

CAREC ENERGY SECTOR PROGRESS REPORT

JUNE 2019 – OCTOBER 2020



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ABBREVIATIONS

CAREC	Central Asia Regional Economic Cooperation
CAREM	Central Asia Regional Electricity Market
CASA	Central Asia South Asia
CDC	Central Dispatch Center
EDM	Enterprise Data Management
EIF	Energy Investment Forum
ESCC	Energy Sector Coordinating Committee
MC	Ministerial Conference
NFP	National Focal Point
TA	Technical Assistance
TAP	Turkmenistan-Afghanistan-Pakistan
TAPI	Turkmenistan-Afghanistan-Pakistan-India
TUTAP	Turkmenistan-Uzbekistan-Tajikistan-Afghanistan-Pakistan

1. ANNUAL HIGHLIGHTS 2019-2020

The CAREC Energy Program achieved a number of strategic milestones for the regional energy sector during the reporting period (June 2019 – October 2020). This section provides an overview of annual highlights achieved which include the adoption of the new CAREC Energy Strategy 2030, the first Regional Energy Ministers Dialogue and the 2019 Energy Investment Forum.

The reporting period was affected by the outbreak of the global COVID-19 pandemic and slowed down results foreseen from Q2 2020. Due to the quarantine measures and travel restrictions caused by COVID-19, the Energy Sector Coordinating Committee (ESCC) meeting planned for 22-23 April 2020 had to be cancelled. Aside from this cancellation, the milestones achieved during the reporting period have been significant and will shape the CAREC Energy program for the years to come.

The following highlights are presented for the June 2019 – October 2020 period:

- **Adoption of the CAREC Energy Strategy 2030**

The CAREC Energy Strategy 2030 (the Strategy) provides a new long-term strategic framework for the energy sector of the CAREC region. It is inspired by the vision of achieving a reliable, sustainable, resilient, and reformed energy market by 2030. Guided by the overarching principle Common Borders. Common Solutions. Common Energy Future., CAREC members committed to creating a vibrant energy future—a future in which electricity supply is reliable and affordable, energy markets flourish, and cleaner sources have become part of the energy mix.

The Strategy 2030 was adopted by the CAREC Ministerial Conference (MC) on 14 November 2019 in Tashkent. Prior to the event, Energy Ministers from the region endorsed the Strategy through a declaration adopted at the first Regional Energy Ministers Dialogue (see below). The document was extensively consulted with all 11 CAREC member countries prior to adoption through a physical in-country consultation which took place in June/ July 2019. Please download the [CAREC Energy Strategy](#) for further information.

- **First Regional Energy Ministers Dialogue and Declaration**

On 20 September 2019, the first CAREC Energy Ministers Dialogue took place in Tashkent chaired by Uzbekistan’s Minister of Energy, Mr. Alisher Sultanov and ADB’s Vice President Mr. Diwakar Gupta. The historic gathering was attended by Energy Ministers from the CAREC region and the Turkish Energy Minister, H.E. Fatih Dönmez, who joined the discussion as a non-

regional member. Representatives from the CAREC Development Partners as well as Director General Emeritus from the International Renewable Energy Agency Mr. Adnan Amin and Former Deputy Mayor of Vienna, Ms. Maria Vassilakou also joined the meeting as keynote speakers.

The Energy Ministers signed a declaration in which they endorsed the CAREC Energy Strategy 2030 and committed to increasing the share of renewable energy, improving energy efficiency, launching energy sector reforms and fostering gender equity in the energy sector. Please download the [CAREC Energy Ministers Declaration](#) for further information.

- **Energy Investment Forum 2019**

The Energy Investment Forum (EIF 2019) took place on 20-21 September 2019 in Tashkent. It was attended by nearly 300 participants from in and outside the CAREC region, including investors, financiers, policy makers and other stakeholders. The conference was titled “Breaking the Investment Barrier in Central Asia: Bringing Business to Energy Markets in Transition” and focused on helping investors understand current and envisaged energy market reforms in the region. Energy Ministers from the CAREC region personally intervened at the conference and answered questions from investors.

The forum also created Central Asia’s 1st Start-Up Competition. The three finalists coming from Afghanistan, Azerbaijan and Uzbekistan gave a ted-talk on their start-up company and a professional jury then selected a winner live on stage. The participant from Azerbaijan won the competition with its decorative home solar panels able to store energy accumulated during the day to be used during periods of insufficient sunshine. In addition, the Forum offered a B-2-B platform for participants to find potential business partners.

