



KEMENTERIAN KEUANGAN
REPUBLIK INDONESIA



Energy Transition Policy In Indonesia

SUAHASIL NAZARA
Vice Minister of Finance
7 December 2020



Courtesy: Shutterstock/lassedesign

Outline

- **Recent Economic Updates**
- **Overview On The Effort To Reduce Fossil Fuel Subsidy**
- **The Importance of Renewable Energy Development**
- **Fiscal Support for Renewable Energy Development**
- **The Way Forwards**



American Solar Energy Society



KEMENTERIAN KEUANGAN
REPUBLIK INDONESIA



RECENT ECONOMIC UPDATES





COVID-19 PANDEMIC IS STILL ESCALATING GLOBALLY

Daily death case keeps on increasing but recovery rate has also been improving.

GLOBAL CUMULATIVE CASES

67.00 mil

Highest cumulative cases:

1. U.S. 14.65 mil
2. India 9.14 mil
3. Brazil 6.07 mil
4. France 2.14 mil
5. Russia 2.09 mil
- ...
16. South Africa 767K
- ...
19. Chile 540K
- 21. Indonesia 569K**
- ...
24. Bangladesh 447K
26. Philippines 418K

J F M A M J J A S O

GLOBAL DEATHS

1.537 mil

Fatality Rate 2.4%

- Fatality rate in some countries:*
- Mexico 9.8%
 - China 5.4%
 - Peru 3.7%
 - U.K. 3.6%
 - Italy 3.5%
 - Australia 3.3%
 - Indonesia 3.2%**
 - Brazil 2.8%
 - South Africa 2.7%
 - Philippines 1.9%

J F M A M J J A S O

GLOBAL RECOVERY

46.38 mil

Recovery Rate 69%

- Recovery rate in some countries:*
- China 94%
 - India 94%
 - Philippines 92%
 - Vietnam 87%
 - Indonesia 84%**
 - Bangladesh 81%
 - Russia 77%
 - Mexico 75%
 - Malaysia 76%
 - U.S. 59%

J F M A M J J A S O

Covid-19 pandemic forms a new pattern of with new waves that hit various countries → **daily cases rise significantly up to more than 650 thousands per day.**

- **Second waves** are happening in Europe.
- Increasing cases in Japan and South Korea indicate a **third wave.**

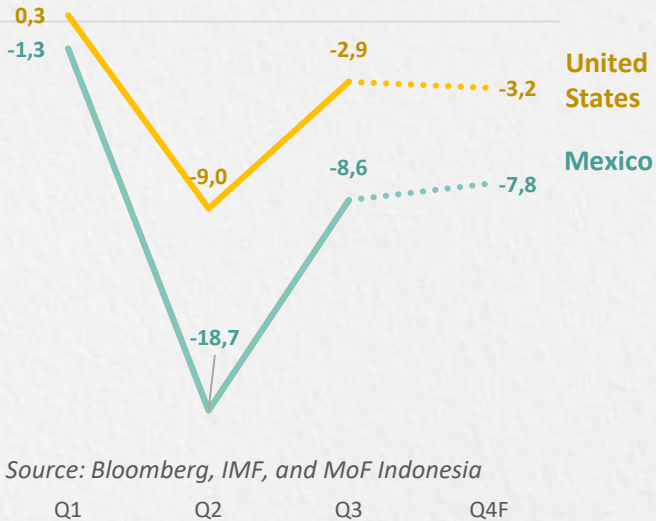




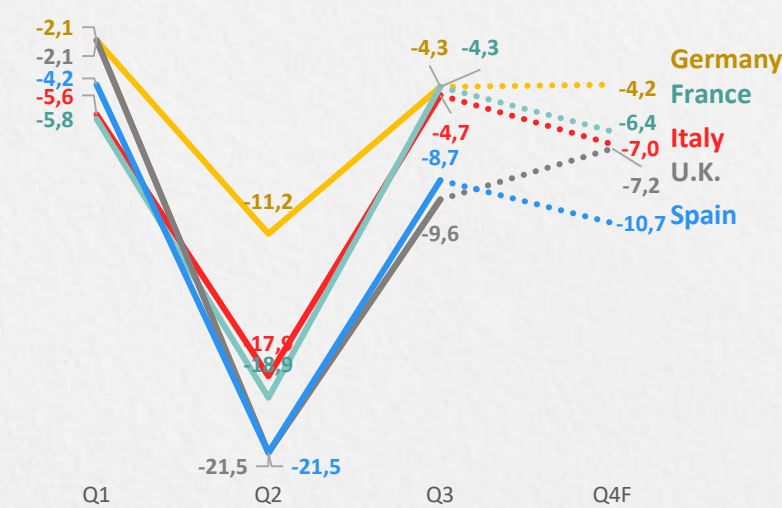
Q3-2020 WAS A TURNING POINT THAT SHOWED ECONOMIC IMPROVEMENT IN VARIOUS COUNTRIES

Quarterly GDP Growth in 2020 (% , yoy)

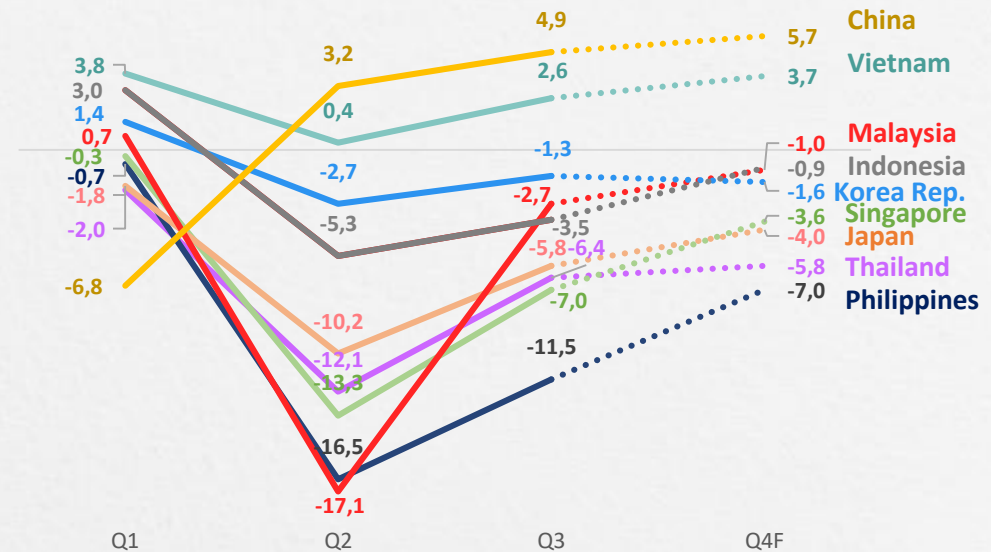
America



Europe



Asia



Source: Bloomberg, IMF, and MoF Indonesia

Global Projection (% , yoy)

	2020F	2021F
IMF	-4.4	5.2
World Bank	-5.2	4.2
OECD	-4,5	5.0

GDP Growth 2019 - 2021 by IMF (% , yoy)

Country	2019	2020F	2021F	Country	2019	2020F	2021F	Country	2019	2020F	2021F
U.S.	2.2	-4.3	3.1	U.K.	1.5	-9.8	5.9	Indonesia*	5.0	-1.7 to -0.6	5.0
Mexico	-0.3	-9.0	3.5	Spain	2.0	-12.8	7.2	Korea Rep.	2.0	-1.9	2.9
Germany	0.6	-6.0	4.2	China	6.1	1.9	8.2	Singapore	0.7	-6.0	5.0
France	1.5	-9.8	6.0	Vietnam	7.0	1.6	6.7	Japan	0.7	-5.3	2.3
Italy	0.3	-10.6	5.2	Malaysia	4.3	-6.0	7.8	Thailand	2.4	-7.1	4.0
								Philippines	6.0	-8.3	7.4

