



Policy Brief

Regional Climate Cooperation – Challenges and Perspectives

By

Nailya Timerkhanova (Mustaeva)

December 2020

Disclaimer

The CAREC Institute workshop report and policy brief series is a forum for stimulating discussion and eliciting feedback on ongoing and recently completed research and workshops undertaken by the CAREC Institute staff, consultants, or resource persons. The series deals with key economic and development issues, particularly those facing the CAREC region, as well as conceptual or analytical issues relating to program or policy design and implementation.

This policy brief is one of the outputs of the Institute's research project of 2020 titled "Climate Insurance, Infrastructure and Governance in CAREC" and the namesake virtual workshop delivered in collaboration with the Asian Development Bank Institute (ADBI) and the Xinjiang Institute of Ecology and Geography of the Chinese Academy of Sciences (XIEG) on 18-19 June 2020.

The policy brief is authored by Nailya Timerkhanova (Mustaeva), international expert on climate change and environment. Dr. Iskandar Abdullaev, Deputy Director Two at the CAREC Institute, and Mr. Shakhboz Akhmedov, Senior Research Fellow of the CAREC Institute, have contributed to the paper. It is reviewed by Ms. Rose Shuai Shao, Capacity Building Specialist, and Mr. Rovshan Mahmudov, Senior Capacity Building Specialist, the CAREC Institute.

The views expressed in this policy brief are the views of the authors and do not necessarily reflect the views or policies of the CAREC Institute, its funding entities, or its Governing Council. The CAREC Institute does not guarantee accuracy of the data included in this paper and accepts no responsibility for any consequences of its use. The terminology used may not necessarily be consistent with the CAREC Institute's official terms.

By making any designation of or reference to a particular territory or geographical area, or by using country names in the report, the author(s) did not intend to make any judgment as to the legal or other status of any territory or area.

This work is available under the Creative Commons Attribution 3.0 IGO license (CC BY 3.0 IGO) <https://creativecommons.org/licenses/by/3.0/igo/>. By using the content of this paper, you agree to be bound by the terms of this license. This CC license does not apply to other copyright materials in this paper. If the material is attributed to another source, please contact the copyright owner or publisher of that source for permission to reproduce it. The CAREC Institute cannot be held liable for any claims that arise as a result of your use of the material.

Central Asia Regional Economic Cooperation (CAREC) Institute
No. 376 Nanchang Road, Urumqi, Xinjiang, the PRC
f: +86-991-8891151

[LinkedIn](#)

km@carecinstitute.org

www.carecinstitute.org

Table of Contents

Abbreviations	4
1. Introduction	5
2. Approach.....	6
3. Regional Cooperation	6
3.1. Challenges	9
3.2. Perspectives	9
4. Conclusion and Recommendations.....	11
Annex 1: Matrix of Regional Climate Change Projects in CAREC.....	15

Abbreviations

ADB	Asian Development Bank
BRI	Belt and Road Initiative
CA	Central Asia
CACCC	Central Asia Climate Change Conference
CAMP4ASB	Climate Adaptation and Mitigation Program for Aral Sea Basin
CARE Centre	Central Asia Regional Environmental Centre
CAREC	Central Asia Regional Economic Cooperation
CI	CAREC Institute
CO ₂	Carbon dioxide
COP	Conference of the Parties
CTCN	Climate Technology Centre and Network
DCC	Donor Coordination Council
EBRD	European Bank for Reconstruction and Development
EU	European Union
GCF	Green Climate Fund
GEF	Global Environment Facility
GIZ	German Agency for Cooperation and Development
IPCC	Intergovernmental Panel on Climate Change
MDB	Multilateral Development Bank
NDC	Nationally Determined Contributions
OECD	Organization for Economic Co-operation and Development
PRC	People's Republic of China
SDC	Swiss Agency for Cooperation and Development
UNDP	United Nations Development Program
UNEP	United Nations Environment Program
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFCCC	United Nations Framework Convention on Climate Change
WECOOP	Central Asia Water, Environment and Climate Change Cooperation
WHO	World Health Organization

1. Introduction

Climate change is an omnipresent complex issue augmenting progressively, which cannot be tackled without multicountry collaboration. It poses a substantial threat to key sectors such as water, agriculture, energy and affects food systems, supply chain, infrastructure, and natural capital inhibiting economic development (CAREC Institute, 2020). Its impacts transcend local, national and regional boundaries and affect shared natural resources that will exacerbate associated risks. Climate change impacts also the health security by creating favorable environment for proliferation of infectious diseases like currently ongoing COVID-19 outbreak (Patz, J. A. et al., 2005; ADB, 2020). The complexity of the issue makes these intersectoral connections and intercountry dependencies even stronger.

Under these circumstances, climate change is having a widespread knock-on effect on vital sectors of economy and sustainable development of CAREC countries, which makes regional cooperation essential. The associated risks demand a broad spectrum of both policy and technical responses of regional scale. It is reported that CAREC member countries collectively emit on average 30% of the global greenhouse gas emissions (CAREC Institute, 2020). In the coming decades, water, energy, and food demands are projected to increase across CAREC due to the rapid growth of population and economic activities (CAREC Institute, 2020). This is another alarm urging for large-scale regional adaptation and mitigation efforts, which demands strong regional coordination, pooling of financial and knowledge resources, efficient institutions, and engagement of technology.

A multi-stakeholder regional collaboration on climate change is also a prerequisite for meeting the commitments under the UN Convention and its treaties (IPCC, 2017; World Bank, 2014). It is a necessity, which is derived from high vulnerability of the CAREC region¹ to climate impacts (CAREC Institute, 2020) and readiness to move forward towards a climate-resilient economic path. The shared challenges demand shared efforts.

