Session 7:

ISLAMIC FINANCE FOR NDC

Tuesday, 03 September 2019, 11.25-12.40
Islamic Finance for NDC

Moderator: Evelyn Batamuliza, UNDP Regional Hub

Speakers:
• Eka Hendra Permana, Ministry of Finance, Indonesia
  • Tiara Utami, UNDP Indonesia
  • Cedric Rimaud, Climate Bonds Initiative
PUBLIC CLIMATE FINANCE IN INDONESIA
2016-2018

Delivered at Regional NDC Dialogue For Asia & Pacific

Bangkok, 03 September 2019
1. INDONESIA ECONOMIC DEVELOPMENT
2. COMMITMENT ON CLIMATE CHANGE
3. CLIMATE FINANCE IN INDONESIA
4. WHAT’S NEXT
Vision On Indonesia 2045: Becomes A Developed Country

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.
FIGHTING CLIMATE CHANGE!

“EARTH IS MELTING, THIS MELTS DOESN’T TASTE GOOD”

THE GLOBAL MEAN TEMPERATURE IN 2018 IS APPROXIMATELY 1°C ABOVE THE PRE-INDUSTRIAL BASELINE

ATMOSPHERIC CO₂ CONCENTRATION IS 146% OF PRE-INDUSTRIAL LEVELS (2017)
Indonesia’s Climate Change Vulnerability And Impact

- Indonesia is the world’s largest archipelago comprising over 17,508 Islands. Covering an area of about 790 million hectares with a total coastline length of 95,181 KM and a land territory of about 200 million hectares.
- Floods, droughts, typhoons, and landslides dominate 4 major disasters in Indonesia, and affect several economic sectors.
- Therefore, Indonesia is highly vulnerable to the adverse impacts of climate change.

Data collected on the average temperature variation across the entire region of Indonesia for the past years shows a trend of increasing temperature level.

Climate Change is believed to increase the risk for hydro-meteorological disasters, which make up to 80% of disaster occurrences in Indonesia.

Key hazards in Indonesia:
- In Jakarta, 17.4% area of had been affected by a flood with 23 deaths & over 65,000 evacuees in January 2014.
Ratified the Kyoto Protocol into UU No. 17/2004

Indonesia hosting the UNFCCC COP 13

National Action Plan of GHG Emission Reduction (RAN-GRK)

Ratified the Paris Agreement into Law No. 16/2016

Govt. of Indonesia declare the commitment for the Katowice Package with the NDC renewal long term plan until 2050
Indonesia’s Nationally Determined Contribution (NDC)

Government of Indonesia (GoI) has strong commitment on climate actions to reduce GHG emission & strengthen resilience in supporting the sustainable development.

Emission Reduction Target

By 2030, Indonesia pledges to reduce Greenhouse Gases (GHG) emissions:

- **FORESTRY**
  - 59.6% 497 Mton CO₂e
- **ENERGY**
  - 37.7% 314 Mton CO₂e
- **WASTE**
  - 1.3% 11 Mton CO₂e
- **AGRICULTURE**
  - 1.1% 9 Mton CO₂e
- **IPPU**
  - 0.3% 2.75 Mton CO₂e

Unconditional emission reduction against BAU scenario

Conditional emission reduction subject to international support

29% Up to 41%
CLIMATE BUDGET TAGGING

“CBT is Budget Marking Mechanism for Government Activities in Climate Change Funded by State Budget”

<table>
<thead>
<tr>
<th>Year</th>
<th>APBN-P 2016</th>
<th>Central Govt.</th>
<th>Transfer to Region</th>
<th>Total</th>
<th>% Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>72.4</td>
<td>1306.7</td>
<td>776.3</td>
<td>2083.0</td>
<td>3.6 %</td>
</tr>
<tr>
<td>2017</td>
<td>95.6</td>
<td>1366.9</td>
<td>766.3</td>
<td>2133.2</td>
<td>4.7 %</td>
</tr>
<tr>
<td>2018</td>
<td>109.7</td>
<td>1454.5</td>
<td>766.2</td>
<td>2220.2</td>
<td>4.9 %</td>
</tr>
</tbody>
</table>

