

Mobilizing Clean Energy Finance and Investment to Support Energy Transition

Experiences in Financing Clean Energy Projects in Indonesia

PT Sarana Multi Infrastruktur (Persero)

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01. About PT SMI

02. Sustainable Finance in PT SMI

03. Challenges in Clean Energy Financing in Indonesia

04. SDG Indonesia One Platform



“Catalyst in Accelerating Infrastructure Development”



Non-Bank Financial Institution for Infrastructure Financing,
100% owned by Government of Republic of Indonesia through Ministry of Finance

Business Pillars & Strategic Partnership

Innovative, Unique & Flexible Financing Products
in “closing the gap” and as complementary to other financing

- Senior Loan,
- Subordinate/ Mezzanine,
- Equity,
- Municipal Finance,
- Sustainable Financing,
- Sharia Financing

Advisory & Project Development as enabler for infrastructure investment

- Financial/Transaction Advisory, Financing Arranger,
- PPP Development, Technical Assistance, *Capacity Building*,
- Renewable Energy Project Development, Geothermal Fund Management

Strategic Partners for domestic and international institutions in accelerating infrastructure development in Indonesia

- Ministries/Governmental Offices, Municipalities
- Private / State Owned Entities
- FI/Banks/Private Equity, Multilateral/Bilateral, Sovereign Wealth Fund
- Capital Market, Institutional Investors (Pension Fund, Insurance, Social Security Funds, Hajj Funds, etc)

Eligible Sectors



Performance

by April 2020

AAA/Stable
National Rating

Highest rating for local company

BBB/Stable
International Rating

Similar with sovereign rating

USD **5.1** billion

Total Asset

USD **2.44** billion

Total Equity

USD **44.94** billion

Total Project Value

22.32 times

Multiplier effect
To paid up capital

“unqualified opinion”

FS opinion for 10 consecutive years

Clean Energy Portfolio in PT SMI

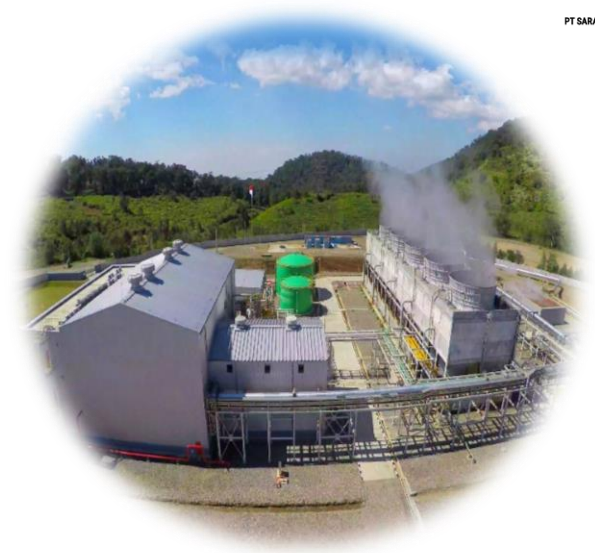
PT SMI has demonstrated a commitment in renewable energy through financing for at least 10 projects with installed capacity more ~**400 MW** (4 financial close in 2019); with **total financing commitment** more than **2 Trillion IDR**; mobilizing financing to contribute towards **climate change mitigation**



Portfolio signing 2019

No	Remarks	No	Remarks
1	PT Cipta Multi Listrik Nasional - PLTBm Deli Serdang 9.9 MW	6	PT Geo Dipa Energi – PLTP Dieng Small-scale 10.0 MW
2	PT Brantas Cakrawala Energi – PLTM Sako, Pesisir Sel 6.0 MW	7	PT Merauke Narada Energi – PLTBm Merauke 3.50 MW
3	PT Selo Kencana Energi – PLTM Lb. Gadang, Solok 8.0 MW	8	PT Brantas Hidro Energi – PLTM Padang Guci 2 – 2x3.5 MW
4	PT Kerinci Merangin Hydro – PLTA Kerinci 350 MW [Sindikasi]	9	PT Bangun Tirta – PLTA Air Putih – 21 MW [DPI]
5	PT Mega Hydro Energi – PLTM Tunggang, Bengkulu 9.9 MW	10	PTPN – PLTBm Situbondo dan Lumajang [DPI]

Example of Clean Energy Projects Financed by PT SMI



Project	PLTBm Wapeko, Merauke
Capacity	3.5 MW
Commitment	60 billion IDR
Financing Scheme	<i>Project finance</i>
Tenor	8.5 years
Key Factors	<ul style="list-style-type: none"> ✓ All of project's asset are guaranteed ✓ PPA take-or-pay guaranteed ✓ Sponsor Capacity ✓ Sufficient study and feedstock contract
Milestone	Comissioning

