



The 27th CAREC Energy Sector Coordinating Committee Meeting
 13—14 March 2018, Yyldyz Hotel, Ashgabat, Turkmenistan

Opening (9:00 am – 9:30 am)

Welcome remarks

Batyr Hudayberdyev, Deputy Minister of Energy, Turkmenistan Government

Batyr Hudayberdyev, Deputy Minister of Energy of the Turkmenistan welcomed the participants on behalf of the government. He gave updates on the energy sector development in Turkmenistan and regional projects, including the development of TAPI project and MOU signing of TAP project.

Ahmet Cevdet Denizer, Country Director, Turkmenistan Resident Mission, ADB

Ahmet Cevdet Denizer, Country Director of ADB in Turkmenistan explained the ADB Country Partnership Strategy (CPS) for Turkmenistan.

Ashok Bhargava, Director, Energy Division, Central and West Asia Department, ADB

Ashok Bhargava, Director of Energy Division, Central and West Asia Department from ADB expressed appreciation for the warm hospitality from Turkmenistan government. He also explained the agenda of the ESCC.

Keynote Speech (9:30 am - 10:00am)

Energy 2030 Perspectives from Antonio dela Pelle, McKinsey Energy Insights

Antonio dela Pelle from McKinsey Energy Insight presented their analysis on “Energy 2030” based on their forecasting model.

Session 1: Developing the East-Central Asia-South Asia Regional Energy Market (10:00am – 11:00am)

Update on the Turkmenistan-Afghanistan-Pakistan (TAP) transmission line project (Presentation by Turkmenistan and Afghanistan governments and Asad Aleem, ADB)

Asad Aleem from ADB updated on the regional projects, including TUTAP and TAP. He also explained proposed actions, including 500-kV Uzbekistan-Afghanistan Power Interconnection project (Surkhan to Pule Khumri), and Study to support increase in regional power trade with in the Central Asia Power Systems (CAPS), which may also support the acceptance of AFG into the CAPS.

Update on East CASAREM (presented by Sujata Gupta, ADB)

Sujata Gupta from ADB explained the ongoing study under ADB’s Technical Assistance on North East Asia super grid. The study examines the renewable energy potential in Mongolia and the potential for developing regional trade

<p>Updates on CASA 1000 (Presented by Kyrgyz and Tajikistan governments, and World Bank)</p>	<p>market with neighboring countries.</p> <p>Husam Beides from World Bank presented an overview of and updates on CASA 1000. He explained that the project is making progress and all the contract documents will be completed by the end of this year. KGZ and TAJ also shared the progress from each side.</p>
<p>Session 2: Promoting Regional Electricity Trade and Harmonization (11:15 am – 12:15 pm)</p> <p>Presentation by Uzbekenergo, Government of Uzbekistan</p> <p>Presentation by Khamidillah Shamsiev, Coordination Dispatch Center</p>	<p>Abdyrashid Tukhtasinovich Mirzaev from UZB presented current structure of electricity sector in Uzbekistan. He also explained the current regional interconnection and trade with neighbor countries, including the new agreement on the supply of electricity from Tajikistan in summer.</p> <p>Khamidillah Shamsiev from Coordination Dispatch Center (CDC) explained the transition of regional electricity trade volume of the power trade. He explained the trade volume is expected to rise in the near future and it will increase the need for coordination work between energy grids by CDC.</p> <p>He also explained that while most the countries in the CAPS already have either already installed and operate or in the process of installing modern Supervisory Control and Data Acquisition (SCADA) systems for their dispatch, CDC still performs its coordinating functions using technology from 70s and 90s, which seriously constrains its function. He requested grant funding support (\$10 million) from development partners within the framework of CAREC to introduce SCADA system into CDC in order to be able to execute its role more effectively using state of the art technology.</p> <p>ADB responded that the need for technical assistance to CDC to address the technical bottlenecks of regional trade was already shared and discussed among development partners, and ADB will consider mobilizing resources to address the request from CDC on the SCADA system, in close coordination with other development partners, including World Bank and USAID. The World Bank, in collaboration with USAID, will also be providing CDC Energia a technical assistance for capacity building and training program.</p> <p>ESCC members recognized the need for better coordination among the countries to increase the level of energy trade</p>

