

Central Asia Regional Economic Cooperation Program

Development Effectiveness Review 2012





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Abbreviations

ADB – Asian Development Bank BCP – border crossing point

CAREC – Central Asia Regional Economic Cooperation

CFCFA – CAREC Federation of Carrier and Forwarder Associations
CPMM – Corridor Performance Measurement and Monitoring

DEfR – development effectiveness review

EAP – Energy Action Plan Framework 2010–2012

EBRD – European Bank for Reconstruction and Development

ESCC – Energy Sector Coordinating Committee

EWP – ESCC Work Plan

GDP aross domestic product gross national income GNI HDI human development index **IMF** International Monetary Fund institutional quality index IOI IsDB Islamic Development Bank logistics performance index LPI multitranche financing facility MFF **MTPP** medium-term priority project

NFP – national focal point

OECD – Organisation for Economic Co-operation and Development

RPMP – Regional Power Master Plan

SWD – speed with delay

SPS – sanitary and phytosanitary TLI – trade liberalization index

TPCC – Trade Policy Coordinating Committee
TPSAP – Trade Policy Strategic Action Plan

TSCC – Transport Sector Coordinating Committee
TTFS – Transport and Trade Facilitation Strategy

TRS – time release study

UAIS – unified automated information system
UNDP – United Nations Development Programme

WTO – World Trade Organization

Weights and Measures

km – kilometer

kph – kilometer per hour

kV – kilovolt MW – megawatt

Executive Summary

The 2012 Central Asia Regional Economic Cooperation Program Development Effectiveness Review: Implementing CAREC 2020—Vision and Action is the fourth annual performance assessment of the overall Central Asia Regional Economic Cooperation (CAREC) Program. The development effectiveness review (DEfR) process evaluates progress in all components of the program over calendar year 2012 toward the objectives laid out in CAREC 2020: A Strategic Framework for the Central Asia Regional Economic Cooperation Program 2011–2020. Through the examination of data for the performance indicators, it highlights the achievements and draws attention to emerging issues faced by CAREC partners. As a consolidated assessment mechanism, it also helps identify how the activities across the

CAREC implementing sectors complement one another and where their potential for impact can be realized.

National-level development outcomes at Level 1 measured through CAREC regional averages showed distinct improvements in human development and gender equality in 2012. Progress was also significant for the poverty level indicator using 2010 data, excepting only a few countries. Impressive growth in real gross domestic product (GDP) of the region was sustained up to 2012. The indicator for trade openness was static, however, while the indicators for foreign direct investment and business environment improved over the previous year's levels. The proposed indicator for the strategic objective of "increased trade" shows

2012 Performance Snapshot

Level 1: 0	CAREC Region Development Outcomes							
Poverty a	nd human development outcomes	G						
Gross dor	nestic product, trade, and business environment	G						
Monitorin	g CAREC 2020	A						
Level 2: 0	CAREC Priority Sector Outputs							
Transport	sector	G						
Trade faci	litation sector	A						
Trade poli	cy sector	A						
Energy se	ctor	G						
Level 3: 0	Operational and Organizational Effectiveness							
Operation	s growth	G						
Finance m	nobilization	R						
Knowledg	e management	A						
G	Over 50% of indicators in this group have made progress value reflected in the previous DEfR cycle. This group is "							
An equal number of indicators in this group have (i) made progress, or (ii) deteriorated over the previous DEfR cycle. This indicator has "stalled" and necessary action should be identified to prevent further deterioration.								
R	Over 50% of indicators in this group have stalled and/or deteriorated for 2 consecutive years. This group is "off track" and immediate attention is required.							

Executive Summary

intraregional trade to be a small proportion of total trade, which moreover declined during the period. For the strategic objective of "improved competitiveness," the proposed indicator, logistics performance index (LPI), indicated a low baseline level of logistics efficiency, which also fell slightly in the last 2 years.

Results for CAREC priority sector outputs in 2012 were mixed. The length of CAREC corridors in good condition has now reached 80% of the 24,000 kilometer (km) total, exceeding the 2012 target of 75%. The transport sector however built only 49% of the 880 km of national highways targeted in 2012; the cumulative 3,942 km of national highways built is also only 46% of the total corridor length identified for improvement. For the trade facilitation sector, the average time to clear a border crossing point was longer by 3 hours although average cost was practically unchanged. The average speed to travel a section of the CAREC corridors increased slightly while transit and activity costs also escalated moderately. The indicator for trade policy, the trade liberalization index (TLI), continued on a positive trend reflecting increasing openness and simplification of trade regimes. Further improvement seemed possible, however, since the indicator fell short of the 2012 target, with all countries except for the Kyrgyz Republic exhibiting little progress in reducing the number of nonzero tariff bands and average tariff levels. Data for the first energy indicator demonstrated an additional 322 km of transmission lines installed or upgraded in 2012, bringing the cumulative total to 2,322 km.

Operations growth and finance mobilization were sustained in 2012, with \$3.4 billion additional loans and grants supporting 11 new projects in transport and energy. A 42% expansion relative to the 2011 level reversed the slowdown that began in 2010. Nonetheless, the 3-year moving average used as an indicator for finance mobilization fell, distorted by very large one-time inflows recorded in 2009. During 2001–2012, 136 CAREC-related projects worth \$21.2 billion were approved.

With regard to CAREC-related technical assistance activities, 45 projects worth \$32.6 million over the period 2001 to 2012 led to investments

in the transport and energy sectors equivalent to \$9.8 billion thus far. Technical assistance was also provided to other priority sectors and second-tier areas including disaster risk reduction and management. Fewer training and capacity building events with fewer participants were held, although the courses were longer on average. This was due to the restructuring of the CAREC Institute, reduced activities in second-tier areas, and no executive leadership and management courses unlike in the previous years.

The 11th Ministerial Conference held in Wuhan, People's Republic of China, endorsed the Wuhan Action Plan to guide the CAREC Program through its next phase of operations in order to ensure the attainment of the strategic objectives described in CAREC 2020. The Wuhan Action Plan focuses on sector operational priorities, the CAREC Institute work plan, and transport facilitation measures, and will be regularly reviewed by the CAREC countries through the institutional framework.

The DEfR process is action-oriented and proposes a set of specific measures to intensify implementation of the CAREC Program across all its components. These actions are for consideration at the midterm Senior Officials' Meeting. Progress made in resolving the issues will be reported at the annual CAREC Ministerial Conference. The proposed actions seek to accomplish the following:

Accelerate implementation of CAREC 2020

- Review the Transport and Trade Facilitation Strategy and Implementation Action Plan for consideration at the Senior Officials' Meeting and Ministerial Conference.
- Maximize the benefits of CAREC corridors by addressing key nonphysical barriers to cross-border transport and implementing the endorsed approach to corridor-based transport facilitation arrangements.
- Update the Trade Policy Strategic Action Plan, continue implementation of the trade liberalization index, and develop the institutional quality index.
- Implement the CAREC Energy Work Plan 2013–2015.

Executive Summary

- To sustain operations growth, update the medium-term priority project (MTPP) list and commence mainstreaming priority projects into national development plans of the CAREC countries.
- To counter the drop in finance mobilization, step up efforts to explore cofinancing opportunities among CAREC governments, multilateral and bilateral institutions, other development partners, and the private sector.
- Implement sector-focused training and capacity building activities through the CAREC Institute.
- Expand dissemination of relevant knowledge products to all CAREC

- members, especially through the CAREC web portal.
- Build and expand web-based data repository functions for each priority sector, CAREC partners, and the CAREC Institute.
- Coordinate closely with national focal point advisers to promote consistent messaging and information about the CAREC Program in all member countries.

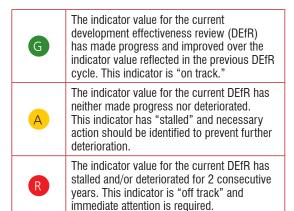
Enhance CAREC Program results orientation

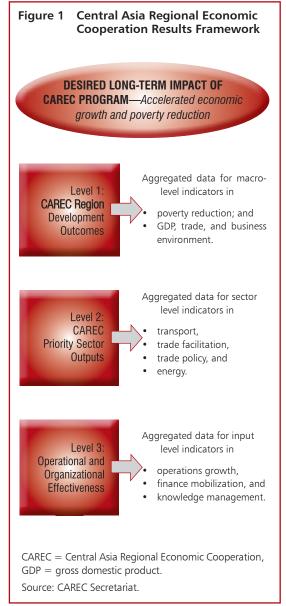
• Revisit the performance indicators.

Introduction

The Central Asia Regional Economic Cooperation (CAREC) Program is a practical, project-based, and results-oriented initiative implemented by 10 partner countries and 6 supporting multilateral institutions. The 2012 Central Asia Regional Economic Cooperation Program Development Effectiveness Review: Implementing CAREC 2020—Vision and Action (2012 CAREC DEFR) is the fourth annual performance assessment of the overall CAREC Program, and is based on analysis of the 32 aggregated performance indicators that function as interdependent building blocks to form the CAREC results framework (Figure 1; Appendixes 1 and 2).²

The DEfR process uses a simple rating system designed to show (i) where progress is being made in the overall context of CAREC activities, (ii) where progress has slowed or begun to deteriorate, and (iii) where urgent attention is required to prevent further deterioration. The traffic light rating system adopted by the CAREC DEfR process is as follows:





The 10 country partners comprise Afghanistan, Azerbaijan, the People's Republic of China, Kazakhstan, the Kyrgyz Republic, Mongolia, Pakistan, Tajikistan, Turkmenistan, and Uzbekistan. The six multilateral institutions are the Asian Development Bank, European Bank for Reconstruction and Development, International Monetary Fund, Islamic Development Bank, United Nations Development Programme, and the World Bank.

² The complete 2012 CAREC results framework is in Appendix 1. Definitions and sources are in Appendix 2.

Level 1: CAREC Region Development Outcomes

Level 1 of the 2012 CAREC DEfR provides a broadstroke context of national-level progress toward development goals (development outcomes) to which CAREC projects and activities aim to contribute, together with the work of national governments and other development partners. Macro-level development outcomes indicate the ability of CAREC countries to achieve economic growth and further the goals of poverty reduction, both at national and regional levels. The results framework (Appendixes 1 and 2) tracks indicators at Level 1 that reflect medium-term national and regional economic objectives of the CAREC Program. Indicators fall under two groupings: poverty reduction and human development; and economic progress—gross domestic product (GDP), trade, and business environment.3

The 2012 DEfR introduces two additional Level 1 indicators to monitor the strategic objectives laid out in CAREC 2020, one for "trade expansion," and another for "improved competitiveness," discussed in Section C.

It is time to start examining regional trade and industry competitiveness because these are the intermediate outcomes of the numerous initiatives undertaken by the CAREC Program for more than a decade now. Tracking the trends in the proposed indicators would help identify more clearly the linkages between and contributions of CAREC sector outputs to national development outcomes, hence providing additional useful information to the current set of indicators.

Poverty Reduction and Human Development (Table 1) G

The results framework tracks poverty reduction and human development through three sets of data:

 a variant of the Millennium Development Goal measure of extreme poverty—
 "proportion of people living on less than \$1.25 a day"—adjusted to more appropriate levels for the CAREC region;⁴

Tab	le 1	Level	1—P	overty	and	Human	Deve	lopment
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Indicator	Indicative Target	Baseline Year	Baseline Value	2010	2011	2012/ Latest Value	Progress
1. Population living on less than \$2 a day (%) ^a	1	2002	65.7	52.1 ^b	50.1 ^{c.}	42.9 (2010)	G
2. Human Development Index	1	2000	0.525	0.619	0.624	0.628	G
3. Gender Inequality Index ^d	1	2010	0.458		0.436	0.420	G

^a PovcalNet calculated the averages. No data for Afghanistan, Mongolia, and Uzbekistan.

Notes: Comparable subnational data for Xinjiang Uygur Autonomous Region and Inner Mongolia Autonomous Region of the People's Republic of China are not available for the indicators in Table 1.

Sources: World Bank. PovcalNet Online Database for indicator 1; United Nations Development Programme. 2013. *Human Development Report 2013*. New York, for indicators 2 and 3.

^b 2005 data.

c 2008 data

^d No data for Turkmenistan or Uzbekistan in all years, and for Azerbaijan in 2010.

³ Additional Millennium Development Goal indicators for the CAREC region are listed in Appendix 3.

⁴ Under the UN MDG system of classification, seven CAREC countries are "early achievers" because they are already within target for this indicator, hence the CAREC results framework chose to use the next level of measurement for which data is routinely captured: population living below \$2 a day.

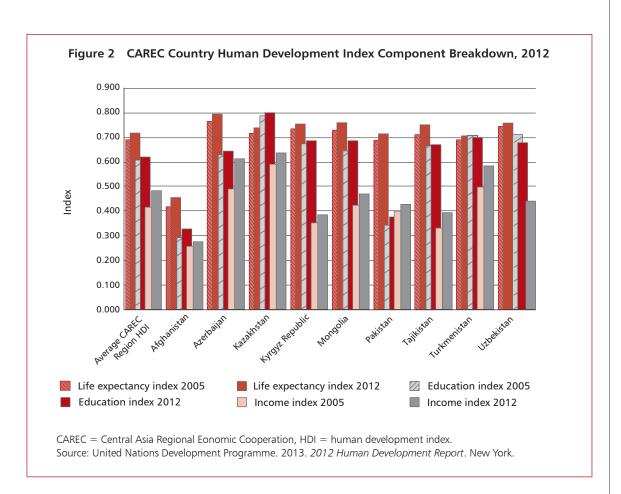
Level 1: CAREC Region Development Outcomes

- the United Nations Development Programme's (UNDP) composite human development index (HDI), to measure a broad spectrum of human development; and
- UNDP's gender inequality index (GII), which aims to demonstrate how human development achievements can be eroded by gender inequality, and provide empirical foundations for policy analysis and advocacy efforts.

The latest available data on the proportion of the population living below \$2 a day reveal significant reductions in the CAREC average during 2002–2010. Country data that are available for six CAREC countries show that the decline of the regional average has been steady owing to major sustained improvements in four of them: Azerbaijan (15.2% to 1.6%), Kazakhstan

(21.5% to 3.6%), Tajikistan (72.3% to 27.7%), and Turkmenistan (18.8% to 0.77%). Only a few countries experienced either no change or a slight worsening of poverty levels, but these appear to be confined to only part of the period. The indicator thus gets a "green" rating.

The 2012 average HDI for CAREC improved slightly from the 2011 level (Figure 2). Nevertheless, eight out of nine⁵ countries registered higher indexes, among which Azerbaijan and Mongolia progressed substantially. Across the three HDI components, life expectancy and education advanced more than standards of living. The average income index was pulled down by decreases in income per capita in four countries, although three of them had only minor reductions. Azerbaijan, Kazakhstan, and Turkmenistan continued to enjoy relatively higher incomes, while



Comparable subnational data for Xinjiang Uygur Autonomous Region and Inner Mongolia Autonomous Region of the People's Republic of China are not available, hence are excluded from the estimates.

Mongolia, Uzbekistan, and Pakistan retained their middle range. Literacy and schooling were enhanced greatly in Azerbaijan, bringing its index closer to that of Kazakhstan. Turkmenistan, Mongolia, the Kyrgyz Republic, Uzbekistan, and Tajikistan also had relatively high education indexes. Life expectancy lengthened in all countries. The CAREC average HDI is still midway between the regional averages for Europe and Central Asia (0.77) and South Asia (0.58) in 2012.6

Gender inequality was reduced in 2012 for all countries where data was available, resulting in an 8% drop in the CAREC regional average. Mongolia's marked decline of 20% brought its index close to the low levels in Azerbaijan, Kazakhstan, the Kyrgyz Republic, and Tajikistan, resulting in a 0.332 average for the five countries together. The overall CAREC average for seven countries still compares favorably with that of South Asia (0.473), but has yet to match that of Europe and Central Asia (0.267).

► Gross Domestic Product, Trade, and Business Environment (Table 2) **G**

The second set of performance indicators at Level 1 provides a snapshot of macroeconomic progress in growth, employment, trade, and the business environment in the CAREC region. It is important to note, however, that while CAREC countries show a degree of uniformity, they remain highly diverse as demonstrated in some of the indicators used in this results framework. They are subject to different challenges and they reap different benefits.

CAREC countries' economic growth has been sustained as seen in annual increases in average GDP⁷ in constant terms. In 2012 the average for 8 countries⁸ grew by 17% over 2011 and by 41% over the 2006 baseline. Real GDP growth in local currency terms averaged 6.5% across the 8 countries. Mongolia and Turkmenistan registered the same impressive double-digit

growth rates they showed in 2011, while the rest had single-digit rates ranging from 4% to 8%, with the exception of Kyrgyz Republic, which suffered a slight contraction. Kazakhstan continued to have the highest per capita GDP, \$11,973, comparable to the 2011 average for Europe and Central Asia of \$12,370. Azerbaijan and Turkmenistan had the next highest levels while the other countries' estimates were closer to the South Asia regional average in 2011 of \$3,033.

The average proportion of the working-age population actively seeking work expanded slightly to 58% in 2011. Most countries showed very small increases in their labor force participation rates over the past years, barely reaching 1 percentage point. However, small year-to-year differences are expected for this indicator, since the working-age population for each country also expands every year. Hence a "green" rating is warranted. The unweighted average of 65% is equal to the average of Europe and Central Asia (65%) but lower than that of South Asia (70%). For the indicator tracking the proportion of women employed in nonagriculture sectors, data for five countries in 2008 produced a 37.9% average—a drop from the baseline by 0.7 percentage points. However, since there was no data after 2009. the indicator is not rated.

Trade openness was also virtually unchanged since 2009, drawing an "amber" rating for the indicator. The region's total trade was equivalent to 50% of GDP on average.

This is far below the 88% average for Europe and Central Asia. At the country level,
Azerbaijan, the Kyrgyz Republic, and Tajikistan were the most open, as their trade volumes exceeded their GDP levels. Kazakhstan's trade volume was equivalent to two-thirds, Pakistan's was one-third, and Uzbekistan's was one-fourth of GDP. There was no data after 2009 for real growth in trade, hence there is also no rating for this indicator.

⁶ For this section, the averages for Europe and Central Asia exclude Azerbaijan, Kazakhstan, the Kyrgyz Republic, Tajikistan, Turkmenistan, and Uzbekistan while the averages for South Asia exclude Afghanistan and Pakistan.

Definition given in Appendix 2. The average was weighted by population. The unweighted average grew by 14% from 2011 to 2012 and 50% from 2006 to 2012.

⁸ The average excludes Afghanistan and the Inner Mongolia Autonomous Region and Xinjiang Uygur Autonomous Region of the People's Republic of China, due to unavailable data.

Table 2 Level 1—Gross Domestic Product, Trade, and Business Environment

Indicator	Indicative Target	2006 Baseline Year	2009	2010	2011	2012/ Latest Value	Progress
GDP per capita PPP (constant 2005 international \$)	↑	2,622	2,959	3,044	3,138	3,555⁵	G
2. GDP PPP (constant 2005 international \$ billion)	Û	242.3	272.1	282.4	291.5	340.4°	G
3. Real GDP growth rate (%)	1	7.9	6.1	6.0	7.9	6.5 ^e	A
4. Labor force participation rate (%)	1	57.8	57.7	57.8	58.0		G
5. Women employed in nonagriculture sector (%) ^a	1	38.6	49.1 ^b	b			
6. Real growth in trade of goods and services (%)°	1	12.5	(3.9)				
7. Trade openness (%)d	1	0.59	0.51	0.51	0.52		A
8. Intraregional energy trade (GWh)	1	5,061	4,435	3,544	5,304	4,752	A
9. GDP per unit of energy use (2005 PPP \$ per kilogram of oil equivalent) ^e	Û	2.9	4.0	4.2			G
10. Foreign direct investment (% of GDP)	1	6.2	5.3	3.6	4.1		G
11. Time required to start a business (days) ^a	1	31.0	16.9	15.0	14.5	14.1	G
12. Cost of business start- up procedures (% GNI per capita) ^a	1	26.3	10.8	12.0	10.7	8.9	G

^{... =} data not available, () = negative, GDP = gross domestic product, GNI = gross national income, GWh = gigawatt-hour, PPP = purchasing power parity.

Notes: Comparable subnational data for Xinjiang Uygur Autonomous Region and Inner Mongolia Autonomous Region of the People's Republic of China are not available for the indicators in Table 2.

Sources: World Bank. World Development Indicators Online Database for indicators 1–4, 7, and 9–10; United Nations Statistics Division. Millennium Development Goals Indicators Online Database for indicator 5; World Bank. World Trade Indicators Online Database for indicator 6; Central Dispatch Center, Tashkent, Uzbekistan, 2011, for indicator 8; International Finance Corporation/ World Bank Doing Business Online Database, for indicators 11 and 12.

Intra-CAREC energy trade fluctuated during the last 3 years, growing by 50% between 2011 and 2010 to exceed the baseline level, but declining by 10% between 2012 and 2011 to fall below the baseline. This confers an "amber" rating to the indicator, since the year-to-year trend appears to be cyclical. Energy efficiency has improved gradually from 2006 to 2010,

meriting a "green" for this indicator. Country data, however, show wide variation in GDP per unit of energy use. High efficiency is apparent in Azerbaijan, Tajikistan, and Pakistan, followed by the Kyrgyz Republic, Mongolia, and Kazakhstan. The CAREC average is lower than those for Europe and Central Asia (6.2) and South Asia (6.3).

^a No data for Turkmenistan.

^b Only covers three countries in 2009. Only two countries had data in 2010.

^c No data for Afghanistan, Mongolia, and Turkmenistan in all years, and Tajikistan in 2009.

d No data for Afghanistan, Mongolia in all years, and Turkmenistan after 2006, and Uzbekistan after 2009.