Project	PLTM Lubuk Gadang, Solok Selatan
Capacity	8 MW
Commitment	155.5 billion IDR
Financing Scheme	<i>Project finance</i>
Tenor	10 years
Key Factors	<ul style="list-style-type: none"> ✓ All of project's asset are guaranteed ✓ PPA take-or-pay guaranteed ✓ Sponsor Capacity ✓ Robust mini hydro technology
Milestone	<ul style="list-style-type: none"> ✓ Operational ✓ Repayment

Project	PLTP Dieng Small Scale, Central Java
Capacity	10 MW
Commitment	USD 17.5 million
Financing Scheme	<i>Corporate Finance</i>
Fiduciary	<ul style="list-style-type: none"> • Project asset • Machinery/tools fiduciary • Electricity bill to PT PLN • Account fiduciary
Schedule (tentative)	<ul style="list-style-type: none"> • Construction in Q4 2019 • COD in Q1-Q2 2021

PT SMI ESS Architecture



PT SMI Green Bond Issuance

The first Indonesian corporate that issues Green Bond

Nominal
IDR500 billion
Green Bond Program
with total facility IDR3 trillion

100%
to finance
Green Projects

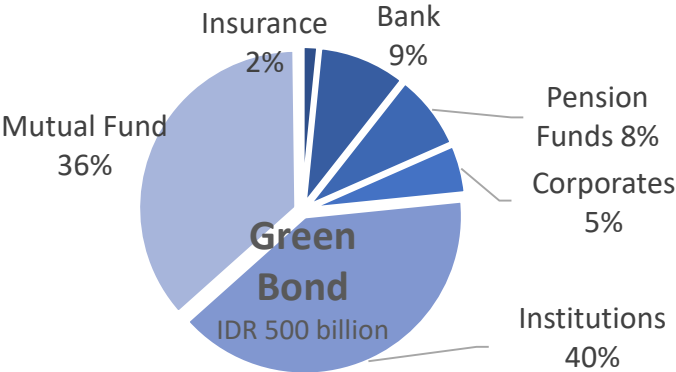
1. Renewable Energy
2. Energy Efficiency
3. Pollution Management and Mitigation
4. Sustainable natural resources and land use.
5. Clean Transportation
6. Sustainable Waste and Water Management.

Green Bond Structure

	Seri A 3 years	Seri B 5 years
Total	IDR 251.5 billion	IDR 248.5 billion
Coupon	7.55%	7.80%
Risk Premium*	47 bps	62 bps

*) above Government bonds with the same tenor

Green Bond Investors** of PT SMI



**) Investor: Asing (22%) vs Domestik (78%)

Mandatory Standards



POJK No. 60/POJK.04/2017
about Green Bond Issuance

Additional Standards




Second Opinion:
CICERO
Medium Green

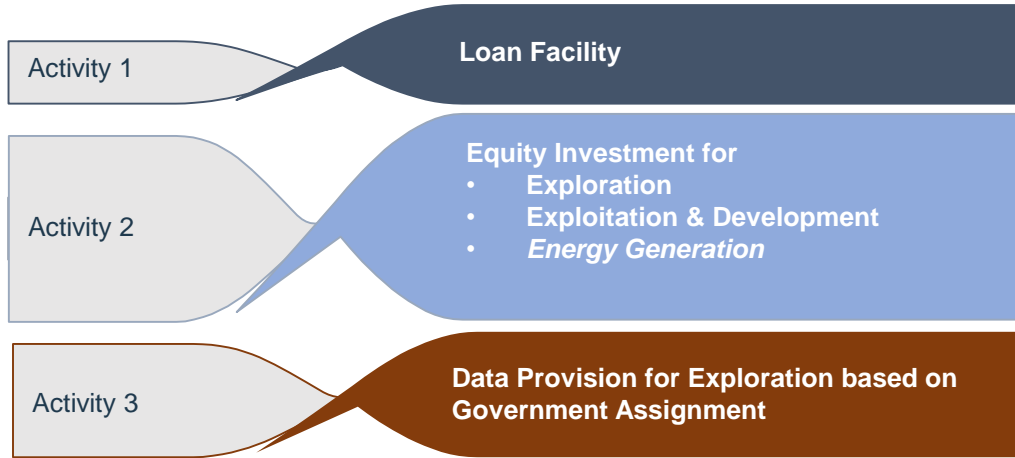
The first corporate that issues
Green Bond Impact Report
in Indonesia



