to the reduction of carbon emission and greenhouse effect.
- PT SMI's commitment to support sustainable development is reflected on climate related projects financing amounted to 7,1%, higher compared to *coal-fired* of 4,6% from total financing commitment of Rp 113.3 trillion<sup>1</sup> in 2020.
- PT SMI has financed 31 climate related projects with total commitment of Rp9,8 trillion and project cost amounted to Rp77,5 trillion, significantly higher than coal-fired projects with 9 projects and total commitment of Rp6,1 trillion and project cost amounted to Rp28,5 trillion

\* YTD

<sup>1</sup> Excluding equity investment

# Framework : Climate Change Issue Must Be Resolved By Collaboration Between Government And Private





# Sustainable Development Goals (SDG) Indonesia One - Blended Finance Platform: From the Concept to the Implementation

## Challenges



Resources and public sector's limited ability on budgeting, planning, and preparation



Lack of project readiness due to inadequate process preparation (including the risks allocation framework)



Other setbacks caused by:

- Tariff policy
- Unsustainable business model
- High interest rate

## Blended Finance Solution



Offers consultation and project development service to improve project qualities and readiness



Use various sources of funds from various stakeholders to de-risk projects and increase bankability



Synergy and collaborate with relevant stakeholders and strategic partners

## Platform Concept

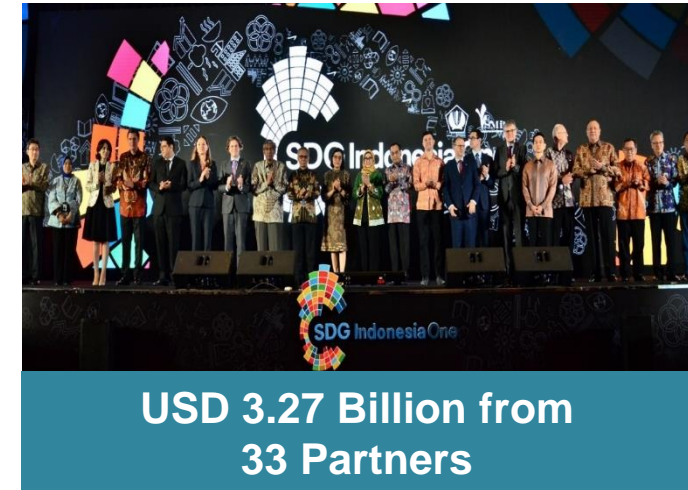
*SDG Development Facilities*

*SDG De-risking Facilities*

*SDG Financing Facilities*

*SDG Equity Fund*

## SDG Indonesia One as of May 2021



# Case Study Blended Finance on Clean Energy Sector (Project Development): Collaboration Between PT SMI and ClimateWorks Foundation

## Grant for Feasibility Study in Solar Rooftop Airport



### Program Detail

#### Donors



#### Re-granting Agency



#### Program Manager



#### Consultant



#### Beneficiary



#### Grant Fund

Available grant fund

**IDR 4.93 billion (~USD 323,778)**



#### Program Period

1 April 2020 - 31 September 2021

#### Output

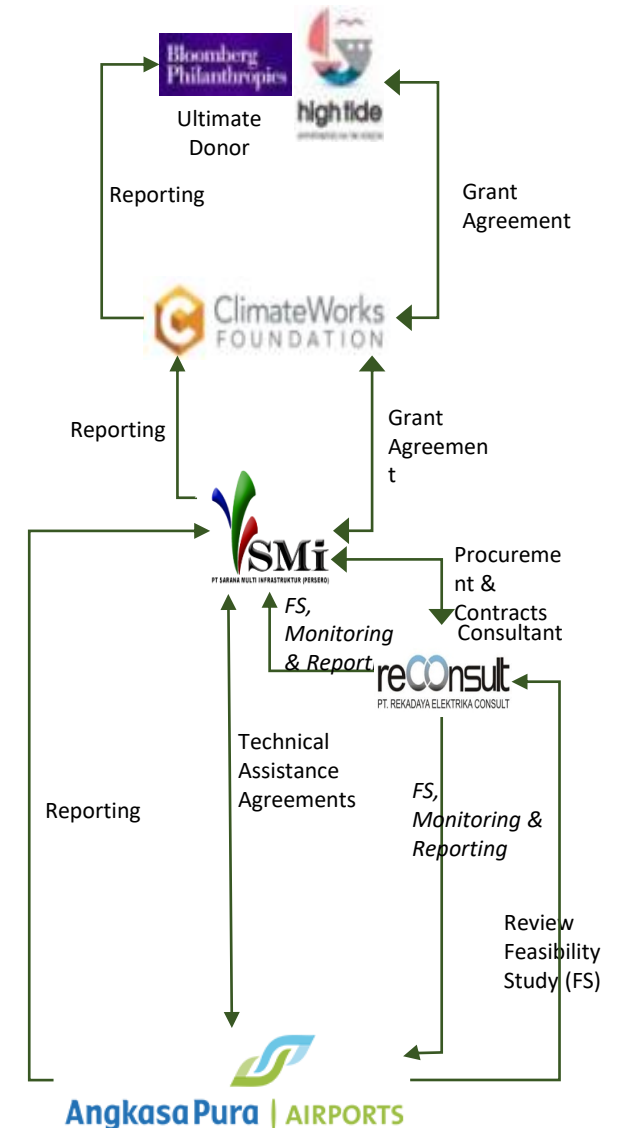
Feasibility Study of Airport Solar Rooftop Projects