The main objective of this policy brief is to lay out the regional aspects of climate change and how CAREC countries can work together to address climate change challenges as well as seize potential opportunities for collective way forward. The paper is based on key takeaways from the Institute's research report on Climate Vulnerability, Infrastructure, and Governance in CAREC Region (CAREC Institute, 2020) and virtual policy dialogue held in June 2020² along with personal viewpoints and analysis of the author.

The main idea of the paper arises from the need to inform the policy makers about existing players, thematic directions, and platforms on regional climate change interventions as well as provide possible solutions to effective cooperation within CAREC.

¹The Central Asia Regional Economic Cooperation, or CAREC, Program is a partnership of 11 countries (Afghanistan, Azerbaijan, People's Republic of China, Georgia, Kazakhstan, Kyrgyz Republic, Mongolia, Pakistan, Tajikistan, Turkmenistan, and Uzbekistan), supported by multilateral institutions, working together to promote development through cooperation, leading to accelerated growth and poverty reduction.

² In 2019, the CAREC Institute, in cooperation with the Innovations and Scientific Research Cluster, conducted a research project on the theme of "Climate Insurance, Infrastructure and Governance in CAREC Region." The key aim of the project was to provide an overview of the current status of climate change in 11 CAREC countries through the prism of water, energy and food nexus, economic and financial aspects, and governance. The full report of the project can be viewed at: <https://www.carecinstitute.org/wp-content/uploads/2020/05/CI-climate-research-report-29-May-2020.pdf>

2. Approach

The policy brief draws insights from literature review as well as personal experience in implementation of Central Asian regional initiatives on climate change. The scope includes regional projects a) with at least two countries in CAREC; b) with a direct climate objective (i.e., CO₂ emission reduction or adaptation/sequestration); c) with a commitment under the UNFCCC in reporting; and d) with the ongoing or recently completed plans. A matrix of projects is enclosed to the paper (Annex 1).

3. Regional Cooperation

Regional cooperation can be advantageous for cost reduction and resource efficiency, replication and scaling up of best practices, knowledge, technology and capacity building, unlocking innovative financing and private sector involvement. While enhancing collective actions to mitigate risks of climate change, it can also unlock the CAREC region's potential for accelerated integration in achieving sustainable economic growth. Planning these efforts, however, requires that (i) the potential challenges and perspectives are well understood across all countries of the region, and (ii) continuous commitment to regional and intersectoral collaboration is in place. Similarly, ADB also aims to increase the quantity and quality of projects and overall investment toward climate change by enhancing intersectoral engagement and regional collaboration to minimize adverse consequences of single-sector or single-country approaches (ADB, 2019).

Although there are quite a number of regional projects and programs on climate change in a given region, the area of mutual collaboration is specific (Engberg-Pedersen, 2011). The approach towards the implementation of the projects is kept within the individual countries due to their nation-wide legal frameworks and institutional arrangements, priorities and strategies, while the regional component is to the most extent concerned about interventions in capacity building, development of joint regional strategies, elaboration of methodologies and research tools, information exchange and building new knowledge (UNOSSC, 2017). All these interactions are built on workshops, trainings, study tours and exchange visits.

At the same time, one can notice that there is little or no coordination mechanism between these regional interactions. For example, there is a number of projects (both national and regional), which support the rehabilitation and/or modernization of hydromet services in Central Asia by providing machinery and equipment. Still, little is known about the effectiveness of the purchased equipment and whether the specialists on the ground have the skills to operate and maintain the acquired tools or need specific capacity building exercises.

At present, there are many organizations working in the area of climate change, including the ones with a regional focus: (a) UN Agencies, primarily UNEP and UNDP, (b) MDBs, namely ADB, the World Bank and EBRD, and (c) the European Commission and other development agencies from Europe (OECD, GIZ, SDC, etc.). Large-scale climate change regional projects (>30M USD) belong to the initiatives supported and implemented by MDBs (GCF, 2018).

At the same time, a desk assessment of regional climate change initiatives shows that key thematic directions, which are reflected in the organizations' climate change profile, especially at the regional level, are as follows:

- a) **Climate policy and implementation of global commitments.** Countries receive financial support to formulate adequate climate policy and properly report on their national climate targets (NDCs) – some of the initiatives consider a regional component. UNDP and UNEP are playing a key role in this direction under GEF investment portfolio. Since 2018, ADB and the European Commission have also become more active in climate policy projects aiming to provide technical assistance in updating the countries’ NDCs and raising climate ambitions (EU4Climate, 2018).
- b) **Data, knowledge and information exchange on climate change.** This dimension largely considers regional interventions. One of the examples is the World Bank’s Climate Adaptation and Mitigation Program for Aral Sea Basin (CAMP4ASB) with more than USD 15M dedicated to the regional component (CAREC Centre, 2016).
- c) **Low-emission development through sustainable energy.** This is the best indicative example of the EBRD’s efforts in scaling up its respective country projects to regional and global interventions to reduce carbon emissions by deploying renewable energy sources and promoting energy efficiency. In 2018, the MDB was successful to launch a EUR 295M Green Cities Program to enable the transition of cities³ to low-carbon, climate-resilient urban development (GCF, 2018).
- d) **Ecosystem-based adaptation and reforestation.** This thematic direction mostly features GIZ, which is implementing several regional interventions. Most of its projects are located in mountainous and plain areas of Central Asia (GIZ, 2015 and GIZ, 2016).
- e) **Research on climate change in the regional context.** This direction is limited to the topics of mountains and glaciers with SDC, UNESCO and UNEP playing a major role (SDC, 2017). A fragmented research component on other topics (e.g., water, land management) is also noticeable in the agenda of regional projects on knowledge and capacity building (CAREC, 2017).

The mechanisms of regional cooperation are to the most extent envisaged in regular meetings of the multi-country working groups, dialogue platforms and forums maintained by certain projects (Engberg-Pedersen, 2011). Apart from the globally operated working groups (e.g., negotiating regional alliances under the COP UNFCCC Convention or IPCC regional review panels or CTCN network groups), there are a number of other sub-regional platforms which were quite successful in raising awareness and maintaining information exchange on climate related topics (Box 1).