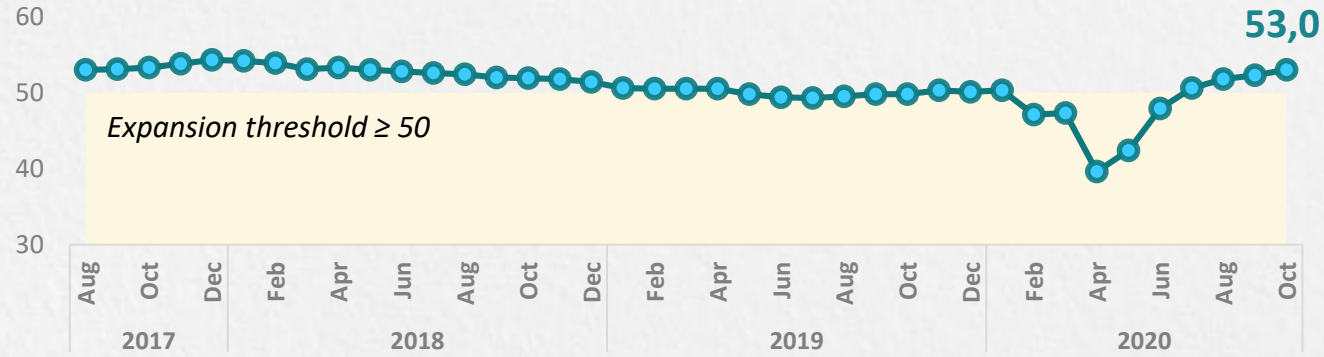
*MoF estimation



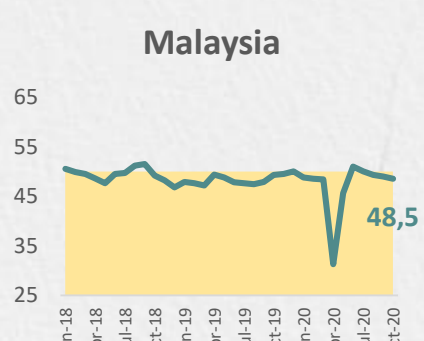
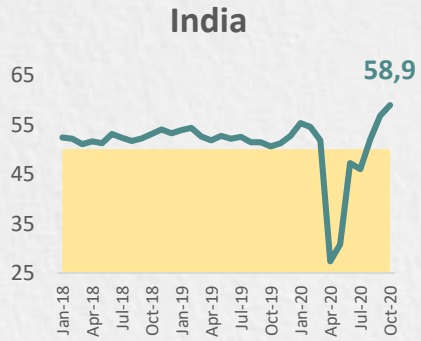
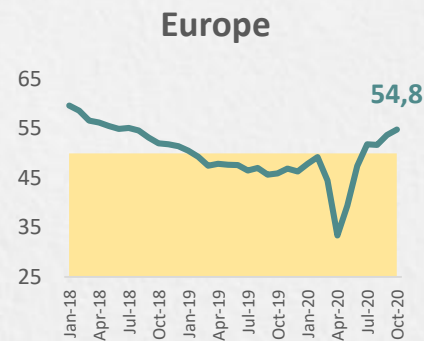
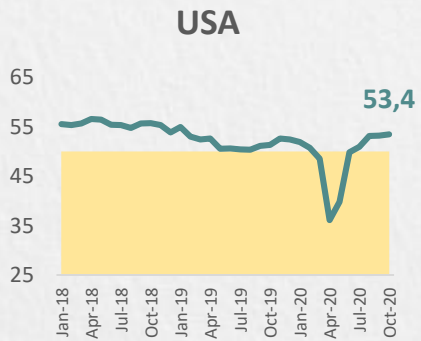
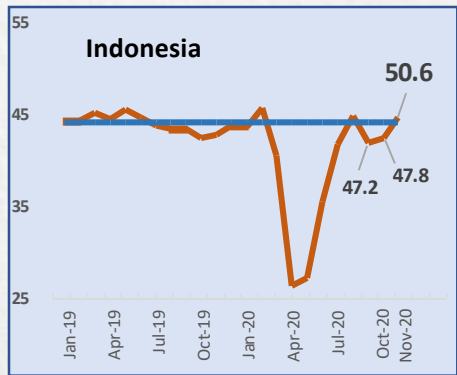
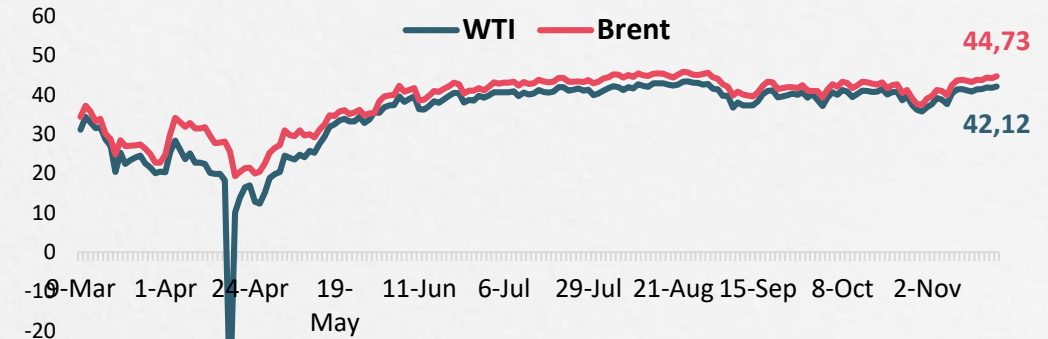
IMPROVING ECONOMIC ACTIVITY CAN BE SEEN FROM VARIOUS ECONOMIC INDICATORS

Increasing trends are happening in manufacture activities and oil prices

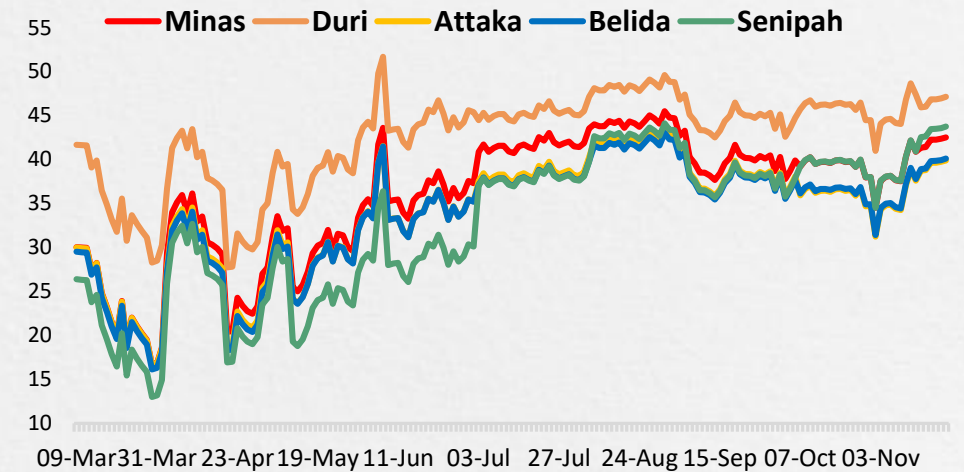
Global PMI Manufacture & Several Countries



Global Oil Price Movement (US\$ per barrel)



Reference Price for ICP (US\$ per barrel)



