



BMU
BAKİ MÜHƏNDİSLİK UNIVERSİTETİ

Baku Engineering University

Climate Action Policy 2024



CONTENTS

SECTION 1: INTRODUCTION

- 1.1. BACKGROUND
- 1.2. IMPORTANCE OF CLIMATE ACTION

SECTION 2: CURRENT SITUATION

- 2.1. OVERVIEW OF BEU'S CARBON FOOTPRINT
- 2.2. EXISTING ENVIRONMENTAL ACTIVITIES

SECTION 3: MISSION, VISION, AND SCOPE OF THE POLICY

- 3.1. MISSION STATEMENT
- 3.2. VISION FOR SUSTAINABLE CAMPUS
- 3.3. SCOPE OF THE CLIMATE ACTION POLICY

SECTION 4: EXECUTED ACTIONS

- 4.1. POST INITIATIVES AND ACHIEVEMENTS

SECTION 5: CURRENT ONGOING PROCESSES

- 5.1. ONGOING PROJECTS AND PROGRAMS

SECTION 6: FUTURE GOALS AND STRATEGIES

- 6.1. LONG-TERM OBJECTIVES
- 6.2. INNOVATIVE STRATEGIES FOR CLIMATE ACTION

SECTION 7: STAKEHOLDER ENGAGEMENT

- 7.1. INVOLVEMENT OF STUDENTS, FACULTY AND STAFF
- 7.2. COMMUNITY OUTREACH AND PARTNERSHIPS

SECTION 8: RESOURCE ALLOCATION

- 8.1. RESOURCE ALLOCATION

SECTION 1: INTRODUCTION

BACKGROUND:

- 1.1. Over the last few decades, one of the most pressing challenges as it concerns the whole world – global climate change has emerged. Recent research and scientific common ground underline the hazardous challenge towards the planet to launch essential and collective actions to minimize the impacts of climate change. Comprehending the larger picture, the primary aim of the university's both immediate and long-term objectives is to fulfill the integration of sustainable practices and ecological responsibility. To that end, Baku Engineering University (BEU) is dedicated to comprehending and thoroughly analyzing the situation within the region and beginning from its community in tackling its root cause to mitigate the problem in the country.

The Intergovernmental Panel on Climate Change (IPCC) reports draw attention to the necessity for various institutions to diminish greenhouse gas emissions and develop sustainability concepts as an automatic procedure. BEU takes note of the intercorrelated concepts of environmental, social, and economic sustainability, as the background subsection includes fundamental contextualization of the university's commitment to the interconnectedness of this sustainability and underscoring the urgency of mitigation of climate change impacts.

IMPORTANCE OF CLIMATE ACTION:

- 1.2. In terms of both preserving the planet's life and building a better world for the near and distant future, climate action is also a moral and strategic concept that is synchronized with the Baku Engineering University's core values and mission-vision concept. BEU grasping the environmental challenges that are dangerous to the values and missions of the university focuses on the climate change blows, and creates step-by-step guidance to make the students at the university acquire the perception as fellow responsible citizens and to aid for the betterment of society.

SECTION 2: CURRENT SITUATION

OVERVIEW OF BEU'S CARBON FOOTPRINT

2.1. By 2024, BEU will perform an in-depth analysis of its carbon footprint, considering direct and indirect greenhouse gas emissions in connection with campus activities. The University comprehends the essentiality of its analysis which helps to identify the situations that arise from energy consumption, waste management, transportation, and other operations within the campus area. To track the progress and direct focused interventions to lessen the harmful effects on the environment, the evaluation acts as an initial intervention.

EXISTING ENVIRONMENTAL ACTIVITIES

2.2. BEU has been trying to be a carbon-free institution from the beginning of its foundation till now. Moreover, the various environmental initiatives and operations help to achieve short- and long-term goals in terms of diminishing climate change effects within the region. (actions) are the ones to display the idea of mitigation of climate change impacts and compose a more sustainable and healthy campus for the students. These initiatives distribute the BEU's long-term thinking for generating a better culture of environmental responsibility within the BEU community.