The Energy Investment Forum (EIF) is the region’s flagship event to enable private investments in the CAREC region. Private investments are needed to meet the \$400 billion worth of energy sector investment needed until 2030 (excluding PRC). Please visit the [EIF Website](#) for further information.

2. CAREC ENERGY STRATEGY 2030 IMPLEMENTATION

The CAREC Energy Strategy 2030 was adopted on 14 November 2019 at the CAREC Ministerial Conference in Tashkent. Thereafter, a concept was developed for its implementation which was approved by ADB's Vice President on 18 May 2020. A technical assistance (TA) project has recently been established to cover the implementation of a first set of actions under the CAREC Energy Strategy 2030.

The first set of selected actions is directly linked to the strategic priorities of the CAREC Energy Strategy 2030 and aims at improving regional energy connectivity, scaling-up investments and achieving higher sustainability and inclusiveness in the CAREC region. To achieve these goals, the TA will (i) seek the establishment of a new regional transmission cooperation arrangement, (ii) strengthen capacity to carry out market reforms and attract investors, (iii) establish a financing vehicle for green energy projects and foster consumer awareness for energy efficiency and (iv) establish a women-in-energy program to increase women participation in the energy sector.

The following table shows all actions to be implemented between 2020 and 2030 and the current progress made:

Strategy Pillar 1: Better Energy Security through Regional Interconnections

Action	Description	Performance Indicators	Progress
Realize TUTAP, TAP, and CASA-1000 electricity interconnection projects	The CAREC region's flagship power transmission line projects connecting Central and South Asia are at various stages of implementation and shall go into operation within the strategy period.	TUTAP, TAP, and CASA-1000 projects in operation	Ongoing <i>see detailed progress in Section 3</i>
Advance TAPI gas pipeline project	Ongoing negotiations for possible modalities to realize the TAPI gas pipeline shall be accelerated.	Dialogue on the implementation of TAPI project intensified	Ongoing <i>see detailed progress in Section 3</i>
Facilitate cooperation among regional transmission system operators	Growing electricity and gas interconnections require increased cooperation among transmission system operators. The establishment of a corresponding platform for regional network development planning, identification of projects of	Central Asia Transmission Cooperation Association (CATCA) concept developed	To start in October 2020

	common interest, and information sharing shall be facilitated by this activity.		
Identify new cross-border infrastructure projects	New cross-border gas and electricity links shall be identified to increase energy security in the region.	New regional gas and/or power interconnections identified	Open

CASA = Central Asia–South Asia, TAP = Turkmenistan–Afghanistan–Pakistan, TAPI = Turkmenistan–Afghanistan–Pakistan–India, TUTAP = Turkmenistan–Uzbekistan–Tajikistan–Afghanistan–Pakistan.

Strategy Pillar 2: Scaled-Up Investments through Market-Oriented Reforms

Action	Description	Performance Indicators	Progress
Build capacity for unbundling models and liberalization of energy markets	This activity shall support policy makers in making informed decisions when embarking on unbundling and market liberalization reforms.	CAREC Energy Reform Atlas (containing access to practical handbooks and database with study materials) established	To start in October 2020
Advise on tariff-setting principles and methods of introducing tariff reform	Financial health of network companies is critical to ensuring high quality of service. This activity shall shed light on tariff design options and ways of implementing gradual tariff reform.	Handbook on Tariff Principles and Reform Options published Capacity building workshops held	To start in October 2020
Develop options for social protection measures for vulnerable energy consumers	This activity shall assist in elaborating options for social protection measures to accompany tariff reform and shall include the development of a definition for “vulnerable consumers” to assist policy makers in identifying the appropriate target group.	CAREC Guide to Social Protection and Energy Sector Reform published	To start in October 2020
Share international best practices in legal enforcement of sector reform	Sector reform requires adapting existing energy laws and creating new laws. This activity is aimed at discussing successful examples of relevant sector laws and methods of law enforcement.	Capacity building workshops held	Open

Strategy Pillar 3: Enhancing Sustainability by Greening the Regional Energy System

