

Reference Document for the
Senior Officials' Meeting28
June 2022

CAREC 2030: Infrastructure & Economic Connectivity

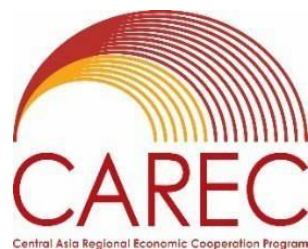
Central Asia Regional Economic
Cooperation Program

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List of Acronyms (Energy Sector Report)

CAREC	Central Asia Regional Economic Cooperation
CAREM	Central Asia Regional Electricity Market
CASA	Central Asia South Asia
CATCA	Central Asia Transmission Cooperation Association
CDC	Central Dispatch Center
EIF	Energy Investment Forum
ESCC	Energy Sector Coordinating Committee
SOM	Senior Officials Meeting
TA	Technical Assistance
TAP	Turkmenistan-Afghanistan-Pakistan
TAPI	Turkmenistan-Afghanistan-Pakistan-India
TUTAP	Turkmenistan-Uzbekistan-Tajikistan-Afghanistan-Pakistan



CAREC TRANSPORT SECTOR

PROGRESS REPORT AND WORK PLAN

JULY 2021-AUGUST 2022

Reference Document
Virtual Senior Officials' Meeting
Central Asia Regional Economic Cooperation
28 June 2022



CAREC Transport Sector: Progress Report and Work Plan

I. Executive Summary

Roughly two years into the pandemic, CAREC transport continues to adapt to the challenges ushered in by the COVID-19 outbreak. Amidst the quickly changing constraints resulting from the pandemic, some adjustments in both the lineup and schedule of CAREC transport activities had been accommodated as deemed appropriate.

With COVID-19-related restrictions remaining largely in place across MCs over the work plan timeframe¹, a number of events under the current work plan had to be pushed back until in-person meetings become more feasible. These include the 19th Transport Sector Coordinating Committee Meeting, the 6th RWG Meeting, as well as the Regional Aviation Forum, which involve careful discussions of high-level sector plans and issues and are thus deemed better suited for in-person meetings. Meanwhile, events that had been successfully completed on schedule were all arranged and conducted virtually.

On a positive note, some events were carried out well amidst the fluidity of the pandemic, including the Crash Investigation Training for Uzbekistan and the Kyrgyz Republic, the Online Training on the Road Safety Problem, and the Workshop on Knowledge Sharing on Road Asset Management Systems, to name a few. These events were not originally included in the current work program but had been successfully initiated and completed over the work plan period.

With respect to knowledge products (KPs), a number of KPs were completed within the work plan timeframe despite some pandemic-related delays especially during the initial months of the work plan period. For other KPs, however, activities requiring field research, in-person collaboration and data collection were slowed by COVID-19-related constraints, inevitably resulting in delays in their completion. Timelines for these KPs have been adjusted and CAREC transport aims for their completion under the coming year's work program.

On another note, the budget shortfalls and funding realignments that beset the CAREC transport in the previous year had been resolved by mobilizing new funding from other sources to support new activities in CAREC transport.

As the pandemic began to wane in recent months and travel restrictions are eased gradually, the tourism and travel industries are slowly bouncing back from the pandemic and markets are reintegrating into global value chains. As a result, the trade and transport sectors have also started to recover after contending with the challenges of the drawn-out pandemic.

But just as the world economy is starting to bounce back, new challenges have emerged such as surging oil prices (particularly for non-oil exporting countries) and fresh disruptions to the supply chain as a result of the Russia-Ukraine conflict. A global slowdown and sharp increases in inflation seem imminent. Depending on how long the conflict drags on, however, the extent of its potential impact on the trade and transport sectors in CAREC MCs is still unclear at this point.

II. Key Developments and Results

This report covers progress made by the CAREC member countries in 2020 under the new CAREC Transport Strategy (CTS) 2030. It covers progress achieved in the implementation of events and knowledge products under the five sector pillars. CTS2030 uses several performance indicators to inform countries about their progress in key transport pillars (Table 1).

¹ The current work program covers the period July 2021-August 2022.

**Table 1: Outcome Level Indicators for CAREC Transport Sector**

Pillar	Title	Outcomes	Indicators (Sources or Reports)
1	Transport and Logistics Facilitation	Efficiency improvements in border crossing points (BCPs), customs clearance, immigration procedures and cross-border logistics.	<ul style="list-style-type: none"> • Average speed by corridors, speed with delay (SWD) • Time and cost to clear a border crossing point, by corridor, country and BCP • Logistics Perception Index (LPI)
2	Roads and Road Asset Management	Improvement on the CAREC Road Asset Management maturity model*	<ul style="list-style-type: none"> • 2019 (provisional): All countries at level 1 except Pakistan at level 3, for National Highway network (CAREC Transport Sector Progress Report) • Average speed of traffic without delay (SWOD), by corridors (CAREC CPMM) • Perception of highway quality improved (World Economic Forum Global Competitiveness Index) for selected countries
3	Road Safety	Reduction in the number of road crash fatalities on CAREC international road corridors	<ul style="list-style-type: none"> • By 2030: 50% reduction from 2010 figure (82,000 fatalities).
4	Railways	Improved service level and operation efficiency of railways	<ul style="list-style-type: none"> • CPMM average commercial speed, by CAREC corridor, SWD and SWOD • Perception of railway quality improved ((World Economic Forum Global Competitiveness Index for railways) for selected countries
5	Aviation	Creation of a more open aviation market that catalyzes enhanced exchange and trade outcomes	<ul style="list-style-type: none"> • Number of CAREC country pairs achieving unrestricted third- and fourth-freedom rights • Number of CAREC countries adopting paperless e-freight systems for aviation • Number of countries with e-visa systems

* RAMS maturity model (Phase 1 - RAMS at construction; Phase 2 - RAMS provides full inventory assessment, albeit it can be at the fixed time, not regularly updated, not used in full for decision making and financial planning; Phase 3 - continuous (periodic) monitoring of the road asset inventory, good cost models, cost/management accounting and planning, decisions and financial planning based on all well-known factors and clear performance targets).

CAREC = Central Asia Regional Economic Cooperation, CPMM = Corridor Performance Measurement and Monitoring.

Source: CAREC Secretariat.



a. Sector Implementation

Roughly two years into the pandemic, CAREC transport continues to adapt to the challenges brought on by the COVID-19 outbreak, especially with regard to effective and timely delivery of planned KPs and events. Some of the activities under the current work plan encountered delays but were nonetheless completed within the work plan timeframe. They continued to be held virtually, however, as COVID-19-related restrictions remained largely in place across CAREC MCs over the work plan period.

Some of the important events carried out under the current work plan include the online workshop on Road Safety Engineering - Star Ratings for Road Safety Audits which was held in November 2021. The workshop introduced the manual of the same title to CAREC MCs and key stakeholders. The manual, which is still currently under development but is expected to be completed and published in July 2022, presents the different approaches for how Road Safety Audits and the iRAP methodology can be used together to improve safety in road designs.

