

# CLIMATE ACTION PLAN



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## Introduction

Our planet's climate has always been changing, but it's happening much faster now than ever before. The reason for this is that humans are releasing gases into the atmosphere that trap heat, causing the Earth to warm up. We do this by burning fossil fuels like coal, gas, and oil, and by farming and using the land in ways that contribute to climate change. This is a big problem because the Earth is changing too quickly for living things to adapt.

To help address this problem, the *Azerbaijan Technical University (AzTU)* has created a Climate Action Plan. This plan outlines the university's roadmap for reducing greenhouse gas (GHG) emissions, promoting sustainability across campus operations, and embedding climate literacy in the curriculum. AzTU wants to be a leader in this area by becoming carbon neutral, which means not releasing any more greenhouse gases than they can remove from the atmosphere.

AzTU has a long history of being a leader in science, engineering, and technology, and they want to continue this tradition by producing projects that will help create a better future.



## Vision & Mission:



Our vision is to empower students with the knowledge, skills, and values needed to address the challenges of climate change. We are committed to fostering a deep understanding of the causes, consequences, and solutions to climate-related issues, ensuring our students become informed and responsible stewards of the environment.

### Our goal is to:

- Provide accessible, science-based education on climate change;
- Equip students with practical tools and strategies to reduce environmental impact;
- Inspire innovation and leadership in the pursuit of a sustainable and resilient future.

Through education, research, and campus-wide engagement, AzTU strives to cultivate a generation of change makers who will contribute meaningfully to local and global climate solutions.



Our mission is to actively contribute to climate change mitigation by minimizing environmental pollution and advancing the transition to green energy technologies. We are committed to inspiring and empowering individuals to adopt sustainable practices that reduce their ecological footprint and support a cleaner, greener future.

Through education, research, advocacy, and community engagement, we aim to:

- Raise awareness about the causes and consequences of climate change;
- Promote the adoption of renewable energy and environmentally friendly technologies;
- Encourage sustainable lifestyles and responsible resource use across our university and beyond.

By integrating sustainability into every aspect of university life, AzTU strives to lead by example and contribute to building a healthier, more resilient planet for current and future generations.

## Current Initiatives at AZTU

**Azerbaijan Technical University** is a leading institution that actively participates in regional and international networks to promote sustainability and higher education. The university is affiliated with prestigious associations like the Eurasian Universities Union (EURAS), the Eurasian Universities Association (EUA), The Association of State Universities of Caspian Region Countries, the Black Sea Universities Network, CIS International Innovation Centre for Nanotechnology, and EIFL (Electronic Information for Libraries), among others. Through these partnerships, **Azerbaijan Technical University** fosters opportunities for collaboration and knowledge-sharing with similar organizations worldwide, while underscoring its dedication to sustainability.

To mitigate its environmental impact, **Azerbaijan Technical University** has implemented various energy efficiency measures, including transitioning to clean and sustainable heating systems, installing hermetically sealed and double-glazed windows to reduce heat loss, and utilizing low-carbon, energy-efficient fuels. The university has also expanded renewable energy production, implemented efficient waste management technologies, and promoted the expansion of forest areas and gasification to prevent deforestation. These efforts align with its goal of reducing greenhouse gas emissions and promoting environmental stewardship.

**Azerbaijan Technical University** has installed two wind turbines and plans to install additional solar panels shortly to embrace sustainable energy solutions. The university supports national initiatives that emphasize the development of "smart" cities and villages in the liberated territories of Azerbaijan, declared as "green zone" territory by President Ilham Aliyev, following the victory in the 44-day Patriotic War. Azerbaijan Technical University leverages its scientific expertise and research capabilities to support these initiatives.

At **Azerbaijan Technical University**, sustainability is not just a goal but a core principle that guides its actions, both locally and globally.



