Concept Note:
Regional Ecological Summit 2026:
Shared Vision for Resilient Future

At the 78th session of the United Nations General Assembly, the President of the Republic of Kazakhstan, Kassym-Jomart Tokayev, first proposed the idea of holding a **Regional Ecological Summit in 2026**, in partnership with the United Nations and international organizations. In 2025, this initiative was further confirmed during the Astana International Forum and the opening ceremony of the UN Regional Centre for Sustainable Development Goals for Central Asia and Afghanistan, attended by UN Secretary-General António Guterres.

I. What is the Regional Ecological Summit 2026, its goals and objectives?

Regional Ecological Summit 2026 will be a key platform for uniting the efforts of Central Asian countries in the field of climate change and environmental protection. It will cover a wide range of priority topics, including biodiversity conservation, restoration of degraded lands, sustainable management of natural resources, ecosystem development and environmental education.

The aim of the Summit is to develop agreed **workable** solutions and mechanisms that reflect a regional approach to addressing climate and environmental challenges, preventing risks and strengthening resilience. The climate and environmental agendas of the Summit will be considered **as interlinked and indivisible.**

The initiative also aims to strengthen and coordinate existing regional and international programmes without duplication, such *as Green Central Asia*, and to create new synergies between countries and partners.

The summit will serve as a platform for dialogue and interaction between governments, international organizations, development institutions, the private sector, the scientific community, civil society and young people, as well as a unique space for presenting regional initiatives and promoting practical solutions.

The Regional Ecological Summit will be the culmination of **regional cooperation** between the countries of Central Asia aimed at demonstrating to the world the **real needs of the region in climate finance,** developing joint approaches and mechanisms to combat climate change, **address environmental problems and strengthen the region's sustainability.**

II. Central Asia Today: Climate and Environmental Risks and the Path Toward Unity

Over the past 115 years, countries in Central Asia have experienced a significant increase in average annual temperatures: +2.1 °C in Kyrgyzstan, +3.3 °C in Tajikistan, +5.7 °C in Kazakhstan, +12.2 °C in Uzbekistan, and +15 °C

in Turkmenistan. [1] Even under a global temperature increase limited to 1.5 °C by 2050, temperatures in the region are projected to rise by 2–2.5 °C.[2]

It poses serious risks, including: ~10% reduction in agricultural productivity, an increase in wildfire risk (up to 13% by 2080), a 26% decrease in snowfall by 2100.[3]

Ecosystem degradation, desertification, and soil depletion are accelerating-especially in pasturelands, forests, and mountainous areas. According to the latest UN data, more than **20%** of the total land area in Central Asia is subject to degradation, equivalent to approximately **80 million hectares**. This situation affects approximately 30% of the region's population[4].

Human **pressure on water and land resources is intensifying, biodiversity is declining, and the ecosystem services** needed for water supply, agriculture, and public health are deteriorating. Population growth in the region is contributing to a rise in waste from production and consumption.

Key Challenges Facing Central Asian Countries:

a) The need for a systematic and coordinated approach

− The complex and interrelated nature of climate and environmental risks requires comprehensive and coordinated measures aimed at:

− Reducing anthropogenic impacts on the environment and climate.

− Enhancing the resilience of economies and their adaptive capacity to external shocks.

− Developing mechanisms to prevent, mitigate and compensate for losses and damage.

− Ensuring the rational use of natural resources and the preservation of ecosystem services to maintain food, water and energy security.

− Strengthening social resilience and involving local communities in adaptation and sustainable development processes.

− The countries of the region have already developed national strategies to mitigate and adapt to climate change. However, addressing the challenges ahead requires further coordinated efforts and deeper regional cooperation.

b) Identifying priority areas for joint action

− Accelerating the implementation of national sustainable development plans, including achieving climate neutrality and enhancing the adaptive capacity of economies.

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[1] World Bank Group, 2021. *Climate Change Knowledge Portal – Europe and Central Asia.* https://climateknowledgeportal.worldbank.org/region/europe-central-asia

[2] As noted by the President of Kazakhstan in a statement at the World Climate Action Summit during COP28 in Dubai.