^e No data for Afghanistan.

The latest data for foreign investment inflows in 2011 demonstrate an expansion over the previous year's average share in GDP, earning a "green" rating for the indicator. Mongolia attracted the largest volume, 54%, relative to its GDP. The rest drew in much smaller proportions, e.g., the Kyrgyz Republic and Turkmenistan each around 11%, Azerbaijan and Kazakhstan with similar 7% shares, and Uzbekistan with 3% of GDP. Inflows into CAREC are a larger share of GDP than the average

3.0% of Europe and Central Asia, but smaller than the average 5.4% of South Asia.

The DEfR process tracks a subset of data from the International Finance Corporation and World Bank's annual *Doing Business* report to gauge perceived changes in the business-enabling environment throughout the CAREC region. Data for 2012 recorded positive movement in the two indicators monitoring the ease of starting a business. Completing the

Box 1 CAREC Countries After 10 Years of Doing Business: What Has Changed?

In 2012, *Doing Business* marked its 10th anniversary with a concise stock-take review of reforms enacted since 2006 that aim to enable the business environment. It found business regulatory practices of low-income economies to have noticeably converged toward the more efficient practices of higher-income economies. Eastern Europe and Central Asia improved the most, becoming the world's second most business-friendly region, after OECD high-income economies. The reforms focused more on reducing the complexity and cost of regulatory processes, and less on the strength of legal institutions.

Out of the 185 economies surveyed, 23 implemented reforms in three or more areas; of these, 10 improved the most in the ease of doing business, including Uzbekistan, Mongolia, and Kazakhstan. Reforms instituted were in the areas of starting a business (simplified registration formalities, no minimum capital requirement), getting credit (stronger rights of secured creditors during reorganization, guaranteed borrowers' right to access data), protecting investors (disclosure requirements and suing directors for related party transactions), trading across borders (electronic single window), and/or resolving insolvency (promoted liquidation or foreclosure, eliminated formalities or tightened time limits, regulated profession of insolvency administrators, granted priority to secured creditors).

The ease of doing business score is complemented by an absolute measure of business regulatory efficiency called "distance to frontier." This measures how far each economy is from the "frontier" of best performance observed on each indicator across all economies and years, normalized to range from 1 to 100, with the latter representing the frontier. The 174 economies surveyed are on average 40 percentage points away from the frontier, compared to 46 percentage points in 2005; the CAREC average is now 56, up from 46 in 2005. Among the top 20 economies that most narrowed the distance to the frontier since 2005 are Tajikistan, the Kyrgyz Republic, the People's Republic of China, Azerbaijan, and Kazakhstan.

Good practices include no minimum capital requirement for starting a business (Kazakhstan, Mongolia), reduced financial burden of security deposits for new electric connections (Kyrgyz Republic), expedited procedures for property registration (Azerbaijan), distributing both positive and negative credit information and allowing self-assessment for taxes (People's Republic of China), allowing access to all corporate documents before trial (Tajikistan), electronic submission and processing of trade documents (Pakistan), and giving creditors' committees a say in insolvency proceeding decisions (Uzbekistan).

The report also underscores a number of results from various studies: that (a) smarter business regulation promotes economic growth, (b) simpler business registration promotes greater entrepreneurship and firm productivity, (c) less costly business registration improves formal employment opportunities, (d) an effective regulatory environment improves trade performance, and (e) sound financial market infrastructure improves access to credit.

Source: World Bank. 2013. *Doing Business 2013: Smarter Regulations for Small and Medium-Size Enterprises*. Washington, DC: World Bank Group.

Level 1: CAREC Region Development Outcomes

procedures required to start a business took on average one-third of a day less than in 2011. The gradual improvement since 2010 turns the indicator's rating from "amber" in 2011 to "green" in 2012 and is entirely attributable to two CAREC countries: Uzbekistan shortened the time by 2 days (from 14 to 12), and Mongolia cut 1 day off (from 13 to 12). The other CAREC countries showed no change from 2011 figures. The CAREC average is identical to the Europe and Central Asia average (from 15 days in 2011 to 14 days in 2012), and very close to the results for the countries of the Organisation for Economic Co-operation and Development (OECD) for 2012 (almost 12 days; static during 2011-2012). The CAREC region also continues to compare favorably with South Asia, whose average was 21 days in 2012.

The cost of starting a business also dropped to an average of 8.9% of per capita gross national income (GNI) in 2012, from 10.7% of per capita GNI in 2011, yielding a "green" rating for the indicator. This is due to reductions in all CAREC countries, most notably in Tajikistan (from 33.3% to 27.5% of per capita GNI) and Afghanistan (from 25.8% to 22.5% of per capita GNI). This trend is encouraging since these are also the same countries where cost shares have been exceedingly large over the whole period, compared to a range of 0.6% to 9.9% for the rest. The CAREC average was not too far from that of Europe and Central Asia (6.7% of per capita GNI), slightly higher than that of the OECD high-income group (about 4.7% of per capita GNI), but significantly lower than that of South Asia (23.4% of per capita GNI).

► Monitoring CAREC 2020 (Table 3) 🗛

To contribute to the CAREC goal of development through cooperation, CAREC 2020 targets the complementary strategic objectives of expanded trade and improved competitiveness. As CAREC moves into its second decade of implementation, it is now useful to monitor the region's performance in these areas, to start ascertaining whether the numerous CAREC initiatives are achieving their desired outcome of linking the countries and opening opportunities for production. The proposed indicators closely reflect the essence of the two strategic objectives, as well as CAREC's overall goals of accelerating trade and development through connectivity. The indicators are sourced through public domain materials, produced by CAREC multilateral development partners.

For the strategic objective of increased trade, intraregional trade as a proportion of total CAREC trade is computed. This measures the extent to which CAREC countries have become integrated through trade with each other, relative to their trade with the rest of the world. The data comes from the Direction of Trade Statistics of the International Monetary Fund (IMF). The baseline year is 2010, a decade into the establishment of the CAREC Program, which would also allow a comparison with the latest available trade data in 2011. The total trade of CAREC countries with the world has grown steadily from 2001 to 2008, dropping substantially in 2009 and regaining its previous levels in 2011. The sudden decline in 2009

Table 3 Level 1—CAREC 2020: Increased Trade and Improved Competitiveness

Indicator	2010 Baseline Year	2011	2012	Progress
Intraregional trade in total CAREC trade (%)	6.2	5.6		A
Logistics Performance Index	2.53		2.46	A

 $[\]ldots =$ data not available, CAREC = Central Asia Regional Economic Cooperation.

Note: Comparable subnational data for Xinjiang Uygur Autonomous Region and Inner Mongolia Autonomous Region of the People's Republic of China are not available for indicators in Table 3.

Sources: IMF, Direction of Trade Statistics; World Bank, Connecting to Compete 2012: Trade Logistics in the Global Economy. The Trade Logistics Performance Index and its Indicators.

was true for both imports and exports, and mimicked the widespread drop in world trade resulting from the global financial crisis.

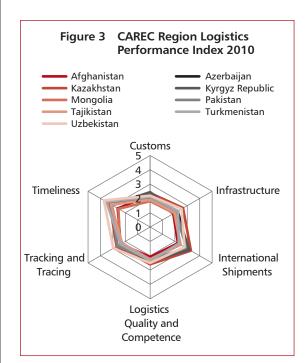
The baseline indicator is 6.2%, which fell to 5.56% in 2011. The proportion has not changed much over the period 2001 to 2011, ranging only from 5.5% to 6.7%, or a 1.2 percentage point range. It signifies that CAREC countries have not been trading extensively with each other. Afghanistan, Kazakhstan, Pakistan, and Uzbekistan have been the largest traders. Intraregional imports have exceeded intraregional exports, due mainly to differences in valuation, as imports are in "cost plus insurance and freight" terms while exports are in "free on board" terms. Since the 2011 figure is at the low end of the range, this indicator gets an "amber" rating.

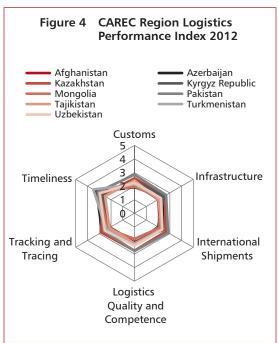
For the strategic objective of improved competitiveness, the logistics performance index (LPI) of the World Bank is proposed, as it reflects the CAREC 2020 approach of transport connectivity, and facilitated cross-border movement and economic corridor development. Produced every 2 years, the LPI measures logistics efficiency along a country's supply chain through a survey of perceptions on six

components: (i) efficiency of customs and border management clearance, (ii) quality of trade and transport infrastructure, (iii) ease of arranging competitively priced shipments, (iv) competence and quality of logistics services, (v) ability to track and trace consignments, and (vi) frequency with which shipments reach the consignee within the scheduled or expected delivery time. A score ranges from 1 for worst to 5 for best.

The CAREC average LPI score for 2012 is 2.46, which is midway between best and worst. It worsened slightly from the 2010 score of 2.53, due to deteriorations in the average scores for timeliness, ease of arranging international shipments, tracking consignments, and logistics services; better average scores for customs and infrastructure were not enough to offset these. Across countries, the LPI scores of Afghanistan and Pakistan improved between 2011 and 2012, while those of the rest declined. Other regions performed better, e.g., Europe and Central Asia (2.84), East Asia and the Pacific (2.84), and South Asia (2.61).

Figures 3 and 4 portray how each country has performed in each component and enable one to visualize the change within a short period of 2 years.





Level 2: CAREC Priority Sector Outputs

Level 2 indicators seek to track tangible results delivered through CAREC-related projects and activities in its priority sectors of transport. trade, and energy.9 Tangible outputs give a real time indication of annual progress, and flag emerging issues that may stall progress. Although outputs are measured and monitored within individual sectors, the DEfR process is unique in presenting a measure of aggregate progress. The quantitative and qualitative nature of outputs monitored at Level 2 seek to help the CAREC priority sectors identify areas of complementarity that may be developed across the sectors. The ultimate aim is to optimize a regional approach to project planning and implementation in the three priority sectors.

Transport and Trade Facilitation Indicators (Tables 4 and 5)

The CAREC Transport Sector Coordinating Committee (TSCC) and the Customs Cooperation Committee have been implementing a Transport and Trade Facilitation Strategy (TTFS) jointly since 2007¹⁰ to strengthen effective cooperation between the two components. The overarching goals of the TTFS are to (i) establish competitive corridors across the CAREC region; (ii) facilitate efficient movement of people and goods through CAREC corridors and across borders; and (iii) develop sustainable, safe, user-friendly transport and trade networks. The consolidated

strategic approach of the TTFS maximizes the benefits accruing from investment and technical assistance projects and seeks to increase the CAREC region's competitiveness in intraregional and international trade.

The transport and trade facilitation sectors are represented in the overall CAREC results framework by six indicators. Physical progress in hard infrastructure development is monitored through two indicators that track tangible progress in infrastructure connectivity: "expressways or national highways built or improved (km)" and the "proportion of total CAREC road corridor built or improved (%)." Four separate indicators monitor the soft side of trade facilitation initiatives: (i) "time taken to clear a border crossing (hours)," (ii) "costs incurred at a border crossing clearance (\$)," (iii) "speed to travel 500 km on CAREC corridor section (km per hour)," and (iv) "costs incurred to travel corridor section (\$)".

Transport (Table 4) G



The CAREC TTFS and Action Plan continued to be implemented satisfactorily. Additional kilometers were built in 2012, although progress achieved was below the annual target. Nonetheless, the total targeted proportion of CAREC corridors in good condition by 2012 was exceeded, supporting a "green" overall rating for the sector.

Not all of CAREC's sector output indicators are true "outputs," however. While the transport and energy sectors identified quantifiable output indicators—e.g., "expressways or national highways built or improved (kilometers [km])" and "proportion of total CAREC road corridor built or improved (%)" for transport; "transmission lines installed or upgraded (km)" and "increased energy generation capacity (megawatts [MW])" for energy—the Level 2 indicators selected for trade facilitation and trade policy activity under CAREC are not output indicators. Rather, they are broader intermediate outcome indicators. This means they do not measure the tangible output of specific CAREC-related projects, but rather how project-based and other outputs contribute to the desired objectives of the overall program.

Endorsed at the Sixth CAREC Ministerial Conference in 2007. The Implementation Action Plan for the TTFS was endorsed at the Seventh CAREC Ministerial Conference in 2008: http://www.adb.org/sites/default/files/pub/2009/CAREC-Transpo-Trade-Facilitation.pdf

Table 4 Level 2—Transport Sector Outputs

Indicator	2008 Baseline Year	2009	2010	2011	2012 Q 1–Q3	2012 Target	Progress
Expressways or national highways built or improved (km)	177	1,288	1,025	1,022	430	880	A
Proportion of total CAREC road corridor built or improved (%)	64	70	74	79	80	75	G

CAREC = Central Asia Regional Economic Cooperation, km = kilometer, Q = quarter. Sources: Transport and Trade Facilitation Coordinating Committee, Country Progress Report 2012.

A total of 430 km of expressways or national highways were built or upgraded during the first three quarters of 2012 and represent approximately 5% of the total 8,640 km corridor length identified for improvement. The total 430 km built delivered 49% of the 2012 target of 880 km. As of the end of 2012, the cumulative total of national highways built stood at 3,942 km, or 46% of the total corridor to be built or upgraded. Eighty percent of the total length of CAREC corridors (24,000 km) is now in good condition. This exceeds the 2012 target of 75% and already achieves the 2013 target of 80%. Data for 2012 are attributed to 5 ongoing transport projects along the six CAREC corridors.

Trade Facilitation (Table 5)



The 2012 data for CAREC's trade facilitation indicators present a mixed picture. The average

time and costs incurred to clear a border crossing point (BCP) both increased, prompting a downgrade to "amber" rating. The average speed to travel a 500 km section of the CAREC corridors improved, suggesting that delays encountered at BCPs were offset by improvements in road infrastructure: this indicator is rated "green." Average costs to travel a 500 km corridor section, however, increased for the second consecutive year, resulting in a "red" rating for this indicator. Since the BCP cost increase was relatively slight, the increase in activity cost at non-BCP stops is the principal cause for this "red" rating.

Data measuring the average¹¹ time taken to clear a border crossing point showed significant deterioration in 2012: from just under 8 hours in 2011, the time taken to cross BCPs averaged 11 hours in 2012—a rise of almost 38%. Reversing a 9% improvement in time to cross a BCP from 2010 to 2011, the

Table 5 Level 2—Trade Facilitation Sector Outputs

Indicator	Indicative Target	2010 Baseline Year	2011	2012	Progress
Time taken to clear a border crossing (hours)	1	8.7	7.9	10.9	A
Costs incurred at a border-crossing clearance (\$)	1	186	156	157	A
Speed to travel 500 km on CAREC corridor section (km per hour) ^a	1	24	22	23	G
Costs incurred to travel corridor section (\$)	1	712	959	999	R

CAREC = Central Asia Regional Economic Cooperation, km = kilometer.

Sources: CAREC Corridor Performance Measurement and Monitoring Quarterly and Annual Reports, 2010–2012.

^a Speed is measured "with delays" for a 20-ton truck or a 20-foot equivalent unit container.

Overall median values for BCP clearance time were much lower and remained consistent throughout the last 3 years; the large excess of the mean over the median indicates wide variability of the data above the median.

Level 2: CAREC Priority Sector Outputs

increase to almost 11 hours in 2012 represents 25% deterioration over the 2010 baseline.

Specifically, BCP clearance took more than 10 hours on average at Corridor 1 (13.7 hours), Corridor 4 (12.2 hours), and Corridor 2 (11.6 hours). Clearance time lengthened the most in Corridor 1, mainly because truck drivers bound for Kazakhstan, to avoid incurring penalties from a more stringent inspection process assessed by the Customs Union patrol on the Kazakh side of the border, elected to wait out inspections before crossing from the People's Republic of China at Ala Shankou and Khorgos. Correspondingly, their waiting time averaged 353 and 65 hours, respectively. The Customs Union presents nonmembers with a choice of paying increased duties or outwaiting strict enforcement of the new regulations. This extreme situation lasted only a few months in the first half of 2012 and did not persist throughout the year, suggesting that drivers began timing their arrival at the Customs Union border to coincide with the arrival on duty of more lenient border managers. Nonetheless, the effect proved substantial enough to influence the annualized indicator negatively. Cargo also waited 54.8 hours to clear in Dostyk, Kazakhstan along Corridor 1, and 75.5 hours at Turkmenbashi, Turkmenistan in Corridor 2. In Corridor 5, trucks crossed Yierkeshitan (People's Republic of China) after an average of 51 hours because of adverse weather, while Karamik, Kyrgyz Republic was temporarily closed. These extreme cases combined to prolong BCP crossing by 3 hours from the 2011 average.

The most time-consuming road transport activity in 2012 was waiting/queuing, taking 11 hours on average, 12 and doubling that of 2011. For rail transport, gauge change procedures typically lasted 28.5 hours, followed by 21.8 hours of waiting/queuing. Although road transport constitutes the bulk of the sample, the particularly long time that rail transport continued to take in Corridors 1 and 4, exceeding 22 hours, partly contributed to the high corridor averages.

Conversely, the shortest clearance times were recorded at Corridor 3 (7.1 hours) and Corridor 6 (7.4 hours) BCPs. The guickest BCPs took from 0.1 hour to 0.3 hours at Isfara (Guliston) in Tajikistan, Beyneu in Kazakhstan, and Suvanobad in Uzbekistan in Corridor 3; and Istaravshan and Isfara (Guliston) in Tajikistan in Corridor 6. Two BCPs in Corridor 1— Urly Tube in Kazakhstan, and Novomarkovka in the Russian Federation had the same efficiency. The largest time reductions were seen in two Corridor 2 BCPs: Aktau, Kazakhstan from 120.3 to 1.8 hours; and Dustlik, Uzbekistan from 25.2 to 9.5 hours. The rapid passage recorded at Kazakh BCPs was for traffic exiting the Customs Union space. Improved efficiency at Kazakhstan's border with the Russian Federation can be attributed to the elimination of customs control at borders within the Customs Union space.

Average **costs incurred at a border crossing clearance** increased by 0.6% in 2012, to \$157. From 2010 to 2011, this indicator had improved by 16%—it became on average \$30 cheaper to clear a BCP in 2011. The slight worsening in 2012 suggests the possibility that costs may be kept relatively stable, adjusting for inflation. The trend was due to a combination of decreased average clearance costs on three corridors and increased costs on the other three. Corridor 6 BCPs were notable for being both least costly (\$91) and cutting costs the most (by 39%) from 2011 to 2012. Corridor 5 BCPs recorded the next lowest average cost and largest reduction in costs from 2011.

It cost \$152 to \$175 on average¹³ to cross BCPs in Corridors 1 to 5. Costs increased at BCPs in Corridors 1, 2, and 3 due to higher outlays for loading/unloading and escort/convoy at Corridor 1 BCPs, road toll and loading/unloading at Corridor 2 BCPs, and escort/convoy, road toll, and queuing at Corridor 3 BCPs. The BCP pair Dostyk—Ala Shankou (Kazakhstan—People's Republic of China) remained the most expensive BCPs to cross. For vehicles departing the

¹² One other activity, security services, took almost 40 hours to complete, but there were only 2 observations for this, out of 32,852 total observations.

¹³ Median estimates suggest a steady decline from 2010, and are much lower than the mean, indicating widely dispersed values above the mean.

People's Republic of China and entering Kazakhstan, various fees averaging \$548 per crossing at Ala Shankou and \$992 per crossing at Dostyk were levied on westbound traffic in early 2012. The Turkmenistan BCPs were just as high-cost—\$760 at Farap in Corridor 1, and \$550 at Turkmenbashi in Corridor 2 for vehicles entering Turkmenistan—while the largest percentage surges aside from Farap were recorded in Altanbulag, Mongolia in Corridor 4 and Kordai, Kazakhstan in Corridor 3. By contrast, some border crossings were costfree, particularly in the treatment of transit traffic. Others charged minimal fees of \$3 for traffic inspection and other border protocols, such as at Sukhbaatar, Mongolia along Corridor 4. The largest absolute cost cuts were at Urly Tube, Kazakhstan and Karamik, Kyrgyz Republic, while the largest percentage cuts aside from Urly Tube were recorded at Aktau, Kazakhstan for shipments exiting Kazakhstan.

For road transport, the costliest activities were customs clearance (\$136) and loading/unloading (\$94).¹⁴ The cost of customs clearance was highest in Corridor 4, in particular for shipments entering Mongolia. Although only a minor proportion of the sample, rail transport costs leapt from \$223 to \$280 on the average, consisting mainly of customs clearance (\$211), change of gauge (\$190), and loading/unloading (\$160). Compared with their 2011 levels, the cost of customs clearance rose, while that of loading/unloading fell, for both modes of transport.

The average **speed to travel 500 km on CAREC corridors** increased in 2012 by 5% from 2011. This modest improvement sets the indicator back on track, although it does not yet regain the 2010 baseline average speed of 24 km per hour (kph). The improvement was muted partly because of delays at particular BCPs described above, since the speed indicator takes border crossing efficiency into account. In 2012, Corridor 4 continued to be the slowest, with an average "speed with delays" (SWD) of 12.2 kph. Improved road conditions along the corridor were offset by the slow speed of rail—6.7 kph—that pulled down

the corridor average. The next slowest was Corridor 5 with an average SWD of 17.1 kph due mainly to the topography of the roads; travel along this corridor also slowed compared to 2011. Security risks in certain areas required escort/convoys, exacerbating delay. Corridor 6 improved substantially with an SWD of 27.5 kph, surpassing Corridor 1 to become the fastest lane in 2012. This can be attributed to improved border crossing efficiency as seen in its relatively short average clearance time. Corridors 1 and 2 maintained essentially the same average speeds recorded in 2011.