A country-specific Road Safety Engineering Workshop for Turkmenistan was also held virtually in April 2022. As part of a broader effort to help strengthen road safety engineering capacity among CAREC MCs, the workshop helped participants upgrade their skills and knowledge on the key aspects of road safety engineering as embodied in the CAREC Road Safety Engineering Manuals. The six-module workshop was organized by the CAREC Institute in partnership with the Asian Development Bank (ADB).

Meanwhile, a Pedestrian Safety Training, which will be conducted for CAREC MCs in June 2022, will discuss the importance of protecting pedestrians and making roads more pedestrian-friendly by providing safer pedestrian facilities. It will also encourage CAREC MCs to embrace the Safe System to achieve higher standards of road safety.

With the continued uncertainty that marks the current work plan period, CAREC transport had to revisit its work plan and accommodate changes in schedules as deemed appropriate. The 19th Transport Sector Coordinating Committee Meeting, the 6th RWG Meeting, as well as the Regional Aviation Forum, for instance, had to be pushed back until in-person events become more feasible. These three activities involve careful discussions of high-level sector plans and issues and are thus deemed better held in-person.

Meanwhile, some events that were not originally included in the work plan but which could be carried out amidst the fluidity of the COVID-19 crisis, had been successfully initiated and completed over the work plan period. These include the Crash Investigation Training for Uzbekistan and the Kyrgyz Republic, the Online Training on the Road Safety Problem, and the Workshop on Knowledge Sharing on Road Asset Management Systems, to name a few.

The virtual workshop on Knowledge Sharing on Road Asset Management Systems that was organized for Georgia, Pakistan, and Tajikistan in October 2021 served as a platform for the three countries to share their respective experiences in RAMS development, while the Online Training on the Road Safety Problem that was organized for the Kyrgyz Republic in April 2022 got the workshop participants acquainted with the Safe System Approach, crash causes, and principles of effective enforcement and deterrence theory. It also highlighted the importance of enforcement and its role in a safe system. Finally, the 3-day Crash Investigation Training that was organized for Uzbekistan (December 2021) and the Kyrgyz Republic (January 2022) explained the importance of collecting accurate crash data and provided participants with the skills necessary for managing a traffic crash scene, and for collecting and providing accurate crash data.

Several important knowledge products have also been successfully completed under the current work plan period, including the Situation of Railways in CAREC Countries and Opportunities for



Investment, Commercialization and Reform, which was published in April 2022. Building upon 11 country-level assessments and incorporating the development of a CAREC Regional Transport Model, the report examines the situation of the region's railways and identifies priorities for railway investment, commercialization, and reform.

The Road Asset Management System and Performance-Based Road Maintenance Contracts in the CAREC Region is another key product that was completed under the current work plan. This report provides a status assessment of RAMS implementation and application of PBM contracts in the 11 CAREC MCs, including an overview of respective road networks, institutional arrangements, and levels and sources of funding for road assets management.

Two other studies are currently being developed: (i) Road Maintenance Financing in five selected countries in the CAREC region and (ii) an assessment of PBC pilots carried out in the CAREC member countries. The first reviews how different types of road user charges and revenue levels are being collected in selected CAREC MCs, and the extent to which these are earmarked for road maintenance. The second reviews ongoing and completed PBC pilots in CAREC MCs, including an analysis of how the PBCs were designed and issues encountered during implementation. Findings from the two studies will be presented in reports.

On road safety, the CAREC Road Safety Report Card is under development and will be published in July 2022. The Report Card aims to track the status of implementation and progress of road safety initiatives of individual CAREC MCs under the CAREC Road Safety Strategy. Concurrently, the fifth in the CAREC Road Safety Engineering Manuals series, RSE Manual 5: Star Ratings for Road Safety Audit is in progress and will likewise be published in July 2022. The manual provides a brief overview of Road Safety Audits and the iRAP methodology and identifies the different approaches for using RSAs and the iRAP methodology together to reduce the occurrence and severity of crashes through safer road designs.

On cross-border transport and logistics, the RIBS projects in Pakistan and Mongolia are ongoing, while that for the Kyrgyz Republic is expected to be completed in the third quarter of this year. Civil works for the BCP in Tajikistan have long been completed while its NSW facility has also been fully operational since January 2021.

Table 2. Workshops, Training Programs, and Knowledge Products Completed

Title of Publication / Event	Timeframe
Roads and road asset management	
Knowledge Sharing Workshop on Road Asset Management Systems (Georgia, Pakistan, and Tajikistan)	Oct 2021
Workshop: Road Asset Management System and Performance-Based Road Maintenance Contracts - Afghanistan*	Mar 2021
Workshop: Road Asset Management System and Performance-Based Road Maintenance Contracts - Kyrgyz Republic	Jun 2021
Road Asset Management System and Performance-Based Road Maintenance Contracts in the CAREC Region (English and Russian versions)	Nov 2021
Road safety	



Title of Publication / Event	Timeframe
Road Safety Engineering - Star Ratings for Road Safety Audits Online Workshop	Nov 2021
Uzbekistan - Crash Investigation Training	Dec 2021
Kyrgyz Republic - Crash Investigation Training	Jan 2022
Turkmenistan - Road Safety Engineering Workshop**	Apr 2022
Kyrgyz Republic - Online Training on the Road Safety Problem	Apr 2022
Pedestrian Safety Training in CAREC countries	Jun 2022
CAREC Road Safety Engineering Manual 5 - Star Ratings for Road Safety Audit	Jun 2022
Railways	
The Situation of Railways in CAREC Countries and Opportunities for Investment, Commercialization and Reform (English and Russian versions)	Apr 2022
Overall transport	
2020 CAREC Transport Annual Report (abridged online version)	Oct 2021
CAREC Transport Sector Progress Report and Work Plan (July 2020 to August 2021)	Oct 2021

*ADB placed on hold its assistance to Afghanistan effective 15 August 2021.

**With CAREC Institute.

b. Implementation Progress by Priority Area

Cross-border transport and logistics facilitation. This pillar facilitates greater economic cooperation and connectivity among CAREC countries by reducing impediments to cross-border transport. It focuses specifically on improving cross-border infrastructure, streamlining the implementation and enforcement of transport agreements and conventions. Progress in these areas for 2021-2022 includes:

- **Continued improvement and application of the CAREC program's Corridor Performance Measurement and Monitoring (CPMM) tool.** The CPMM tool is continuously being improved and applied in analyzing border crossing costs and delays in CAREC corridors. A Methodology Review Study and Consultation Workshop was held virtually in March 2022 to improve CPMM data collection and analyses.
- **Support for improved cross-border infrastructure, operational procedures, and stronger border management capacity through various projects and TA activities.** The CAREC Regional Improvement of Border Services (RIBS) projects in the Kyrgyz Republic, Mongolia, Pakistan, and Tajikistan aim to support BCP improvements through the deployment of BCP security and ICT equipment, creation of National Single Window (NSW) facilities, and establishment of integrated border management institutions. The RIBS projects in Pakistan and Mongolia are ongoing, while that for the Kyrgyz Republic is expected to be completed in the third quarter of this year. Civil works for the BCP in



Tajikistan have already been completed while its NSW facility has been fully operational since January 2021. Meanwhile, the ADB and CAREC Institute are developing three-part modules on the RIBS and NSW projects.² In a virtual meeting held in January 2021, the four CAREC countries discussed their experiences in RIBS project development and implementation as well as NSW systems development. For the third module, project officers and experts from international organizations discussed the various trade facilitation programs and initiatives supporting CAREC MCs. The Almaty-Bishkek Economic Corridor (ABEC) Program is also supporting improvements of border crossing points in Kazakhstan and the Kyrgyz Republic.

