

# Regional Climate Change Adaptation Strategy for Central Asia

The Regional Climate Change Adaptation Strategy for Central Asia was developed by the countries of the region, and approved by the Republic of Kazakhstan, the Kyrgyz Republic, the Republic of Tajikistan, Turkmenistan and the Republic of Uzbekistan







## *Preface*

Central Asia, with its diverse terrains and ecosystems, faces a myriad of climate-related challenges. From water scarcity to changing weather patterns, the repercussions are profound and far-reaching. As the countries of the world are trying to navigate the complex challenges posed by a changing climate, it becomes increasingly evident that a united front is essential to safeguard the future of Central Asia.

Against this background, it is with great honor that we present the Regional Climate Change Adaptation Strategy for Central Asia. It is the result of a remarkable collaborative effort involving all five Central Asian countries — the Republic of Kazakhstan, the Kyrgyz Republic, the Republic of Tajikistan, Turkmenistan, and the Republic of Uzbekistan. Together, these nations, supported by the Green Central Asia Initiative, an initiative of the German Government, have engaged in a process of shared dialogue, mutual understanding, and joint commitment to address the pressing issues posed by climate change.

This strategy serves as a comprehensive roadmap which incorporates a holistic approach that considers the unique climatic, environmental, and socio-economic dynamics of Central Asia. It represents a unified vision, crafted through the collective wisdom and experiences of the participating nations, illustrating that regional cooperation is not only beneficial but essential in navigating the complexities of climate change.

As we embark on the implementation of this strategy, let it be known that Central Asia, through the unity of its nations and the support of the Green Central Asia Initiative, is at the forefront of global efforts to adapt and thrive in the face of a changing climate. May this policy document serve as a guidepost for future action and a testament to the resilience and determination of the Central Asian nations.

Dr. Caroline Milow  
Programme Manager

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# GLOSSARY

**C5+1** - Regional diplomatic platform of the Government of the United States “plus” the Governments of the Republic of Kazakhstan, the Kyrgyz Republic, the Republic of Tajikistan, Turkmenistan, and the Republic of Uzbekistan

**GIZ** – German International Cooperation

**IKI** – International Climate Initiative

**ADB** – Asian Development Bank

**AF** – Adaptation Fund

**WB** – World Bank

**WMO** – World Meteorology Organization

**HPS** – Hydroelectric Power Station

**GEF** – Global Environmental Fund

**EDB**– Eurasian Development Bank

**EBRD** - European Bank for Reconstruction and Development

**EIB** – European Investment Bank

**EC** – European Union

**GCF** – Green Climate Fund

**IDB** – Islamic Development Bank

**COP** – Conference of the Parties to the UNFCCC

**IPCC** - Intergovernmental Panel on Climate Change

**MFA** – Ministry of Foreign Affairs

**ICSD** - Interstate Commission for Sustainable Development of the Countries of Central Asia

**IFAS** – International Fund for Saving the Aral Sea

**IFI** – International Financial Institutions

**NGO** – Nongovernmental Organization

**NDC** – Nationally Determined Contribution

**UN** – United Nations

**ASBP**– Aral Sea Basin Program

**PA** – Paris Agreement UNFCCC

**UNFCCC** - United Nations Framework Convention on Climate Change

**REP4SD-CA** – Regional Environmental Programme for Sustainable Development in Central Asia

**RWG** – Regional Working Group

**CAREC** – Central Asian Regional Environmental Center

**CA** – Central Asia

**SDG** – Sustainable Development Goals

# 1. INTRODUCTION

## 1.1. Regional context of climate change impact and the need for adaptation

The Central Asia region is located in the center of the Eurasian continent and includes 5 countries: the Republic of Kazakhstan, the Kyrgyz Republic, the Republic of Tajikistan, Turkmenistan and the Republic of Uzbekistan (Figure 1).



Figure 1. Geographic location of Central Asia

In Central Asia, climate change is characterized by increasing average temperatures, changes in precipitation and shifts in extreme climatic factors. The temperature in the region was increasing unevenly (Table 1). The highest increase rates in the average annual air temperature were noted in the territory of Turkmenistan. In most of the territory of the Central Asian countries, the temperature rises most rapidly in the spring.

Table 1. Growth rate (linear trend coefficient, C/10 years) of average seasonal temperatures in the territories of Central Asian countries for the period 1976-2022<sup>1</sup>

| Country      | Year | Winter | Spring | Summer | Autumn |
|--------------|------|--------|--------|--------|--------|
| Kazakhstan   | 0,33 | 0,26   | 0,65   | 0,22   | 0,23   |
| Kyrgyzstan   | 0,25 | 0,27   | 0,48   | 0,13   | 0,12   |
| Tajikistan   | 0,20 | 0,19   | 0,35   | 0,07   | 0,09   |
| Turkmenistan | 0,38 | 0,47   | 0,48   | 0,38   | 0,24   |
| Uzbekistan   | 0,34 | 0,39   | 0,58   | 0,31   | 0,15   |

<sup>1</sup> Consolidated annual report on the state and climate change in the territories of the CIS member states for 2022, Interstate Council on Hydrometeorology of the CIS Member States, 2023<sup>1</sup>

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The increase of extreme maximum temperatures threatens health of the population, nature ecosystems, agriculture and water economy, infrastructure». Change in intra-annual distribution of precipitation, combined with increased drought, is decreasing moisture content, increasing water demand, and creating greater water shortages.