## Purpose

The Climate Change Plan/Policy Document of **Azerbaijan Technical University** (hereinafter referred to as the Document) is prepared based on the decisions of the United Nations Framework Convention on Climate Change (UNFCCC) adopted at COP 28 conference in 2023, the Basic Regulations of the Forest Development Service under the Ministry of Ecology and Natural Resources of the Republic of Azerbaijan (Baku, 2020), and the Decree of the President of the Republic of Azerbaijan Ilham Aliyev dated February 2, 2021, on the "National Priorities for Socio-Economic Development of Azerbaijan 2030" to combat climate change.

This Document serves to eliminate all activities at **Azerbaijan Technical University** (AzTU) that may negatively impact climate change resulting from environmental pollution and atmospheric contamination by harmful gases.

AzTU prioritizes the preservation of a teaching and working environment that does not allow activities contributing to climate change caused by environmental pollution and atmospheric contamination. It commits to undertaking appropriate measures to combat climate change in accordance with international agreements, conventions, conferences, and decisions accepted by international legal acts and national legislation.

## Causes of Climate Change



The causes of climate change resulting from environmental pollution and atmospheric contamination include factors creating the greenhouse effect in the atmosphere, including increased emissions of CO<sub>2</sub>, methane, and other gases, the formation of the ozone hole due to the release of freons into the atmosphere, the excess accumulation of aerosols, anthropogenic dust, and similar factors. AzTU conducts scientific research in these areas, which will continue in the future. The increased amount of these gases has led to deviations from the average temperature norms on Earth, resulting in intensified and accelerated phenomena such as storms, droughts, heatwaves, hurricanes, precipitation, floods, and others. The surface of the ocean, which used to be warmed up to a depth of 1000 meters, now reaches depths of 2000 meters, negatively affecting the flora and fauna of marine ecosystems.

Global climate changes, including the excess emission of greenhouse gases and aerosols beyond the permissible levels, leading to the greenhouse effect and negatively affecting average climate indicators on Earth, unstable precipitation patterns, increased occurrences of floods and droughts, and the melting of glaciers leading to rising sea levels. The AzTU leadership and employees commit to a policy of limiting the temperature increase of the environment within 1.5-2°C.



The current Document applies to all students, academic and administrative staff participating in educational programs, especially in bachelor's programs such as "Environmental Engineering," "Chemical Engineering," "Occupational Safety Engineering," and master's programs such as "Reprocessing Technologies of Metallurgical Waste," "Efficient Use and Protection of Natural Resources," "Conservation and Recycling of Natural Resources," "Transport Ecology," "Environmental Protection in the Oil and Chemical Industry," and other related fields. It also applies to all members participating in the university's social activities.



## Protected Values

This Document opposes and prohibits any activities in all state and private organizations, industrial sectors, and institutions that may contribute to global climate change resulting from environmental pollution and atmospheric contamination.

This Document declares AzTU's commitment to environmental protection, prevention of disturbances caused by climate change, and the obligation to create a clean and environmentally friendly environment suitable for human life.

AzTU instills a work culture that prohibits environmental pollution, combustion of waste, discharge of effluents into the environment without proper treatment, and emission of gases into the atmosphere without purification.



## Education and Awareness

AzTU declares its commitment to organizing continuous conferences, seminars, and training sessions to address and raise awareness about the prevention of environmental pollution and climate change.

This initiative aims to foster mutual understanding and respect within the AzTU community.

The "Eco-Technology" society operates within AzTU, involving students, master's students, and teachers. They conduct awareness-raising activities and publish scientific articles on climate change and environmental protection.



## Management and Responsibilities

All members of the AzTU community, including leaders (rectors, vice-rectors), employees, workers, students, and teachers, share the responsibility to support and promote the plan/policy against pollution contributing to climate change.

Supervisors, regulators, and the professorial staff bear direct responsibility for preventing and eliminating incidents that may contribute to climate change and promptly reporting incidents according to their competence. A department for "Labor Protection and Technical Safety" is established within the university to implement these activities.

Any individual witnessing incidents contributing to climate change resulting from environmental pollution and atmospheric contamination must immediately report the incident to the relevant department (person).

All members of the AzTU community, including leaders (rectors, vice-rectors), employees, workers, students, and teachers, collaborate to implement joint activities based on the approved action plan to achieve sustainable development, combat climate change, and protect ecosystems on the university campus and in other locations."