PT SMI Geothermal Financing

1. Geothermal Fund (PISP)

Geothermal Fund Development – USD 250 mn



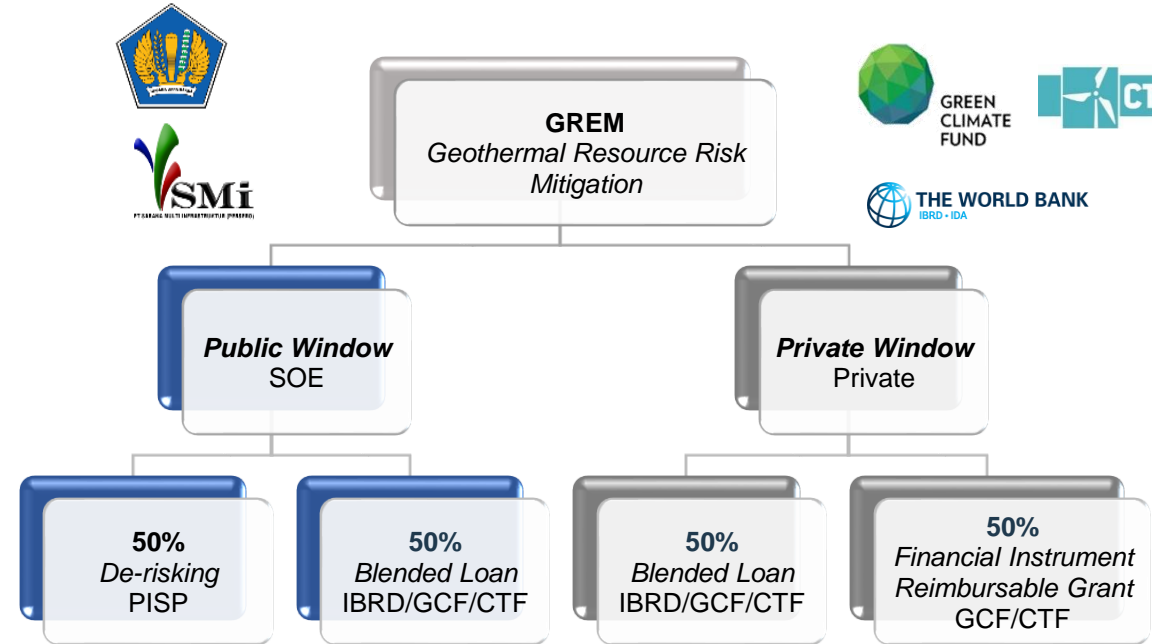
2. Geothermal Energy Upstream Development Project (“GEUDP”)

Government Exploration Drilling Program – Revolving Fund of USD 95mn



3. Geothermal Resource Risk Mitigation (“GREM”)

SOE and Private Sector Exploration Drilling Fund – USD 655mn



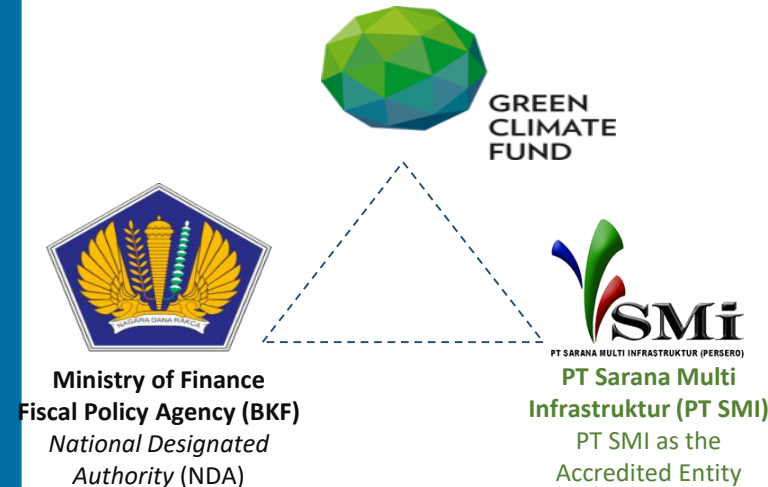
Geothermal Exploration Drilling



PT SMI and Climate Fund Activities



PT SMI as the Green Climate Fund Accredited Entity



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

Eligible Sectors:

Climate Change Mitigation:

- Energy generation and access
- Transport
- Forest and land use
- Building, cities, industries and appliances

Climate Change Adaptation:

- Health, food and water security
- Livelihoods of people and communities
- Ecosystems and ecosystems services
- Infrastructure and built environment

Facility	Project Preparation Facility (PPF)	Funding Proposal (FP)
Instrument	Grant	Grant, concessional loan
Function	Project preparation	Project implementation
Amount	Max. USD 1.5 million/project	Max. total project cost USD 50 million
Description	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

TA Partnership with Climate Foundation



SDG Partner

European Climate Foundation

Sector

Clean Energy

Beneficiaries

PT. SMI

Supports to PT SMI

- 1. A partnership** facilitate identification, preparation and/or co-financing of projects, targeting early stage investments
TA for Clean Energy Investment Advisory: technical assistance to increase business development and origination of projects by PT SMI.
- 2. TA for Clean Energy Risk Management:** technical assistance for development of updated risk assessment management methodologies for clean energy projects, in cooperation with the Risk Management Division of PT SMI.
- 3. TA for Financial De-risking Instruments:** technical assistance for development of de-risking instruments for clean energy project financing.