[3] IPCC, 2021: *Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* [Masson-Delmotte, V., P.Zhai, A.Pirani, S.L.Connors, C.Péan, S.Berger, N.Caud, Y.Chen, L.Goldfarb, M.I.Gomis, M.Huang, K.Leitzell, E.Lonnoy, J.B.R.Matthews, T.K.Maycock, T.Waterfield, O.Yelekçi, R.Yu, and B.Zhou (eds.)]. Cambridge University Press, Cambridge, United Kingdeom and New York, NY, USA.

[4] *More than a fifth of Central Asia's land is degraded, according to new UN data:* https://www.unccd.int/ru/news-stories/press-releases/over-one-fifth-central-asias-land-degraded-new-un-data-warns

− Effective waste management and prevention of air, water and soil pollution to protect human health and ecosystems.

− Restoring degraded lands, natural ecosystems and preserving biodiversity as environmental security.

− Integrating the climate, environmental and socio-economic agendas to ensure sustainable growth, reduce regional vulnerability and improve the quality of life of the population.

c) Expanding opportunities for regional cooperation

− Mobilising international financing and investment for the implementation of climate, environmental and socio-economic initiatives.

− Joint management of natural and man-made disaster risks, including the establishment of regional early warning and data exchange systems.

− Strengthening institutional cooperation mechanisms to develop coordinated solutions and enhance the overall resilience of the region.

III. What topics will the Regional Ecological Summit focus on?

The Regional Ecological Summit 2026 and its preparatory process will focus on the following key thematic areas.

1. Supporting the Climate Transition

Description: For Central Asian countries, it is critical to develop cost-effective approaches to reducing greenhouse gas emissions and mechanisms for regional cooperation to meet global climate goals. The UAE Consensus (COP28) calls for tripling global renewable energy capacity and doubling energy efficiency by 2030 - setting a clear benchmark for the region.

Central Asia remains highly dependent on fossil fuels (e.g., coal - 72% in Kazakhstan, natural gas - 75% in Uzbekistan and 100% in Turkmenistan)[5], yet the region has strong potential for methane reduction and development of alternative energy. The region possesses exceptionally high potential for solar and wind energy[6]. At the same time, there is a pressing need to invest in the modernization and expansion of power grids, as well as in energy storage systems to enable the integration of renewable energy sources. Additionally, the potential for developing low-carbon hydrogen, under the right conditions, could contribute to the decarbonization of the region's industrial sector.

Moreover, **energy efficiency** remains a common challenge across the entire region. The region's energy intensity is on average 2.4 times higher than OECD countries, signaling major efficiency improvement opportunities.

[5] United Nations ESCAP, the UN Special Programme for the Economies of Central Asia, n.d. *Energy Development in Central Asia: A statistical overview of energy sectors in Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan*.
https://www.unescap.org/sites/default/files/Central%20Asia%20Statistical%20Perspective%202018_WEB.pdf

[6] Ibid

Key challenges include modernizing power grids, integrating storage systems, and decarbonizing "hard-to-abate" sectors like aluminum and cement production, using low-carbon innovations and technologies.

Objective: To promote regional cooperation in reducing GHG emissions, transitioning to renewables, improving energy efficiency, and developing low-carbon industries in line with global climate goals and the UAE Consensus (COP28).

2. Adaptation and Economic Resilience to Environmental and Natural Risks

Description: Climate adaptation and economic resilience are vital for Central Asia. Climate-related disasters cause ~$10 billion USD in damages annually, affecting the lives of nearly 3 million people.[7] and reducing per capita economic growth by 1-2 percentage points. [8]

Regional approaches are needed to implement the Global Goal on Adaptation, and to develop national and regional adaptation plans that protect vulnerable sectors, communities, and ecosystems. Adaptation must also align with other areas of sustainable development - climate mitigation, forest and water resource management, and disaster risk reduction. Special focus will be placed **on loss and damage prevention mechanisms,** including the development of a regional mechanism for minimizing and managing climate-related losses.

In the context of environmental degradation, coordination of efforts to **preserve mountain ecosystems, including the acute problem of glacier melt,** is of particular importance. According to UNESCO, over the past 70 years, the area of glaciers in Kyrgyzstan has decreased by 16%, and in Tajikistan, more than a thousand glaciers have disappeared over the past three decades. Scientists' forecasts are alarming: according to a study published in 2023 in the authoritative scientific journal Science, the retreat of Central Asian glaciers **will accelerate** and is expected to peak in 2035–2055[9].

