



FISCAL POLICY AGENCY  
MINISTRY OF FINANCE  
REPUBLIC OF INDONESIA

# Green SUKUK and Innovative Financing for Protected Areas

# Outline

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# INDONESIA GOVERNMENT COMMITMENTS ON CLIMATE HAVE BEEN IMPROVED IN ENHANCED NATIONALLY DETERMINED CONTRIBUTION (NDC)



## Paris Agreement dan Nationally Determined Contribution (NDC) 2030

Target:  
**31,89 % national effort**  
**43,20 % with international support**

Stated in:

- First NDC (2016);
- Updated NDC (2021);
- Enhanced NDC (2022);
- Second NDC (2024);
- Second BUR (2018);
- Third BUR (2022);

Policy Strengthening and Implementation

Carbon Pricing   CBT   Energy Transition Mechanism

## INDONESIA'S CLIMATE CHANGE AGENDA

### MITIGATION

Emission Reduction Target by Sector (MTon CO2e)

INDONESIAN EMISSION REDUCTION TARGET	FORESTRY	ENERGY AND TRANSPORTATION	WASTE	AGRICULTURE	IPPU	
ND						
29%	497	314	11	9	3	CM1
41%	692	446	40	4	3.25	CM2
Enhanced NDC						
31.89%	500	358	40	10	7	CM1
43.2%	729	446	43.5	12	9	CM2

### ADAPTATION

### Climate Resilient

- 1 Economic Resilience
- 2 Social and Livelihood Resilience
- 3 Ecosystem and landscape resilience

## Long-Term Strategy for Low Carbon and Climate Resilience 2050

Mandate from:

- Paris Agreement Article. 4.19
- Dec.1/CP.21 Para 35

LCCP (low carbon compatible Paris Agreement) Scenario:

- Peak emission 5 sector in 2030 = **540 Mton CO2e**
- Forestry Net-Sink FOLU in 2030;
- Energy Net-Sink in 2037;
- Net Zero Emission in 2060 or sooner

### Toward Net Zero Emission 2060 or sooner

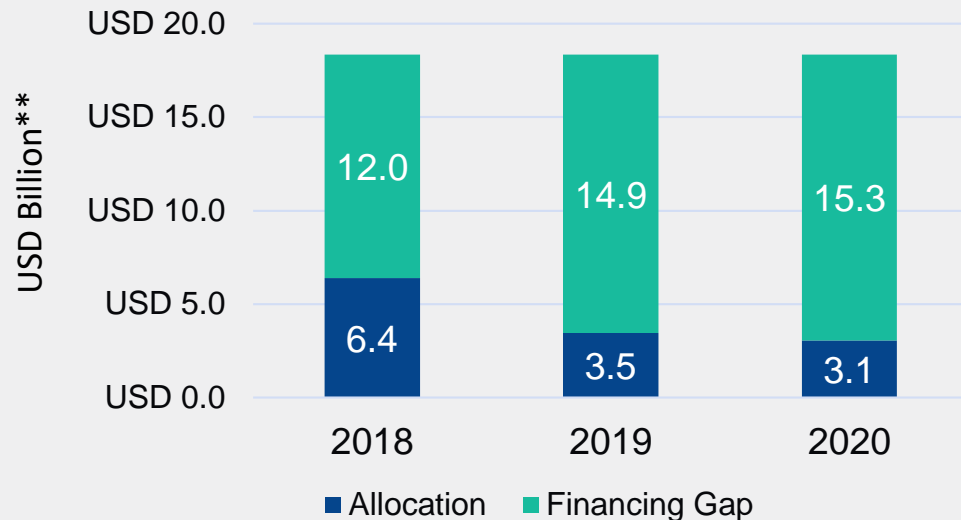
- G7 minus Germany (2050);
- Germany (2045);
- South Africa (2050);
- Singapore (2060);
- Australia (2060);
- G20 (2050-2070);