CHALLENGES

Limited resources and capability of the public sector in budgeting, planning, and preparation

Lack of bankable projects due to inadequate preparation process (including risk allocation framework)



Constraints caused by:

- Tariff policy
- Contract / business policies and governance
- Lack of equity from Project Sponsor



PT SMI ROLES



Offer consulting and project development services to improve the quality of infrastructure projects





Use of different and innovative funding strategies



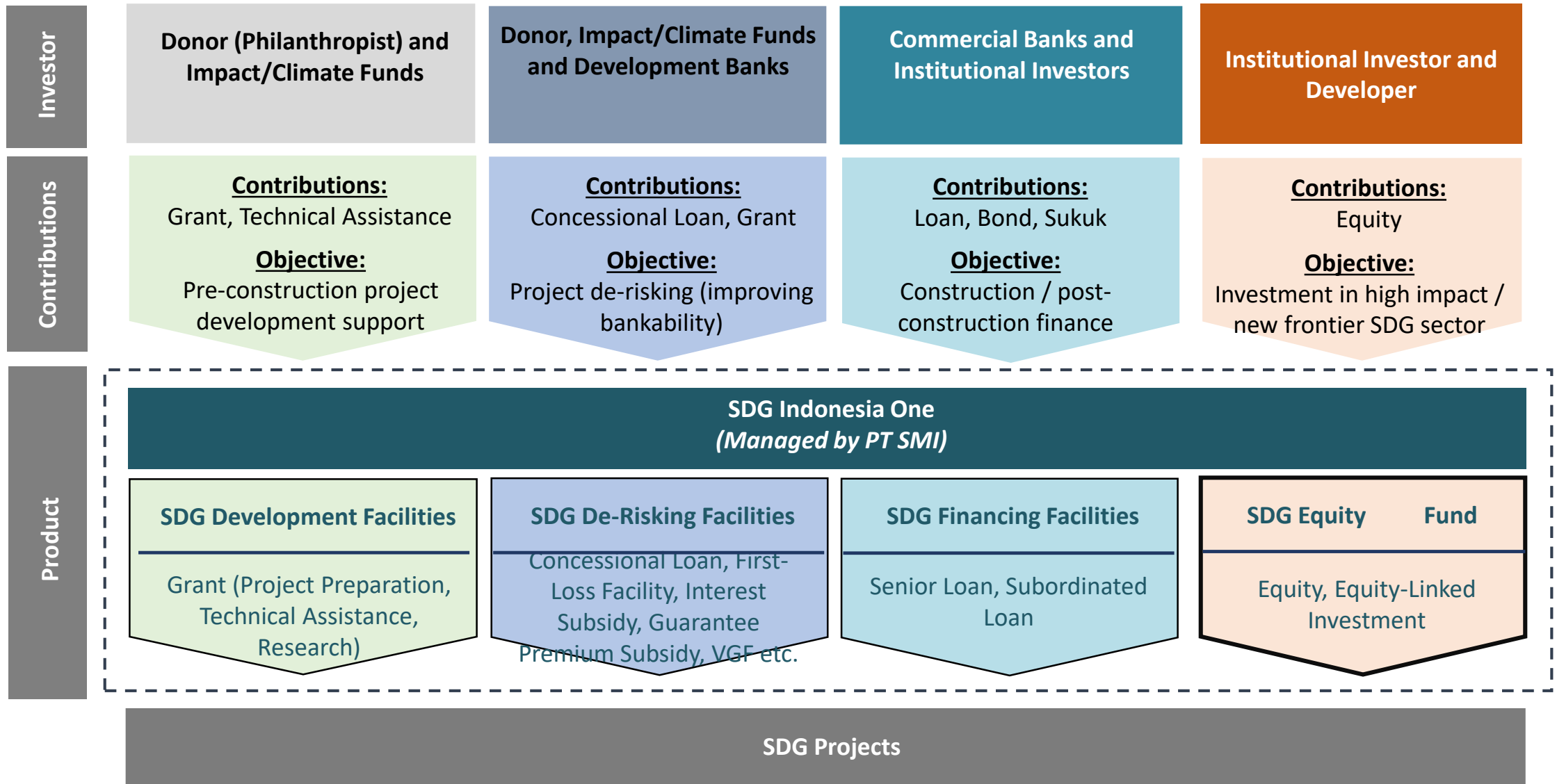
Synergy and collaboration with relevant stakeholders and strategic partners

Challenges in Clean Energy Financing in Indonesia (2)

