



# **Virtual Constituting Meeting of the CAREC Working Group on Climate Change**

26 April 2024



# 1. The CAREC Program

**Open and inclusive platform** to promote sustainable development through **regional cooperation**



- 11 member countries
- Development partners
- Promotes **policy dialogue**, supports **project development** and financing, provides **technical assistance**, and advocates **South-South cooperation**

ADB

ADB serves  
as the  
**CAREC  
Secretariat**



**CAREC Institute**  
supports knowledge  
generation and  
capacity building



Rotating chairmanship  
annually:  
**Kazakhstan** as chair  
country in 2024

**Overarching Vision: “Good Neighbors, Good Prospects, Good Partners”**



# 1. The CAREC Program: CAREC 2030 Strategy

## CAREC 2030 Strategy

### Operational Clusters



**Economic and Financial Stability**



**Trade, Tourism and Economic Corridors**



**Infrastructure and Economic Connectivity**



**Agriculture and Water**

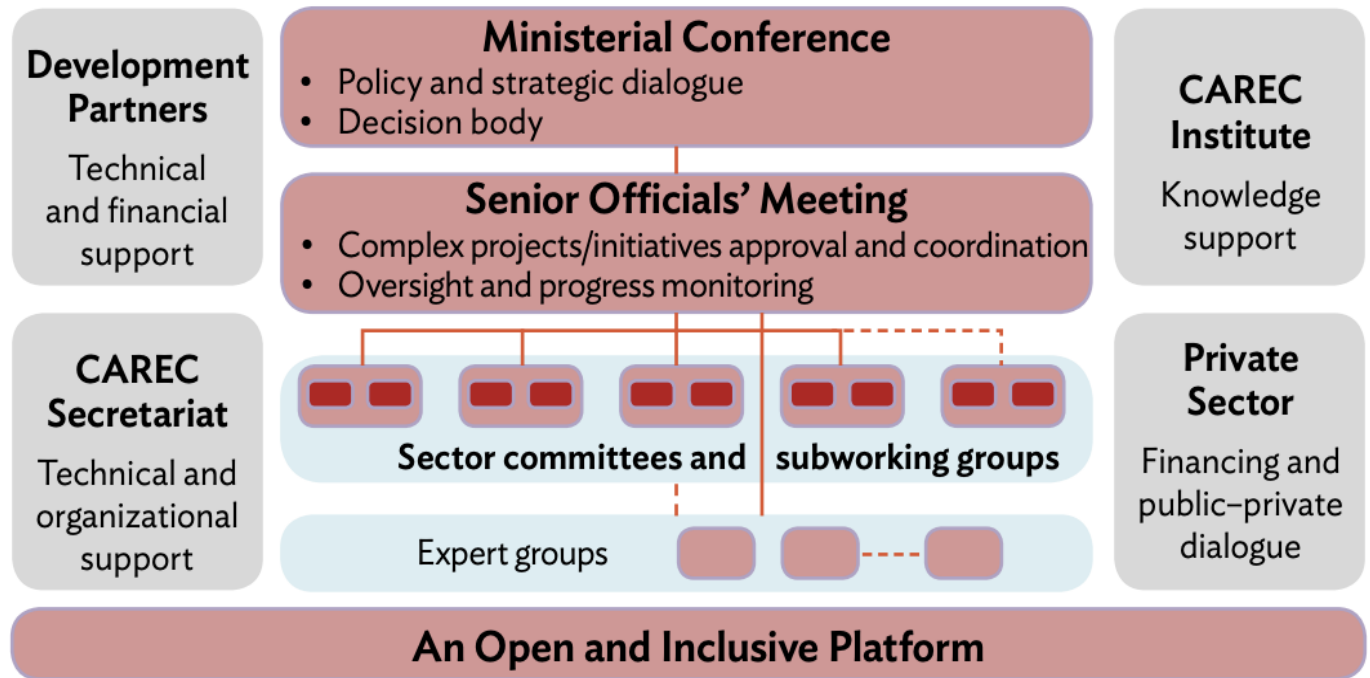


**Human Development**



**Cross-cutting Themes**

### Institutional Structure





# 1. The CAREC Program

## Plans and Priorities 2024

- Midterm review of CAREC 2030 Strategy
- Implementation of **CAREC Climate Change Vision**
- Establishment of **CAREC Climate and Sustainability Project Preparatory Fund**
- Proposed CAREC Infrastructure Investment Forum
- Development of pipeline of innovative regional projects