Roads and road asset management. This pillar supports the adoption of preventive knowledge-based road maintenance to minimize road maintenance costs while also maintaining good road network quality, with the aim of extending road asset life and increasing traffic safety. Activities in 2021-2022 under this pillar includes:

- **Workshop on Knowledge Sharing on Road Asset Management Systems.** A virtual workshop on Knowledge Sharing on Road Asset Management Systems was organized jointly by the CAREC Transport TA team and the ADB transport teams³ of Georgia, Pakistan, and Tajikistan in October 2021. This pilot event offered the three CAREC MCs an opportunity to exchange experiences and lessons learned from RAMS development in their respective countries. Topics discussed ranged from the early stages of their respective RAMS development, current` implementation status, and plans for further development.
- **Workshops on Road Asset Management System and Performance-Based Road Maintenance Contracts.** Two virtual workshops were held for Afghanistan⁴ (March 2021) and the Kyrgyz Republic (June 2021) introducing the concepts of RAMS and PBM contracts.
- **Road Asset Management System and Performance-Based Road Maintenance Contracts in the CAREC Region.** Published in November 2021, this report discusses the development status of RAMS and PBCs in each of the 11 CAREC MCs, including an overview of their respective road networks, as well as institutional arrangements and levels and sources of funding for road assets management. This resource allows CAREC MCs to learn from other MCs' experiences with RAMS and PBCs, and identify best practices which they can replicate. More significant, the report outlines recommended actions for integrating RAMS and PBC into the broader framework for road management, tailored to each MC's specific context, current status and issues. The report is available in both English and Russian.

In 2022, two studies are being carried out that review (i) Road Maintenance Financing in 5 selected countries in the CAREC region and (ii) an assessment of PBC pilots carried out in the CAREC member countries. The first effort looks at how different types of road user charges and related revenue levels are being collected in the selected countries and to which degree these are earmarked for road maintenance. Subsequently these are compared to estimated road maintenance needs and actual road maintenance budgets.

² The three-part modules comprise Module 1: Regional Improvement of Border Services: Project Development and Country Experiences; Module 2: Single Window Development, and Module 3: Role of Development Partners.

³ Transport and Communication Division and Georgia/Pakistan/Tajikistan Resident Missions, Central and Asia Department.

⁴ ADB placed on hold its assistance to Afghanistan effective 15 August 2021.



The Assessment of PBC pilots carried out in the CAREC member countries will review several ongoing and completed PBC pilots and analyze how the PBCs were designed and what issues may have been faced during implementation. Findings from the two studies will be presented in reports.

- **Capacity building support.** CAREC is assisting the Kyrgyz Republic in developing its road asset management system under a small expenditure financing facility for the Kyrgyz Republic. RAM components have also been included in road projects in other CAREC countries such as Georgia and Tajikistan. Performance-Based Maintenance contracts are also being implemented in several road projects in the People's Republic of China, the Kyrgyz Republic, and Tajikistan.

Railways. Guided by the CAREC Railway Strategy (Unlocking the Potential of Railways: A Railway Strategy for CAREC, 2017-2030), this pillar supports the long-term development of the railway sector in CAREC countries to facilitate cross-border trade and promote economic development in the region.

The Situation of Railways in CAREC Countries and Opportunities for Investment, Commercialization and Reform. Building upon 11 country-level assessments and incorporating the development of a CAREC Regional Transport Model, this report examines the situation of the region's railways and identifies opportunities for railway investment, commercialization and reform. It is one of the first consolidated analyses of CAREC railways and contributes to the growing evidence basis to support dialogue and decision-making on railway development in the region. The report, which was completed and published in April 2022, is available in both English and Russian.

Road Safety. This pillar helps ensure that CAREC road corridors continue to support safe and efficient movement of people and goods with high reliability and connectivity. Key achievements in these areas for 2021-2022 include:

- **Road Safety Engineering - Star Ratings for Road Safety Audits Online Workshop.** In November 2021, the CAREC Program organized an online workshop to introduce the manual *Road Safety Engineering - Star Ratings for Road Safety Audits* to CAREC MCs and key stakeholders. The workshop presented the different approaches for how Road Safety Audits and the iRAP methodology – which essentially use different methods but share the same objective of reducing both the risk of occurrence and severity of crashes – can be used together to improve safety in road designs.
- **CAREC Road Safety Report Card.** This report was developed to track the status of implementation and progress of road safety initiatives of individual CAREC MCs under the CAREC Road Safety Strategy. It is a useful resource for identifying implementation challenges, priorities, and reforms and resources necessary to fill any gaps that remain and to improve overall road safety in CAREC MCs. The CAREC Road Safety Report Card will be published in July 2022.
- **CAREC Road Safety Engineering Manual 5: Star Ratings for Road Safety Audit.** This manual introduces the concept of Star Ratings for road safety audits, wherein road segments are assessed on a 5-star scale, with a 5-star rating being the safest. It provides a brief overview of Road Safety Audits and the iRAP methodology, including the strengths and limitations of each. It outlines the different approaches for using RSAs and the iRAP methodology together, which are essentially different methodologies but share a common objective of reducing the occurrence and severity of crashes through safer road designs.



The manual, which is the fifth in the CAREC Road Safety Engineering Manual series, is expected to be published in June 2022 and will be officially launched in Q3 2022.

- **Crash Investigation Training.** A 3-day training course on Crash Investigation was organized for Uzbekistan and the Kyrgyz Republic in December 2021 and January 2022, respectively. The training course explained the importance of collecting accurate crash data which is predicated on thorough crash investigation, crash analysis, and proper reporting. Accordingly, it provided participants with the skills and technical know-how needed to manage a traffic crash scene, and to collect and provide accurate crash data which is key to making well-informed decisions relating to traffic safety laws, road engineering improvements, and road safety measures, among other things.
- **Road Safety Engineering Workshop.** As part of ongoing efforts to help build up the road safety engineering capacity of CAREC MCs, the CAREC Institute in partnership with the Asian Development Bank (ADB) organized a six-module country-specific virtual workshop on Improving Road Safety Engineering for Turkmenistan in April 2022. The workshop provided participants the opportunity to update and upgrade their skills and know-how on the key elements of road safety engineering as embodied in the CAREC Road Safety Engineering Manuals. Workshop participants included road safety professionals from universities, the Committee of Roads, the National Traffic Police, national highway authority, provincial road agencies, and other government ministries and relevant authorities.
- **CAREC Online Training on the Road Safety Problem.** Government officials from the Ministry of Transport and Communications and from the Departments on Road Safety and on Road Supervision of the Ministry of Internal Affairs participated in the online training on Road Safety Problem that was organized by the CAREC Program for the Kyrgyz Republic. The training, which was held in April 2022, familiarized participants with the Safe System Approach, crash causes, and principles of effective enforcement and deterrence theory. It also highlighted the importance of enforcement and its role in a safe system.
- **Pedestrian Safety Training in CAREC countries.** A Pedestrian Safety Training will be conducted for CAREC MCs on 14-28 June 2022. The workshop is intended for highway and road safety engineers, project managers, planners, municipal engineers, traffic police, and representatives of design institutes and road agencies. It aims to broaden understanding of the importance of protecting pedestrians and providing safer pedestrian facilities to make roads more pedestrian-friendly. It will also urge CAREC MCs to conform to higher standards of road safety by embracing the Safe System. The workshop will discuss a broad range of topics relating to pedestrian safety, including pedestrian management strategy, road rules enforcement, design considerations for disabled pedestrians, pedestrian facilities, small-scale civil works for improved pedestrian movement and safety, infrastructure design, speed management, and traffic calming strategies, among other things.