No	Key Issue	Remarks
1	Readiness of clean energy projects 	<ul style="list-style-type: none"> ✓ The MEMR Regulation 50/2017 jo. 4/2020 related to renewable energy tariff is somewhat challenging towards the investment environment, many investors are considering to wait and see. ✓ Differences of PPA/PJBTL in renewable energy projects causing creditor's concerns in project bankability ✓ Project documentations still required improvement – incl FS and DED/FEED ✓ Imposing the new standard on ESIA, Procurement, Gender as required by the international financiers still take times ✓ Licensing and Land Acquisition still become dominant factors
2	Sponsor capacity, project, and size for financing 	<ul style="list-style-type: none"> ✓ Renewable energy projects <10 MW is dominated by small and medium scale developers which is associated with the capacity of sponsor/investor. ✓ Clean energy projects are mainly using project finance scheme with small financing limit (mainly below Rp 250 billion IDR) which cause the number of loan facility of these projects are limited (dependent to project readiness and progress). ✓ Lack of derisking instruments available, e.g: guarantee (first loss mechanism), viability support, interest subsidy,etc

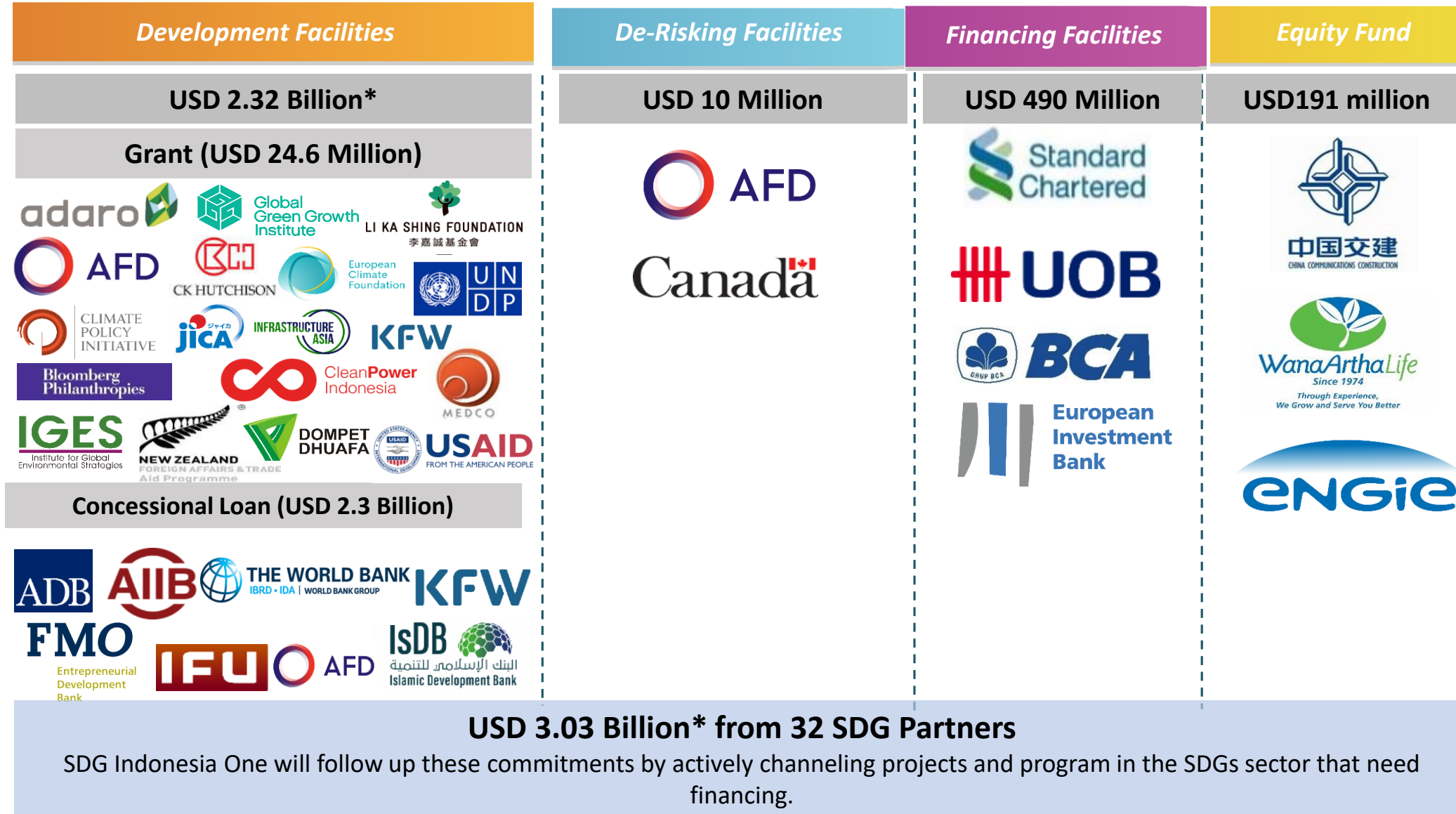
Blended Finance Platform:

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



SDG Indonesia One Partners

(Status as of June 2020)



