GREEN SUKUK: INNOVATIVE FINANCING SCHEMES

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INDONESIA’S CLIMATE CHANGE
Vulnerability and Commitment
INDONESIA VULNERABILITY AGAINST CLIMATE CHANGE

Indonesia is the largest archipelagic country in the world consisting of more than 17,508 ISLANDS. Covering an area of around 790 million hectares with a total coastline of 95,181 KM and land area of around 200 million hectares. Therefore, Indonesia is very vulnerable to the adverse effects of climate change.

Data collected on average temperature variations in all regions of Indonesia over the past few years shows a trend of increasing temperature levels.
There is a **financial gap** between the funding needs and funding sources currently available to support the Indonesian Government's commitment to finance climate change activities.

The source of funding allocated for mitigation and adaptation actions from 2015 to 2019 is $55.1 billion

Source: NDC, 2017

Estimated costs for climate change mitigation and adaptation action activities for 2015–2020 is $ 81 billion

Source: TNC, 2017

**INDONESIAN COMMITMENTS TO CLIMATE CHANGE AND FUNDING NEEDS**
GREEN SUKUK ISSUANCE

Process and Results
PROCESS OF GREEN SUKUK ISSUANCE

Preparation

- Studied through a series of FGDs with experts / investment banks / issuers of green bonds

Budget Tagging

- Selection of eligible green projects through a budget tagging system developed by MoF and UNDP

Green Bond/Sukuk Framework

- assisted by Bappenas, KLHK, Line Ministries, UNDP and HSBC
- Studied through a series of FGDs with experts / investment banks / issuers of green bonds

2nd Party Review

- Labelled medium green from CICERO

Roadshow

- Targeting new types of investors (green investors)
- Visiting green investors in Europe

1st Sovereign Green Sukuk Issuance

- March 2018
- Total issuance of USD 1.25 billion
- The total order is USD 3 billion
- 29% green investors

1st Green Sukuk Impact Report

- February 2019
- The preparation was assisted by Bappenas, KLHK, Line Ministries, UNDP, and the World Bank
ROI GREEN BOND/SUKUK FRAMEWORK

**Pillar I: Use of Proceed**
100% Used for refinancing and new financing of green projects

**Pillar II: Project Evaluation and Selection**
Budget Tagging Process to identify green projects

**Pillar III: Management of Proceeds**
MoF as issuer should guarantee 100% of proceed used to finance green projects

**Pillar IV: Reporting**
Reporting is expected to include measures of the reduction in greenhouse gas emissions

INDONESIA GREEN BOND/SUKUK FRAMEWORK

MEDIUM GREEN Reviewed by Cicero
Green Sukuk is a shariah-compliant bond, where 100% of the proceeds exclusive go to finance or refinance green projects that contribute to mitigating and adapting of climate change.

- **2018**
  - Yield 3.75% p.a.
  - Matured on March 1, 2023 (5-years)
  - USD1.25 billion

- **2019**
  - Yield 3.90% p.a.
  - Matured on August 20, 2014, (5.5-years)
  - USD750 million
Published in February 2019, less than one year from the issuance of Green Sukuk in March 2018.

Proceeds from Green Sukuk support the achievement of SDGs

Audited by KPMG, the results stated that the process and allocation of Green Sukuk were in accordance with the ROI’s Green Framework.

Total 23 National Green Project funded by 2018 Green Sukuk

727 km Construction of double rail lines on the North Coast of Java

121 unit the construction of solar, mini-hydro and micro-hydro power plants

3.4 Mio FAMILIES benefited from the Waste Management System project
UNDERLYING USE OF PROCEEDS – GREEN SUKUK 2018

**Refinancing existing green projects (2016):**
USD 637.55 Mn

**Financing new green projects (2018):**
USD 684.25 Mn*

**By Sector (USD Mn):**
- Sustainable Transport: 80.18 (13%)
- Waste to Energy and Waste Management: 38.24 (6%)
- Renewable Energy: 426.54 (67%)
- Energy Efficiency: 91.74 (14%)

