

5.2 Polytechnic University of Tirana: Plan for Climate Action

Introduction

In the scope of the work package 2 of the 1FUTURE project, it is foreseen to prepare and approve a Plan for Climate Action in each Higher Education Institution in the Western Balkan Countries. This plan is the product of the task 2.5 and is developed based on the findings of the previous tasks of the work package 2, specially on the results of the gaps analysis and study visits to EU partners. The gap analysis of climate and sustainability initiatives between Western Balkans (WBC) and European Union (EU) Higher Education Institutions (HEIs) revealed notable differences in terms of national legal and strategic framework; Institutional framework; Curricula; Projects and research; Services and practices.

The situation in the EU HEIs shows comprehensive sustainability integration in the institutional framework; a holistic and structured approach to sustainability education, with focused programs and broader integration; engagement in broader and interdisciplinary research; different services and practices focused on climate and sustainability.

While the WBC face challenges in aligning with international standards, limited use of resources, and early-stage implementation; lack of specific institutional frameworks; lack of curricula focused on Climate Change and Sustainability Practices; disparity in SDG integration across various specialized programs; research and projects with a more focused approach; in providing services and practices addressing climate and sustainability challenges.

Addressing the identified gaps between WBC HEIs and EU HEIs in climate and sustainability initiatives can yield significant benefits for WBC HEIs. Closing these gaps elevates the international standing of WBC HEIs, fostering recognition for their commitment to sustainability and aligning with global standards. Aligning with EU practices opens doors for collaboration, joint projects, and research partnerships, providing WBC HEIs with access to broader networks and resources.

The aim of the Plan for Climate Action is to close these gaps by implementing a climate agenda in the future in WBC HEIs. Its approval and implementation will position WBC HEIs as key contributors to national sustainability efforts, fostering positive impacts on education, research, and environmental protection.

Chapter 1: Higher Education and Climate Action

The Plan for Climate Action aims to complement our research, teaching and learning activities in support of sustainability. We propose to have 7 areas of implementation with focus on Climate Action as a crosscutting thematic area, in recognition of the critical nature of the climate crisis. While the lifetime of this plan is planned to cover the years 2024 – 2029. The plan will seek to have longer lifetime, and to built different collaborations schools, businesses, units and student organisations across the Faculty.

The vision of the Faculty of Civil Engineering (FCE) is related to be a high-quality Public Institution of higher education and a leader in its fields of expertise. It aims to improve and consolidate academic training and solving important research and scientific problems on a national and regional scale.

With the approval of this plan, the Faculty of Civil Engineering aims to be a leading faculty on implementing Climate and Sustainability action, through research, demonstration of best practice on campus, and education of current and future leaders and decision makers.

The general mission of FCE is based on honesty, curiosity, creativity, freedom of spirit, cooperation and transfer of knowledge in the field of science and education for a sustainable development.

Moreover, with the approval and implementation of this plan for climate action, the Faculty of Civil Engineering aims:

- To facilitate the development and empowerment of future leaders in sustainability through research, teaching and learning activities.
- To engage students, staff and wider community in becoming active citizens for sustainability.
- To minimise the environmental impacts of our educational, research, and infrastructural development on local, regional and global scale.

Chapter 2: Sustainability and Climate Action Plan Overview

This Plan will be developed through the following areas of action. The areas have been conceived following the action priorities of higher education institutions. For each area, the purpose of proposing concrete action is highlighted.

Environmental Sustainability in Academics: Learning, Teaching and Research

- To facilitate the development and empowerment of both current and future leaders in sustainability through our teaching and learning activities. To foster sustainability literacy through both formal and informal learning opportunities.
- To facilitate the development and empowerment of future leaders in sustainability through our research activities and, in doing so, maintain and enhance the University's standing and leadership in research on sustainability topics.

Sustainability Citizenship

- To support, enable and influence our students, staff, and wider community in achieving the SDGs and establish Sustainability Citizenship as a core ethos of HEIs.
- To be transparent, accountable, and inclusive and to place the just transition as a core element of our programmes.

Climate Action

- To build and operate within HEIs carbon budget and mitigate the impact of climate changes on our country, while acting as a leader for climate action locally, regionally and nationally aiming to achieve net zero emissions by 2050.