*Value will vary subject to exchange rate assumption

SDG Indonesia One Highlight

As of 31 May 2020

SDG Indonesia One Commitment



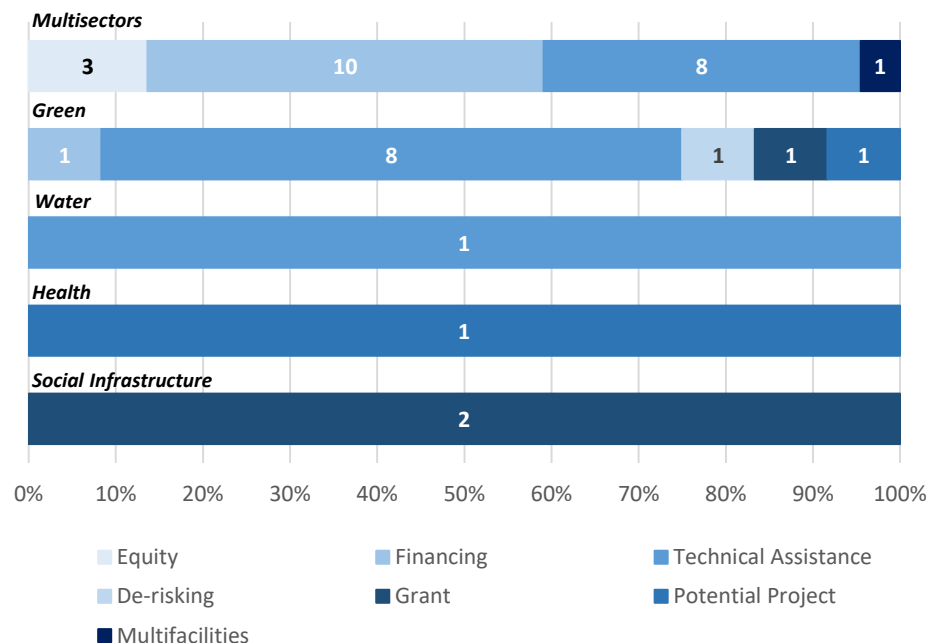
32



USD
3.03
Billion

SDG Indonesia One Commitment

Based on sector and no of program



SDG Indonesia One Achievements



- 1 Rehabilitation and Reconstruction Program after Natural Disaster In Central Sulawesi
- 2 RIDF Financing for RSUD & RSK Mata North Sulawesi
- 3 RIDF Financing for Traditional Market Banjar Baru City
- 4 Developing Project Concept Solar PV Rooftop in West Java
- 5 Technical Assistance FS PJU ("public street lighting") Project Bengkulu
- 6 Technical Assistance FS W-t-E Plant Putri Cempo Solo



Activities SDG Center with University = 3



Activities with SIO Partners = 10

SDG Indonesia One Impacts



Renewable Energy



- Study of **5 MWp** dan **7.48 MW** for the renewable energy power plants with the potential saving of ± 1.5 M / year;
- Emissions reduction potential ± 5.867 tCO₂e p/ year



Waste management potential ± 365.000 ton / year



2.000 families get access to clean water



Education

4 schools with **31** classes for **716** students



Perumahan Umum



101 temporary shelters & **218** permanent shelters for **1.430** families (**5.780** people)



550 beds and total area of hospital ± 47.535 m²



Social Infrastructures



An increase in market area **15.400** m² and **172** kiosk; **1** worship place

*) Based on USD currency exchange as of 31 May 2020

SDG Indonesia One (Development Facilities): Capacity Building and Research Collaboration

Research for De-Risking Instruments



Capacity Building for Energy Efficiency



Research on Guarantee Instrument Analysis



Guarantee Instruments Analysis

Randy Rakhmadi
Melisa Sudirman

SDG Partners	Global Green Growth Institute ("GGGI")
Beneficiaries	PT SMI
Program	<ul style="list-style-type: none"> Partnership Technical Assistance Grant of USD 200,000 for technical and research assistance to project proponents Study of available de-risking instruments in Indonesia

