



RIS
Research and Information System
for Developing Countries
विकाशशील देशों की अनुसंधान एवं सूचना प्रणाली

INAUGURATION SOUTH ASIA GROUP ON ENERGY (SAGE)

Wednesday, 10 March 2021

RIS, New Delhi



CONCEPT NOTE

There is an urgent need, and a tremendous scope, for enhancing per capita consumption of energy, particularly electricity, in South Asia, for its overall development. The region is home to about one-fourth of the world's population and witnessing a gradual surge in demand for electricity on account of rising per capita incomes. About 50 percent population in the region (about 1 billion) however faces a serious challenge of accessing a stable supply of electricity. The per capita electricity consumption remains significantly low in almost all countries in the region. Faced with the challenge of a deficit in stable energy supply, mutual cooperation among South Asian nations can lead to several optimal solutions with benefits to all, besides addressing climate change concerns.

India and its neighbouring countries are endowed with rich natural resources, which can be harnessed for supplying a large amount of clean energy to its people. Huge Hydro Power potentials of India, Bhutan and Nepal - almost 300 GW and India's programme of over 400 GW of Solar and Wind power - can transform the energy profile of the entire region. Moreover, regional energy cooperation can be immensely beneficial in terms of achieving substantial cost savings across the region. According to studies published by the World Bank, the estimated savings from regional South Asian electricity trade "facilitated by expanded cross-border transmission interconnections" could save as much as \$94 billion.

Regional Energy Infrastructure

At present, approximately 3,000 MWe of electricity is being traded among four countries in the region namely, India, Nepal, Bhutan and Bangladesh. India sources hydropower from Bhutan and also supplies both thermal and hydropower to Bangladesh and Nepal. Bhutan, among others, has emerged as an important exporter of its hydropower to India for the past two decades. Selling surplus hydropower (about 1400 MW) to India has proven immensely beneficial to Bhutan. The revenues earned through power trade account for about 25 percent of its GDP and enabled it to invest in capital-intensive sectors like cement and steel, etc. Consequently, cross border energy trade is perceived to be a win-win for all the regional players which can improve overall access to electricity, optimize energy generation resources, and foster economic growth and development.

Under the ‘Neighbourhood First’ policy, India has laid a strong emphasis on attracting investments in regional electricity infrastructure development. Towards facilitating regional energy trade, the Government of India has launched a series of policy reforms including amendments to its electricity import-export guidelines notified by the Central Electricity Regulation Commission (CERC). The absence of a regional power transmission and distribution infrastructure including power grids has been a major barrier to enhancing energy cooperation between India and its neighbours. Widening regional transmission and distribution infrastructure holds a key to fully reaping the benefits of CBET. Many technical, administrative and financial divergences need urgent resolution, in this regard, to facilitate the development of regional energy infrastructure. Concurrently, the development of soft infrastructure in terms of harmonized policy guidelines, grid codes as well as the common regulatory & legal framework needs attention.

Innovation for the Energy Transition

The rapid pace of innovation in various energy technologies like smart grids offers immense opportunity for regional energy cooperation. In recent years, the concerns over sustainable development have stimulated rapid innovation in smart grids, energy storage and mobility solutions, etc. The transfer of energy technologies can be an important driver of promoting energy cooperation in the region. There is great scope for technology and innovative firms in the region to take part in energy infrastructure development. This could involve the sharing of best practices for supporting the implementation of commercial-scale projects. Regional energy trade can also help to achieve technology standardization, which

in turn can increase regional energy technology trade. Furthermore, the growing demand can offer valuable opportunity to improve R&D in energy technologies and to upgrade the domestic technology base.

In this backdrop, the South Asia Group on Energy (SAGE) at RIS aims to achieve a balanced and optimal development of energy infrastructure through mutual understanding and cooperation. The group will have the role of promoting, initiating and facilitating effective policy dialogue and capacity building on a bilateral, sub-regional and regional basis for energy and related issues, among South Asian countries. Following are the key Terms of Reference (ToR) for SAGE:

1. To identify infrastructural constraints in Power Transmission connectivity and suggest an appropriate strategy to address these constraints.
2. To identify potentials in trade and investment, particularly in the energy sector and suggest measures to address gaps in regulatory policies in the sector across the region.
3. To identify regional solutions to technology in the power sector, both in generation and transmission of power, and suggest financing options of the regional project as well as a source of funding for this initiative.
4. To suggest an institutional framework for planning and monitoring of project implementation and propose possible areas of cooperation between regional economies.

SAGE Members

1.	Shri RV Shahi, Former Power Secretary, Government of India & Distinguished Fellow, RIS	Chairman
2.	Professor Sachin Chaturvedi, Director General, RIS	Co-Chair
3.	Shri Rakesh Nath, Former Chairman Central Electricity Authority & Former Member Appellate Tribunal for Energy	
4.	Shri Ajay Shankar, Former Secretary, Department of Industrial Policy & Promotion, Government of India	Member
5.	Shri Rakesh Kacker, Former Secretary, Ministry of Food Processing Industries, Government of India	Member
6.	Shri Deepak Amitabh, CMD, PTC India Limited.	Member
7.	Amb. Amar Sinha, Former Secretary, Government of India, Ministry of External Affairs & Distinguished Fellow, RIS	Member
8.	Amb. Preeti Saran, Former Secretary, Government of India, Ministry of External Affairs	Member
9.	Shri. Anil Sardana, Managing Director & CEO, Adani Power	Member
10.	Shri. CK Mondal, Director (Commercial) NTPC & Chairman, NVVN	Member
11.	Shri K. Sreekant, CMD, Power Grid Corporation of India Limited	Member
12.	Professor S.K. Mohanty, Professor, RIS	Member
13.	Professor Mahendra P. Lama, School of International Studies, Jawaharlal Nehru University, New Delhi	Member