Additional human-induced factors specific for Central Asia cause the changes in both temperature and rainfall in the region. The factors like drying of the Aral Sea and increased wind erosion of its dried bottom are the ones of the significant anthropogenic causes of local climate change. Other specific factors of climate change in the region are the state of glaciers and snow cover, as well as increased desertification. The shrinkage of glaciers in Central Asia is 0.2-1% per year. Over the past 50-60 years, from 14 to 30% of the Tien Shan and Pamir glaciers have melted. The retreat of glaciers is observed worldwide: small glaciers disappear, and large ones break up. Over the entire observation period starting from 1930, the total of Pamir-Alay glaciation area approximately decreased by one third<sup>2</sup>.

In the long term, climate change vulnerability of all five Central Asian countries increases significantly. In the 21st century, it is expected that the rate of temperature increase will continue to outpace global values. By 2100, the average annual temperature may increase by 2.6% (by 3.3°C in summer) compared to pre-industrial levels in the most optimistic scenario and by 6.8°C (up to 8.7°C in summer) in the most pessimistic scenario, out of the four used in the world today for modeling global climate change<sup>3</sup>. In many standard scenarios of global climate change, the average annual rainfall in Central Asia will rise: by an average of 14.4% (from 9.6 to 21.3%) in the most pessimistic scenarios SSP3-7.0 and SSP5-8.5. In the other two scenarios, a smaller increase in average temperature and consequently rainfall is expected<sup>4</sup>.

Along with a temperature increase in most of Central Asia and an increase in average annual rainfall, an increase in the interannual variability of runoff and a change in its intra-annual distribution during the year is expected compared to the current situation. An increase in the frequency and depth of hydrological drought, as well as an increase intensity in desertification processes can be expected<sup>5</sup>. The intensive melting of glaciers and changes in river runoff exacerbating many water and environmental problems can have a destabilizing effect on food security and high-quality drinking water supply to the population, as well as on the operation of hydroelectric power plants.

The climate change impacts are already leading to ever-increasing human, financial and environmental losses, negatively affecting food security, poverty levels and hindering the sustainable development of the Central Asian countries. The studies show<sup>6</sup> a significant increase over the past 20 years (compared to average indicators) in economic losses due to a variety of disasters: damage from droughts increased by 63 percent, from floods by 23 percent, and from landslides by 147 percent.

<sup>2</sup> Regulation of the water and energy complex of Central Asia, analytical report. EDB, 2022

<sup>3</sup> Climate Change 2021: The Physical Science Basis. IPCC

<sup>4</sup> Climate Change 2021: The Physical Science Basis. IPCC

<sup>5</sup> Regulation of the water and energy complex of Central Asia, analytical report. EDB, 2022

<sup>6</sup> State of the Climate in Asia 2021, WMO, 2022

According to the report of the IPCC Working Group II in the Sixth Assessment Report, the world will face serious climate risks before the end of this century, even under low emission scenarios (Figure 2).

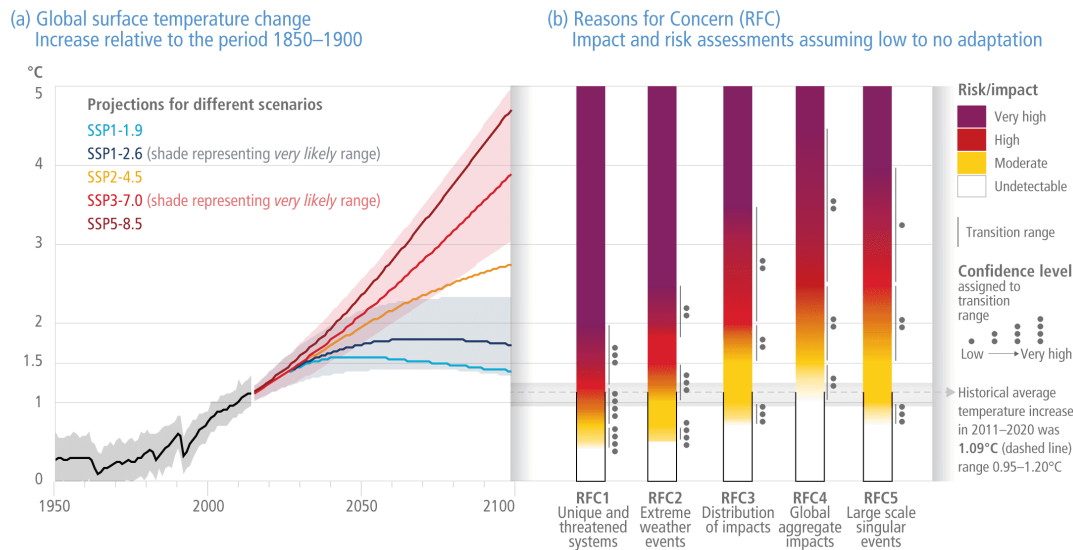


Figure 2. Projections of global climate change scenarios

Climate change poses a serious threat to the entire ecological and socio-economic development of Central Asian region, especially to the water and land resources in the region. Geographic features such as water scarcity, drought hazards and land degradation are exacerbated by climate change and increase vulnerabilities. Therefore, ambitious actions on climate change adaptation are of utmost importance along with the strong mitigation efforts. Adaptation is a key component of the long-term global response to climate change to protect people, infrastructure, livelihoods, and ecosystems. At the same time, climate change adaptation measures need to be viewed as well through the prism of addressing food security issues and combating poverty.

