



EGE UNIVERSITY

SUSTAINABLE GREEN UNIVERSITY STRATEGIC PLAN



Bornova-İZMİR



BASIC POLICIES AND OBJECTIVES

The concept of Sustainable Green Campus is a holistic management approach that prioritises environmental awareness in all activities of the University, carries out environmental activities in this direction, aims to make sustainability a culture of life for students and employees during and after the education and training period, and includes students, academic and administrative staff, media, local governments, regional businesses and other stakeholders of the campus.

Ege University, one of the leading prestigious universities of our country, aims to maintain its pioneering role in 'ENVIRONMENT', one of the most prioritised problems of the world agenda. In this context, Ege University aims to realise the accumulated knowledge on 'ENVIRONMENT', which has been handled with importance and sensitivity for many years within Ege University, on the way to becoming a more environmentally sustainable and more livable university and to be a guide to the society in this regard.

With the 'Sustainable Green Campus' understanding, which is intended to be put into action with these ideas;

- The concept of 'environmental sustainability' to be prioritised in technical and social decision-making processes in university life and management approach,
- Maximising environmental awareness among all students and employees on campus,
- Minimising the possible negative impacts and risks of university activities on the environment
- Setting an example for the society and local stakeholders in terms of environmental sustainability and assuming a guiding role towards becoming a Green City
- Considering the campus as a living laboratory and ensuring that staff and students take an active part in environmental learning and environmental protection regardless of their branch of education
- Strengthening stakeholder cooperation by reaching out to wider social masses, including local schools, local government, non-governmental organisations and industry
- Adopting 'Zero Discharge, Zero Waste, Zero Carbon Emission and Recycling' as a principle in the development plans, design and development projects of the Central Campus and the surrounding University units
- Setting environmental targets in line with the principle of 'zero discharge', measuring and reporting them effectively and continuously improving these targets
- Ensuring that policies and practices for students' campus life quality, diversity and equality are supported by environmental criteria
- Creating of a campus life where cultural diversity is blended with environmental values
- It is aimed to establish a co-operation framework with national and international universities on Green Campus and to ensure joint action.



Strategic Objective 1. Establishing of a “Sustainable Green” University Management System

Strategic Goal 1: *Determining the green university policy and establishing its strategy,*

Action 1: Determining the green university policy and basic objectives of the University and getting the approval of the University Senate

Action 2: Carrying out studies to determine the deficiencies and problems of the university on the way to becoming a green university, creating a green university strategic plan based on the results obtained and getting the approval of the University Senate

Strategic Goal 2: *Implementation of institutional structuring towards becoming a green university,*

Action 1: Opening an office within the Rectorate where administrative and managerial work will be carried out to become a ‘Sustainable Green University’ and developing a coordinated working system with the Environmental Problems Application and Research Centre (EÜ-ÇEVMER)

Action 2 : Making the administrative arrangements required by the institutional organisation

Action 3: Opening ‘Sustainability Office Representation Offices’ at certain points of the campus, ensuring the participation of University staff and students

Strategic Goal 3: To provide the employment needed for the implementation of the Green University,

Action 1: Calculating and planning the labour force requirement of the university,

Action 2: Making possible arrangements within the framework of the existing legislation to give priority to applicants with experience in sustainable environment and energy issues in the employment of academic and administrative human resources,

Action -3: Adding a personnel support item to BAP projects in order to meet the labour force requirement,

Strategic Goal 4: Developing internal and external financing opportunities in order to implement the Green University,

Action 1: Developing new co-operations and externally financed projects at national and international levels,

Action 2: Investigating the use of revolving fund opportunities and making attempts to make the

Strategic Goal 5: Completion of the infrastructure works for the establishment of ISO 14001 Environmental Management System and ISO 50001 Energy Management System on the basis of TS EN 9001:2000 Quality Management System,

Action -1: Researching appropriate management models and taking necessary initiatives for the implementation of the appropriate model,

Action -2: In order to ensure the implementation of the systematic model, first of all, in-house academic support should be provided, and where it cannot be provided, attempts should be made to obtain external consultancy services,

Strategic Goal 6: Establishing an information infrastructure and technological data collection infrastructure for the sustainability of Green University Management systems,

Action -1: Carrying out the necessary survey and feasibility studies for the establishment of data collection systems for the creation of environmental and energy inventories and the creation of information systems that will ensure the sustainability of the data collection system, and initiating the necessary studies in line with the decisions to be made as a result of the survey and feasibility studies,

Action -2: Necessary feasibility and survey studies for the establishment of a management information system will be completed and necessary work will be carried out to implement the most appropriate solution possible.