## Key Events 2024

- Senior Officials Meeting (30-31 May, Astana)
- National Focal Points' Meeting (Sept, virtual)
- Ministerial Conference (8 Nov, Astana)
- **COP29 Summit** (11-24 Nov, Baku) → *potential CAREC session*

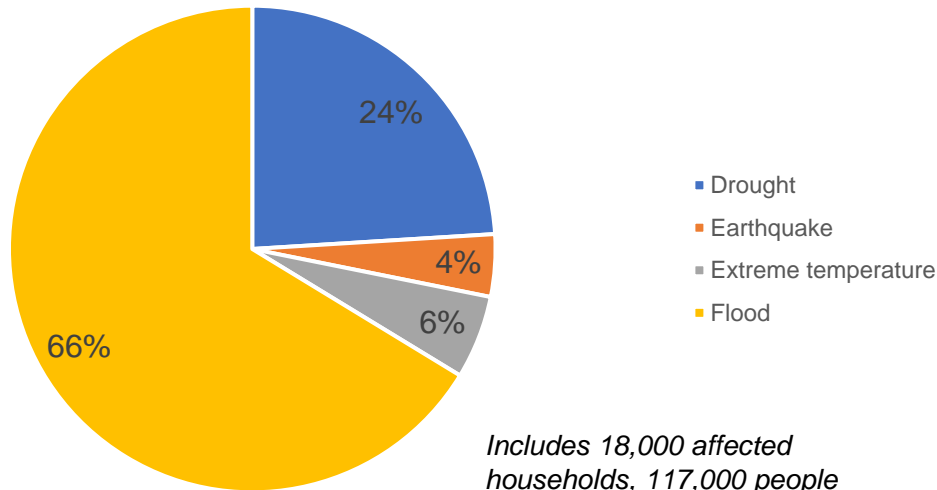




# 2. CAREC Climate Change Vision

- 1 **Floods:** most frequent hazards in terms of affected people and economic losses
- 2 **Droughts:** most significant impact in terms of economic losses in Central Asia
- 3 Climate impacts and natural hazards are being **exacerbated by climate change** and they are set to **increase in the future**

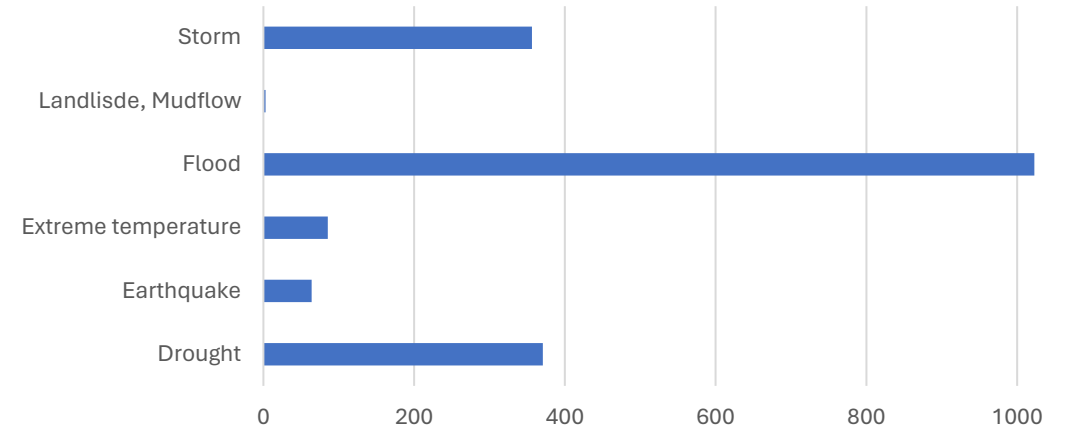
CAREC % people affected by natural disasters (2000-2024)