Early action on climate change adaptation will bring significant economic benefits and minimize threats to ecosystems, human life and health, economic development, and infrastructure. Cost-benefit analysis of adaptation actions<sup>7</sup> showed that the overall rate of return on investment in climate resilience is very high and the cost-benefit ratio ranges from 1:2 to 1:10. In addition, just improving the quality of weather forecasts and strengthening early warning systems can save the lives of about 23,000 people<sup>8</sup> in the world every year.

<sup>7</sup> Adapt now: A global call for leadership on climate resilience Flagship Report, Global Center on Adaptation, 2019

<sup>8</sup> Hydromet Gap Report 2021, WMO and Alliance for Hydromet Development, 2021



## 1.2. Prerequisites for developing a regional strategy for climate change adaptation

At the national level, the Central Asian countries continue to develop strategic documents and plan adaptation actions. Many countries have already developed climate change adaptation strategies and are currently developing National Adaptation Plans with the support from the Green Climate Fund. In addition, Nationally Determined Contributions (NDCs) in the framework of the Paris Agreement of the UNFCCC have been developed with a strong focus on climate change adaptation.

However, a broader consideration of the impacts associated with climate change requires adaptation actions at the regional level implemented for all Central Asia. To adapt to the climate change risks in the Central Asian region, cooperation at the regional level is essential to optimize the use of national potential and ensure joint activities. Especially in terms of water and energy resources and ecosystems, which may cross boundaries of the countries, and climate impacts and their sources may be geographically far apart.

The regional strategic planning approach for climate action creates an enabling environment for cross-border cooperation in knowledge sharing, decision-making, mobilization of finance and implementation of adaptation actions that countries could not achieve individually.

## 1.3. Regional cooperation on climate change adaptation

The Central Asian countries have been moving along on the regional processes and policies to address the climate crisis. Thus, the joint statements of the Green Central Asia<sup>9</sup> Initiative of the Ministry of Foreign Affairs of the Federal Republic of Germany (2020), the Ministerial meeting on climate issues of the group of countries “C5+1” (2021) and others, highlighting the need to implement adaptation actions, also noted that accelerated action to address climate change can be an engine for economic growth.

At the Fourth Consultative Meeting of the Heads of State of Central Asia<sup>10</sup> (2022), the common position of the leaders of Central Asia on expanding cooperation in the field of ecology and combating climate change was demonstrated. In a Joint Statement, the Heads of State of Central Asia noted the importance of further strengthening regional cooperation on climate change mitigation and adaptation, desertification control, rational use of water and energy resources, safe drinking water supply, environmental protection, ecology, conservation of biodiversity and glaciers, promoting projects and programs in these spheres.

<sup>9</sup> “Green Central Asia” Initiative of the German Federal Foreign Office <https://greencentralasia.org>

<sup>10</sup> Official statement of the Ministry of Foreign Affairs of the Kyrgyz Republic, <https://mfa.gov.kg>

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In order to implement the 2030 Agenda for Sustainable Development, the UN Framework Convention on Climate Change and the Paris Agreement, the Meeting adopted the Green Agenda Regional Programme for Central Asia, which expressed political intentions to expand mutually beneficial bilateral and regional cooperation for ensuring green economic growth and sustainable development in the region through the implementation of joint projects, technology transfer and knowledge sharing in this area.

The development of the Regional Climate Change Adaptation Strategy for Central Asia is a logical continuation of regional processes and agreements reached.

## 2. THE GOAL AND OBJECTIVES OF THE REGIONAL STRATEGY

The Regional Climate Change Adaptation Strategy for Central Asia (hereinafter referred to as the Strategy) is a “framework” strategic document with a planning time frame that correlates with the horizon for achieving the Sustainable Development Goals until 2030.

*The long-term vision of the Strategy is that by 2030, the Central Asian countries will improve climate resilience and minimize vulnerability to climate impacts in line with the Paris Agreement through a “better together” approach.*

Based on a long-term vision, the overall **Goal of the regional strategy until 2030 is to develop a mechanism for cooperation between the Central Asian countries to overcome the negative effects of climate change and implement adaptation measures.**

The implementation of most climate change adaptation measures will be carried out at the national levels, with regional harmonization of approaches/methodologies, joint resource mobilization, etc. Based on this key understanding, the goal of the regional strategy will be achieved through the implementation of 4 strategic objectives:

### **Strategic objective 1: Strengthen regional coordination for climate change**

As part of the first task, the main activity will be aimed at creating and supporting the regional mechanisms for coordinating joint activities, including support for participation, the formation of common positions in international negotiations and processes. Capacity building of national and regional authorities will be supported to manage climate change adaptation processes based on best practices and advanced experience.