#### Other Proposed Program

- Airport Solar Rooftop Feasibility Study in collaboration with **PT Angkasa Pura I**
- Gas Station Solar Rooftop Feasibility Study in collaboration with **Pertamina**
- Solar Rooftop Feasibility Study development in **remote areas**
- **Capacity Building** on solar rooftop



### Scheme



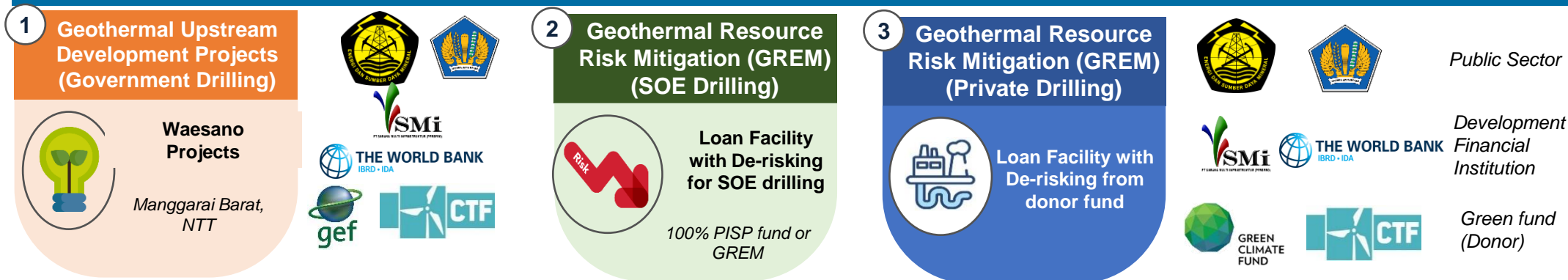



# Case Study Blended Finance on Clean Energy Sector (De-risking):

## Blended Finance Structure in Geothermal Sector

Collaboration of Public Sector, DFIs and Donors to de-risk projects

