Corporate Perspectives on the ASEAN Power Grid and Technological Innovation

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Coalition of renewable energy buyers collaborating with sellers & financiers and working closely with governments

Support policy and regulatory changes to enable markets for corporate RE purchasing

Unify corporate voice to decarbonize the regional economy and accelerate a just energy transition by building healthier communities and creating jobs

Promote clean energy investments to mobilize funding and help advance energy security
Accelerating Power Grid Interconnectivity in Southeast Asia: A Private Sector Perspective

2023 ACEC paper offered high-level support for the following in a new ASEAN Power Grid (APG) Framework Agreement:

- Regular, coordinated process for holistic planning of regional grid interconnectors
- Prioritise grid interconnectors that enable higher penetration of renewable energy and reduce emissions
- Harmonise regulatory and technical frameworks to facilitate regional electricity trading and trace clean power across borders
- Regional electricity data platform for a more efficient and transparent APG
Planning, prioritization & platforms

- Identify **benefits & beneficiaries** through interconnector planning & prioritisation processes to avoid under-investing in grid infrastructure
  - This is challenge in cross-border transmission elsewhere
  - Can help determine who may champion or partially support projects
- For clean energy buyers, cross-border trade could reduce overall costs of electricity and RECs/EACs
  - Need **harmonised** cross-border **metrics** and **tracking system** for EACs and GHG accounting (plus market price discovery) to produce quantifiable cost savings
- Others will benefit from the same interconnectors and could contribute proportionately
  - Governments with GHG policies
  - Electricity consumers wanting to boost reliability of system
Planning for and managing new load growth

- New electrification, data centers, energy intensive industry coming online
- Forecast where/when load will materialize and include in transmission planning
- Develop mechanism for stakeholders to inform and provide feedback on regional interconnector planning
  - Enable large energy customers to specify attributes of electricity desired / RE demand and load growth. Helps avoid:
    - Underbuilding interconnectors needed for clean electricity
- Develop means to help large flexible demand to site and consume where/when clean electricity is available
  - Enable price transparency & emissions data on a locational and temporal basis
ACEC ongoing discussion on advanced technologies & their role

- Improve ampacity & energy efficiency of transmission lines and rights of ways
- More quickly connect new load at lower cost

Dynamic Line Ratings
Adjusts capacity limits based on ambient conditions

Topology Optimization
Software that optimize power flow across network

Advanced Power Flow Control
Hardware that can control power flow

Replacing traditional transmission wires with high-performance conductors can quickly expand ampacity of line and reduce line loss, new ROW developments, and overall costs
Thank you!

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