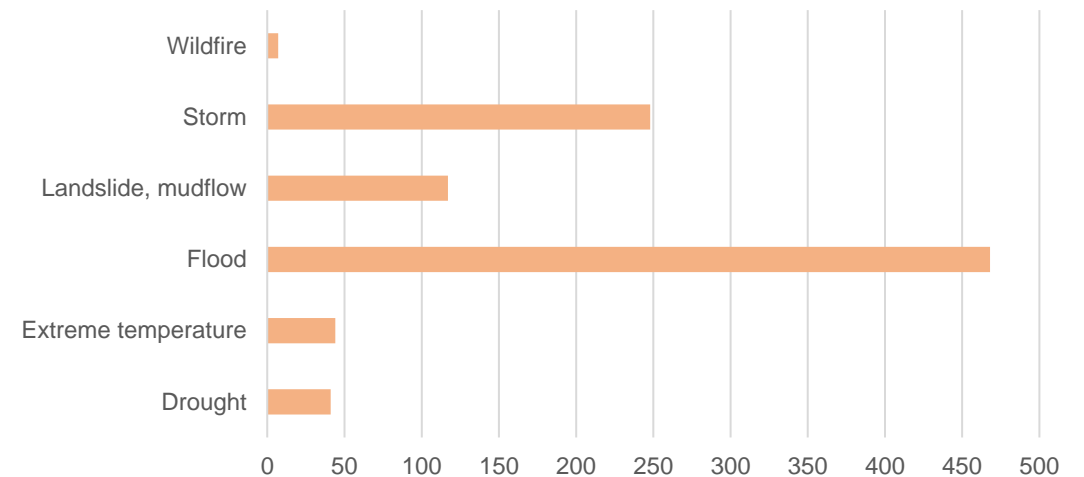
*Includes 18,000 affected households, 117,000 people evacuated in KAZ in April 2024*

Source: EM-DAT, ADB

CAREC: Economic losses by to Natural Hazards  
Sum of total damage (billion USD 2000-2024)