### Blended Finance Structure to de-risk Exploration Stages of Geothermal Development

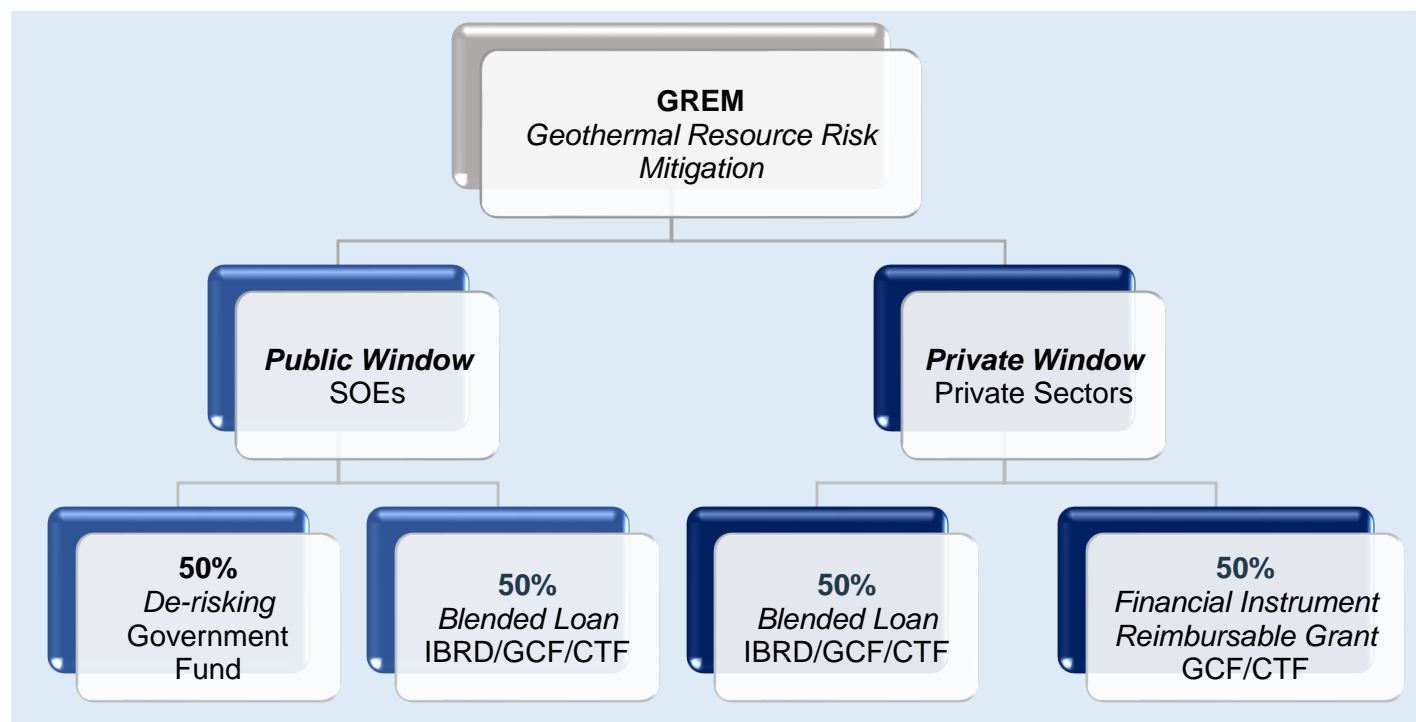


Program	Geothermal Energy Upstream Development Projects (GEUDP)
Location	Wae Sano
Province	Nusa Tenggara Timur
Potential Capacity	30 MW
Exploration Drilling cost	USD 30.3 juta
	

CTF grant  
USD 49 mill.  
GEF grant  
USD 6.25 mill.

Co-financing  
USD 49 mill.

TA grant  
NZD 2.13  
millions



## Blended Finance Structure in Mini-Hydro Project

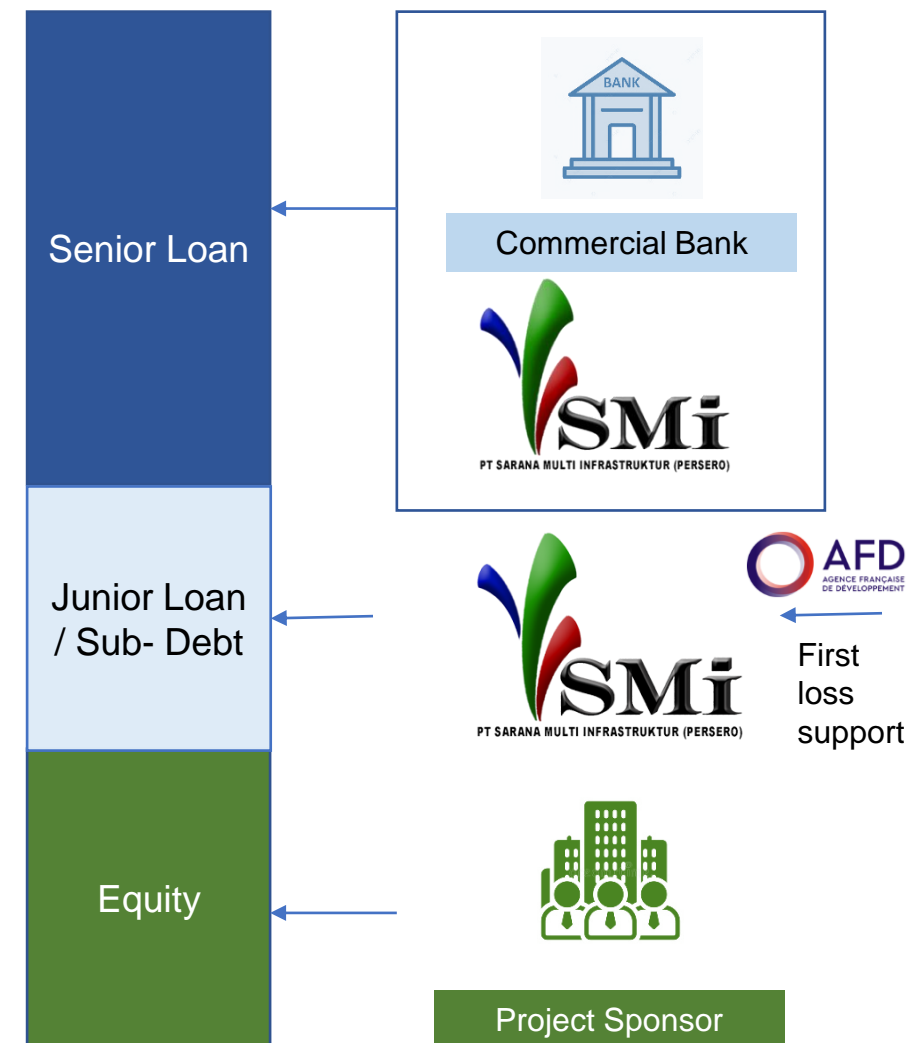
*Collaboration of DFIs and Donors to de-risk projects*