<p>Framework for action to expand on opportunities for regular electricity trading (Presentation by Michael Curtis, USAID)</p>	<p>within CAPS and supported the CDC's request for its modernization.</p> <p>Michael Curtis from USAID presented its priorities for the Central Asia region during the ESCC meeting. He explained that USAID, in collaboration with other US government agencies and the International Finance Institutions, can assist in the establishment of a new, market-based Central Asia Power System that will enhance energy security, improve economic stability, facilitate commercial trade transactions and attract investments in the power sectors of all five Central Asian countries. This effort will build on its long-standing relationships in the Central Asian power sector, including with multilateral development banks, to provide the needed technical assistance and capacity building necessary to establish an independent system operator, as well as the standards and grid codes needed for a modern regional power system. The creation of an economically-viable new regional power market would not only enhance energy security and economic stability, but would also facilitate commercial trade transactions, attract investments in the power sectors of all five Central Asian countries, and allow for greater energy trade with South Asia. This undertaking is fully aligned with CAREC's energy sector strategic plan.</p>
<p>Session 3: Promoting and Prioritizing Clean Energy Technologies (2:00 pm – 3:30 pm)</p> <p>Renewable Energy integration to Grid (presentation by Pascal Dominique Jean Bertolini)</p> <p>Renewable Energy work by USAID (presentation by Michael Curtis, USAID)</p>	<p>Pascal Bertolini from RTE gave an update on the ongoing activities of the RETA 9365 on Renewable Energy integration to the Grid, including the background, outputs, the team, and preliminary findings, synchronism issues between the countries of the region and ongoing projects. Three options were proposed for different levels of regional integration. For the inquiry about possible storage application, the TA will analyze the possibility as one of balancing reserve technology options.</p> <p>Michael Curtis from USAID explained USAID's Power the Future program. The program works to accelerate Central Asia's transition to low-cost, clean energy solutions. The program provides technical assistance to the Central Asia countries by strengthening their capacity to provide low-cost energy services that are competitive with the existing prices that are common throughout the region. USAID will provide technical assistance to the governments of Central Asia in developing innovative solutions that will scale-up and promote increased private investment in low cost clean energy. The Power the Future program will support clean energy goals through: (i) Improved power sector planning and policy</p>

<p>Electricity in a Box (Off-grid Solar kit pilot project) (presentation by Kazuto Muraguchi, ADB)</p>	<p>frameworks for renewable energy (ii) Increased deployment of grid-connected renewable energy; (iii) Improved efficiency in energy generation; and (iv) Enhanced coordination, knowledge management, and communications</p> <p>Kazuto Muraguchi from ADB presented offgrid solar kit pilot projects under the Regional Technical assistance. He explained the concept of “electricity in a box”, which may provide access to rural and remote area with reasonable costs. He updated the participants on the past and current activities and timelines for delivery to the target pilot areas.</p>
<p>Session 4: Round Table Discussion on Enhancing Gender Balance in CAREC Energy Sector (3:45 pm – 4:15 pm)</p>	<p>Cindy Tiangco from ADB led the discussion on how to enhance the gender balance in energy sector. Delegates from each country shared the current situation and rules/regulations in their respective countries.</p>
<p>Session 5: Wrap-up of Day 1 and Preview of Day 2 (4:15 pm – 5:00 pm)</p> <p>High Technology Roadmap – David Beeton Initial draft of CAREC High Technology Road Map and Electric Vehicle (Presentation by David Beeton)</p>	<p>Sohail Hasnie from ADB described the upcoming activities under CAREC ESCC for 2018.</p> <p>David Beeton from Urban Foresight introduced the High Technology Roadmap, which features four areas of technologies: Solar, Battery, Energy Efficiency and Electric Vehicle. The roadmap aims to (i) increase awareness of emerging technology (ii) create a framework of possibilities (iii) create a living document that is updated.</p>
<p>Session 6: CAREC High Technology Roadmap (9:30 am – 12:00 pm)</p> <p>Solar Power (Presentation by Sohail Hasnie and Cindy Tiangco, ADB)</p> <p>Battery Technology (Presentation by Simon Franklin)</p>	<p>Sohail Hasnie from ADB opened the meeting with an introduction to the High Technology Roadmap. He presented the huge solar potential in CAREC region, featuring the rapid decline in solar cost globally. Cindy Tiangco from ADB introduced floating solar technology, including its benefit, cost breakdown, synergy with hydropower. She also introduced proposed technical assistance on floating solar, which include the pilots in AZE, AFG, and KGZ.</p> <p>Simon Franklin from ITP Renewable presented the possible applications of battery technology with examples and price trends. He also explained examples of battery installations: Hornsdale Power Reserve, Endeavour Energy Virtual Power Plant, and CSIRO Off-grid Battery. Opportunities for CAREC countries throughout the value chain of battery technology was also explained.</p>

