Recommendations for the JAPAN- SAARC Roadmap for the Energy Connectivity in the SAARC Region

The 8th Japan-SAARC Energy Symposium
2015.03.11

Shigeru Sudo
Department of Business Management
Teikyo Heisei University
SCOPE of the Presentation

I. Reviews of Previous Recommendations

II. Japan’s Cooperation to SAARC

III. Medium-Term Vision for Energy Connectivity in the SAARC Region
Main Topics in Energy Related Activities in SAARC

◆ 2004 Established a SAARC Energy Working Group
◆ 2006 Established SAARC Energy Centre
◆ 2009 Approved the Concept paper on Energy Ring by Energy Ministers Meeting in Colombo;
  i) Oil and Gas    ii) Electricity    iii) Renewable Energy    iv) Technology
◆ 2010 Conducted SAARC Regional Energy Trade Study
◆ 2010 Circulated the Concept Paper on the Road map for SAME (SAARC Market for Electricity)
◆ 2011-12 Action Plan On Energy Conservation
◆ 2013 Study on South Asia Regional Power Exchange
◆ 2014 SAARC Framework Agreement for Energy Cooperation (Electricity)
# Reviews of Previous Recommendations

<table>
<thead>
<tr>
<th>Date</th>
<th>Venue</th>
<th>Main Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2006</td>
<td>Dhaka</td>
<td>Promoting energy dialogue</td>
</tr>
<tr>
<td>2 2008</td>
<td>Islamabad</td>
<td>8. <strong>SAARC Member States consider establishing an inter-governmental framework</strong> for implementing the agreed program of action in energy cooperation. <strong>SAARC member States may also consider possibility of joining the Energy Charter Treaty to promote regional energy cooperation.</strong></td>
</tr>
<tr>
<td>3 2010</td>
<td>New Delhi</td>
<td>Promoting energy cooperation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Recognizing the need for collaboration among the SAARC Member States in harnessing the indigenous energy resources and procuring energy supplies from other regions to meet their increasing energy needs, <strong>a &quot;SAARC Regional Energy Framework Agreement&quot;, be put in place.</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>5. A regional forum should be established where the professionals engaged in energy sector including those in regulatory bodies, generation, transmission, distribution and exploration utilities could regularly meet and exchange views, ideas, technologies and success stories. To start with, the Sikkim University may initiate the concept of establishing a South Asian Energy Club, as a forum for engaging energy sector professionals to exchange views, ideas, technologies and success stories.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6. The <strong>SAARC Development Fund (SDF)</strong> should be increasingly utilized for regional energy projects. Besides the commitments from the SAARC Member States the SDF could draw the financial support from international financial institutions to finance regional projects.</td>
</tr>
<tr>
<td>Date</td>
<td>Venue</td>
<td>Main Recommendations</td>
</tr>
<tr>
<td>------</td>
<td>-------</td>
<td>----------------------</td>
</tr>
<tr>
<td>4 2011 Dhaka</td>
<td><strong>Regional Cooperation in Energy Efficiency and Renewable Energy</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. Identification of technology options, financing mechanisms and policy interventions for the expeditious development of the Renewable Energy (RE) and Energy Efficiency (EE) projects within the region.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Design and implementation of a Regional Standard and Labeling program based on the available projects and the initiatives in the region or adopt with suitable modifications, the ones that are in operation in some of the countries in the region.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Share experiences on test facilities and programs among the SAARC Member States, establish minimum energy standards in addition to harmonization of test procedures and capacity of testing facilities.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. SAARC Energy Center (SEC) may facilitate regular interactions between the RE and EE institutions and professionals from the SAARC Member States to promote innovative solutions.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. SEC may undertake a review of the policy initiatives of the SAARC Member States to facilitate harmonization of the RE and EE policies across South Asia.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6. The next meeting of the SAARC Energy Ministers may consider the following recommendations for adoption by the SAARC summit:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(i) Implement at least one regional/sub-regional power generation project that would be jointly developed by the SAARC Member States for mutual benefits. This proposal has also been recommended under the SAARC Regional Energy Trade Study instituted by the SAARC Secretariat.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(ii) To provide national treatment to any cross border investments by the Member States in energy projects, including RE and EE projects, by both public and private sector agencies.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(iii) SEC to identify a set of research institutions within the region to take up specific research energy technology projects with funding from SAARC Development Fund (SDF), that have potential of benefiting the region/sub-regions.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(iv) Energy exchanges could be promoted among the SAARC Member States to encourage regional energy trade.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>8. The South Asian Energy Club, as proposed in the 3rd Japan–SAARC Symposium (held in 2010, in New Delhi), should be established through active and regular participation from the Member States to serve as a platform to nurture future energy professionals from among the younger generations.</td>
<td></td>
</tr>
<tr>
<td>Date</td>
<td>Venue</td>
<td>Main Recommendations</td>
</tr>
<tr>
<td>------</td>
<td>-------</td>
<td>----------------------</td>
</tr>
</tbody>
</table>
| 5 2012 | Colombo | **Renewable Energy Technologies Initiative for SAARC**  
1. SAARC Energy Centre (SEC) to identify one or two centres of excellence and fund specific research projects for adoption and indigenisation of existing RE technologies and evolution of new technologies suitable for the region.  
2. SEC to put in place mechanisms through which the results obtained from the research can be shared and disseminated throughout the region.  
4. SEC to propagate the opportunities; that existing on-grid systems offer to all stakeholders.  
6. SEC to establish and implement country level energy sustainability targets.  
9. Identify action items for achievement of tangible results, as an option for the next phase of the Japan-SAARC Energy cooperation and development.  
10. Implement mechanisms to improve the reliability of the existing power distribution systems (e.g. smart grids)  
11. SEC to review recommendations of previous symposia for follow-up and implementation. |
| 6 2013 | Kathmandu | **Commercia...**  
1. Augmentation of Generation and Transmission Capacities:  
2. Incorporation of necessary Provisions in Electricity Laws and Regulations:  
3. Harmonization of Technical Parameters:  
4. Commercial Arrangements:  
5. Open Access on Transmission Systems:  
6. Transit Facilitation: |
# Reviews of Previous Recommendations