Source: Bloomberg & IHS Markit

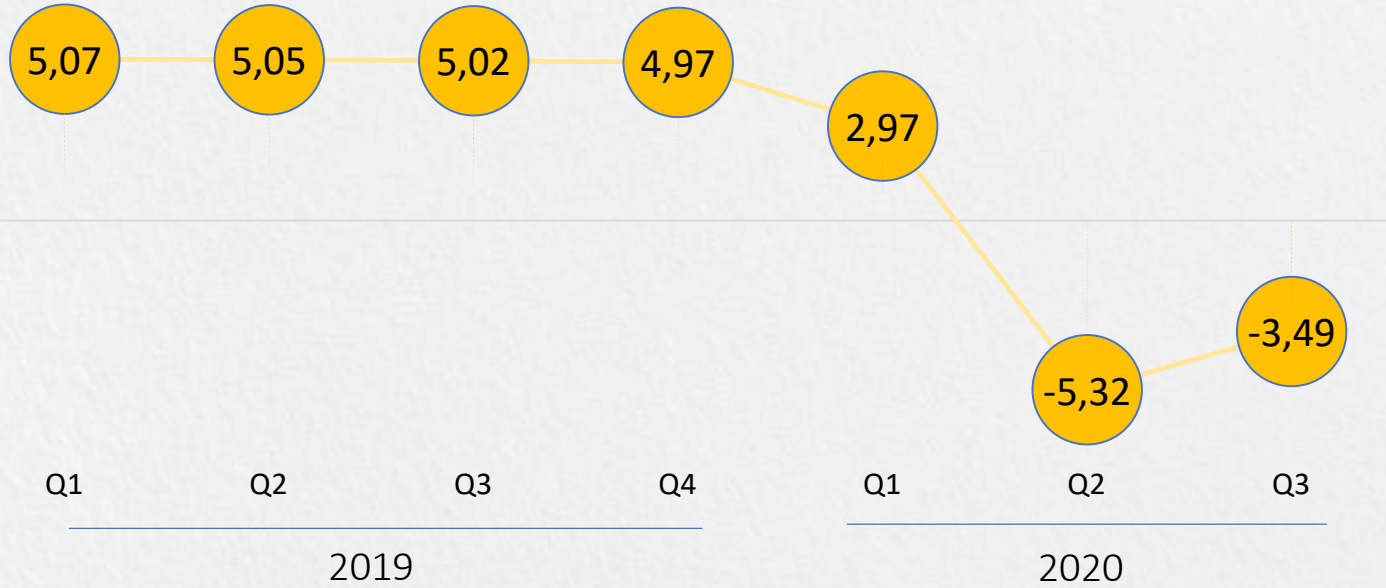


Q3-2020 GROWTH: A TURNING POINT

Indonesia Economy Has Improved Supported by Strong Government Consumption



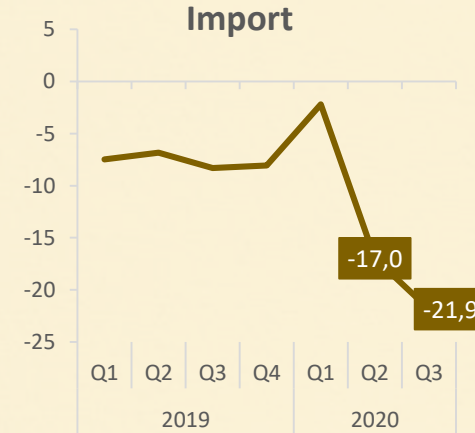
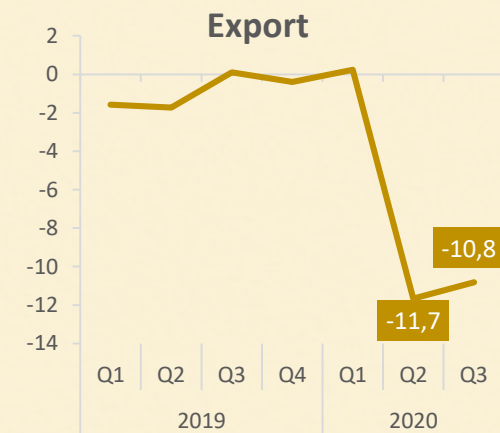
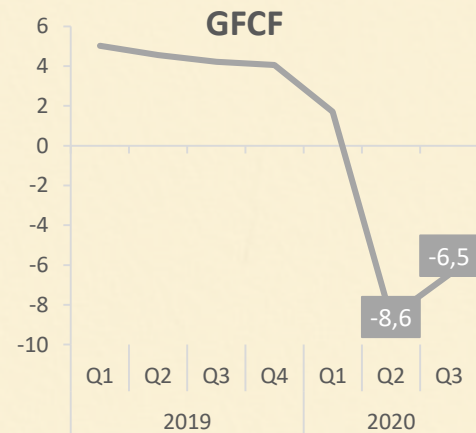
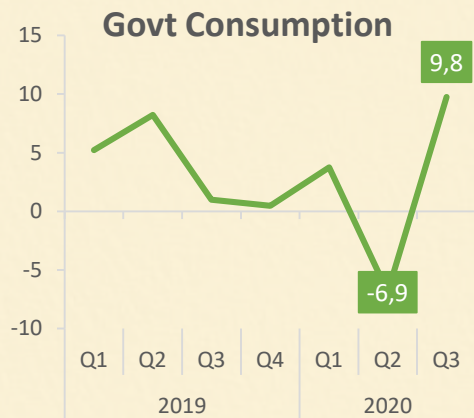
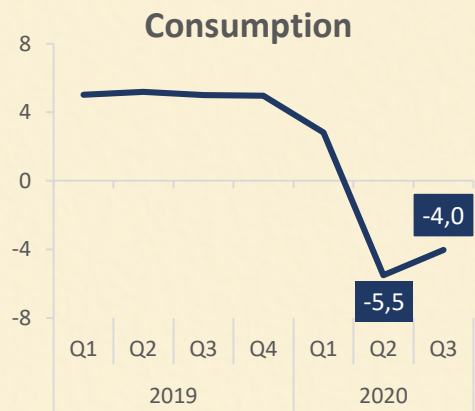
GDP growth (% ,yoy)



Indonesia's Growth Outlook 2020 (% ,yoy)

Institutions	Outlook
MoF	-1.7 to -0.6
OECD	-3.3
IMF	-1.5
World Bank	-2.0 to -1.6

GDP by Expenditure (% ,yoy)





AS MANDATED BY LAW 2/2020, GOVERNMENT IS GRANTED A FLEXIBLE FISCAL POLICY

As a Response for Handling of COVID-19 Pandemic & National Economic Recovery

PERPPU 1/2020 (31 March 2020) UU 2/2020 (18 May 2020)

- The legal basis for the government to flexibly adjust the fiscal policies, including budget and its deficit.
- Allowing the government to continually refocusing and reallocation budget without parliament approval process
- The state budget deficit has to be returned to a maximum of 3% in 2023

Perpres No. 54/2020

With extraordinary and very urgent conditions, the State Budget deficit policy exceeds the 3% limit, through the enactment of Perpu No.1 / 2020 (becoming Law No.2 / 2020). Prioritized on health and social security spending

Perpres No. 72/2020

Responding to the development needs of the Covid-19 pandemic handling and to maintain the economy and financial system stability, including running the National Economic Recovery Program (PEN)

	Initial Budget UU No. 20/2019	Perpres No. 54/2020	Perpres No. 72/2020
Budget Deficit to GDP	1.76%	5.07%	6.34%
Budget Deficit	IDR307.2 tn (~USD 21.0)	IDR852.9 tn (~USD 58.2 bn)	IDR1,039.2 tn (~USD 70.9 bn)
2020 Financing Need	IDR 741.8 tn (~USD 50.6 bn)	IDR 1,439.8 (~USD98.3 bn)	IDR 1,645.3 (~USD112.3 bn)



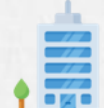



PERPU 1/2020 is emergency law issued by government to respond the COVID-19 outbreak



COMPREHENSIVE STIMULUS PROGRAM TO SAVE LIVES & ECONOMY



Program Pemulihan Ekonomi Nasional	Rp695,2 T (4.2% of GDP)	Realization (as of Nov 25) 61.1%
---	--------------------------------	--

 Rp97,90 T Realization 41.2%	 Rp233,69 T Realization 88.9%	 Rp65,97 T Realization 54.9%	 Rp115,82 T Realization 85.3%	 Rp61,22 T Realization 3.3%	 Rp120,61 T Realization 38.5%
Health	Social Protection	Sectoral & Regional Gov't	SMEs	Corporate Financing	Business Incentives
<p>To address the pandemic by ensuring the quality of treatment and accelerating the containment effort</p> <ul style="list-style-type: none"> ■ Expenditure for Covid-19 Handling ■ Incentives for Paramedic ■ Death Compensation ■ National Health Insurance Fee ■ Covid-19 Task Force ■ Tax Incentives in Health 	<p>To protect the poor and the vulnerable as the most impacted group during pandemic:</p> <ul style="list-style-type: none"> ■ Conditional Cash Transfer Program ■ Non Cash Food Assistance ■ Social Assistance ■ Pre-Working (unemployment benefit) ■ Electricity Discount ■ Cash Transfer through Village Fund 	<p>To empower sectoral and regional governments in responding COVID-19 pandemic</p> <ul style="list-style-type: none"> ■ Line Ministries labor Intensive Program ■ Housing Incentives ■ Tourism ■ Regional Incentive Fund ■ Physical Special Allocation Fund ■ Regional Loan Facility 	<p>To maintain sustainability of MSME as critical part of economic recovery</p> <ul style="list-style-type: none"> ■ Interests Subsidy ■ Fund Placement ■ Guarantee Return ■ Working Capital Guarantee (Stop Loss) ■ Government-Borne Final Income Tax ■ Investment Financing to Cooperatives 	<p>To ensure the financing availability for economic recovery phase</p> <ul style="list-style-type: none"> ■ Labor Intensive-Fund Placement ■ State Equity Participation ■ Working Capital Investment Rp29.65T 	<p>To provide cushion for impacted businesses through for example fiscal incentive</p> <ul style="list-style-type: none"> ■ Government-Borne Income Tax; ■ Income Tax Exemption on Import ■ Tax Deduction VAT Return ■ Corporate IT Rate Reduction