Strategic Goal 7: Increasing the level of environmental awareness of internal and external stakeholders and raising awareness,

Action 1: Preparation of an action plan for the continuation and sustainability of awareness-raising activities (congresses, workshops, seminars, competitions, etc.) on campus and at national level and carrying out the activities within the framework of this plan.

Action 2: On-campus awareness-raising activities will continue, and the effectiveness of these activities will be monitored and evaluated within the framework of national or internationally developed indices,

Action 3: Organising national and international competitions to raise awareness and contribute to publicity,

Action 4 : Including the environmental principles of the University in the protocols to be signed between the University and external stakeholders.

Strategic Goal 8: Establishing an environmentally orientated management system that includes procurement, transformation and logistics activities,

Action 1: Carrying out procurement activities within the framework of this concept to the extent permitted by campus legal regulations.

Action2: Organising training activities and seminars to raise awareness of regional suppliers on green procurement,

Action-3: Preferring suppliers with a high level of environmental awareness in supplier evaluations, (For this purpose, requesting ISO 14025 Environmental Product Declaration, Ecolabel certificate, Energy Star etc. certificates from suppliers, making necessary initiatives to include the Lifetime Cost basis in the legislation in product selections)

Action -4: Determining the principles of the campus regarding reverse logistics activities and carrying out necessary studies,

Action 5: Determining the principles regarding the logistics activities of the campus based on purchasing (less transport, transport from a central point, short routes, etc.) and carrying out the necessary studies in this direction,

Strategic Goal 9: Carrying out studies to ensure the sustainability of all actions developed in the strategic plan

Action 1 : Conducting preliminary studies on existing risks

Action 2 : Carrying out monitoring and auditing work in units twice a year

Action 3: Appointment of the relevant unit authority by the senior management and conducting internal audits in the units

STRATEGIC OBJECTIVE 2. Ensuring Sustainable Energy Management and Reducing Our Carbon Footprint

Strategic Goal 1: Reducing energy consumption and losses, increasing energy use efficiency,

Action 1: Taking necessary initiatives to appoint an energy manager/coordinator in the units and to receive the necessary training,

Action 2: Determining the exact amount of current energy use on the basis of units, conducting investigation on energy losses, developing appropriate measures

Action 3: Conducting energy efficiency and saving potential studies, creating an inventory and repeating these studies in necessary periods,

Action 4: Determining the methods and measures to be applied in energy efficiency and saving,

Action 5: Carrying out the necessary work to establish ISO 50001 Energy Management System, reviewing the administrative structure within the framework of the requirements of this system and making arrangements

Action 6 : Following the energy efficiency and saving studies, determination of implementation methods (Efficiency Improvement Projects-VAP, Saving Projects- TSP) and their investment costs and return periods by foreseeing efficiency improvement and saving potential,

Action 7: To examine the nationally or internationally recognised minimum efficiency criteria for energy consuming goods and services procurement and construction works, and to make possible changes in the technical specifications for new procurement and construction works for this purpose,

Action 8: Completing feasibility and survey studies for the gradual replacement of all kinds of equipment, machinery, lighting and other vehicles that have completed their economic life in terms of energy efficiency with equipment that is more compatible with the environment and has high efficiency, and making the necessary arrangements based on the results obtained,

Strategic Goal 2: To expand the use of renewable energy sources in existing buildings and to prioritise renewable energy systems in new buildings,

Action 1: Completion of detailed and data-based potential studies for the conversion of wind and solar energy into electricity on and around the campus,

Action 2: Supporting academic ‘Scientific Research Projects’ for the research of renewable energy resources,

Action-3: Establishment of the by-laws mentioned in the ‘Renewable Energy Law’ of the Republic of Turkey making the necessary initiatives to obtain the exemptions and incentives that may be granted subsequently,

Strategic Goal 3: To ensure that existing campus facilities meet national and international energy performance standards and to switch to energy efficient systems,

Action -1: New facilities to be constructed shall be based on the ‘Turkish Energy Performance Regulation for Buildings’ and ASHRAE 189-1 High Performance Building Standards,

Action -2: Carrying out the necessary surveys and feasibility studies for the issuance of ‘Energy Identity Certificate’ for existing facility buildings based on the ‘Turkish Energy Performance Regulation for Buildings’,

Action -3: Taking initiatives for the design and construction of exemplary zero emission building(s) on campus.