CAREC Natural Hazards Count 2000-2024

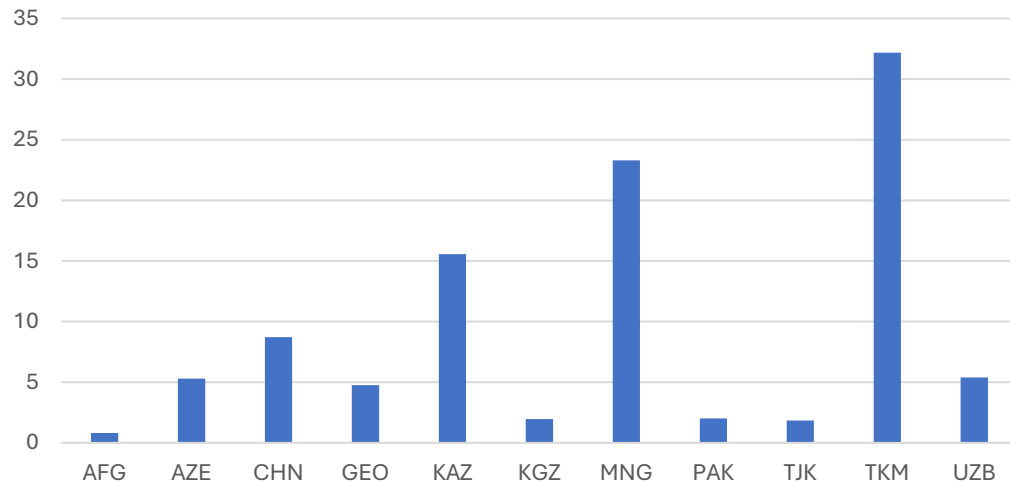




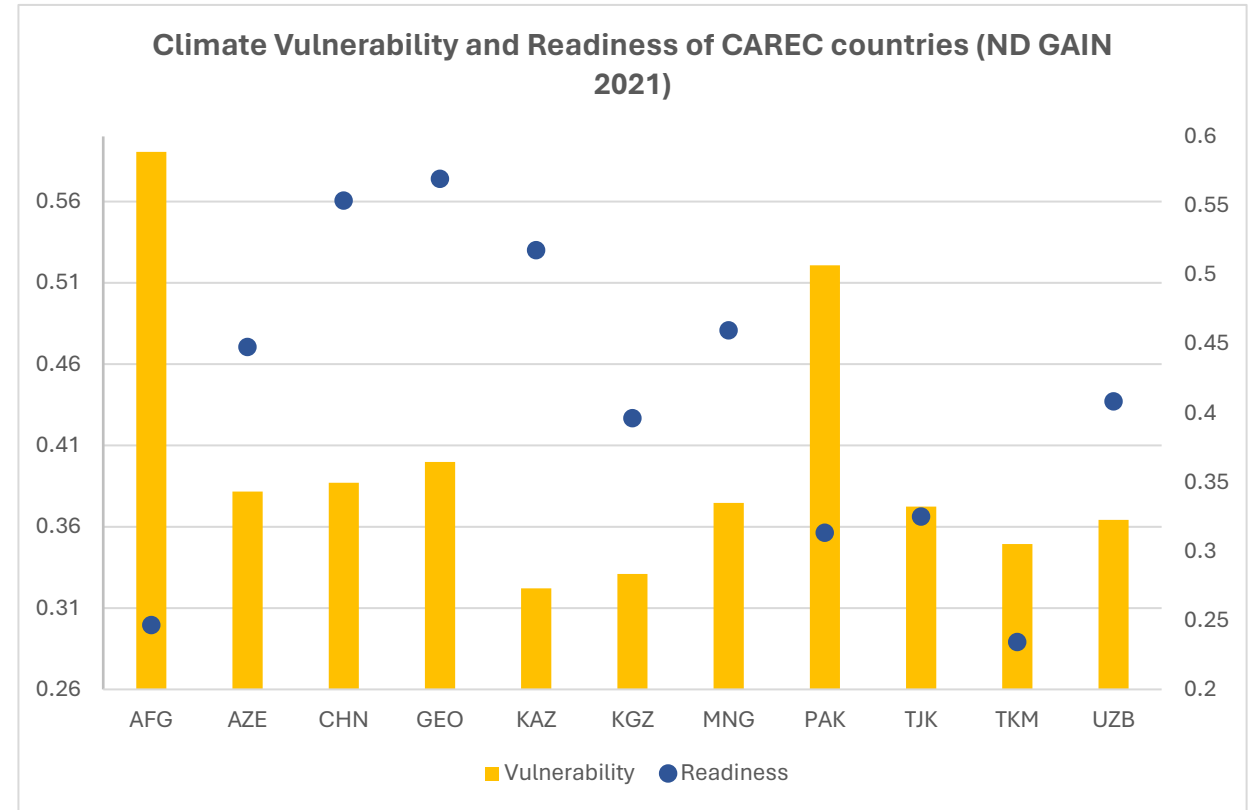
# 2. CAREC Climate Change Vision

- 1 Most CAREC countries ranked with high or very high vulnerability to climate change and natural hazards.
- 2 NDCs, NAPs and SAPs: recent updates but gaps in formulation and implementation of action plans
- 3 Moving forward on CAREC CC vision: integration of climate measures across key sectors and priority areas to build resilience and increase mitigation efforts