Aviation. The 2018 CAREC Aviation scoping study, which served as a reference document for establishing the aviation pillar under CAREC Transport Strategy 2030, outlines key issues and priorities for the aviation sector in CAREC member countries. This pillar emphasizes the importance of establishing more direct, cost-efficient, and safe aviation links among CAREC member countries for a more open regional aviation market in the CAREC region.

- **Aviation Freight Study.** This study, which examines aviation freight logistics services in CAREC MCs, including regional freight operations by land, air, and sea, aims to guide CAREC



MCs in prioritizing national policy actions and regional agreements to facilitate the development of competitive aviation freight and logistics services. The study encountered some delays given the pandemic-related restrictions that made field research and data collection difficult, but it is ongoing and is making progress toward completion and expected publication within the year.

III. Challenges and Key Issues

Some events and knowledge products outlined under the current work plan (i.e., knowledge products, training, workshops, and similar initiatives, etc.) faced some delays owing to COVID-19-related restrictions, but others proceeded as scheduled, particularly those that could be carried out well virtually. Events which involve careful discussions of high-level sector plans and important issues were deemed better held under face-to-face (F2F) setting and had to be pushed back until in-person meetings become more feasible.

The 19th Transport Sector Coordinating Committee Meeting and the 6th RWG Meeting, for example, which will discuss strategic directions and priorities for the CAREC transport sector and the railway subsector, respectively, are deemed better suited for in-person meetings. The Regional Aviation Forum, which plans to convene important players and stakeholders in the aviation subsector to initiate the development of a new long-term strategy for CAREC aviation, is also deemed more appropriate under F2F setting. These events are expected to be held soon, pending further easing of COVID-19-related travel restrictions.

Moreover, some events that were originally not part of the current work plan had been initiated and successfully completed over the work plan period. These include the Crash Investigation Training for Uzbekistan and the Kyrgyz Republic, the Online Training on the Road Safety Problem, and the Workshop on Knowledge Sharing on Road Asset Management Systems, to name a few.

With respect to knowledge products, a number of KPs were completed within the work plan timeframe despite some pandemic-related delays especially during the initial months of the work plan period. For other KPs, however, activities requiring field research and in-person collaboration were slowed by COVID-19-related constraints. Timelines for these KPs have been pushed back as a result, and CAREC transport aims for their completion under the coming year's work program.

On a positive note, the budget shortfalls and funding realignments that beset the CAREC transport in the previous year had been resolved by mobilizing new funding from other sources to support new activities in CAREC transport.

As the pandemic began to ebb in recent months, borders have started reopening and travel restrictions are being eased gradually. As a result, tourism and travel industries are slowly recovering from the pandemic and markets are reintegrating into global value chains. Accordingly, the trade and transport sectors are also starting to bounce back after grappling with the challenges of the drawn-out pandemic.

But just as the world economy is starting to rebound, new challenges have emerged such as surging oil prices (particularly for non-oil exporting countries) and fresh disruptions to the supply chain as a result of the Russia-Ukraine conflict. Depending on how long the conflict drags on, however, the extent of its potential impact on the trade and transport sectors in CAREC MCs is still unclear at this point.



IV. Work Program for Coming Year

The CAREC program will offer technical assistance to CAREC countries in the remaining period of 2022 onward through knowledge products and workshops on the five pillars: roads and road asset management, road safety, railways, cross-border facilitation, and aviation.

Cross border transport and logistics.

- **CAREC Guide on Logistics Centers Development.** The CAREC program has identified an increasing interest in developing logistics centers among some member countries. Logistics centers are in substance areas specialized to accommodate warehouses, distribution centers, transport and logistics facilities and associated services. A set of knowledge materials on logistics centers will be prepared which would include a technical guide on the features, business model, and roadmap for implementation, among others. Workshops will be organized to provide guidance to decision makers, planners, investors, private sector and other concerned actors on market, institutional, financial, and operational aspects relevant to the design, planning and the operations of logistics centers.
- **Aviation Freight Study.** This study, which looks comprehensively at aviation but with focus on cross-border transport and logistics, will provide an overview of the state of aviation freight logistics services in CAREC MCs – including regional freight operations by land, air and sea – as well as analyze logistics parameters across various modes of transport and multimodal combinations. The study aims to help guide CAREC MCs in prioritizing national policy actions and regional agreements to facilitate the development of competitive aviation freight and logistics services.

Roads and road asset management.

- **Study on Road Maintenance Financing in the CAREC region.** The Study on Road Maintenance Financing in the CAREC region is in progress and is planned for publication in Q3 2022. The report reviews the different types of road user charges being collected in CAREC MCs, and the extent to which the revenues they generate are earmarked for road maintenance. The report also examines the degree to which actual road maintenance budgets are able to cover estimated road maintenance requirements in CAREC MCs.
- **Assessment of Performance-based Road Maintenance Contracts in the CAREC region.** This report reviews ongoing and completed PBC pilots in CAREC MCs. It examines CAREC MCs' experiences in using PBCs for the management, maintenance, and rehabilitation of their road networks, particularly in terms of improvements in road asset conditions, cost savings, as well issues and challenges encountered during implementation. It also discusses lessons that can be drawn from these experiences and identifies best practices that can be replicated by other CAREC MCs. The report is planned for publication in Q4 2022.

Road safety.

- **Crash Investigation Training.** A 3-day training course on Crash Investigation will be organized for Georgia, Kazakhstan, Mongolia, Pakistan, and Tajikistan for the remainder of the current year. The course will discuss how accurate crash data aids understanding of why crashes occur and how they can be prevented, and how they can be used to guide evidence-informed measures and policy decisions relating to road safety. Moreover, the course will



provide participants with the skills needed for managing a traffic crash scene and for collecting accurate crash data.

- **Launch of Road Safety Engineering Manual 5 – Star Ratings for Road Safety Audit.** This manual, which is fifth in the series to the CAREC Road Safety Engineering Manuals, will be launched in the third quarter of 2022. The manual introduces the concept of Star Ratings for road safety audits and provides a brief overview of Road Safety Audits and the iRAP methodology, as well as different approaches for combining RSAs and the iRAP methodology to improve the safety of road designs.