STRATEGIC OBJECTIVE 3. Ensuring Sustainable Waste Management System and Working with Zero Waste Target

Strategic Goal 1: *Ensuring the sustainability of the hazardous waste management system*

Action-1: Ensuring that the units submit their work as a report to the Rectorate in March and November of the year

Action -2: Unit coordinators organise unit trainings for unit personnel at the beginning of each term

Action -3: The Rectorate will allocate a special budget for the disposal of hazardous wastes every year as of 2017

Strategic Goal 2: *Minimising the use of hazardous substances*

Action-1: Purchasing environmentally friendly products

Action-2: Replacement of hazardous substances used in laboratories with less hazardous equivalents at every possible opportunity

Action-3: In order to minimise the amount of waste, the option of using the least possible amount of the hazardous substance used should be considered first; if it is not possible, it should be ensured that waste generation is minimised by processes such as neutralisation and recovery.

Strategic Goal 3: *Increasing the amount of packaging waste sent for recycling*

Action-1: Establishing technical systems that make recycling of wastes attractive throughout the university, ensuring that they are placed in different units of our university

Action- 2: Including cafes, restaurants, etc. within the university in recycling activities, ensuring that the necessary commitment conditions for waste recycling and penal conditions for violations and negligence are included in the annual lease agreements

Action -3: Carrying out awareness-raising and training activities on recycling of packaging wastes

Strategic Goal 4: Producing less *Packaging Waste*

Action-1: In addition to the reduced paper consumption with e-signature; minimising paper consumption by using electronic alternatives in invitations, announcements, etc.

Action 2 : Use of sustainable materials, not disposable materials

Action-3: Making maximum effort to ensure that the packaging material is taken back by the supplier company in purchasing transactions

Strategic Goal 5: *Utilisation of organic wastes*

Action-1: Separate collection of organic wastes from all dining halls, cafes, restaurants, etc. of our university and then utilising them with compost, biogas, etc. instead of throwing them away

Action-2: Alternatively, ensuring that the food wastes from all dining halls, cafes, restaurants, etc. of our university are sent to animal shelters

Strategic Goal 6: *Ensuring safe disposal of Electronic Wastes*

Action-1: Establishment of electronic waste inventory

Action-2: Paying attention to the purchase of environmentally friendly, recyclable products

Action-3: Establishment of purpose-built collection stations for the safe disposal of electronic waste or integration with existing hazardous waste stations

STRATEGIC OBJECTIVE 4. Implementing Sustainable Water Use and Reducing Our Water Footprint,

Strategic Goal 1: Investigating alternative water sources that can be used instead of municipality water

Action-1: Utilising groundwater as the most easily accessible resource and making it available,

Action-2: Storing rainwater and making it usable, for this purpose roof water

The rainwater that flows through a special water channel from one end to the other in the middle of the campus of our University in every rain can be collected, stored and put into use (garden and tree irrigation can be considered in the first stage),

Action-3: To carry out the necessary work to make the supply of usable water from alternative water sources sustainable.

Action-4: To ensure that studies are carried out to store the waste water of the air conditioners that are in operation in order to be utilised instead of disposing air conditioning water directly into the sewerage network.

Action-5: Seminars and information meetings should be held under the leadership of the relevant academic units in order to raise awareness within the University about the importance of water in our lives, its economical use and consumption to our on-campus employees and students, and the subject should be kept up-to-date and users should be trained on these issues. In addition, in order to increase social awareness, courses on the subject should be included in the education plans to be taught for one semester in order to raise awareness on this issue.

Strategic Goal 2: To carry out studies to make wastewater reusable

Action-1: To prepare an action plan for the reuse of wastewater,

Action-2: A water treatment plant should be commissioned so that waste water can be recycled and used in the on-campus network and the energy needed for this plant should be used green energy (produced from solar panels) to be produced within the University.

Action-3: To store rainwater and make it usable, roof water collection system may be implemented for this purpose, and rainwater that flows through a special water channel from one end to the other in the middle of the campus of our university in every rain can be stored and put into use. (garden and tree irrigation can be considered in the first stage) will also help to use water resources economically.

Action-4: To meet the drinking water needs of the campus by passing the collected rainwater through special processes,

Action-5: The energy needed in all these studies should be the use of green energy (produced from solar panels) to be produced within the University.