Mitigation: 72.2 T
Adaptation: 37.5 T

STATE BUDGET (IDR Trillion)

<table>
<thead>
<tr>
<th>Year</th>
<th>Mitigation</th>
<th>Adaptation</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>IDR72.4 T</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>IDR95.6 T</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>IDR109.7 T</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

% STATE BUDGET

- 2016: 3.6%
- 2017: 4.7%
- 2018: 4.9%
**CLIMATE BUDGET TAGGING 2018**

**MITIGATION (IDR72.2 T)**

- **Energy & Transportation**: 55.3 T
- **Forestry & Land Management**: 14.3 T
- **Waste**: 2.6 T

CBT Mitigation is carried out by 6 Line Ministries:

- IDR50.4 T
- IDR2.6 T
- IDR16.6 T
- IDR28 B
- IDR2.2 T
- IDR442 B

**ADAPTATION (IDR37.5 T)**

- Economic Resilience: 16%
- Life System Resilience: 2%
- Ecosystem Resilience: 1%
- Special Territory Resilience: 55%
- Supporting Resilience: 26%

8 Ministries & Agencies
CBT 2019 (as of June 2019)

- CBT 2019 in on progress with temporary data of IDR100.4T is allocated for Climate Actions at 16 ministries & agencies.
- Mainstreaming Climate Actions into Fiscal Transfer to Sub-national
  - Special Incentive Fund, with additional parameter on controlling the use of plastic bags at modern/retail shops
  - Special Allocation Fund, to support local government in managing waste to energy
  - Preparing Regional Climate Budget Tagging (RCBT).
BUDGET ALLOCATION
(based on CBT 2018)
TOTAL: IDR109.7 T
MITIGATION: 72.2 T
ADAPTATION: 37.5 T

FINANCING NEEDS
(based on 2nd BUR)
Average: 770 T/year
Included private sector contributions

FINANCING GAP
ENERGY SECTOR & NATIONAL DEVELOPMENT

Energy Is One of Important Pillars For Sustainable Development:

- Energy Distribution
- Energy Security
- Emission Reduction
- Sustainable Development Goals / SDGs
- Low Carbon Development (draft Mid-term National Development Plan 2020-2024)

RE Development in Indonesia


RE Potential

- Hydro Power 75 GW
- Solar Power 207.8 GW
- Geothermal Power 29 GW
- Wind Power 60.6 GW
- Bioenergy 32.6 GW
- Ocean Power 60.6 GW

Source: MoEMR (2017)
ENERGY SUBSIDY REFORM: RATIONALES BEHIND THE REFORM

1. Indonesia transforms from exporter towards net oil importer

Indonesia Oil and Gas Export and Import

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

The Share of Energy Subsidy to Budget, 2010-2018

3. Energy subsidy was poorly targeted

Diesel Subsidy Received by Households

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

Renewable Energy Share on Energy Mix

Source: Ministry of Finance

Source: Ministry of EMR

Source: Indonesian Bureau of Statistics

Source: SUSENAS, staff’s calculation

Source: Ministry of Finance
**Fiscal impacts:** more fiscal space for productive spending

**Percentage to State Budget**

- Energy subsidy was mainly reallocated to productive investment on infrastructure, health & education which significantly increased since 2015.
- The government continues 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.
Government Supports for RE & Geothermal

### 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.

**PISP**

**Ministry of Finance**

**IDR 3.1 Trilion**

- **CTF USD 49 m**
- **GEF USD 6.25 m**
- **Co-financing USD 49 m**
- **TA NZD 2.13 m**

### Tax Incentives

#### Income Tax Facility
- **Tax Allowance**
- Tax exemption on *PPh 22 Impor*

#### VAT Facility
- **VAT Import exemption**

#### Import Duty Facility
- **Import duty exemption on imported goods**
- **Import duty exemption on imported machineries, goods, and materials**