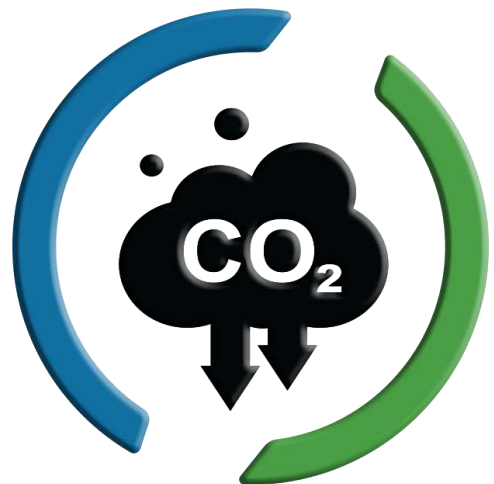


## Carbon reduction

Azerbaijan, like many other countries, is working to reduce its carbon footprint and limit the impact of climate change. Azerbaijan has set a goal of reducing greenhouse gas emissions by 35% by 2030 compared to 1990.

To achieve this goal, *Azerbaijan Technical University* is taking several steps, including focusing on energy-efficient building design, reducing energy consumption on campus, and switching from gasoline/diesel-fueled vehicles to electric/hybrid ones. The university will also encourage sustainable transportation options, such as walking, biking, and public transportation, which can help reduce emissions.

The university is also committed to expanding its use of renewable energy sources, such as solar and wind power, to help further reduce carbon emissions. Additionally, the university will work to engage with the community and implement strategies to reduce waste and optimize energy use.



To enhance Azerbaijan Technical University's efforts in reducing its carbon footprint, a more detailed approach focusing on the three scopes of carbon emissions—Scope 1, Scope 2, and Scope 3 can be beneficial. Here's a breakdown of how the university can tackle each scope:

### **Scope 1: Direct Emissions**

Scope 1 refers to direct emissions from university-owned and controlled sources, including:

#### **1. Fossil Fuel Consumption:**

- Transitioning from gasoline/diesel-powered vehicles to electric and hybrid vehicles for campus transportation will reduce direct emissions from vehicle use.
- Implementing energy-efficient heating systems for buildings by shifting from traditional fossil fuels to cleaner energy sources, such as natural gas or biogas, will cut emissions.

#### **2. On-site Energy Production:**

- If the university uses any on-site energy generation systems (e.g., backup generators), transitioning these systems to cleaner alternatives such as solar-powered or wind-powered generators can help mitigate emissions.

#### **3. Building Operations:**

- Improving building energy efficiency through better insulation, use of energy-efficient lighting, and low-emission appliances can reduce emissions from heating, cooling, and electricity consumption in university buildings.

### **Scope 2: Indirect Emissions from Purchased Energy**

Scope 2 refers to indirect emissions from the purchase of electricity, heating, and cooling consumed by the university:

#### **1. Renewable Energy Sources:**

- Expanding the use of renewable energy sources such as solar and wind power on campus, or purchasing green energy from local providers, will reduce Scope 2 emissions. Installing solar panels on rooftops or campus parking structures could be a great start.

#### **2. Energy Efficiency Initiatives:**

- Reducing overall energy consumption across campus by upgrading to energy-efficient appliances, smart lighting systems, and heating and cooling systems.
- Conducting energy audits to identify areas for improvement and optimizing energy management systems.

### **3. Energy Storage Systems:**

- Investing in energy storage systems to store excess renewable energy during periods of high production, which could be used when renewable sources are low, reducing dependency on grid power and associated emissions.

### **Scope 3: Indirect Emissions from Other Activities**

Scope 3 includes all other indirect emissions that occur in the university's value chain. This includes emissions from commuting, waste, procurement, and more:

#### **1. Sustainable Transportation:**

- Promoting sustainable transportation methods for students and faculty, including incentives for biking, walking, and the use of public transportation.
- Introducing bike-sharing programs and electric scooter stations around campus to reduce the reliance on private cars.