Waste Reduction and Circular Economy

- To minimize the local, regional and global environmental impacts of our educational, research, operations, and infrastructural development.
- To make reuse the first option and promote a circular economy approach at all times.

Landscape and Natural Resources

- To promote engagement with campus green space amongst campus and local community.

Commuting and Active Travel

- To promote the use of more sustainable methods of commuting amongst our staff and students.
- To capitalize on the opportunities, to reduce our transport related emissions.

Food Health and Weelbeing

- To enhance the health and well-being of the University and wider community through the facilitation and promotion of aspects of healthy eating and living as an integral part of sustainable living

Chapter 3: Monitoring and Reporting

The newly created Knowledge HUBs for Climate and Sustainability (KHCS) will have overall responsibility for reporting and communicating the associated outcomes. For each action or group of actions, an action group will be established to oversee the development of targets and ensure successful delivery. The action group will be consisted of 1 representative from the KHCS staff, 1 PhD student and 1 administrative staff from FCE. Each action group will produce Sustainability Reports outlining progress against each action and target within this plan. The responsible of the KHCS will report to the dean of the faculty progress of the action plan.

The KHCS will continue to act as open spaces for staff and students within Faculty of Civil Engineering to drive innovative and impactful projects and initiatives for the entire FCE community.

No.	Areas	Goals	Activities	Outcomes	Deadline	Responsible Parties	Priority
1	Environmental Sustainability in Academics: Teaching, Learning and research	<ul style="list-style-type: none"> - Promote scientific research in the field of environmental sustainability. - Reduce the environmental impact of our research practices. - Support our teaching staff to integrate the SDGs into their curricula where appropriate. - Ensure every student at DEE is exposed to the global sustainability agenda and this action plan - Promote collaboration and transdisciplinarity. 	<ul style="list-style-type: none"> - Support researchers to understand where their work impacts on the SDGs and environment. - Presentation of environmental sustainability principles and SDGs to students and teaching staff. - Support academic community to develop interdisciplinary collaboration. - Develop sustainability and climate action continuous professional development courses for policy makers, businesses and communities. 	<ul style="list-style-type: none"> - Curricula and research mapped to SDGs - Increased understanding and awareness of environmental principles among student communities. - Knowledge Exchange among students, academic community, and external stakeholders in the environmental field. 	2027	All Faculty of Civil Engineering academic, non-academic and administrative staff and students	High
2	Sustainability Citizenship	<ul style="list-style-type: none"> - Align the sustainability programme with relevant FCE strategies including teaching and learning and research strategies. - A sustainable FCE building 	<ul style="list-style-type: none"> - Offer SDG training for FCE staff and students. - Develop a coherent and transparent Sustainability reporting process. 	<ul style="list-style-type: none"> - All FCE staff and students trained about SDGs 	2026	All Faculty of Civil Engineering academic, non-academic and administrative staff and students	High
3	Climate action	<ul style="list-style-type: none"> - Implement and adapt our institutional management policies and infrastructure to 	<ul style="list-style-type: none"> - Continue best practice energy conservation, construction and reconstruction, 	<ul style="list-style-type: none"> - Less carbon emissions. 	2029	All Faculty of Civil Engineering academic, non-academic and	High