The costs incurred to travel corridor section are broken down into two components: transit cost (vehicle operating cost, driver's salary, fuel) and activity cost (both BCP and non-BCP stops). Transit and activity costs associated with traveling corridor sections rose for the second consecutive year in 2012, but by far less (4%) compared to the increase seen for 2010-2011 (35%). In 2012, it cost on average 40% more (\$999) to travel 500 km along CAREC corridors than in 2010 (\$712). As in the case of average costs incurred to clear BCPs, it is too early to speculate whether this reduced rate of cost escalation will hold, but it remains an encouraging sign. In 2012, the overall share of activity cost to total cost increased from 17% to 19%. This share differs from one corridor to another; nominal increase in activity cost to travel a 500 km section is more apparent in Corridors 1, 2, and 5. On the other hand, the share of transit cost to total declined marginally from 83% to 81%. Nominal costs likewise experienced an insignificant increase (from \$822 to \$830), suggesting a stable trend for the transit cost component.

In 2012, total transit costs along Corridor 2 remained the lowest with an average of \$563 per 500 km per 20-ton cargo, representing an improvement over the relatively low 2011 level. Travel along Corridor 6 became the next cheapest, at \$719 per 500 km per 20-ton cargo, as costs also dropped year-on-year, particularly those incurred at BCPs. In contrast, Corridor 5 continued to be the most expensive corridor with an average cost of \$1,580 per 500 km per 20-ton cargo, a marginal drop from 2011. This

Emergency repair and escort/convoy, cost \$133 and \$134 on the average, but there were only 5 and 67 observations for these, out of 19,758 observations for all activities.

Level 2: CAREC Priority Sector Outputs

Box 2 Bringing Down Nonphysical Barriers to Trade along the CAREC Corridors

The July 2012 transport facilitation workshop's recommendations were endorsed at the 11th CAREC Ministerial Conference in Wuhan, People's Republic of China in October 2012 and included in the Wuhan Action Plan. Recommendations and priority actions agreed by consensus include

- (i) adopting a pragmatic, corridor-based, and results-driven approach, building on ongoing and planned transport facilitation measures, either by enhancing existing bilateral/plurilateral agreements, and/or forging new bilateral/plurilateral agreements between/among the countries;
- (ii) identifying on a voluntary basis corridor-specific "pilot" agreements that will over time pave the way for effective implementation of a wider regional agreement;
- (iii) identifying in selected agreements key impediments to implementation and proposing measures to address impediments in line with the minimum and most critical requirements for facilitated cross-border transport operations;
- (iv) strengthening CAREC countries' respective national transport and trade facilitation bodies through (a) systematic and sustainable capacity building; (b) regular and constructive dialogue with transport facilitation bodies in neighboring countries; and (c) active engagement with private sector stakeholders, both domestic and in neighboring countries; and
- (v) formulating and implementing respective action plans by the national transport and trade facilitation bodies of each CAREC country, which include monitoring the effectiveness of existing agreements and disseminating knowledge on good practices.

Source: R. Butiong and M. Ordoñez, eds. 2012. Where to from Here? Corridor-Based Transport Facilitation Arrangements in the CAREC Region. Mandaluyong City, Philippines: Asian Development Bank.

high cost is attributed to the difficult terrain and security issues along the corridor. Corridor 1 became the next most costly passage, and stands out for its substantial (44%) cost inflation in 2012. This increase was counterbalanced by the average cost decreases for Corridors 2, 4, and 6, hence the small jump in the overall average between 2011 and 2012.

An essential component of CAREC's transport and trade facilitation agenda to maximize the benefit of CAREC corridors is addressing nonphysical barriers to cross-border movement of goods and people. In July 2012, in Beijing, People's Republic of China, the CAREC Secretariat organized the first in a series of seminars and workshops on regional and international experience in transport facilitation, with the objective of formulating recommendations on feasible approaches for addressing nonphysical barriers. Key recommendations and priority actions are detailed in Box 2: Bringing Down Nonphysical Barriers to Trade along the CAREC Corridors.

To implement CAREC's transport facilitation agenda, an Asian Development Bank (ADB)-supported regional technical assistance project worth \$1.5 million was approved in 2012. By completion in December 2015, the CAREC countries will have (i) agreed on the approaches to mitigate nonphysical barriers to cross-border transport along the CAREC corridors, and (ii) identified and pursued transport facilitation arrangements to pilot the approaches adopted at the Beijing workshop in July 2012.

On the "Agreement on the Cross-Border Transport of Persons, Vehicles and Goods within the Framework of CAREC" between the Kyrgyz Republic and Tajikistan on Corridor 5, little progress has been made in expanding or implementing the agreement since the end of 2011, when the protocol for the accession of Afghanistan was signed by Afghanistan and Tajikistan. At the end of 2012, the Kyrgyz Republic continued to prepare the protocol for parliamentary consideration.

ADB. 2012. Technical Assistance for Facilitating Cross-Border Transport in the Central Asia Regional Economic Cooperation Region, Phase 1. Manila.

In addition to CAREC's work on facilitating cross-border agreements, the trade facilitation sector embarked on specific actions to support the modernization of sanitary and phytosanitary (SPS) measures that currently hinder the smooth flow of goods and people in the CAREC region. A workshop held in July 2012 focused on information exchange and initial steps to develop an SPS action plan of future regional cooperation activities in the CAREC region. Funding for a technical assistance project has been secured to take this agenda forward, and approval of final arrangements is expected during 2013.

Contribution of Transport and Trade Facilitation Sector Outputs to CAREC Outcomes

The CAREC DEfR process not only tracks sector outputs in the four priority areas, but also seeks to understand better how these outputs contribute (positively or negatively) to sector outcomes and affect the lives of people in the CAREC region. The impact of infrastructure investments tends to manifest only some time after project completion. Accordingly, the CAREC DEfR process augments the purely quantitative indicators of annual progress with project assessments issued in the year of review.¹⁶ These assessments comprise both quantitative data and qualitative information, thereby allowing a broader analysis of the project's success in helping improve the quality of life for the people of the CAREC region.

In 2012, a project completion report was circulated for the Regional Customs Modernization and Infrastructure Development Project in Tajikistan,¹⁷ which was responsible for the construction of five new and rehabilitation of eight existing customs posts. To support improvement in physical infrastructure, customs services were automated through the installation

of unified automated information system (UAIS) terminals at 72 customs posts—up from the 50 customs posts anticipated at the onset of the project—and 400 customs officers trained in the use of the UAIS.18 As a result, the processing of customs declarations is now automated, beginning with 45,000 forms in 2011, compared with none in 2005. Vehicles and x-ray machines were provided to priority border posts. These, and other project outputs contributed to several positive outcomes for Tajik traders and businesses: not only has efficiency and transparency in customs procedures improved with the implementation of the UAIS, but the time taken for a truck to clear all required import clearance procedures decreased significantly from 10 days in 2005 to a maximum clearance time of 2 days and a minimum of 1 hour in 2011. Revenue collection more than quadrupled over the implementation period of the project, from \$103 million in 2003 to \$485 million in 2011, exceeding the \$400 million target set by the project. Furthermore, from a 2005 baseline of zero, at least 2,700 incidences of undervaluation, fraudulent declarations, and contraband were recorded.

The DEfR process continually seeks to strengthen understanding of the linkages between the sector outputs and national and regional development outcomes. It is important to identify where contributions are being made to development outcomes as a result of CAREC investments, and where these contributions could be enhanced or made more effective. In the case of CAREC transport and trade facilitation sectors, these linkages and contributions are being examined through the midterm review process of the TTFS and Action Plan.

The midterm review was initiated in 2012 and is expected to be completed within 2013. It will update and refine the TTFS and Action Plan for

These assessments include project completion reports, project validations, and project performance evaluations, and are issued by the multilateral institution partners and their independent evaluation departments. In general, the longer the time elapsed since project completion, the more comprehensive the assessment becomes regarding issues of sustainability and positive or negative outcome.

ADB. 2012. Completion Report: Regional Customs Modernization and Infrastructure Development Project in Tajikistan. Manila. www.adb.org/sites/default/files/projdocs/2012/37644-013-taj-pcr.pdf

⁸ Capturing importers' entry data for customs declaration in a centralized place for calculating duties and taxes, and identifying revenue loss and corruption at border posts.

Level 2: CAREC Priority Sector Outputs

effective implementation in tandem with CAREC 2020. The midterm review is also needed to define CAREC corridors in the two participating countries that joined CAREC in 2010—Pakistan and Turkmenistan—and their connection to existing CAREC corridors. ADB approved a regional technical assistance project in September 2012 to finance the midterm review. and the consultant was mobilized in November 2012. The midterm review will be conducted in two phases. Phase I (November 2012-April 2013) has reviewed the implementation progress of the TTFS and Action Plan. Based on the results of Phase I, an updated and refined TTFS and Action Plan is being developed in Phase II (May-October 2013).

The midterm review of the TTFS is intended to (i) confirm the status of priority projects, (ii) revisit the CAREC corridor alignments in light of updated projections on traffic and trade flows and the recent inclusion of Pakistan and Turkmenistan in CAREC, (iii) strengthen the integration of hard (physical infrastructure) and soft (trade and transport facilitation) aspects of the TTFS, (iv) consider multimodal transport dynamics and logistics development, and (v) refine the TTFS, including its results framework. The TSCC and trade facilitation bodies of the CAREC Program will work closely on implementing the midterm review.

Trade Policy Sector

The CAREC Trade Policy Strategic Action Plan (TPSAP) envisages concrete policy actions to achieve several key objectives: (i) support World Trade Organization (WTO) accession, (ii) eliminate remaining quantitative restrictions on exports and imports, (iii) reduce and simplify trade taxes, (iv) implement capacity building activities to facilitate WTO accession, (v) improve the general institutional environment for trade, and (vi) reduce transit

and border trade barriers. 19 Through these policy actions, the Trade Policy Coordinating Committee (TPCC) aims to help all CAREC countries adopt more open trade regimes, thus facilitating both intra- and interregional trade.

Trade Policy Indicator (Table 6)



Monitoring of the TPSAP is conducted through a composite indicator—the CAREC trade liberalization index (TLI).20 Using a questionnaire-based monitoring mechanism designed jointly by the IMF and the TPCC, the TLI tracks member countries' progress over the period 2009–2013 in (i) reducing or eliminating specific quantitative restrictions and tariffs, and (ii) simplifying tax regimes related to trade.

At the end of 2012, the TLI generally remained on a positive trend, which reflects continued openness and simplification of the CAREC countries' trade regimes. However, the rate of improvement in the TLI slowed in 2012 and the overall index fell short of the target set by the TPSAP (Figure 5). The index, which averages across six CAREC countries that completed the questionnaire,²¹ rose from 12.8 in 2011 to 15.2 in 2012, versus targets of 10 and 20, respectively. On a disaggregated level, the Kyrgyz Republic retains its lead (23), followed by Kazakhstan (18) and Azerbaijan (17). Indeed, aside from the Kyrgyz Republic, which in 2011 already exceeded the 2012 target, all other CAREC countries had not yet met the earlier years' targets. This yields an "amber" rating for the indicator.

To monitor improvements in the institutional environment for trade and following the completion of its 2010 study on institutional impediments to trade in CAREC countries, the TPCC in 2011 agreed to develop a second composite indicator. Against this background, the IMF developed the institutional quality

TPCC. 2008. Trade Policy Strategic Action Plan for the Central Asia Regional Economic Cooperation Program. Manila. www.carecprogram.org/uploads/docs/CAREC-Trade-Policy-Strategic-Action-Plan.pdf

²⁰ The methodology for the TLI is found in Appendix 4 of the 2009 CAREC DEfR: www.carecprogram.org/uploads/docs/ CAREC-DEfR/CAREC-Development-Effectiveness-Review-2009.pdf

Namely Afghanistan, Azerbaijan, Kazakhstan, the Kyrgyz Republic, Tajikistan, and Uzbekistan. The People's Republic of China, Mongolia, Pakistan, and Turkmenistan have not submitted responses to the questionnaire.

Table 6 Level 2—Trade Policy Sector Outputs

Indicator	2009 Baseline Value	2010	2011	2012	2012 Target	Progress
CAREC Trade Liberalization Index	(1.8)	5.5	12.8	15.2	20.0	A

() = negative, CAREC = Central Asia Regional Economic Cooperation. Source: Trade Policy Strategic Action Plan monitoring questionnaire, 2012.

index (IQI), which will be computed yearly. Preliminary results of the IQI were presented at the 16th CAREC TPCC meeting in June 2012 while the methodology was approved at the 17th CAREC TPCC meeting in October 2012; the baseline and targets still need to be set. Data as of the end of 2012 show wide variation in institutional quality between CAREC countries, with substantial room for improvement for most. Indeed, institutional barriers to trade remain, and the region consistently ranks very low in the "Ease of Trading Across Borders" component of the World Bank's Doing Business indicators. In particular, with a few exceptions, number of procedures, and time and cost of importing/exporting are substantially higher than in other regions.

The TPCC continued to implement the capacity building and knowledge-sharing program

among CAREC members. At the 16th TPCC meeting, the IMF presented recent research results on trade and trade policies. The studies argue that (i) industry and product diversification of exports help soften the impact of crises on trade flows; (ii) a flexible exchange rate can be an important shock absorber during periods of global economic and financial stress, which also softens the impact on trade; and (iii) bilateral trade agreements work best as steps toward multilateral trade liberalization. The discussion that followed noted that significant room for improvement in these areas existed for many CAREC countries, particularly regarding product diversification of exports and flexibility of exchange rates.

At the 17th TPCC meeting, the World Bank presented a study on *Borderless Bazaars* and Regional Integration in Central Asia:



Actual score reflects the average across Afghanistan, Azerbaijan, Kazakhstan, the Kyrgyz Republic, Tajikistan, and Uzbekistan.

Level 2: CAREC Priority Sector Outputs

Emerging Patterns of Trade and Cross-Border Cooperation. A key finding is that, despite low volumes, the extent to which the welfare of border regions depends on cross-border trade is enormous. Moreover, nonstandard tradelike bazaars, play a pivotal role in regional and national production and distribution chains, with national networks strongly integrated across Central Asian economies. In a second presentation, the European Bank for Reconstruction and Development (EBRD) reviewed recent research on the effects of Kazakhstan's customs union with the Russian Federation and Belarus on its imports. While there is evidence of trade diversion (e.g., positive impact on imports from customs union countries versus negative impact on imports from non-customs union countries), the effects of trade creation are not yet clear. However, since the customs union was formed only in 2009 and is relatively new, the results capture the initial short-term impact of the change in import tariffs.

The Trade Policy Sector Work Plan remains broadly on track. The TPCC has started preparatory work and discussions on updating the 2008 TPSAP to reflect progress achieved and new developments, with the view to possibly redefining the TLI and IQI, as well as align it with the strategic objectives of CAREC 2020.

Box 3 Then There Were Five: A Snapshot of 2012 CAREC Membership in the World Trade Organization

In December 2012, the General Council of the World Trade Organization (WTO) approved the accession package^a of the **Republic of Tajikistan**, paving the way for the country's WTO membership. After establishing its Accession Working Party in July 2001, Tajikistan became the 159th member of the WTO on 2 March 2013. Tajikistan joins four other CAREC WTO members: **Pakistan** (acceded 1 January 1995), **Mongolia** (29 January 1997), the **Kyrgyz Republic** (20 December 1998), and the **People's Republic of China** (11 November 2004).

Four CAREC countries held observer status in 2012:

- (i) **Afghanistan:** Accession Working Party was established in December 2004 and met for the third time in December 2012, where WTO members expressed their willingness to make this accession a priority in 2013.
- (ii) **Azerbaijan:** Accession Working Party was established in July 1997 and the tenth meeting took place in December 2012. It reconfirmed its commitment to WTO accession, and noted that diversification of its economy was a government priority.
- (iii) **Kazakhstan:** Accession Working Party was established in February 1996 and met for the 14th time in December 2012, where WTO members expressed optimism that Kazakhstan would conclude accession in 2013.
- (iv) **Uzbekistan:** Accession Working Party was established in December 1994 and met for the third time in October 2005.

Turkmenistan recently expressed its intention to join the WTO and established a governmental commission to review issues related to WTO accession.

CAREC's Trade Policy Strategic Action Plan aims to help all CAREC countries accede to the WTO, and in 2012, the WTO Accession Knowledge Sharing Program conducted a series of three seminars: Recent Developments in the Multilateral Trading System in the Agriculture Sector held in Vienna, Austria; Services Liberalization and the WTO held in Almaty, Kazakhstan; and Managing WTO Accession Process—Strategies, Challenges, and Practices held in Shanghai, People's Republic of China. The Asian Development Bank, Asian Development Bank Institute, Asia-Pacific Finance and Development Center, and World Bank Institute sponsored the events.

^a Accession package refers to the set of documents that represent the results of bilateral and multilateral negotiations that a country undertakes as part of the process of accession.

Source: www.wto.org and www.carecprogram.org

Energy Sector

The Strategy for Regional Cooperation in the Energy Sector of CAREC Countries (Energy Strategy) seeks to ensure energy security, energy efficiency, and economic growth through energy trade.²² The CAREC Energy Action Plan Framework 2010–2013 (EAP), which focused on the Central Asian energy corridor, supported the Energy Strategy.²³ With the adoption of CAREC 2020, the EAP was revisited and the Energy Sector Coordinating Committee (ESCC) Work Plan 2013–2015 was delineated.

Energy Indicators (Table 7)



The work of the energy sector is represented in the overall CAREC results framework by two indicators: (i) "transmission lines installed or upgraded (km)," and (ii) "increased energy generation capacity (megawatt [MW])." These indicators seek to capture how CAREC's physical infrastructure rehabilitation operations contribute to energy security, efficiency, and ability to enhance the power trading in the CAREC region. They reflect the results only from completed energy sector projects. It is not possible to reflect incremental annual progress for projects still under construction.

In 2012, the ESCC reassessed the above indicators and agreed to expand the monitoring scope with the addition of three indicators to better record full activities of the energy sector: (i) rehabilitated generation capacity (MW); (ii) new substations installed (megavolt-ampere [MVA]); and (iii) substations upgraded (MV). The baseline for these indicators will be 2013 and they will be included in the 2014 CAREC DEfR process.

In 2012, Kazakhstan's Moinak Transmission Project, where 322 km of transmission line were completed,²⁴ brought results for the first energy indicator. The cumulative total for transmission line installation or upgrading now stands at 2,322 km. Ongoing and recently approved CAREC projects are anticipated to produce approximately 755 km of additional transmission lines by the end of 2015. In the medium term, and with the approval of the fourth tranche of Afghanistan's Energy Sector Development Investment Program in 2012,25 an additional 100 km of 500 kV transmission line and 142 km of 220 kV transmission line is envisaged by the end of 2016. A total of 820 MW in increased generation capacity is also expected during 2013-2015. Projected estimates can, however, be subject to unforeseen delay.

Table 7 Level 2—Energy Sector Outputs

Indicator	2009 Baseline Value	2010	2011	2012	Projected Outputs for 2013–2015	Progress
Transmission lines installed or upgraded (km)	850		1,150	322	755	G
Increased energy generation capacity (MW)					820	

... = no data available, km = kilometer, MW = megawatt. Source: ADB project completion and validation reports, and World Bank online project database.

Energy Sector Coordinating Committee. 2008. Strategy for Regional Cooperation in the Energy Sector of CAREC Countries. Manila. This strategy was endorsed at the 2008 CAREC Ministerial Conference, Baku, Azerbaijan, and is available at www. carecprogram.org/uploads/docs/CAREC-Regional-Cooperation-Strategy-in-Energy.pdf

²³ Energy Sector Coordinating Committee. 2009. CAREC Energy Action Plan Framework 2010-2013. Manila. This action plan was endorsed at the 2009 CAREC Ministerial Conference, Ulaanbaatar, Mongolia. The Central Asian energy corridor focuses on cooperation opportunities within the Central Asia countries of Kazakhstan, the Kyrgyz Republic, Tajikistan, and Uzbekistan. The action plan is available at http://www.carecprogram.org/uploads/events/2009/8th-MC/Energy-Action -Plan-Framework.pdf

Project information is available at www.carecprogram.org/index.php?page=carec-project-details&pid=250

Project information is available at www.carecprogram.org/index.php?page=carec-project-details&pid=400

Level 2: CAREC Priority Sector Outputs

During 2012, the Energy Action Plan Framework (EAP) Completion Report was presented for endorsement to the 11th CAREC Ministerial Conference.²⁶ The EAP guided the priorities and actions of the ESCC during 2010–2013, focusing on the three pillars of (i) diagnostic studies, with a view to identifying infrastructure investment; (ii) identification of areas for policy development and reform; and (iii) knowledge and capacity building. Achievements under these three pillars include:

- Pillar 1: Diagnostic study on the power sector in Kazakhstan, the Kyrgyz Republic, Tajikistan, and Uzbekistan, paving the way for the Regional Power Master Plan (RPMP), endorsed by the ESCC in May 2012.27 The RPMP estimates generation and transmission needs in Kazakhstan, the Kyrgyz Republic, Tajikistan, and Uzbekistan at upward of \$35 billion over the next 20 years; prioritizes identified investment opportunities; and recommends institutional measures necessary for implementation of these investments. It also provides a 10-year investment plan, which contributed to the preparation of a medium-term priority projects list for the TSCC. The RPMP dovetailed with the preparation of the Afghanistan Power Master Plan, also completed in 2012, which highlighted the opportunity for regional power network expansion involving Afghanistan, Tajikistan, Turkmenistan, and Uzbekistan.
- Pillar 2: Diagnostic analysis of interconnected/isolated operation in the Central Asia Power System, which indicates that countries under the system could save more than \$2 billion over 3 years through integrated operations, because of more efficient thermal power generation and optimal dispatch, and enhanced security of power supplies. Recommendations for the short term include finding options to increase power

trade without changes in the national regulation of power sector organizations in the countries. Medium- and longterm recommendations include using modern tools to achieve integrated power system operation benefits and creating an efficient regional energy market by implementing regional scale generation and transmission projects. The recommendation to strengthen awareness and capacity of technical decision makers led the ESCC and the Regional Energy Security, Efficiency and Trade Program of the United States Agency for International Development (USAID) to design a capacity-building program, including two workshops in 2012: Renewable Energy and Energy Efficiency Measures, and Operating Competitive Wholesale Markets.