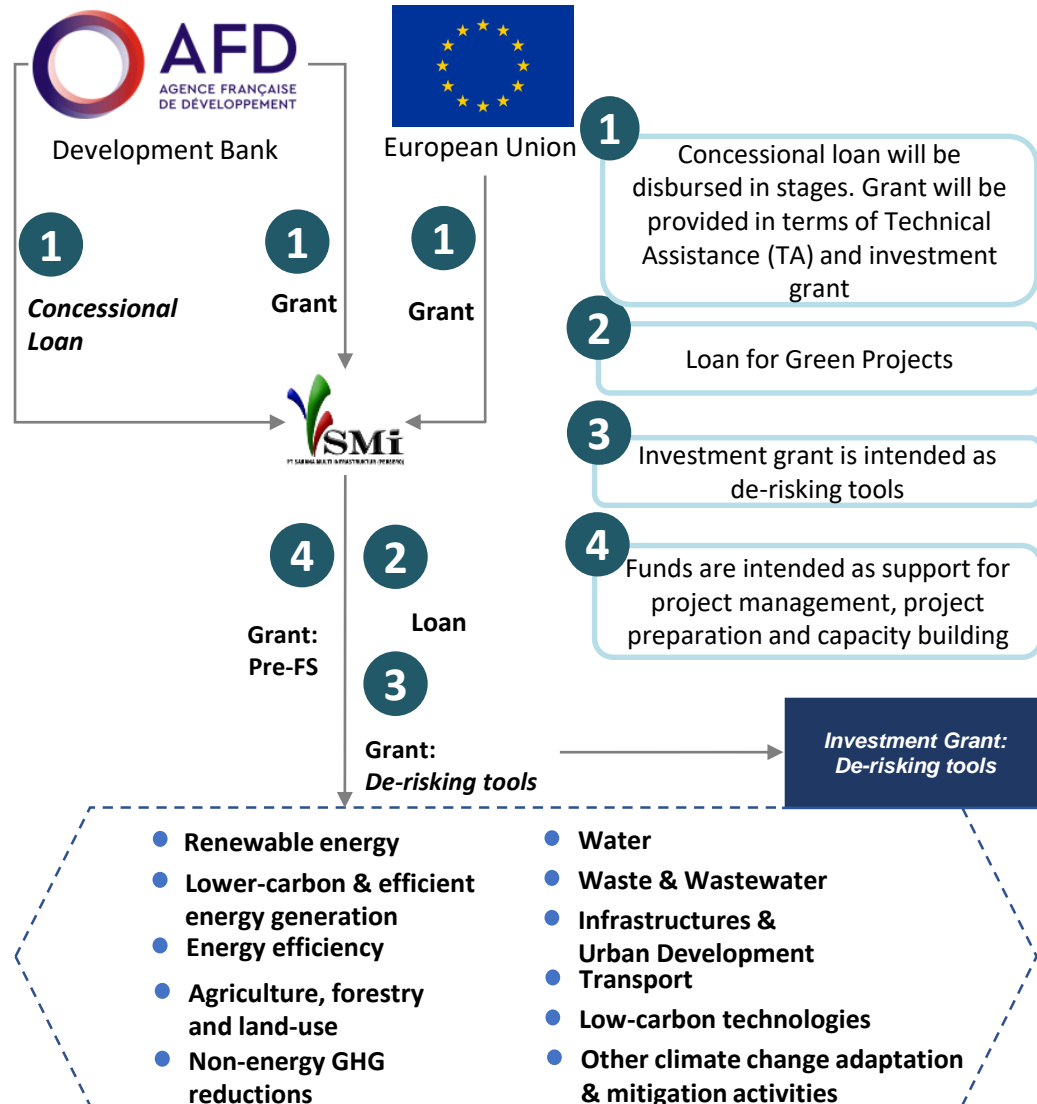
SDG Partners	Climate Policy Initiatives (Supported by KIGALI Cooling Efficiency Program and the David and Lucile Packard Foundation)
Beneficiaries	<ul style="list-style-type: none"> Ministry of Energy and Mineral Resources (MEMR) PT SMI
Topics	<ul style="list-style-type: none"> Energy Efficiency Market in Indonesia Key Technologies in Energy Efficiency Energy Efficiency Audit Level Monitoring & verification (M&V) Risk Mitigation

SDG Partners	Climate Policy Initiatives ("CPI")
Beneficiaries	PT SMI
Program	CPI's Technical assistance to PT SMI covered under a Cooperation Agreement on "Climate Change & Clean Energy Projects" to help accelerate Renewable Energy ("RE") development in Indonesia
Summary Findings	<p>Guarantee instrument as a de-risking instrument which can address investment barriers</p> <ul style="list-style-type: none"> ✓ Address security gap ✓ Improve risk-return profile of an RE project ✓ Increase access to long-term funding from local banks resulting from improved risk profile <p>Potential challenges:</p> <ul style="list-style-type: none"> ✓ Competition with shareholder/corporate guarantee ✓ "First demand" feature ✓ Limited involvement in recovery proceedings ✓ Limited awareness about guarantee instruments

SDG Indonesia One (De-risking Facilities):