		<p>mitigate the impacts of climate change.</p> <ul style="list-style-type: none"> - Support students, staff and the wider community to reduce energy consumption levels through the increase of energy efficiency and the use of renewable energy. - Positively impacting on the sustainability performance of suppliers and the sustainability credentials of the goods and services we buy. 	<p>behavioural change initiatives and equipment replacement programmes.</p> <ul style="list-style-type: none"> - The introduction of eco and environment-friendly criteria in the tendering procedures for materials and services from third parties. 	<ul style="list-style-type: none"> - Onsite renewable capacity at FCE building - Reduction of annual energy usage - All suppliers required to submit carbon footprint 		administrative staff and students	
4	Waste Reduction and Circular Economy	<ul style="list-style-type: none"> - Become single-use plastic free across catering operations and work with the wider community to minimise plastic consumption in laboratories. - Make reuse a first option promote a sharing economy across faculty and into the community. - Ensure a full life cycle cost approach as part of tendering processes and everyday purchases of the faculty. - Trial innovative approaches to waste reduction and reuse in collaboration with internal and external stakeholders. - Gain a better understanding of the types of waste generated across departments and develop strategies for reuse of these materials. 	<ul style="list-style-type: none"> - Placement in the faculty's premises of the necessary infrastructure for the differentiated collection of waste. - Carry out a full assessment of laboratory waste. - Work with the Procurement Office to engage with suppliers in reducing waste and taking a lifecycle approach to all activities. - Collaborate with IT office to promote efficient reuse and repair of IT equipment - Promote reuse of office items and consumables on faculty's premises. 	<ul style="list-style-type: none"> - Differentiated waste collection. - Minimisation of plastic usage - Reduction in the environmental impact of waste disposal through proper recycling methods. - Contribution to a circular economy by maximizing the recovery and reuse of recyclable materials. 	2025	All Faculty of Civil Engineering academic, non-academic and administrative staff and students	High

		<ul style="list-style-type: none"> - Ensure best practice in construction waste management 					
5	Landscape and Natural Resources	<ul style="list-style-type: none"> - Promote better integration and connection of green spaces across FCE building and its surroundings. - Promote and enhance the use of our natural resources in teaching and learning and research on sustainability as well as in everyday use and recreation. - Promote and facilitate social and physical access to green space, and raise awareness of the associated ecosystem, biodiversity, heritage, social and health related values. - Water conservation by increasing the efficiency of its use and reducing the pollution of used water. 	<ul style="list-style-type: none"> - Incorporate green infrastructure and biophilic design principles in new builds and major retrofits. - Develop a green walls/roofs in new buildings. - Develop walkways and greenways to ensure accessibility of our green space. - Implement standards for water efficiency. - Develop rainwater collection standards 	<ul style="list-style-type: none"> - More green spaces in FCE building and surroundings. - Efficient use of natural resources. - Reduction in water wastage and increased efficiency in water use in targeted environments. 	2029	All Faculty of Civil Engineering academic, non-academic and administrative staff and students	High
6	Commuting and Active Travel	<ul style="list-style-type: none"> - Reduce the number of staff and students commuting to campus by single car journeys. - Reduce the overall carbon emissions associated with staff and student commuting to FCE. - Support staff and students in choosing more sustainable transport options by providing the correct incentives and 	<ul style="list-style-type: none"> - The gradual change of the car/vehicle fleet towards electric or hybrid ones. - Work with partner institutions and the city council to drive provision of better cycling and public transport infrastructure. 	<ul style="list-style-type: none"> - Adequate bike storage available across FCE premises - Increase in the proficiency of staff and students in effectively using videoconferencing tools for virtual 	2029	All Faculty of Civil Engineering academic, non-academic and administrative staff and students	Medium

		infrastructural improvements.	<ul style="list-style-type: none"> - Create covered bicycle parking Develop and pilot a communications strategy and programming to reduce single-occupancy vehicle commuting. - Promote videoconferencing as an alternative to air travel. 	meetings, lectures, and collaborative projects, resulting in a higher frequency of virtual interactions and reduced travel-related emissions.			
7	Food, Health and Well-Being	<ul style="list-style-type: none"> - Ensure the entire faculty community have access to healthy and affordable plant-based meal options. - Ensure a healthy air quality for all staff and students internally and externally, and promote air quality initiatives in the wider community. - Support staff and students to utilise active modes of transport in their daily commute. 	<ul style="list-style-type: none"> - Work to more vegan choice in the mini restaurant. - Support active travel through better provision of cycling storage. - Drafting and implementation of a regulation for cleaning and sanitizing environments, in order to maintain/improve air quality. - Creation of green recreational areas with open environments. - Increase access to healthy extracurricular activities 	<ul style="list-style-type: none"> - Enhanced health and wellbeing of the faculty community - Encourages active transportation and social responsibility. - Increased awareness and compliance with regulations and standards for cleaning and sanitizing - Motivates community engagement and long-term impact beyond campus. 	2029	All Faculty of Civil Engineering academic, non-academic and administrative staff and students	Medium