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## **Strategic objective 2. Creation of mechanisms for the development and implementation of adaptation projects/programs and attraction of financing**

Under this objective, the main activity will be focused on identifying and using joint opportunities for the development of adaptation projects, including the mobilization of resources for their implementation from various sources – climate mechanisms and funds, development partners, international banks, the private sector, the budgets of participating countries, etc.

## **Strategic objective 3: Improve adaptive capacity through accumulation and sharing of knowledge and scientific cooperation**

Under this objective, the main activities will be aimed at creating an enabling environment for transboundary cooperation on climate change adaptation knowledge, decision making that improves understanding of climate change issues and support processes for financing and implementing actions in the field of climate change adaptation that countries could not achieve individually. Emphasis will be placed both on the generation of new knowledge, the joint development of training materials and the training of key partners on common methodologies, as well as on ensuring the sustainability of already established regional mechanisms for the accumulation and sharing of knowledge, such as “Informational Portal on Climate Change in Central Asia<sup>11</sup>”, “Climate Transparency Center”, “Climate Box”<sup>12</sup>, etc.

## **Strategic objective 4. Development of climate monitoring, information exchange and forecasting systems**

Under this task, activities will focus both on expanding climate monitoring networks and on joint capacity building to enable climate change impact and forecast assessment including the development and adaptation of regional models.

<sup>11</sup> Informational Portal on climate change in Central Asia, <https://centralasiacclimateportal.org/>

<sup>12</sup> Educational set for secondary school “Climate Box” <https://climate-box.com/ru/>

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## 3. STRATEGIC APPROACH AND PRIORITY AREAS

### 3.1. Strategic approach

The strategic approach to the implementation of regional activities is based on the initial harmonization of adaptation actions in two aspects:

- harmonization of policies, plans, laws and regulations related to vulnerability assessment and climate change adaptation between countries;
- harmonization of sectoral adaptation methodologies and actions regarding common approaches and intersectoral links. The initial stage of harmonization could be a joint capacity building in the fields of hydrometeorological data analysis and statistical analysis of climate change scenarios.

### 3.2 Priority areas and relation to the Sustainable Development Goals

Following the strategic objectives at the regional level, the priority for the implementation of adaptation actions will be enabling favorable conditions in the national most vulnerable areas to climate change:

- Water
- Energy
- Agriculture and land management
- Health
- Natural ecosystems and biodiversity
- Reducing the risks of climate-driven natural disasters

To achieve the Sustainable Development Goals (SDGs), countries, civil society and international institutions for the period up to 2030 have taken on a range of targets – from reducing extreme poverty to ensuring environmental sustainability and universal education, reducing child mortality and ensuring gender equality. Although adaptation directly contributes to the achievement of SDG 13 aimed at climate change actions, it should be considered as part of a strategy to consolidate the efforts of countries in the implementation of all other SDGs.

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## 4. IMPLEMENTATION OF THE REGIONAL STRATEGY-OPPORTUNITIES AND RISKS

### 4.1. Strategy Implementation

Four implementation directions are defined as broad categories for implementing the regional strategy. These directions are placed under the four strategic objectives and are consistent with the highlights of the national climate adaptation documents:

1. Intersectoral capacity development on climate change risk, vulnerability, and adaptation processes, making use of the regional potential. This key area signifies the creation of a knowledge database to better understand the various processes, their needs and gaps, and possibilities. It would imply analysis of previously implemented activities and a range of analyses of the climate change situation in the region for the major sectors in the region, such as water, energy, agriculture and land use, healthcare, natural ecosystems, and biodiversity, “climate dependent” natural disasters.
2. Capacity development and cooperation on forecasting climate vulnerability. This is focused on creating further technical knowledge base on forecasting (e.g., through climate modelling, risk analysis, natural resource use and extraction thresholds).
3. Making necessary data accessible for regional-level climate change adaptation assessments and knowledge sharing.
4. Uniting and development of the educational and research capacities of the region. This key area is to optimise the contribution in the adaptation to climate change by identifying the gaps and opportunities of the common capacities of the region. The significance of this action goes beyond short-term education, it is rather to have a long-term exchange and development of educational, scientific, student and expert experience.

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## 4.2 Barriers, risks, and benefits

The challenges may be viewed in terms of (1) barriers and (2) risks, where barriers are those that create obstacles or difficulties in implementing solutions. Risks are those that may turn out to be future costs for actions taken today. On the other hand, the advantages are the benefits over time of addressing climate change through adaptive measures. Major barriers, risks and advantages are listed below:

### Barriers:

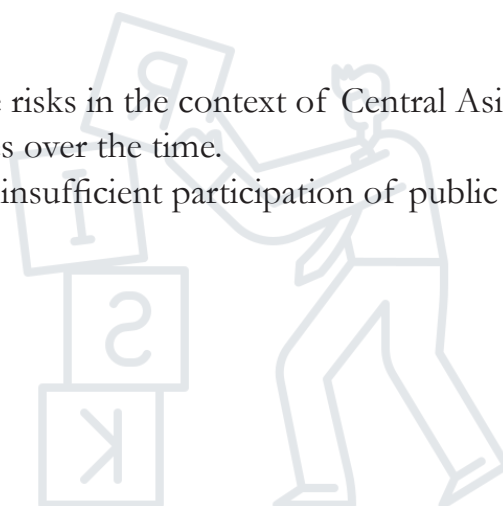
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- Most decisions cannot incorporate climate change issues due to a lack of evidence and knowledge on the impact of climate change on them.
- In addition to knowledge gaps and short-term biases, fragmented responsibilities, poor institutional cooperation, and lack of resources hinder action.
- There is a lack of understanding of the intersectoral nature of climate change risks, vulnerabilities, and adaptation capacities.
- Preparedness for financing is weak in national capacities.
- Quantity, quality and access to existing natural resource data and information are weak.
- New forecasting technologies, including climate information and Earth observations, lack capacity and investments.
- Overall educational and scientific capacity on climate change adaptation is weak.

### Risks:

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- Lack of assessment and understanding of climate risks in the context of Central Asia.
- Inaction increases the cost of adaptation measures over the time.
- Low effectiveness of adaptation measures due to insufficient participation of public sector and civil society.

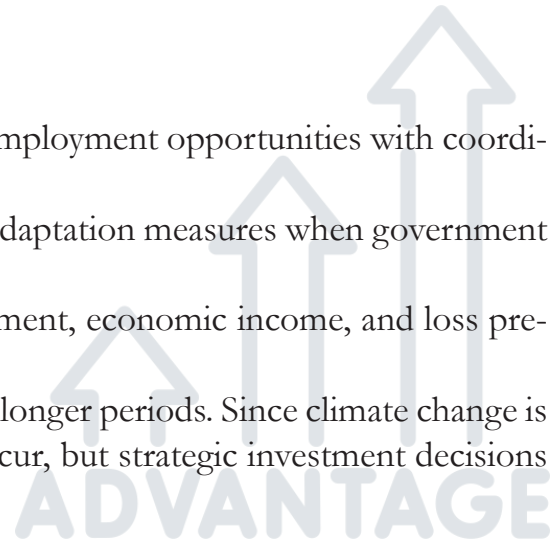


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## Advantages:

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- Economic benefits reduced future costs and new employment opportunities with coordinated preparation of adaptation measures.
- Increasing private sector interest in implementing adaptation measures when government incentives are provided.
- Improvement of the social and ecological environment, economic income, and loss prevention - triple benefit from adaptation actions.
- Actual funding for implementation may occur over longer periods. Since climate change is a long-term process, its impacts may take time to occur, but strategic investment decisions need to be made now.



## 5. OVERVIEW OF FINANCING PROSPECTS

The Regional Strategy implementation will be based on the use of regional, national and international sources of financing, technical and technological assistance and will require the mobilization of significant financial, scientific and technological, labor and other resources. The process of formation of financial flows in the field of adaptation is inextricably linked with the process of investment and capital accumulation in the economy. Therefore, we are not talking about creating fundamentally different funding sources, but about additional criteria and incentives that emerge as a result of regional cooperation. Such sources include resources provided for the implementation of regional programs, expenses of sectoral government bodies, investments by private companies, international donor assistance, etc.

Accounting for climate risks should be an additional element of the decision-making mechanism for spending funds in the public and private sectors. One of the tools of this mechanism is methodological and regulatory documents that need to be brought into line with the tasks of climate change adaptation.

In order to effectively address issue of climate change adaptation, regional coordination mechanisms, attraction of external investment and joint international negotiations planned under the first strategic objective are required. In the framework of UNFCCC, several specialized mechanisms have been created for financing adaptation activities, which are the basis for countries to attract special climate finance, these include the Green Climate Fund, the Adaptation Fund, the Global Environment Facility, etc. Priority should be given to regional projects, as well as negotiations to create special programs/priority to support implementation of the Regional Strategy in the framework of these mechanisms.



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It is also important to negotiate and attract financial resources from international financial institutions (IFIs) and development partners, such as World Bank, European Bank for Reconstruction and Development, Asian Development Bank, UN agencies, as well as bilateral and multilateral assistance to major countries-donors (European Union, Germany, China, etc.). In addition, an increase in adaptive capacity can be achieved through the transfer of technologies and international experience, which is planned as part of the implementation of strategic objectives 3 and 4.

Currently, most of the regional activities are funded by IFIs and development partners. However, the Regional Strategy envisages the development of independent and, subsequently, self-sustaining regional funding mechanisms including co-financing from national budgets and the private sector.

Thus, the first element of the strategy implementation is to assess the ability of the countries in the region to finance actions on the climate change adaptations. Then, assessments through practice and research will identify opportunities and gaps that need to be addressed by IFIs and development agencies. Engaging the private sector in climate finance will be an important challenge to leverage regional potential.

As part of the Regional Strategy, the following sources of funding will be considered:

- National financial potential of CA countries;
- Global climatic mechanisms (Green Climate Fund, Adaptation Fund, Global Environment Facility, Climate Investment Fund, etc.);
- Key development partners such as UN, EU, German Society for International Cooperation (GIZ), International Climate Initiative (IKI);
- International financial institutions (e.g. WB, ADB, EIB, EBRD, IDB and other development banks).