OVERVIEW ON THE EFFORT TO REDUCE FOSSIL FUEL SUBSIDY



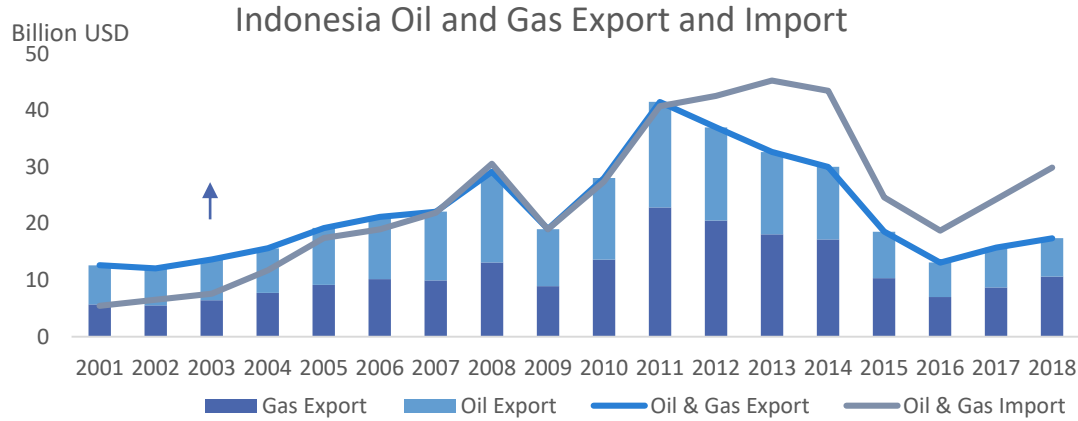


ENERGY SUBSIDY REFORM: RATIONALES BEHIND THE REFORM

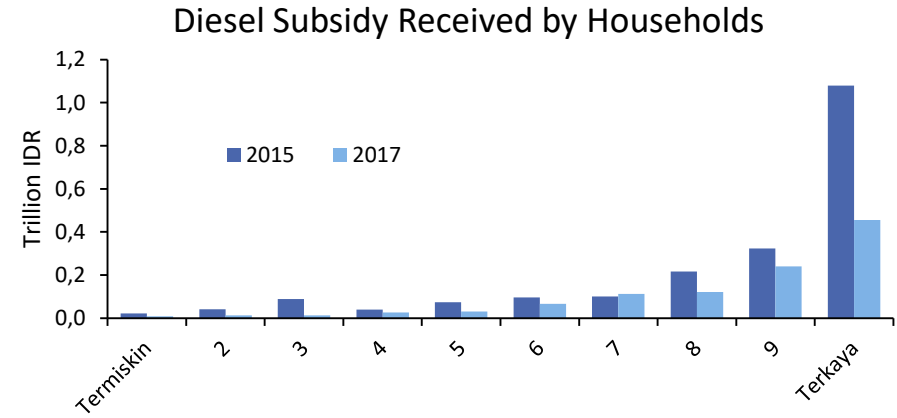


1. Indonesia transforms from exporter towards net oil importer

Source: Indonesian Bureau of Statistics



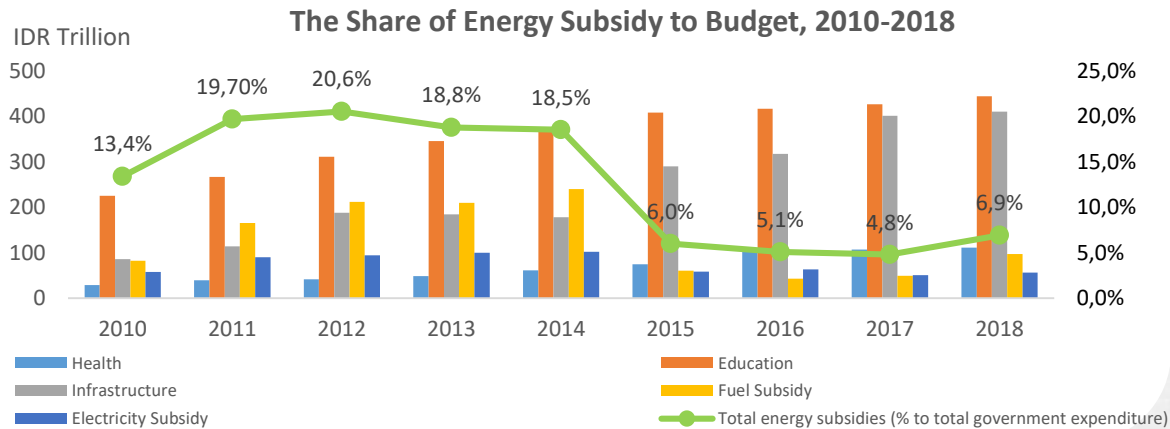
3. Energy subsidy was poorly targeted



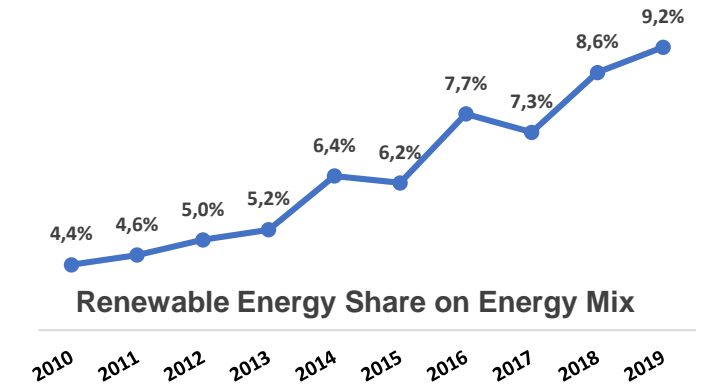
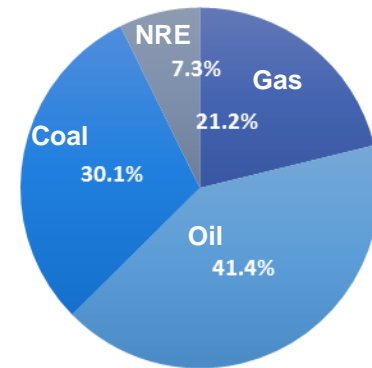
Source: SUSENAS, staff's calculation

2. Limited Fiscal Space, Energy subsidy has taken a big portion of the budget and taking away the productive spending

Source: Ministry of Finance



4. Energy subsidy becomes a disincentive for the development of renewable energy



Source: Ministry of EMR



HIGHLIGHTS ON INDONESIAN FOSSIL ENERGY SUBSIDY REFORM



1977

Indonesia **started subsidizing 7** types of fossil fuel

The type of fuel subsidy **was decrease into 5**

Indonesia **became net oil importer**

2005

Increase gasoline price by 80% and withdraw subsidies for industrial sector. Government gives unconditional cash transfer (BLT) to middle and lower society to compensate the price increase
Subsidy budget increased to US\$ 8 billion
Only 3 types of fuel subsidized by government (i.e. Gasoline (RON 88), Diesel, kerosene)

2013

Increase electricity tariff by 15% excluding 450VA and 900VA
Government gives improved BLT (BLSM) to middle and lower society to compensate the price increase

2010

Increase electricity tariff by 10% on July 2012
Converting public transportation from using gasoline to Compressed Natural Gas (CNG)

2007

Kerosene-to-LPG conversion program was initiated. This program managed to reduce 9 million KL kerosene consumption until 2014
2008 Encouraging the utilization of new and renewable energy, such as: palm oil, biomass, biogas; not only for fuel but also for electricity

2014

Reducing electricity subsidy and electricity tariff adjustment
Fuel Price increase in November

2015

Government **completely eliminated gasoline subsidies** and set fixed subsidies of IDR1,000 per liter for diesel, 12 Groups of consumer are no longer subsidized

2016

Fixed subsidies of IDR500 per liter for diesel

2017

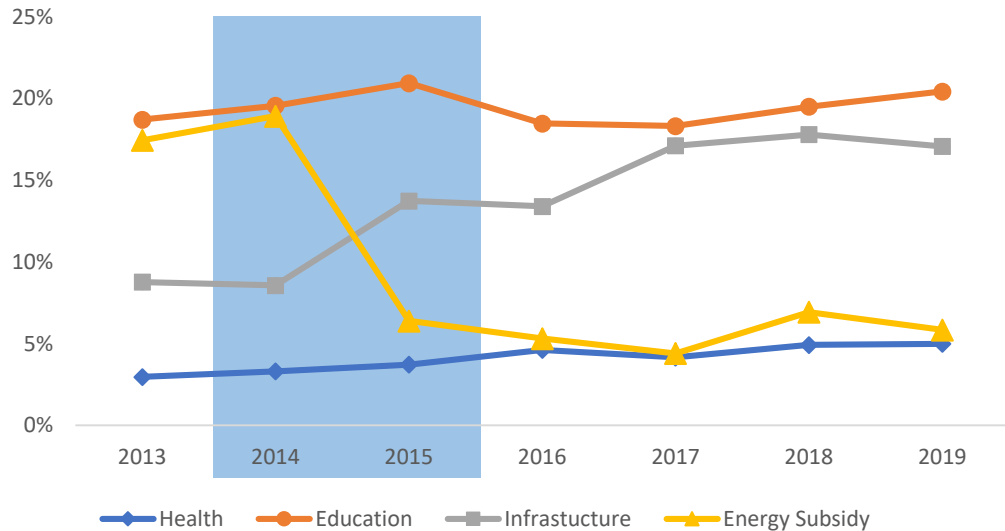
Electric Subsidy for HH powered 900 VA set only for the poor and vulnerable



