



Reference Document
For Session 1 of the Senior Officials' Meeting
November 2011

Energy Sector Progress Report and Work Plan (2011-2012)

**10th Ministerial Conference on
Central Asia Regional Economic Cooperation
22 – 24 November 2011
Baku, Azerbaijan**

SUMMARY HIGHLIGHTS

- The CAREC Energy Action Plan Framework focuses on the three pillars: (i) **energy demand-supply balance and infrastructure constraints**; (ii) **regional dispatch and regulatory development**; and (iii) **analysis of energy-water linkages**. Progress was under each pillar since the 9th CAREC Ministerial Conference last year. Protocol is to have each activity reviewed by the Energy Sector Coordinating Committee (ESCC) prior to submission to the CAREC Senior Officials' Meeting. However, the October 27-28 meeting scheduled in Bangkok was cancelled due to the city's emergency flood situation. The following was reviewed in a brief informal meeting of the ESCC¹.
 - (i) Energy Demand and Supply Balance and Infrastructure Constraints
 - The Regional Power Sector Master Plan, the concept for which was approved by Eighth CAREC Ministerial Conference in 2009, is at the final stage of preparation. The Master Plan is being prepared by a consulting company Fichtner and financed with \$2 million technical assistance provided by ADB. The consultants visited the four participating Central Asian countries (Kazakhstan, Kyrgyz Republic, Tajikistan, and Uzbekistan) a number of times. A vast amount of data was collected, interpreted and analyzed.
 - In 2011, three Pillar 1 Subcommittee meetings were held where the Inception (March), Interim (July) and draft Final Reports (October) were consecutively presented. The draft Final Report also included a draft 10-year investment plan, which was supported by the Subcommittee. All reports were actively discussed and reviewed by the subcommittee members, and changes were incorporated. Additional comments by the countries will be provided in the written form. The proposed investment plan was incorporated into draft Medium Term Priority Project (MTPP) list as agreed by the ESCC members present at the informal meeting.²
 - The Final Report with the 10-year investment plan is planned to be finalized by the end of 2011. Upon its completion, the Pillar 1 Subcommittee might convene a meeting to review and endorse the Final Report.
 - (ii) Regional Dispatch and Regulatory Development
 - The original work program for Pillar 2 has been augmented with the activation of USAID's RESET (Regional Energy Security, Efficiency and Trade) program. ESCC participants have identified range of topics for knowledge sharing and training activities, from which some were already carried out. In 2012 the ESCC will provide guidance on the implementation of additional knowledge sharing activities that will be supported by CAREC Institute and USAID's RESET program.. The list is provided in section on the Work Plan.

¹ In 2012, ESCC meeting will be held earlier than scheduled in order to discuss remaining topics, not covered during informal meeting.

² In 2011, the first ESCC meeting was held in Baku in May. The second meeting was planned to follow immediately after Pillar 1 Subcommittee meeting on 27-28 October in Bangkok. However, it was cancelled due to emergency flood situation. For details see Section I.

(iii) Energy Water Linkages

- The ESCC work plan includes a two-phase process to enhance independent, shared and robust analytical tools on regional energy-water linkages. The first phase activities continued in February-March, 2011, via two-day national consultations in four countries and reported at the May 2011 meeting of the ESCC. The draft prototype demonstration model developed by the University of Washington was planned to be presented at the October ESCC meeting. A detailed review of six existing models is under way. A final report on the needs assessment (terms of reference) combining the various activities will be completed in 2012.

- **Activities and Deliverables for 2011-2012**

- The ESCC meetings are convened at least two times a year. The next ESCC meeting will be held in March-April 2012 (location to be determined).
- Knowledge Sharing Activities
Several areas of capacity building activities were identified in the ESCC meeting, which are listed in detail in Section III.
- The deliverables for the 10th MC are:
 - Energy Sector Progress Report and Work Plan
 - Draft Final Report of Power Sector Regional Master Plan
 - Draft updated Medium Term Priority Project (MTPP) list
 - National Workshop Reports and Synthesis Report on Phase 1 of the integrated energy-water analysis
 - Draft First-generation Demonstration of Energy-Water Model

- **Sector Projects**

A number of new projects are under development in the CAREC countries and are presented in the Section D.