Railways.

- **Sixth Railway Working Group Meeting.** The pandemic restricted most activities and disrupted work plans and timetables especially at its onset. As a result, the sixth RWG meeting, which was originally scheduled to take place in March 2020 in Istanbul, Turkey, did not proceed as planned. But as the pandemic starts to wane and restrictions are slowly being eased, the railway subsector is pressing ahead with its plans to convene the working group for its sixth meeting in Q3 2022.

Aviation.

- **Aviation Freight Study.** The Study aims to guide CAREC governments in prioritizing national policy actions and regional agreements to facilitate development of competitive aviation freight and logistics services. Specifically, the study will compile background information on aviation freight logistics services in CAREC member countries and provide an overview of the regional freight operations by land, air and sea. The analysis will focus on logistics parameters of various modes of transport and multimodal combinations. The study will be a good reference material for regional aviation companies, air terminal operators and logistics companies. Webinars will be organized in late 2022 to disseminate the findings of the Study.
- **Low-Cost Carriers Study.** Low-cost carriers (LCCs) are starting to gain ground in the CAREC region. Yet the CAREC aviation market is still relatively unpenetrated despite the launching of new local LCCs and expansion of foreign counterparts. Higher LCC penetration can help stimulate demand, accelerate air transport growth, as well as drive tourism growth in the domestic, regional (i.e., within CAREC) and international segments. In this context, this study aims to help CAREC governments and stakeholders gain a better understanding of the potential role of LCCs in driving a new phase of passenger growth and tourism development in the region. It will provide an overview of current and historical LCC operations in the CAREC region and assess opportunities for LCC growth in the post-pandemic environment.
- **Regional Aviation Forum.** The Regional Aviation Workshop is planned to be organized in Q4 2022. The Forum will assess the current status of the aviation sector and provide an update on CAREC's role in facilitating regional cooperation in aviation. It will discuss priority topics for CAREC aviation, including: (i) opportunities for aviation industry growth in the post-pandemic environment; (ii) continued air transport market liberalization for both cargo and passenger services, (ii) facilitation of regional international travel within CAREC and (iii) adoption of health-related aviation protocols and standards and cooperation on public health measures. The workshop will also initiate and facilitate the development of a new long-term strategy for CAREC aviation.



Appendix 1: Outcome indicators by pillar

Transport and Logistics Facilitation: Efficiency improvements in BCPs, customs clearance, immigration procedures and cross-border logistics.				
Average speed by corridors, speed with delay (SWD; km/hr)	Corridor	2020	2021	Change
	Overall	20.7	18.9	(1.7)
	1	27.6	20.7	(6.9)
	2	24.4	26.3	+1.9
	3	20.8	21.7	+0.9
	4	16.4	13.7	(2.7)
	5	8.6	10.6	+2.0
	6	20.3	20.7	+0.4
Time taken to clear a border crossing point, by corridor, country and BCP (hour)	Corridor	2020	2021	Change
	Overall	18.9	24.0	+5.1
	1	27.9	51.6	+23.7
	2	22.4	11.7	(10.8)
	3	6.8	5.0	(1.8)
	4	8.1	25.7	+17.7
	5	40.2	25.2	(15.0)
	6	14.0	11.8	(2.2)
Cost incurred to clear a border crossing point, by corridor, country and BCP (\$)	Corridor	2020	2021	Change
	Overall	202	323	+121.3
	1	422	1083	+660
	2	116	103	(13)
	3	91	79	(12)
	4	97	85	(12)
	5	300	279	(20)
	6	136	123	(13)
Logistics Perception Index (LPI)	Country	2016	2018	Change
	Afghanistan*	2.14 [150]	1.95 [160]	(0.19)
	Azerbaijan	-	-	
	PRC	3.66 [27]	3.61 [26]	(0.06)
	Georgia	2.35 [130]	2.44 [119]	+0.09
	Kazakhstan	2.75 [77]	2.81 [71]	+0.06
	Kyrgyz Republic	2.16 [146]	2.55 [108]	+0.39
	Mongolia	2.51 [108]	2.37 [130]	(0.13)
	Pakistan	2.92 [68]	2.42 [122]	(0.50)
	Tajikistan	2.06 [153]	2.34 [134]	+0.28
	Turkmenistan	2.21 [140]	2.41 [126]	+0.20
	Uzbekistan	2.40 [118]	2.58 [99]	+0.17
Roads and Road Asset Management: Improvement on the CAREC Road Asset Management maturity model*				



Average speed of traffic without delay (SWOD; km/hr)	Corridor	2020	2021	Change
	Overall	42.9	41.6	(1.4)
	1	69.5	63.5	(6.0)
	2	46.6	49.7	+3.1
	3	41.2	39.4	(1.8)
	4	33.8	36.0	+2.2
	5	28.4	27.5	(1.0)
	6	40.6	39.6	(1.0)
Perception of highway quality improved (World Economic Forum Global Competitiveness Index)	Country	2018	2019	Change
	Afghanistan*	-	-	-
	Azerbaijan	4.78 [34]	5.16 [27]	+0.38
	PRC	4.58 [42]	4.58 [45]	0.00
	Georgia	3.79 [80]	3.79 [81]	0.00
	Kazakhstan	3.23 [106]	3.59 [93]	+0.36
	Kyrgyz Republic	2.81 [118]	3.05 [113]	+0.24
	Mongolia	3.14 [110]	3.08 [112]	(0.06)
	Pakistan	3.94 [69]	4.04 [67]	+0.09
	Tajikistan	4.53 [44]	4.49 [50]	(0.04)
	Turkmenistan	-	-	-
	Uzbekistan	-	-	-
Railways: Improved service level and operation efficiency of railways				
CPMM average commercial speed, SWD (km/hr)	Corridor	2020	2021	Change
	Overall	16.8	12.1	(4.7)
	1	20.2	14.6	(5.7)
	2	5.4	15.2	+9.8
	3	17.5	13.4	(4.1)
	4	13.5	7.5	(6.0)
	5	-	-	-
	6	13.4	13.3	(0.1)
CPMM average commercial speed, SWOD (km/hr)	Corridor	2020	2021	Change
	Overall	42.2	38.0	(4.2)
	1	67.3	56.2	(11.1)
	2	7.9	15.5	+7.6
	3	19.6	14.9	(4.7)
	4	18.4	14.8	(3.6)
	5	-	-	-
	6	24.4	24.6	+0.2
Perception of railway quality improved ((World Economic Forum Global	Country	2016-2017	2017-2018	Change
	Afghanistan*	-	-	-
	Azerbaijan	4.15 [29]	4.69 [20]	+0.54
	PRC	5.07 [14]	4.80 [17]	(0.27)
	Georgia	3.85 [38]	3.84 [39]	(0.02)



Competitiveness Index for railways)	Kazakhstan	4.26 [26]	4.14 [32]	(0.12)
	Kyrgyz Republic	2.37 [81]	2.45 [76]	+0.08
	Mongolia	2.73 [69]	2.80 [69]	+0.07
	Pakistan	3.08 [53]	3.33 [52]	+0.26
	Tajikistan	3.74 [41]	3.74 [41]	0.00
	Turkmenistan	-	-	-
	Uzbekistan	-	-	-

* ADB placed on hold its assistance to Afghanistan effective 15 August 2021.