AFD Financing Facility to Support SDG Indonesia One

Collaborative Structure and Schemes



Details of the Program



Solar Panel Project

Biomass Project

6 CLEAN WATER AND SANITATION

7 AFFORDABLE AND CLEAN ENERGY

8 DECENT WORK AND ECONOMIC GROWTH

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

11 SUSTAINABLE CITIES AND COMMUNITIES

13 CLIMATE ACTION

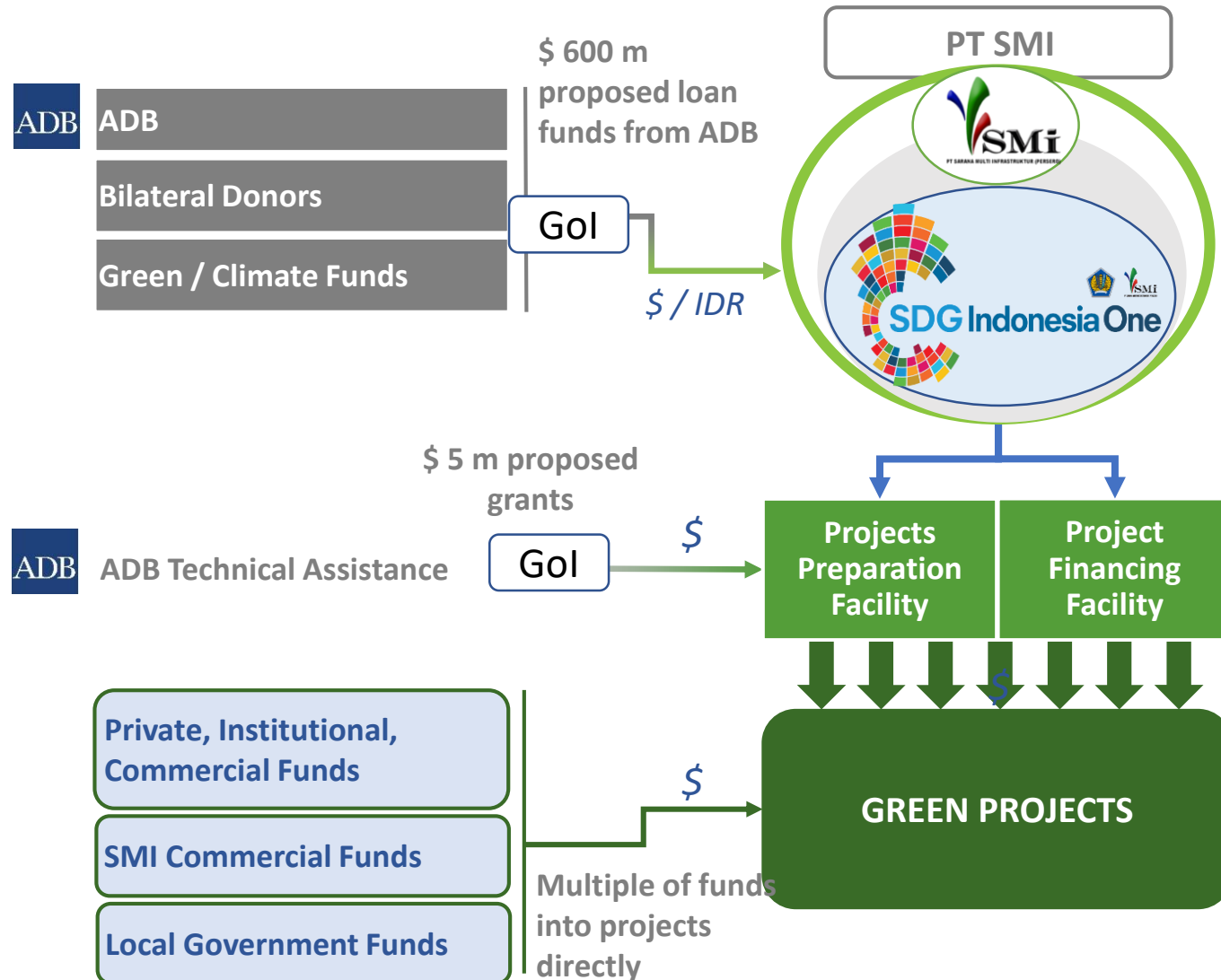
17 PARTNERSHIPS FOR THE GOALS

Credit Facility	US\$ 150 million
Maturity	Up to 7 years including grace period
Grace Period	Up to 3 years on principal repayments only
Program Scope	<ul style="list-style-type: none"> • To finance low carbon and climate resilient projects • Eligible projects including adaptation and mitigation activities with extension to health & education sectors up to max. 30% of total amount of the credit facility • Technical assistance & grant: <ul style="list-style-type: none"> ○ AFD: EUR 600,000 for preparation & implementation of AFD contributions to SIO Development, De-Risking and Financing Facilities ○ EU: EUR 3 million for technical assistance & EUR 2 million as an investment grant for de-risking activities

SDG Indonesia One (De-risking Facilities):

ADB Green Finance Facility (GFF)*

Collaborative Structure and Schemes



Details of the Program



Waste to Energy

Mini Hydro



To Support Green Projects

Credit Facility	Max. of US\$ 600 million
Grant	US\$ 5 million for technical assistance
Modality	Multi-tranche Financing Facility (MFF)
Products	<ul style="list-style-type: none"> • Debt • Equity investment • Credit enhancements
Eligible Sectors (Green Projects)	<ul style="list-style-type: none"> • Energy • Energy Efficiency • Transport • Water • Waste Management • Land-use • Adaptation infrastructure

*Under development

Thank you,



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