\*CM1= Counter Measure 1 (unconditional mitigation scenario)

\*CM2= Counter Measure 2 (conditional mitigation scenario)

# Indonesia's Climate Financing Needs

## Climate Financing Needs\*



Based on 3<sup>rd</sup> BUR, To achieve the unconditional target in 2030, the financial requirements to achieve NDC target are estimated at about

**USD 281 billion**

\*source: Climate Budget Tagging (Ministry of Finance)

\*\* USD 1 = Rp 14,500

## Current Climate Financing Landscape

- In 2018–2020, GoI allocated an average of 4.3% of total national budget for climate related activities. Mitigation; 66.2% in 2018, 55.6% in 2019.
- Financing needs for mitigation is estimated to be Rp 343 trillion/year or 27% of the national budget only for NDC's mitigation targets (NDC Roadmap).
- Financing needs for adaptation is estimated to be USD 77.81 billion (2021–2030), aimed to reduce the risk of 2.9% of potential GDP loss.
- Budget allocation is declining since 2020 due to Covid-19 reallocation.



# INDONESIA GREEN BOND/SUKUK FRAMEWORK

## Green Sukuk Allocation and Impact Report



## Audited and Receive Assurance Statement by



The Ministry of Finance has issued 3 Green SUKUK Allocation and Impact Report documents and has been audited and obtained an *assurance statement* from credible third parties.



## The Green Eligible Sectors according to Green Framework

- Renewable Energy
- Sustainable Transportation
- Resilience to Climate Change for Disaster Risk Area
- Use of Clean Technology for Power Generation
- Sustainable Agriculture
- Green Building
- Green Tourism
- Energy and Waste Management
- Sustainable Natural Resource Management



# INDONESIA GREEN BOND/SUKUK FRAMEWORK



Innovative  
Financing  
Lab



The Ministry of Finance is supported by the Innovative Financing Lab UNDP Indonesia in the preparation, issuance and reporting of Green SUKUK

## Issuance of Global Green SUKUK

2018

- USD 1,25 billion
- Yield 3,75% p.a.
- Tenor 5-tahun
- Investor spread: 18% USA, 15% Europe, 32% Middle East, and 35% Asia

2019

- USD 750 million
- Yield 3,90% p.a.
- Tenor 5,5-tahun
- Investor spread: 23% USA, 22% Europe, 29% Middle

2020

- USD 750 million
- Yield 2,30% p.a.
- Tenor 5-tahun
- Investor spread: 12% USA, 11% Europe, 32% Middle East, 40% Asia, and 5% Indonesia.

2021

- USD 750 million
- Yield 3,55% p.a.
- Tenor 30-tahun
- Investor spread: 27% USA, 25% Europe, 8% Middle East & Malaysia, 34% Asia, and 6% Indonesia.

## Issuance of Green SUKUK Retail

2019

- IDR 1,46 trillion
- 7.735 total investor
- 51.07% millennials, 48.66% Gen X, Baby Boomers, Traditionalist, 0.27% Gen Z

2020

- IDR 5,4 trillion
- 16,500 total investors
- 44.51% millennials, 23.31% baby boomer, 29.4% gen X, 2.19% traditionalist, 0.34%

Green SUKUK so far have financed green projects in 5 eligible sectors



Renewable Energy



Energy Efficiency



Waste to Energy and Waste Management



Resilience to Climate Change for Highly Vulnerable Areas and Sectors/ Disaster Risk Reduction