#### L&B Tax facility
- **L&B Tax reduction on exploration stage**

#### Borne by the Government Tax
- **Tax Subsidy**

### Geothermal Fund (Pembiayaan Infrastruktur Sektor Panas Bumi / PISP)

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

**Ministry of Finance**

**IDR 3.1 Trilion**

- **CTF USD 49 m**
- **GEF USD 6.25 m**
- **Co-financing USD 49 m**
- **TA NZD 2.13 m**
Government Supports for RE & Geothermal

Indonesia is on the 2nd rank of countries with potential geothermal, but the installed capacity is still far in optimization.

Potential (25,386.5 MW)  
(MoEMR, December 2018)

Installed Capacity

1,948.5 MW (Utilization 7.68% of potential source)

<table>
<thead>
<tr>
<th>No.</th>
<th>Country</th>
<th>Potential (Mw)</th>
<th>Installed Capacity (Mw)</th>
<th>Utilization (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>USA</td>
<td>30,000</td>
<td>3,639</td>
<td>26.57%</td>
</tr>
<tr>
<td>2</td>
<td>INDONESIA</td>
<td>25,386</td>
<td>1,948.5</td>
<td>14.23%</td>
</tr>
<tr>
<td>3</td>
<td>PHILIPPINES</td>
<td>4,000</td>
<td>1,916</td>
<td>13.99%</td>
</tr>
<tr>
<td>4</td>
<td>TURKY</td>
<td>4,500</td>
<td>1,347</td>
<td>9.84%</td>
</tr>
<tr>
<td>5</td>
<td>NEW ZEALAND</td>
<td>3,650</td>
<td>1,005</td>
<td>7.34%</td>
</tr>
<tr>
<td>6</td>
<td>MEXICO</td>
<td>4,600</td>
<td>951</td>
<td>6.94%</td>
</tr>
<tr>
<td>7</td>
<td>ITALY</td>
<td>3,270</td>
<td>944</td>
<td>6.89%</td>
</tr>
<tr>
<td>8</td>
<td>ICELAND</td>
<td>5,800</td>
<td>755</td>
<td>5.51%</td>
</tr>
<tr>
<td>9</td>
<td>KENYA</td>
<td>15,000</td>
<td>646</td>
<td>4.72%</td>
</tr>
<tr>
<td>10</td>
<td>JAPAN</td>
<td>23,400</td>
<td>542</td>
<td>3.69%</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td>119,606</td>
<td>13,693</td>
<td>100%</td>
</tr>
</tbody>
</table>
Government of Indonesia has released the Presidential Regulation (Perpres No.55/2019) to incentivize electric vehicle development for sustainable and green transportation.

Government is on consultation process with Parliament on proposed Tax from Luxury Goods Sales (PPnBM) with new parameters on fuel consumption, carbon emission level, passenger capacity.
Instrument to financially support the green projects contributes to the Climate Actions, as well as for the Sustainable Development Goals (SDGs)

1. Issuance in February 2018 (USD 1.25 B), & 2nd Issuance in March 2019 (USD 750 M)

8 global awards
The Republic of Indonesia’s Green Bond/Sukuk Framework

**Use of Proceeds: Presentation of Eligible Green Sectors**

Eligible sectors identified that has met the criteria of Green Framework

The proceeds of each Green Bond or Green Sukuk will be used exclusively for spending in the form of budget allocation/subsidies/projects for new financing or the refinancing of Eligible Green Projects where it must fall into at least one of the following sectors