IMPACTS OF THE REFORM

Fiscal impacts: more fiscal space for productive spending

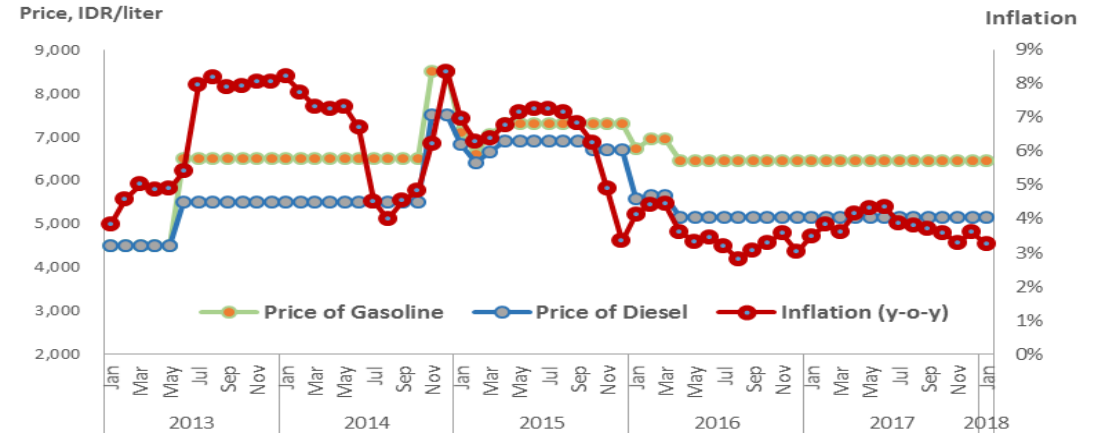
Percentage to State Budget



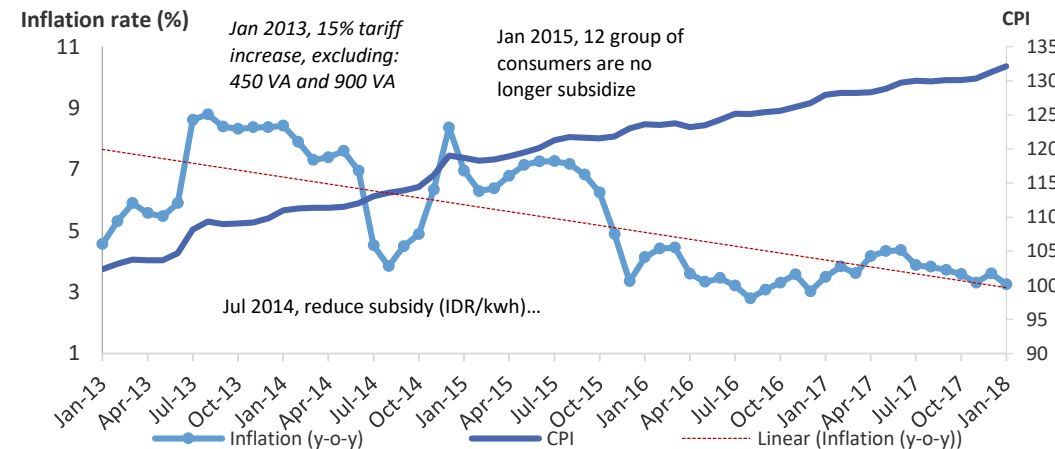
- Energy subsidy was mainly reallocated to infrastructure spending which significantly increased since 2015.
- The government continue the mandatory spending, which are 20% for Education (since 2009) and 5% for Health (since 2016).
- Efficient budget for subsidy expenditure would be beneficial for leveraging economic growth and alleviating poverty such as health, infrastructure, and social assistance.

Impacts on inflation: Reforms may create a short-term inflation impact, the GoI maintain the expected inflation steady low

Fuel Price and Inflation, 2013-18



Inflation and Electricity Subsidy Policies, 2013-18





THE IMPORTANCE OF RENEWABLE ENERGY DEVELOPMENT





INDONESIA ECONOMIC DEVELOPMENT

Indonesia wants to become a developed country, therefore needs to ensure sustainable economic growth and cope the global challenges, one of them is national energy sustainability



Vision On Indonesia 2045: Becomes A Developed Country



Infrastructure

Quality Infrastructure to support mobility & boost national development



Government Bureaucracy

Public service quality & business process improvement



Human Resources Quality

HR improvement on R&D, education, health, & social safety net system.



Spatial Planning

Good governance in spatial planning management with integrated system



Technology

Technology & innovation in supporting industry development



Economic & Finance Resources

Sound State Budget as a key modality for Indonesia 2045

Indonesia's economic growth is one of the most stable among other countries, supported with credible fiscal management & structural reforms. In ensuring sustainable growth and cope with the global challenges, the Government of Indonesia has strong **commitment facing global issues**, such as discourse on FED rates issue, trade wars, fluctuations in commodity prices, climate change, including to ensure our national energy sustainability.



ENERGY TRANSITION IS NEEDED TO MAINTAIN ENERGY SUSTAINABILITY AND LOWERING CO2 EMISSION, MAINLY BY PROMOTING RENEWABLE ENERGY



Indonesia commits to support CO2 reduction (Paris Agreement):

→ 29% in 2030 by its own effort

→ 41% in 2030 by International support

Indonesia Energy Transition is captured on the RUEN (National Energy Framework)

Renewables target is set at 23% in 2025, & 31% in 2050 to the national energy mix (PP No. 79/2014 on RUEN).

Emission reduction through renewable power plants is equal to 48.9 GW and 156.6 Mton CO₂e, required around IDR 1700 Trillion in funding (MEMR, 2018)

EMISSION REDUCTION TARGET (NDC)



FORESTRY
59,6%

497 Mton CO₂e

ENERGY

37,7%

314 Mton CO₂e



WASTE

1,3%

1 Mton CO₂e



AGRICULTURE

1,1%

9 Mton CO₂e



IPPU

0,3%

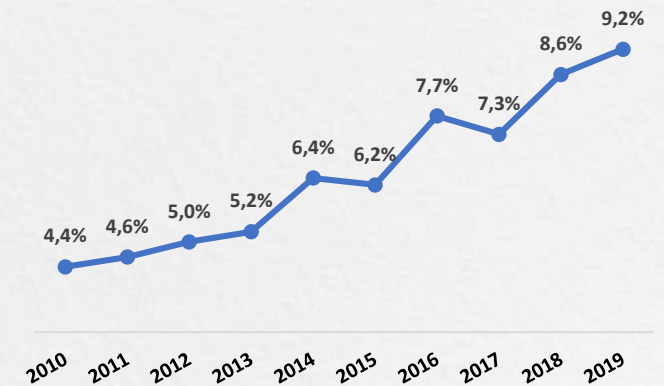
2,75 Mton CO₂e



Indonesia has abundant resources on RE



The share of RE in national energy mix increasing, but remain left behind



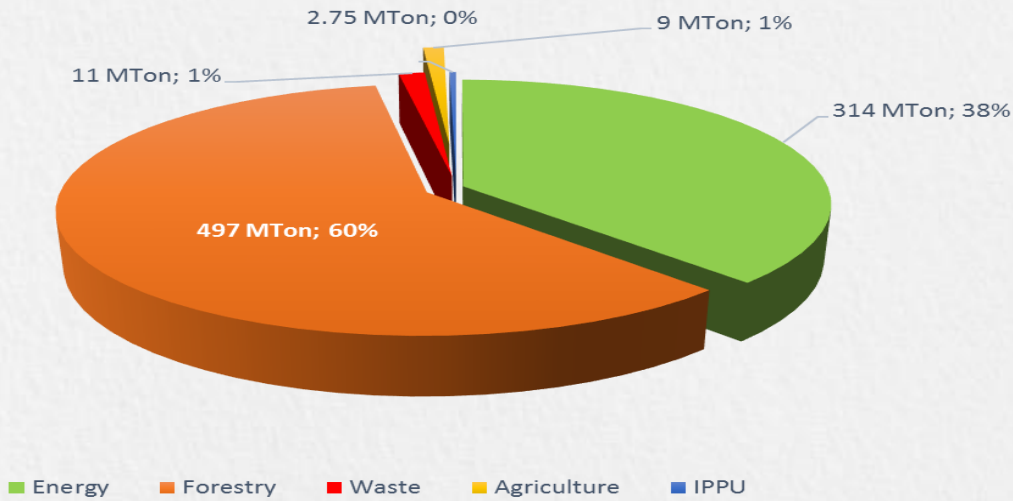


THE IMPORTANCE OF RENEWABLE ENERGY TO ACHIEVE EMISSION REDUCTION TARGET

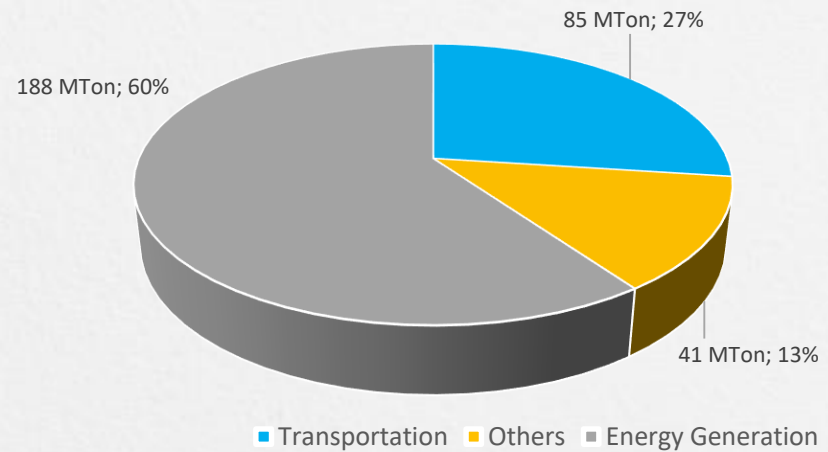


Energy is the 2nd largest contributor sector to achieve Indonesia's commitment on emission reduction by 2030.