Sustainable Transport

The issuance of Green SUKUK also contributes to various SDGs targets



6 AKSES AIR BERSIH DAN SANITASI



7 ENERGI BERSIH DAN TERJANGKAU



8 PEKERJAAN LAYAK DAN PERTUMBUHAN EKONOMI



9 INFRASTRUKTUR, INDUSTRI DAN INOVASI



11 KOTA DAN KOMUNITAS YANG BERKELANJUTAN

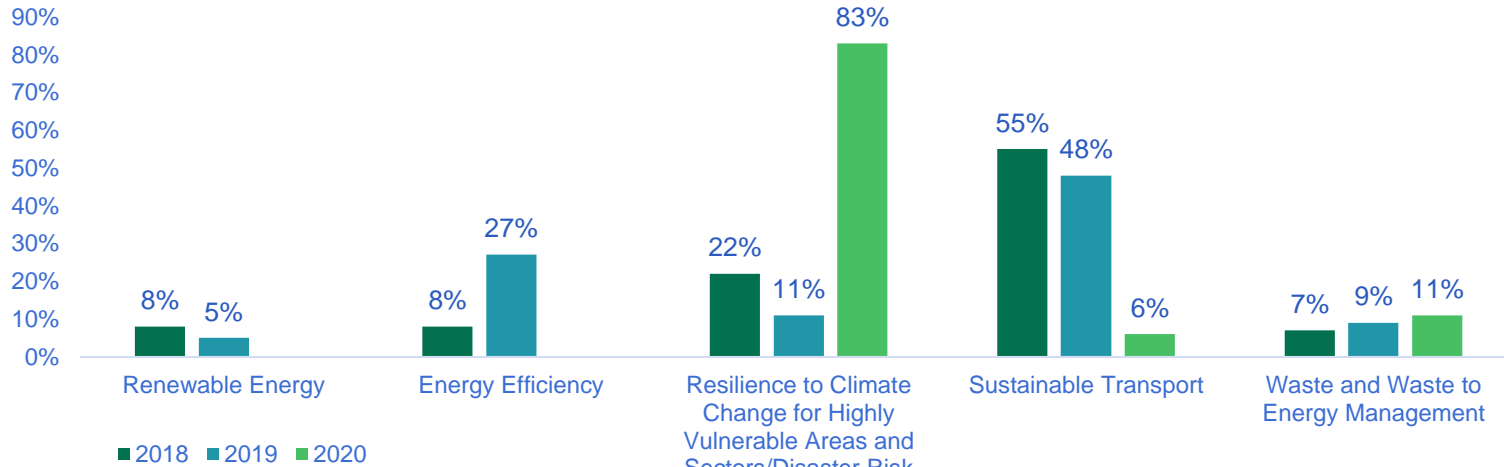


13 PENANGGAPAN PERUBAHAN IKLIM



# ALLOCATION & IMPACT REPORT GREEN SUKUK

## Green SUKUK Allocation in 2018–2020 base on Eligible Sector



Sources: MOF Indonesia, (2020)

## Projected Environmental and Social Impacts of Green Sukuk 2020



Sustainable Transport

- Reduce CO2e emissions by **1,415,718 tons**
- Average travel time efficiency is about **30 minutes**



Waste and Waste to Energy Management

**2,059,094 households** benefit from improving the quality of waste management



Resilience to Climate Change for Highly Vulnerable Areas and Sectors/Disaster Risk Reduction

- Meet the supply of drinking water **275.5 m3**
- Protecting **1,920.4 Ha** of tertiary irrigation network
- Develop **1,071** water source units
- Revitalization of **12,000** hectares of rice fields

## Emission Reduction Projection from the Issuance of Green Sukuk 2018–2020



Issuance in 2018



Issuance in 2019



Issuance in 2020 (only from sustainable transport)

## Other Contributions



Built more than **690 KM** of railway line

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Improved waste management for **5 million households**



Improved **7.3 million kWh** power generation capacity

# Milestones Toward Carbon Market



Presidential Regulation  
on Carbon Economic  
Value (2021)



Carbon trade pilot in the  
power sector  
by the Ministry of Energy  
and Mineral Resources  
(2020-2021)