<p>Energy Efficiency and Conservation (Presentation by Sohail Hasnie and Yasushi Tanaka)</p> <p>Electric Vehicles (Presentation by David Beeton)</p>	<p>Yasushi Tanaka from Energy Conservation Center Japan presented on energy efficiency and conservation, based on the experience in Japan. He also introduced 14 Best Available Technology applicable to CAREC countries.</p> <p>David Beeton from Urban Foresight presented on electric vehicles, touching on the global trend and the rationale for investing in EVs. He concludes with the way forward through (i) raising awareness on EVs (ii) creating infrastructure (iii) financial and non-financial incentives (iv) communication, education, and outreach.</p> <p>WB suggests that, following the discussion in ESCC, it would be more useful if some countries in CAREC could present on how they have promoted and implemented these technologies in practice in future ESCC.</p> <p>ADB distributed the High Technology Vision where each country has expressed interest in a specific technology and asked country delegates to confirm their area of interest. Mr. Beeton emphasized that the next stage is to have a clear path forward after countries confirm their needs.</p> <p>USAID mentioned the importance of policy reforms and creating an investment environment to promote the technology and energy efficiency.</p>
<p>Energy Sector Outlook under Technology Disruption Scenario (Presentation by Jasper Vaan de Staaij, McKinsey Energy Insights)</p>	<p>Jasper Vaan de Staaij showed the energy sector outlook for the region based on the cases of 9 countries from CAREC countries, contrasting the baseline scenario with two technology disruption scenarios: uptake of EVs and higher renewable energy penetration.</p> <p>ADB asked the participants if there is an interest to do further studies to develop country specific or regional outlook utilizing the model. AFG showed interest in developing outlook with more complete data.</p>
<p>Session 7: Mid-term Review of the Energy Sector Work Plan and Strategy (1:30 pm – 2:45 pm)</p> <p>Following the endorsement from SOM, participants will discuss the Mid-term Review of the Energy Sector Work Plan and Strategy, to make it fully</p>	<p>ADB asked each country and development partners for feedback on the current ESCC activities and its future role, taking into account the new the CAREC 2030 Strategy and Paris Agreement/SDGs.</p> <p>AFG suggested each country should have at least one senior person attending the ESCC regular basis to maintain the continuity of discussion. AFG also suggested to have more presentations from CAREC countries focusing on specific area.</p>

<p>aligned it with the new strategy of CAREC (CAREC 2030) and agree on a framework for review.</p>	<p>AZE supported the activities of ESCC so far, and also suggested as a next step, ADB to develop workshop/training to address specific issues in specific country.</p> <p>WB proposed more active involvement of CAREC focal point from each country in agenda setting of ESCC so that the needs from CAREC countries can be appropriately addressed in ESCC.</p> <p>MON and UZB also supported of the ESCC activities and the idea of having regular participation of specific senior people. UZB mentioned inviting new persons to bring new ideas is also important and also showed interest in training/workshop on forecasting.</p> <p>ADB concluded the discussion with following 1) ADB will develop a short paper on strategic direction of ESCC taking into account today's discussion, development of regional cooperation and Climate change, and circulate the draft to CAREC countries for feedback. 2) The essence of the short paper will be presented to SOM in June. 3) Strategy and workplan of ESCC will be developed based on the short paper.</p>
<p>Session 8: The 2018 Energy Investment Forum (2:45 pm – 3:00 pm)</p> <p>Presented by Deputy Minister Romeo Mikautadze, Ministry of Economy and Sustainable Development, Georgia)</p>	<p>Deputy Minister Romeo Mikautadze from Georgia presented the plans for the 3rd EIF in Batumi, highlighting the geographical location, major stakeholders, current situation of Power Sector in Georgia, including the 10 year network development plan.</p> <p>ADB requested senior level participation from each country to 3rd EIF.</p>
<p>Closing</p>	<p>ADB summarized the discussion of 2 days, highlighting</p> <ol style="list-style-type: none"> 1) CDC's request for support on SCADA system up to \$10 million, which will be of key importance for enhancing regional trade 2) The needs for data for progress report to be submitted to SOM. ADB will send formal letter for this request 3) Request for confirmation on each government's interest/priority on High Technology areas. Secretariat will also send a letter on this. <p>Deputy Minister of Turkmenistan closed the meeting and thanked the delegates and development partners for the attendance and presentations.</p>

