

Parallel Session A3 **Towards an Integrated Energy Grid**

Saturday, 4 November 2023 | 2:30 pm – 4:00 pm Venue: Nawab, Sheraton Dhaka

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Within the South Asian countries there is a seasonal variation of demand and supply of energy. Whileenergy-deficient countries like Bangladesh, Pakistan and Sri Lanka have been facing severe energy crises, India, Nepal and Bhutan have unutilised power generation capacity and surplus energy. However, ensuring greater national and regional energy security is possible through bilateral and trilateral energy trade and greater cooperation. This can be enabled through an integrated regional energy grid. The integrated regional grid system can help South Asian countries to access competitive, affordable, least-cost electricity, help economic extension of the grid, address seasonal energy scarcity, build larger and better grid, and expedite the promotion of renewable/clean energy development and improved energy and environmental security.

Cross-border electricity trade already exists at bilateral levels as Bangladesh, Bhutan and Nepal have bilateral cooperation models with India. In 2022, the total traded electricity energy volume was 17,202 Mega Unit (ADB 2023). Currently, India exports 1160 MW to Bangladesh, and 1000 MW to Nepal and imports 2260 MW from Bhutan. Recently, Bangladesh also signed a Memorandum of Understanding for importing 500 MW of hydropower from Nepal, using India's transmission corridor. Bhutan's Nyera Amari and Dorjilung hydropower projects are expected to be developed through trilateral cooperation between Bangladesh, Bhutan, and India.

South Asia Subregional Economic Cooperation (SASEC) can play a significant role in regional energy trade by improving interconnections to access large-scale electricity and natural gas sources, harnessing unused and unexplored hydropower potentials, facilitating bilateral and regional coordination mechanisms, and knowledge sharing. The India Green Energy Corridor project can support the intra-state transmission of energy which can also include clean and renewable energy with a competitive intra-state transmission cost. Such productive, solutions-oriented discussions should take place through the South Asia Clean Energy Forum (SACEF), which aims to drive the energy sector forward and contribute to a more sustainable future for the region's citizens.

However, the absence of sufficient grid infrastructure (insufficient regional grid network and high transmission and distribution loss) stands in the way for an integrated supply chain for energy services in the region.

Guiding Questions

- 1. How can South Asia benefit from an integrated energy grid?
- 2. What are the economic, technological, regulatory and institutional barriers for an integrated regional energy grid within South Asia?
- 3. How can regional cooperation help reduce dependence on fossil fuel and enhancerenewable energy trade in South Asia?
- 4. What are some of the examples of regional cooperation in energy in South Asia which can be scaled up?
- 5. How new and innovative investment and financing mechanisms can be established toenhance the energy market in the region?