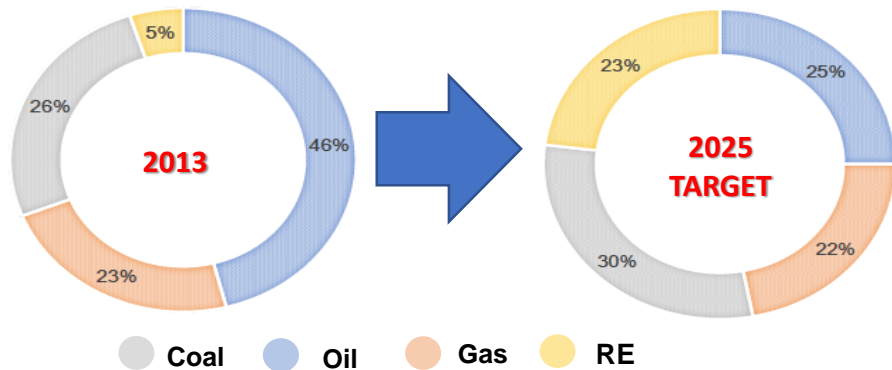
Indonesia's Commitment on Emission Reduction by 2030



Emission Reduction Target in Energy Sector



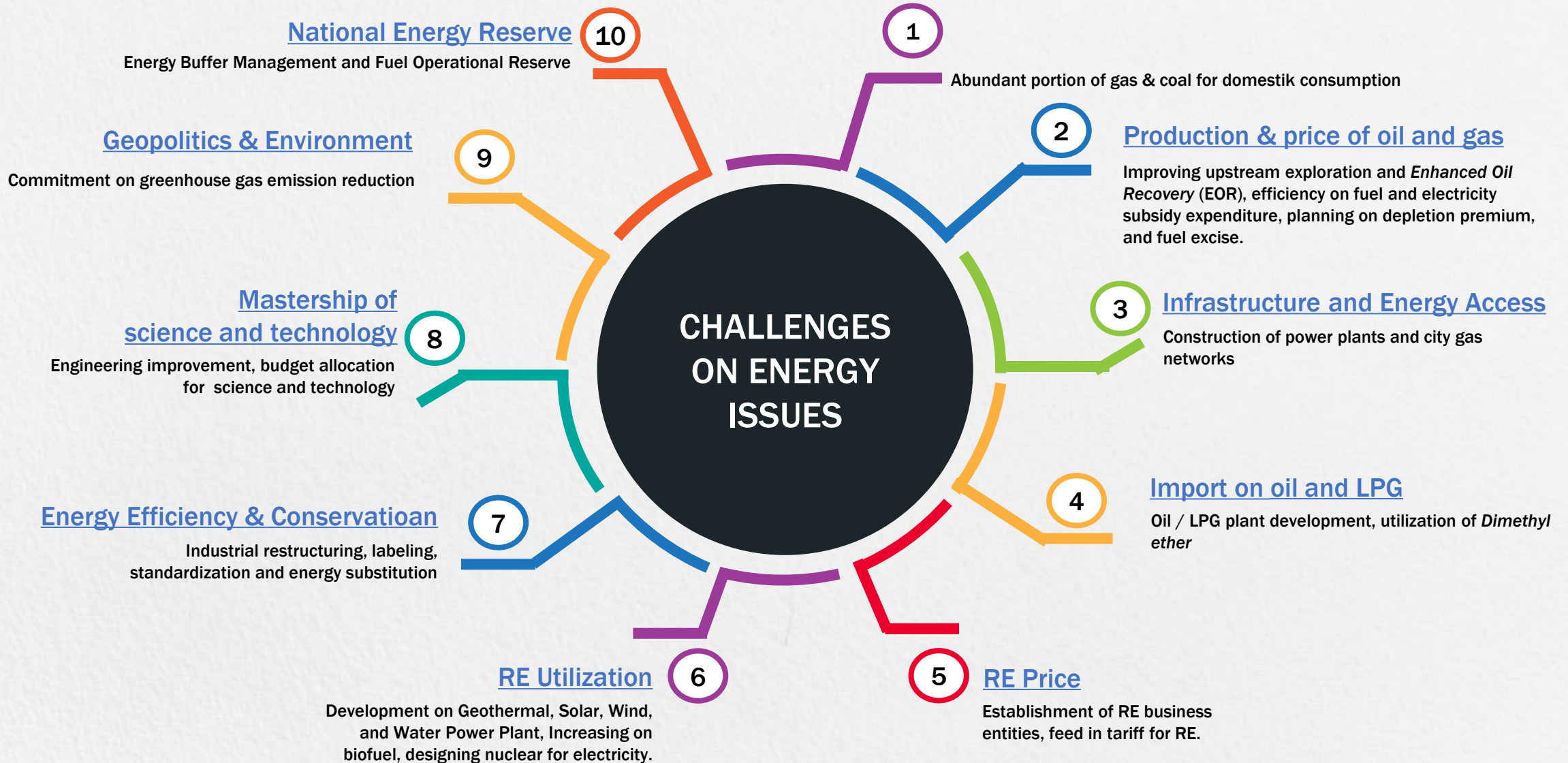
Promoting The Development Of New And Renewable Energy



- Energy Security
- Fiscal Sustainability
- Climate Actions on Emission Reduction
- Sustainable Development Goals / SDGs
- Low Carbon Development (RPJMN 2020-2024)