#### **2. Waste Reduction and Recycling:**

- Implementing comprehensive waste management programs, including recycling and composting to reduce the carbon impact of waste sent to landfills. The university could also work on reducing single-use plastics by introducing reusable alternatives in cafeterias and vending machines.
- Engaging students and staff in reducing food waste, particularly in the student canteen.

#### **3. Sustainable Procurement Practices:**

- Ensuring that the university's procurement practices consider the carbon footprint of products and services purchased, such as choosing sustainable building materials, energy-efficient appliances, and local sourcing of products to reduce the emissions associated with transportation.
- Partnering with sustainable vendors and encouraging suppliers to meet carbon reduction goals.

#### **4. Sustainability in Research and Curriculum:**

- Encouraging research projects focused on sustainability and clean technologies. Aligning the university's research activities with global climate goals, including investigating new renewable energy technologies or carbon capture solutions, would have a lasting impact.
- Integrating sustainability topics across curricula, including climate change, carbon management, and sustainable development, will raise awareness among students and faculty.

## 5. Engaging the Campus Community:

- Organizing regular workshops and awareness campaigns on sustainability, climate change, and ways to reduce carbon footprints both individually and as a collective campus.
- Creating a student-led sustainability committee to promote initiatives across campus.

By taking these steps, *Azerbaijan Technical University* will systematically reduce its overall carbon emissions and contributing meaningfully to the national and global climate goals

#### **Ensuring Clean and Safe Drinking Water at Azerbaijan Technical University**

*Azerbaijan Technical University* is located in the Yasamal district of Baku city, and the drinking water supply of this district falls under the responsibility of the Jeyranbatan reservoir and Oguz-Gabala-Baku water pipeline. The existence of the Jeyranbatan reservoir ensures stable water supply not only for our university, but also for our capital. The drinking water supply of this pipeline is able to meet the water demand of Baku city in the next few decades. In addition, the Oguz-Gabala, Baku-Shollar aqueducts and underground water of Khachmaz can also be mentioned. The least share in Baku's drinking water supply belongs to the Kura River. Reservoirs and aqueducts that supply our city and Azerbaijan Technical University with drinking water use many modern equipment, technologies, and methods for water desalination, disinfection, and sweetening. Drinking water is checked by passing certain tests, especially the determination of heavy metals, nitrite (NO<sub>2</sub>) or nitrate (NO<sub>3</sub>), determination of water turbidity, determination of chemical and physical composition. Such tests are conducted in special laboratories of our university and are organized to protect the health of employees. The composition of drinking water is physical, chemical, physical-chemical, etc. methods are carried out. Every person should save water so that water resources do not run out. It is necessary to consume at least 2 liters of water during the day. The water must contain fluorine (F) and calcium (Ca) minerals.

#### **Accessible Drinking Water Facilities at Azerbaijan Technical University**

The university as an institution provides free drinking water to students, staff, and visitors. There is a source of drinking water in every working room on the campus and it is used by both students and teachers free of charge.



There is also a water fountain in the garden on the campus of the University. Everyone uses the water fountain. Azersu joint-stock company is responsible for the purity of this drinking water, and at the same time, the University management also monitors the quality of the water. Employees are also provided with mineral water for sale. All these are carried out at the expense

of the University. Visitors are provided with free mineral water on sale.

### **Biodiversity Conservation Efforts at Azerbaijan Technical University**

Our University, as an institution, strives to protect and expand the biodiversity of both plants and animals, especially the existing ecosystems that are under threat. On the campus of our university, greenery has been planted, various types of drought-resistant trees have been planted, and the gardeners of the University are busy with these plants. However, animals are not kept on the campus of the University. However, the trees planted in the courtyard of the University are being agrotechnically cared for, the land is plowed, new types of trees are planted, and greening works are being carried out. It should be noted that we do not have relations with industries in this field. However, we have strong relations with the green management, and we can get the necessary help from them.



## Environmental Education and Waste Management Initiatives at Azerbaijan Technical University

Since the university prepares specialists in "Ecological engineering" and "Environmental protection" specialties, information about ecosystems, especially water quality, is given a special place in education.