Action	Description	Performance Indicators	Progress
Establish a joint platform for mobilizing sources of funding for emission reduction projects	For emission reduction projects to be realized, a dedicated platform shall be established for identifying and securing funding for priority projects.	CAREC Green Energy Alliance established	To start in October 2020
Identify suitable energy efficiency measures and track progress	Energy efficiency is a powerful tool for reducing emissions. The aim of this activity is to disseminate practical skills in implementing efficiency measures and establish a regional benchmarking tool for comparing progress and rewarding high performers.	CAREC Energy Efficiency Week held Regional Energy Efficiency Scorecard developed Capacity building workshops held	Open
Create public awareness of energy efficiency	This activity shall enhance public awareness of energy efficiency and empower consumers to engage in more conscious use of energy.	CAREC Consumer Leaflet on Energy Saving prepared Energy efficiency radio or TV commercial developed Handbook for organizing consumer awareness campaigns published	To start in October 2020 Open
Support in the development of renewable energy and the diversification of the energy mix	This activity is aimed at supporting CAREC members in adding renewable energy to their energy mix by providing practical guidance on the necessary pre-requisites.	Workshop on pros and cons of different renewable incentive schemes held Coping mechanisms for renewable energy intermittency developed Manual on legislative requirements for the integration of renewable energy	Open Completed Completed

		prepared Role of gas as a transition fuel discussed	Open
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Cross Cutting Theme 1: Building Knowledge and Forming Partnerships

Action	Description	Performance Indicators	Progress
Develop CAREC Energy Outlook and Investment Report	This activity is aimed at providing investors and other relevant stakeholders with reliable regional data to make investment and policy decisions.	CAREC Energy Outlook and Investment Report published	To start in January 2021
Establish relevant partnerships to support the implementation of the three strategy pillars	All three strategy pillars include capacity building, institution-building, and training initiatives, which shall be implemented in collaboration with experienced partner organizations.	Partnerships with global centers of excellence in the fields covered by the strategy established	Open
Promote networking and skills development of next-generation energy professionals	The CAREC program shall facilitate cross-regional networking and skills development of next-generation energy professionals to allow a natural sense for regional cooperation to emerge among the target group.	CAREC Young Energy Leaders initiative established	Open

Cross Cutting Theme 2: Attracting Private Sector Investments across the Energy Value Chain

Action	Description	Performance Indicators	Progress
Prepare a regional investment strategy	A regional investment strategy containing recommendations for improved enabling conditions for private investments in the CAREC region shall be developed.	CAREC Energy Investment Strategy developed	Open

Hold annual CAREC Energy Investment Forum	The annual Energy Investment Forum shall continue to attract investors to the region and foresee a dedicated space for B2B meetings.	CAREC Energy Investment Forum held yearly	Open
Provide practical support to investors to enhance their business operations in the region	This activity shall create improved enabling conditions for private investors operating in the region.	CAREC Business Advisory Council created to identify needs of private investors	Open

B2B = business-to-business

Cross Cutting Theme 3: Empowering Women in Energy

Action	Description	Performance Indicators	Progress
Establish CAREC Women in Energy Program	This activity shall provide women in the CAREC region with the necessary tools to boost their career, build a regional network, and become more visible in the region's energy sector.	Women in Energy Summit organized Secondment program for women in energy established Educational scholarship program for women in energy facilitated	Open

3. PROGRESS ON REGIONAL ENERGY PROJECTS

This section describes the progress and status of ongoing cross-border energy infrastructure and technical assistance (TA) projects.

3.1 INFRASTRUCTURE PROJECTS

TUTAP

- **Rationale:** TUTAP is the acronym of Turkmenistan (TKM), Uzbekistan (UZB), Tajikistan (TAJ), Afghanistan (AFG), and Pakistan (PAK) Power Interconnection Framework. The Project exports energy power from thermal/gas (TKM and UZB) and hydro power (TAJ) rich Central Asia countries to supply AFG grid with surplus power to be exported to PAK and TAJ. TUTAP concept was identified during preparation of AFG Power Sector Master Plan (2014) and is endorsed and under implementation by the Government of Afghanistan.
- **Objective:** Year-round power exports from TKM to AFG and PAK primarily underpin the TUTAP power interconnection framework. TKM could also supply TAJ via Afghanistan during Tajikistan's winter deficit period.
- **Status:** The first phase (\$35 million) was approved by ADB in 2003 and commissioned in 2009 with an all year power interconnection (~330 MW maximum) between Afghanistan and Uzbekistan operational since February 2009.

The second phase (\$47 million) was approved by ADB in 2007 and commissioned in 2011 with a summer only power (300-450 MW) interconnection between Afghanistan and Tajikistan operational since October 2011.

The third phase (\$140 million) was approved by ADB in 2012 and is under implementation for a 300 MW power interconnection between Afghanistan and Turkmenistan. The line will have a capacity to transmit up to 1000 MW power. Construction of the 500-kV line and 3 substations in AFG is ongoing since early 2016 while the TKM portion of the line was completed in mid-2016. The third phase is expected to be completed by end 2020.

