Regulatory Framework for RE MPT

Manila, 5th June

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Enabling Frameworks for RE Multilateral Power Trade

1. Establishing Inter-governmental Agreement

2. Ensuring inter-operability
   - Data Sharing Framework
   - Grid Harmonization
   - Available Transfer Capacity

3. Market Creation & Business Model
   - Wheeling Charges
   - Regional REC

Pic source: freepik
Ensuring Inter-Operability: Stepwise Approach for Data-Sharing by ASEAN Utilities

**Category and Classification**
- **Historical Data**
  - List of Data:
    - Power traded (Mwh)
    - …… etc
- **Operation Data**
  - List of Data:
    - Available Transfer Capacity
    - ……
- **Planning Data**
  - List of Data:
    - Capacity (MW)
    - ……

**Grid to Grid**
- Operation Data
- Planning Data

**Substation to Substation**
- Operation Data
- Planning Data

**Circuit to Circuit**
- Operation Data
- Planning Data

**Proposed for Pilot**
- APG Framework Agreement & Protocols

**Purpose**
- Identify the purpose of the data sharing based on the data classification
  - Record the traded power in AMS
  - Development of Market
  - Regional infrastructure Planning (AIMS)

**Methods, Mechanism, & Procedure**
- Identify the methods, mechanism and procedure, including the proposed platform for data measurement, sampling, data handling, data sharing, and data management in each level
  - Annually submitted
  - Using ACE AEDS platform

**Stakeholders/ Governance**
- Determine the stakeholders shall be involved (data owners, data gatherers, and data approver for data sharing in national level)
- Identify approval level required (national & regional level)
  - ACE
  - HAPUA
  - Designated bodies/ market platform operator ?
  - HAPUA? AERN?

**Challenges & Gaps, Requirements, Roadmap**
- Identify the challenges and gaps for implementing the data sharing in each level
- Identify requirements & enablers for moving to the next stage of data sharing
- Identify key action for step-wise roadmap
Ensuring Inter-operability: Grid Code Harmonization & ATC

Grid Code Harmonization
Action Plan 3.1 - Develop harmonised grid codes for the transmission interconnectors

- Conduct the FS to assess the harmonization of the grid codes and prepare the draft harmonized grid codes
- Propose and discuss the draft of the harmonized grid codes
- Obtain agreement on the proposed draft of the harmonized grid codes
- Initiate the implementation of the harmonized grid codes as applicable
- the proposed detailed design

Available Transfer Capacity
Action Plan 3.5 - Develop coordinated transmission capacity calculation methodology

- Conduct consultative meeting and/or workshop on Transmission Capacity Calculation Methodology
- Develop draft Transmission Capacity Calculation Methodology
- Acquire agreement on the proposed Transmission Capacity Calculation Methodology
Enabling Frameworks: Market creation & Business model to mobilize Interconnectors Investment (1/2)

Wheeling Charges
Action Plan 3.2 Develop harmonised wheeling charges methodologies

- Conduct FS on the harmonization wheeling charges methodologies
- Propose and discuss the draft of the high-level formula for wheeling charges
- Obtain agreement on the proposed draft of the high-level formula for wheeling charges
- Implement the harmonized wheeling charge methodology
Idea of Regional REC in ASEAN

Initiated in Special SOME 2020
Thailand proposed an idea to develop regional REC system
Similar interest by EMA and NEA of Singapore

Endorsed in 39th SOME 2021
Support regional RE target
Priority initiative of JMS of 18th AMEM+3

9th BIMP-EAGA PEIC Meeting 2023
Alignment with BIMP-EAGA priority and agenda
Introduction of REC Steering Committee request

RE Certificate System in BIMP-EAGA Project (RECAP)

Expected Output
- Technical Note of REC market potential
- Technical Note of REC opportunities
- Conceptual Framework Report of REC in ASEAN

Objectives & Goals
- To study the market potential of RECs in BIMP-EAGA countries
- To study the REC registries function vis-à-vis national electricity market rules of BIMP-EAGA member states
- To develop a conceptual framework of REC system in BIMP-EAGA countries

Duration
Dec 2022 – Dec 2024 (24 months)
Start date: 16 December 2022
Voluntary REC Market

BIMP Opportunities

Driven by corporate sustainability commitments and reporting requirements

Kay Reporting Platforms

1. CDP (Carbon Disclosure Project)
2. RE100
3. SBTi (Science Based Targets Initiative)
4. Race to Zero campaign

Buyer Requirements:
1. RECs must be credible and comply with international standards.
2. Companies need RECs to substantiate their renewable energy claims.