I. OVERVIEW OF PROGRESS

1. The Central Asia Regional Economic Cooperation (CAREC) participating countries and multilateral institutions (MIs) began the implementation of the activities defined in the CAREC Energy Action Plan Framework (the Action Plan).³ The activities primarily focus on the Central Asia energy corridor and will deliver investments, knowledge and capacity building, and policy advice in three areas: energy demand-supply balance and infrastructure constraints; regional dispatch and regulatory development; and analysis of energy-water linkages. The results are intended to strengthen energy security and increase energy trade. This progress report focuses on the key developments in the energy sector since the 9th CAREC Ministerial Conference in November 2010. The report was supposed to be endorsed by the ESCC meeting on 27-28 October in Bangkok. Most of participants arrived in Thailand; however, the meeting was canceled due to severe flood situation in Bangkok. Nevertheless, ESCC participants who were present still held a half day session where the highlights of the progress report were discussed and new proposals offered. These are described in the report below.

2. A number of new investment projects were identified and are under development. Diagnostic works in each of the three areas have been completed, and will help establish a shared understanding of opportunities for cooperation and follow-up actions. As part of the CAREC results framework,⁴ the ESCC has agreed on specific indicators to monitor and measure progress of the Energy Strategy. These indicators will provide annual data to the CAREC results framework and development effectiveness review (DEfR).

II. KEY DEVELOPMENTS

A. Pillar 1: Energy Demand and Supply Balance and Infrastructure Constraints

3. The preparation of Power Sector Regional Master Plan was initiated by the ESCC in 2009 and the funding of the technical assistance was approved by ADB in June 2010. The supervision of the preparation of the Master Plan is done by a separate technical Subcommittee established under the ESCC Pillar 1. The Master Plan identifies generation and transmission needs in Kazakhstan, Kyrgyz Republic, Tajikistan, and Uzbekistan, and also addresses the technical conditions for synchronous interconnection of the Afghanistan system to the Central Asian system. The consulting contract was awarded to Fichtner of Germany on 29 November 2010 with final report scheduled to be completed by December 2011.

4. In March 2011, members of Pillar 1 Subcommittee and representatives of ADB, World Bank, USAID, and Coordinating Dispatch Center met in Almaty to discuss the Inception Report of the Master Plan presented by Fichtner. The methodology, schedule and outputs were endorsed by sub-committee members. During the meeting, members made it clear that national energy security is the primary consideration of each country with regional considerations following. Members also advised on the need to consider stability criteria when examining interconnections. Respective amendments were made to the consultant's contract and their work plan.

5. In July, Subcommittee 1, with the same participation, met to review the Interim Report. Members agreed upon the methodology for electricity demand forecast for each individual country and the region and estimated results. The described condition of power sector assets in the master plan participating countries and the list of ongoing projects were also accepted. The

³ CAREC. *Energy Action Plan Framework*. 8th Ministerial Conference on CAREC. Ulaanbaatar, Mongolia.

⁴ CAREC. *Results Framework*. 8th Ministerial Conference on CAREC. Ulaanbaatar, Mongolia.

members endorsed the proposed project selection criteria for the elaboration of the 10-year investment plan. Separately, discussions also addressed the choice of planning software to be provided under the project, and the need to consider stability criteria when examining interconnections.

6. In October, the Subcommittee met to discuss the draft Final Report and draft 10 Year Investment Plan for the countries covered by the Master Plan. The Consultant was advised to incorporate specific recommendations on Demand Side Management. The Subcommittee agreed that the list of ongoing projects and the presentation of model simulation results should be revised based on the participants' comments. The Subcommittee requested the Consultant to provide additional investigation on requirements to realize the connection between Afghanistan and Central Asian countries in the Final Report. Afghanistan delegates agreed to support the Consultant in acquiring the information. The Subcommittee also acknowledged that this matter will need to be dealt with under the USAID's RESET Program under ESCC Pillar 2. It was also advised that the benefits of regional cooperation should be provided in monetary figures in the Final Report.

7. The Subcommittee supported the presented draft 10-year investment plan prepared by the Consultant. During the half day ESCC meeting, the participants agreed that 10-year investment plan will be incorporated into the MTPP list that will be presented to the Senior Officials' Meeting in November 2011. It was also agreed that the countries will review the draft final report in more detail and provide any further comments to ADB end of November 2011.