Although the highly appreciated progress has been made to wipe out the issues, BEU understands the urgency for continuous development. This section briefly introduces the current situation in the university in terms of environmental aspects and establishing a foundation for new initiatives.

SECTION 3: MISSION, VISION AND SCOPE OF THE POLICY

MISSION STATEMENT

3.1. At BEU, the mission is to lead by example in terms of diminishing the impacts of climate change and come up with proactive and urgent solutions while addressing the issues. The university aims to reduce its carbon footprint and to raise awareness both in its community and society. Creating connections and correlations with economic, social, and environmental endeavors is missionary work both in the immediate and long term.

VISION

3.2. BEU's vision attempts to adopt a sustainable campus model and educate the community about the rapid evolution of the environment. BEU seeks to increase awareness about the envision that is not only the mission and responsibility of the society but also ethically virtuous. The university strives to create creating living and learning environment that fosters consciousness, inventiveness, and constructive transformation.

SCOPE AND APPLICABILITY OF THE CLIMATE ACTION POLICY

3.3. This policy adapts to not only academics, research, campus, transport, and involvement of the community members, but also all features of BEU's activities. The policy brings together the students, faculty members, staff, and outside collaborators. By embracing an all-encompassing viewpoint, the university aims to have a culture of environmental awareness but not limited to all members of its community and to use this advantage to form state-of-the-art facilities in the institution concerning sustainability standpoint. Proactive measures are the key point to the scope of the commitment of BEU which will help the global effort to fight climate change.

SECTION 4: EXECUTED ACTIONS

POST INITIATIVES AND ACHIEVEMENTS

As of 2024, the challenges to diminishing carbon footprint and grasping the significance of climate change impacts hold its essentiality. Baku Engineering University has been and also is trying to be the institution to lead by example in every field. This Policy illustrates the importance of how past initiatives, ongoing processes, and future strategies affect the overall status of the university in terms of climate change. Past actions and achievements in terms of diminishing the climate change impacts are the key factors to understand and continue with the new projects and programs to be carbon-neutral institutions. These actions and achievements are:

1. The “Plant a Tree” campaign in 2023 was set to recreate the local ecosystem, increase flora, and also propagate the environmental culture within the region. In this campaign, the building of new green spaces and areas was notified as a continuous measure to ensure environmental safety.
2. With the joint organization of the Ministry of Ecology and Natural Resources of the Azerbaijan Republic, the Ministry of Education, and IDEA Public Union, tree-planting action took place as “From Victory to Green Thinking” in 2021
3. In 2021, the “Sustainable Development in Economy and Management” Conference was held and most of the universities operating in Azerbaijan, as well as the Azerbaijan National Academy of Sciences, attended the conference, which aims to bring together scientists and researchers working in the field of economics and management, as well as public and private sector employees, to share new and different researches and thoughts, and to find a joint solution to the encountered problems researchers from several institutes are involved.
4. Joining with the Netherlands Business Academy and Romanian Language and Cultural Center in Azerbaijan, BEU aimed to establish a consortium and review the participation of BEU members and the Director of Romanian Language and Cultural Center in Azerbaijan in “Pollution and Environmental Protection” in Germany in 2019 under the leadership of the center with the Erasmus + program.
5. BEU, Physiotherapists Public Union, and Republican Women’s Society have together organized a “No to ecoterrorism in Karabagh” scientific conference. The aim was to discuss soil degradation, purposeful destruction of flora and fauna in the region, clear disruption of international water sanitation regulations, and deforestation.
6. In 2023, the “International Ecology and Environment” congress was hosted by Baku Engineering University, as the initiative of the Institute of Economic Development and Social Research (IKSAD) held its significance and both institutions discussed how ecological balance could be restored in the liberated territories of Azerbaijan.

Today, the world is facing one of the most important challenges in the history – Climate change. As the threat to the very existence of the earth is actual, from the global

organizations and institutions to the individuals all have to collaborate together to mitigate the situation. While combatting with the climate change impacts, learning, teaching, research and analysis are the vital aspect of ongoing process and future target aspirations for the next generations.

