Islamic Financing for Climate Change

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One of Indonesia's vulnerabilities to climate change can be seen from the increasing frequency of hydrometeorological disasters occurring in Indonesia. From 1 January to 3 September 2020, there have been 1,944 disasters in Indonesia and more than 90% were hydrometeorological disasters.

Source: BNPB, 2020

To that end, Indonesia has a strong commitment to addressing climate change, both through national policies and the ratification of international agreements into laws, policies and national action plans.
ROI COMMITMENTS TO CLIMATE CHANGE

LAW Number 16/2016
Paris Agreement Ratification to UNFCCC

RAN GRK
National Action Plan for GHG Emission Reduction
(Presidential Decree No. 61/2011)

RAN-API
National Action Plan on Climate Change Adaptation

NDC  Nationally Determined Contribution
By 2030, Indonesia pledges to reduce Greenhouse Gases (GHG) emissions:
- **29%**
  Unconditional emission reduction against Business as Usual (BAU) scenario
- **41%**
  Conditional emission reduction subject to international support
  and to improve its Climate Resilience

Low Carbon Development Plan

Economic Growth  Poverty Reduction  GHG Emission Reduction
ROI GREEN BOND/SUKUK FRAMEWORK

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

**Pillar II:** Project Evaluation and Selection
- Budget Tagging Process to identify green projects (supported by UNDP)

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

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

**Benchmark Green Framework:**
- Poland
- Fiji
- France

**The Green Eligible Sectors according to Green Framework**
- Renewable energy
- Use of Clean Technology for Power Generation
- Sustainable Natural Resource Management
- Resilience to Climate Change for Disaster Risk Areas
- Sustainable Transportation
- Green Tourism
- Energy and Waste Management
- Sustainable Agriculture
- Green Building
Use of fund: Eligible Green Projects

Worth green sector below are sectors that meet the requirements according to the Green Framework

- **Renewable Energy**
  - Generation and transmission of energy from renewable energy sources (solar, waves, water, biomass and geothermal)
  - Research and improvement of the product or technology from renewable energy sources, including turbine and solar panel

- **Energy Efficiency**
  - Improving infrastructure energy efficiency to produce energy consumption of at least 10% below the average national energy consumption
  - Research and development of products or technologies and their implementation which reduce energy consumption

- **Resilience to Climate Change for Disaster Risk Reduction**
  - Research leads to technological innovation with continuing benefits
  - Food security
  - Food security
  - Drought management
  - Public health management

- **Sustainable Transportation**
  - Develop a clean transportation system
  - Improving energy efficiency and public transportation with low emissions
  - Upgrading the transportation network to higher design standards for resilience

- **Energy and Waste Management**
  - Improving waste management
  - Turning waste into a renewable energy source
  - Rehabilitation of final disposal area

- **Sustainable Natural Resources Management**
  - Sustainable management of natural resources that substantially avoids or reduces carbon loss / increases carbon sequestration
  - Habitat conservation and diversity

- **Green Tourism**
  - Develop new tourism areas in accordance with Green Tourism Principles
  - Optimizing infrastructure support for sustainable tourism

- **Green Building**
  - Developing green building that in line with the Greenship that has been developed by the Green Building Council in Indonesia

- **Sustainable Agriculture**
  - Develop sustainable agricultural management and management methods, such as organic farming, reducing pesticides, research and development on climate-resistant seeds, and energy saving on agriculture
  - Subsidy mechanism for agricultural guarantees

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The eligible green project will override: a) The capacity of new fossil fuel-based power plants; b) Large scale hydroelectric power plants (over 30 MW) with large inundation areas; and c) Nuclear and nuclear-related assets
Evaluation Process And Project Selection

Budget Tagging is used to identify eligible projects in the Green Framework

The Ministry of Finance will manage the allocation process in the general account of the Government of the Republic of Indonesia

Created to identify expenditures on projects that provide climate change benefits where they are supported by the UNDP

Involves a detailed assessment of the climate benefits of the project carried out by the ministries on key performance indicators of project results

Green Bond or Green Sukuk funds issued under the Green Framework will be used to fund certain projects that have been tagged