CAREC ENERGY SECTOR

PROGRESS REPORT AND WORK PLAN

JULY 2021-AUGUST 2022

Reference Document
Virtual Senior Officials' Meeting
Central Asia Regional Economic Cooperation
28 June 2022



CAREC Energy Sector: Progress Report and Work Plan

I. Executive Summary

The CAREC Energy Program completed phase 1 of implementing the CAREC Energy Strategy 2030 during the reporting period covered by this report. This puts CAREC Energy fully on track to achieve its vision of a reliable, sustainable, resilient and reformed energy market by 2030. Overall, CAREC Energy was transformed into an ambitious, results-driven and visible program with more partners joining the program than ever.

- **Energy Strategy implementation: Phase 1 successfully completed**

In April 2022, the Energy Sector Coordinating Committee (ESCC) successfully completed all strategic deliverables of its 2020-2022 workplan and thus completed the first phase of implementing the CAREC Energy Strategy 2030. More precisely, the ESCC endorsed a plan to establish a CAREC Green Energy Alliance to be the region's 1st targeted financing vehicle for green energy projects. The Committee also launched a 24/7 tool for policy makers – the CAREC Energy Reform Atlas – which aims to support decision makers in resolving the typical dilemmas when implementing energy sector reform. The ESCC also laid the foundation for a new Regional Transmission Cooperation Association (CATCA) as a body to establish regional grid enhancement plans and execute future cross-border projects. Another 2030 flagship deliverable - the CAREC Energy Outlook 2030 - was endorsed and will be officially published at the end of 2022 to attract much needed investment. All CAREC members and development partners also endorsed the first CAREC Women-in-Energy Program which includes an action plan targeted at improving employability, visibility and education of women in the energy sector.

- **New flagship conferences designed and conducted**

Two flagship conferences were conducted during the reporting period: (i) The 2021 CAREC Energy Investment Forum (EIF) which was re-launched in a new format and emerged as the region's flagship event to enable private investments in the energy sector. The 2021 Forum discussed business opportunities in the field of energy efficiency to support CAREC members in doubling energy efficiency until 2030. The Forum also hosted an Energy Efficiency Competition presenting innovative energy saving solutions from young start-ups in the region; and (ii) The 1st CAREC Women in Energy Summit held in March 2022 which celebrated the launch of the 1st CAREC Women-in-Energy Program. This is the first targeted CAREC Energy initiative to advance women in the regional energy sector making the principles of equal opportunity, equal pay, and equal leadership the modus operandi by 2030. The event also offered live coaching sessions for participants and access to membership in international Women-in-Energy Networks.

- **New partnerships formed and visibility boosted**

The high amount of quality results delivered during the past 2 years and the program's increased visibility through the new CAREC Energy web platform (www.carecenergy.org) led new organizations/development partners to express significant interest in the program. A number of new organizations have now joined the ESCC and are supporting the implementation of the CAREC deliverables.



II. Key Developments and Results

a. Sector Implementation

As part of the 2030 strategic framework of the CAREC Program, long-term goals for the Energy Sector were identified and integrated in the CAREC 2030 Program Results Framework (see table 1).

The overarching goal in the energy sector is to achieve improved regional energy security and enhanced deployment of green energy until 2030. To this end, a number of flagship cross-border electricity interconnection projects (TUTAP, TAP and CASA-1000)⁵ as well gas interconnection projects (TAPI)⁶ shall be made operational by 2030 to boost regional energy trade and improve overall energy security in the region.⁷ At the same time, CAREC members shall also be able to benefit from a new and innovative financing vehicle that will facilitate implementation of green energy projects, particularly energy efficiency and renewable energy projects, for a cleaner energy sector by 2030. To this end, energy consumer awareness campaigns shall be regularly held to inform and sensitize domestic consumers as well as businesses on energy efficient behavior. Table 1 summarizes the progress made during the reporting period as per the overall CAREC 2030 Program Results Framework.

Table 1: CAREC 2030 Program Results Framework – Progress in the Energy Sector (2021-2022)

Sector Outcomes & Outputs by 2030	Indicator	2017 Baseline	Progress		2022
			2020	2021	
Enhanced regional energy security and deployment of green energy in the energy sector of CAREC countries	% renewable energy in CAREC countries	<1% renewable energy in CAREC countries	6% renewable energy in CAREC countries	6% renewable energy in CAREC countries*	<i>Data will be available by end 2022</i>
Output 1: Increased regional energy trade through implementation of the TUTAP, TAP, and CASA-1000 electricity interconnection projects and the TAPI gas pipeline project	TUTAP, TAP, and CASA-1000 electricity interconnection projects and the TAPI gas pipeline project operational	0 project operational	TUTAP partially operational	TUTAP and other projects' progress impacted by situation in Afghanistan**	<i>Data will be available by end 2022</i>
Output 2: Financing vehicle for green energy projects developed and consumer awareness for energy efficiency strengthened	# of donor organizations providing finance to new CAREC green energy alliance and # of regional energy efficiency consumer campaigns held throughout the region	0 donor organizations providing finance to new CAREC green energy alliance 0 regional energy efficiency	0 donor organizations providing finance to new CAREC green energy alliance 0 regional energy	0 donor organizations providing finance to new CAREC green energy alliance 1 regional energy	3 organizations expressed support for CAREC Green Energy Alliance*** 1 regional energy

⁵ CASA = Central Asia-South Asia, TAP = Turkmenistan-Afghanistan-Pakistan, TAPI = Turkmenistan-Afghanistan-Pakistan-India, TUTAP = Turkmenistan-Uzbekistan-Tajikistan-Afghanistan-Pakistan.

⁶ TAPI = Turkmenistan-Afghanistan-Pakistan-India

⁷ ADB placed on hold its assistance in Afghanistan effective 15 August 2021. (ADB Statement on Afghanistan published on November 10, 2021: <https://www.adb.org/news/adb-statement-afghanistan>). This impacted progress of regional interconnection projects during the reporting period covered by this report.



Sector Outcomes & Outputs by 2030	Indicator	2017 Baseline	Progress		2022
			2020	2021	
		consumer campaigns held		efficiency consumer campaigns held	efficiency consumer campaign held ^Δ

* share of variable renewable energy sources (solar PV and wind) - Source: IRENA (2022), Renewable capacity statistics 2022. International Renewable Energy Agency (IRENA), Abu Dhabi

** Progress of regional interconnection projects are impacted as ADB placed on hold its assistance in Afghanistan effective 15 August 2021. ADB Statement on Afghanistan published on November 10, 2021: <https://www.adb.org/news/adb-statement-afghanistan>

*** EBRD, IsDB and UNECE (as expressed at 32nd ESCC meeting, April 2022)

Δ CAREC launches first region-wide energy efficiency campaign: <https://carecenergy.org/carec-first-region-wide-energy-efficiency-campaign/>

b. Implementation Progress by Priority Area

The CAREC Energy Strategy 2030⁸, adopted on 14 November 2019 at the CAREC Ministerial Conference in Tashkent, remains the key guiding document for all CAREC energy activities. It rests on the overarching principle of “Common Borders. Common Solutions. Common Energy Future.”, and aims at achieving a reliable, resilient, sustainable and reformed energy market in the CAREC region by 2030.