### Facility Details

<b>Sector</b>	Electricity – Renewable Energy
<b>Project Name</b>	Air Putih Minihydro Power Plant
<b>Location</b>	Desa Ladang Palembang, Kecamatan Lebong Utara, Provinsi Bengkulu
<b>Installed Capacity</b>	3 x 7 MW
<b>Project Cost</b>	IDR 670,870,000,000
<b>Tenor</b>	Senior Loan: 9 years Sub-debt: 12 years
<b>Facilities</b>	Senior Loan: IDR 140,000,000,000 Sub-debt: IDR 100,000,000,000



### Financing Structure



## PT SMI as Green Climate Fund Accredited Entity

- **Green Climate Fund (GCF)** is a financial mechanism under the United Nations Framework Convention on Climate Change (UNFCCC) which was established in 2010.
- GCF invests in climate change **mitigation** and **adaptation** activities in developing countries through GCF's partners, known as **Accredited Entities**.
- **PT SMI** is one of GCF's Accredited Entity, the Accreditation Master Agreement between PT SMI and GCF was signed on 28 April 2017.
- As **Accredited Entity**, PT SMI submits proposals to receive funding from GCF through the following facilities:

Facility	<i>Project Preparation Facility (PPF)</i>	<i>Funding Proposal (FP)</i>
<b>Instrument</b>	Grant	Grant, loan
<b>Function</b>	Project preparation	Project implementation
<b>Amount</b>	Max. USD 1.5 million/project	Max. total project cost USD 50 million
<b>Description</b>	Project prepared by the PPF grant is expected to submit Funding Proposal within 2 years of the project preparation	Project which does not need PPF support can directly submit the Funding Proposal



All proposal require No Objection Letter (NOL) from Fiscal Policy Agency Ministry of Finance as NDA GCF Indonesia

# PT SMI's Approved GCF Project:

## Project Preparation Facility for Integrated Sustainable Bus Rapid Transit Development in Semarang

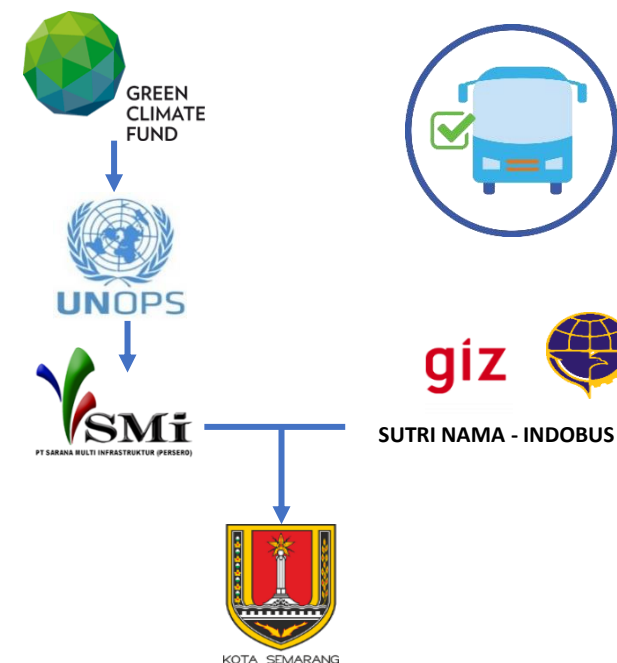
### Project Overview:

#### Bus Rapid Transit in Semarang, Central Java

Project Owner	: City Government of Semarang
Estimated total project cost	: ± Rp 1200 billion
Estimated corridor length	: ± 13 km
Project Preparation Cost	: USD 788,000 (GCF) + USD 300,000 (GIZ)
Project Preparation Source of Fund	: Green Climate Fund and GIZ SUTRI NAMA – INDOBUS