The fourth phase (\$200 million) was approved by ADB in December 2015 to extend the AFG-TKM interconnection through 500-kV transmission interconnection until Pul-e-Khumri in north-east AFG, where power interconnections from Uzbekistan and Tajikistan

into AFG meet and converge with TKM interconnection. The contract for this phase was awarded in October 2017 and is expected to be completed in mid 2021.

- **Next Steps:** Once the interconnection components are completed, trade among four countries will start. Interconnection with Pakistan is still under discussion.

TAP

- **Rationale:** TAP is the acronym of Turkmenistan-Afghanistan-Pakistan power interconnection project. The project envisages connecting Turkmenistan power exports into Afghanistan and Pakistan through TUTAP (Phase1) and through Southern Corridor (Phase 2).
- **Objective:** The proposed TKM-AFG-PAK (TAP) power interconnection project is under discussion among the participating countries, with a potential capacity of 2,000 MW. An MOU among the 4 heads of governments was signed in December 2015 and a Joint Ministerial Statement, confirming agreed scope and timelines containing 2 phases:

The first phase will use the existing or financed infrastructure under the TUTAP to export Turkmen power to Afghanistan and Pakistan. Options will be explored to especially optimize and use any excess power or transmission capacity during the winter months (October – April) through integration with the CASA system (see details on CASA below). The requirement of additional ancillary infrastructure to complement TUTAP and other planned infrastructure will be investigated.

The second phase will transfer power from from Serhetabad (TKM) / Torghundy (AFG) border into Herat, Kandahar and Spin Boldak in Afghanistan and export to Chaman and Quetta in Pakistan.

- **Status:** TKM is strengthening its network and generation capacity to export power into AFG and PAK. Due to security challenges in AFG and excess capacity in PAK, tariff negotiations are currently put on hold among the participating countries. PAK has communicated that the cost of delivered energy should be less than the basket generation cost (9 us cents / kWh).

- **Next Steps:** ADB as project secretariat will continue to support the TAP Project through: (i) analytical studies for systems stability, reliability, and grid interconnection; (ii) studies for regulatory and legal, technical, commercial, and systems dispatch; (iii) Project assessment, including Project feasibility, technical design, and preparation; (iv) coordinate project planning & implementation and provision of financing; (v) facilitation of energy trade negotiations among the 3 countries; and (vi) finalizing of an implementation roadmap, among others studies as agreed and deemed necessary.

TAPI

- **Rationale:** Suboptimal regional gas and energy trade markets contribute to limited economic growth, increased poverty (possibly leading to social unrest) and exacerbated greenhouse gas emissions in the TAPI region. The Project will help improve regional energy trade, as it will build and support requisite natural gas supply and transportation capacity across the TAPI countries. Its realization will also help address several issues causing these suboptimal regional markets by improving cross-border cooperation among multiple stakeholders and resolving some of the security issues in Afghanistan and Pakistan, as well as by improving institutional capacity to implement complex projects. It will attract and catalyze investments and financing that would otherwise be unavailable and, ultimately, help boost inclusive economic growth in the region.
- **Objective:** Phase 1 of the Turkmenistan-Afghanistan-Pakistan-India (TAPI) gas pipeline (the "Project") will extend approximately 1,600 kilometers (km), from the Turkmenistan-Afghanistan border to the Pakistan-India border. The Project comprises the procurement, installation and operation of the pipeline and related facilities (without any compressor stations) over the entire 1,600 km length within Afghanistan and Pakistan. Concurrently, State company Turkmengas will use its own resources to implement within Turkmenistan: (i) the development of a dedicated portion of the Galkynysh gas field; (ii) the installation of approximately 200 km of pipeline to the Turkmenistan-Afghanistan border; and (iii) the construction of one or more compressor stations. In parallel, GAIL (India) Limited will use its own resources to install within India approximately 10 km of pipeline from the Pakistan-India border to its gas network terminus at Fazilka.

Once phase 1 is operational, the TAPI pipeline is expected to transmit 11 billion cubic meters (bcm) of gas annually from Turkmenistan to Afghanistan, Pakistan, and India, about one third of its annual design capacity of 33 bcm, realized with the construction of six compressor stations planned during phase 2. The Project will allow Turkmenistan to diversify its gas export markets over a commercial operations period of 30 years. The CAREC Energy Strategy 2030 sees the TAPI pipeline as one of the key links in the inter-

energy relationship among CAREC countries. Overall, the Project will have a transformational impact on regional cooperation and will also support other initiatives aimed at increasing growth and economic stability in the region.