<table>
<thead>
<tr>
<th>Eligible Green Sectors</th>
<th>Description</th>
</tr>
</thead>
</table>
| **Renewable Energy**   | - Generation and transmission of energy from renewable sources (onshore wind, solar, tidal, hydropower, biomass and geothermal). 
- Research and development (R&D) of products or technology for renewable energy generation, including turbines and solar panels. |
| **Clean Technology Usage for Power Plant** | - Improve an infrastructure’s energy efficiency resulting in an energy consumption of at least 10% below the average national energy consumption of an equivalent infrastructure. 
- R&D of products or technology and their implementation that reduces energy consumption of underlying assets. |
| **Resilience to Climate Change for Highly Vulnerable Areas and Sectors / Disaster Risk Reduction** | - Research leading to technology innovation with sustainability benefits 
- Food security 
- Flood mitigation 
- Drought management 
- Public health management |
| **Sustainable Transport** | - Developing clean transportation systems 
- Increasing energy efficiency (which results in a reduction of energy consumption of at least 10%) and low emission public transportation 
- Transportation network upgrade to higher climate resilient design standards |
| **Waste to Energy and Waste Management** | - Improving waste management 
- Transforming waste to renewable energy source 
- Rehabilitation of landfill areas |
| **Sustainable Management Natural Resource** | - Sustainable management of natural resources which substantially avoids or reduces carbon loss/increases carbon sequestration 
- Habitat and biodiversity conservation |
| **Green Tourism** | - Developing new tourism areas in line with Green Tourism Principles 
- Optimization of supporting infrastructure to support sustainable tourism |
| **Green Building** | - Developing green buildings in line with Greenship developed by Green Building Council in Indonesia |
| **Sustainable Agriculture** | - Developing sustainable agriculture management and methods, such as organic farming, less pesticides, R&D on climate resilient seeds, and energy efficient on agriculture 
- Subsidy mechanism for agriculture insurance |

For avoidance of doubt, in any case, the Eligible Green Projects shall exclude a) new fossil fuel-based electric power generation capacity, b) large-scale hydropower plants (>30 MW capacity) with large incremental inundation areas, and c) Nuclear and nuclear-related assets.
Underlying Assets for 1st Green Sukuk Issuance (2018)

- Aspects: Mitigation & Adaptation

- Green Sectors for Underlying
  - Sustainable Transport
  - Renewable Energy
  - Energy and Waste Management
  - Use of Clean Technology for Power Generation
  - Resilience to Climate Change for Disaster Risk Areas

- Ministries/Agencies:
  - Min. of Transportation
  - Min. of Public Work & Housing
  - Min. of Energy & Mineral Resources
Innovative financing instrument to support the infrastructure development in achieving 16 of 17 SDGs Targets.

- **SDG Indonesia One** is 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.

- **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*

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

* from 26 development partners (as of Oct 05, 2018)
Geothermal Resource Risk Mitigation Facility (GREM)

Description:
GCF Financing Facility to support de-risking on exploration phase in geothermal development. Implementation with PT. SMI as an executing entity.

Climate Investor One (CIO)

Description:
Blended finance facility for 11 countries with several financing schemes for development, construction and/or project implementation phase. The project estimated to support Indonesia at around USD 43.9 M.
What’s Next?

- Indonesia has strong commitment SDGs & Climate Actions to support sustainable development and economic growth.

- GoI has taken energy subsidy reform which enlarge fiscal space for productive spending, and promote the development of renewable energy.

- SDGs & Climate Actions implementation required huge investment, government is required to ensure quality spending to lead effective, efficient, good & sound budget management.

- Yet, government budget is limited, Government commits on scaling up climate finance by developing various policies and instruments, such as issuing innovative financing instruments (green sukuk/green bond, SDG Indonesia One), improving access to global finance (such as GCF), leveraging financing facilities (including Financial Services Institutions, MDBs and Private), and providing more efficient and effective incentives to stimulate business entities to run investment with responsiveness towards environment and social aspects.
"WE ARE VICTIMS OF CLIMATE CHANGE, LET'S WORK TOGETHER AS CLIMATE CHANGE AGENTS!"