At a country level, coordination among the development partners exist in the form of donor coordination councils (DCC – e.g., Kyrgyzstan and Tajikistan) or Development Forums (e.g., the PRC) which provide a room for communication and information exchange on targeted aid or funding perspectives (WHO, 2009). However, continuity of the networks is much dependent on the government’s will and leadership, while the efficacy of such coordination mechanisms mostly depends on the national strategic agenda. The top priority of the most countries in the CAREC region is poverty reduction and economic growth, which are strongly articulated in the mentioned donor coordination councils, and which in times of COVID-19 are drawing more attention. Although both topics correlate with climate change related risks and perspectives, the latter is not on the top of the discussion agenda of such networks.

³ Georgia, Jordan, Moldova, Armenia, Tunisia, Mongolia, Serbia, North Macedonia and Albania (GCF, 2018)

Box 1. Examples of sub-regional dialogue platforms on climate change

Annual Central Asia Climate Change Conferences (CACCC) aims to foster a regional dialogue on climate change adaptation and mitigation by exploring opportunities for joint actions among Central Asian countries and other key stakeholders. Established by the World Bank in 2013, annual CACCCs are now funded by the CAMP4ASB project and organized by CAREC (CAREC Centre, 2020).

The Asia Pacific Adaptation Network (APAN) is a regional program for managing and applying adaptation knowledge in the region, and supports governments and other organizations working on adaptation, with special emphases on the management of knowledge and capacity building. A key objective is to build climate change resilient and sustainable human systems, ecosystems and economies through mobilization of knowledge, enhanced institutional capacity and informed decision-making processes, and facilitated access to finance and technologies (APAN, 2019).

EU-CA Working Group on Environment and Climate Change (WGECC) aims to enable and facilitate the policy dialogue between the EU and CA countries and within the CA region to enhance cooperation, as well as to support progress on environment and climate change issues. The WGECC meetings define common priorities for exchange and sharing experiences (WECCOOP, 2019).

The Caucasus Mountain Forum (CMF) is the platform with the aim to activate regional studies on climate change effects on shared ecosystems and resources critical for economic development of the Caucasus countries (SDC, 2019).

3.1. Challenges

The main challenges for regional cooperation are estimated as follows:

- a) Language barrier. The CAREC region is multilingual. This imposes a communication challenge in regional engagement. While the largest part of the region consists of Russian-speaking group (former soviet republics), those countries, which could potentially share their lessons and practices on climate change (the PRC, Pakistan) get hampered by the language barrier.
- b) In view of the blended mode of investments in infrastructure and transport, climate change issues are not specifically targeted, i.e., not directly addressing the objectives of emission reduction, carbon sequestration or adaptation although there is an opportunity to link the projects with climate related targets. Quite a good example is the Belt and Road Initiative (BRI), which targets the region with innovative and technological solutions in infrastructure, transport and energy. While the program envisages multi-billion investment package and contributes to climate change (fuel combustion, emissions from the industrial and energy processes, transport), its response measures mostly address environmental issues (e.g., prevention of air pollution). At the same time, the implementation plans may include the measures on climate change objectives (e.g., amount of GHG emissions reduced or area sequestered by reforestation actions).
- c) Coordination gap among different actors is due to complexity and cross-cutting nature of topics. The climate change agenda usually considers multiple stakeholders, dealing with economic development and finance, energy and industry, human health and environment. However, specific institutional arrangements as well as weak coordination of national bodies challenge the effectiveness of regional collaboration. The level of authority and decision-making power should also be considered. While many countries of the region have their Committees or Ministries of Environment or Hydromet Services designated to deal with climate change, their limited mandate to make cross-cutting decisions challenges effectiveness.
- d) Finally, although there are multiple sub-regional platforms and information portals on climate related topics, their sustainability is challenged. Established within the regional projects and aimed to inform the users, they are fully dependent on the project funding and could not continue work once the projects end. A good example is the APAN network, which was very successful in generating knowledge on climate adaptation and providing information exchange for the countries of Asia and the Pacific. However, with the end of the project which supported this network, the platform discontinued existence.

3.2. Perspectives

In contrast to the challenges mentioned above, opportunities exist to enhance the climate related collaboration in the region, which in times of the COVID-19 pandemic adds extra value to optimizing finance resources and strive towards a joint climate and crisis-resistant economic pathway. Namely, some perspectives are:

- a) Consider targeted focus on a selected topic, which is a priority for all CAREC countries. This can help determine the niche for regional interventions on climate and cross-cutting topics. One of the examples is the water-agriculture-energy nexus through the lenses of climate change, which

if elaborated further could bring more insights into the overall agenda of CAREC countries on climate change (CAREC Institute, 2020).