Pillar 3: Launch of an initiative on modeling and decision support activities on energy-water linkages in the region, which defined the need for (i) a consensus on a regional water-energy model structure, (ii) data requirements, and (iii) supporting institutional platforms consistent with new realities of sovereign development in the region. In addition, a "first generation" demonstration model of water flows was developed, enabling visualization and simulation of water and energy linkages in Amu Darya and Syr Darya river systems, with the purpose of (i) understanding the energy and water resources linkages better, and (ii) facilitating a dialogue with regional and national technical stakeholders on strengthening analysis for water resources management. The final achievement under the third pillar of the EAP was the development of a road map for the next phase of modeling and decision support activities, and identifying eight principles that establish a new paradigm for future work in this area.

ESCC. 2012. Energy Action Plan Framework (2010–2012) Completion Report. Manila. www.carecprogram.org/uploads/events/2012/SOM-Oct/002_104_206_EAP-Framework-2010-2012-Completion-Report.pdf

²⁷ www.carecprogram.org/uploads/events/2012/CAREC-ESCC-Meeting-May/Day1-Pillar1-Power-Sector-Regional-Master-Plan-2nd-Draft.pdf

The EAP Completion Report identified key impediments to implementing the EAP, and discussed potential ways forward. Particular issues noted were the lack of political will and commitment; technical issues relating to energy–water coordination; commercial and institutional barriers; and funding and programming limitations.

With the completion of the EAP, the ESCC also presented to the 11th CAREC Ministerial Conference for endorsement, the ESCC Work Plan 2013–2015 (EWP),²⁸ guided by a road map for energy sector growth, based on the strategic framework, CAREC 2020. The priority elements of the EWP build on the achievements of the EAP and include

- (i) developing the Central Asia—South Asia energy corridor;²⁹
- (ii) resolving regional energy dispatch issues;
- (iii) managing energy-water linkages;
- (iv) mobilizing funds for building energy assets:
- (v) implementing medium-term priority projects; and
- (vi) capacity building and knowledge management.

The ESCC will guide and oversee implementation of the EWP, and monitor and report on progress of EWP activities. It will also continue to contribute output data and key achievements under the EWP to the CAREC DEfR process.

As in the case of transport and trade facilitation, the DEfR process tracks relevant completion and validation reports to

understand better the development outcomes of CAREC-related projects and how they can improve the lives and business of the CAREC region. A completion report issued in 2012 on Kazakhstan's North-South Electricity Transmission Project³⁰ details how reliable and cost-effective supplies of electricity have been ensured for business enterprises and households in southern Kazakhstan. The total north-south transmission line required three construction phases, with phase II the subject of this completion report. Project outputs included, among others, construction of a 463 km 500 kV, single circuit overhead transmission line from air-insulated Ekibastuz substation (1,150/500 kV) to the air-insulated Agadyr substation (500 kV); and the extension and modernization of Ekibastuz substation and Agadyr substation. The increased annual volume of electricity (by 92%, from 3.9 terawatt-hour [TWh] to 7.5 TWh) transferred from generation plants in the north to consumers in the south has contributed to continued economic growth by removing a binding energy supply constraint and helped the region's competitiveness with related economic benefits in terms of employment and income. Significantly improved reliability and quality of transmission is seen in the decrease in frequency and duration of forced outages (from 19 major outages in 2005 to 6 in 2011). Transmission losses have declined from 8.5% in 2006 to 7.6% in 2011. Customer losses due to outages on the north-south line have declined, and capacity has increased by about 700 MW. The project provided substantial additional regional electricity transfer capacity to support electricity trade among the Russian Federation, Kazakhstan, and other Central Asian countries.

www.carecprogram.org/uploads/events/2012/SOM-Oct/002_104_206_ESCC-Work-Plan-2013-2015.pdf

One of five regional corridors and one of two with the highest need and potential for integration, based on (i) energy supply–demand balance and infrastructure constraints, (ii) regional dispatch and regulatory development, and (iii) energy –water linkages.

World Bank. 2012. Completion Report: North–South Electricity Transmission Project in Kazakhstan. Washington, DC. www. wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2012/06/25/000333038_20120625234116/Rendered/PDF/ICR5780P0951550C0disclosed060210120.pdf

Level 3: Operational and Organizational **Effectiveness**

Indicators at Level 3 track financial and knowledge-based contributions (inputs) to the CAREC Program to assess operational and organizational effectiveness. Monitoring these inputs helps CAREC better understand how the overall program is (i) building on and consolidating its active operations portfolio and completing ongoing project activities, (ii) securing new financing, and (iii) responding to its member country needs in capacity building and knowledge production and sharing.31

Operations Growth (Table 8) G



Indicators for operations growth track the rate of increase in number and volume of loans and grants approved, and the number of completed projects in CAREC's priority sector investments

from the 2006 baseline to the current review period. These data indicate how successfully CAREC continues to attract financing for ongoing and future investment. In 2012, all three indicators continued to record positive growth and are rated "green."

By the end of 2012, cumulative investment in CAREC-related projects stood at \$21.2 billion, a rise of 584% over the 2006 baseline, and 19% over the end of 2011 figure of \$17.8 billion. While the rise over the baseline is to be expected and follows the 2006–2010 rise of 395%, and 2006-2011 rise of 473%, the 19% gain over 2011 cumulative investment totals is encouraging. The 2011 CAREC DEfR noted a clear slowdown in the rate of increase: 2007–2011 saw an annual fall in the rate of cumulative investment from 71% in 2007-2008, to 64% in 2008-2009, 23% in

Table 8 Level 3—Operations Growth

Indicator	Indicative Target	2006 Baseline Value	2009	2010	2011	2012	Progress
Volume of approved investment projects (loans and grants, cumulative since 2001, \$ million)	1	3,104ª	12,504ª	15,385	17,805	21,237	G
Number of approved investment projects (loans and grants, cumulative since 2001)	1	41	92	108	125	136	G
Number of completed investment projects (cumulative since 2001)	1	4	16	28	35	41	G

^a Figures include only disbursed tranches of multitranche financing facility investments. Source: CAREC Program Portfolio.

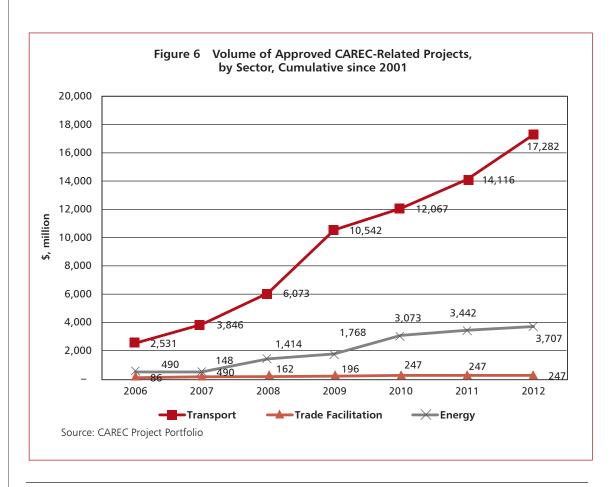
The CAREC portfolio has been updated since 2011 to reflect more fully investment and technical assistance activities of all CAREC multilateral institution partners and governments. As a result, some of the baseline data have changed from figures presented in the 2009, 2010, and 2011 DEfR reports.

2009–2010, and 16% in 2010–2011. Although a modest turnaround for 1 year is no guarantee of sustained improvement, the 2011–2012 rate of increase at 19% at least halts the decline.

There is little room for complacency, however, as applying a 3-year rolling average to cumulative investment shows how slight the upturn is in terms of emerging trends rather than annual change.³² While 2007–2009 saw a 62% increase in cumulative volume of investments over the 2006–2008 baseline, a steady decline began thereafter leading to more moderate increases of 29% for 2009–2011, and 19% for 2010–2012, respectively.

The 3 percentage point gain seen in 2012 in overall cumulative investment is a result of the sectors' varied performance. Figures for the

transport sector show cumulative investment at \$17.3 billion at the end of 2012, close to six times the magnitude in 2006. From 2009 to 2012, the annual increase is 14%, 17%, and 22%, which is an upward though slow trend. Energy sector cumulative investment stood at \$3.7 billion at the end of 2012, constituting six-and-a-half times the 2006 level. However on an annual basis, growth declined from 74% in 2010, to 12% in 2011, and then 8% in 2012. Trade facilitation, with its emphasis on increased cross-border cooperation, adoption of international standards and best practice, and improved policies, procedures, and interagency collaboration rather than capital-intensive investments, remained at a cumulative total of \$247 million at the end of 2012, a rise of 189% over the 2006 baseline (Figure 6).



³² Significant infrastructure investments—notably in transport—can lead to distorted year-on-year trends. Examining the same data sets through the lens of a 3-year rolling average that flattens out unusually high levels of investment in a specific year helps in differentiating one-time spikes from longer-term trends.

Level 3: Operational and Organizational Effectiveness

Levels of cofinancing of the cumulative CAREC-related portfolio remained steady throughout 2012. Government cumulative cofinancing stood at \$4.3 billion, or 20% of the overall \$21.2 billion portfolio, continuing a stable trend since 2009. By the end of 2012, other development partners had contributed \$909 million (4%) to the cumulative CAREC portfolio. During 2006–2012, cofinancing by development partners outside of the six CAREC multilateral development partners has not accounted for more than 7% of the cumulative CAREC portfolio, and the list of cofinanciers has not diversified.33 Within the priority sectors, little change has been seen in non-CAREC cofinancing during 2010–2012: the transport sector recorded 3% annual non-CAREC cofinancing of cumulative investment; energy recorded 12% in 2010, 11% in 2011, and 10% in 2012.

Five CAREC countries, four multilateral development partners, and several other cofinanciers have jointly committed almost \$13.8 billion through 10 multitranche financing facility (MFF) investments for CAREC-related projects in transport and energy. As of the end of 2012, almost \$5.2 billion (38% of total commitments) had been disbursed through 25 approved tranches, CAREC multilateral development partners (ADB, EBRD, the Islamic Development Bank [IsDB], and World Bank) account for \$9.2 billion of total commitments, with the CAREC governments and other cofinanciers each providing \$2.3 billion. Other cofinanciers include the Afghanistan Infrastructure Trust Fund, Danish International Development Assistance, the Department for International Development of the United Kingdom, Japan International Cooperation Agency, and USAID. One new MFF was approved in 2012—Azerbaijan's Second Road Network Development Investment Program, with funding of \$625 million.

The inflow of new projects slowed down further in 2012, continuing a downtrend that started in 2007. The cumulative number had increased

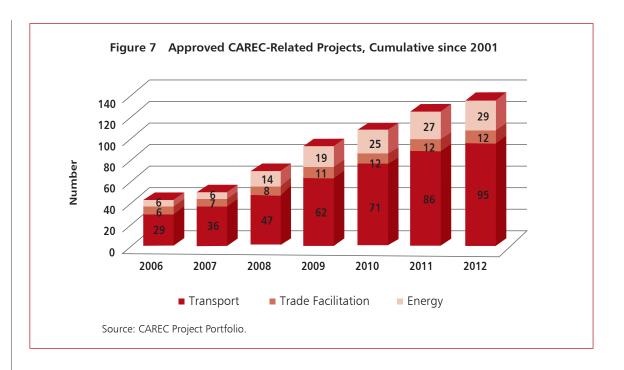
to 136 projects in 2012, representing a 231% expansion from the 2006 baseline figure. However, yearly growth was at a decelerated pace, from the highest rise in 2007–2008 of 41%, steadily dropping to 33% in 2008–2009, 17% in 2009–2010, 16% in 2010–2011, and finally 9% in 2011–2012.

The transport sector accounted for most of the increase in the number of new projects, with 9 new ones approved in 2012 to yield a cumulative total of 95 projects since 2001 (with 73 ongoing) (Figure 7). There were 2 new energy projects, expanding its cumulative number to 29 projects since 2001 (with 18 ongoing). The trade facilitation sector had no new additions, remaining at 12 projects for the last 3 years (with 4 projects ongoing). Investments in the latter two sectors have not been as steady as in transport, owing to complexities and longer lead times before results can be realized, or to minimal demand for capital investments.

Six CAREC-related investment projects were completed in 2012, five in energy, and one in transport. This brought the cumulative total to 41 completed projects, or one-third of all 136 approved projects over 2001–2012, having a combined value of \$2.6 billion as of 2012. The majority of completions was in transport, with 23 projects worth \$1.9 billion, followed by energy with 11 projects worth \$516 million, and trade facilitation with 8 projects worth \$98 million. About 16 more transport projects and 1 trade facilitation project are expected to be completed in 2013.

To carry out CAREC 2020, a priority action identified in the 2011 DEfR was to sustain operations growth through the development of the CAREC medium-term priority project (MTPP) list. This recognizes that the benefits of projects and financing efforts require time to be realized, and will show in the indicator for operations growth only gradually over the years. Nevertheless, the TSCC finalized an MTPP list of 68 investments, with a combined value

Non-CAREC member cofinanciers include the Afghanistan Infrastructure Trust Fund, Danish International Development Assistance, the European Commission's Technical Assistance to the Commonwealth of Independent States, the European Union's Transport Corridor Europe—Caucasus—Asia, Japan International Cooperation Agency, Organization of the Petroleum Exporting Countries Fund for International Development, Saudi Fund for Development, Department for International Development of the United Kingdom, and USAID.



of \$23 billion (of which \$7 billion is already financed), at its meeting in May 2012. These projects will address the remaining sections of the CAREC corridors, as identified in the TTFS. Approved projects will be monitored in accordance with standard procedure and the MTPP list will be updated every 6 months.

In the trade facilitation sector, the first Regional Improvement of Border Services Project was considered at a management review meeting in October 2012. The project was processed on the basis of two participating countries, after negotiations with the Kyrgyz Republic and Tajikistan were concluded in the same month. Detailed investments in border crossing points and single window facilities under the project were identified for both countries.

Finance Mobilization (Table 9) R

Level 3 includes two indicators that track different areas of finance mobilization: the "annual average volume of new approved investment projects" and the "CAREC technical assistance project financing gap." The rationale for tracking these data is to enable a clear picture of overall annual investment trends—as distinct from (i) the cumulative volume of the program monitored through indicators for operations growth, and (ii) investment trends for individual sectors. Annual finance mobilization data will enable CAREC partners to analyze the main financing sources for CAREC project-based activities and better strategize future financing options and priorities.

The indicator for finance mobilization suffered a 14% reduction in 2012 compared to 2011, further dropping from the 7% of the preceding period, thus incurring a "red" rating. The descent seems to have started in 2011, but growth had already decelerated over the years, e.g., from 80% in 2007–2008 and 85% in 2008–2009, to 16% in 2009–2010. The downtrend in the moving average mirrored individual sector contractions, i.e., 16% for transport, 40% for trade facilitation, and 4% for energy.

However, on a year-to-year basis, new investment volumes in fact increased by 42% between 2011 and 2012, paralleling the

Table 9 Level 3—Finance Mobilization

Indicator	Indicative Target	2006 Baseline Value	2009	2010	2011	2012	Progress
Annual average volume of new approved investment projects (loans and grants, 3-year rolling average, \$ million)	1	594ª	3,133	3,635	3,386	2,910	R
CAREC technical assistance project financing gap (\$ '000)							

^{... =} no data available, CAREC = Central Asia Regional Economic Cooperation.

Note: Where rolling averages are used to flatten unrepresentative spikes and dips in data, 2006 reflects data for 2004–2006, 2009 reflects data for 2007–2009, 2010 reflects data for 2008–2010, 2011 reflects data for 2009–2011, and 2012 reflects data for 2010–2012.

Source: CAREC Program Portfolio.

major influx that took place in 2009.34 This positive development reverses the reductions experienced during the previous 2 years of 41% in 2009–2010 and 16% in 2010–2011. It is solely attributable to the infusions in the transport sector, which had maintained its position since 2011, in contrast to the other sectors where new investments for the past 2 years shrank. For instance, additional investments in transport rose by 55% in 2011-2012 and 34% in 2010-2011; those in energy fell by 28% and 72%, respectively, while no inflows benefited trade facilitation in both years. In terms of numbers, there were fewer new project approvals in 2012. Six of the transport projects were tranches of MFFs.

The distribution of financing sources for projects approved in 2012 is depicted in Figures 8 and 9, including the share of three multilateral development partners. A significant amount from the World Bank was devoted to the East–West Roads Project: Western Europe–Western People's Republic of China International Transit Corridor (CAREC 1b and 6b). This complements the South–West Roads project that it also helped finance in 2009, and is part of the \$7.5 billion program of the Kazakhstan government to upgrade the 2,787-kilometer road corridor

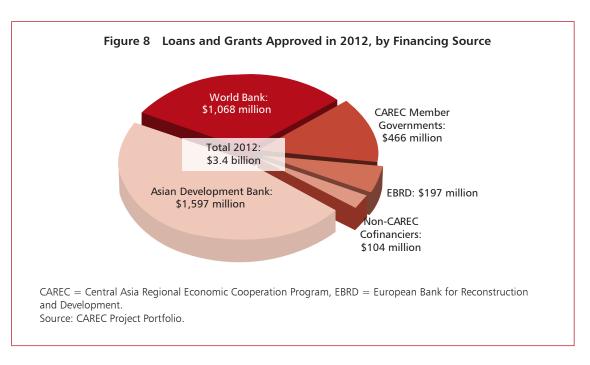
linking the People's Republic of China to the Russian Federation through Almaty, Shymkent, Kyzylorda, and Aktobe cities. ADB funding supported road network and other CAREC corridor development amounting to \$1,342 million, and energy sector projects with a combined value of \$255 million.

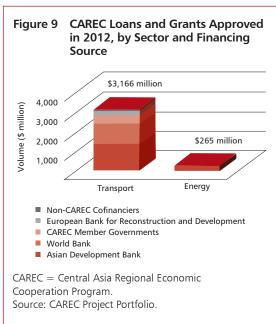
CAREC governments invested \$466 million to cofinance 10 projects approved in 2012 (Figure 10). Almost all of this, 97%, went to transport infrastructure. Government counterpart funds made up from between 7% and 20% of project costs for transport, and 1.5% to 11% for energy.

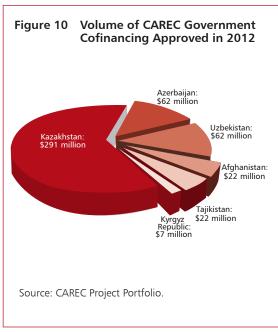
In response to the declining annual rate of finance mobilization, and to promote funding opportunities for the transport sector MTPP, the TSCC will conduct a development partners' forum on MTPP financing with multilateral and bilateral institutions for stakeholders in CAREC countries. This forum will be held at the TSCC meeting scheduled for September 2013. CAREC's trade facilitation sector stepped up efforts to secure cofinancing through support from the Japan Fund for Poverty Reduction for technical assistance activities under the trade facilitation agenda. This funding mechanism is expected to be finalized in 2013.

^a Figures that appeared in the 2011 CAREC Development Effectiveness Review have been adjusted to reflect updated project information.

³⁴ The use of the 3-year moving average for the operations growth indicator smoothened extreme values, so that significant inflows in 2009 were reflected only in the past 3 years' estimates and not in 2012, hence its relatively lower figure.







Technical assistance in support of CAREC operations continued at virtually the same pace, as 18 projects were approved in 2012 worth a total of \$23 million. While this did not differ much from the previous year's 19 projects equivalent to \$29 million, it has yet to match the record level in 2009 when 22 projects with a combined value of \$35

million were approved. The new projects were distributed across sectors as follows: 6 in transport, 3 in trade facilitation, 2 in energy, and 7 in multisector/second-tier activities. The latter included disaster risk management projects implemented by the UNDP in the region as well as support to the CAREC program.

Level 3: Operational and Organizational Effectiveness

Knowledge Management (Tables 10 and 11) __

The CAREC Program includes knowledge and capacity building as one of its key themes. Research and analytical work conducted through CAREC underpins the design and implementation of mutually beneficial regional initiatives. To achieve the strategic objectives laid out in CAREC 2020 and guide the CAREC Program through the next phase of operations, the Wuhan Action Plan was endorsed at the 11th Ministerial Conference in 2012. Among its priority areas is the CAREC Institute Work Plan of 2013–2017, emphasizing the institute's critical role in providing knowledge support to the priority areas. The work plan translates the CAREC Institute's Strategic Knowledge Framework 2013–2017 into activities, following the three components of knowledge generation, knowledge services, and knowledge management. The work plan was developed through consultations with country and multilateral development partners that included a review of sector work plans and country training needs. Knowledge management work that was initially identified includes the establishment of databases and conferences on particular topics. The 11th Ministerial Conference also made the decision to establish a physical base for the CAREC Institute in the region by 2014.

The DEfR process assesses three areas of knowledge management: (i) the quality of CARECrelated technical assistance completion reports circulated in the year under review—"ratings of CAREC-related technical assistance projects

completed (% successful)"; (ii) the production and dissemination of CAREC-supported research and other knowledge products—indicator pending; and (iii) training programs and capacity building— "participants in CAREC-supported training programs (number of person days)."

