



## Bangladesh: SASEC Third Bangladesh India Electrical Grid Interconnection Project

Project Name	SASEC Third Bangladesh India Electrical Grid Interconnection Project		
Project Number	51236-001		
Country	Bangladesh		
Project Status	Proposed		
Project Type / Modality of Assistance	Loan		
Source of Funding / Amount	<b>Loan: SASEC Third Bangladesh India Electrical Grid Interconnection-East Project</b>		
	Ordinary capital resources		US\$ 80.00 million
	concessional ordinary capital resources lending / Asian Development Fund		US\$ 60.00 million
Strategic Agendas	Environmentally sustainable growth Inclusive economic growth Regional integration		
Drivers of Change	Governance and capacity development Knowledge solutions Private sector development		
Sector / Subsector	<b>Energy</b> - Electricity transmission and distribution		
Gender Equity and Mainstreaming	No gender elements		
Description	<p>The proposed project is a part of Bangladesh's Power System Master Plan 2016. Analytical studies, including the SAARC's Regional Energy Trade Study 2010 proposed power transmission connectivity between India and Bangladesh. A regional SAARC grid will result in increased operational efficiency, tapping of new power resources and improved system reliability. It will also provide a platform to reduce the prevailing energy gap that hinders regional economic and social development. The project is in accordance with the regional cooperation and integration priorities identified under the medium-term review of strategy 2020. It is also in line with the strategic and thematic objectives of easing infrastructure constraints in the energy sector as well as the cross-cutting priority of deepening regional cooperation and integration to create new economic opportunities. The Project is considered under the South Asia Subregional Economic Cooperation (SASEC) Operational Plan.</p> <p>The SASEC Third Bangladesh India Electrical Grid Interconnection Project (the Project) will upgrade the power transmission capacity of the Bangladesh (Comilla) and India (Tripura) grid interconnection from about 160 MW to 500 MW. This will allow Bangladesh to increase the import of electricity from India to meet the supply deficit.</p> <p>The proposed interconnection project was examined by a joint technical team from both countries and considered it viable to enhance Bangladesh's power capacity; help meet deficits; and reduce dependence on small, inefficient captive and rental generation facilities in Bangladesh. Reliable power supply will, in particular benefit manufacturing and service industries (including the private sector) across Bangladesh. Vulnerable consumers, often the hardest hit by inadequate and poor quality power supply, will benefit from the import of lower cost power under the proposed project. The project has been reviewed and approved in the 13th Joint Steering Committee in September</p>		

Project Rationale and Linkage to Country/Regional Strategy

In 1971, when Bangladesh gained independence, only 3% of the population had access to electricity. By the end of 2017, this had risen to nearly 80%, a significant increase when compared even to the 47% access achieved by 2009. The government has set an ambitious target of achieving 100% electricity access by 2021. Peak power demand is expected to grow from about 9,500 megawatt (MW) in 2017 to over 14,000 MW by 2021 and power generation capacity in Bangladesh would be inadequate to cope with this increase in demand.

Natural gas, the main source of primary energy for power generation in Bangladesh, contributed over 80% of the total electricity generation in 2009. While the installed capacity in Bangladesh reached over 13,800 MW in December 2017, the dependable capacity available to the grid consumers is lower given gas shortages and ongoing projects to upgrade capacity. The growing electricity demand, coupled with increased requirements for limited domestic natural gas in other sector, is resulting in shortages impacting economic performance, business competitiveness, productivity and quality of life. The government has initiated several projects to add new generating capacity to meet the growing requirement of power through rehabilitation of existing gas-fired power plants, setting up of large thermal base-load power projects, and creating inter-country power interconnections while in the short-term, power from rental power projects has been made available to meet growing demand.

There has been progress on rehabilitation of existing gas-fired power plants including through ADB-financed projects. However, there have been significant delays to the plan for the development of large thermal base-load projects in Bangladesh. The initial plan to develop several domestic coal projects has been impacted by mining concerns while imported coal-based projects are developing slower than originally envisaged given limitations on port infrastructure and environmental aspects. The addition of imported gas-based thermal power plants is progressing but this may also take a few years for commissioning. In this context, cross-border power interconnections that enable power imports are considered a reliable option to rapidly increase supply.

Since 2010, when a joint communique on electrical grid connectivity was signed between Bangladesh and India, there has been significant progress on regional cooperation in the power sector. The power grids of Bangladesh at Bheramara and the eastern power grid of India at Baharampur were first successfully interconnected in 2013, financed by Asian Development Bank (ADB). This establishment of the first inter-country electrical grid interconnection in South Asia was followed by 500 MW of power imports from India to Bangladesh through 250 MW of government to government contracts and 250 MW of competitive tenders. The capacity of this interconnection is expected to double to 1,000 MW in 2018 through a second loan from ADB. Significant interest has been noted for supply of power to Bangladesh through a competitive tendering process.

India, the power exporter to Bangladesh, reported a country-wide installed power generation capacity of 334,400 MW in January 2018 against a peak demand of less than 200,000 MW. Over the period 2012-2017, India added about 126,000 MW of power generation capacity (including renewable energy). The Draft National Electricity Policy, 2016 of the Government of India estimates that India would further add an additional 187,000 MW of capacity (including 115,000 MW from renewables) over 2017-2022 to meet an expected peak demand of 235,000 MW in 2022.

A competitive market for power trading is operating in India, with several licensed power traders including in the private sector. Subsequent to the South Asia Association for Regional Cooperation (SAARC) Kathmandu declaration of 2014 to support power trading, the notification of the guidelines for cross-border electricity trade in 2016 and of the draft cross-border regulations in 2017 in India will support efforts towards increasing and facilitating power trade in the region.

Impact	Availability and sustainability of power supply in Bangladesh improved by 2025 (Perspective Plan of Bangladesh, 2012)
Outcome	Cross-border power trade between Bangladesh and India increased.
Outputs	Comilla-Tripura power transmission link strengthened Cross-border power purchase agreement signed.
Geographical Location	Nation-wide

**Safeguard Categories**

Environment	B
Involuntary Resettlement	B
Indigenous Peoples	C

**Summary of Environmental and Social Aspects**

Environmental Aspects
Involuntary Resettlement
Indigenous Peoples

**Stakeholder Communication, Participation, and Consultation**

During Project Design

## During Project Implementation

### Business Opportunities

Consulting Services	Not applicable
Procurement	Based on ADB's Procurement Policy and Procurement Regulation for ADB's Borrowers. (2017, as amended from time to time).
Responsible ADB Officer	George, Len V.
Responsible ADB Department	South Asia Department
Responsible ADB Division	Energy Division, SARD
Executing Agencies	<i>Power Grid Company of Bangladesh, Ltd. (PGCB) IEB Bhaban (4th Floor) Ramna, Dhaka, Bangladesh</i>

### Timetable

Concept Clearance	20 Jul 2018
Fact Finding	27 Aug 2018 to 07 Sep 2018
MRM	02 Oct 2018
Approval	-
Last Review Mission	-
Last PDS Update	25 Jul 2018

Project Page	<a href="https://www.adb.org/projects/51236-001/main">https://www.adb.org/projects/51236-001/main</a>
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