B. Pillar 2: Regional Dispatch and Regulatory Development

8. The World Bank conducted a diagnostics study to identify opportunities and challenges in the combined Central Asia power transmission grid operations. This study included a SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis and identified immediate opportunities. It was shared with ESCC in its September 2010 meeting. Preliminary model simulations indicated a potential saving of \$1.5 billion over three years, based on simplified assumptions. It pointed out that the main issue is to elevate the confidence of countries to benefit from regional integration through cooperation. The follow on work was to be discussed by a sub-committee for the Pillar 2.

9. The RESET program of USAID will be leveraged for the benefit of the participating countries, where it supports objectives of the Pillar 2. Participants from CAREC member countries can benefit by joining the knowledge sharing and training programs organized and supported by RESET program and CAREC Institute.

10. ESCC proposed several activities for capacity building on areas related to the ESCC action plan, which are described in Section III.

C. Pillar 3: Energy Water Linkages

11. The Action Plan articulated a need to improve the analysis of energy-water linkages. A workshop in September 2009 (linked to the ESCC meeting) explored existing regional water and energy modeling, brought experiences from other basins and started to identify needs and a plan of action for the analytic and modeling effort. This workshop, followed by additional discussion in the region identified a range of analytical and modeling priorities.

12. As a result, the ESCC began a two-part process to define a work program for enhanced independent, shared and robust analytical tools on regional energy-water linkages. The first phase consists of a consultative process involving both technical experts, government officials, youth and users, outline a regional water-energy model (structure, data requirements and supporting institutional platforms) by identifying strategic issues, criteria and metrics and basic architecture of a model. National workshops were held in Kazakhstan, Tajikistan, Kyrgyz Republic and Afghanistan in Feb-March 2011. These workshops were essential first steps in defining a model structure that is useful and accepted by all players. It is intended to complete the remaining two workshops in Uzbekistan and Turkmenistan upon agreement of the governments. Currently, a detailed comparative analysis of six existing models has been started to determine the possibility of using, adapting or extending the model, or components thereof. This analysis responds to Central Asian specialists' guidance to maximize the use of existing models and analytical tools. The second part of the work plan consists of development of a prototype demonstration decision support system (DSS) model based on existing free and publicly accessible data and modeling platforms, including remote sensing and satellite imagery. The model was scheduled to be demonstrated at the CAREC ESCC meeting October 2011 in Bangkok.

D. Sector Projects

13. The progress report has not provided comprehensive information on the projects undertaken in Azerbaijan, the People's Republic of China (PRC), Pakistan, and Afghanistan previously. A preliminary version of pipeline projects has been incorporated into the draft MTPP list in Section III. Below summarizes the highlights of the status of activity in each country.

14. **Afghanistan:** Years of war and neglect have left Afghanistan's electricity sector in poor condition. Electrification ratios and energy consumption rates are among the world's lowest. The Government has been developing the Afghanistan National Development Strategy since 2004, where the energy sector has top priority. The need for a master plan for the power sector was identified in the strategy, which was quickly prepared in 2004. However, the master plan quickly became outdated as the Ministry of Energy and Water lacked the capacity to update it. Without an updated master plan, many activities under the strategy have become ad hoc and lacking in strategic management. Taking into account all of the above, the Government requested ADB to develop the power sector master plan and requisite capacity within the Ministry of Energy and Water to administer and update the plan. A technical assistance of \$1.5 million was approved in November 2010 and consultants are expected to be mobilized in December 2011 with completion scheduled in December 2012.

15. **Azerbaijan:** The World Bank is completing a review of regional power trade in the country. It takes stock of new developments in the region and individual countries with regard to developments in their power systems over the last decade, as well as opportunities for economical integration of their power grid; and bottlenecks and information gaps for subsequent follow-up.

16. **PRC:** The World Bank has multiple projects that were initiated since May 2011. In June 2011, the World Bank approved a \$100 million loan for the Shandong Renewable Energy Project. The project is aimed to improve energy efficiency in selected enterprises in the PRC's Shandong Province, particularly through financial leasing arrangements, and increased use of biomass for power and heat generation. The World Bank also approved a project for \$100 million to promote low carbon district investment, including building energy efficiency for the Low Carbon City in Shanghai along with a study that establishes the marginal abatement curves for

the project. The World Bank has also initiated a study that evaluates the technical and economic incentive mechanisms for wind power in the PRC in September 2011. A study that targets building energy efficiency measures in government facilities has also been commenced. Another study was launched to develop low carbon city indicators and assess if marginal abatement cost curve methodology could be scaled up and applied elsewhere.