CAREC-Related Technical Assistance Projects

The first indicator is adjusted to include technical assistance activities that led to investment projects, in consideration of the relatively high number of such activities that typically have no stand-alone completion reports. The adjusted ratings are shown in Table 10 for 2009-2012. The results reflect the successful delivery of technical assistance in all five projects that were approved in 2012 and three projects approved in 2011. This was an improvement over the baseline and leads to a "green" rating for the indicator.

Of the 200 technical assistance projects approved from 2001 to 2012, 44 projects equivalent to \$31.8 million contributed directly to investments with a combined value of \$9.8 billion thus far. ADB supported 84% while governments financed 14% of the technical assistance. The resulting loans and grants were concentrated in the transport and energy sectors, with \$7.8 billion and \$1.03 billion, respectively. The funding was provided by ADB (68%), government (18.5%), non-CAREC cofinanciers (7.9%), and multilateral development partners (5.2%).

Table 10 Level 3—Knowledge Management

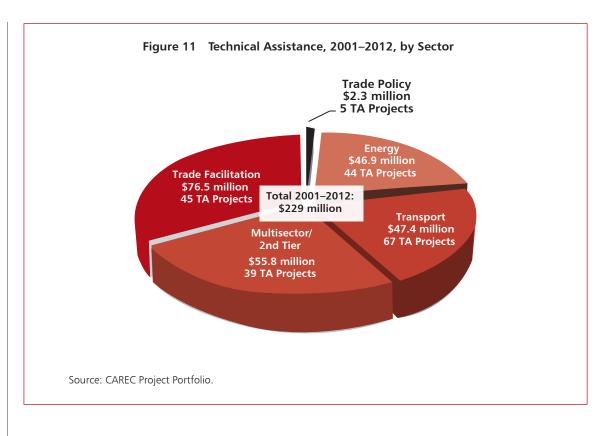
Indicator	Indicative Target	Baseline Year	Baseline Value	2009	2010	2011	2012	Progress
Ratings of CAREC-related technical assistance projects completed (% successful)	1	2006	86	90	83	100	100	G
[Knowledge production and dissemination: pending] ^a								

CAREC = Central Asia Regional Economic Cooperation Program.

Sources: CAREC Program Portfolio, CAREC Institute, www.carecprogram.org

^a The indicator is being developed as part of the new CAREC Institute results framework.

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Development Effectiveness Review



From 2001 to 2012, CAREC multilateral development and government partners together provided technical and knowledge transfer support equivalent to \$229 million to priority individual and multisector areas (Figure 11). This was accomplished through 200 projects, of which 115 have been completed. In value terms, trade facilitation benefited from the most technical support, at \$76 million, followed by second-tier areas, which received \$56 million, and the transport and energy sectors, which got \$47 million each. In terms of number of projects, 67 were in transport, followed by 45 in trade facilitation, 44 in energy, and 39 in multisector areas. Trade policy had the least number and volume of technical assistance.

In 2012, 12 technical assistance projects were completed with a combined value of \$12.5 million. There were four in secondtier areas worth \$4.5 million, another four in trade facilitation amounting to \$3.9 million, three in energy totaling \$3.6 million, and one in transport equal to \$0.6 million. Only 2 out of the 12 contributed directly to investment

projects, both of which were in the energy sector and amounted to \$2.3 million.

Among the technical projects completed in 2012, two were rated partly successful. The ADB-supported Road Database Development using Geographic Information System addressed a real need, but domestic capacity to operate the system was limited and government ownership was insufficient. There was an overemphasis on the technology rather than the road asset management system, the institutionalization of which was crucial for success. For the UNDP-European Union project, Supporting Integrated Border Management Systems in the South Caucasus, which covers Azerbaijan, the government had yet to subscribe to a specific national integrated border management strategy. Nevertheless, it incorporated elements of the strategy into practice, technical staff increased their understanding of its benefits, information exchange was enhanced, and refurbished border infrastructure and revised procedures reduced border crossing times because of the project.

Level 3: Operational and Organizational Effectiveness

Noteworthy also was the success of UNDP technical assistance for Growing Inclusive Markets in Eastern Europe and the Commonwealth of Independent States (Bosnia and Herzegovina, Kazakhstan, Kosovo, and Uzbekistan), which achieved its primary target of bringing 24 small business projects into implementation. Business brokers in the targeted countries identified potential projects, prepared feasibility studies, and helped develop the identified inclusive business projects based on the agreed annual work plans. The business projects range from agriculture to social enterprise types. They have both direct and indirect impact, created additional jobs, increased the income of households, thus contributing to the sustainable development of the inclusive business models.

Knowledge Production and Dissemination

With the endorsement in 2012 of the Wuhan Action Plan and the Strategic Knowledge Framework 2013–2017, the CAREC Institute is now tasked to focus on key economic cooperation issues along the three framework components. Knowledge generation will be guided by the principles of clarity and specificity of focus; knowledge services will address knowledge gaps in a regional context; and the CAREC Institute will be the knowledge hub for economic cooperation in the region. The activities will be integrated across the components, contribute directly to CAREC 2020 targets, and be delivered through partnerships. The Work Plan 2013–2017 has identified a number of priority studies, training seminars, and knowledge products to generate in the first 2 years and indicative areas for the remaining period. The next task for the CAREC Institute is to develop a results framework specifying the indicators that would best serve the purpose of measuring its effectiveness.

Research Program

A pilot study on economic corridor development has commenced, focusing on Corridor 1, a regional and international link traversing Kazakhstan and the Kyrgyz Republic. In line with CAREC 2020's goals of trade expansion and increased competitiveness and thus overall economic growth, the pilot study

focuses on easing the flow of goods and people, promoting domestic value addition, and strengthening cities as engines for economic growth. Thus, for example, the study will assess transport and transit traffic and the economic activities that take place within the corridor routes, including access conditions and constraints to the efficient flow of goods, services, and people along Corridor 1. The study will also apply a supply chain framework to major traded products to trace the business processes involved in sourcing, producing, and distributing products that could cut across corridor cities and towns at the borders and hinterland. Finally, it will assess how the economic capacity of major cities of Almaty and Bishkek can be strengthened to accelerate growth, and generate more jobs and income.

Publications and Outreach Activity

CAREC partners agreed—as laid out in CAREC 2020— to accelerate implementation of CAREC 2020 by strengthening awareness and ownership of the CAREC Program and its activities at the national level of each member country. In May 2012, five CAREC governments (Azerbaijan, the Kyrgyz Republic, Mongolia, Turkmenistan, and Uzbekistan) arranged and hosted national consultation workshops to (i) present the strategic directions and operational priorities of CAREC 2020 to relevant government officials and key stakeholders, and (ii) begin the process of mainstreaming CAREC projects and activities in their respective national development plans. This type of promotional workshop is being taken to a wider audience base during 2013 as part of a structured outreach program developed by the Office of the National Focal Point (NFP) for each CAREC country.

The CAREC Secretariat produced two new awareness-raising brochures for the CAREC Program, in both English and Russian: From Landlocked to Linked In: The Central Asia Regional Economic Cooperation Program, and Central Asia Regional Economic Cooperation Program: Good Neighbors, Good Partners, Good Prospects. The secretariat in collaboration with the Office of the NFP also continued to produce new video footage for promotional

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purposes, including a 2.5-minute CAREC introductory video, and a 1-minute video for each partner country. These videos are featured on the CAREC website and are expected to be used for all events and awareness-raising activities in 2013. The CAREC website also generated 18 issues of the *CAREC e-Alert* during 2012 for information dissemination.

The secretariat was also responsible for producing strategic and sector publications for 2012, including *Implementing CAREC* 2020 Strategic Framework: The Wuhan Action Plan, and the CAREC Development Effectiveness Review 2011: CAREC 2020— Focus, Action, Results. Based on the proceedings of the Roundtable Seminar on Ways Forward For Corridor-Based Transport Facilitation Arrangements in the CAREC Region (held in Beijing, July 2012), Where to From Here? Corridor-Based Transport Facilitation Arrangements in the CAREC Region details the experience of transport facilitation to date, and provides recommendations on next steps for CAREC partners.

In 2012, the CAREC Trade Facilitation priority area produced the 2011 Annual Report for Corridor Performance Measurement and Monitoring (CPMM) and quarterly reports covering the first 9 months of the year. The reports were shared with development partners, disseminated at the Asia Pacific Trade Facilitation Forum, CAREC Senior Officials' Meetings, the Ministerial Conference, CAREC trade facilitation events, and via the internet. ADB's Transport Community of Practice organized a briefing for ADB staff on CPMM, and CPMM findings were presented at the Annual Meeting of the CAREC Federation of Carrier and Forwarder Associations (CFCFA).

As reported in previous CAREC DEfRs, success in creating public awareness about CAREC activities is gauged through the number of times information about the program appears in print media. In 2012, there were 186 CAREC-related articles, a slight decline from the 194 media hits of the previous year. About a third, 61, reported the results of the ministerial

conference, or announced the event. Coverage was given by media organizations such as the BBC Monitoring Asia Pacific and Xinhua News Agency, news services outside the region such as Thai News, and regional or business news agencies such as Trend News and Trade Finance, aside from country newspapers. Most of the articles included background information about the CAREC Program and the Wuhan Action Plan. Roughly another third of the total media hits covered transport projects in progress or loans for proposed roads along CAREC corridors. News in the energy sector was confined to a proposed hydropower project in Pakistan. One article described the speech of the US Assistant Secretary of State for South and Central Asian Affairs at an international conference of the Central Eurasian Studies Society that was attended by 400 scholars, and which focused on the CAREC Program. Seminars on regional cooperation, transport, customs, CAREC 2020, and the World Trade Organization generated local news for the host countries. More targeted in-country campaigns would raise awareness about CAREC activities, not only in print media but also in television and radio.

CAREC Program Websites

In 2012, the CAREC Program website—www.carecprogram.org—recorded significantly higher usage than in 2011: the Englishlanguage site registered 27,016 visits and the Russian-language site had 7,029 visits, with a combined total of 34,045. This represents an increase of 40.5% over figures for 2011. The combined average number of monthly visits in 2012 rose by over 800 against the monthly average for 2011—again, a healthy increase compared to the 500 monthly visit increase noted from 2010–2011.³⁵

Before 2012, hits on the website consistently peaked in the run up to the CAREC Ministerial Conference and Senior Officials' Meetings, and these events generated the most usage. However, web pages most frequently visited in both English- and Russian-language sites showed greater variety in 2012 than in previous years,

www.carecprogram.org/index/php?page=website-statistics

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and included features, projects, sectors, and the web pages of multilateral development partners. Search engines still remained the top traffic source of visits for both websites (cornering 17,508 hits, up 66.9% over 2011). Referring sites brought in 8,992 hits, 24.3% more than the previous year; and direct traffic added 7,545 hits, a 16.1% increase.³⁶ Of particular note during 2012, hits coming through links from issues of *CAREC e-Alert* contributed to the promotion of the website. During 2012, the number of subscribers to the *CAREC e-Alert* increased from just under 600 to just over 900.

Top three sources of visits by country remained the same since 2010—the US (12.8% more hits than for 2011, though much lower than 91.2% increase last year), Kazakhstan (43.6% more hits), and the Russian Federation (69.9% more hits). These three countries always featured as one of the top five user countries during 2012. Pakistan and Uzbekistan consistently placed next highest on this list.

With ADB technical assistance, a website—cfcfa.net—was established for the CAREC Federation of Carrier and Forwarder Associations. The site provides links to the sites of member associations and serves as a platform for disseminating CPMM reports. The website will be transferred to CFCFA custody in 2013.

For the third year running, the Central Asia Atlas of Natural Resources remained the

most visited page of the CAREC website.³⁷ In the English site, the next two most visited pages were news features on transport projects—"First Afghan railway opens, promotes cooperation" published in 2012, and "Turkmenistan gets \$125 million ADB loan for a regional railway project" in 2011. Other frequently visited pages included the transport sector, CAREC corridors, and CAREC projects list. The Russian-language mirror site generated notable hits for the pages of multilateral development partners—in particular, ADB, EBRD, and IsDB.

Training and Capacity Building

The indicator "participants in CAREC-supported training programs" tracks the annual number of person days that CAREC sponsors or cosponsors through training activities aimed at helping its institutional bodies carry out their duties, and technical sectors implement projects in the most effective way. Some of these initiatives are coordinated through the CAREC Institute.

In 2012, there were 15 CAREC-supported training courses, seminars, and workshops attended by 349 participants, equivalent to 1,328.5 persondays of capacity building. These were held in three CAREC member countries as well as in Thailand and the Republic of Korea. The number of events and the proportion of female participants paralleled that of 2011. However, over the past 4 years there have been fewer participants and

Table 11 Level 3—Knowledge Management

Indicator	Indicative Target	Baseline Year	Baseline Value	2009	2010	2011	2012	Progress
Participants in CAREC- supported training programs (number of person days)		2009	1,825		1,349	1,582	1,328	A

... = no data available, CAREC = Central Asia Regional Economic Cooperation. Sources: CAREC Program Portfolio, CAREC Institute, www.carecprogram.org

³⁶ Referring sites are websites that carry links to the CAREC Program website while direct traffic refers to the number of users who accessed the CAREC Program website directly.

³⁷ ADB. 2010. *Central Asia Atlas of Natural Resources*. Central Asian Countries Initiative for Land Management. Manila. http://caatlas.org/index.php

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events, i.e., from 939 participants in 25 events in 2009, 663 participants in 21 events in 2010, and 561 participants in 15 events in 2011. This was slightly offset by the lengthening of the training courses from an average of 2 days in 2009 to 3.8 days in 2012, but the combined effect was fewer person-days, or 27% less than the baseline figure. This yields an "amber" rating for the indicator.

The decline from the baseline number of participants at 63% and events at 67% is even starker. Executive leadership program and management courses of previous years were no longer conducted, the CAREC Institute was restructured, and fewer events under CAREC's second-tier implementation were held, contributing to the considerable downtrend. The training activities envisioned in the CAREC Institute Work Plan for 2013–2014 should stem the trend in each sector, as 7 in transport, 7 in transport and trade facilitation, 5 in trade policy, 6 in cross-border transport agreement, and 6 in energy have been identified.

In response to the priority action in the 2011 DEfR to ensure that relevant sector-focused training and capacity building activities are implemented through the CAREC Institute, training events in 2012 were coordinated with the institute. These are briefly described below:

Transport

The TSCC, with the CAREC Institute, conducted training on the performance-based maintenance contract for roads for concerned government officials and other stakeholders in CAREC countries in November 2012. The training workshop provided a cross-section of the contract experience in terms of size of contract, country, and degree of success. Participants expressed interest in (i) international models from developed countries; (ii) more details on the conditions of contract, particularly the employer's requirements; and (iii) a field visit to the participants' countries to inspect road sections in similar condition.

Transport and Trade Facilitation

Transport and customs officials and representatives of the offices of the national

focal points participated in the Roundtable Seminar on Ways Forward for Corridor-Based Transport Facilitation Arrangements in the CAREC Region in July 2012. They tackled key impediments to cross-border transport, shared their experience with transport facilitation agreements, discussed how to further facilitate corridor-based transport, and recommended ways to take a general approach to implementation, which were included in the Wuhan Action Plan.

A Study Tour of the CAREC National Focal Points to the Second Mekong International Bridge Project in September 2012 enabled them to observe the implementation of the Greater Mekong Subregion cross-border transport agreement at the Mukdahan (Thailand) and Savannakhet (Lao People's Democratic Republic) border crossing point and understand the benefits of economic corridor development through a free trade zone. It included a briefing on Thailand's national coordination arrangements for regional cooperation and how regional cooperation projects are mainstreamed into its national development agenda.

Trade Facilitation

The CAREC Training Workshop on Time Release Study (TRS) for Afghanistan and Pakistan Customs in September 2012 taught participants how to organize and conduct a TRS with lectures on the methodology, global experience, and a demonstration and hands-on use of the World Customs Organization TRS software application with practical exercises.

A number of workshops were cosponsored by ADB and the General Administration of Customs of the People's Republic of China, through the Shanghai Customs College: (i) Training of Trainers Workshop for Kazakhstan Customs, held in September 2012 to develop skills of customs officers in designing and delivering training to their national counterparts; (ii) Training on Customs Intelligence in June 2012 for Kazakh customs officials, covering information systems and e-port development, risk management, compliance facilitation, and special customs zone management; (iii) Training on Customs Techniques in June 2012 for Mongolian

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customs officials, on the same topics; (iv) Training on Customs Modernization for CAREC Countries in May 2012 for senior and mid-level customs officials, also on the same topics.

A Workshop on Sanitary and Phytosanitary (SPS) Measures in July 2012 enabled the exchange of information on SPS assessments in CAREC countries, best practice, and provisions of the WTO SPS Agreement. Focal points of the trade facilitation sector and senior officials of SPS-related government agencies in CAREC countries participated.

The ADB–Economic and Social Commission for Asia and the Pacific Capacity Building Workshop on Single Window Implementation in April 2012 trained management-level stakeholders from CAREC and the South Asia Subregional Economic Cooperation on the formulation of a program for cross-border electronic data exchange and paperless trade, the key elements of an enabling legal framework for single window development and operation, and the actual operation of single window agencies through site visits.

CAREC Institute and the CAREC trade facilitation team are designing further capacity-building programs together with ADB Institute. These programs will provide the substance for subsequent knowledge products. Capacity-building activities on the conduct of TRS, Revised Kyoto Convention accession and compliance, and risk management remain a priority. Capacity-building activities developed in conjunction with the CAREC Institute will sustain programs designed for CAREC customs officials (specialized customs training conducted by the Shanghai Customs College) and CAREC private sector partners (trade logistics training).

Trade Policy

There were three seminars on WTO accession: (i) Recent Developments in the Multilateral Trading System in the Agriculture Sector in March 2012 covered patterns of trade and protection, the Uruguay Round Agreement on Agriculture and current negotiations under the Doha Round, impact of trade liberalization, and the likely effect of the Doha Round

on producers and consumers; (ii) Services Liberalization and the WTO in May 2012 covered the WTO General Agreement on Trade in Services, accession negotiations, and post-accession processes; and (iii) Managing the WTO Accession Process—Strategies, Challenges, and Practices in July 2012, which discussed key goals, assessment of options, negotiation strategies, and the negotiating team and national committee.

Energy

In July 2012, the International Energy Agency, in cooperation with the Government of Kazakhstan, held the Caspian Energy Policy Dialogue and Training, where Caspian countries discussed perspectives on energy technology, received energy-training modules, and shared best practices in energy efficiency and renewable energy. CAREC energy sector focal points and alternates attended this event, which was cosponsored with the European Commission and USAID.

A Capacity Building Workshop on Market Models and Their Supporting Information Systems was co-organized with the USAID Regional Energy Security Efficiency and Trade Project in September 2012 for CAREC energy sector focal points and officials of energy ministries. Conducted under Pillar 2 of the CAREC Energy Action Plan, it presented international experience in the operation of advanced competitive power markets, and best practice for developing regional and national power markets in Central Asia. Participants also learned how to implement information systems and communicate between system operators and power market operators.

Regular regional and subregional assemblies in 2012 continued to provide an effective platform for CAREC members to discuss strategic issues and share information and experiences. The most important include

Institutional framework support and capacity building

The 11th Ministerial Conference was held in Wuhan, People's Republic of China, in which the CAREC ministers endorsed the 2012 CAREC Program
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Wuhan Action Plan that will guide the next phase of the CAREC Program toward the achievement of strategic objectives laid out in CAREC 2020. The six multilateral development partners and other development partners supported the plan. It sets priority actions in each sector, focusing on regional transport infrastructure, trade openness, and energy cooperation. It also underscores the critical role of the CAREC Institute in providing analytical, training, and knowledge management support. Participating delegates comprised ministers and representatives from CAREC countries, partner multilateral institutions and the Agence Française de Développement, Japan International Cooperation Agency, Department for International Development of the United Kingdom, US Department of State, and USAID. A Wuhan Action Plan workshop for national focal point (NFP) advisors and regional cooperation coordinators subsequently formulated 2013 results-based action plans based on the Wuhan Action Plan.

Two regular senior officials' meetings took place, supplemented by consultation with CAREC NFPs on the direction of the CAREC Institute, proposed approach to transport facilitation, and preparations for the 11th Ministerial Conference. Subregional consultations helped finalize the CAREC Institute assessment and work plan and senior officials reached agreement on the CAREC Institute's Strategic Knowledge Framework. National CAREC workshops were conducted in four countries to present CAREC 2020 to government officials from the ministries and line agencies in charge of the economy, industry, energy, trade, and transport. An overview of the CAREC Program, work progress in priority sectors, mediumterm priority projects, and CAREC dimensions of national development programs were discussed.

Institutional strengthening for the technical sectors of CAREC

Significant progress continues in each of the four sector coordinating committees, which met six times. The Energy Sector Coordinating Committee (ESCC) met twice and developed the Energy Work Plan 2013–2015. The Transport Sector Coordinating Committee (TSCC) met once and approved 68 medium-term priority investment projects amounting to \$23 billion. The Customs Cooperation Committee met once on priority investments and technical assistance projects to support trade facilitation. The Trade Policy Coordinating Committee (TPCC) met twice and endorsed priority policy actions to help CAREC countries adopt more open trade regimes and facilitate intraand interregional trade. The CAREC Federation of Carrier and Forwarder Associations (CFCFA) hosted its second business networking forum and annual meeting, in which they finalized project proposals under CAREC 2020, shared experience with the Greater Mekong Subregion Freight Transport Association, and discussed measures to facilitate cross-border transport, increase standardization, and adopt best practices.