#CLIMATEACTIONS
Islamic Finance for NDC

Moderator: Evelyn Batamuliza, UNDP Regional Hub

Speakers:
• Eka Hendra Permana, Ministry of Finance, Indonesia
  • Tiara Utami, UNDP Indonesia
• Cedric Rimaud, Climate Bonds Initiative
Islamic Finance for NDCs

Tiara Azarine Utami,
Innovative Financing Lab,
UNDP Indonesia
SDGs & Climate Change Financing

SDGs requires additional investment of $5-7 tn per year up to 2030 (ICESDF), developing countries needs $3.3-4.5 tn per yer (UNCTAD), financing shortfall of about $2.5 tn (World Investment Report 2014 – Investing in the SDGs).

Around US$2 trillion are needed for climate-related sector alone (worldwide).
Asia Pacific region needs US$ 380 Billion alone of investment to stay in line with 1.5 C

SDGs with greatest private sector interest are SDG 7 Clean Energy and SDG 13 Climate Actions

Private Sector's interest

Climate-related sectors
Islamic Finance and SDGs

- Assets expected to exceed $3 trillion by 2020.
- Annual Islamic finance industry expansion 10-12%.
- Embodies socially responsible & sustainable development.
- Attracting new sources of funding that are not fully leveraged otherwise.
SDGs Country Platform
Tools in enabling Innovative Financing Instruments

- CPEIR - Climate Public Expenditure and Institutional Review (Bangladesh, Nepal, Philippines, Thailand, Indonesia, etc.)
- Climate Budget Tagging (Nepal, Indonesia)
- Climate Fiscal Framework (Bangladesh)
- Climate Change Financing Framework (Cambodia)

Effective and Efficient Management of Public Budget

Unlock the untapped potential of non-government sources

The need for a coordinated approach in creating a conducive ecosystem for SDGs funding

The need for a shared platform for dialogue with non-state actors (business, civil society, development partners and others)

The need for innovative financing schemes

The need to link private investment to SDGs
Case Study 1: Story of Green Sukuk
Why Green Sukuk Could Be Attractive

• Bond vs Sukuk
  • Sukuk represents proportionate ownership of an asset, while bonds indicate a debt obligation. In other words, sukuk is backed with tangible assets not debt.
  • The returns of bonds in the form of interest payments, while returns on Sukuk is periodical payments -> rent/profit. (Shari’a compliant)
Indonesia’s Green Sukuk

Distribution of investors

Green Sukuk Allows Indonesia to tap into a new type of investor.

- 71% Non Green Investors
- 29% of the 2018 issuance are Green Investors
Indonesia’s Green Sukuk First Annual Impact Report

- The development of Impact report is supported by UNDP and the World Bank Group. The final report is audited by KPMG.

- Allocation of Proceeds from Green Sukuk also promote national target to the SDGs.

Use of Proceeds for RoI Green Sukuk 2018 cover five main green eligible sectors.

- Sustainable Transport: 55.2%
- Renewable Energy: 8.0%
- Energy Efficiency: 8.1%
- Resilience to Climate Change: 22.2%
- Waste to Energy & Waste Management: 6.5%

23 PROJECTS across Indonesia

- 121 UNITS of solar, mini-hydro and micro-hydro power plant was developed
- 727 KM double-track railways is built in Java’s North Coast Line
- 3.4 MILLIONS of households received the benefit of the improvement in solid waste management
Feb 2018
• Republic of Indonesia issued the First Green Sukuk in the World / First Green Bond in Indonesia

July 2018
• PT SMI (an SOE) issued First Green Bond in Indonesia’s domestic market

July 2018
• OCBC NISP is the first commercial bank to issue green bond in Indonesia

March 2019
• BRI Bank (SOE) issued the First Sustainability Bond in Indonesia

(+) Positive Spillovers to the Market
UNDP’s Support to the Green Sukuk

- Green Bond/Sukuk Framework
- Project Selection and Data Collection
- Impact Calculation Methodology
- Report Writing

- Coordination and Institutional Capacity Building on Green Finance and Climate Change
- Training for Impact Calculation and Report Writing for Technical Ministries

- IMF-WB Annual Meeting, Bali 2018
- ECOSOC Forum on Financing for Development
  - Ministerial-level event on Islamic Finance, New York 2018
- COP 24 Katowice, Poland 2018
Other pipelines