Given the high global competition for international funding to support adaptation actions, a regional approach provides an opportunity to gain a more competitive advantage. At the same time, developed investment proposals should include detailed description of approaches to reduce climate risks and prevent damages, be supported by justification, and meet the main criteria for reducing vulnerability in priority areas of adaptation to climate change in Central Asian countries, which is part of implementation of second strategic objective.



## 6. MONITORING AND EVALUATION

Monitoring and Evaluation are important components for the implementation of the Strategy. This will ensure transparency and inclusiveness in the development and consequent implementation of the full regional strategy with the participating countries. The overall process for monitoring and evaluating the implementation of the Regional Climate Change Adaptation Strategy for Central Asia consists of two parts:

- monitoring the achievement of the Goal of the Strategy;
- monitoring and evaluation of the progress in fulfilling the strategic objectives.

To monitor progress in achieving the overall Goal of the Strategy, an independent assessment of the positions of each Central Asian country in the adaptation ranking of indexes ND-GAIN<sup>13</sup> (Climate Resilience Index ND-GAIN, Vulnerability Index ND-GAIN and Readiness Index ND-GAIN, Table 2, Figure 3) will be used. Progress will be considered positive when each of the 5 countries improves their score in the index.

Table 2. Central Asia position in ND-GAIN adaptation indices for 2022

| Country                           | Index ND-GAIN      |                 |             |
|-----------------------------------|--------------------|-----------------|-------------|
|                                   | Climate Resilience | Vulnerabilities | Readiness   |
| <b>The Republic of Kazakhstan</b> | 36 (59,8)          | 22 (0,322)      | 51 (0,518)  |
| <b>The Kyrgyz Republic</b>        | 65 (53,3)          | 28 (0,331)      | 100 (0,396) |
| <b>The Republic of Tajikistan</b> | 98 (47,6)          | 55 (0,372)      | 140 (0,325) |
| <b>Turkmenistan</b>               | 117 (44,2)         | 36 (0,349)      | 183 (0,234) |
| <b>The Republic of Uzbekistan</b> | 72 (52,2)          | 43 (0,364)      | 97 (0,408)  |

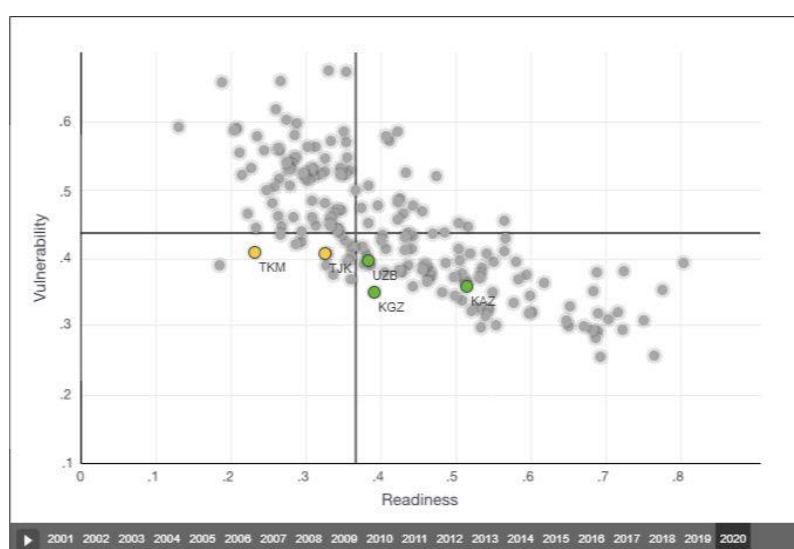


Figure 3. Central Asia position in ND-GAIN adaptation Indexes ND-GAIN for 2022

13 Notre-Dame Global Adaptation Initiative, <https://gain-new.crc.nd.edu/>

Monitoring of the implementation of strategic objectives will be based on the assessment of the first stage of the implementation of the Action Plan, which is the main tool for assessing the implementation of strategic objectives. Moreover, monitoring and evaluation of the programmed will be based on principles of broad participation in monitoring and evaluation process of all participants and stakeholders, including civil society, government institutions of Central Asian countries, represented in Regional Working Group (RWG) on the implementation of the Regional Strategy. The working body of RWG will be the Secretariat of the Strategy, responsible for overall coordination of implementation of its decisions and preparation of materials and proposals for its meetings. Secretariat, being a working body of the Council, will coordinate activities of RWG and will be responsible for conducting regular and high-quality monitoring of implementation of the Strategy on an annual basis.