- b) Consider the topics of economics and climate change. The recent CARDNO Emerging Markets report (2016) of the ADB's "Economics of Climate Change in Central and West Asia" states that "the economic costs of climate change under the BAU scenario for Afghanistan, Kyrgyzstan and Tajikistan are expected to increase from an average value of USD 200 million per year in 2020 to an average value of USD 2.5 billion per year by 2050 (or 1.3% of annual GDP), while the estimated adaptation costs range up to USD 547 million per year in 2050." This means that investing in adaptation will definitely require 50% less financial resources than the cost of inaction. Since the region is limited in new research and prognosis of economic development which takes into consideration climate risks and the pandemic, the new projects on these topics can be mainstreamed for producing evidence-based policy recommendations.
- c) Make an effort to link the outputs of the current and planned regional projects (e.g., water-agriculture-energy, economic dimensions) to climate objectives. Indicative targets on the amount of GHG emission reduced or carbon sequestered, or lands recovered with climate resilient practices, can be of particular focus (UNOSSC, 2017). This will help the national governments of the region report adequately under their global UNFCCC commitments. Promising expectations are determined within the EBRD's Green City Initiative with detailed city action plans, which encounter both mitigation and adaptation targets to back up urban development and smart infrastructure.
- d) Invest in information technologies and online tools of communication. In times of lockdown and work-from-home period, this particular measure has become more than just a need. Given the uncertain nature of pandemic waves, investing in green information technologies can minimize a carbon footprint. However, more research in a given topic is required (Millan Lombrana and Rath, 2020). Nowadays, climate finance to support the green IT investments is mostly channeled to the development of online communication tools and web-based information portal with climate-related information, maps and data, which are maintained by the regional projects.
- e) Strengthen the coordination of national and regional interventions, which are generating same products and pursue similar tasks and objectives (e.g., rehabilitation of climate monitoring systems or exercising capacity building strategies). Some promising examples exist at the Regional Environmental Centre for Central Asia. The teams of new emerging projects on climate change (regional in nature) use a combined approach towards performing the needs assessments on capacity building. First, nation-wide consultations are conducted to determine country-specific needs and, second, regional meetings with participating countries are held to validate the findings of the assessment exercise and plan the future activities of the regional scale.

4. Conclusion and Recommendations

Given the exponential increase in climate change impact across the region (CAREC Institute, 2020) and economic hurdles stemming from the COVID-19 pandemic, CAREC countries could draw particular attention to joint actions against ongoing and upcoming challenges. In times of a crisis, regional cooperation is not only a priority, but becomes a necessity, which helps unlock new opportunities, optimize resources and build on lessons and successful practices of the past. Regional cooperation on climate change with its complexity in having multiple countries and players, different thematic directions and investment envelopes requires a detailed study.

The present paper attempted to highlight key niches to frame additional research around climate change agenda in the CAREC region. The challenges in cooperation touch upon the lack of coordination among different regional and national players, peculiarities of institutional arrangements and legal frameworks, limitations in mainstreaming direct climate change objectives in large regional infrastructure projects, while different languages, which the region speaks, add to the constraints.

Meanwhile, opportunities exist to focus on a certain niche (e.g., water-agriculture-energy nexus). CAREC countries can enhance cooperation with existing regional organizations and centers to deal with climate agenda as well as seek innovative solutions in a post-COVID-19 world. Focusing on new climate studies in times of new realities (e.g., 2020 economic crisis, pandemic) could supplement the region's policies with a strong evidence-based component. Given the challenge of determining how precisely to proceed is substantial, there still are some recommendations the countries might consider:

- a) **The regional climate change dialogue**, which was initiated by the CAREC Institute and ADBI can be further developed and maintained focusing on different aspects of climate change agenda of CAREC countries. Through a dialogue, countries can set regional targets and develop action plans for harmonizing government policies with respect to regional environmental and development goals. This can be done through conducting regular conferences or forums to exchange information and best practices within CAREC and inform policymakers on the progress of the region in responding to the Paris Agreement commitments (all eleven CAREC countries are the signatories to this agreement).
- b) **Closer collaboration** among those governmental institutions dealing with the development sectors at risk (water, agriculture, energy, etc.) both at the national and regional level supported by regular coordination mechanism is necessary. The function of this mechanism needs to be **anticipatory rather than reactive** when it comes to enhancing climate resilience. The existing dialogue platforms, which proved successful, can be further enhanced and re-profiled to suit concrete needs of this mechanism.
- c) While planning regional projects on development and/or green economy (infrastructure), **empowered national institutions** with expanded advisory and technical roles can deal with climate change policy agenda more efficiently. This would enhance the ability of the countries to adapt to, to provide public services, to design and implement sound policies, also known as **government effectiveness**, which is a precondition for better outcomes in adaptation.

- d) Climate issue should be prioritized and **integrated into the list of development agenda** in the countries of the given region, by ensuring better governance and coordination with donor communities.
- e) **Cooperation with regional organizations**, donor coordination councils and knowledge hubs (e.g., UNDP and UNEP sub-regional divisions, CAREC, CAREC Centre, REC-Caucasus) dealing with climate change agenda in the region needs to be strengthened.

References

- a) Asian Development Bank (ADB). 2020. Future Regional Cooperation in Asia and the Pacific. Manila.
- b) Asian Development Bank (ADB). 2019. Strategy 2030, Operational Plan for Priority 3 – Tackling Climate Change, Building Climate and Disaster Resilience, and Enhancing Environmental Sustainability, 2019-2024. Manila.
- c) Asian Development Bank (ADB). 2017. Regional: Economics of Climate Change in Central and West Asia. Project Overview. Retrieved from <https://www.adb.org/projects/44068-012/main#project-pds>
- d) Asia Pacific Adaptation Forum (APAN). About APAN (June 2019). Retrieved from <http://www.asiapacificadapt.net/about-us>
- e) CARDNO Emerging Markets report (2016). Economics of Climate Change in Central and West Asia. Final report: Retrieved from https://www.adb.org/sites/default/files/project-documents/44068/44068-012-tacr-en_0.pdf
- f) CAREC Institute, 2020. Climate Vulnerability, Infrastructure, Finance and Governance in the CAREC Region. Available at: <https://www.carecinstitute.org/wp-content/uploads/2020/05/CI-climate-research-report-29-May-2020.pdf>
- g) Engberg-Pedersen, L. (2011) *Climate change negotiations and their implications for international development cooperation*. Danish Institute for International Studies. Retrieved from <https://um.dk/en/danida-en/partners/research/other/~media/um/english-site/documents/danida/partners/research-org/research-studies/climate%20change%20negotiations%20and%20their%20implications%20for%20international%20development%20cooperation%202011.pdf>
- h) EU4Climate. 2018. Program Overview. Retrieved from <https://www.euneighbours.eu/en/east/stay-informed/projects/eu4climate>
- i) European Union-Central Asia Water, Environment and Climate Change Cooperation (WECOOP). About WECOOP (2019). Retrieved from <https://wecoop.eu/about/>
- j) German Agency for Cooperation and Development (GIZ 2015). Ecosystem-based adaptation to climate change in high mountainous regions of Central Asia. Project overview. Retrieved from <https://www.giz.de/en/worldwide/40944.html>
- k) German Agency for Cooperation and Development (GIZ 2016). Program for sustainable and climate sensitive land use for economic development in Central Asia. Project overview. Retrieved from <https://www.giz.de/en/worldwide/14210.html>
- l) Green Climate Fund (GCF 2018). Green Cities Facility. Project overview. Retrieved from <https://www.greenclimate.fund/project/fp086#overview>
- m) IPCC (2014) Climate Change 2014. Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Chapter 24. Asia.
- n) Millan Lombrana, L. and Rathi, A. 2020. Green Technology Key To Pandemic Recovery Plans. Article in Financial Advisor (26 May 2020). Retrieved from <https://www.fa-mag.com/news/green-technology-key-to-pandemic-recovery-plans-55953.html>
- o) Patz, J. A., Campbell, Lendrum, D., Holloway, T., and Foley, J. 2005. Impact of Regional Climate Change on Human Health. *Nature* 438: 310–17.
- p) Swiss Agency for Cooperation and Development (SDC). The Caucasus Mountain Forum – a Step towards Addressing Climate Change (September 2019). Retrieved from <https://www.eda.admin.ch/countries/georgia/en/home/news/news.html/content/countries/georgia/en/meta/news/2019/october/the-caucasus-mountain-forum---a-step-towards-addressing-climate->