1. Japan and SAARC member should work together to:

   - Encourage Japanese investors in cooperation with companies from SAARC Member State to develop energy resources in South Asia with support from JBIC (Japan Bank for International Cooperation);
   - Consider financial assistance to implement large energy projects, especially the cross border power transmission projects in South Asia;
   - Provide latest efficient technologies to harness energy from conventional energy resources;
   - Consider harnessing energy from renewable energy wherein Japan, being a global leader of renewable energy technologies, can play a catalytic role;
   - Develop a concept paper on harmonized multinational energy transmission frameworks within the SAARC region which will facilitate member states to consider enter into bilateral or trilateral power transmission project more liberally.

2. A: Intra–regional Energy Networks:

   B: Inter–regional Energy Networks:

3. Based on the recommendation of the earlier Japan–SAARC Symposia, Japan and the SAARC Member States have initiated a study to identify key energy projects in South Asia that can be supported by Japan through JICA and JBIC. The draft action plan will become available by April 2014. SAARC and Japan may work closely to have it endorsed by the SAARC Summit for follow up action.

4. In the absence of a credible SAARC Energy Data Base, energy professionals, . . . . . Japan directly or through its technical assistance scheme and the SAARC Member States should work together to develop “SAARC Energy Data Base”.

<table>
<thead>
<tr>
<th>7</th>
<th>2014</th>
<th>New Delhi</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
1. Support for Enhancing Connectivity
   1.1 Energy Sector 1.2 Transportation Sector
2. Promotion of Youth Exchanges
3. Support for Democratization and Peace-Building
4. Cooperation in Disaster Risk Reduction
Support for Enhancing Connectivity Energy Sector

- **Afghanistan:** The Project for Introduction of Clean Energy by Solar Electricity Generation System
- **Pakistan:** National Transmission Lines and Grid Stations Strengthening Project
- **India:** Haryana Distribution System Upgradation Project
- **Maldives:** Project for Clean Energy Promotion in Male
- **Nepal:** Tanahu Hydropower Project
- **Bhutan:** Rural Electrification Project (Phase 1, 2)
- **Bangladesh:** Matarbari Ultra Super Critical Coal-Fired Power Plant Project
- **Sri Lanka:** Greater Colombo Transmission Distribution Loss Reduction Project
Japan’s ODA in Energy Sector in South Asia

◆ Generation:
- Coal for India, Bangladesh, and Pakistan
- Gas for India and Bangladesh
- Storage-type hydropower in Nepal

◆ Transmission and distribution to meet energy demand and reduce loss (all countries)

◆ Energy efficiency (all countries)

◆ Renewable energy (all countries)
Support for Enhancing Connectivity
Transportation Sector
Japan has continued implementing youth exchange programs such as JENESYS² since 2007 to help lay the foundation for a common future vision and solidarity in the SAARC region as well as to promote mutual understanding among youths between the SAARC member countries and Japan.