**Table 3. Matrix of indicators for monitoring and evaluation of implementation of the Strategy**

| OBJECTIVES   | INDICATORS   | FINAL INDICATORS/ TARGETS   |
|--|--|---|
| <b>1</b><br>Strengthening regional coordination on climate change adaptation   | 1.1 RWG on Implementation of the Strategy and Secretariat are established  | Protocol decision on activities and tasks of RWG and Secretariat                      |
|  | 1.2 RWG meetings conducted, and protocol decisions agreed  | 1 RWG meeting per year  |
|  | 1.3 Reports on monitoring and evaluation of implementation of the Strategy are prepared  | Annual monitoring and evaluation reports on implementation of the Strategy            |
| <b>2</b><br>Establishment of mechanisms for development and implementation of adaptation projects/ programs, and fundraising | 2.1 Trainings on interaction with the GCF and other financial institutions were conducted for government agencies of Central Asian countries | 1 regional training per year  |
|  | 2.2 Implementation Plan for “Regional Climate Change Adaptation Strategy for Central Asia” have been developed and approved                  | Implementation Plan of “Regional Climate Change Strategy for Central Asia”            |
|  | 2.3 Supporting national state agencies in development of climate project proposals   | Draft climate project proposals developed as part of the Strategy Implementation Plan |

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Increasing adaptive capacity through accumulation, knowledge sharing and scientific cooperation

Development and implementation of priority projects in the framework of implementation plan of the Strategy

3 regional project proposals developed and approved

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## 3

Development of systems for climate monitoring, information exchange and forecasting

Development and implementation of priority projects in the framework of implementation plan of the Strategy

3 regional project proposals developed and approved

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## 4

## 7. IMPLEMENTATION PLAN

The Regional Climate Change Adaptation Strategy for Central Asia is a framework strategic document that provides development of regularly updated Action Plans that clarify adaptation actions. Action plans divided into four strategic objectives are developed for a 3-year period, and contain both activities, monitoring indicators, budgets, and responsible executors.

Pending the development and approval of the first Action Plan of the Regional Climate Change Adaptation Strategy for Central Asia, the “Regional Action Plan for Joint Political Dialogue on Climate, Environment and Security” (“Green Central Asia”) will be used as the initial Action Plan of the Regional Strategy. This document identifies the stakeholders and partners at the national level, indicates the timeframe for taking various measures until 2025.

At the initial stage, in order to form common approaches to the implementation of the Strategy, it is proposed to implement a number of priority projects, and based on the results of these projects, the Strategy Implementation Plan will continue to develop including new and additional regional initiatives in the field of climate change adaptation.

## Proposals for the Strategy Implementation Plan:

| DESCRIPTION | COUNTRIES INVOLVED | IMPLEMENTATION PERIOD |
|-------------|--------------------|-----------------------|
|-------------|--------------------|-----------------------|

### Strategic objective 1: Strengthen regional coordination for climate change adaptation

|  |                  |                      |
|--|------------------|----------------------|
| Capacity building of the Central Asian countries for national adaptation planning through strengthening regional coordination on climate change adaptation | All CA countries | 4 years<br>2024-2027 |
|--|------------------|----------------------|

Brief description: In all CA countries, national adaptation planning processes have been initiated with the support of the GCF. This project complements national climate change adaptation strategic planning processes and aims at increasing their effectiveness through support for regional cooperation, knowledge sharing and strategic best practices. At the regional level, the process of implementing the Regional Strategy is carried out through supporting the functioning of the Central Asian Climate Adaptation Secretariat based on the approved Climate Change Adaptation Strategy for Central Asia. The activities include: (1) supporting the functioning of the working Secretariat for the Strategy, (2) organizing and conducting coordination activities of countries within the framework of the Strategy implementation, (3) monitoring processes of the Strategy implementation, (4) strengthening regional cooperation and positioning of the Central Asia countries in global climate processes/negotiations.

### Strategic objective 2. Creation of mechanisms for the development and implementation of adaptation projects/programs, and attraction of financing

|   |                  |                      |
|---|------------------|----------------------|
| Capacity building of CA countries to attract climate finance through regional cooperation | All CA countries | 4 years<br>2024-2027 |
|---|------------------|----------------------|

Brief description: The project is aimed to build a preparedness system and increase the capacity of the CA countries to interact with the GCF and other financial institutions through improved understanding of the rules, procedures, and regional approaches. By assessing the sources of climate finance available to the CA countries (including requirements/conditions) with the identification of the main directions/opportunities for improving the efficiency and volume of attracting climate finance by countries through regional cooperation with the development of a practical Roadmap. This activity also includes support to national government authorities in development of climate project proposals.

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**DESCRIPTION****COUNTRIES INVOLVED****IMPLEMENTATION PERIOD**

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**Strategic objective 3: Improve adaptive capacity through accumulation and sharing of knowledge and scientific cooperation**

|   |                         |                              |
|---|-------------------------|------------------------------|
| Strengthening the Informational Portal on Climate Change in Central Asia as a single center for the accumulation and exchange of climate knowledge in Central Asia (Informational Portal on Climate Change in Central Asia) | <b>All CA countries</b> | <b>4 years<br/>2024-2027</b> |
|---|-------------------------|------------------------------|

Brief description: CAREC has created and operates the Informational Portal on Climate Change in Central Asia (<https://centralasiacimateportal.org>). The project is aimed to promote the Portal and provide technical support to expand the possibilities of collecting, processing, and disseminating climate knowledge.

|   |                         |                              |
|---|-------------------------|------------------------------|
| Development of methodologies for assessing the vulnerability of territories and sectors of the economy of the Central Asian countries to climate change | <b>All CA countries</b> | <b>4 years<br/>2024-2027</b> |
|---|-------------------------|------------------------------|