- q) Swiss Agency for Cooperation and Development (SDC 2016). Maximum cooperation needed to manage glacier melt in Central Asia. Project overview. Retrieved from <https://www.eda.admin.ch/deza/en/home/laender/mongolei.html/content/dezaprojects/SDC/en/2016/7F07194/phase1>
- r) The Regional Environmental Centre for Central Asia (CAREC 2017). Information Portal on climate adaptation and mitigation in Central Asia. CAMP4ASB Project Overview. Retrieved from <http://ca-climate.org/eng/about/projects/climate-adaptation-and-mitigation-program-for-aral-sea-basin-camp4asb/>
- s) The Regional Environmental Centre for Central Asia (CAREC 2020). Information Portal on climate adaptation and mitigation in Central Asia. About Central Asia Climate Change Conference. Retrieved from <http://ca-climate.org/eng/events/conference/>
- t) United Nations Framework Convention on Climate Change (UNFCCC 2020). 2020 a “Critical Year for Addressing Climate Change” (23 Jan 2020). UN Climate Speech. Retrieved from <https://unfccc.int/news/2020-a-critical-year-for-addressing-climate-change-ovais-sarmad>
- u) United Nations Office for South-South Cooperation and the South Centre (UNOSSC 2017). Climate Partnership for a sustainable future: An initial overview of South-South cooperation on climate change in the context of sustainable development and efforts to eradicate poverty. Report. Retrieved from <https://www.un.org/sustainabledevelopment/wp-content/uploads/2017/11/Report-on-Climate-Partnerships-for-a-Sustainable-Future.pdf>
- v) World Health Organization (WHO 2009). Review of coordination mechanisms for development cooperation in Tajikistan. Summary Report. Retrieved from https://www.euro.who.int/_data/assets/pdf_file/0013/106411/E93771.pdf
- w) World Bank (2014). Turn Down the heat. Confronting the New Climate Normal. World Bank: Washington. Retrieved from http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2014/11/20/000406484_20141120090713/Rendered/PDF/927040v20WP0000ull0Report000English.pdf

Annex 1: Matrix of Regional Climate Change Projects in CAREC

#	Title of the project	Amount in Million, \$	Type of climate actions	Investor (donor)	Timeline	Objectives and brief description	Geography	Web link to the project
1	Capacity building in development of policy framework for promotion of low carbon emission societies in Central Asia	0.05	Mitigation	UNEP	2015-2016	Improve regional and national level networking and enhance exchange of knowledge in Central Asia and improve institutional capacity for the uptake of cleaner energy and energy efficient technologies and services.	Central Asian countries	https://unfccc.int/sites/default/files/resourcelibrary/20963851_Kazakhstan-NC7-BR3-1-ENG_Saulet_Report_12-2017_ENG.pdf
2	Reducing vulnerabilities of populations in the Central Asia region from glacier lake outburst floods in a changing climate	5	Adaptation	UNESCO (Adaptation Fund)	2019-2023	The objective of the proposed project is to strengthen adaptation to climate change in Central Asia by reducing societal risks and vulnerabilities associated with GLOFs. This objective also addresses SDGs 11 and 13 of the 2030 Agenda, particularly targets 11.5 and 13.1 - 13.3.	Kazakhstan, Tajikistan and Uzbekistan	https://www.adaptation-fund.org/wp-content/uploads/2018/09/Proposal-for-Kazakhstan-Tajikistan-Uzbekistan.pdf
3	Strengthening the Resilience of Central Asian Countries by Enabling Regional Cooperation to Assess High Altitude Glacio-nival Systems to Develop Integrated Methods for Sustainable Development and Adaptation to Climate Change	6	Adaptation	UNDP UNESCO	2018-2019	To strengthen the adaptation capacity of Central Asian countries to climate change impacts on glacio-nival systems through assessment, promotion of regional cooperation, and stakeholder engagement	Kazakhstan, Tajikistan, Turkmenistan	https://www.thegef.org/sites/default/files/web-documents/10077_PIF.pdf
4	Integrated Natural Resources Management in Drought-prone and Salt-affected Agricultural Production Landscapes in Central Asia and Turkey (CACILM2)	10	Adaptation	FAO (GEF)	2015 - ongoing	Scale up integrated natural resources management for agricultural regions prone to drought in Central Asia and Turkey	Central Asia, Turkey	https://www.thegef.org/project/integrated-natural-resources-management-