Our students studying "Ecological engineering" and "Environmental protection" specialties at the university join the calls for the reduction and disposal of waste in the environment as volunteers. In addition, subjects on waste management, recycling, and waste-free production processes are taught at both the bachelor's and master's levels. Waste, especially household waste, plastic waste occupies a large place due to its volume and quantity. Although it is not a dangerous waste, plastic waste takes 300-400 years to decay and disintegrate, so its accumulation in large quantities, taking up a lot of space in landfills, and its dumping into seas and oceans are a global problem for society. Collecting and recycling plastic waste is the most convenient way. The most convenient way is to make packaging boxes, trash cans, and household appliances that do not come into contact with food from recycled plastic waste. It is a convenient way to collect plastic waste in establishments, especially catering establishments, parks, and educational institutions. Our students participate in the initiatives of collecting and handing over plastic containers in the recreation areas of the city and on the beaches.



## Compliance with the SDGs:

### Climate Action (SDG 13):



**Azerbaijan Technical University** (AzTU) is devoted to addressing Sustainable Development Goal 13, which aims to combat climate change. Our research in this area demonstrates our commitment to reducing greenhouse gas emissions, although we have not yet set a target date for achieving carbon neutrality. We recognize the importance of tailoring climate change information, factual data, outcomes, and adaptation strategies to different target populations. Therefore, we are currently developing and customizing climate-related initiatives, taking into account various factors such as age demographics, types and degrees of educational institutions, and the unique requirements of different contexts.

**Azerbaijan Technical University** (AzTU) is committed to achieving net zero greenhouse gas emissions by 2040. This goal reflects our dedication to addressing the global climate crisis and aligns with international sustainability standards, including the United Nations Sustainable Development Goals (SDGs), particularly Goal 13: Climate Action. To reach net zero, AzTU will implement a comprehensive Climate Action Plan focused on reducing emissions across all scopes—direct, indirect, and value chain—through energy efficiency, renewable energy adoption, sustainable transportation, waste reduction, and green building practices. The university will also embed climate action into education, research, and community outreach efforts. Our journey to net zero will be guided by transparent monitoring, annual reporting, and active stakeholder engagement. Through collaboration with government bodies, industry partners, and the university community, AzTU aims to become a leader in climate responsibility and a model for sustainable development in higher education.

By reaching net zero by 2040, AzTU will contribute to a healthier planet while preparing future engineers and professionals to build a more sustainable world.

#### Quality Education (SDG 4):



***Azerbaijan Technical University*** (AzTU) has recognized the significance of incorporating sustainability, environmental ethics, and climate action into its academic programs to align with Sustainable Development Goal 4 (Quality Education) and Goal 13 (Climate Action). AzTU is committed to promoting a culture of environmental responsibility among its students and faculty as part of its dedication to quality education.

***Azerbaijan Technical University*** understands that addressing sustainability challenges and mitigating climate change require interdisciplinary approaches and collaboration across academic fields. As a result, the university is striving to integrate these principles into various academic disciplines, ensuring that students are equipped with the knowledge and skills necessary to effectively tackle environmental issues.

***Azerbaijan Technical University*** is endeavoring to empower future generations of students to become agents of positive change in addressing global environmental challenges while advancing their education and contributing to sustainable development in Azerbaijan and beyond by incorporating sustainability, environmental ethics, and climate action into its curricula and research endeavors.

## Action Plans of AZTU with COP29

COP29 is the 29th Conference of the Parties, a significant event in international climate negotiations under the United Nations Framework Convention on Climate Change (UNFCCC). It's a platform for countries to discuss and negotiate actions to address climate change.

**Azerbaijan Technical University**, being a technical education-focused institution, has immense potential to contribute to COP29 in various ways:



**1. Research and Innovation:** The university's researchers could present their findings or participate in discussions on climate change mitigation and adaptation, renewable energy, environmental engineering, or sustainable development.



**2. Student Involvement:** Students from the university could participate in COP events, providing them with opportunities to learn about international climate policy, network with professionals in the field, and engage in discussions on global environmental challenges.