- **Status:** At the February 2018 TAPI Steering Committee Meeting, it was agreed -in principle- that the TAPI pipeline would be implemented using a two-phase approach, subject to its commercial viability being established. Although the Steering Committee did not decide on this, it requested that its shareholders be furnished with details necessary to conduct: (i) an analysis of the proposed two-phase approach; and (ii) internal discussions regarding the provision of sovereign guarantees. To potentially shorten the timeframe toward the initial delivery of gas under phase 1, safeguards assessments required for the project and procurement activities for the supply of long lead items (e.g. line pipe and valves) and the engineering, procurement and construction (EPC) contracts to install the pipeline. ADB's preliminary due diligence identified several critical issues in the followed procurement processes that are particularly pertinent to the EPC contracts for Afghanistan. Following discussions with ADB, it has been agreed to re-procure these contracts.
- **Next Steps:** Following its May 2020 approval of the Project's concept paper and technical assistance report, ADB continues engaging with the Project company and its shareholders, as well as with ADB's sovereign clients in Turkmenistan, Afghanistan and Pakistan to finetune the required project due diligence and processing timeline aiming to achieve financial close in 2021.

CASA-1000 - *awaiting input from World Bank*

3.2 TECHNICAL ASSISTANCE PROJECTS

Regional Cooperation on Renewable Energy Integration into the Grid (RETA:9365)

- **Objective:** The project developed a regional cooperation mechanism for 7 Central Asian countries (Afghanistan, Kazakhstan, Kyrgyz Republic, Pakistan, Tajikistan, Turkmenistan, and Uzbekistan) to facilitate integration of renewable energy into the regional energy mix. It specifically looked at how the countries can share capacity reserves in order to mitigate intermittency from renewable energy and determined how much costs can be saved if countries cooperate regionally.

- **Progress 2019/2020:** The project developed a regional cooperation mechanism that will allow the 7 countries to increase the share of renewable energy without the addition of new energy infrastructure and at a lower cost compared to a no-cooperation scenario. The studies showed that with cooperation, the countries can save around US\$ 230 million annually by 2030 if the cooperation mechanism is implemented as less reserve capacity will have to be generated/procured at individual national level. The project was completed in June 2020.

Regional Cooperation on Increasing Cross-Border Energy Trading within the Central Asian Power System (SP1: TA 9709, SP2: TA 9717, SP3: TA 9823)

- **Objective:** The project supports an increase in regional power trade among Afghanistan, Kazakhstan, the Kyrgyz Republic, Tajikistan, Uzbekistan, and Turkmenistan by (i) modernizing the Coordinating Dispatch Center (CDC) Energiya, which coordinates power flow between the national electricity grids of the Central Asian power system (CAPS), to enhance its technical capacity; (ii) identifying the technical obstacles to power trade for CAPS, and proposing and coordinating solutions to overcome them for each country; and (iii) supporting the expansion of CAPS membership and seeking new markets.
- **Progress 2019/2020:** (i) The CDC needs assessment was completed, and its functions were reconfirmed. An Enterprise Data Management System (EDM) was designed and will be procured. Bidding to start in June 2020; (ii) Data collection was completed and an interim report was prepared and discussed virtually during a 2-day virtual meeting in May 2020. Almost 50 participants took part in the meeting. The next virtual meeting is planned in Q3 to address remaining comments; (iii) Configurations for connecting Afghanistan to CAPS were discussed and a preliminary roadmap was developed. Comments on the roadmap will be addressed in Q3 and further discussed with participants.

Leapfrogging of Clean Technology in CAREC Countries through Market Transformation (RETA:9299)

- **Objective:** The project develops a technology adoption road map for faster integration of new technology into existing systems in the CAREC region. The road map will include analysis of business models, and policy incentives for faster new technology adoption and scale-up.

- **Progress 2019/2020:** The high-technology roadmap was completed at the end of 2018. To promote the roadmap and related investments, a number of Energy Investment Forums were organized with investors, suppliers, financiers and policy makers. The project was completed in April 2020.