Strategic Goal 3: Taking the necessary measures for the economic use of water supplied from water resources and hygienised

Action-1: The distribution of water obtained from natural resources for use in proportion to the needs of the units by using the necessary tools and equipment within the campus will be an important practice that will ensure the economical use of water (distribution of water through share meters or meters that control consumption, etc.),

Action-2: Within our university, garden and tree irrigation is carried out by using the sprinkler method that lasts for hours in the hottest hours of the day. This method leads to excessive water consumption as well as the loss of a large part of the water used through evaporation. Instead, it should be ensured that irrigation is carried out by drip irrigation outside working hours, especially at night, with a method that will be more efficient and minimise water loss, and with a programming to be made in advance.

Action-3: Due to the problems experienced in the water distribution network within our university, the interruptions and waiting for the water to be cleaned by leaving the taps open for a while due to the dirty water flowing from the taps at the end of each repair, thus increasing consumption, wasted water has led inefficient use of resources. The distribution and use of water can be made more economical by making on-campus network maintenance and repairs in advance.

Action-4: The use of infrastructure and technological innovations in the supply, storage and distribution of water will reduce water losses. The use of more hygienic and durable plastic pipes instead of iron pipes used in the network will reduce interruptions and prevent dirty and rusty water from coming from the network at the end of each repair.

STRATEGIC OBJECTIVE 5. Providing Environmentally Friendly Campus Transport Service,

Strategic Goal 1: To raise awareness about transport within the university and to ensure the creation of sensitivity on this issue

Action-1: To ensure the establishment of an Intra-University Transport Coordination Unit, which will include a wide range of University employees. To enable this unit to carry out awareness-raising activities on the issue by taking advantage of the ideas of the citizens who come to the campus during the day, especially those who work on campus, and to evaluate the suggestions that emerge and to present the ones that may be a solution to the problem to the relevant units of the University administration and to ensure that they are implemented.

Action-2: To ensure that elective courses or courses on transportation within the university are included in the scope of the education programme, and to ensure that the suggestions and support of the students studying at the University on this issue are discussed and evaluated on the basis of projects, as well as to enable them to be implemented by making studies on them.

Action-3: To identify the proposals that can be taken into consideration in the studies carried out on this subject and to encourage them for new studies. If necessary, encouraging panels, seminars and competitions on this subject may be organized.

Strategic Goal 2: To carry out studies to eliminate the traffic density at the entrances and exits to and from the university campus, especially during exam periods and at the beginning and end of working hours.

Action-1: Approximately 60,000 students are studying in the campus of our University, which has a campus in an area of approximately 3 million m². In addition to this, around 4000 academic and administrative staff enter and exit the University every day. In addition, the Faculty of Medicine Hospital and the Faculty of Dentistry of our University have an intensive flow of patients and their relatives coming from outside. In the light of this information, in order to find a solution, the intensity of transport within the University should be monitored and a 'Transport Intensity Table' should be prepared.

Action-2: In the first place, in order to eliminate the vehicle traffic in the campus, car parks to be built underground in the campus should be planned and the vehicles that will enter the campus should be taken to these car parks.

Action-3: To make an electric tram system operational in the campus area where there is no vehicle traffic, will continuously meet the transport need and provide its energy from renewable energy with solar panels.

Action-4: In addition to the on-campus electric tram, in co-operation with Izmir Metropolitan Municipality, to ensure that the BISIM bicycle application is also implemented on campus,

Action-5: In addition to the electric tram and BISIM applications, to carry out studies to enable the use of electric charged bicycles (two or three wheeled) by providing new co-operation and sponsorships,

Strategic Goal 3: To ensure the establishment of a safer transport system that will operate on the rail system.

Action-1: To create a well-planned, non-intersecting, safe tram line that does not harm the nature.

Action-2: To ensure the preparation and implementation of a transport movement plan including a controlled and planned signalling system.

Strategic Goal 4: To provide a more economical and environmentally friendly transport service

Action-1: Renewable energy should be used in on-campus transport. In particular, vehicles should be put into service in which renewable energies that can be obtained from the waste of the University can be used together with the green energy to be obtained from the energy panels to be placed on the roofs of other buildings with large roofs that are constantly exposed to the sun during the day, such as the roof of the campus swimming pool.

Action-2: The Electric Tram System, which will constitute the main part of on-campus transport, should be planned to transfer/connect with other local Metro and Bus transport

systems and passenger transfers should be provided without the need for an additional transport system.