RES 2026 will provide an opportunity to discuss mechanisms for developing joint programmes to monitor and assess the state of the mountain environment using modern digital and geoinformation technologies.

An integral part of the regional approach should be the intensification of intergovernmental exchange of knowledge, best practices and technologies for the **adaptation of mountain communities** and vulnerable ecosystems to climate change. This is particularly important for ensuring water security and increasing the resilience of economies to growing climate threats.

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[7] Global Facility for Disaster Reduction and Recovery (2016). Europe and Central Asia: Country Risk Profiles for Floods and Earthquakes. The World Bank Group, Washington DC, USA.

[8] International Monetary Fund, 2022. *Feeling the Heat: Adapting to Climate Change in the Middle East and Central Asia. Departmental paper. DP/2022/008* [prep.by Duenwald, Christoph, Yasser Abduh, Kerstin Gerling, and Vahram Stepanyan, and including Lamiae Agoumi, Abdullah AlHassan, Gareth Anderson, Anja Baum, Mehdi Benatiya Andaloussi, Chen Chen, Sahra Sakha, Sergejs Saksonovs, Faten Saliba, and Jesus Sanchez]. International Monetary Fund, Publication Services, Washington DC, USA.

[9] Glacier melt: Central Asia at risk: https://courier.unesco.org/ru/articles/tayanie-lednikov-centralnaya-aziya-v-zone-riska

Objective: To develop and harmonise regional and national approaches to adaptation to enhance the resilience of communities, economies and ecosystems in Central Asia to climate risks, with a focus on preventing and minimising losses and damage, preserving mountain ecosystems, including the development of measures to adapt to rapid glacier melt.

3. Food Security and Regional Ecosystems

Description: Food security is one of the key global priorities, playing a critical role in combating hunger, maintaining sustainable development and preventing social crises. The COP27 and COP28 emphasised the importance of transitioning to sustainable food systems that can adapt to external challenges, including land degradation, biodiversity loss and changes in the water balance[10].

These challenges are particularly acute in Central Asia. Land degradation, declining crop yields, water scarcity and the degradation of agricultural ecosystems undermine food security and the sustainability of rural areas. This, in turn, becomes one of the factors driving **climate-induced forced migration**. The loss of livelihoods in agricultural areas leads to population outflows, primarily of the working-age population, in search of more stable living conditions and employment. The growth of migration flows puts additional pressure on food systems and social and economic infrastructure in receiving areas, both within countries and at the regional level as a whole.

Thus, **the food crisis and climate migration reinforce each other**, creating a vicious circle of vulnerability. Rural communities that lose productive capacity and human capital become less able to recover, while host regions face additional pressure on resources and life support systems.

In this context, the sustainability of food systems should be seen not only as an agricultural or environmental priority, but also as a social and demographic one. It is important to develop policies that simultaneously strengthen food security and reduce the risks of migration pressure, support the integration of displaced persons and enhance the resilience of both origin and host territories.

Objective*:* To promote the development of sustainable, environmentally and socially balanced food systems in Central Asia through regional cooperation, integrated natural resource management and comprehensive consideration of climate and migration risks. This will strengthen food security, prevent new waves of forced migration and contribute to the sustainable development of vulnerable areas.

4. Sustainable Natural Resource Management

Description: With growing anthropogenic and climatic pressures, ecosystem conservation and sustainable natural resource management are becoming particularly important for Central Asia. The region faces acute land degradation, biodiversity loss and declining agricultural landscape resilience. The region is at

[10] FCCC/CP/2022/10/Add.1

high risk of desertification, especially in arid and foothill areas. Habitat loss is leading to a decline of up to one-third of species in some ecosystems.

Of particular concern are two major environmental crises in the region: the **tragedy of the Aral Sea**, which has become a global symbol of environmental degradation, and the **sustained decline in the level of the Caspian Sea**, which is already having a significant impact on coastal ecosystems, biodiversity and economic activity.

Since 2001, the north-eastern coast of the Caspian Sea has receded by more than 50 km, resulting in thousands of square kilometres of water surface turning into land. According to the World Bank, over the past 120 years, the water level in the Aktau port area (Kazakhstan) has fluctuated between -26.0 and -29.5 m according to the Baltic height system, with the lowest level recorded in early 2025. Over the past three decades, the water level in the Caspian Sea has been falling by an average of 10 cm per year. With a sea level drop of 5 metres, Kazakhstan could lose up to 60% of its ecologically and biologically significant coastal areas; with a drop of 10 metres, losses could exceed 80%, threatening natural habitats and undermining conservation efforts[11]. Access to the Caspian Sea for international shipping via the Volga River will also be critically affected by a 5-metre drop in sea level.