#	Title of the project	Amount in Million, \$	Type of climate actions	Investor (donor)	Timeline	Objectives and brief description	Geography	Web link to the project
								drought-prone-and-salt-affected-agricultural
5	Economics of Climate Change in Central and West Asia	2.25	Adaptation and Mitigation	ADB	2012-2017	Identify priority investments for climate resilience and low-carbon growth. There are 2 components: (i) the component 'adaptation to climate change' assessed the costs and benefits of implementing adaptation measures to reduce the adverse effects of climate change on energy and water resources in the most vulnerable countries, i.e., Afghanistan, the Kyrgyz Republic, and Tajikistan; and (ii) the component 'mitigation of climate change' assessed the costs and benefits of GHG emission reduction measures and formulate low-carbon growth investment proposals for energy and transport in the most carbon-intensive countries in the region, i.e., Azerbaijan, Kazakhstan, and Uzbekistan	Regional Afghanistan Azerbaijan Kazakhstan Kyrgyz Republic Tajikistan Uzbekistan	https://www.adb.org/projects/44068-012/main#project-pds
6	Promoting Low-Carbon Development in Central Asia Regional Economic Cooperation Program Cities	3.5	Mitigation	ADB	2019-2020	Aims to support cities in Central Asia Regional Economic Cooperation (CAREC) program countries to strengthen their capacity to undertake climate actions to further enhance sustainable, inclusive, and prosperous economic development.	Regional: Afghanistan, Azerbaijan, Georgia, Kazakhstan, Kyrgyz Republic, Mongolia, Pakistan, People's Republic of China, Tajikistan, Turkmenistan, Uzbekistan	https://www.adb.org/projects/50287-001/main#project-pds

#	Title of the project	Amount in Million, \$	Type of climate actions	Investor (donor)	Timeline	Objectives and brief description	Geography	Web link to the project
7	Regional: Greater Mekong Subregion Climate Change and Environmental Sustainability Program	5	Adaptation and Mitigation	ADB	2019-2025	Aligned with the following impact: environment sustainability and climate-compatibility of economic growth and propensity in the GMS improved, as stated in GMS Core Environment Program Strategic Framework and Action Plan. The TA will have the following outcome: climate resilience, green growth, and environmental quality in the GMS enhanced.	Cambodia; China ; Lao People's Democratic Republic; Myanmar; Thailand; Viet Nam	https://www.adb.org/projects/53390-001/main#project-pds
8	Establishing a Platform for Climate-Resilient and Low-Carbon Urban Development	1	Adaptation and Mitigation	ADB	2019-2022	Support the establishment of a Platform for Climate Resilient and Low Carbon Urban Development (the Platform) through research and development at the Asian Development Bank (ADB) headquarters and in selected partner cities in ADB's developing member countries (DMCs). The Platform aims to establish a collaborative process among key stakeholders at ADB and the DMCs, which will result in the production of a knowledge base on climate-informed urban development.	Regional: no particular countries specified	https://www.adb.org/projects/52304-001/main#project-pds
9	Regional: Supporting Ambitious Climate Action through Implementation of Developing Member Countries' Nationally Determined Contributions (Subproject 1)	3	Adaptation and Mitigation	ADB	2019-2020	The TA subproject 1 will have the following outcome: capacities of selected DMCs to implement NDCs enhanced. The TA subproject will directly support output 1 of the overall TA cluster, supporting the implementation of NDCs for selected DMCs. The TA subproject will deliver on the following	Regional: Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka, Georgia, Armenia and Uzbekistan	https://www.adb.org/projects/52004-002/main#project-pds

#	Title of the project	Amount in Million, \$	Type of climate actions	Investor (donor)	Timeline	Objectives and brief description	Geography	Web link to the project
						outputs: (i) DMC knowledge and skills on climate investment planning in line with nationally determined contributions strengthened; and (ii) priority climate projects in line with nationally determined contributions identified.		
10	Regional: Supporting the Implementation of ADB's Climate Change Operational Framework 2017-2030 - Enhancing Financial Mechanisms to Develop Climate Actions of Developing Member Countries (Subproject 2)	0.8	Adaptation and Mitigation	ADB	2019	Subproject 2 will support enhancement of financial mechanisms for developing climate actions of DMCs. Expected outputs will include: (i) improved DMC knowledge on public and private sources of climate finance, and (ii) innovative financing mechanisms to develop DMC climate actions identified.	Regional: no particular countries specified	https://www.adb.org/projects/52004-004/main#project-pds
11	Framework 2017–2030 - Establishing Mechanisms to Measure, Monitor, and Report on Commitments made under the Paris Agreement (Subproject 3)	0.75	Adaptation and Mitigation	ADB	2019-2020	KSTA Cluster Subproject 3 will support establishment of mechanisms to measure, monitor, and report on commitments made under the Paris Agreement. Expected outputs under the subproject includes: (i) results framework approach and indicators in line with DMC nationally determined contributions (NDC) developed; (ii) DMC knowledge and skills on monitoring and evaluation of NDCs strengthened, and (iii) baseline indicators and monitoring tools under the CCOF2030 developed.	Regional: no particular countries specified	https://www.adb.org/projects/52004-005/main#project-pds