STRATEGIC OBJECTIVE 6. Dissemination of Green Building Practices

Strategic Goal 1: To make a standardisation in accordance with the national green building standards depending on the characteristics of the geography where our university is located

Action 1: Analysing the relevant certification systems (LEED, BREEAM, DGNB and EIABIK),

Action 2: Establishing a commission to determine the green building standard specific to our university

Action 3 : Co-operation with local administrations

Strategic Goal 2: Carrying out studies for the transformation of existing buildings into environmentally friendly ones

Action 1: Creating an inventory of the existing building assets on the campus and analysing the deficiencies,

Action 2: Identification of priority structures/areas based on the results of the survey,

Strategic Goal 3: *Ensuring that new buildings are built in accordance with green building standards*

Action 1: Paying attention to environmentally friendly certificates in procurement,

Action 2: Preferring technologies that ensure efficient and sustainable use in the selection of consumption materials

Strategic Goal 4: *Ensuring sustainable land management*

Action 1: Prioritise the re-use of existing buildings or previously used land to meet building needs,

Action 2 : Protection and expansion of green areas,

Action 3 : Avoiding settlement on lands with unsuitable land selection standards,

Action 4: Identifying campus biodiversity and taking steps to protect it,

Action 5: Improving the campus ecosystem through innovative practices such as rooftop gardens and vertical gardens,

Action 6 : Collection and utilisation of rainwater

STRATEGIC OBJECTIVE 7. Combating Climate Change and Ensuring Adaptation

Strategic Goal 1: Implementation of activities on combating and adapting to climate change

Action 1 : Ensuring the implementation of climate change actions under the headings of energy, waste, water, transport, green building, etc. within the Ege University Green University

Action 2 : Realising the necessary financial arrangements for the implementation of climate change actions

Action 3 : Developing and implementing information, monitoring and evaluation systems and tools to support decision-making processes

Action 4 : Organising training and awareness-raising activities for internal and external stakeholders in order to raise awareness on combating and adapting to climate change

Strategic Goal 2: *Developing R&D capacity for climate change*

Action 1: Prioritising projects aimed at improving the capacity to combat and adapt to climate change in the BAP projects of the university,

Action 2: Providing ‘co-operation’ meetings that will enable the development of innovative ideas by bringing together researchers working on climate change in different units of the university

Action 3: Encouraging our researchers to participate in international meetings in order to benefit from international calls on climate change at the highest level **Action 4**: Organising training and awareness-raising activities for internal and external stakeholders in order to raise awareness on combating climate change

STRATEGIC OBJECTIVE 8. Raising Awareness on the Concept of Sustainability

Strategic Goal 1: *Adding sustainability courses to the curriculum*

Action 1 : Introducing this concept to new students, adding a course to the first year of all departments

Action 2: To determine the number of courses on environment and sustainability at the university and to increase the number of relevant courses within 3 years

Action 3: To increase the number of projects on sustainability carried out by students within the scope of Community Service Practices course

Strategic Goal 2: *Raising awareness on the concept of sustainability through ‘Media’*

Action 1 : Introducing the concept of sustainability by using the media organs of our university

Action 2: Increasing the number of programmes on Radio Ege Kampüs and Ege Kampüs TV

Strategic Goal 3: Raising awareness on the concept of sustainability through ‘Internet’

Action 1: Adding Sustainability definition and studies on the home page of our university

Action 2: Announcing and promoting the work done with social media

Action 3: Establishing a web page, activating the English version of the page

Action 4: Increasing the number of participation in international sustainability networks

Action 5 : Establishment of a national sustainability network

Strategic Goal 4: *Ensuring that student groups work on sustainability*

Action 1: Determining the number of student groups working on sustainability, environment, green university issues

Action 2: Increasing the number of student groups working on sustainability, environment and green university issues

Action 3 : Increasing the number of activities related to sustainability, environment and green university issues

Action 4 : Establishing a network for effective communication of groups

Action 5 : Creating a forum where students and faculty members can discuss together

Strategic Goal 5: *Increasing awareness raising activities*

Action 1 : Campus visits, distribution of posters and brochures

Action 2 : Organising competitions, artistic activities, etc.

Action 3: Organising informative meetings such as conferences, seminars, etc. for the public on special environmental days

Action 4 : Increasing the number of local administrations and NGOs in co-operation

Action 5: Increasing the number of activities with local administrations, NGOs

Strategic Goal 6: *Supporting the concept of sustainability through scientific activities*

Action 1: Organising national and/or international scientific activities (congress, seminar, etc.) on sustainability

Action 2: Supporting faculty members and lecturers participating in scientific meetings on sustainability

Action 3: Analysing national and/or international project calls on sustainability, increasing the number of projects, increasing the number of publications on the subject

Action 4: Increasing the number of master's and doctoral theses on sustainability