CAREC CO2 Emissions (metric T per capita) 2020



Source: ND GAIN, World Bank, Climate Watch



Vulnerability: higher = more vulnerable  
 Readiness: higher = better prepared





## 2. CAREC Climate Change Vision

### Background

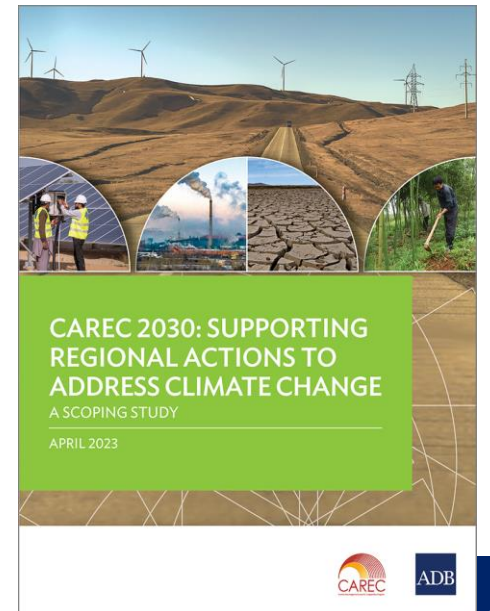
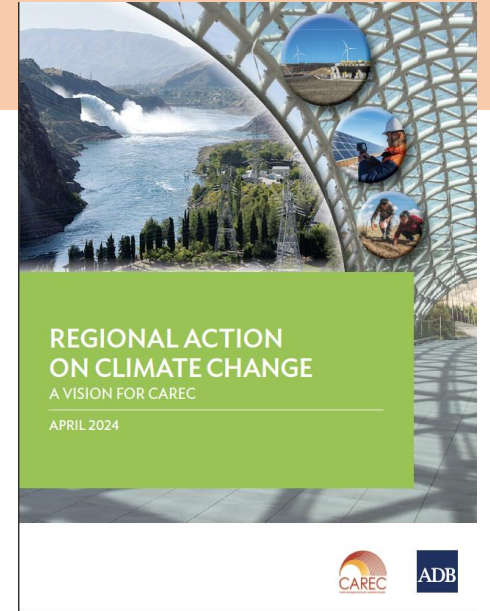
- CAREC Climate Change Scoping Study 2023
- CAREC Climate Change Vision 2023
- ADB TA to implement CAREC CC Vision
- CAREC platform for regional climate action and negotiations

### Institutions

- CAREC Climate Change Working Group
- CAREC Climate Change Steering Committee
- CAREC Climate Change Action Plan
- Coordination with CAREC Institute
- Development Partners Forum
- Communication Plan

### Regional Climate Priorities

- Energy
- Water
- Agriculture
- Transport, Transit, and Trade
- Climate-Smart Cities
- Climate-Related Disasters
- Health, Education, and Social Protection





# 3. CAREC Working Group on Climate Change (WGCC)

Representatives from CAREC countries

Representatives from development partners

- **Coordinate** with and support **sector committees** / working groups for **mainstreaming climate change** across CAREC 2030's operational areas
- Develop and disseminate **CAREC Climate Change Action Plan** (to be updated every three years)
- Develop **CAREC climate project portfolio** and identify potential **financing sources**
- Identify **regional initiatives** to strengthen **enabling environment for climate action**
- Build **multistakeholder consensus** and **public-private partnerships**
- Share **best practices** for regional climate action

CAREC Secretariat



Meetings twice per year



Annual reporting to Ministerial Conference



Rotating chairmanship





# 4. Agenda for 1<sup>st</sup> physical WGCC meeting

29 May 2024, Astana, Kazakhstan

14:30–14:35 **Opening Remarks**

Mr. Yevgeniy Zhukov, Director General, Central and West Asia Department (CWRD), ADB

14:35–14:40 **Introduction of Program**

Objective: Overview of the outcomes of the first virtual meeting of the WG, initial work plan for 2024/2025, and goals and agenda of the meeting.

14:40–16:00 **Session 1. Mainstreaming Climate Change across CAREC 2030's operational areas**

Objective: Align existing sectoral strategies and projects with the Paris Agreement and countries' climate commitments and identify potential climate-related regional projects and initiatives in the sectors.

Q&A (15 mins)

16:00–16:20 **Group Photo and Coffee/Tea Break**

16:20–17:40 **Session 2. Financing Regional Climate Projects**

Objectives: Discussing Financing and Regional Climate Change Projects, including showcasing ongoing project examples of regional projects in the CAREC region

Presentations of Selective Projects by CAREC Member Countries and Development Partners

17:40–18:00 **Wrap-up**

Objective: Summary of key takeaways from the discussions and next steps.