**3. Policy Engagement:** The university's faculty members could use their expertise to inform climate policy discussions at the national or international level and engage with policymakers, providing insights based on their research and experience.

**4. Capacity Building:** The university could contribute to capacity-building efforts related to climate change through training programs, workshops, or collaborative projects aimed at enhancing the skills and knowledge needed to address climate challenges.



In conclusion, although there may not be a direct institutional relationship between Azerbaijan Technical University and COP29, the university has various avenues for engagement and contribution to the discussions and initiatives surrounding the conference.

Note that environmental issues are of particular relevance to the *Azerbaijan Technical University (AzTU)*. In the Republic, one of the main sources of environmental pollution is the oil and gas industry and its various sectors. Up to 16% of oil is lost during extraction, preparation, storage, transportation, and processing. Leakage, accidents, and losses contribute to environmental pollution.

It is known that the loss of biodiversity and ecosystem degradation due to global ecological changes is a major concern for the world community. From this perspective, there is increasing attention in science and society to ecosystem services and their direct and indirect effects on human well-being.

AzTU determining and assessing ecosystem services, and integrating their values into state and private decision-making processes, is a key objective of our national, European, and international biodiversity, ecosystem conservation, and Sustainable Development Strategy.

Research conducted at AzTU in the field of business-oriented ecological services shows that during the operation of more than half of ecosystem services, services become degraded or are used non-continuously. As a result, this has a significant negative impact on business and production. The degradation of ecosystem services affects countries in the following ways:

- Failure to align with trends in EU countries will eliminate the currently provided ecosystem services for free. They will become more expensive in the future.
- The loss of ecosystem services will have its impact magnified in the operations of enterprises,

affecting the financial remuneration and insurance of workers employed there.

- The use of more efficient ecosystem services will open up new opportunities for business activities.

These issues are relevant because, for example, if water ecosystem services are disrupted, biodiversity, materials, food products, and climate are affected. If the balance is disrupted, the enterprise will not be able to operate. For example, the water ecosystem will also have a significant impact on agriculture. Also, if industrial enterprises (including AzTU) release more harmful components into the environment (such as harmful gases CO<sub>2</sub>, CO, SO<sub>2</sub>, NO<sub>2</sub>, H<sub>2</sub>S, etc.), climate change will occur. As a result, ecological balance will be disrupted, leading to the creation of the "Greenhouse" effect.

In the educational programs of AzTU, especially at the bachelor's level in "Ecological Engineering," "Chemical Engineering," "Occupational Safety Engineering," and at the master's level in "Reprocessing Technology of Metallurgical Emissions," "Environmental Protection and Sustainable Use of Natural Resources," "Conservation and Recycling of Natural Resources," "Transport Ecology," "Environmental Protection in the Oil and Chemical Industry," students receive education in various specialties.

**Azerbaijan Technical University** has an "Eco-Technology" society where students, undergraduates, and teachers actively participate. They implement educational events on climate change and environmental protection and publish scientific articles.

### **6.1. Climate Action Plans:**

1. Conducting lectures on sustainable development to educate students.
2. Organizing seminars on environmental protection for master's students.
3. Holding training sessions and practical exercises related to climate change for doctoral students in oil and chemical industries.
4. Organizing conferences on climate change, current issues, mitigation strategies, and perspectives for members of the "Eco-Technology" community at our university.
5. Host symposiums for students specializing in environmental engineering to discuss modern research methods for minimizing emissions ( $\text{CO}_2$ ,  $\text{H}_2\text{S}$ ,  $\text{NO}_x$ ) according to the Sustainable Development Plan.
6. Publishing scientific articles dedicated to climate change and mitigation strategies in prestigious international journals (Web of Science, Scopus, etc.) by the university's professorial staff.
7. Assigning dissertation topics related to climate change to doctoral students and conducting intensive scientific research.
8. Implementing environmental protection strategies for mitigating climate change in Azerbaijan at AzTU.
9. Exploring the scientific foundations and practical application of technology for purifying wastewater to address water scarcity related to climate change.
10. Developing and implementing technologies for cleaning oil-contaminated soil at AzTU.