17. **Kazakhstan:** In addition to ongoing support to Kazakhstan for the development of transmission infrastructure and development of power trade markets (spot and balancing market), the World Bank is considering two new initiatives. The first one (\$ 18 million) is related to the promotion of energy efficiency in the demand side, envisaging funding of demonstrable energy savings projects focusing on hospitals, homes for old and disabled people, kindergartens, schools, etc. The project would also help with technical assistance to help design and build a framework for sustainable EE/RE investments.

18. The second project is related to supporting a third north-south interconnector with strategic routing to support future power trading with the PRC and promoting small hydro based potential in eastern part of Kazakhstan. The World Bank support would be finalized after the completion of feasibility study, which is in progress and the first phase is expected to be completed by December 2011.

19. ADB plans to draw on its extensive knowledge and experience in energy efficiency (EE) and projects in Kazakhstan to assist the government to put in place a regulatory, legal and legislative framework to achieve its EE goals. As a first step, ADB and the Government have engaged consultants to conduct an energy efficiency diagnostic study (EEDS) to lay the groundwork for the development of EE in Kazakhstan. The EEDS will gather energy data, assess current status of EE in Kazakhstan, review and evaluate existing EE legal, legislative and regulatory environment, recommend actions for the Government of Kazakhstan to achieve its energy efficiency targets, develop strategies for stakeholders in the planning and implementation of EE projects, and identify priority investment areas and a preliminary pipeline of potential EE projects for future due diligence. This \$200,000 study is completed and a follow-up stakeholder round table will be held in November 2011.

20. **Kyrgyz Republic:** As part of planned development Policy Operation, some key milestones on energy sector development are being discussed with the Government of Kyrgyz Republic. The Kyrgyz power sector suffers from significant electricity losses due to theft, metering data manipulation, metering and billing errors, and dilapidated infrastructure. The Kyrgyz Republic has requested ADB to help bring transparency to the power sector, reduce losses, and enhance regional power trade through (i) developing an automated metering and data acquisition system at the wholesale level, (ii) rehabilitating selected substations, (iii) developing basic components of a SCADA system including a modern communication system in priority sections of the grid, (iv) studying the wholesale electricity transaction settlement mechanism (including import/export transactions), and (v) building the corporate and financial capacity of the national grid company. Total project cost is \$56 million of which ADB will finance up to \$44.8 million equivalent. The project was approved in September 2010 and signed in December 2010. Recruitment of consultants is ongoing.

21. ADB is also ready to commence a project preparatory technical assistance to formulate a hydropower rehabilitation project in the Kyrgyz Republic. ADB has indicatively earmarked \$45 million to rehabilitate electrical and electro-mechanical equipment of some hydropower plants along the Naryn River. Consultants are expected to produce a feasibility study identifying

needed rehabilitation by November 2011. The project is scheduled to be considered by the ADB Board in first quarter of 2012.

22. **Tajikistan:** An additional financing of \$17 million is planned to be considered for the World Bank's Energy Loss Reduction Project to support (i) scaling up of metering and billing program in the capital city of Dushanbe; (ii) meeting the funding gap for international standards assessment studies for the Rogun Hydro electric project; and (iii) strategic studies and advisory support needed in critical areas for country's energy sector development. The studies include: (i) assessment of sedimentation management and rehabilitation of the Nurek hydropower project; (ii) assessment of the energy audit of the large industries, such as aluminum smelter that could be a large potential source for energy savings through efficiency measures; and (iii) study on isolated operation of grid system of the country. The advisory support is provided in the areas of (i) developing electricity export potential, and (ii) capacity enhancement of Barki Tajik (BT) for other strategic areas, namely: (i) preparation of a winter strategy and dissemination of information to customers, (ii) collections improvement, (iii) upgrading of communication, reporting and statistical system, and (iv) FM capacity enhancement in BT. In addition, as part of planned World Bank Development Policy operations, energy efficiency audit of TALCO plant, which consumes more than 40 % of total energy would be studied to explore areas of energy efficiency.