### PPF Scope:

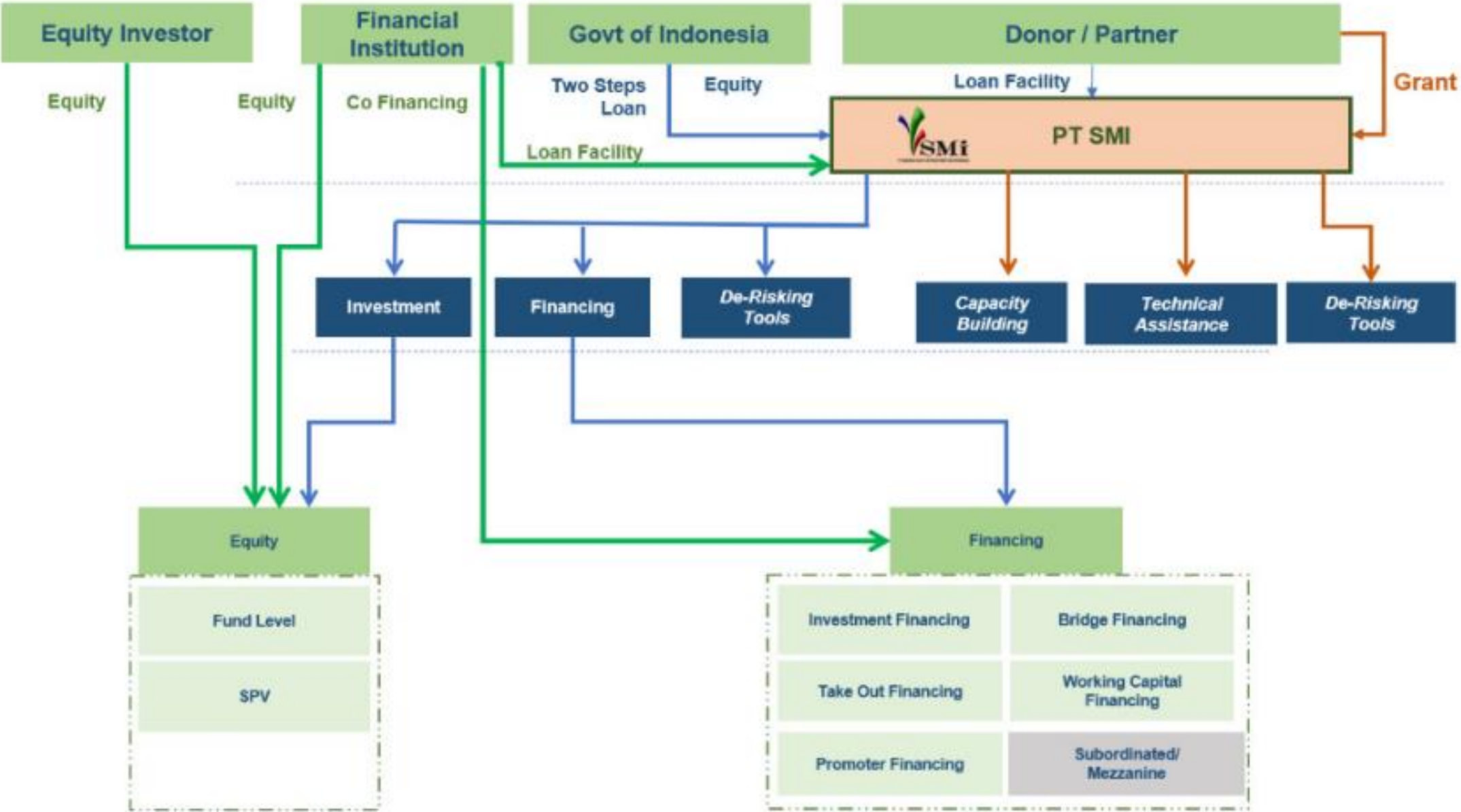
No	Activity	PT SMI (GCF)	SUTRI NAMA – INDOBUS (GIZ)
1	Pre-Feasibility Study		<input checked="" type="checkbox"/>
2	Feasibility Study	<input checked="" type="checkbox"/>	
3	Legal and Regulation Study		<input checked="" type="checkbox"/>
4	ESIA	<input checked="" type="checkbox"/>	
5	Gender Assessment		<input checked="" type="checkbox"/>
6	Risk Assessment		<input checked="" type="checkbox"/>
7	Stakeholder Management		<input checked="" type="checkbox"/>



### PPF Implementation Timeline:

March 2018	November 2018	April 2019	September 2019	January 2020	September 2020	December 2020
PPF Proposal Submission	PPF Approval	Signing Grant Support Agreement	Start of FS study	Start of ESIA	End of FS	End of ESIA End of PPF Implementation

# Potential Collaboration





# Thank you.



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(Persero)