The Caspian Sea must not repeat the fate of the Aral Sea. Its ecological future requires urgent and coordinated action at the regional and international levels.

An additional issue is the decline in the water content of the region's largest transboundary rivers, the Amu Darya and Syr Darya (World Bank, 2019), which complicates water regulation and exacerbates competition for resources between countries and sectors.

The challenges of sustainable natural resource management are **one of the key areas on the Summit agenda**. It will provide a platform for coordinated regional dialogue and exchange of best practices in the field of ecosystem protection and restoration, and rational and integrated water resources management. An important part of the discussions will be the identification of **joint and urgent actions to preserve and restore the Aral and Caspian Seas**, strengthen transboundary cooperation and establish sustainable mechanisms for monitoring and responding to environmental threats.

***Objective**:* To develop coordinated and sustainable regional agenda for the protection and rational use of natural resources as a basis for enhancing environmental sustainability, food security and climate stability in the region. Particular attention will be paid to preventing further degradation of the Aral and Caspian Seas and promoting their restoration as key ecosystems on which the lives of millions of people in Central Asia depend.

5. Combating Air Pollution and Waste Management

[11] The shrinking of the Caspian Sea threatens coastal communities, biodiversity and industry in Kazakhstan: https://asianecology.kz/tpost/29xkno8lp1-umenshenie-kaspiiskogo-morya-ugrozhaet-p

Description: The circular economy (CE) is becoming a key driver of sustainable development for Central Asian countries seeking to combine economic growth with reduced dependence on natural resources and waste minimization. Despite currently low rates of recycling and resource efficiency (World Bank, 2024)[12], the region has strong potential to scale up CE approaches, especially in construction, agribusiness, and urban management.

The international context is also accelerating CE development. For instance, the theme of the 2025 Conference of the Parties to the Basel, Rotterdam, and Stockholm (BRS) Conventions - "Making the invisible visible: environmentally sound management of chemicals and waste" - highlights the importance of waste and chemical management as contributions to the Paris Agreement. The BRS Conventions offer practical tools for preventing hazardous waste generation, ensuring safe chemical handling, and promoting sustainable production.

Equally important is the preparation of a legally binding global plastics treaty, which will require adoption of eco-design principles, regulation of product composition, and the development of packaging and labeling standards.

At the same time, attention is increasingly being focused on one of the most pressing problems in the region – **air pollution**, including transboundary pollution. According to the World Bank, the main sources of air pollution in Central Asia are the burning of fossil fuels in domestic heating, industry and transport, as well as dust and sand storms. The latter can account for up to **25%** of total air pollution. PM2.5 concentrations in large cities in the region, especially in winter, are **6–12 times** higher than WHO recommended levels. This directly affects public health and requires the urgent implementation of effective solutions.

The 2026 Regional Ecological Summit will provide a unique platform for Central Asian countries to join forces in a systematic transition to a circular economy and reduce pollution levels.

Objective: To promote the transition of Central Asian countries to a circular economy through the creation of a regulatory and institutional framework, the development of recycling infrastructure, the harmonisation of standards and the expansion of cross-border cooperation. Also, take effective measures to reduce air pollution through joint strategies for decarbonising transport and industry, preventing dust storms and improving environmental monitoring.

6. Mechanism to Achieve Environmental Ambitions

Description: Achieving environmental goals in Central Asia is impossible without the establishment of practical implementation mechanisms for sustainable development strategies and plans. Priority areas include **technology transfer** and mobilization of "**green" finance**, including development of a regional financing plan and application of sustainable finance instruments.

Another key component is regional participation in international environmental mechanisms (e.g., market mechanisms under Article 6 of the Paris

[12] The Circular Economy: An Opportunity for Central Asia - Synthesis Report (Russian). Washington, D.C.: World Bank Group. http://documents.worldbank.org/curated/en/099052024074541821

Agreement), which requires assessing the potential for market creation and the availability of robust national monitoring, reporting, and verification (MRV) systems, in line with the TACCC principles (transparency, accuracy, completeness, comparability, and consistency).