Technical training and capacity building across all priority sectors

Knowledge continued to be shared and enhanced during 2012 through workshops and seminars co-organized with CAREC country or multilateral development partners, and other development partners. The trade facilitation sector accounted for most of the capacity building events, including those that combined with transport facilitation and other subregional programs. The trade policy sector dedicated their seminars to WTO accession topics. The transport sector provided technical information on performance-based contracts while the energy sector tackled energy policy and market models.

Proposed Actions

The CAREC DEfR seeks to be an action-oriented living document—it aims to function both as a monitoring tool for the effectiveness of the

CAREC Program and as a platform from which to initiate specific priority actions. Table 12 summarizes the proposed actions.

Table 12 Priority Actions, 2012–2013

Broad Priority Action	Responsibility	Specific Priority Actions						
Accelerate implementation of CAREC 2020								
Review the Transport and Trade Facilitation Strategy and Implementation Action Plan (TTFSIAP) for consideration at the Senior Officials' Meeting (SOM) and Ministerial Conference.	Transport Sector Coordinating Committee, Customs Cooperation Committee, and Integrated Trade Facilitation stakeholders	Refine the TTFSIAP for consideration at the SOM and Ministerial Conference.						
Maximize the benefits of CAREC corridors by addressing key nonphysical barriers to cross- border transport and implementing	Transport Sector Coordinating Committee	Translate the endorsed approach to corridor-based transport facilitation arrangements into a specific action plan.						
the endorsed approach to corridor- based transport facilitation arrangements.	Customs Cooperation Committee and Integrated Trade Facilitation stakeholders	Support (i) CAREC countries' accession to and compliance with the Revised Kyoto Convention, (ii) replication of joint customs control in other border crossing point (BCP) pairs, (iii) adoption of risk management procedures and post entry audit, and (iv) pilot regional customs transit system. By 2020, all CAREC corridor BCPs modernized/renovated.						
		By 2020, all CAREC countries to conduct time release studies (TRSs) on a regular basis. Work with World Customs Organization (WCO) and Organization for Cooperation between Railways to refine the conduct of TRS at railway BCPs.						
		By 2020, sanitary and phytosanitary (SPS) measures in all CAREC countries to comply with international standards.						
		Support the interagency and regional coordination of single window development and operation.						

2012 CAREC Program Development Effectiveness Review

Table 12 continued

Broad Priority Action	Responsibility	Specific Priority Actions
		By 2017, Cross-Border Transport Agreement under implementation and accession to other multilateral agreements on track.
		Strengthen national and regional joint transport and trade facilitation committees through regular meetings.
		By 2017, a program for movement of people across borders developed in coordination with the International Organization for Migration. By 2020, specific visa regime established for business people and transport operators.
	CAREC Federation of Carrier and Forwarder Association	Improve Corridor Performance Measurement and Monitoring (CPMM) coverage of corridor segments in Pakistan and Turkmenistan, logistics operations, and railway movements.
Update the Trade Policy Strategic Action Plan (TPSAP) and continue implementation of the trade liberalization index (TLI) and institutional quality index (IQI).	Trade Policy Coordinating Committee International Monetary Fund	Update the TPSAP to (i) reflect progress and new developments in the implementation of the existing plan (in particular, further reduction of tariff and non-tariff barriers, WTO accession, and improvements in the institutional environment for trade); and (ii) better align the new action plan with the strategic objectives of CAREC 2020. The new TPSAP will highlight the core objectives for CAREC member countries to achieve over the period 2013–2017, and will include a matrix of policy actions that will form the basis for a new index to measure outcomes versus targets.
Implement the CAREC Energy Work Plan 2013–2015.	Energy Sector Coordinating Committee	Activities under the six actionable elements of the Energy Work Plan: 1. Develop the Central Asia—South Asia Energy Corridor, with three projects under Central Asia South Asia Regional Electricity Market: a) CASA-1000—project preparation including negotiation of commercial agreements, selection of a developer and operator. b) Turkmenistan, Uzbekistan, Tajikistan, Afghanistan, Pakistan
		(TUTAP)/Afghanistan Power Sector Master Plan

Table 12 continued Proposed Actions

Broad Priority Action	Responsibility	Specific Priority Actions
		c) Turkmenistan–Afghanistan– Pakistan–India (TAPI) Natural Gas Pipeline Project—work on phase 3
		Resolve Regional Energy Dispatch and Trade Issues
		a) Prepare work program for the Central Asia Electricity Trade Development Program
		b) Under the USAID Regional Energy Security Efficiency and Trade project, introduce the curriculum on power markets to universities
		3. Manage Energy–Water Linkages
		a) Complete the review of the road map and finalize proposals for new or expanded activities
		b) Hold workshops on the Basin Economic Allocation Model, AralDIF, other models for energy— water linkages to identify gaps in establishing analytical tools for basin-wide management
		c) Complete first phase of the Central Asia Energy–Water Knowledge Portal, explore the inclusion of regional and national information, and conduct capacity building
		d) Studies on energy vulnerability to climate change
		e) Central Asia Energy–Water Knowledge Network—develop mechanisms for creating centers of excellence
		4. Mobilize Funds for Building Energy Assets (see below)
		5. Implement Energy Sector Priority Projects (see below)
		Capacity Building and Knowledge Management (see below)

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Table 12 continued

Broad Priority Action	Responsibility	Specific Priority Actions
To sustain operations growth, undetection medium term priority.	CAREC governments	
update the medium-term priority project (MTPP) list and commence mainstreaming priority projects	Transport Sector Coordinating Committee	Update the MTPP list.
into national development plans of the CAREC countries.	Customs Cooperation Committee and Integrated Trade Facilitation stakeholders	Update the MTPP list. Formulate the 2nd and 3rd phase of the Regional Improvement of Border Services project to improve BCPs and establish national single windows. Complete needs assessment, formulate the regional upgrade of SPS measures for trade project, and establish coordination group. Support evolution of CAREC Corridors into economic corridors. By 2017, upgrade/automate customs processes and procedures in all CAREC countries. By 2017, at least six CAREC countries (Azerbaijan, Mongolia, Kazakhstan, the Kyrgyz Republic, Tajikistan, and Uzbekistan) have their national single windows developed and operating. By 2020, all CAREC countries have single window facilities in place and operating. By 2020, conduct joint customs control in jointly operated facilities at 10 CAREC BCPs.
	Energy Sector Coordinating Committee	Implement energy sector priority projects (5th actionable element in the Energy Work Plan)—Circulate list of medium-term priority projects based on agreed upon selection criteria. Countries will update their planned project list and indicate concerns regarding projects identified by other countries. Consolidated comments and updated list will be presented.

Table 12 continued Proposed Actions

Broad Priority Action	Responsibility	Specific Priority Actions
To counter the drop in finance mobilization, step up efforts to explore cofinancing opportunities among CAREC governments, multilateral and bilateral institutions, other development partners, and the private sector.	CAREC governments	Establish and convene national joint transport and trade facilitation committees to improve interagency coordination and public—private dialogue, identify and mobilize resources to fund key investments, introduce cost-saving measures, and serve as a focal point for development partners in implementing and revising MTPPs.
	Transport Sector Coordinating Committee	Conduct Development Partners' Forum to discuss financing of projects under the Transport and Trade Facilitation Strategy and MTPP.
	Customs Cooperation Committee	Implement projects to support (i) aligning customs trade facilitation measures with best practice, (ii) coordinated border management, and (iii) facilitation of regional transit trade.
	Energy Sector Coordinating Committee	Mobilize funds for building energy assets (4th actionable element in the Energy Work Plan)—Conduct study to determine the capacity to finance power sector infrastructure projects and sources of finance, examine the enabling environment for private investment, and recommend project development facilities.
	CAREC Federation of Carrier and Forwarder Association (CFCFA)	By, 2017, CFCFA becomes a formal CAREC institution. Establish regular dialogue and collaboration with CAREC governments to make the investment climate more attractive for international capital.
 Implement sector-focused training and capacity building activities through the CAREC Institute. 	CAREC Institute	The CAREC Institute work plan includes activities that reflect the training requirements of sectors. Coordinate with sectors, which will define the implementation modalities.

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Table 12 continued

Broad Priority Action	Responsibility	Specific Priority Actions
	Transport Sector Coordinating Committee	Continue capacity building program.
	Customs Cooperation Committee and Integrated Trade Facilitation stakeholders	Sustain capacity-building programs, in partnership with WCO, the CAREC Institute, and CAREC member country training institutes, for (i) customs and relevant government agencies on Revised Kyoto Convention, TRS, single window, and SPS and (ii) private sector partners on trade logistics and FIATA training. Develop public-private capacity to support adoption of risk management procedures in all CAREC countries and post entry audit for 50% of cargoes. By 2020, establish Authorized Economic Operator programs in most CAREC countries.
	Trade Policy Coordinating Committee	Continue capacity building program.
	International Monetary Fund	
	Energy Sector Coordinating Committee	Capacity Building and Knowledge Management (6th actionable element in the Energy Work Plan)—Continue activities, guided by updated list of topics, and coordinated with the US Agency for International Development.
Expand dissemination of relevant knowledge products to all CAREC	CAREC Secretariat	Continue
members, especially through the CAREC web portal.	CAREC Institute	
 Build and expand web-based data repository functions for each priority sector, CAREC partners, and the CAREC Institute. 	CAREC web team All CAREC partners	Continue
Coordinate closely with national focal point advisers to promote consistent messaging and information about the CAREC Program in all member countries.	National Focal Point Advisers CAREC Secretariat	Continue
Enhance CAREC Program results orier	ntation	
Revisit the performance indicators	CAREC Secretariat	Review the indicators, methodology, baselines, and targets.

CAREC = Central Asia Regional Economic Cooperation.

Conclusion

In this fourth annual monitoring cycle, CAREC performance is assessed against CAREC 2020, which guides the second decade of implementation of the CAREC Program while promoting better alignment with national development priorities. After 4 consecutive years of data are examined, the trends indicate improvements in the energy and transport sectors, moderated momentum in the trade policy sector, and the need for sustained effort in trade facilitation. Operations growth persisted, while finance mobilization expanded relative to 2011 even if it was restrained compared to the previous 3 years' average. Successful technical assistance continued to be delivered but training output declined.

With the introduction of the two strategic objectives of increased trade and improved competitiveness in CAREC 2020, intermediate outcome indicators corresponding to each were measured this year. Data for 2012 disclosed that intraregional trade has been relatively fragile and logistics efficiency needs to be raised.

As the CAREC Program matures and priorities evolve in the next decade of operation, the results framework must continue to be realistic and flexible. To ensure delivery of results, the 32 indicators must be revisited regularly for any necessary adjustment or replacement, resetting of baselines and targets, and consistency in the application of evaluation criteria. This must consider the fact that data sources are constantly updated, leading to revised estimates of the same indicator annually, while other data series are discontinued. A robust monitoring mechanism must both measure progress and alert decision makers to those constraints that require attention.

The DEfR proposes a set of priority actions to increase the effectiveness of operations and address the issues and challenges. These actions are directed to the technical sector coordinating committees, the CAREC Secretariat, and the CAREC Institute. They are for consideration at the midterm Senior Officials' Meeting and subsequent progress will be reported at the 12th Ministerial Conference scheduled for October 2013.

CAREC Program Results Framework 2012

Table A1.1 Level 1—CAREC Region Development Outcomes

					negion					
Ind	icator	Indicative Target	Baseline Year	Baseline Value	2008	2009	2010	2011	2012	2012 Progress
1.	Population living on less than \$2 a day (%) ^a	1	2002	65.7	52.1 ^b	50.1°	42.9			G
2.	Human Development Index ^d	1	2000	0.525	0.598	0.613	0.619	0.624	0.628	G
3.	Gender Inequality Index ^e	1	2010	0.457	0.614		0.457	0.436 ^f	0.420	G
4.	GDP per capita PPP (constant 2005 international \$)	1	2006	2,622	2,872	2,959	3,044	3,138	3,555 ¹	G
5.	GDP PPP (constant 2005 international \$ billion)	•	2006	242.3	262.1	272.1	282.4	291.5	340.4 ¹	6
6.	Real GDP growth rate (%)	1	2006	7.9	9.1	6.1	6.0	7.9	6.5 ¹	A
7.	Labor force participation rate (%)	1	2006	57.8	57.5	57.7	57.8	58.0		G
8.	Women employed in nonagriculture sector (%) ⁹	1	2006	38.6	37.9	h	h			
9.	Real growth in trade of goods and services (%) ⁱ	1	2006	12.5	7.2	(3.9) ^j				
10.	Trade openness (%) ^k	1	2006	0.60	0.56	0.51	0.51	0.52		A
11.	Intraregional energy trade (GWh)	1	2006	5,061	4,227	4,435	3,544	5,304	4,752	A
12.	GDP per unit of energy use (2005 PPP \$ per kilogram of oil equivalent) ¹	•	2006	2.9	3.7	4.0	4.2			G
13.	Foreign direct investment (% GDP)	1	2006	6.2	5.9	5.3	3.6	4.1		G

Table A1.1 continued

Indicator	Indicative Target	Baseline Year	Baseline Value	2008	2009	2010	2011	2012	2012 Progress
14. Time required to start a business (days)	•	2006	31	21.1	16.9	15	14.5	14.1	G
15. Cost of business start-up procedures (% GNI per capita) ^m	•	2006	26.3	15.9	10.8	12.0	10.7	8.9	G
16. Intraregional trade in total CAREC trade (%)	1	2010	6.2			6.2	5.6		A
17. Logistics Performance Index	1	2010	2.53			2.53		2.46	A

- ... = data not available, () = negative, CAREC = Central Asia Regional Economic Cooperation, GDP = gross domestic product, GNI = gross domestic income, GWh = gigawatt-hour, PPP = purchasing power parity.
- ^a Calculated by PovcalNet using the closest survey years or interpolated figures. No data for Afghanistan, Mongolia, and Uzbekistan.
- b 2005 data.
- c 2008 data
- d No data for Turkmenistan in 2000 and 2008.
- ^e No data for Turkmenistan and Uzbekistan in all years and for Azerbaijan in 2010.
- f 2011 data
- ⁹ No data for Turkmenistan in all years and for Tajikistan and Uzbekistan in 2008.
- ^h Only three countries had data in 2009, and only two in 2010.
- No data for Afghanistan, for Mongolia and Turkmenistan in all years, and for Tajikistan in 2009.
- 2009 data covering five countries only.
- k No data for Afghanistan and Mongolia in all years, and for Turkmenistan after 2006 and Uzbekistan after 2009.
- No data for Afghanistan.
- ^m No data for Turkmenistan.

Notes: Comparable subnational data for Xinjiang Uygur Autonomous Region and Inner Mongolia Autonomous Region of the People's Republic of China are not available; therefore these two regions are not reflected in the table.

Sources: World Bank. PovcalNet Online Database for indicator 1; United Nations Development Programme. 2013. Human Development Report, 2013, New York, for indicators 2 and 3; World Development Indicators Online Database for indicators 4–7, 10, and 12–13; United Nations Statistics Division. Millennium Development Goals Indicators Online Database for indicator 8; World Bank. World Trade Indicators Online Database for indicator 9; Central Dispatch Center, Tashkent, Uzbekistan, 2012, for indicator 11; International Finance Corporation/World Bank Doing Business Online Database, for indicators 14 and 15; International Monetary Fund. Direction of Trade Statistics for indicator 16; World Bank. 2012. Connecting to Compete: Trade Logistics in the Global Economy. The Trade Logistics Performance Index and Its Indicators for indicator 17.

Appendix 1

Table A1.2 Level 2—CAREC Priority Sector Outputs

						•		
Indicator	Baseline Year	Baseline Value	2009	2010	2011	2012	2017 Target	2012 Progress
Transport and Trade Fa								
Expressways or national highways built or improved (km)	2008	177	1,288	1,025	1,022	430 (Q1–Q3)	8,640	A
Proportion of total CAREC road corridor built or improved (%)	2008	64	70	74	79	80 (Q1–Q3)	100	G
Time taken to clear a border crossing (hours)	2010	8.7		8.7	7.9	10.9	1	A
Costs incurred at a border-crossing clearance (\$)	2010	186		186	156	157	•	A
Speed to travel 500 km on CAREC corridor section (km per hour) ^a	2010	24		24	22	23	1	G
Costs incurred to travel corridor section (\$)	2010	712		712	959	999	1	R
Trade Policy								
CAREC Trade Liberalization Index	2009	(1.8)	(1.8)	5.5	12.8	15.2	20.0b	A
Energy								
Transmission lines installed or upgraded (km)	2009	850	850		1,150	322	755°	G
Increased energy generation capacity (MW)							820	

^{... =} no data available, () = negative, CAREC = Central Asia Regional Economic Cooperation, km = kilometer, MW = megawatt.

Sources: Transport and Trade Facilitation Coordinating Committee, Country Progress Reports for transport indicators; CAREC Corridor Performance Measurement and Monitoring Quarterly and Annual Reports, 2009–2012, for trade facilitation indicators; Trade Policy Strategic Action Plan monitoring questionnaire, 2012; ADB project completion and validation reports, and World Bank online project databases for energy indicators.

^a Speed is measured here "with delays" for a 20-ton truck or a 20-foot equivalent unit container.

^b Target year is 2012.

^c Represents expected output over 2013–2015.

CAREC Program Results Framework 2012

Table A1.3 Level 3—Operational and Organizational Effectiveness

	Indicative	Baseline	Baseline					2012
Indicator	Target	Year	Value	2009	2010	2011	2012	Progress
Volume of approved investment projects (loans and grants, cumulative since 2001, \$ million)	1	2006	3,104ª	12,504ª	15,385	17,805	21,237	G
Number of investment projects approved (loans and grants, cumulative since 2001)	1	2006	41	92	108	125	136	G
Number of completed investment projects (cumulative since 2001)	1	2006	4	16	28	35	41	G
Annual average volume of new approved investment projects (loans and grants, 3-year rolling average, \$ million)	1	2006	594 ^b	3,133 ^b	3,635b	3,386 ^b	2,910	R
CAREC technical assistance project financing gap (\$ '000)								
Ratings of CAREC- related technical assistance projects completed (% successful)	1	2006	86	90	83	100	100	G
[Knowledge production and dissemination: pending]								
Participants in CAREC-supported training programs (number of person days)	1	2009	1,825		1,349	1,582	1,328	A

^{... =} no data available, CAREC = Central Asia Regional Economic Cooperation Program.

^a Figures include only disbursed tranches of multitranche financing facility investments.

^b Figures that appeared in the 2011 CAREC DEfR have been adjusted to reflect updated project information.

Results Framework Definitions and Sources

Table A2.1 Level 1—CAREC Region Development Outcomes

Indicator	Definition and Source
Poverty Reduction	
Population living below \$2 a day	Definition: Percentage of the population living on less than \$2 a day measured at 2005 international prices adjusted for purchasing power parity (PPP), i.e., where an international dollar has the same purchasing power over GDP as the United States (US) dollar in the US. The \$2-a-day poverty line is compared to consumption or income per person and includes consumption from own production and income in kind. Source: World Bank PovcalNet Online.
Human Development Index	Definition: The human development index (HDI) is a composite index measuring average achievement in three basic dimensions of human development—a long and healthy life (life expectancy at birth); access to knowledge (mean years of schooling, and expected years of schooling); and a decent standard of living (GNI per capita [PPP \$]). The HDI provides a single statistic as a frame of reference for both social and economic development. The HDI sets a minimum and a maximum for each dimension called goalposts, and then shows where each country stands in relation to these goalposts, expressed as a value between 0 and 1. Source: United Nations Development Programme (UNDP). Human Development Reports. New York.
Gender Inequality Index	Definition: The gender inequality index (GII) reflects women's disadvantage in three dimensions—reproductive health, empowerment, and the labor market. The index shows the loss in human development due to inequality between female and male achievements in these dimensions. It ranges from 0, which indicates that women and men fare equally, to 1, which indicates that women fare worse in all measured dimensions. Source: UNDP. Human Development Report. New York.

Table A2.1 continued

Indicator	Definition and Source
Gross Domestic Product, Trade, and Business Devel	opment
GDP PPP (constant 2005 international \$ billion)	Definition: Gross domestic product (GDP) is the sum of gross value added by all resident producers plus any product taxes and minus subsidies not included in the value of the products. Calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources. PPP GDP is GDP converted to international dollars using PPP rates. Data are in constant 2005 international dollars. [CAREC average is population-weighted.] Source: World Bank. World Development Indicators Online.
GDP per capita PPP (constant 2005 international \$)	Definition: GDP (see above) divided by a country's population. Source: World Bank. World Development Indicators Online.
Real GDP growth rate (%)	Definition: Average annual growth of GDP (see above).
Tiour des growal rate (18)	Source: World Bank. World Development Indicators Online.
Labor force participation rate (%)	Definition. Percentage of the working-age population (ages 15–64) that actively engages in the labor market by either working or actively looking for work. [CAREC average is population-weighted.] Source: World Development Indicators Online.
Women employed in nonagricultural sector (%)	Definition: Share of female workers in wage employment in the nonagricultural sector expressed as a percentage of total wage employment in that sector. Nonagricultural sector includes industry and services. Following the International Standard Industrial Classification of All Economic Activities, "industry" includes mining and quarrying (including oil production), manufacturing, construction, electricity, gas, and water. "Services" includes wholesale and retail trade; restaurants and hotels; transport, storage and communications; financing, insurance, real estate and business services; and community, social and personal services. Source: United Nations Statistics Division. Millennium Development Goals Indicators Online.
Real growth in trade of goods and services (%)	Definition: Average annual growth rate of total exports and imports in goods and services, deflated by import and export prices maintained by Development Prospects Group 2000. This indicator reflects the trade expansion of a country over the period. Source: World Bank. World Trade Indicators Online.
Trade openness (%)	Definition: Trade openness is measured using the trade volume approach where export and import of goods and services are divided by GDP in constant \$ price (exports+imports/GDP). This methodology allows time series analysis of results.