Exploring domestic sukuk in retail market

**Blended Finance:** Zakat for SDGs, CSR & Global Fund

Sustainable Energy Fund: Synergy with **SDG Indonesia One** (Renewable Energy)

Leveraging Climate Finance for **Gender Equality**

**Blue Financing** (Bonds, Insurance, Blended Finance, etc.)
Case Study 2: Blended Finance → Zakat for SDGs, CSR and global fund

- Four micro-hydro power plants, which the project built directly benefit for a total of 803 households (about 4,500 people) from four villages giving them access to electricity and to likewise bolster rural livelihoods and increases the economic activities of the communities.
Gender and Climate Finance

Climate finance and gender are part of thematic tagging(s) within the national planning and budgeting system.

Mainstreaming climate change and gender is part of RJPMN (National Long Term Planning) 2019-2024.

Existing financial instruments need to be leveraged to consider climate change and gender.
Thank you

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Islamic Finance for NDC

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• Cedric Rimaud, Climate Bonds Initiative
Islamic Finance for NDC Financing

Green Sukuks

Bangkok 3rd September 2019
Cedric Rimaud, CFA, ASEAN Program Manager
Climate Bonds Initiative
Green Bonds are growing fast globally

Key figures
- USD11.8bn of issuance* - USD100bn threshold reached in H1, the earliest ever
- 625 green bond issues* with 363 from the USA, 51 from Sweden and 32 from China
- 236 issuers* from 40** countries
- 98 market entrants from 32** countries bring the total number of green bond issuers to 747
- 57** green bond markets reached
- The Netherlands and Chile bring the number of sovereign green bond issuers to 12
- June issuance was strong with 137 deals in 21** countries and 17 new issuers

Year-on-year comparison of issuer types for H1 2018 and 2019

H1 use of proceeds: 2018 and 2019

H1 monthly volumes: 2017 - 2019
Green Bonds are growing everywhere

Source: Climate Bonds Initiative
Standards create confidence in the market

## Sector Criteria development

<table>
<thead>
<tr>
<th>Energy</th>
<th>Can be certified now</th>
<th>Criteria in development</th>
<th>TWGs launching soon</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wind</td>
<td><img src="icon" alt="Wind" /></td>
<td></td>
<td><img src="icon" alt="Wind" /></td>
</tr>
<tr>
<td>Solar</td>
<td><img src="icon" alt="Solar" /></td>
<td></td>
<td><img src="icon" alt="Solar" /></td>
</tr>
<tr>
<td>Hydro</td>
<td><img src="icon" alt="Hydro" /></td>
<td><img src="icon" alt="Hydro" /></td>
<td><img src="icon" alt="Hydro" /></td>
</tr>
<tr>
<td>Marine</td>
<td><img src="icon" alt="Marine" /></td>
<td></td>
<td><img src="icon" alt="Marine" /></td>
</tr>
<tr>
<td>Natural Resources</td>
<td><img src="icon" alt="Natural Resources" /></td>
<td><img src="icon" alt="Natural Resources" /></td>
<td><img src="icon" alt="Natural Resources" /></td>
</tr>
<tr>
<td>Industry</td>
<td><img src="icon" alt="Industry" /></td>
<td></td>
<td><img src="icon" alt="Industry" /></td>
</tr>
</tbody>
</table>

Source: Climate Bonds Initiative

© Climate Bonds Initiative March 2019
How to issue green bonds?