#	Title of the project	Amount in Million, \$	Type of climate actions	Investor (donor)	Timeline	Objectives and brief description	Geography	Web link to the project
12	Regional: Supporting the Implementation of ADB's Climate Change Operational Framework 2017–2030	4.55	Adaptation and Mitigation	ADB	2018	Support for NDC implementation, mobilization of climate finance, and support for more effective monitoring and tracking of climate actions and finance are key activities under the Climate Change Operational Framework 2017-2030 (CCOF2030).	Regional: no particular countries specified	https://www.adb.org/projects/52004-001/main#project-pds
13	Regional: Floating Solar Energy Development	3	Mitigation	ADB	2018	The proposed knowledge and support technical assistance (TA) aims to pilot test and build expertise on the emerging floating solar photovoltaic (FPV) technology to diversify the energy mix, increase energy security, and reduce greenhouse gas (GHG) emissions. Afghanistan, Azerbaijan, and the Kyrgyz Republic represent these critical vulnerabilities of Central and West Asian countries and are the targeted beneficiaries.	Regional: Afghanistan, Azerbaijan and Kyrgyzstan	https://www.adb.org/projects/52079-001/main#project-pds
14	Regional: Strengthening the Capacity for Environmental and Climate Change Laws in Asia and the Pacific	0.75	Adaptation	ADB	2017-2021	The proposed knowledge and support technical assistance (TA) will strengthen the capacity and networks of university-level educators and institutions to improve the teaching and application of environment and climate change laws in ADB's developing member countries (DMCs), leading to more effective implementation, compliance and enforcement of national laws and better implementation of international commitments such	Regional: no particular countries specified	https://www.adb.org/projects/51310-001/main#project-pds

#	Title of the project	Amount in Million, \$	Type of climate actions	Investor (donor)	Timeline	Objectives and brief description	Geography	Web link to the project
						as the Paris Agreement and Sustainable Development Goals (SDGs).		
15	Regional: Supporting Adaptation Decision Making for Climate Resilient Investments	2	Adaptation	ADB	2017-2021	The TA aims to improve the understanding by DMCs on how to make effective use of climate information and services to facilitate planning and decision-making under climate uncertainty.	Regional: no particular countries specified	https://www.adb.org/projects/50121-001/main#project-pds
16	Support for Implementation of the Asia-Pacific Climate Finance Fund	0.75	Adaptation and Mitigation	ADB	2017-2020	The proposed technical assistance (TA) project will support the implementation of the Asia-Pacific Climate Finance Fund (AClIFF or the Fund), a multi-donor trust fund that was approved by ADB on 28 April 2017. AClIFF will support the assessment, development and provision of financial risk management products that can help unlock financing for climate investments and improve resilience to the impacts of climate change.	Regional: Pakistan, China, People's Republic of, Sri Lanka and Viet Nam	https://www.adb.org/projects/51163-001/main#project-pds
17	Regional: Strengthening Women's Resilience to Climate Change and Disaster Risk in Asia and the Pacific	1.4	Adaptation	ADB	2017-2021	The proposed knowledge and support technical assistance (TA) will enhance the capacity of three developing member countries (DMCs) - Fiji, the Lao People's Democratic Republic (Lao PDR), and Mongolia - to strengthen women's resilience to climate change and disaster risks.	Fiji, the Lao People's Democratic Republic (Lao PDR), and Mongolia	https://www.adb.org/projects/50042-001/main#project-pds

#	Title of the project	Amount in Million, \$	Type of climate actions	Investor (donor)	Timeline	Objectives and brief description	Geography	Web link to the project
18	Regional: Promoting Low-Carbon Development in Central Asia Regional Economic Cooperation Program Cities	3.548	Mitigation	ADB	2017-2020	This regional capacity development technical assistance (TA) aims to support cities in Central Asia Regional Economic Cooperation (CAREC) program countries to strengthen their capacity to undertake climate actions to further enhance sustainable, inclusive, and prosperous economic development.	Regional: Afghanistan, Azerbaijan, Georgia, Kazakhstan, Kyrgyz Republic, Mongolia, Pakistan, China, People's Republic of, Tajikistan, Turkmenistan, Uzbekistan	https://www.adb.org/projects/50287-001/main#project-pds
19	Promoting Urban Climate Change Resilience in Selected Asian Cities	15	Adaptation and Mitigation	ADB	2015-2019	The TA will assist the prioritized countries to foster urban climate change resilience in medium-sized cities and to build capacity to work together to prevent climate change indicated shocks and stresses.	Regional: Bangladesh, India, Indonesia, Myanmar, Pakistan, Philippines, Viet Nam	https://www.adb.org/projects/48317-001/main#project-pds
20	Promoting Urban Climate Change Resilience in Selected Asian Cities - Developing Integrated Urban Development Plans in Selected DMC Cities Incorporating Urban Climate Change Resilience Principles (Subproject 1)	3.95	Adaptation and Mitigation	ADB	2015-2021	Subproject 1 (SP1) will support a range of activities to help lay the groundwork for UCCR planning processes and build capacity in preparing and responding to climate change-induced shocks and stresses in medium-sized and secondary cities.	Regional: Bangladesh, India, Indonesia, Myanmar, Pakistan, Philippines, Viet Nam	https://www.adb.org/projects/48317-002/main#project-pds
21	Promoting Urban Climate Change Resilience in Selected Asian Cities - Knowledge Management and Resilience Measurement for Urban Climate Change Resilience (Subproject 2)	4.99	Adaptation and Mitigation	ADB	2016-2021	Subproject 2 (SP2) will support a range of activities that generate and disseminate evidence and experience-based knowledge related to UCCR based primarily on UCCRTF supported interventions.	Regional: Bangladesh, India, Indonesia, Myanmar, Pakistan, Philippines, Viet Nam	https://www.adb.org/projects/48317-003/main#project-pds