BIMP Potential

1. Growing Demand
2. Large Addressable Market

Growing Demand:
1. Increasing pressure on companies to decarbonize their operations and supply chains
2. Upcoming regulations like the EU's CBAM will make it even more important

Large Addressable Market:
1. Companies with operations in BIMP and reporting to CDP, RE100, or SBTi
2. Many of these companies have already pledged to reduce their carbon footprints
3. RECs are a tangible way for them to demonstrate their commitment
Compliance Market and BIMP

**Opportunities and Challenges**

**Philippines’ RPS System**

1. The sole BIMP country with an existing RPS
2. However, the **current system faces hurdles** in implementation and enforcement, limiting its full potential

**Challenges:**

1. **Limited participation** from obligated parties
2. **Lack of transparency and clear guidelines**
3. **Difficulty in verifying** the origin and authenticity of RECs

**CBAM – a game changer!**

RECs will be crucial for BIMP/ASEAN exporters to avoid costly tariffs, particularly in sectors with high electricity consumption (steel and aluminum)

**Opportunities for BIMP**

**Philippines has a head start with its existing RPS system**

**Opportunities:**

1. Philippines needs to **strengthen and adapt this system** to meet the upcoming CBAM requirements
2. Other BIMP/ASEAN nations have a unique opportunity to **establish robust REC markets before 2026**
3. **Increase investment in renewable energy projects** (ensuring REC supply)
4. Improve **cross-border electricity trade** on RE
5. Boost **export competitiveness and maintain access** to the EU market
## Regional REC Market Framework

### Opportunities and Path Forward

<table>
<thead>
<tr>
<th>Opportunities</th>
<th>Path Forward</th>
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<tbody>
<tr>
<td><strong>Challenge:</strong></td>
<td><strong>1. Common REC instruments,</strong></td>
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<tr>
<td>1. Lack of unified guidance &amp; information</td>
<td><strong>2. Market rules and guidance,</strong></td>
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<td>2. Limited cross-border transactions</td>
<td><strong>3. Designated entities for regional coordination</strong></td>
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<tr>
<td>3. Difficulty meeting international reporting standards</td>
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### Benefits and Regionalisation:

| 1. **Streamlined transactions**: Common REC instruments & rules |
| 2. **Improved market health**: Clearer roles, targets, and monitoring (MRV) |
| 3. **International recognition**: Alignment with RE100, SBTi, and GHGP2 |
| 4. **Stronger regional cooperation**: Collective bargaining power in trade agreements |

### Implementation:

1. Consultative approach with stakeholders
2. Research on international best practices

### Outcomes:

1. Increased market efficiency & transparency
2. Facilitated cross-border REC trade
3. Enhanced renewable energy investments
4. Stronger regional cooperation on energy transition
Collaboration with Partners on Implementing the APG Priorities and Action Plan

**USAID SPP**

**Action Plan 1.1 - 4.3**
- Output:
  - Workshop
  - Capacity Building
  - Guidelines
  - Study

**ETP-CASE - UNESCAP**

**Action Plan 2.1 – 3.5**
- Output:
  - APG Roadmap
  - Analytical Work of AIMS III Phase 3
  - Pilot implementation of AIMS III Phase 3

**USTDA**

**2 Feasibility Study IN - MY**

**AP 1.1, 1.2 & 4.1**

**APG related activities**

**ERIA**

**Study on Enabling Agreement among AMS for establishing the MPT/APG Institutions**

**NREL COP GPST**

**AP 1.3, 3.6, 4.3**

**Workshop & Capacity Building with HAPUA**

**Regional Power Market trade**

**ADB**

**On-going Project**
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Thank You