**By Objectives:**
- Mitigation (100%)
- USD 637.55 Mn

**By Ministry (USD Mn):**
- Ministry of Transportation: 453.21 (71%)
- Ministry of Public Work and Housing: 92.60 (15%)
- Ministry of Energy and Mineral Resources: 38.24 (6%)

**By Objectives:**
- Mitigation: USD 456.85 Mn
- Adaptation: USD 227.40 Mn

**By Objectives:**
- Energy Efficiency: 356.81 (52%)
- Renewable Energy: 227.40 (33%)
- Resilience to Climate Change for Highly Vulnerable Areas and Sectors/Disasters Risk Reduction: 100.04 (15%)
- Sustainable Transport: 91.74 (14%)

**By Ministry (USD Mn):**
- Ministry of Transportation: 356.81 (52%)
- Ministry of Public Work and Housing: 227.40 (33%)
- Ministry of Energy and Mineral Resources: 100.04 (15%)

Source: Green Sukuk Issuance, Allocation and Impact Report dated February 2019

*Any committed (realisation) amount exceeding the Green Sukuk proceeds is financed by other sources of fund available in the general treasury account
## PROJECT LIST: GREEN SUKUK 2018

### Samples of Green Projects

<table>
<thead>
<tr>
<th>No</th>
<th>Sector</th>
<th>Project Name</th>
<th>Amount Committed (in IDR)</th>
<th>Impact Mitigation (Annual GHG Emission Avoided, in CO2e)</th>
<th>Project Owners</th>
<th>Project Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Energy Infrastructure Development through Utilization Renewable Energy</td>
<td>785.5 Bio</td>
<td>13,044.474 tonnes</td>
<td>2016</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Application of Clean and Efficient Energy Technology</td>
<td>155.02 Bio</td>
<td>9,988 tonnes</td>
<td>2016</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Construction of Aid to Navigation Facilities</td>
<td>304.3 Bio</td>
<td>141,800 tonnes</td>
<td>2016</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Improvement of Municipal Solid Waste Management System at City-scale</td>
<td>1,126.8 Bio</td>
<td>tbd</td>
<td>2016</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Construction of surface irrigation networks authorized by the Central Government</td>
<td>3,736.8 Bio</td>
<td>tbd</td>
<td>2018</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Operation of Double Track Railways in Java’s North Path</td>
<td>1,528.5 Bio</td>
<td>0.566 MT</td>
<td>2016</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Ministry of Energy and Mineral Resources
- Ministry of Transportation
- Ministry of Public Work and Housing
LESSON LEARNED

Continuous improvement for better issuance processes in the future

During Issuance

1. Right JLMs → Can support Green and Sukuk
2. Roadshow is key → New instrument and to tap new investors
3. Need to show government commitment on Green Development or Climate Change
4. Find the right window → Global condition was not conducive

Pre-Issuance

1. Commitment and coordination
   ➢ High Level and Experience
2. No Expertise and Experience
   ➢ Need to find right and good partners and advisors
3. Long Journey with Many Steps
   ➢ 3 importants milestones:
   1) Budget tangging (assisted by UNDP)
   2) Green Framework (partnered with HSBC)
   3) Reporting (led by system)

Post Issuance

1. Reporting: Need support and cooperation from relevant Ministries
2. Need assistance from experts (UNDP and World Bank)
3. To select and define indicators
4. To select the Auditor
5. To design Reporting SYSTEM (work by system, because the process will be repeated every...
Indonesia is at the top 15 countries of Green Bond issuance. More commitment is needed for Green Bond Issuance not only from the Government, but also from Private sector and SOE's.

Continue to issue Global Bond in green format in the future, either Green Sukuk or Green Bond.

Continue to innovate, to look for new and innovative instruments and to diversify risks such as thematic bond and other Sustainable and Responsible Investment (SRI) instruments. For example, SDG bond and Waqf-Link Sukuk.

Championing and encouraging more issuance of new creative and innovative financing instruments, including from private sector and SOEs.
THANK YOU

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