Ministry of Finance will record all of Green Eligible Projects that have been reviewed and funded by the issuance of Green Bonds and Green Sukuk
Green Sukuk Issuance

Global Market

<table>
<thead>
<tr>
<th>Year</th>
<th>Yield</th>
<th>Tenor</th>
<th>USD</th>
<th>Investor Spread</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>3.75% p.a</td>
<td>5 years</td>
<td>1.25 billion</td>
<td>18% USA, 15% Europe, 32% Middle East, and 35% Asia</td>
</tr>
<tr>
<td>2019</td>
<td>3.90% p.a</td>
<td>5 years</td>
<td>750 million</td>
<td>23% USA, 22% Europe, 29% Middle East, and 26% Asia</td>
</tr>
<tr>
<td>2020</td>
<td>2.30% p.a</td>
<td>5.5 years</td>
<td>750 million</td>
<td>12% USA, 11% Europe, 32% Middle East, 5% Indonesia, and 40% Asia</td>
</tr>
<tr>
<td>2021</td>
<td>3.55% p.a</td>
<td>30 years</td>
<td>750 million</td>
<td>27% USA, 25% Europe, 8% Middle East, 6% Indonesia, and 34% Asia</td>
</tr>
</tbody>
</table>

Domestic Market

<table>
<thead>
<tr>
<th>Year</th>
<th>Coupon</th>
<th>Tenor</th>
<th>IDR</th>
<th>Total Investors</th>
<th>New Investors</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>6.75% p.a (floating with floor)</td>
<td>2 years</td>
<td>1,46 T</td>
<td>7,735</td>
<td>2,908</td>
</tr>
<tr>
<td>2020</td>
<td>5.5% p.a (floating with floor)</td>
<td>2 years</td>
<td>5,42 T</td>
<td>16,992</td>
<td>4,276</td>
</tr>
</tbody>
</table>

Green Sukuk is potential to be developed and used as climate funding in Indonesia even in the midst of COVID-19 pandemic

GREEN SUKUK : 9 Juni 2021

1. First ever 30-year and the longest Green Sukuk issuance in the world
2. Reached 57% of Green Investor, an increase from 33% (2020) and 29% (2018 & 2019).
3. Lowest ever 30-year yield, spread over UST and profit rate
LAPORAN GREEN SUKUK

1st Impact Report
Published in Feb 2019

2nd Impact Report
Published in Mar 2020

3rd Impact Report
Published in May 2021

APPROVAL BY SHARIA ADVISORS

CIMB Islamic Bank Berhad
The Sharia Advisory Board of Citi Islamic Investment Bank
The Executive Committee of the Fatwa and Sharia Supervisory Board of Dubai Islamic Bank PJSC

Indonesia Council of Ulama

Audited by:
KPMG
PwC
EY

GREEN SUKUK
ALLOCATION AND IMPACT REPORT
May 2021
Projected Emission Reduction from Global Green Sukuk Issuance

- **Renewable Energy**: 8% in 2018, 5% in 2019, 8% in 2020
- **Energy Efficiency**: 27% in 2018, 11% in 2019
- **Resilience to Climate Change for Highly Vulnerable Areas and Sectors/Disaster Risk Reduction**: 83% in 2020
- **Sustainable Transport**: 55% in 2018, 48% in 2019, 7% in 2020
- **Waste and Waste to Energy Management**: 9% in 2020

**Underlying Assets:**
- Ministry of Public Works and Housing
- Ministry of Transportation
- Ministry of Energy and Mineral Resources
- Ministry of Agriculture

**Issuance Details:**
- **Issuance 2018**: 5.7 million ton CO2e
- **Issuance 2019**: 3.2 million ton CO2e
- **Issuance 2020**: 1.4 million ton CO2e
LESSON LEARNED from Green Sukuk Issuance

**SYNERGY.** It needs to increase synergy among stakeholders to formulate policies and national development programs related to climate change control.

**IMPACT INVESTING.** Measuring not only the environmental benefits of the investment, but also economic and social impact.

**SYSTEM INTEGRATION.** Strengthening and integrating the mechanism of climate budget tagging (CBT) with other system (e.g. SRN, AKSARA, KRISNA) to create effective and efficient financial governance and reporting.
THANK YOU

Have a Great Day!