Access to Electricity with New Off-Grid Solar Technology in Central Asia (RETA:9168)

- **Objective:** The project develops a technology adoption road map for off-grid areas in the CAREC countries. A pilot will be conducted in Afghanistan to test and support the proof of concept to demonstrate the technical feasibility of a 12-volt DC solar kit, which can be assembled with little training. The design and complete technical specifications of the kit will be developed for the proof of concept, which will also identify the appliances that can be used with the kit.
- **Progress 2019/2020:** Installation of 260 units of solar off-grid kits were completed for Afghanistan, Kyrgyz Republic and Tajikistan. Monitoring activities for pilot countries were also completed. TA was closed in April 2020. ADB is now preparing for a scale-up solar off-grid project in Afghanistan where about 66% of the population is living without electricity. A survey conducted by the Ministry of Rural Rehabilitation and Development (MRRD) identified that a large number of these families are located in border district areas (with 3.2 million people in 470,000 households). Connectivity through conventional power will not be available before 2025. The proposed solution would be to increase solar off-grid electrification and partner with large international NGOs to develop women entrepreneurship, community strengthening and creation of business opportunities. The proposed project is targeted to be completed by end of 2020.

3.2 REGIONAL INITIATIVES

CAREM

- **Rationale:** A Central Asia Regional Electricity Market, or CAREM, will assure the region's long-term energy security and economic growth and also serve as a platform for an expanded Central Asia-South Asia regional power market. Currently, the Central Asian countries pursue self-sufficient power supplies, while more cost-effective options based on regional power trade remain largely underutilized. An improved regional power system would address these issues. Recent trends towards greater bi-lateral energy trade are hopeful signs that suggest the time is right for a regional power market. CAREM is wholly consistent with the CAREC Energy Strategy 2030. CAREM will provide

the basis for greater energy security that is consistent with Pillar 1 of the Strategy.

- **Objective:** The ultimate goal of CAREM is an integrated power market with effective regional institutions that ensure fair and consistent transactions for all countries; common standards for performance; fair and non-discriminatory pricing; and full access to the power grid.
- **Status:** Over the past year, USAID has entered into memorandums of understandings with three Central Asian countries, including Kazakhstan, Tajikistan and Uzbekistan, as well as a work agreement with the Kyrgyz Republic for CAREM. USAID has kicked off its support for CAREM by conducting numerous workshops with government representatives from all five Central Asian countries, including Kazakhstan, Kyrgyz Republic, Tajikistan, Uzbekistan and Turkmenistan, as well as the regional system operator, CDC-Energia.

USAID initiated the formation of three Working Groups: Technical, Market and Legal/Regulatory. Over the course of the past six months, there have been 2 workshops that have focused on market benefits, and the technical aspects and common vision for regional transmission system with cross-border capacities. USAID has also developed a roadmap and presented it to the Central Asian countries.

USAID has held several donor coordination meetings in support of CAREM. These meetings have provided an opportunity for all the donors to present their work and express their support for CAREM.

- **Next Steps:**
 - Continue support for the development of a regional market by providing technical assistance in support of a regional council and working groups
 - Complete analyses of national transmission systems and provide recommendations on the expansion and rehabilitation
 - Support the establishment of agreements among national transmission system operators
 - Draft agreement on regional power market
 - Support capacity building to operative open market
 - Support establishment of regional trading platform
 - Support power sector reforms for improved governance and transparency, and financial sustainability
 - Support establishment of safety net programs
 - Support market-based pricing for cost recovery tariffs

4. MAIN DELIVERABLES FOR 2020 MINISTERIAL CONFERENCE

The following list gives an outlook of deliverables to be achieved until end of 2020. The deliverables will inform the Ministerial Conference on progress made in the CAREC Energy program.

Deliverables	Timing (2020)	Description	NFP/MC action
TA "Fostering Expanded Regional Electricity and Gas Interconnection and Trade under the CAREC Energy Strategy 2030" launched	Q3	New CAREC TA implementing the CAREC Energy Strategy 2030	for information
TA "Regional Cooperation on Renewable Energy Integration to the Grid" completed	Q3	TA developed a regional cooperation mechanism among 7 CAREC countries to facilitate integration of renewable energy into the grid	for information
TA "Leapfrogging of Clean Technology in CAREC Countries through Market Transformation" completed	Q2	TA developed measures to support opening up of Central Asian Markets to new technologies	for information
TA "Access to Electricity with New Off-Grid Solar Technology in Central Asia" completed	Q3	TA installed 260 units of solar off-grid kits in Afghanistan, Kyrgyz Republic and Tajikistan	for information
30 th ESCC Meeting held, 2-year ESCC work program and new working group structure endorsed	Q4	ESCC meeting to be held virtually if physical meeting will not be possible	for information