Most of the individuals have been experiencing and comprehends the effects of climate change, such as air temperature, amount of precipitation, the intensity of extreme weather conditions – droughts, storms and sea level alterations. These impacts negatively affect people’s health and lifestyle and even sometimes these conditions cause serious and lifelong effects.

BEU’s Greenhouse Gas (GHG) emissions inventory consists of the facilities that are owned and rented by Baku Engineering University located in Khirdalan. University is located a bit far from the city which gives the opportunity to have relatively much healthier environment within the region. GHG emissions inventory of the Baku Engineering University is separated to scope 1, 2 and 3 emissions which are defined by World Resources Institute’s (WRI) Greenhouse Gas Protocol.

First of all, emissions that are directly produced by the university and also, controlled and owned by university, are included within the Scope 1 emissions (figure 1.1).

Boilers	Generators
Furnaces	Kitchen Equipment
Fugitive emissions from lab chemicals	Fugitive emissions from refrigeration systems
Mobile Combustion from vehicles operated by university	Ground maintenance work

Secondly, the emissions that indirectly produced by the university which university purchases these services, are included within the Scope 2 emissions. The electricity consumption could be the only emission from scope 2 that university is eligible to announce, as the heating and cooling systems are owned and controlled by the university.

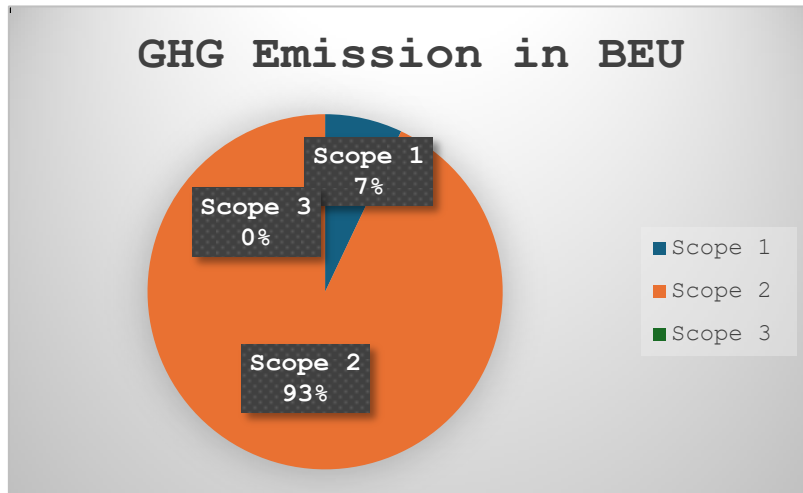
Finally, other emissions are included to the Baku Engineering University’s GHG Emissions Inventory. Although few of the other emissions are calculated and included to the GHG Emissions Inventory such as water use, some other emissions for instance, waste disposal, commuting, employee travel projected for the future for calculation and inclusion to the University’s GHG emission Inventory.

ESTABLISHING THE BASELINE (2023)

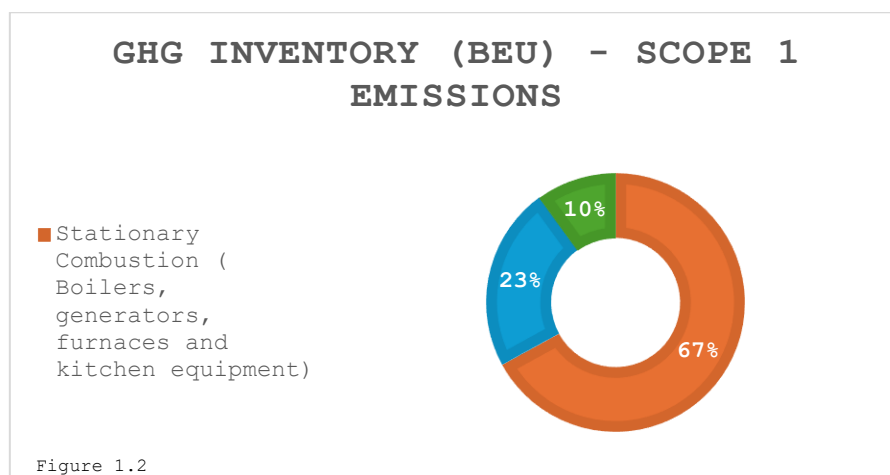
As the world organizations tries to mitigate the climate change impacts, the universities and other relatively small institutions starts to combat together with the other organizations and local governments. Local governments’ long term and short-term goals are the vital impact for other institutions to learn, adapt and solve the situations.