Objective: To develop and strengthen tools for implementing the region's environmental policies through the expansion of sustainable finance, technology transfer, market mechanisms, and MRV systems to enhance transparency and accountability.

7. A Just and Inclusive Regional Transition

Description: The transition to sustainable development in Central Asia must be **socially inclusive**, protect the most vulnerable groups and create equal opportunities for all, including women, young people and rural populations.

Decarbonising the economy – for example, in Kazakhstan, which has set a target of carbon neutrality by 2060 – involves both creating new jobs in green sectors and gradually reducing employment in traditional industries, particularly in the fossil fuel sector.

Such a transformation requires a comprehensive approach: reforming subsidies, introducing carbon pricing mechanisms, and developing effective instruments for social protection, retraining and adaptation of the population. Particular attention should be paid to **eliminating gender imbalances in the labour market** and expanding women's access to opportunities created by the green transition, including training, employment and entrepreneurship in sustainable sectors of the economy.

Gender equality is a key element of a sustainable and equitable future. Increasing women's participation in decision-making on climate, environmental and social policy issues, and ensuring their full involvement in the green transition will strengthen the resilience of communities and enhance the effectiveness of measures taken.

In addition, this area involves **promoting constructive social dialogue** at the national and regional levels on environmental, climate and employment issues, including the development of mechanisms for involving local communities and civil society organisations in decision-making.

The 2026 Regional Ecological Summit will provide an opportunity to launch a large-scale regional dialogue on the protection of vulnerable groups, the development of retraining programmes and job creation in the green economy, and the promotion of gender equality and social partnership principles.

Objective*:* To minimise the socio-economic impact of the transition to sustainable development on the region's population by **protecting vulnerable groups**, including women and young people, creating new jobs, developing social policies, strengthening gender equality and encouraging a broad public dialogue on the green economy and social justice.

8. Environmental and Digital Competencies for a Sustainable Future

Description:

Central Asia faces an urgent need to cultivate a new generation of specialists, citizens, and leaders equipped with the environmental and digital competencies required to respond to environmental, social, and economic challenges.

At the same time, the region must develop and deploy digital solutions, including artificial intelligence (AI), to address environmental problems and foster a green economy.

Developing environmental awareness, sustainable skills, and digital literacy is essential to building a sustainable and inclusive future. Yet current education systems and digital transformation potential are underutilized due to the lack of systemic programs, limited access to technology, shortage of qualified personnel, weak regional coordination, and low media presence.

Fostering environmental and digital competencies goes beyond knowledge - it is about developing responsibility, leadership, and readiness to act. Simultaneously, the development of innovative digital platforms, AI algorithms, and tools can catalyze effective natural resource management, risk monitoring, and green growth.

The Regional Ecological Summit 2026 can serve as a key platform to recognize these areas as strategic priorities for Central Asia's sustainable and just transition.

***Objective**:* To advance environmental and digital competencies, raise public awareness, and foster a culture of sustainability - while creating and deploying digital and AI solutions to address environmental challenges and stimulate green growth.

IV. How Will the Regional Ecological Summit 2026 be organized?

Preparations for the Regional Ecological Summit 2026 will be based on the principles of equality, inclusiveness, synergy and long-term regional cooperation. The main objective is to consolidate and strengthen the impact of existing regional initiatives, align priorities and develop new joint approaches aimed at accelerating environmental and socio-economic transformation in Central Asia.

Particular attention will be paid to coordinating current and future programmes/initiatives in the areas of environmental protection, sustainable natural resource management, biodiversity conservation, water and food security, and adaptation to climate and environmental risks.

During the preparation of the Summit, the following is **planned:**

- consolidation of efforts by all stakeholders – governments, international organisations, scientific institutions, the private sector and civil society – to strengthen a joint approach and develop a specific pool of regional projects;
- analyse and integrate existing programmes and initiatives to identify synergies and develop joint tools to accelerate action;
- develop a conceptual framework for the Summit, including mechanisms for regional cooperation beyond 2026.

The preparatory process will be coordinated by the Project Office for Central Asia on Climate Change and Green Energy, which acts as a working body ensuring coherence of efforts and interaction with all key partners.

It is important to emphasise that the 2026 Summit will not be the end point; on the contrary, it will serve as a springboard for deepening long-term regional cooperation for a sustainable future for Central Asia and the well-being of future generations.