CHALLENGES ON ENERGY ISSUES



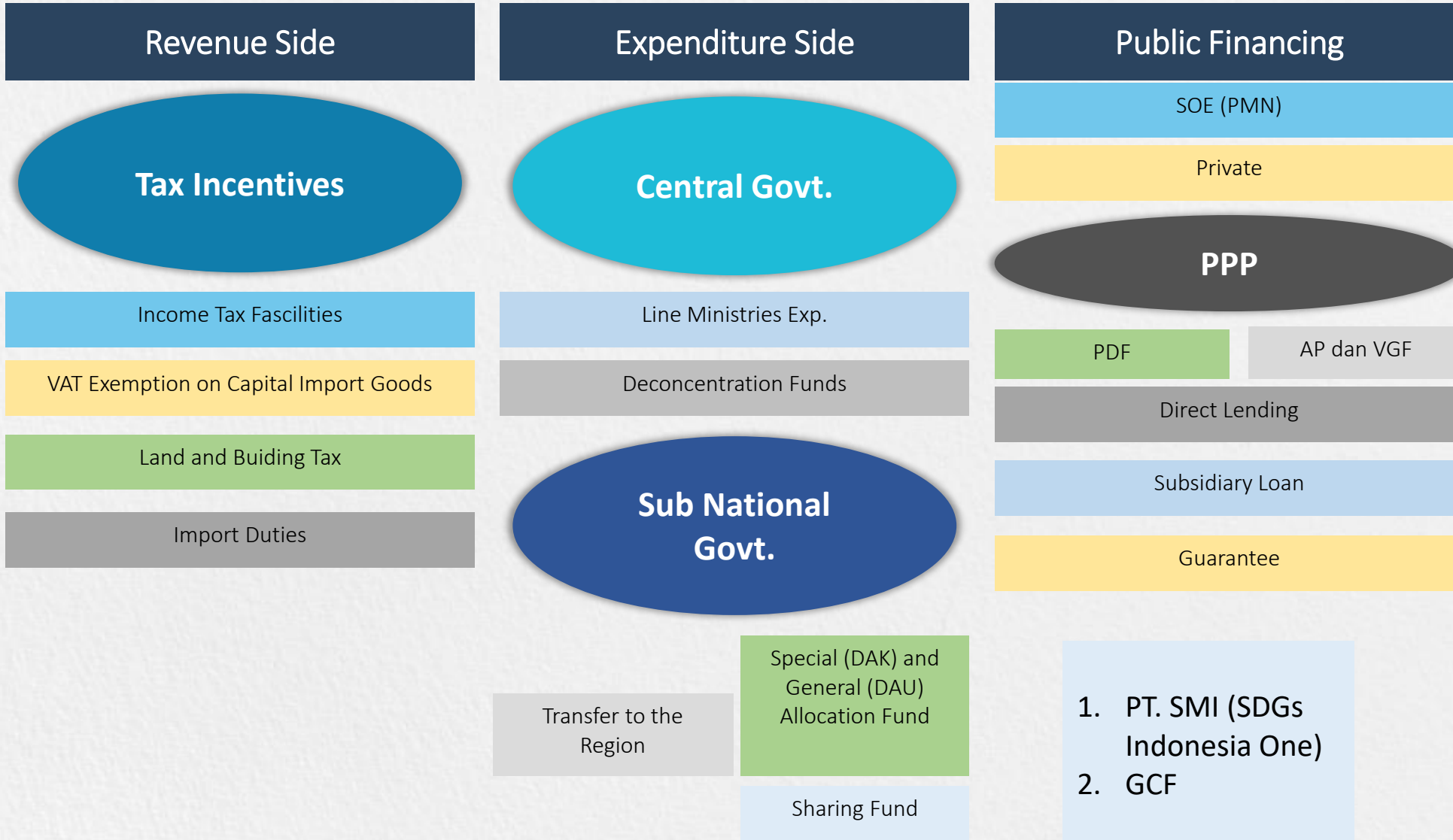


FISCAL SUPPORTS FOR RENEWABLE ENERGY DEVELOPMENT





FISCAL POLICY ON RENEWABLE ENERGY



*Limitation Fiscal Space pushes the Govt. to create another source of financing: **BLENDED / CREATIVE FINANCING:***

- Issuance Green Sukuk
- Geothermal Fund (PISP: GREM, GEUDP)
- Environment Pooling Fund (BPD LH)
- PT SMI (SDGs Indonesia One)
- GCF



INNOVATIVE FINANCING INSTRUMENT

GREEN SUKUK





Green Sukuk is a financing instrument for government programs related to climate change actions, including supporting the Sustainable Development Goals (SDGs).


Issuance of Global Green Sukuk:
 2018 (USD 1,25 billion)
 2019 (USD 750 million)

Domestic Retail Green Sukuk (November 01, 2019)

 **Indonesia won 8 international awards from the issuance of Green Sukuk**

 Resilience to the impacts of climate change is related to areas at risk of disaster

 Renewable Energy

 Green Tourism

DARK GREEN | **MEDIUM TO DARK GREEN**

 Sustainable Agriculture

 Transportation

 WTE and Waste Management

MEDIUM TO DARK GREEN

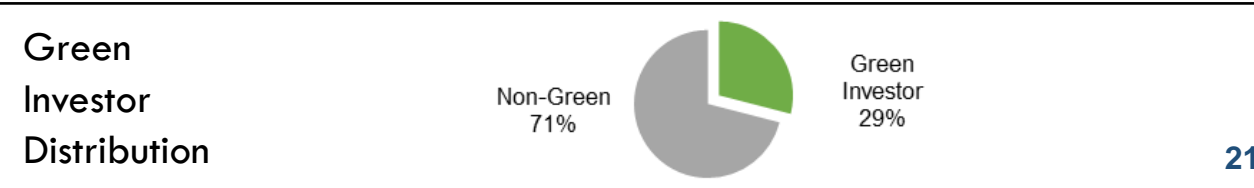
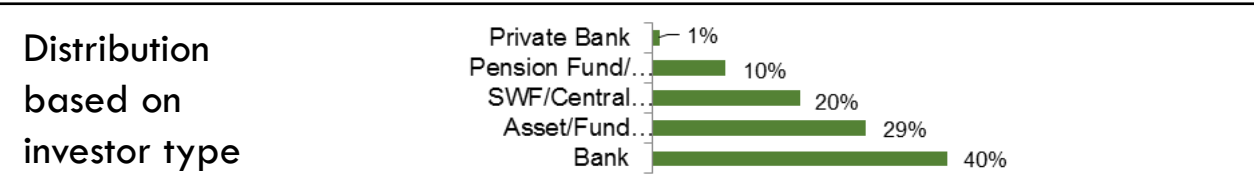
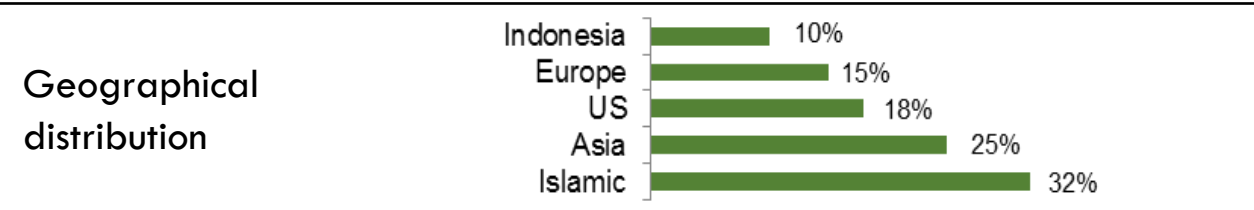
 Green technology for electricity generation

 Sustainable management of natural resources

 Green infrastructure

LIGHT TO MEDIUM GREEN | **LIGHT GREEN**

Global Green Sukuk (5 Years): First Issuance





BLENDING FINANCE ON GEOTHERMAL (PISP)

Geothermal Fund (Pembiayaan Infrastruktur Sektor Panas Bumi / PISP)

In 2017 Government provides Geothermal Fund (PISP) to support exploration projects through Government & SOEs drilling scheme.

Background	The needs of Government support on exploration in developing geothermal.
Objective	Financing on exploration, exploitation and Geothermal Power Generation Projects
Fund Manager	PT Sarana Multi Infrastruktur
Fund	IDR 3,1 Triliun
Exploration Scheme	<ul style="list-style-type: none"> Government Drilling- usulan Menteri ESDM SOE Drilling- usulan BUMN
Exploration Risk Sharing	<ul style="list-style-type: none"> Government Drilling – 100 persen porsi APBN SOE Drilling – 50 persen porsi APBN
Governance	<ul style="list-style-type: none"> Assignment to PT SMI on exploration support; Monitoring & Supervision under Joint Committee of MoF and MoEMR.

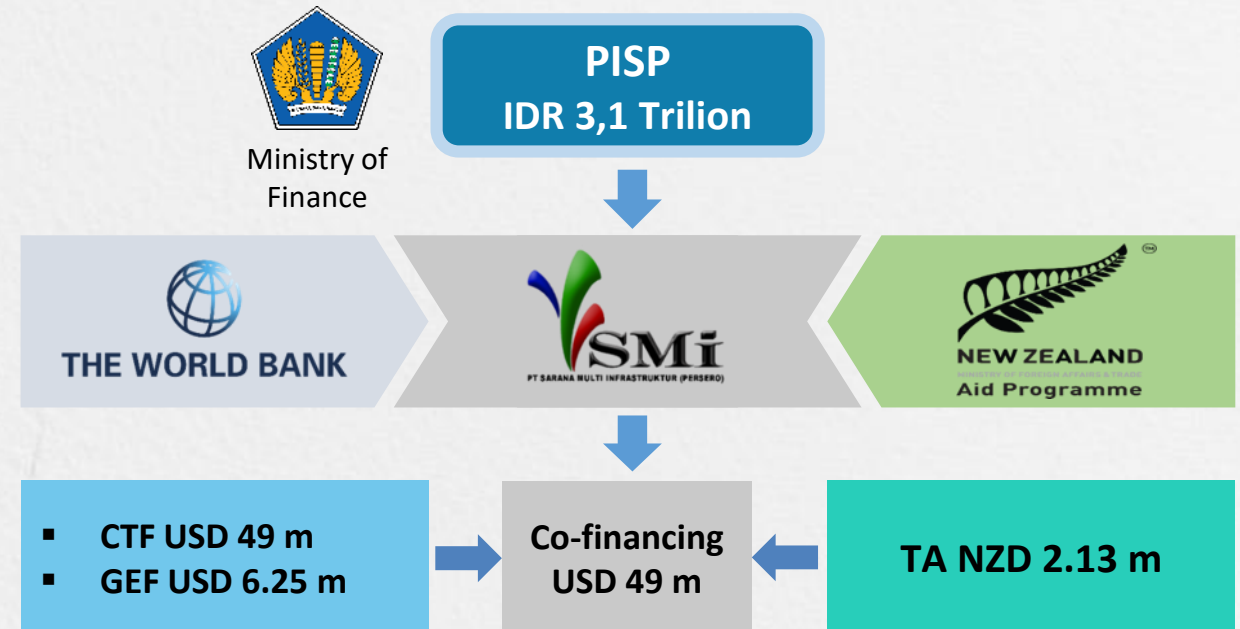
PISP Progress

Exploration	Cofinancing facility for Government Drilling Scheme between PISP and CTF at USD 49 million
Exploitation	Financing on loan amounted USD 20 million for PT. GDE <i>small scale</i> Dieng project of 10 MW.