BEU has started to record the information gathered for the calculation of the GHG emissions for the future comparisons. The data would be the essential indicator for the university and

other organizations that what has been done and what can be done for future. As data gathered for the baseline year, the total emissions from the inventory were 431,400 Metric ton Carbon Dioxide (MTCO₂). From the total emissions, the scope 1 emissions are approximately 30,400 MTCO₂, and scope 2 emissions are approximately 401,000 MTCO₂.



Scope 1 emissions at Baku Engineering University mostly are boilers, furnaces, kitchen equipment and mobile combustion from vehicles owned by university. Primarily, stationary combustions are the most produced emissions in scope 1 (figure 1.2).



As shown *Figure 1.2.*, 67 per cent of scope 1 emissions are the stationary combustion such as, boilers and generators covering most of the stationary combustion. Greenhouse gas emissions from cars owned and operated by university and ground work maintenance equipment are 23 per cent and and remaining emissions are the fugitive emissions from refrigeration systems and laboratory chemicals.

Scope 2 from GHG Emissions Inventory mostly contains electricity used by university. 32,5 per cent of whole GHG emissions are the approximate calculation for the whole emissions for usage of electricity, although the other emissions as WRI GHG Protocol defines as Scope 3, predicted to calculate GHG emissions in the future.

SECTION 5: CURRENT ONGOING PROCESSES

ONGOING PROJECTS AND PROGRAMS

As climate change is rapidly becoming a global threat, countries and organizations comprehend the situation and try to tackle the challenges in a more structured and official way. All major actors in the international arena understand that collaboration is the key point for the enhancement and effectiveness of the strategies. BEU starts with the campus community and the area and continues to widen the range of its projects and programs to aid in diminishing the impacts of climate change and create stronger partnerships.

BEU Ecology Engineering students and faculty members have actively participated in CampaignERs and BEU is the valuable partner of Climate Campaigners Global Community. Climate Campaigners illustrates that governments and other organizations are the key actors in solving climate change, as it also shows the essential factor of coming together as a society to be part of the solution. As a partner, BEU Ecology Engineering students and faculty members have held surveys about the satisfaction level of public transportation, the community's view of alternative energy options, and the carbon footprint knowledge of respondents. Data collected from surveys have been reported to the Climate Campaigners Global Community and shared with the Partner universities. BEU also actively participated during the process of coding and translation process of the CC application.

SECTION 6: FUTURE GOALS AND STRATEGIES

LONG-TERM OBJECTIVES

6.1. Following the dedication to sustainability, BEU has set long-term goals that help to continue with its purpose in terms of a carbon-neutral and environmentally resilient future. By 2030, The aims are:

- Substantially reducing total carbon emissions in all campus operations in the next 6 years.
- Partially transition to renewable energy to reduce greenhouse gas emissions through the campus area.
- Launching a perfect sustainable program for recycling and waste reduction that will reduce the amount of waste dumped in landfills.

These long-term objectives clearly state that the commitment of the university to transform the area to the ideal sustainable campus model while having a blasting role in terms of protecting the environment both at the national and international level is the key aspect that we aspire to achieve.