#	Title of the project	Amount in Million, \$	Type of climate actions	Investor (donor)	Timeline	Objectives and brief description	Geography	Web link to the project
22	Climate Adaptation and Resilience for South Asia Project	39.5	Adaptation	WB	2020-2025	Contribute to an enabling environment for climate-resilient policies and investments in select sectors and countries in South Asia.	Pakistan, Bangladesh and Nepal	https://projects.worldbank.org/en/projects-operations/document-detail/P171054
23	Central Asia Hydrometeorology Modernization Project (CAHMP)	20.7	Adaptation	WB	2011-2023	Improve the accuracy and timeliness of hydromet services in Central Asia	Central Asian countries	https://projects.worldbank.org/en/projects-operations/project-detail/P120788
24	Additional Financing - Central Asia Hydrometeorology Modernization Project (CAHMP)	11.5	Adaptation	WB	2018 - n/a	Improve the accuracy and timeliness of hydromet services in Central Asia, with particular focus on Kyrgyz Republic and Republic of Tajikistan.	Tajikistan and Kyrgyzstan	https://projects.worldbank.org/en/projects-operations/project-detail/P164780
25	Climate Adaptation and Mitigation Program for the Aral Sea Basin (CAMP4ASB)	38	Adaptation and Mitigation	WB	2016-2021	Enhance regionally coordinated access to improved climate change knowledge services for key stakeholders (e.g., policy makers, communities, and civil society) in participating Central Asian countries, as well as to increase investments and capacity building that, combined, will address climate challenges common to these countries.	Regional: Kazakhstan, Kyrgyz Republic, Tajikistan, Turkmenistan and Uzbekistan	https://projects.worldbank.org/en/projects-operations/project-detail/P151363?lang=en

#	Title of the project	Amount in Million, \$	Type of climate actions	Investor (donor)	Timeline	Objectives and brief description	Geography	Web link to the project
26	Scaling-up Climate Adaptation and Mitigation Program For the Aral Sea Basin (CAMP4ASB)	19	Adaptation	WB (GCF)	2016-2022	Scaling up the Climate Adaptation and Mitigation Program for Aral Sea Basin (CAMP4ASB) by providing support to adaptation activities in Tajikistan and Uzbekistan. Providing grants to the most vulnerable communities for climate resilient measures in priority areas, including to the poorest populations residing in risk-prone areas, and marginalized groups such as women.	Tajikistan and Uzbekistan	https://www.greencimate.fund/project/fp014
27	Green Cities Facility	294.2	Mitigation	EBRD and GCF	2018-2034	Enabling the transition of cities to low-carbon, climate-resilient urban development.	Georgia, Jordan, Republic of Moldova, Armenia, Tunisia, Mongolia, Serbia, North Macedonia and Albania	https://www.greencimate.fund/project/fp086#overview
28	EU4Climate	8.8	Adaptation and Mitigation	EU	2018-2022	The programme supports the development and implementation of climate policies by the Eastern Partnership countries, contributing to low emission and climate resilient development, and to their commitments to the 2015 Paris Agreement on Climate Change.	Armenia, Azerbaijan, Belarus, Georgia, Moldova, Ukraine	https://www.euneighbours.eu/en/east/say-informed/projects/eu4climate
29	European Union – Central Asia Water, Environment and Climate Change Cooperation (WECOOP)	3.3	Mitigation	EU	2019-2022	The WECOOP project aims to enhance environment, climate change and water policies in Central Asia through approximation to EU standards and to promote green investments in relevant sectors with the aim of contributing to measurable	Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan	https://wecoop.eu/

#	Title of the project	Amount in Million, \$	Type of climate actions	Investor (donor)	Timeline	Objectives and brief description	Geography	Web link to the project
						reductions in man-made pollution, including CO2 emissions.		
30	Climate Change and Security in Eastern Europe, Central Asia and the Southern Caucasus	2	Mitigation and adaptation	OSCE	2013-2017	Enhance understanding and awareness of climate change as a security challenge and the consequent need for regional and transboundary co-operation in adaptation; and to enhance national and local stakeholders' capacity to anticipate, prevent and mitigate effectively and in a timely manner potential security risks resulting from climate change.	Eastern Europe, Central Asia and the Southern Caucasus	https://www.osce.org/projects/climate-change-and-security
31	Maximum cooperation needed to manage glacier melt in Central Asia	1.2	Adaptation	SDC	2017-2020	The overall goal of the initiative is that Central Asia moves forward towards sustainable and equitable transboundary water management in a changing climate whereby the people in the region benefit from water security, peace, stability and sustainable development.	Central Asia	https://www.eda.admin.ch/deza/en/home/laender/mongol/ei.html/content/dezaprojects/SDC/en/2016/7F07194/phase1
32	Programme for sustainable and climate sensitive land use for economic development in Central Asia	11.4	Adaptation	GIZ	2016-2019	Continues the activities of its predecessor programme on sustainable use of natural resources in Central Asia by developing regionally adapted approaches for the participatory and sustainable management of land resources. The conceptual focus has shifted to the integration of different forms of land use (for example pasture and forest management) and their economic valuation, both on the level of land	Regional: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan	https://www.giz.de/en/worldwide/14210.html

#	Title of the project	Amount in Million, \$	Type of climate actions	Investor (donor)	Timeline	Objectives and brief description	Geography	Web link to the project
						users as well as on the level of national economic accounts.		
33	Strengthening of Livelihoods through climate change adaptation in Kyrgyzstan and Tajikistan	6	Adaptation	GIZ	2014-2018	Strengthen the livelihoods of vulnerable rural communities in Kyrgyzstan and Tajikistan through climate change adaptation measures.	Kyrgyzstan, Tajikistan	https://www.giz.de/en/worldwide/28804.html
34	Ecosystem-based adaptation to climate change in high mountainous regions of Central Asia	4	Adaptation	GIZ	2015-2020	Ecosystem-based adaptation and other climate adaptation strategies have been successfully tested and integrated into national policies in Kazakhstan, Kyrgyzstan and Tajikistan.	Kazakhstan, Kyrgyzstan and Tajikistan	https://www.giz.de/en/worldwide/40944.html
35	Technology based Adaptation to Climate Change in Rural Areas of Tajikistan and Kyrgyzstan		Adaptation	GIZ	2019-2022	The responsible authorities in Tajikistan and Kyrgyzstan have improved the plans for climate adaptation in rural regions with the aid of modern information technology and geodata management.	Kyrgyzstan, Tajikistan	https://www.giz.de/en/worldwide/82076.html