Blended Finance Scheme of PISP

GEUDP (Geothermal Energy Upstream Development Program) manages PISP combined with other financing sources to provide government drilling projects with pilot project in Wae Sano, Flores, NTT.

- WB's grant facility of CTF (Clean Technology Fund) - GEF (Global Environment Fund) at USD 55,25 million
- New Zealand's grant at NZD 2,13 million.





ENVIRONMENT POOLING FUND (BADAN PENGELOLA DANA LINGKUNGAN HIDUP - BPD LH)



UU 32/2009 : Environmental Protection and Management

Mandating the establishment of an Environmental Economic Instrument as an instrument to prevent environmental pollution and / or damage

PP 46/2017 Environmental Economic Instruments

One of them regulates the Management of the Environmental Fund (PDLH) with the financial management of the Public Service Agency (BLU)

Perpres 77/2018 Management of the Environmental Fund

Regulates the formation of non-echelon organizational units to manage environmental funds determined by the PMK

PMK 137/2019 tentang Organization and Work Procedure Public Service Agency of Environment Fund

Documents compiled based on the draft governance and business strategic plan of the Public Service Agency for Environmental Fund Management

KMK 779/2019 tentang Public Service Agency of Environment Fund as a Public Service Agency

Establishment of BDPLH as a Government Agency that implements financial management patterns for Public Service Agencies

The agency is aimed to mobilize public and private funds to effectively support environment protection programs including climate change actions.

Ministry / Institutional related:



OPERATIONAL BPD LH:



-
- Fund Distribution**
- Grant
 - Loan
 - Subsidy
 - Carbon Trading
 - Others



SDG INDONESIA ONE

A blended finance platform managed by PT. SMI to facilitate the involvement of philanthropist, donor, climate fund, green investors, MDBs, international agencies, commercial banks, sovereign wealth fund, institutional investors.



Summary Underlying Projects*



Urban Transport

5 Projects (USD 6.48 B)



Special Economic Zone

1 Project (USD 890 M)



Road

1 Project (USD 535 M)



Tourism

1 Projects (USD 535 M)



Ports

4 Projects (USD 5.91 B)



Telecommunication

1 Project (USD 589 M)



Railway

2 Projects (USD 533 M)



Healthcare

3 Projects (USD 113 M)



Renewable Energy

72 Projects (USD 2.48 B)



Water

3 Projects (USD 173 M)



SDG Indonesia One will manage & leverage USD 2.34 B of fund*, to facilitate 93 projects amount USD 18.2 B.

** commitments & pledges from 26 development partners (as of Oct 05, 2018)*



** indicative*

- Innovative financing instrument to support the infrastructure development in achieving 16 of 17 SDGs Targets.
- Product Type: Development Facilities, De-risking Facilities, Financing Facilities, & Equity Fund.
- Priority sectors: Health, Education, Renewable Energy and Urban Infrastructure (transportation, water & waste management)*
- **potentially can be expanded*



Projects/Programs Approved by the GCF

Readiness Facility

1



GCF Readiness Program to strengthen NDA and AE institutional capacity



Grant : US\$ 850,000

2



Project Preparation Facility of Semarang's Bus Rapid Transit



Grant : US\$ 788,000

Funding Proposal

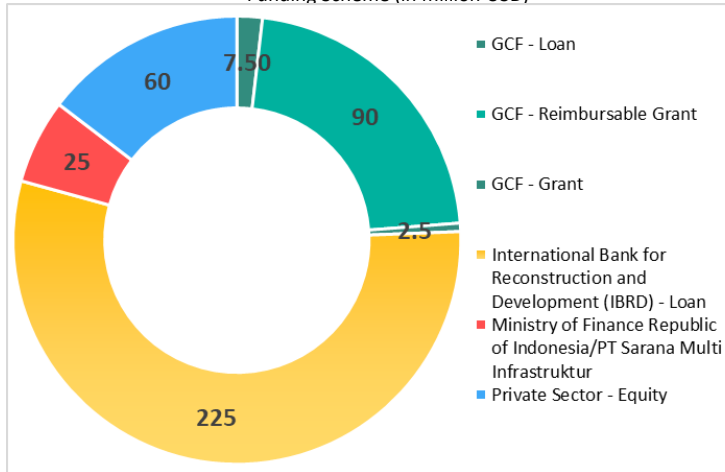
3

Geothermal Resource Risk Mitigation Facility (GREM)



THE WORLD BANK

Funding Scheme (in million USD)



GCF Funding : USD 100 mil
Co-financing : USD 310 mil

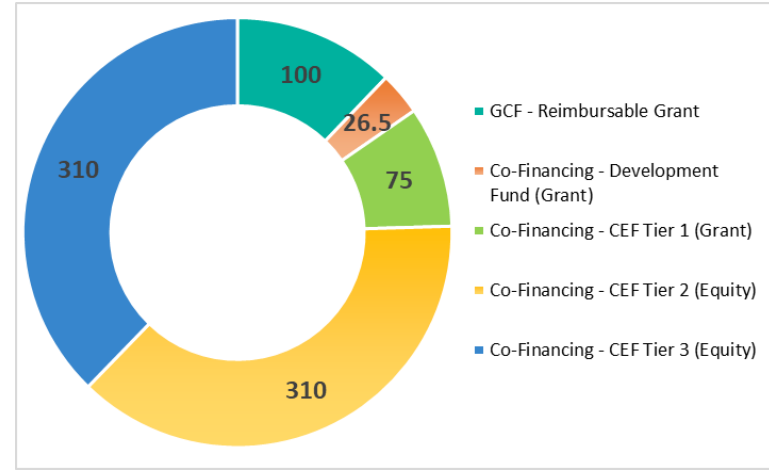
4

Climate Investor One (CIO)



Entrepreneurial Development Bank

Funding Scheme (in million USD)



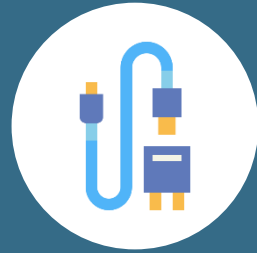
Pendanaan GCF : USD 100 mil
Co-financing : USD 721.5 mil



FISCAL POLICY ON PROMOTING ELECTRIC VEHICLES INDUSTRIES (PRESIDENTIAL DECREE NO 55/2019)



- I. Tax Incentives**
 - a. Luxury VAT (PPnBM)**
 - b. Income Tax**
 - i. Tax Holiday**
 - ii. Tax Allowance**
 - iii. Super deduction**
 - c. Import duties**
 - i. On capital goods**
 - ii. Import duties paid by the govt (BM DTP)**



Subsidy on charging cost in charging station (SPKLU)



Financing Support on SPKLU infrastructure

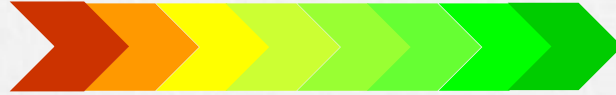


ENERGY SUBSIDY TRANSFORMATION

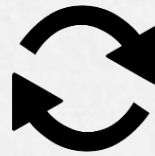
Energy Subsidy Transformation is a key to improve the fiscal capacity in order provide funding for RE Development



COMMODITY BASED SUBSIDY



PEOPLE BASED SUBSIDY



People Targeted Energy Subsidy

Energy Subsidy Transformation from commodity to people

- Prepare Infrastructure and Targeted Beneficiary Data based on DTKS
- Gradually implementing energy price adjustment

- Transforming LPG 3Kg Subsidy into Social Assistance
- Transforming Household Electricity Subsidy to Social Assistance
- Intergrated with Kartu sembako

2021

2022-2024

- Agreement between Government and DPR to carefully transform energy subsidy and consider the right time based on data and infrastructure availability
- **Challenges :**
 - DTKS data by name by address is only available for household, but not for micro enterprise, small farmer and fisherman
- **Progress:**
 - LPG → TNP2K has piloting distribution mechanism using fintech
 - Listrik → PLN has matched customer data with DTKS



THE WAY FORWARDS



THE WAY FORWARDS



Developing RE is crucial for Indonesia energy security and sustainability

Optimizing fiscal facilities to reduce the cost of investment on RE

Expanding the coverage of existing financing facilities such as **BPD LH and PISP (geothermal fund)** to support all renewable energy development

Exploring other instruments to develop RE such as carbon pricing

Continuing the reform on fossil based energy subsidy

Reallocating the fossil based energy subsidy into renewable energy subsidy

Strengthen synergy among programs (policies) and stakeholders



Thank You