Appendix 2

Table A2.1 continued

Indicator	Definition and Source
Gross Domestic Product, Trade, and Business Devel	opment
Intraregional energy trade (GWh)	Definition: Total volume of regional electric trade in gigawatthours of CAREC members Afghanistan, Kazakhstan, the Kyrgyz Republic, Tajikistan, Turkmenistan, and Uzbekistan.
	Source: Central Dispatch Center, Tashkent, Uzbekistan.
GDP per unit of energy use (2005 PPP \$ per kilogram of oil equivalent)	Definition: The ratio of GDP to energy use indicates energy efficiency. GDP per unit of energy use is the ratio of GDP per kilogram of oil equivalent of energy use, with GDP converted to 2005 constant international dollars using PPP rates. An international dollar has the same purchasing power over GDP that a dollar has in the US. Energy use refers to the use of primary energy before transmission to other end-use fuel, which is indigenous production plus imports and stock changes minus exports and fuel supplied to ships and aircraft engaged in international transport.
	Source: World Bank. World Development Indicators Online.
Foreign direct investment, net inflows (% GDP)	Definition: International investment that obtains a lasting interest (at least 10%) in an enterprise resident in another economy. The components of foreign direct investment (FDI) are equity capital, reinvested earnings and other capital (mainly intra-company loans). As countries do not always collect data for each of those components, reported data on FDI are not fully comparable across countries. In particular, data on reinvested earnings, the collection of which depends on company surveys, are often unreported by many countries.
	Source: World Bank. World Development Indicators Online.
Time required to start a business (days)	Definition: The time, in calendar days, needed to complete the required procedures for legally operating a business. If a procedure can be expedited at additional cost, the fastest procedure, independent of cost, is chosen. The measure captures the median duration that incorporation lawyers indicate is necessary to complete a procedure with minimum follow-up with government agencies and no extra payments. The minimum time required for each procedure is 1 day and, although procedures may take place simultaneously, they cannot start on the same day. A procedure is considered complete once the company has received the final document.
	Source: International Finance Corporation/World Bank. Doing Business Online.
Cost of business start-up procedures (% GNI per capita)	Definition: The cost, as a percentage of the economy's per capita income, including all official fees and fees for legal or professional fees, fees for purchasing and legalizing company books, if such services are required by law for an entrepreneur to start up and formally operate an industrial or commercial business.
	Source: International Finance Corporation/World Bank. Doing Business Online.

Results Framework Definitions and Sources

Table A2.1 continued

Indicator	Definition and Source
Monitoring CAREC 2020: Intermediate Output Indica	tors
Intraregional trade in total CAREC trade (%)	Definition: The ratio of total trade of CAREC countries with each other to the CAREC countries' total trade with the world. Total trade is the sum of exports and imports. The higher the ratio, the more integrated the CAREC countries are. Source of basic data: International Monetary Fund. Direction of Trade Statistics (DOTS). March 2013.
Logistics Performance Index (LPI)	Definition: A weighted average of the country scores on six key dimensions: (1) efficiency of clearance process by border control agencies, (2) quality of trade and transport-related infrastructure, (3) ease of arranging competitively priced shipments, (4) competence and quality of logistics services, (5) ability to track and trace consignments, (6) frequency with which shipments reach the consignee within the scheduled or expected delivery time. Scores can range from 1 for low to 5 for high performance. Source: World Bank. 2012. Connecting to Compete: Trade Logistics in the Global Economy. The Trade Logistics Performance Index and Its Indicators.

CAREC = Central Asia Regional Economic Cooperation, GNI = gross national income.

Appendix 2

Table A2.2 Level 2—CAREC Priority Sector Outputs

Indicator	Definition and Source
Transport and Trade Facilitation Sectors	
Expressways or national highways built or improved (km)	Definition: Length of expressways (i.e., fully access controlled highways) built or improved, expressed in kilometers (km). Access control means no direct crossings. "Expressways" can include roads that in certain countries are called highways if they have full access control. "Improving" includes all activity to restore a degraded road to originally intended design capacity (repair/rehabilitation) and to improve on its design capacity (e.g., by widening). "Improving" cannot be applied in cases where only road signage is improved. Source: Transport Sector Coordinating Committee, Country Reports for transport indicators.
Proportion of total CAREC road corridor built or improved (%)	Definition: Percentage total of all CAREC road corridors built or improved through CAREC investment activities that meet appropriate international roughness index standards. Road should be open to public use. Source: Transport Sector Coordinating Committee, Country Reports for transport indicators.
Time taken to clear a border crossing (minutes)	Definition: The average duration (in minutes) taken to move cargo from an exit point of a country to the entry point of another country. The entry and exit points are typically a primary control center where customs, immigration, and quarantine are done. Besides the standard formalities to clear customs, immigration, and quarantine, this measurement also includes waiting time, unloading and loading time, change of rail gauges and so forth, to capture both complexity and inefficiencies inherent in the border crossing process. This indicator is normalized at 500 km as a basis of unit, so that duration between long and short corridors is comparable. Source: CAREC Corridor Performance Measurement and Monitoring (CPMM) Reports.
Costs incurred at a border crossing clearance (\$)	Definition: The average of total expenses (\$) to move cargo from an exit point of a country to the entry point of another country. The entry and exit points are typically a primary control center where customs, immigration, and quarantine are done. Both official and unofficial payments are included. This indicator is normalized at 500 km as a basis of unit, so that average cost between long and short corridors is comparable. Source: CAREC CPMM Reports.
Speed to travel 500 km on CAREC Corridor section (kph)	Definition: The average speed for a unit of cargo to travel within the country and across borders. A unit of cargo refers to a cargo truck with 20 tons of goods (for road transport) or a rail wagon with one 20-foot equivalent unit (for rail transport). Speed is calculated by taking the total distance traveled divided by the total time taken; both distance and time include border crossings. Source: CAREC CPMM Reports.

Table A2.2 continued

Indicator	Definition and Source
Costs incurred to travel corridor section (\$)	Definition: The average of total costs "with delays" incurred for a unit of cargo to travel within the country and across borders. A unit of cargo refers to a cargo truck with 20 tons of goods (for road transport) or a rail wagon with one 20-foot equivalent unit (for rail transport). Both official and unofficial payments are included.
	Source: CAREC CPMM Reports.
Trade Policy Sector	
CAREC trade liberalization index	Definition: Composite indicator measuring achievement in prioritized actions leading toward effective trade liberalization, as a first step in the process of World Trade Organization accession. Progress is monitored in the following areas: (i) tariffication of quantitative restrictions, (ii) tariff simplification, and (iii) reduction of impediments to transit trade.
	Source: Data are extracted from an annual International Monetary Fund-conducted questionnaire survey of CAREC partners.
Energy Sector	
Transmission lines installed or upgraded (km)	Definition: Transmission lines ≥110 kilovolt (some countries may report only ≥ 220 kilovolt, which was accepted by the committee because it will under-report performance), constructed or upgraded (km). Source: Energy Sector Coordinating Committee (ESCC), CAREC-
	related project completion and validation reports, and CAREC multilateral institution online project databases.
Increased energy generation capacity (MW)	Definition: Increased energy generation capacity (expressed in megawatts [MW]) is incremental capacity for new generation of 50 MW or above created by the project, and the aggregate of the following categories: (i) MW capacity of new power plant projects; (ii) incremental MW as the result of rehabilitation project; and (iii) MW-equivalent capacity of heating supply added. Source: ESCC, CAREC-related project completion and validation reports, and CAREC multilateral institution online project
D. I.	databases.
Rehabilitated generation capacity (MW)	Definition: Rehabilitated generation units of 50 MW or above: percentage of funds spent on rehabilitation over total needed rehabilitation costs, expressed proportionally in MW.
	Source: ESCC, CAREC-related project completion and validation reports, and CAREC multilateral institution online project databases.

Appendix 2

Table A2.2 continued

Indicator	Definition and Source
New substations installed (MVA)	Definition: New substations added of 220 kV or above (megavolt-ampere [MVA]).
	Source: ESCC, CAREC-related project completion and validation reports, and CAREC multilateral institution online project databases.
Substations upgraded (MV)	Definition: Rehabilitated substations of 220 kV or above: percentage of funds spent on rehabilitation over total needed rehabilitation costs, expressed proportionally in MVA.
	Source: ESCC, CAREC-related project completion and validation reports, and CAREC multilateral institution online project databases.

 ${\sf CAREC} = {\sf Central} \ {\sf Asia} \ {\sf Regional} \ {\sf Economic} \ {\sf Cooperation}, \ {\sf kph} = {\sf kilometer} \ {\sf per} \ {\sf hour}, \ {\sf kV} = \ {\sf kilovolt}.$

Results Framework Definitions and Sources

Table A2.3 Level 3—Operational and Organizational Effectiveness

Indicator	Definition
Operations Growth	
Volume of approved investment projects (loans and grants; cumulative since 2001, \$ million)	Total volume of approved CAREC-related projects, jointly financed by CAREC governments and multilateral institution partners, cumulative since 2001
Number of approved investment projects (loans and grants, cumulative since 2001)	Number of approved CAREC-related projects, jointly financed by CAREC governments and multilateral institution partners, cumulative since 2001
Number of completed investment projects (loans and grants, cumulative since 2001)	Number of completed CAREC-related projects, based on multilateral institution-validated project completion reports
Finance Mobilization	
Annual average volume of new approved investment projects (loans and grants, 3-year rolling average, \$ million)	Total volume of CAREC-related projects (loans and grants) from all CAREC partner multilateral institutions and country governments, approved during 12-month period under review
CAREC technical assistance financing gap (\$ thousand)	Outstanding funding gap for proposed/approved priority sector technical assistance projects, forecast for current 12-month period
Knowledge Management	
Ratings of CAREC-related technical assistance projects completed (% successful)	Number of completion reports issued for CAREC-related technical assistance projects in the review period with "successful or better" ratings as a percentage of total technical assistance completion reports circulated in the same year. Technical assistance projects that lead and/or contribute directly to investment projects—and which often do not have completion reports—are also counted as successful.
Knowledge sharing and dissemination: work-in-progress	Pending
Participants in CAREC-supported training programs (number of person days)	Total count of individuals successfully completing CAREC- sponsored training programs during 12-month period under review, multiplied by the total number of days

CAREC = Central Asia Regional Economic Cooperation.

Sources: CAREC Program project portfolio, CAREC-related project completion and validation reports, CAREC multilateral institution partner online project databases, CAREC website.

CAREC Region Development Outcomes

Table A3.1 Millennium Development Goals in the CAREC Region

Indicator	2005 Baseline Year	2008	2011/ Latest Value
Population living below \$1.25 (PPP) a day (%) ^a	19.7	17.5	13.0 (2010)
Children under 5 moderately or severely underweight (%)	24.6	22.4	21.1 (2010)
Total net enrollment ratio in primary education, both sexes ^b	70.7	73.9	78.0 (2010)
Pupils starting Grade 1 who reach last grade of primary, both sexes $(\%)^{\text{b}}$	75.1	68.7	69.8 (2010)
Primary education completion rate, both sexes (%) ^c	66.4	64.5	68.4 (2010)
Gender parity index in primary level enrollment ^c	0.76	0.81	0.82 (2010)
Gender parity index in secondary level enrollment°	0.78	0.77	0.78 (2010)
Gender parity index in tertiary level enrollment ^c	0.82	0.80	0.82 (2010)
Children under 5 mortality rate per 1,000 live births	83.9	77.4	71.4
Infant mortality rate (0–1 year) per 1,000 live births	66.1	61.4	57.1
Adults (15+) living with HIV (number, million)°	0.061	0.102	0.184
Women (15+) living with HIV (number, million) ^d	0.009	0.012	0.018
Tuberculosis prevalence rate per 100,000 population	386	330	326 (2010)
Tuberculosis death rate per 100,000 population	41	31	31 (2010)
Land area covered by forest (%)	3.9	3.9	3.9
Protected area to total surface area (%)	5.8	5.8	11.7
Consumption of ozone-depleting CFCs (ODP metric tons) ^e	645.8	214.0	39.2 (2009)
CO ₂ emissions (metric tons per capita)	2.0	2.4	2.3 (2009)
Population using improved drinking water source (% of population with access)	84	85	86 (2010)
Population using improved sanitation facilities (% of population with access)	55.2	57.1	58.7 (2010)

 $[\]dots$ = no data available, CAREC = Central Asia Regional Economic Cooperation, CFC = chlorofluorocarbon, CO₂ = carbon dioxide, ODP = ozone-depleting potential, PPP = purchasing power parity.

Note: Comparable subnational data for Xinjiang Uygur Autonomous Region and Inner Mongolia Autonomous Region of the People's Republic of China are not available; therefore these two regions are not reflected in the table.

Sources: Millennium Development Goals Online Database; World Bank. PovcalNet Online Database; World Bank. World Development Indicators Online Database.

^a No data for Afghanistan, Mongolia, and Uzbekistan.

b No data for Afghanistan and Turkmenistan.

No data for Turkmenistan.

d No data for Pakistan, Turkmenistan, and Uzbekistan.

^e No data for Azerbaijan, Kazakhstan, Tajikistan, and Uzbekistan.

CAREC Region Development Outcomes

Table A3.2 Level 1 Country Groupings—International Finance Corporation/ World Bank's *Doing Business*

East Asia and the Pacific		
Brunei Darussalam Cambodia China, People's Republic of Fiji Hong Kong, China Indonesia Kiribati Lao People's Democratic Republic	Malaysia Marshall Islands Micronesia, Federated States of Mongolia Palau Papua New Guinea Philippines Samoa Singapore	Solomon Islands Taipei,China Thailand Timor-Leste Tonga Vanuatu Viet Nam
Eastern Europe and Central Asia		
Albania Armenia Azerbaijan Belarus Bosnia and Herzegovina Bulgaria Croatia Cyprus	Georgia Kazakhstan Kosovo Kyrgyz Republic Latvia Lithuania Macedonia, FYR Moldova	Montenegro Romania Russian Federation Serbia Tajikistan Turkey Ukraine Uzbekistan
South Asia		
Afghanistan Bangladesh Bhutan	India Maldives Nepal	Pakistan Sri Lanka
Organisation for Economic Co-operation	n and Development Country Group	
Australia Austria Belgium Canada Czech Republic Denmark Estonia Finland France Germany Greece	Hungary Iceland Ireland Israel Italy Japan Korea, Republic of Luxembourg The Netherlands New Zealand Norway	Poland Portugal Slovak Republic Slovenia Spain Sweden Switzerland United Kingdom United States

Source: International Finance Corporation/World Bank. Doing Business Online Database 2013.

Appendix 3

Table A3.3 Level 1 Country Groupings—World Bank's World Development Indicators

Europe and Central Asia (develo	oping countries only)	
Albania Armenia Azerbaijan Belarus Bosnia and Herzegovina Bulgaria Georgia Kazakhstan	Kosovo Kyrgyz Republic Latvia Lithuania Macedonia, FYR Moldova Montenegro Romania	Russian Federation Serbia Tajikistan Turkey Turkmenistan Ukraine Uzbekistan
South Asia		
Afghanistan Bangladesh Bhutan	India Maldives Nepal	Pakistan Sri Lanka

Source: World Bank. World Development Indicators Online Database 2012.

APPENDIX 4

2012 CAREC Program Portfolio

Table A4.1 CAREC Investment Projects (Loans and Grants) Approved in 2012

Project	Country	Year of Approval	Year of Closing	Funding Agencies	Funding (\$ million)	Total Funding (\$ million)	Brief Description of Project
TRANSPORT							
Transport Network Afghanistan Development Investment Program – Tranche 2 [Multitranche Financing Facility (MFF)] (Grant)	Afghanistan	2012	2016	ADB Government of Afghanistan AITF	176 19 60	255	The subprojects under this second MFF tranche will increase capacity for cross-border links and help improve the economy of southern Afghanistan. One of the two components of this MFF is transport and infrastructure development, which includes the reconstruction and widening of about 106 kilometers (km) of the Sapary to Jalalabad road, the 32 km Chan-e-Anjir to Gereshk road and the 50 km Sharan to Angoor Ada Road. The second component includes the transport network management capacity development of the Ministry of Public Works. The first tranche released in 2011 expanded and rehabilitated major sections of Afghanistan's roads including the (i) 50 km between Bagramy-Sapary, (ii) 51 km between Jabul Saraj-Nijrab, and (iii) 44 km between Faizabad-Beharak. Tranche 1 also supported the Railway Project O&M contract, including additional project facilities and equipment to ensure its efficiency.
Road Network Development Investment Program – Project 2 (Supplementary) [MFF] (Grant)	Afghanistan	2012	2016	AITF	30	30	This supplementary grant supports the second project of Afghanistan's Road Network Development Investment Program. The financing, which is provided by the ADB-administered Afghanistan Infrastructure Trust Fund (AITF), will increase the country's road network connectivity and improve the institutional development component of the Afghanistan National Development Strategy. The project will rehabilitate the 90 km Aisar–Bala Murghab section of Herat–Andkhoy road and construct approximately 143 km of the Bala Murghab–Laman section.

Table A4.1 continued

	or the ble es of allation will be i project adote d	ction in the zakhstan. and 3, vernent The Jors. The it toward	road ek-Zholy rade by ajikistan to	the ed mization naty— xpected C Road
Brief Description of Project	This government-financed project with support from the World Bank is for the construction, renovation, and rehabilitation of the 286 km electrified double track, passenger dedicated high-speed rail line between the northern cities of Zhangjiakou and Hohhot. The project will involve the acquisition and installation of goods, maintenance equipment, and rolling stocks while some funds will be allocated to land acquisition and resettlement of affected population. The project aims to improve accessibility and mobility along the Zhangjiakou-Huhehaote (Hohhot) corridor through the provision of additional railway capacity and reduction of transport time for passengers and freight.	The project will rehabilitate the 37 km four-lane asphalt-paved road section in the capital Tashkent and Shymkent, one of the major industrial cities in Kazakhstan. The project will start from Shymkent, a junction of CAREC Corridors 1 and 3, and is expected to extend benefits to the ongoing ADB-financed improvement works and will enhance the trading of commodities from/to Shymkent. The project will amplify regional cooperation and trade along CAREC Corridors. The project is expected to improve the 37 km four-lane road from Shymkent toward Tashkent road networks in South Kazakhstan region.	This EBRD-financed project will be for the reconstruction of the 62 km road section connecting the city of Shymkent and Uzbekistan border at Zhibek–Zholy post. The road reconstruction will accelerate development of regional trade by facilitating the transit of goods and passengers from Uzbekistan and Tajikistan to Kazakhstan, the Russian Federation, and Western Europe.	The World Bank road project involves the upgrade and construction of the Almaty–Khorgos road section within Almaty Oblast, including associated bypasses, bridges, interchanges, and ancillary facilities; and for modernization of highway management and supervision of civil works along the Western Europe–Western PRC road corridor. The upgraded and constructed Almaty–Khorgos road section with the modernized highway management are expected to increase transport efficiency along the Western Europe–Western PRC Road Corridor within Almaty Oblast.
	This goverr constructio track, pass Zhangjiakou of goods, n allocated to aims to imp (Hohhot) cc reduction o	The project capital Tash The project and is expe works and project will project will project is e Tashkent re	This EBRD section cor post. The refacilitating Kazakhstar	The World Almaty—Kh bypasses, of highway Europe—We Khorgos ro to increase Corridor wi
Total Funding (\$ million)	4,682	175	197	1,256
Funding (\$ million)	200	50	197	1,068
Funding Agencies	World Bank Government of the PRC	ADB Government of Kazakhstan	EBRD	World Bank Government of Kazakhstan
Year of Closing	2017	2016	2016	2017
Year of Approval	2012	2012	2012	2012
Country	People's Republic of China (PRC)	Kazakhstan	Kazakhstan	Kazakhstan
Project	ZhangHu Railway Project (Loan)	CAREC Corridor 3 (Shymkent– Tashkent Section) Road Improvement Project (Loan)	Shymkent— Tashkent Road Reconstruction Project (Loan)	East-West Roads Project (Almaty- Korgos Section): Western Europe- Western People's Republic of China International Transit Corridor (CAREC 1b)

Table A4.1 continued

l ng Brief Description on) of Project	The project will finance the (i) rehabilitation and reconstruction of approximately 113 km road between Ayni–Panjakent and the border with Uzbekistan, (ii) improvement of road safety, (iii) upgrading of Sarazm border post infrastructure, (iv) community development, including improvement of feeder roads and public facilities, and (v) training for local communities. The project will enhance regional cooperation and will lead to inclusive economic growth in Tajikistan, particularly in the Sughd province. The project is expected to improve connectivity and mobility along the CAREC Corridor 6 (Ayni–Uzbekistan Border Road). The outputs will include approximately 113 km of rehabilitated and reconstructed road between Ayni–Panjakent and the border with Uzbekistan; improved road safety; upgraded Sarazm border post infrastructure; and improved local communities.	The project involves the improvement of the 4.6 km section of the 62 km M41 highway between Dushanbe and the border of Uzbekistan, including road widening from three to four lanes; constructing flyover and underpass; and constructing a new asphalt road. The project will improve the domestic and international transport of goods and services. The planned improvement of the 4.6 km highway of CAREC Corridor 3 will contribute to reduced traffic congestion, reduced air emissions, and improved road safety.	This third periodic financing request (PFR 3) includes two components. The first component is road development, which involves land acquisition of 0.61 hectare and civil works on about 40 km of the Uzbekistan section of CAREC Corridor 2 Road (between Km 315 and Km 355 of A380 highway) to achieve the four-lane international design standard within the existing right-of-way. The second component is for Road Sector Sustainability, which will provide for the improvement of cross-border facilities at Daut-ata to shorten the border processing time, expand the community development program and institutional capacity. The expected outcome of the project is better connectivity and efficient transport system along the Uzbekistan section of CAREC Corridor 2. Previous financing includes an approved loan in 2010 worth \$146 million, which involved rehabilitation of about 50 km of the Uzbekistan section of CAREC Corridor 2 (between Km 440 and 490 of A380 highway), expanded and implemented the road asset management system, and supported capacity building for the Road Fund and the local communities living along the road. The second tranche was in 2011 worth \$289 million and was used to reconstruct about 222 km of the A380 highway and strengthened transport logistics and road sector sustainability.
Total Funding (\$ million)	136	197	117
Funding (\$ million)	100	120 35 42	100
Funding Agencies	ADB OPEC Fund for International Development Government of Tajikistan	ADB EBRD Government of Tajikistan	ADB Government of Uzbekistan
Year of Closing	2016	2015	2014
Year of Approval	2012	2012	2012
Country	Tajikistan	Tajikistan	Uzbekistan
Project	CAREC Corridor 6 (Ayni–Uzbekistan Border Road) Improvement Project (Grant)	Dushanbe– Uzbekistan Border Road Improvement Project (Loan)	CAREC Corridor 2 Road Investment Program, Project 3 (Loan)