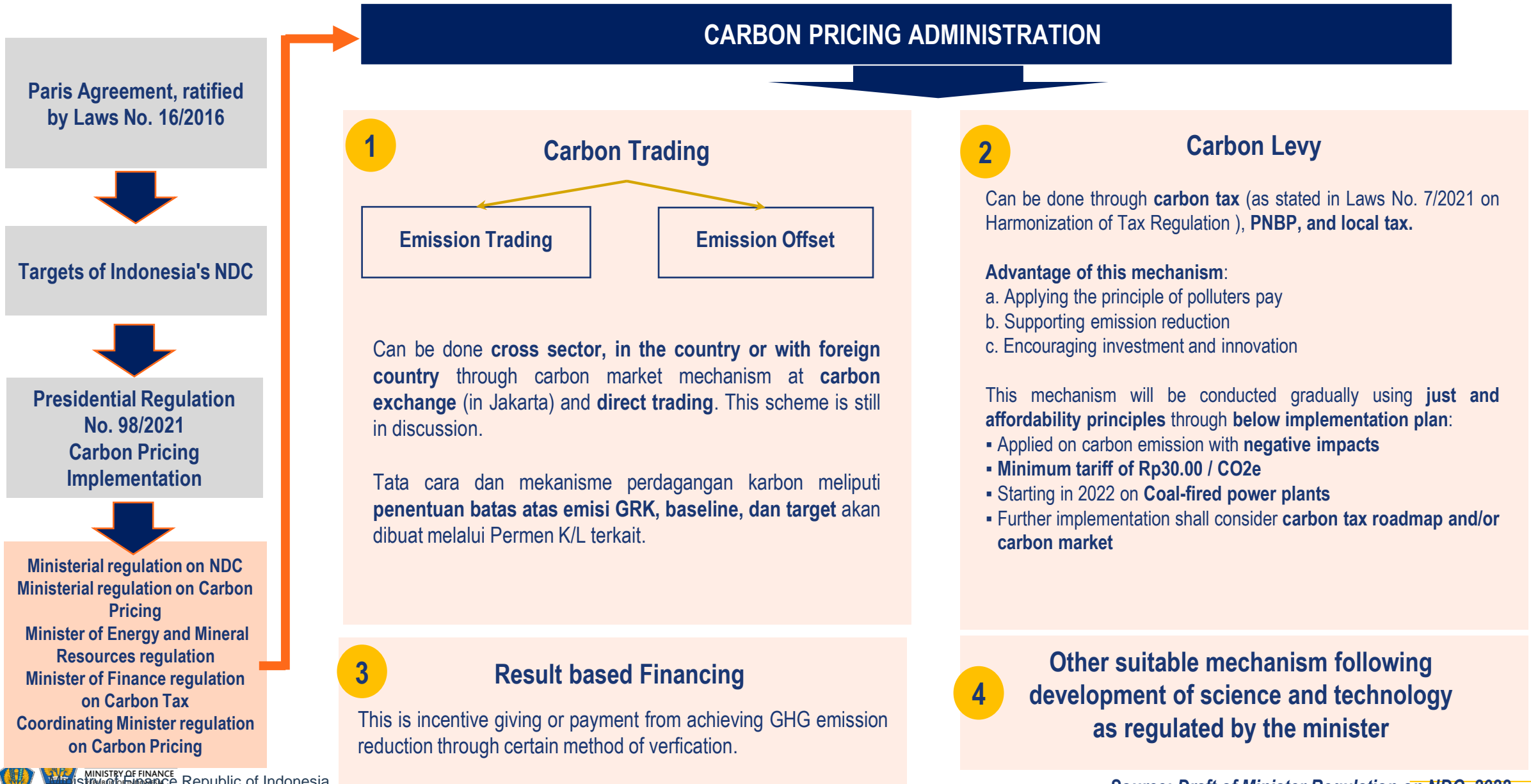
Carbon tax included in  
the Law on Tax  
Harmonization (2021)



Minister Decree on the  
Governance of Carbon  
Economic Value (2022)  
by the Minister of  
Environment and Forestry



# ADMINISTRATION OF CARBON PRICING IMPLEMENTATION



# THANK YOU