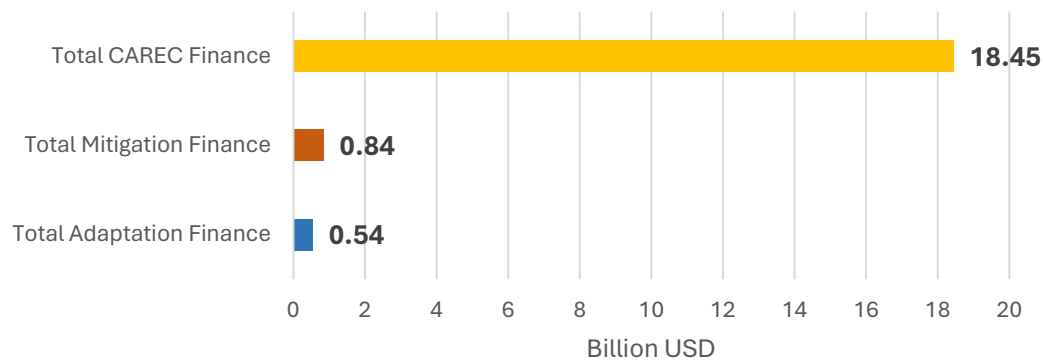
19:30 **Dinner Hosted by ADB**



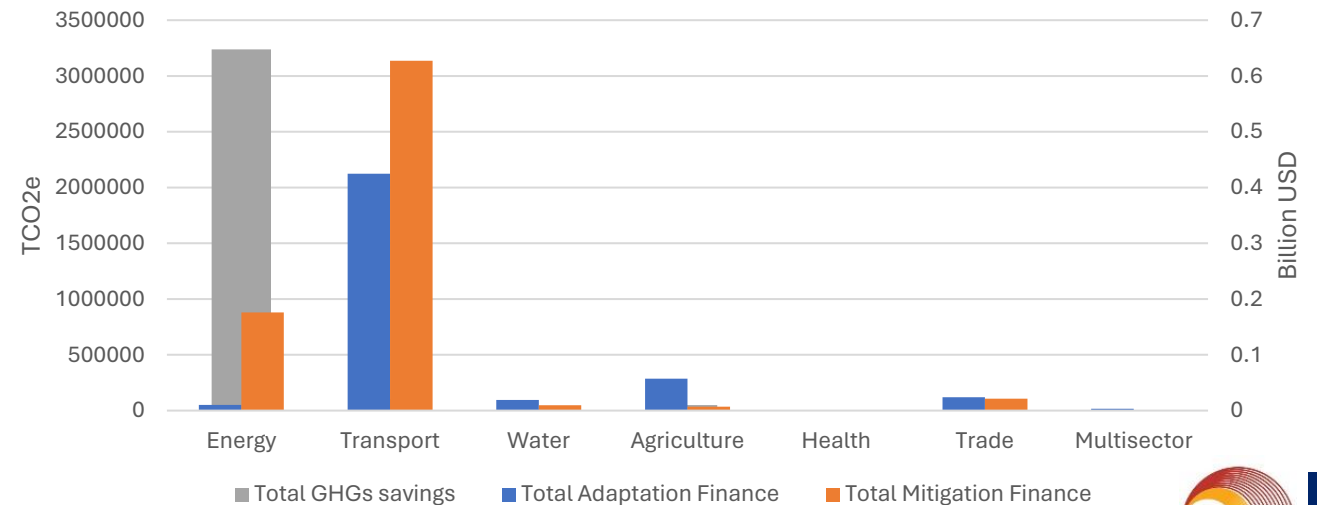
# 5. Proposed CAREC Climate Change Initiatives

- 1 Overall CAREC investments between 2016–2023 are 18.45 billion USD, of which **only 3% invested in adaptation** and **5% in mitigation**
- 2 Most **adaptation finance** is for **transport** (infrastructure resilience); other sectors have marginal or no adaptation finance
- 3 Most **mitigation finance** is for **transport**, followed by energy but proportionally much less; other sectors have marginal or no mitigation finance
- 4 **Energy** accounts for **95% of emissions reduction**, transport for only 2%

Total CAREC investments vs. climate finance (bn USD)



Adaptation and Mitigation Finance (bn USD)



Source: CAREC Projects Database



# 5. Proposed CAREC Climate Change Initiatives

## Climate Change Projections

- 1 CAREC region will experience average **temperature increases of 1.6-2.6°C by 2050s and of 3°C by 2090s** (moderate scenario **SSP2**); more significant warming of **4°C by 2050s and 7°C by 2090s** (high emission scenario **SSP5**)
- 2 Changing climatic patterns expected throughout the region, with **shifting of seasonal rain patterns** (early unseasonal rains) and **climatic zones**
- 3 **Natural hazard risk** (extreme rainfall events, flooding, landslides) and **vulnerability is expected to increase** throughout the region
- 4 At the same time, some countries/regions will experience **altered and reduced precipitation** leading to **more severe and frequent droughts**
- 5 **Increasing unseasonal glacial melt, glaciers' retreat, unpredictability on water flows and availability**