1. **Develop a green bond framework**
   - Define eligibility criteria for projects/assets
   - Create selection process
   - Set up tracking & reporting

2. **Best practice: Arrange an external review**
   - Assurance report: an external party confirmation of compliance with GBP/GLP
   - Second Party Opinion: an external assessment of the issuer’s green bond framework, confirming GBP compliance and analysing the eligible asset categories
   - Green rating: an evaluation of the green bond and framework against a third-party rating methodology, which considers the environmental aspects of the investments. These include products developed by international and local rating agencies such as RAM Malaysia
   - Verification report for Certified Climate Bonds: third-party verification, pre- and post-issuance, which confirms that the use of proceeds adheres to the Climate Bonds Standard and Sector Criteria and the Paris agreement to keep global warming to 2°C and achieve full decarbonisation by 2050

3. **Check for local subsidies & support mechanisms**
   - Singapore: Monetary Authority of Singapore’s green bond grant scheme can absorb the full cost of external reviews
   - Malaysia: offers tax deduction of issuance costs for issuers and tax exemptions for investors until 2020 for socially responsible sukuk and green sukuk. The Green SRI Sukuk Grant Scheme is available to cover the cost of external reviews

4. **Issue the bond, sukuk, loan!**

5. **Post-issuance reporting**
   - Report annually to confirm that the funds are allocated to green projects/assets
   - Best practice: Disclose environmental impacts of financed projects in absolute terms and relative to an appropriate benchmark

**Available guidelines & standards:**
- **International:** Green Bond Principles (GBP), Green Loan Principles, Climate Bonds Taxonomy and Climate Bonds Standard
- **Regional:** ASEAN Green Bond Standards
- **Country-specific:** Sustainable and Responsible Investment Sukuk Framework (Malaysia)
Building a Green Sukuk Market

When did green sukuk come into picture?

- World Bank’s green bond programs
- Guidelines & Indices
- Green sukuk
- Others

![Timeline of Sukuk Issuance](image)

Source: INCEIF and SC

Source: Conference organized by the SC, World Bank Group and the IOSCO Asia Pacific Hub on Harnessing Islamic Finance for a Green Future held from 14 to 15 May 2018 in Kuala Lumpur
## Malaysia – Renewable Energy Green Sukuk

<table>
<thead>
<tr>
<th>Issuer</th>
<th>Program size (RM Million)</th>
<th>Issue date</th>
<th>Issued amount (RM Million)</th>
<th>Utilization of proceeds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tadau Energy Sdn Bhd</td>
<td>250.00</td>
<td>27 July 2017</td>
<td>250.00</td>
<td>To finance 50 megawatt (MW) solar power plants in Sabah.</td>
</tr>
<tr>
<td>Quantum Solar Park (Semenanjung) Sdn Bhd</td>
<td>1,000.00</td>
<td>6 October 2017</td>
<td>1,000.00</td>
<td>To finance three 50 MW solar power plants in Kedah, Melaka, and Terengganu.</td>
</tr>
<tr>
<td>PNB Merdeka Ventures Sdn Bhd</td>
<td>2,000.00</td>
<td>29 December 2017</td>
<td>690.00</td>
<td>To fund an 83-storey office space, forming part of the Merdeka PNB118 tower project in Kuala Lumpur.</td>
</tr>
<tr>
<td>Sinar Kamiri Sdn Bhd</td>
<td>245.00</td>
<td>30 January 2018</td>
<td>245.00</td>
<td>To finance 49 MW solar power plant in Perak.</td>
</tr>
<tr>
<td>UITM Solar Power Sdn Bhd</td>
<td>240.00</td>
<td>27 April 2018</td>
<td>222.30</td>
<td>To finance 50 MW solar power plant in Pahang.</td>
</tr>
</tbody>
</table>

Source: Securities Commission Malaysia
## Malaysia – Renewable Energy Green Sukuk

- **World’s First Mini Hydro Green Sukuk**
- **Borrower:** Telekosang Hydro One Sdn Bhd