To achieve the goals of the CAREC Energy Strategy 2030, the following three strategic pillars were identified:

- Strategy Pillar 1: Better Energy Security through Regional Interconnections
- Strategy Pillar 2: Scaled-Up Investments through Market-Oriented Reforms
- Strategy Pillar 3: Enhancing Sustainability by Greening the Regional Energy System



To support the above priority areas, the following three cross-cutting themes also form integral part of the CAREC Energy Strategy 2030's focus:

- Cross Cutting Theme 1: Building Knowledge and Forming Partnerships
- Cross Cutting Theme 2: Attracting Private Sector Investments across the Energy Value Chain
- Cross Cutting Theme 3: Empowering Women in Energy


Under all strategy pillars and cross-cutting themes, a list of deliverables was agreed as as part of the CAREC Energy 2030 work plan. The following table shows all actions to be implemented between 2020 and 2030 and the progress made to date.

⁸ Asian Development Bank (ADB). [CAREC Energy Strategy 2030](#). Manila.


Table 2: Energy Sector Progress by Priority Area (2021/2022)

 Strategy Pillar 1: Better Energy Security through Regional Interconnections <i>(progress from 10% in 2021 to 40% 2022)</i>			
40%			
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	In progress
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	In progress
Facilitate cooperation among regional transmission system operators (TSOs)	Growing electricity and gas interconnections require increased cooperation among TSOs. The establishment of a corresponding platform for regional network development planning, identification of projects of common interest, and information sharing shall be facilitated by this activity.	Central Asia Transmission Cooperation Association (CATCA) concept developed	Completed (April 2022) https://carecenergy.org/foundation-laid-for-new-regional-transmission-body-catca/
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	In progress
 Strategy Pillar 2: Scaled-Up Investments through Market-Oriented Reforms <i>(progress from 50% in 2021 to 80% 2022)</i>			
80%			
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	Completed (April 2022) https://atlas.carecenergy.org/ https://atlas.carecenergy.org/home-utk/
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	Completed (April 2022) https://atlas.carecenergy.org/home-trf/
Develop options for social protection measures for	This activity shall assist in elaborating options for social protection measures to accompany tariff reform and shall include the development of a	CAREC Guide to Social Protection and	Completed (April 2022) https://atlas.carecenergy.org/home-vct/



vulnerable energy consumers	definition for “vulnerable consumers” to assist policy makers in identifying the appropriate target group.	Energy Sector Reform published	
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	Upcoming
 Strategy Pillar 3: Enhancing Sustainability by Greening the Regional Energy System (progress from 15% in 2021 to 70% 2022)			
70%			
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	In progress A concept defining the role, structure and functioning of the CAREC Green Energy Alliance was endorsed by ESCC in April 2022
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	Upcoming
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	Completed (June 2021) https://carecenergy.org/care-c-first-region-wide-energy-efficiency-campaign/ Completed (June 2021) https://carecenergy.org/care-c-first-region-wide-energy-efficiency-campaign/ Upcoming



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.	<p>Workshop on pros and cons of different renewable incentive schemes held</p> <p>Coping mechanisms for renewable energy intermittency developed</p> <p>Manual on legislative requirements for the integration of renewable energy prepared</p> <p>Role of gas as a transition fuel discussed</p>	<p>Upcoming</p> <p>Completed (August 2020) https://carecenergy.org/care-c-finds-cooperation-on-renewable-energy-to-save-millions-of-dollars/</p> <p>Completed (August 2020) https://carecenergy.org/care-c-finds-cooperation-on-renewable-energy-to-save-millions-of-dollars/</p> <p>Upcoming</p>
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Strategy Pillar 3: Enhancing Sustainability by Greening the Regional Energy System (progress from 5% in 2021 to 50% 2022)

50%

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	Completed (May 2022) ESCC approved the Outlook in April 2022. It is currently layouted for publication in Q4 2022
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	In progress UNECE, UNDP, Energy Charter, ERRa and EFSD are some of the new organizations that joined ESCC activities between 2020-2022 https://carecenergy.org/partners/
	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	Upcoming



Cross Cutting Theme 2: Attracting Private Sector Investments across the Energy Value Chain (progress from 0% in 2021 to 50% 2022)



50%			
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	Upcoming
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	Completed (Dec 2021) https://carec-eif.org/ <i>next EIF is tentatively envisaged in Q4 2022</i>
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	Upcoming



Cross Cutting Theme 3: Empowering Women in Energy

(progress from 10% in 2021 to 60% 2022)

60%			
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	Completed (March 2022) https://women-energy-summit.org/ Upcoming Upcoming



c. New Flagship Conferences and Meetings conducted

Two flagship conferences were conducted during the reporting period:

- **The 2021 CAREC Energy Investment Forum (EIF) – “Investing in Energy Efficiency”** was re-launched in a new virtual format and is emerging as the region’s new flagship event to enable private investments in the energy sector. The 2021 Forum discussed business opportunities in the field of energy efficiency to support CAREC members in doubling energy efficiency until 2030. The Forum also hosted an Energy Efficiency Start-Up Competition presenting innovative energy saving solutions from young start-ups in the region. The Forum was co-hosted by ADB and the Government of Azerbaijan (holding the CAREC Presidency 2021). ADB’s Vice President Shixin Chen and Azerbaijan’s Energy Minister Parviz Shahbazov opened the forum urging that energy efficiency is one of the most potent tools to decarbonize the energy sector in Central Asia and will be paramount in achieving the global climate targets. ADB’s Director General Suzanne Gaboury closed the forum highlighting the pivotal role of the private sector in delivering the required energy efficiency investments and stressed that relevant technologies are already widely available to reduce energy intensity in the CAREC region. The highlights and recording of the full event can be found here: <https://carec-eif.org/>
- **The 1st CAREC Women in Energy Summit – “Equal by 2030 – Time for Change”** was held in March 2022 and celebrated the launch of the 1st CAREC Women-in-Energy Program. The program is the first targeted initiative to advance women in the regional energy sector making the principles of equal opportunity, equal pay, and equal leadership the modus operandi by 2030. The event also offered live coaching sessions for participants and access to membership in international Women-in-Energy Networks. The Summit was opened by ADB Director Joonho Hwang reaffirming that gender equality is a top priority across all ADB activities. ADB Director Lyaziza Sabyrova stressed in her closing remarks that the rise of new jobs due to the global climate agenda is a once-in-a-lifetime opportunity to increase women employment in the sector. The Summit was also attended by Ms. Damilola Ogunbiyi, CEO of SE4all and the Deputy Ministers of Tajikistan and Georgia. The highlights and recording of the full event can be found here: <https://women-energy-summit.org/>

The following working groups were established and successfully launched at the start of 2021 and conducted regular meetings during the reporting period:

- Work Stream 1 (WS 1): Infrastructure Connectivity and Energy Security
- Work Stream 2 (WS 2): Policy Reform and Liberalization
- Work Stream 3 (WS 3): Energy Efficiency and Diversification of the Energy Mix

These work streams directly cover the scope of strategy pillars 1, 2, and 3 and focus on producing their respective deliverables (see Table 2).