Source: CAREC Scoping Study ADB, World Bank Knowledge Portal



# 5. Proposed CAREC Climate Change Initiatives

## Climate Change Projections

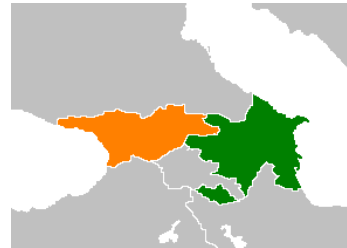
### Central Asia (KAZ, KGZ, TJK, TKM, UZB)

- Glacier melt and glacier retreat
- Increasing heat stress, evapotranspiration, severity and frequency of droughts



### South Caucasus (AZE, GEO)

- Hot days increase but to a lesser degree than Central Asia
- Some increase in extreme precipitation events
- Increase in droughts (in particular AZE, eastern Georgia)
- Sea level rise and coastal storm surges



### Pakistan and Afghanistan

- Increase in extreme precipitation events in AFG and regions of Pakistan
- Droughts and floods, glacial retreat
- Sea level rise and coastal storm surges



### People's Republic of China

- A range of climatic and geographic zones facing distinct climate change challenges



### Mongolia

- Extreme weather patterns and warmer summers
- Increase in droughts and extreme winter conditions (dzuds) and impacts on pastoralists

Source: CAREC Scoping Study, ADB, World Bank Knowledge Portal



## 5. Proposed CAREC Climate Change Initiatives

**Suggestion 1: Climate risk assessment of CAREC assets and investments, and Water Resources Monitoring and Forecasting**



A mudslide badly damaged a road in the town of Vakhdat, Tajikistan  
Source: Tajikistan Committee for Emergency Situations and Civil Defence

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# 5. Proposed CAREC Climate Change Initiatives

## Suggestion 1: Climate risk assessment of CAREC assets and investments, and Water Resources Monitoring and Forecasting

Activities	Outputs
Screen CAREC investments to determine exposure to climate risk	Identification, mapping of assets and classification by type/sector (present and proposed); Identification of main climate risks and impacts for CAREC assets and investments; Identification of vulnerable hotspots based on climate impacts (pilot basis)
Formulate climate action plans to increase resilience of critical infrastructure	Identification of required adaptation and mitigation measures to be integrated in asset design, construction, O&M; Alignment with Paris Agreement and GHGs savings
Forecast future water availability for energy and agriculture needs at regional scale	Development of hydrological models and baselines under different climate scenarios; Regional projections on river flows, precipitation, glacial melt trends in the medium and long term (2050s – 2090s); Regional assessments and studies focusing on transboundary water resources and management

Type	Adaptation	Mitigation
Vision sector	<b>Disaster Risk Management Water</b>	
Vision proposed intervention	CAREC shall assist countries in promoting climate and disaster resilience; CAREC shall further explore the opportunities to assist DMCs' by supporting national and regional adaptation action in the critical water sector	
Countries	All CAREC countries	
Potential financiers	ADB, World Bank, others	





# 5. Proposed CAREC Climate Change Initiatives

## Suggestion 2: Decarbonization of transport corridors and trade



Source: ChatGPT & DALL-E generated panoramic image

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# 5. Proposed CAREC Climate Change Initiatives

## Suggestion 2: Decarbonization of transport corridors and trade

Activities	Outputs
Digitalization of trade processes and upgrade of cross-border infrastructure	Reduced border traffic congestion and crossing times, reduced GHG emissions
Regional assessment of transport corridors' emissions (to identify regional low-carbon solutions and policy measures for decarbonization)	Quantification of present and future transport corridors' emissions
Promotion of road safety in capital cities and regional centers	Reduced air pollution and road congestion, GHGs savings (linkages with climate change education and awareness in schools, climate-smart cities)

Type	Mitigation
Vision sector	<b>Transport, Transit and Trade</b>
Vision proposed intervention	CAREC shall explore opportunities to assist its DMCs in reducing the carbon footprint of regional transport services
Countries	All CAREC Countries
Potential financiers	ADB, others



# 5. Proposed CAREC Climate Change Initiatives

## Suggestion 3: Regional grid readiness and integration of renewable resources



Source: Energy Technologies Area, Berkeley Lab

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# 5. Proposed CAREC Climate Change Initiatives