Note: It has been projected that these plans will be presented by the year 2030.

## 6.2. Goals and Action Steps:

### **Goal 1:** Increase Awareness of Sustainable Development Among Students

#### **Action Steps:**

- Develop a comprehensive curriculum for lectures on sustainable development.
- Schedule regular lecture sessions on sustainable development topics.
- Provide resources and materials to support student learning.
- Evaluate student understanding through assessments and feedback mechanisms.

**Timeline: until 2030**

### **Goal 2:** Enhance Knowledge of Environmental Protection Among Master's Students

#### **Action Steps:**

- Plan and coordinate seminars on various aspects of environmental protection.
- Invite guest speakers and experts to share insights and experiences.
- Facilitate interactive discussions and workshops during seminars.
- Encourage active participation and engagement from master's students.

**Timeline: until 2030**

### **Goal 3:** Equip Doctoral Students with Skills and Knowledge on Climate Change Mitigation

#### **Action Steps:**

- Design and organize training sessions focusing on climate change and its impact on oil and chemical industries.
- Arrange practical exercises to apply theoretical knowledge in real-world scenarios.
- Provide access to relevant resources and tools for further research and learning.
- Monitor progress and provide mentorship to doctoral students throughout their training.

**Timeline: until 2030**

### **Goal 4:** Foster Collaboration and Knowledge Exchange Through Conferences

#### **Action Steps:**

- Plan and coordinate conferences addressing climate change, mitigation strategies, and related issues.
- Invite stakeholders and researchers from various fields to participate.
- Facilitate networking opportunities and collaborative discussions.
- Document and disseminate conference proceedings to share insights with the wider community.

**Goal 5:** Facilitate Research and Innovation in Environmental Engineering

**Action Steps:**

- Organize symposiums focused on modern research methods for emission reduction.
- Encourage students to present their research findings and innovative solutions.
- Provide mentorship and guidance for students undertaking research projects.
- Foster interdisciplinary collaboration among students and faculty members.

**Timeline:** until 2030

**Goal 6:** Promote Scholarly Contributions on Climate Change in Prestigious Journals

**Action Steps:**

- Encourage university professors to conduct research and write scientific articles on climate change.
- Support faculty members in submitting articles to reputable international journals.
- Collaborate with editorial boards and reviewers to ensure quality publications.
- Track and measure the impact of published articles on advancing knowledge in the field.

**Timeline:** until 2030

**Goal 7:** Support Doctoral Research on Climate Change Mitigation

**Action Steps:**

- Assign dissertation topics related to climate change to doctoral students.
- Provide resources, funding, and access to facilities for research activities.
- Facilitate collaboration with industry partners and research institutions.
- Monitor progress and provide mentorship to doctoral students throughout their research journey.

**Timeline:** until 2030

**Goal 8:** Implement Environmental Protection Strategies in Azerbaijan

**Action Steps:**

- Collaborate with government agencies and environmental organizations to develop mitigation strategies.
- Implement initiatives to reduce carbon emissions and promote sustainable practices.
- Monitor and evaluate the effectiveness of implemented strategies.
- Advocate for policy changes and regulatory measures to support environmental protection efforts.

***Timeline: until 2030***

**Goal 9:** Investigate Technology for Wastewater Purification to Address Water Scarcity

***Action Steps:***

- Research to explore innovative technologies for wastewater treatment.
- Collaborate with industry partners and experts in the field.
- Pilot test promising technologies in real-world settings.
- Disseminate findings and recommendations to relevant stakeholders and policymakers.
- ***Timeline: until 2030***

**Goal 10:** Develop and Implement Soil Remediation Technologies for Oil-Contaminated Areas

***Action Steps:***

- Conduct research to identify effective methods for cleaning oil-contaminated soil.
- Design and test prototype remediation technologies in laboratory settings.
- Conduct field trials to assess the feasibility and efficacy of selected methods.
- Collaborate with environmental agencies and local communities for implementation and monitoring.

***Timeline: until 2030***





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