<table>
<thead>
<tr>
<th></th>
<th>2019 issuance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tenor</strong></td>
<td>18 years (2037)</td>
</tr>
<tr>
<td><strong>Size</strong></td>
<td>RM 470 million (USD110m)</td>
</tr>
<tr>
<td><strong>Rating</strong></td>
<td>AA3 / Stable</td>
</tr>
<tr>
<td><strong>Issuance framework</strong></td>
<td>Malaysia’s SRI Sukuk Framework</td>
</tr>
<tr>
<td></td>
<td>ASEAN Green Bond Principles</td>
</tr>
<tr>
<td><strong>Use of Proceeds</strong></td>
<td>40 MW small hydro power plants</td>
</tr>
<tr>
<td></td>
<td>21-year PPA / 2-year construction period</td>
</tr>
<tr>
<td><strong>Additional issuance</strong></td>
<td>MYR 120 m junior bonds due 2039</td>
</tr>
<tr>
<td></td>
<td>A2 / Stable</td>
</tr>
</tbody>
</table>

*Source: RAM Ratings*
Indonesia – Sovereign Green Sukuk

- World’s first issuance of a Sovereign Green Sukuk
- Attractive financing terms
- 29% more investors participated than normal Sukuk issuance
- Various types of projects will be financed

<table>
<thead>
<tr>
<th></th>
<th>2018 issuance</th>
<th>2019 issuance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tenor</strong></td>
<td>5 years (March 2023)</td>
<td>5.5 years (Aug 2024)</td>
</tr>
<tr>
<td><strong>Size</strong></td>
<td>USD 1.25 billion</td>
<td>USD 750 million</td>
</tr>
<tr>
<td><strong>Coupon</strong></td>
<td>3.75%</td>
<td>3.90%</td>
</tr>
<tr>
<td><strong>Reviewer</strong></td>
<td>CICERO</td>
<td>CICERO</td>
</tr>
<tr>
<td><strong>% of Green Investors</strong></td>
<td>29%</td>
<td>29%</td>
</tr>
<tr>
<td><strong>% of Islamic Investors</strong></td>
<td>32%</td>
<td>29%</td>
</tr>
<tr>
<td><strong>% of Europe</strong></td>
<td>15%</td>
<td>22%</td>
</tr>
<tr>
<td><strong>% of US</strong></td>
<td>18%</td>
<td>23%</td>
</tr>
<tr>
<td><strong>% of Asia</strong></td>
<td>25%</td>
<td>16%</td>
</tr>
</tbody>
</table>

Source: Ministry of Finance, Indonesia
United Arab Emirates – Real Estate Green Sukuk

- World’s First Real Estate Green Sukuk
- Majid Al Futtaim Properties LLC

### 2019 issuance

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tenor</strong></td>
<td>10 years (May 2029)</td>
</tr>
<tr>
<td><strong>Size</strong></td>
<td>USD 600 million</td>
</tr>
<tr>
<td><strong>Rating</strong></td>
<td>BBB</td>
</tr>
<tr>
<td><strong>Use of Proceeds</strong></td>
<td>Renewable Energy, Energy Efficiency, Sustainable Water Management, Green Buildings</td>
</tr>
</tbody>
</table>

Source: Company’s Green Framework
From Green Bonds to SDGs, Social & Others

- Green Bonds, Social Bonds, Sustainable Bonds
- Capturing the demand from global investors to invest in ESG products
- Standards already exist, issuance can grow from here

**H1 2019 labelled issuance**

<table>
<thead>
<tr>
<th>Category</th>
<th>USD Billions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green</td>
<td>117.8 Bn</td>
</tr>
<tr>
<td>SDG</td>
<td>10.3 Bn</td>
</tr>
<tr>
<td>Social</td>
<td>5.5 Bn</td>
</tr>
<tr>
<td>Other</td>
<td>11.7 Bn</td>
</tr>
<tr>
<td>Total</td>
<td>145.5 Bn</td>
</tr>
</tbody>
</table>

*Source: Climate Bonds Initiative*
Reach Out!

Cedric RIMAUD, CFA
Climate Bonds Initiative

ASEAN Program Manager

cedric.rimaud@climatebonds.net
Islamic Finance for NDC

Moderator: Evelyne Batamuliza, UNDP Regional Hub

Speakers:
- Eka Hendra Permana, Ministry of Finance, Indonesia
- Tiara Utami, UNDP Indonesia
- Cedric Rimaud, Climate Bonds Initiative