Similarly, individual task forces for each of the three crosscutting themes were successfully established and conducted regular meetings during the reporting period:

- Task Force A (TF-A) on Knowledge Products, Partnerships, and People’s Networks
- Task Force B (TF-B) on Private Sector Enhancement
- Task Force C (TF-C) on Women Empowerment



The working groups and task forces are each led by 1-2 CAREC members. This is a key novelty in the Program and allows CAREC members to directly lead the strategy implementation and thus sit in the driver's seat. In addition, ADB is providing a lead consultant for each working group with technical expertise on the subject areas to assist the groups in preparing their work. A detailed overview of Chairs and members of each working group can be found in Appendix 2.

During the reporting period, the second round of working group meetings took place on 11 & 13 October and on 14 December 2021 followed by an ESCC meeting on 21 April 2022.⁹ The working group chairs successfully presented the deliverables and received ESCC's approval for the deliverables developed.

d. Visibility boosted and new partnerships formed

Another groundbreaking development in the CAREC Energy Program is the launch of the new CAREC Energy web platform (www.carecenergy.org) accessible to a wider public including stakeholders inside and outside the region. The program's increased visibility led new organizations/development partners to express significant interest in the CAREC energy activities. A number of new organizations have now joined the ESCC and are supporting the implementation of the CAREC deliverables and/or have significantly contributed to the flagship events conducted (see above). UNECE, UNDP, Energy Charter, ERRa and EFSD are some of the new organizations that joined ESCC activities between 2020-2022.

III. Challenges and Key Issues

The main challenge remains the global COVID-19 pandemic which has prevented the CAREC Energy Community to hold face to face meetings. Despite these circumstances, all planned meetings and conferences were successfully held (in virtual format). While it is unfortunate that personal meetings were impossible, the virtual format also brought a number of positive effects:

- No restriction in the number of participants allowed a lot more CAREC members to join our meetings compared to the face-to-face format and led to more active participation
- A much bigger number of development partners joined our meetings compared to the past with some new partners joining the energy activities for the first time
- The virtual meetings also allow for a significant reduction in carbon footprint as no travel is involved

Thus, these challenges were successfully transformed into opportunities that will continue to positively impact the work of the CAREC energy program.

The reporting period was also overshadowed by ADB placing on hold its assistance in Afghanistan effective 15 August 2021 (ADB Statement on Afghanistan published on November 10, 2021: <https://www.adb.org/news/adb-statement-afghanistan>).

⁹ The first round of working group meetings took place on 25 and 27 May 2021 followed by an ESCC meeting on 10 June 2021.



IV. Work Program for the Coming Period

The CAREC Energy Strategy 2030 is implemented in sequences of 2-year work programs. Thus, until 2030, there will be a total of five work programs to achieve the goals of the strategy. The deliverables of the first work program (covering the period 2020-2022) are now nearly completed with only the publication of the CAREC Energy Outlook 2030 and an Energy Investment Forum outstanding. Upon completion of these outstanding activities, a new work program for the period 2023-2025 will need to be established together with the ESCC. Activities to be taken up for the period 2023-2025 shall be aligned with the CAREC Energy Strategy 2030 work plan.

V. Deliverables for the Ministerial Conference

The following list gives an outlook of deliverables (i) completed during the reporting period covered by this report and (ii) expected to be completed until the MC 2022:

Table 3: List of Deliverables for the 2022 Ministerial Conference

Deliverables	Completion	NFP/MC action
Concept for establishment of a regional financing vehicle for green energy projects (CAREC Green Energy Alliance)	Q2 - 2022	for presentation at the MC
CAREC Energy Reform Atlas	Q2 - 2022	for information
Concept for the establishment of a Central Asia Transmission Cooperation Association (CATCA) prepared	Q2 - 2022	for information
Publication of 1st CAREC Energy Outlook	Q4 - 2022	for information
Organization of a CAREC Energy Investment Forum (2 Fora)	Q4 2021 & Q4 2022	for information
Development of the 1st CAREC Women in Energy Program	Q1 2022	for information
Organization of the 1st Women in Energy Summit	Q1 2022	for information

VI. Key Issues for Guidance by the Senior Officials' Meeting

Alongside the adoption of the CAREC Energy Strategy 2030, the CAREC Energy Ministers signed a declaration in September 2019 in Tashkent in the framework of the 1st CAREC Energy Ministers Dialogue which contains specific commitments for the CAREC Energy Sector including the following:

- Double regional power flows until 2023
- Double solar and wind power capacity by 2023
- Double the level of energy efficiency until 2030



- Attract private investors through suitable financing vehicles
- Affordable and clean energy for all including in hard to reach areas before 2030
- Implement energy sector reform including phase out of fiscal and fossil fuel subsidies
- Gender Equality in the CAREC Energy Sector by 2030

In view of the commitments, it is suggested to hold a 2nd Energy Ministers Dialogue in 2023/2024 to report on the progress made of these commitments and agree on new commitments as deemed necessary. The CAREC Senior Officials are kindly invited to transmit this suggestion to their governments and report back whether the idea of holding a 2nd Energy Ministers Dialogue is supported.



VII. Appendices

CAREC Energy Working Group Chairs and Members (as of June 2022)

Country	Member in all groups	Work Streams			Task Forces		
		WS 1 Infrastructure Connectivity & Energy Security	WS 2 Policy Reform & Liberalization	WS 3 Energy Efficiency & Diversification of the Energy Mix	TF-A Knowledge Products, Partnerships & People's Networks <i>Chaired by ADB</i>	TF-B Private Sector Enhancement <i>Chaired by CAREC Presidency Country holding the EIF</i>	TF-C Women Empowerment <i>Was chaired by Afghanistan¹⁰ until mid 2021 - then chaired by ADB</i>
Afghanistan	x	Member	Member	Member	Member	Member	Chair
Azerbaijan	x	Member	Member	Mr. Asaf Rzayev Co-Chair	Member	Member	Member
Georgia	x	Member	Member	Ms. Margalita Arabidze Co-Chair	Member	Member	Member
Kazakhstan	x	Ms. Gulnara Bakhtybaeva Co-Chair	Member	Member	Member	Member	Member
Kyrgyz Republic	x	Member	Member	Member	Member	Member	Member
Mongolia	x	Member	Member	Member	Member	Member	Member ¹
Pakistan			Member	Member			
People's Republic of China		Member		Member			
Tajikistan		Member	Member	Member			
Turkmenistan		Member		Member			
Uzbekistan			Mr. Bakhrom Umarbekov Chair	Member		Member	

¹⁰ ADB placed on hold its assistance in Afghanistan effective 15 August 2021. (ADB Statement on Afghanistan published on November 10, 2021: <https://www.adb.org/news/adb-statement-afghanistan>)