Brief description: The project is aimed at (1) developing unified methodologies for assessing the vulnerability of territories and sectors of the economy to climate change, (2) practical training of specialists in the CA countries on the practical application of the developed methodologies, (3) conduct regional assessment of vulnerability of territories and sectors of the economy of Central Asia to climate change with promotion of results in the 7th IPCC Assessment Report.

|  |                         |                               |
|--|-------------------------|-------------------------------|
| Improving the understanding of climate change adaptation issues by national government bodies, taking into account international and regional experience | <b>All CA countries</b> | <b>6 years<br/>2024– 2030</b> |
|--|-------------------------|-------------------------------|

The project is aimed at: (1) development of unified educational and methodological materials on climate change adaptation, taking into account international and regional experience, (2) regional activities to train national trainers, (3) conducting pilot training events in CA countries, 4) strengthening cooperation between CA universities to develop methodological materials on climate change adaptation.

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| DESCRIPTION  | COUNTRIES INVOLVED      | IMPLEMENTATION PERIOD        |
|--|-------------------------|------------------------------|
| <b>Strategic objective 4. Development of climate monitoring, information exchange and forecasting systems</b>  |                         |                              |
| Expansion of the climate observation network of Central Asia countries (with the support of the World Bank and other development partners)   | <b>All CA countries</b> | <b>5 years<br/>2024-2029</b> |
| Brief description: The project is aimed at: (1) expanding the meteorological and hydrological observation network of Central Asian countries, (2) introducing the best available technologies for climate monitoring in national authorized bodies, (3) creating a regional laboratory for verification of measuring instruments, including sensors at automatic meteorological stations |                         |                              |
| Development of regional climate models applicable to the territories of Central Asian countries  | <b>All CA countries</b> | <b>6 years<br/>2024-2030</b> |
| The project is aimed at: (1) identification of global climate models (CMIP6) that are most relevant for assessing climate trends on the territory of each CA country, (2) development and adaptation of regional climate models (taking into account CMIP6) that best reflect climate trends on the territory of each CA country.  |                         |                              |
| Regional cooperation for glaciological monitoring  | <b>All CA countries</b> | <b>6 years<br/>2024-2030</b> |
| The project is aimed at: (1) national capacity building and material base for monitoring glaciers in the Central Asian countries, (2) supporting cooperation and joint glaciological monitoring in the Central Asian countries, (3) to conduct an inventory and creating regional catalogue of CA glaciers.  |                         |                              |
| Development and implementation of methods for calculating threshold values of hydrometeorological emergencies  | <b>All CA countries</b> | <b>3 years<br/>2025-2027</b> |
| The project is aimed at conducting joint research and developing unified methods for calculating the threshold values of hydrometeorological emergencies for interested countries.   |                         |                              |

The indicated projects will become the basis for the development of the Implementation Plan for the Regional Climate Change Adaptation Strategy for Central Asia. The list of projects will be constantly expanded considering the proposals from countries and the results of joint negotiations with development partners.

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## 8. FUTURE ACTIONS

### 8.1 Strategy status

This Regional Climate Change Adaptation Strategy for Central Asia requires high-level guidance and decision-making for political support. Thus, the respective governmental decision-making process is proposed to be followed at the national level.

### 8.2 The process of approval and adoption of the document

Preliminary approval process takes place at the national level in each country by the Ministries of Foreign Affairs (MFA) with the support of the national working group on regional adaptation. Representatives of specialized line ministries responsible for climate change issues and sectoral aspects of climate change adaptation should be represented in these national working groups to update this overall strategy framework and manage its implementation. The same structure and process can be used to support national adaptation strategies once a guidance document has been developed. The final version of the document will be signed by representatives of the Ministries of Foreign Affairs of the countries on the basis of the exchange of official Notes.

### 8.3 Strategy Implementation Mechanism

To further support the coordination and implementation of the Regional Climate Change Adaptation Strategy for Central Asia, it will be proposed to form an RWG on its implementation on the basis of the existing Regional Working Group for the development of the Regional Strategy. Considering that this Working Group includes representatives of the main authorized government bodies in the field of climate change adaptation, this creates conditions for establishing cooperation in the implementation of the Regional Strategy, which includes various priority areas of adaptation.

This transformation of the RWG also allows for the preservation of institutional memory and simplifies the establishment of intersectoral connections as the basis for an interaction mechanism between countries and the implementation of regional projects in the future. The activities of the RWG will be supported through the formation of the Secretariat of the Strategy of the Central Asian countries on climate change adaptation on the basis of the existing regional organization.

The activities of the Regional Working Group and the Secretariat of the Strategy of the Central Asian countries on climate change adaptation to address the strategic objective “Strengthening regional coordination on adaptation to climate change” can be supported by implementing an international project as part of the overall Regional Strategy Implementation Plan.

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## NOTES

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Green Central Asia: Transboundary dialogue on climate,  
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Address: 100128 Uzbekistan, Tashkent,  
401 Labzak 1A, 4th floor  
T. +998 71 241 40 48  
[www.giz.de](http://www.giz.de) / [www.greencentralasia.org](http://www.greencentralasia.org)

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