Project	Country	Year of Approval	Year of Closing	Funding Agencies	Funding (\$ million)	Total Funding (\$ million)	Brief Description of Project
ENERGY							
Energy Sector Development Investment Program — Tranche 4 [MFF] (Grant)	Afghanistan	2012	2016	ADB	200	200	This fourth tranche under the MFF of the Energy Sector Development Investment Program involves the design, supply, and installation of (i) new transmission lines with 500 kilovolt (kV) from the international border of Afghanistan and Turkmenistan and 220 kV from Sheberghan to Mazar-e-Sharif; (ii) substation lines with 220 kV at Andkhoy and Sheberghan and expansion of the existing 220 kV at Mazar-e-Sharif, and (iii) new distribution networks with 20 kV at Pul-e-Alam and 20 kV at Gardez for 10,000 new household connections for each area; and extension of the existing 220 kV Pul-e-Alam and Gardez substations. The first three tranches released in 2008, 2009, and 2011 provided stable energy supply by having additional gas production and increased hydropower generation capacity in the country.
Shardara HPP Modernization Project (Loan)	Kazakhstan	2012	2016	EBRD	50	£50	This EBRD power project involves the rehabilitation of the Shardara hydropower plant, including the replacement of four existing power-generating units. The improved efficiency and increased capacity of the hydro units will reduce the utilization of thermal power plants, and therefore will decrease greenhouse gas emissions and reduce environmental pollution. The project will also result in indirect energy saving as it will meet local demand, and thus will lessen electricity imports and related transmission losses.
Power Sector Rehabilitation Project (Loan, Grant)	Kyrgyz Republic	2012	2016	ADB Loan Grant Government of the Kyrgyz Republic	15 40 7	62	This power sector investment will be for the (i) rehabilitation of Toktogul hydroelectric power, (ii) establishment of an electricity transactions settlement center, (iii) conduct of safety assessment of dams on the Naryn cascade, and (iv) conduct of public information program on sector reforms. The project will improve energy supply, reduce system commercial losses, identify dam rehabilitation measures, and inform the public on sector developments. The expected outputs of this project include the rehabilitated 1,200 MW Toktogul HEPP, electricity transaction centers, dam assessment, and informed public on these power developments.

Table A4.1 continued

Project	Country	Year of Approval	Year of Closing	Funding Agencies	Funding (\$ million)	Total Funding (\$ million)	Brief Description of Project
Namangan 500 Kilowalt	Uzbekistan			ADB	150	288	This power project will provide new high-voltage transmission assets to secure
Soo-kilovoli Power Transmission				Government of Uzbekistan	55		the power supply to retigate variey and implement insulational citatiges in the power utility company, Uzbekenergo. The project will increase energy security through the diversification and expansion of energy supply routes, improve
Project (Loan)							power supply reliability particularly in the Namangan, Fergana, and Andijon provinces, reduce transmission losses, and improve operational efficiency of
				Uzbekenergo	83		the power sector. The outputs of the project include (i) construction of (a) 500 kV overhead transmission line of approximately 175 km between Novo Angren
							Thermal Power Plant (TPP) and Namangan Substation; and (b) rerouting of 220
							kV overhead transmission lines of approximately 32 km between Kuzyl-Ravat- Sardor and Sardor-Crystal and Namangan Substation; (ii) construction of 500
							kV/220 kV Namangan Substation and reconstruction of outdoor switchgear
							Joo ky at the Novo Alighell FF, and (iii) iniplenentation of the operational Improvement Program in transmission system planning, transmission asset
							management, and preparation of a feasibility study for the Supervisory Control
							and Data Acquisition System (SCADA).

ADB = Asian Development Bank, AITF = Afghanistan Infrastructure Trust Fund, CAREC = Central Asia Regional Economic Cooperation, EBRD = European Bank for Reconstruction and Development, O&M = operation and maintenance, OPEC = Organization of the Petroleum Exporting Countries.

Table A4.2 CAREC Investment Projects (Loans and Grants), Completed in 2012

 $\mathsf{ADB} = \mathsf{Asian} \ \mathsf{Development} \ \mathsf{Bank}.$

Table A4.3 CAREC Technical Assistance Projects, Approved in 2012

Technical Assistance Project	Country	Year of Approval	Year of Closing	Funding Agencies	Funding (\$)	Total Funding (\$)
TRANSPORT						
Transport Network Development Investment Program – Tranche 2	Afghanistan	2012	2012	ADB	225	225
Second Road Network Development Program	Azerbaijan	2012	2013	ADB	225	225
CAREC Corridor 3 (Shymkent-Tashkent) Improvement Project	Kazakhstan	2012	2012	ADB	225	225
CAREC Corridor 3 (Bishkek-Osh) Improvement Project, Phase 4	Kyrgyz Republic	2012	2013	ADB	1,000	1,000
Roads Improvement Project	Tajikistan	2012	2013	ADB Government of Tajikistan	100	006
Midterm Review of CAREC Transport and Trade Facilitation Strategy and Implementation Action Plan	REG	2012	2013	ADB	1,500	1,500
TRADE FACILITATION						
Diagnostic Trade Integration Study	Afghanistan	2012	2012	World Bank	160	160
Addressing Trade Logistics Bottlenecks and Facilitating International Trade and Transportation in Central Asia	REG	2012	2013	World Bank	200	200
CAREC Working with the Private Sector in Trade Facilitation (Phase II)	REG	2012	2014	ADB	1,261	1,261
ENERGY						
Tajikistan, Afghanistan, Pakistan, India (TAPI) Phase 3	REG	2012	2014	ADB	1,500	1,500
Takhiatash Power Modernization Project	Uzbekistan	2012	2014	ADB	1,200	1,200

continued on next page

Table A4.3 continued

Technical Assistance Project	Country	Year of Approval	Year of Closing	Funding Agencies	Funding (\$)	Total Funding (\$)
MULTISECTOR/SECOND TIER						
Effective Disaster Risk Management for Sustainable Human Development and Security	Kyrgyz Republic	2012	2016	UNDP	903	2,683
				BCPR, MDTF	1,780	
Community-Based Disaster Risk Reduction in South-East Kazakhstan	Kazakhstan	2012	2013	UNDP	103	574
				ЕС (ЕСНО)	471	
Integrating Climate Change Risks into Water and Flood Management by Vulnerable Mountainous Communities in the Greater Caucusus Region	Azerbaijan	2012	2017	UNDP	260	2,960
				GEF	2,700	
Facilitating Cross-Border Transport in the Central Asia Regional Economic Cooperation (Phase 1)	REG	2012	2015	ADB	1,500	1,500
Enhancing Coordination of the CAREC Program	REG	2012	2015	ADB	3,000	3,000
CAREC: Supporting Capacity Development Needs of CAREC 2020	REG	2012	2015	ADB	1,500	1,900
				TASF/PRCF	400	
Assisting the CAREC Institute Knowledge Program (Phase 1)	REG	2012		ADB	1,500	1,500

ADB = Asian Development Bank, BCPR = Bureau for Crisis Prevention and Recovery, CAREC = Central Asia Regional Economic Cooperation, EC = European Commission, ECHO = European Community Humanitarian Office, GEF = Global Environmental Facility, MDTF = Multi Donor Trust Fund, REG = regional, PRCF = Poverty Reduction Cooperation Fund, TASF = Technical Assistance Support Fund, UNDP = United Nations Development Programme.

Table A4.4 CAREC Technical Assistance Projects, Closed in 2012

Technical Assistance Project	Country	Year of Approval	Year of Closing	Funding Agencies	Funding (\$)	Total Funding (\$)
TRANSPORT						
Railway Electrification Investment Program	Uzbekistan	2011	2012	ADB	225	225
Road Database Development Using Geographic Information System	Mongolia	2009	2012	ADB	200	009
				Government of Mongolia	100	
TRADE FACILITATION						
Diagnostic Trade Integration Study	Afghanistan	2012	2012	World Bank	160	160
Modernization of Customs Services in Azerbaijan Project	Azerbaijan	2011	2012	UNDP	30	450
				Government of Azerbaijan	420	
Supporting Integrated Border Management Systems in the South Caucasus	Azerbaijan	2010	2012	UNDP	96	1,865
				European Union	1,769	
Growing Inclusive Markets in Eastern Europe and the CIS (Kazakhstan Uzhekistan Kosovo Rosnia and Herzenovina)	REG	2009	2012	UNDP	551	1,429
				TIKA	878	
ENERGY						
Power Sector Rehabilitation Project	Kyrgyz Republic	2010	2012	ADB	1,000	1,100
				Government of the Kyrgyz Republic	100	
Power Distribution Development Investment Program	Azerbaijan	2009	2012	ADB	1,000	1,250
				Government of Azerbaijan	250	

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Table A4.4 continued

Technical Assistance Project	Country	Year of Approval	Year of Closing	Funding Agencies	Funding (\$)	Total Funding (\$)
Mitigation of Trans-Boundary Air Pollution from Coal-Fired Power Plants in North-East Asia	People's Republic of China (PRC)	2006	2012	ADB	006	1,200
	Mongolia			UNESCAP	300	
MULTISECTOR/SECOND TIER						
Strengthening CAREC, 2007–2012 (Supplementary)	REG	2011	2012	ADB	750	750
Capacity Development for Radioactive Waste Management and Early Warning System in Fergana Valley	Uzbekistan	2011	2012	UNDP	45	129
				Government of Germany	84	
Strengthening Coordination of Project Formulation and Mobilization of Resources for Sustainable Radioactive Waste Management in	Kyrgyz Republic	2012	2012	AGNN	100	009
Central Asia				ENVSEC	200	
Strengthening CAREC 2007–2009 (Supplementary)	REG	2010	2012	ADB	3,000	3,000

ADB = Asian Development Bank, CAREC = Central Asia Regional Economic Cooperation, CIS = Commonwealth of Independent States, ENVSEC = Environment and Security Initiative, GEF = Global Environmental Facility, REG = Regional, TIKA = Turkish Cooperation and Development Agency, UNESCAP = United Nations Economic and Social Commission for Asia and the Pacific.

Table A4.5 CAREC Multitranche Financing Facility Investments, Ongoing in 2012

MFF Investment Name	Country	Year of Approval	Funding Agencies	Funding (\$ millions)	Total Funding (\$ millions)	Brief Description of Project
TRANSPORT AND TRADE FACILITATION	RADE FACILITATION	NO				
Multitranche Financing Facility (MFF): Road Network Development Investment Program (Grant)	Afghanistan	2008	ADB World Bank USAID Government of Afghanistan	400 400 300	1,250	The overall investment program involves the physical construction of about 2,900 kilometer (km) of national roads and maintaining about 1,500 km of existing ones while the nonphysical part includes the reorganization of the Ministry of Public Works, the creation of a new agency to deal with national roads, the establishment of a maintenance facility, introduction of improved traffic safety measures, and training programs to improve planning and project management. The first tranche was approved in 2008 and covered the cost overruns under the 240 km Andkhoy–Qaisar Road Project and 238 km North–South Corridor Project. The second tranche released in 2010 rehabilitated the 90 km Qaisar–Bala Murghab section of the Herat–Andkhoy road, and constructed the Bala Murghab–Laman section (approximately 143 km), including the related civil works, overall project and contract management, construction supervision and monitoring, security arrangements and related community development works.
MFF: Transport Network Development Investment Program (Grant)	Afghanistan	2011	ADB Government of Afghanistan AITF	754 18 33	805	This investment program will be for the physical and nonphysical improvements in road and railway networks in the country to further improve domestic and regional connectivity and widen access to social and economic opportunities from Central Asia to markets in the south, east, and west. The outputs of the project include the (i) 578 km of reconstructed/rehabilitated regional and national roads, (ii) construction of 225 km railway and stations between Mazar–e–Sharif and Andkhoy, (iii) efficient operation and maintenance of the Hairatan to Mazar railway line, (iv) strengthened capacity of the Ministry of Public Works, and (v) improved transport sector governance. The first tranche 2011 improved the (i) 50 km road between Bagramy–Sapary, (ii) 51 km road between Jabul Saraj–Nijrab, and (iii) 44 km road between Faizabad–Beharak, supported the operation and maintenance contract of the railway project assistance for the improved planning at the Ministry of Transport; and a new road and rail asset management system. The second tranche approved in 2012 will be used to reconstruct the remaining (i) 106 km section of the Kabul to Jalalabad road, (ii) 112 km of the Faizabad to Eshkashem road, and (iii) 33 km of the Lashkar Gah to Gereshk road.

MFF Investment Name	Country	Year of Approval	Funding Agencies	Funding (\$ millions)	Total Funding (\$ millions)	Brief Description of Project
MFF: Road Network Development Program (Loan)	Azerbaijan	2007	ADB Government of Azerbaijan EBRD, ISDB, World Bank	500 350 2,511	3,361	This MFF program aims to develop an adequate, efficient, safe, and sustainable road network, linking Azerbaijan domestically and internationally. Its outputs include improved and efficient national road network and management, which are under two components: (i) road infrastructure development, and (ii) road network management capacity development. The first tranche of the project was released in 2007 and constructed about 59 km of a new four-lane expressway between Masali and Astara on the border with Iran and rehabilitated about 120 km of local roads leading to the said expressway, installed weighing station, procured road maintenance equipment, and provided the necessary management assistance for the project's implementation. The succeeding tranches released in 2008 and 2011 upgraded the road between Ganja and Qazakh from two-lane to four-lane, developed cross border infrastructure and facilities in Astara, and supported capacity building for road network management.
MFF: Second Road Network Development Investment Program (Loan)	Azerbaijan	2012	ADB Government of Azerbaijan	500	625	This investment program will construct an approximately 63 km section of the motorway between Masalli and Shorsulu, along the South–North corridor of the country and also includes nonphysical investment for road safety improvement and capacity development to obtain greater economic growth and expanded trade with neighboring countries. The project is foreseen to produce an efficient, adequate, safe, and sustainable southern motorway corridor from Baku in Azerbaijan.
MF: CAREC Corridor I Corridor I (Zhambyl Oblast Section) [Western Europe–Western PRC International Transit Corridor] Investment Program (Loan)	Kazakhstan	2008	ADB ISDB JICA Government of Kazakhstan	700 414 150 216	1,480	This MFF was conceived to improve and expand the Western Europe—Western PRC International Transit Corridor running from Khorgos, at the PRC border, through Almaty and Shymkent, to the western border with the Russian Federation. Road investments will be made in the PRC, the Kyrgyz Republic, and Tajikistan. The corridor is a flagship transaction under the CAREC program, which runs into Uzbekistan, Turkmenistan, Afghanistan, and Pakistan. Four tranches have already been approved for the project from 2008 until 2011 and were used in road development, reconstruction, upgrading, and installation of road maintenance facilities.

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Table A4.5 continued

MFF Investment Name	Country	Year of Approval	Funding Agencies	Funding (\$ millions)	Total Funding (\$ millions)	Brief Description of Project
MH-: CAREC Corridor 2 (Mangystau Oblast Sections) Investment Program (Loan)	Kazakhstan	2010	ADB Government of Kazakhstan	412	212,1	In investment program will (i) reconstruct 790 km roads of CAREC Corridor 2 in Mangystau, which includes 430 km on the Aktau–Manasha section, 84 km on the Beineu–Akzhigit (Uzbekistan border) section, and the 237 km on the Zhetybai–Fetisovo section; (ii) strengthen capacity for planning, project management, and asset management; and (iii) improve cross-border infrastructure and facilities. The first tranche was provided in 2010 for the reconstruction of the 200 km road sections 372.6 km, 514.3 km, 574 km, and 632.3 km, including culverts and bridges, overpass, road signs and signal posts along accident-prone spots; and institutional support to the Department of Roads of the Ministry of Transport and Communication. The second tranche released in 2012 will be for the reconstruction of about 790 km of the road sections of the CAREC Corridor 2 in the Mangystau Oblast and improving cross-border infrastructure and facilities.
MF: Western Regional Road Corridor Development Program	Mongolia	2011	ADB Government of Mongolia	92	262	This MFF program supports inclusive economic growth and effective regional cooperation by enhancing connectivity in the Western region of Mongolia. The project outputs will provide accessibility to remote areas as well as between western Mongolia and neighboring countries and will open links to economic opportunities and social services, reduce high costs of imports, and improve competitiveness of the region's exports. The first tranche was approved in 2011 and are being used to construct local access roads; maintenance center; and provide capacity building for maintenance, planning, procurement, and project management.
MFF: CAREC Corridor 2 Road Investment Program (Loan)	Uzbekistan	2010	ADB Government of Uzbekistan	990	1,600	This MFF intends to create better connectivity, more efficient transport systems, and institutional effectiveness in Uzbekistan. The investment program is for the reconstruction of approximately 222 km road section of the A380 highway, which connects Uzbekistan to Afghanistan, Kazakhstan, the Kyrgyz Republic, Tajikistan, and Turkmenistan; and strengthening of transport logistics and road sector sustainability. The investment program has strong links to CAREC Corridor 6, which reaches the so-called Ring Road in Afghanistan and thereafter the main ports in Pakistan and Iran. The project already had three tranches approved in 2010 till 2012 and was able to reconstruct about 87% of the A380 highway, strengthened road logistics, improved cross-border facilities and shortened the cross-border processing time.

Table A4.5 continued

MFF Investment Name	Country	Year of Approval	Funding Agencies	Funding (\$ millions)	Total Funding (\$ millions)	Brief Description of Project
MFF: CAREC Corridor 2 Road Investment Program II (Grant)	Uzbekistan	2011	ADB Government of Uzbekistan	500	009	The second CAREC Corridor 2 Investment program MFF for Uzbekistan will boost domestic and international trade, by financing the reconstruction of CAREC Corridor 2, which connects Uzbekistan to Afghanistan, Kazakhstan, the Kyrgyz Republic, Tajikistan, and Turkmenistan. The investment program includes the reconstruction of 236 km section of Corridor 2, and implementation of road system sustainability plans relating to road safety and asset management. The program, with two tranches, approved in 2011 and 2012, helps improve connectivity by reconstructing about 165 km section of Corridor 2 and developed national road infrastructure safety strategy and road safety checklist and guidelines.
ENERGY						
MFF: Energy Sector Development Investment Program (Grant)	Afghanistan	2008	ADB EBRD, Government of Afghanistan, ISDB, World Bank	570 1,762	2,332	The physical and nonphysical outputs of this MFF will lead to a more reliable power system. The physical outputs of this financing include (i) rehabilitation, augmentation, and expansion of the North East Power System (NEPS); (ii) development of distribution systems for load centers supplied from the NEPS; (iii) increased domestic generation capacity through new off-grid greenfield small and mini hydropower plants; and (iv) rehabilitation of gas fields. The nonphysical outputs include (i) training for better system operation and maintenance; (ii) better planning, project management and systems, including the introduction of a management of information system; (iii) metering, billing, and collection of tariffs; and (iv) thematic coverage, including gender mainstreaming and private sector development. Sub-projects have started, which supplied power to some 45,000 new households/commercial/industrial users.

ADB = Asian Development Bank, AITF = Afghanistan Infrastructure Trust Fund, CAREC = Central Asia Regional Economic Cooperation, EBRD = European Bank for Reconstruction and Development, ISDB = Islamic Development Bank, JICA = Japan International Cooperation Agency, PRC = People's Republic of China, USAID = United States Agency for International Development.

Central Asia Regional Economic Cooperation Program Development Effectiveness Review 2012

This Central Asia Regional Economic Cooperation Program (CAREC) Development Effectiveness Review is the fourth annual consolidated picture of progress made by country and multilateral institution partners of CAREC toward economic development through regional cooperation. It measures the performance of CAREC projects and initiatives in transport, trade, and energy during 2012; highlights achievements; identifies areas for improvement; and proposes actions to meet emerging challenges and assist in strategic decision making.

About the Central Asia Regional Economic Cooperation Program

The CAREC Program is a practical, project-based, and results-oriented partnership that promotes and facilitates regional cooperation in transport, trade, energy, and other key sectors of mutual interest. CAREC comprises 10 countries: Afghanistan, Azerbaijan, the People's Republic of China, Kazakhstan, the Kyrgyz Republic, Mongolia, Pakistan, Tajikistan, Turkmenistan, and Uzbekistan. Six multilateral institutions support the work of the CAREC member countries: the Asian Development Bank (ADB), European Bank for Reconstruction and Development, International Monetary Fund, Islamic Development Bank, United Nations Development Programme, and World Bank. ADB serves as the CAREC Secretariat.

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