## Suggestion 3: Regional Grid Readiness and integration of renewable resources

Activities	Outputs
Assessment of regional grid readiness of physical and soft infrastructure (e.g., identification of grid instability factors, grid overload, bottlenecks in regional connectivity, etc.)	<p>Increased readiness for renewable energy generation</p> <p>Identification of opportunities for grid-integration of renewable energy (solar, wind)</p>
Capacity support on grid integration	Knowledge transfer and best practices within CAREC and from other regions (e.g., Europe)

Type	Mitigation
Vision sector	<b>Energy</b>
Vision proposed intervention	CAREC shall explore opportunities to support a just and effective transition to a low-carbon energy system.
Countries	Central Asia, AZE, GEO
Potential financiers	USAID, ESCAP, ADB, World Bank, others





# 5. Proposed CAREC Climate Change Initiatives

## Suggestion 4: Disaster Risk Management and Finance



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Source: Turar Kazangapov / REUTERS

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# 5. Proposed CAREC Climate Change Initiatives

## Suggestion 4: Disaster Risk Management and Finance

Activities	Outputs
Development of a Regional Risk Transfer Facility for CAREC	Increased financial resilience to climate-induced disaster events by leveraging access to international insurance and capital markets, risk diversification and reduced costs
Disaster risk insurance and disaster relief bonds	Increased investments in disaster risk reduction and climate adaptation measures

Type	Adaptation
Vision sector	<b>Disaster Risk Management</b>
Vision proposed intervention	CAREC can serve as a platform to support the implementation of complementary regional disaster risk management (DRM) and disaster risk financing (DRF) initiatives.
Countries	All CAREC countries
Potential financiers	ADB, others





# 5. Proposed CAREC Climate Change Initiatives

**Suggestion 5: Capacity development, knowledge sharing, climate finance, COP29**



Source: Germanwatch e.V.



# 5. Proposed CAREC Climate Change Initiatives

## Suggestion 5: Capacity development, knowledge sharing, climate finance, COP29

Activities	Outputs
Set up a CAREC regional climate platform	Joint climate data, information and knowledge gathering and sharing, including best practices and countries experiences Collaboration between countries hydromets, agencies, departments and relevant sectors
Set up of a Regional Early Warning System	Increased capacity and preparedness for climate and natural hazard risk, and disaster risk management
Support countries' capacity to prepare regional climate projects and access climate finance	Increased access to climate funds (GCF, CIFs, Adaptation Fund, SOFF, etc.) Identify co-finance opportunities, share experiences of funders and recipients, climate finance opportunities for regional projects
Capacity support and training for COP29 negotiations	Joint COP29 negotiations, a joint CAREC climate action agenda

Type	Adaptation
Vision sector	<b>Disaster Risk Management, Financing Climate Action</b>
Vision proposed intervention	CAREC can serve as a platform to support the implementation of complementary regional DRM and DRF; CAREC shall prioritize mobilization of financial resources and mechanisms, by exploring opportunities to support DMCs in the development of financing plans and innovative instruments for regional climate action programs in close partnership with DPs and private sector investors
Countries	All CAREC, regional
Potential financiers	ADB, others



# 5. Proposed CAREC Climate Change Initiatives

## Suggestion 6: Health and Climate Change



Source: Pakistan Today





# 5. Proposed CAREC Climate Change Initiatives

## Suggestion 6: Health and Climate Change

Activities	Outputs
Support the formulation of climate change, environment and health action plans	Increased awareness and preparedness to deal with impacts of heatwaves, extreme weather events on health (MoH, sectors)
Regional surveillance of national NCDs	Increased capacity of national disease control agencies to understand and integrate climate risk in surveillance protocols
Capacity development for the definition and integration of green building standards and regulations in cross-border health infrastructure	Increased resilience of health infrastructure to natural disasters, energy and emission savings, and alignment with Paris goals

Type	Adaptation	Mitigation
Vision sector	<b>Health</b>	
Vision proposed intervention	CAREC shall explore further opportunities to support DMCs in developing climate-related actions on a regional basis in the areas of health, education and social protection.	
Countries	All CAREC, Regional	
Potential financier	ADB, others	



**Thank you for your attention!**