INNOVATIVE STRATEGIES FOR CLIMATE ACTION

6.2. To meet our long-term objectives, The University aims to implement innovative strategies that will continuously help to collaborate with other institutions to exchange strategies, cooperate with other universities for joint research programs to have effective and immediate solutions and to emerging technologies to achieve the objectives in much more efficient and effective ways. Primary strategies consist of:

- Optimizing energy consumption by integrating technological advances into the community and campus;
- Promotion of electric and hybrid cars along with cycling to encourage the students, faculty, and staff to use;
- Improvement of sustainable infrastructure, investments in research and analysis, and enhancing a cultural effect of innovation within the university.

These key strategies create a path for a university not only meet the requirements of our climate action objectives, but also exceeds the goals, and generates new routes for development and authority in sustainable practices.

SECTION 7: STAKEHOLDER ENGAGEMENT

INVOLVEMENT OF STUDENTS, FACULTY, AND STAFF

7.1. Baku Engineering University comprehends the essentiality and necessity of all members of our academic community to contribute to the cause and actively participate in ongoing processes and future strategies that are set to be achieved. To involve faculty, staff, and students in the sustainability practices and our proactive measures, we will:

- Establish a **Sustainable Environment Board** to actively encourage various representatives with diversified academic disciplines and units with administrative duties to verify equity in the decision-making process.
- Conduct education initiatives and workshops to increase consciousness about climate change and the individual but vital role in mitigating climate change impact.
- Promote and inspire new strategies and create a healthy environment for the research about climate science, renewable energy, and sustainable endeavors throughout numerous departments.

The commitment of the university is based on creating a better and sustainable future in terms of a healthy environment and innovative learning space for future generations. Beyond the sustainability practices, the engagement of our academic community will provide a new way of understanding sustainability and climate change which could be the mainstream for raising awareness in a much larger community that all members are part of.

COMMUNITY OUTREACH AND PARTNERSHIPS

7.2. Comprehending the significance of the collaboration with the local and global community, BEU actively searches and connects with external institutions for the positive impact that the interconnectedness of the global community ensures. The most important initiatives are:

- Partnering up with the government, local universities, and non-governmental organizations to acquire efficient and effective resources, interchange practices and ideas, and collectively address local and international environmental issues.
- Allocating resources for external community projects that sync with the climate action goals of the university and to respond actively as an institution;

- Organizing and facilitating dialogues, programs, forums, and conferences on climate change impacts, making the public participate and engage and encourage to practice sustainability but not limited to the university campus.

Although the university desires to be an active and responsible institution in tackling climate change impacts, the prolific engagement of all actors both in the global and our academic community would be a key initiative for the purpose. The involvement of students, faculty, staff, and external entities inspires the necessity of collaboration to mitigate the issue more efficiently and the essentiality of bringing a new perception.

SECTION 8: RESOURCE ALLOCATION

RESOURCE ALLOCATION

8.1. By adopting the policy to diminish the climate change impacts, the commitment of the University to the budget and resource allocation is a meaningful and efficient step to get closer to achievements. BEU has set aside a substantial budget for sustainability initiatives and achieving future goals and strategies. The budget for climate action is structured to promote essential functions, including:

- Allocating resources for research analysis of energy consumption and renewable energy which will make the institution carbon neutral;
- Promoting new approaches for students, staff, and faculty members to encourage using electric, hybrid cars or cycling, as well as improving infrastructure for both cyclists and car owners;
- Establishing research and development for climate action and form with the students and staff with different backgrounds and providing with enough resources;
- Allocating budgets to improve the programs and occasionally to have events, and conferences to exchange ideas about the environment to combat climate change impacts;
- Providing useful resources to monitor and report about ongoing processes and gather data to analyze what to do for further steps;
- Enforcing initiatives to engage with the internal and external actors and having a collective response to the solutions to climate change;

Having structural resource allocation does not create limitations, as the BEU comprehends the situations and ongoing processes to be changing. Variability could lead to institutions being flexible, as the BEU is the institution that understands minor issues and answers excellently with being flexible and having adaptability. Rapid evolution in climate change positively forces the community to adapt to various situations which aligns with Baku Engineering University's philosophy, as it pushes itself to be more flexible and innovative.