23. **Pakistan:** Pakistan is undergoing severe power supply shortages. To address these shortages and improve efficiencies, ADB is preparing a project to replace and/or rehabilitate old, inefficient thermal generation facilities with new efficient plants. The generation facilities to be replaced or rehabilitated have been prioritized under a diagnostic study undertaken by the Agence Francaise de Developpement. Based on the diagnostic study one or more power plants have been selected for replacement or rehabilitation. The feasibility consultant is scheduled to be mobilized in the fourth quarter of 2011. ADB Board consideration of the project is in 2012.

24. **Uzbekistan:** A new \$100 million project is under preparation to support advanced electricity metering to cover Tashkent, Tashkent Oblast and Syr Darya Oblast. Preparation of Energy Sector Strategy and Energy Efficiency Strategy is also under way. Based on the request of the Government of Uzbekistan in September 2011, ADB has launched capacity development technical assistance on "Design and Strengthening of Solar Energy Institute" with an aim to support the design of a solar energy institute, which is expected to become a regional knowledge hub for solar energy. With the second technical assistance (TA), which is still in processing, the Government wishes to promote solar energy through: (i) formulation of a solar energy roadmap, including recommendation on creating the necessary enabling policy, legal and regulatory environment; (ii) measurement of the accurate solar irradiance through installation of on-site measurement equipment; and (iii) feasibility studies on up to six solar energy projects including two on a pilot scale and two on a commercial scale. The second TA is expected to commence by the end of 2011.

25. As another key initiative to enhance energy efficiency in Uzbekistan, ADB approved a \$150 million loan in September 2011 for a smart metering project that will increase utility's load management capability and reduce distribution losses. The project will install one million residential and commercial connection meters in the Bukhara, Samarkand, and Jizzakh regions. ADB is also preparing a feasibility study that covers 1.5 million connections in Tashkent City, Tashkent region, and Syr Darya region, which is expected to be financed by the World Bank in early 2012. The total coverage of 2.5 million connections comprises half of the total national coverage of 5 million.

26. Several initiatives for exploring and developing the power trading market between Central Asia and South Asian countries are ongoing. The progress on these initiatives is reported below:

- (i) **CASA-1000 Project:** The CASA 1000 project aims to connect Kyrgyz Republic, Tajikistan to Afghanistan and Pakistan via transmission lines to increase electricity trade. The feasibility update has been finalized and discussed. All four countries signed a Memorandum of Understanding (MoU) for the development of CASA-1000 Power Transmission Project and the further development of a Central Asia-South Asia Regional Electricity Market on 20 September 2011 in Bishkek. The project components identified under the MoU include a 500 kV AC line between the Kyrgyz and Tajik grids, a 500 kV DC line between the Republic of Tajikistan and Pakistan via Kabul, Afghanistan, 3 substations: 1300 MW AC/DC in the Republic of Tajikistan, 300 MW DC/AC in Afghanistan, 1300 MW DC/AC in Pakistan and supporting AC network reinforcements necessary to accommodate the power flows.
- (ii) Uzbekistan–Afghanistan–Pakistan electricity trade initial assessment is in progress. The consultants have prepared the inception report, which is under review.
- (iii) Turkmenistan–Afghanistan project: The ADB recently approved the “Regional Power Interconnection Project” aimed to address electric supply needs in Afghanistan and electric infrastructure development and export plans in Turkmenistan. On 5 September 2011, ADB approved a \$1.3 million project preparatory technical assistance (PPTA) to conduct due diligence on a proposed power interconnection between Afghanistan and Turkmenistan. The project envisages a 300MW combined cycle gas turbine power plant in Turkmenistan and associated transmission infrastructure in Afghanistan. Recruitment of PPTA consultants is underway.

E. Other

1. Knowledge Sharing Activities

27. The ESCC and the CAREC Institute agreed to design and deliver training activities and research programs on pressing energy related topics, including training for CAREC energy regulators. The September 2010 and May 2011 ESCC meetings defined specific topics.

2. New Proposals

28. The participants proposed the following ESCC activities in the future:

- (i) Turkmenistan–Afghanistan project: See para 26, sub-para (iii).
- (ii) ESCC provides a forum to share information on good examples of regional cooperation in energy sector from both CAREC and non-CAREC member countries (e.g., Black Sea Interconnection Project, which provides high-voltage transmission connection among Azerbaijan, Georgia, and Turkey).