Total: Approximately 2,500 people
Support for Democratization and Peace-Building
Japan’s efforts as a “Proactive Contributor to Peace”
Cooperation in Disaster Risk Reduction

Afghanistan:
The Project for Capacity Enhancement on Hydro-Meteorological Information Management

Pakistan:
Khyber Pakhtunkhwa Emergency Rural Road Rehabilitation Project

India:
Information Network for Natural Disaster Mitigation and Recovery

Maldives:
The Project for Seawall Construction in Male Island (Phase I-IV)

Nepal:
Disaster Mitigation Support Programme Project

Bhutan:
The Project for Capacity Development of GLOF (Glacial Lake Outburst Floods) and Rainstorm Flood Forecasting and Early Warning

Bangladesh:
Project for Capacity Development on Natural Disaster-Resistant Techniques of Construction and Retrofitting for Public Buildings

Sri Lanka:
Landslide Disaster Protection Project of the National Road
With regard to energy, stable supply of electricity is a common challenge for all SAARC member states.

Japan has held “Japan-SAARC Symposium” on energy seven times since 2006.

In the 8th symposium, we are expecting to adopt a proposal that sums up the discussions held at the previous symposia, and we intend to share it with high-levels of each SAARC member state.

Japan will also conduct a study to examine possible ways of cooperation to further strengthen connectivity among SAARC countries in the fields of energy and power based on previous discussions.

Taking also into account the proposal to be adopted at the symposium next year, we would like to formulate specific projects.
9. The Leaders directed the relevant SAARC bodies and mechanisms to identify regional and sub-regional projects in the area of power generation, transmission and power trade, including hydropower, natural gas, solar, wind and bio-fuel, and implement them with high priority with view to meeting the increasing demand for power in the region. The Leaders welcomed the signing of the SAARC Framework Agreement for Energy Cooperation (Electricity).
Ⅲ. Medium-Term Vision for Energy Connectivity in the SAARC Region
Electricity is required for all these sectors

**Key Elements:**  
i) Policy, ii) Source Options, iii) Funding Options, iv) Technology Options

**Bottom line; Policy:**  
i) Minimized use of Fossil, ii) Minimized use of Fossil, iii) Electricity or Energy Trading

**Technology Options:**  
with Quality at Affordable Prices

**Way Forward:**  
i) Energy Policies, ii) Commitment to Energy Corporation, iii) Opportunities and barriers regional connectivity
The participants of the 8th Symposium;
i) Affirming that Japan-SAARC cooperation should promote the enhancement of the SAARC regional connectivity.....;
ii) Emphasizing that the connectivity within the SAARC region is important from a wider strategic view-point of promoting inter-regional cooperation and connectivity.....;
iii) developed the Medium-term Vision for Energy Connectivity in the SAARC.
Reviews of Previous Symposium

1. The SAARC Member States will accelerate the process to establish a necessary mechanism in accordance with the SAARC Framework Agreement for Energy Cooperation which was recommended by the 2nd and 3rd Japan-SAARC Energy Symposium and was signed at the 18th SAARC Summit;

2. Recognizing the continued importance of the regional cooperation on energy efficiency and renewable energy to ensure the supply of sustainable energy, the SAARC Member States will promote to share relevant technologies, experiences and best practices, and Japan will consider the possibility of extending cooperation to be extended to the SAARC Member States including technical cooperation to this end;

3. Recognizing that the development of the domestic legislations on electricity export and trade is necessary for the enhancement of energy connectivity, the SAARC Member States will continue to make efforts to develop domestic legislations and share information and experiences regarding those enacted laws and regulations with other members;
4. Recognizing that the enhancement of regional cooperation and connectivity contributes to the development and stability of the whole region, and based on the result of the 18th SAARC Summit, Japan will, as an observer state, continue to promote its energy cooperation with SAARC in light of the development of all SAARC Member States;

5. Japan will actively promote cooperation on the study for the formulation of a master plan in the field of energy and on the development of high-efficiency power generation that would contribute to energy cooperation with the SAARC Member States and enhance collaboration with the SAARC Secretariat and the SEC as part of the efforts to promote cooperation;

6. Japan will continue considering the implementation of energy projects, currently under discussion in the SAARC Member States;
7. The SEC will continue to make efforts to enhance Japan-SAARC energy cooperation and in particular work to coordinate with the SAARC Member States to ensure prompt decision making with regard to Japanese cooperation;

8. The SEC will continue to encourage the SAARC Member States to enhance energy cooperation and connectivity among the SAARC Member States and play a more active role in the coordination with each Member State in this regard;
9. The SAARC Member States will make efforts to enhance regional energy cooperation and connectivity by promoting the convergence of and improving the consistency of relevant laws, regulations and standards within the SAARC region;

10. The SAARC Member States will actively cooperate with Japan in facilitating formation of its projects that would contribute to regional cooperation.