Some CAREC members have good energy sector information about their neighbors. However, other CAREC members, relatively remotely located, can obtain only general information that is available on internet. It was suggested to produce a periodical,

possibly on annual basis, which would include energy sector information of all CAREC members, such as energy sources and reserves, installed and available capacities, supply and demand, losses, etc.

- (iii) Members supported more interaction among themselves, with the ESCC providing a forum for sharing of areas of strength or challenge. Members were invited to inform the Chair Country of suggested topics.

III. WORK PLAN IN LATE 2011-2012

1. Energy Demand and Supply Balance and Infrastructure Constraints

29. The Final Report of Energy Sector Regional Master Plan with the 10-year investment plan is planned to be finalized by the end of 2011. Upon its completion, the Pillar 1 Subcommittee might endorse the report *ad referendum* or have the final meeting for discussion and endorsement. After this, the Subcommittee under the current structure will be dissolved. The Subcommittee might be reestablished with new structure and participation to address new tasks under Pillar 1, such as, for example, assessment of other energy corridors as defined in the CAREC Energy Strategy.

2. Regional Dispatch and Regulatory Development

30. A set of knowledge sharing and training activities was identified by ESCC for the 2011-2013 period. The details of specific activities were to be decided during the ESCC meeting in Bangkok. In its meeting in May 2011, the ESCC approved the collaboration with USAID funded RESET program. These knowledge sharing activities will be organized and funded by RESET program and CAREC Institute. Under the collaboration with the RESET program, several capacity building programs were identified for 2012 (see table below).

Activity	Duration	Proposed Location	Date	Description
Decision Software for Power System Planning & Operation	5 days	Tashkent	January 2012	3 officials from each country who are actively involved in system planning
Developing and Implementing international Commercial Agreements: Part 1: Project Development & Financing & advantageous use of Power Purchase Agreements (PPAs)	3 days	Almaty	February 2012	3 officials from each country (including one senior lawyer)
Developing and Implementing International Commercial Agreements: Part 2: Costs & Prices, Terms & Conditions & Their Negotiation	3 days	Almaty	March 2012	3 officials from each country (including 1 senior lawyer)
The Design and Operation of Power Markets (Domestic & International)	3 days	Almaty	April 2012	3 officials from each country representing Ministry of Energy & generation & transmission

Activity	Duration	Proposed Location	Date	Description
The Economics of Energy Efficiency & Renewable Energy	3 days	Almaty	May 2012	entities 3 officials from each country (including one involved in tariff setting)
Institutional Structure and Regulation of the Energy Sector	3 days	Almaty	June 2012	3 officials from each country with Ministry/policy level responsibility for sector structure &/or regulation
Cross Border Metering Protocol	2 days	Almaty	July 2012	3 officials from each country involved in cross-border power trading

3. Energy Water Linkages

31. Preliminary diagnostics were presented to the ESCC in September 2010. National workshops to define the analytical parameters and strategic focus of an energy-water model took place during February–March 2011 in Kazakhstan, Kyrgyz Republic, Tajikistan and Afghanistan. Workshops will be held in Uzbekistan and Turkmenistan at the disposition of the governments. The meeting of the Pillar 3 subcommittee will follow in Spring 2012 to review in depth existing models and draft a framework terms of reference for a new/strengthened regional analysis (decision support system). The draft prototype model under development by the University of Washington was schedule to be demonstrated in Fall 2011 at the CAREC ESCC meeting in Bangkok, and further demonstrated at the national levels through Winter 2011 and Spring 2012. A technical workshop proposed for Spring 2012 will review the work to-date and implications for the analytical framework for regionally integrated water-energy resource management.

4. ESCC Meetings

32. The ESCC consists of energy sector focal points and relevant energy sector representatives from each country, and will meet as needed but at least twice a year. The ESCC requests the CAREC Secretariat to continue the support with organization and arrangements. ADB and World Bank will provide necessary technical support to the ESCC activities. The next ESCC meeting is planned in April 2012 (venue to be identified).

5. New Proposals

33. The ESCC will hold further consultation with participating countries regarding the proposed activities of the Committee, and define the corresponding action plan.

6. Investment Plan

34. Based on the results of the draft regional power sector master plan, a 10-Year Investment Plan will be finalized and incorporated into MTPP for CAREC 2020 – the proposed ten-year strategic framework for CAREC – for endorsement by the 11th Ministerial Conference.