Green Transition in Ukrainian NAVA NARODOWA Universities, NAWA project 2023

Unite! Erasmus+ project 2022-2026, WP8, An Open Innovation Community for the Green Transition

Mariusz Mazurkiewicz Wrocław Tech



























Aalto University, Espoo/Helsinki KTH Royal Institute of Technology, Stockholm

Wrocław Tech
Technical University of Darmstadt
Graz University of Technology
Grenoble INP-UGA
Politecnico di Torino
Universitat Politècnica de Catalunya · BarcelonaTech
Universidade de Lisboa



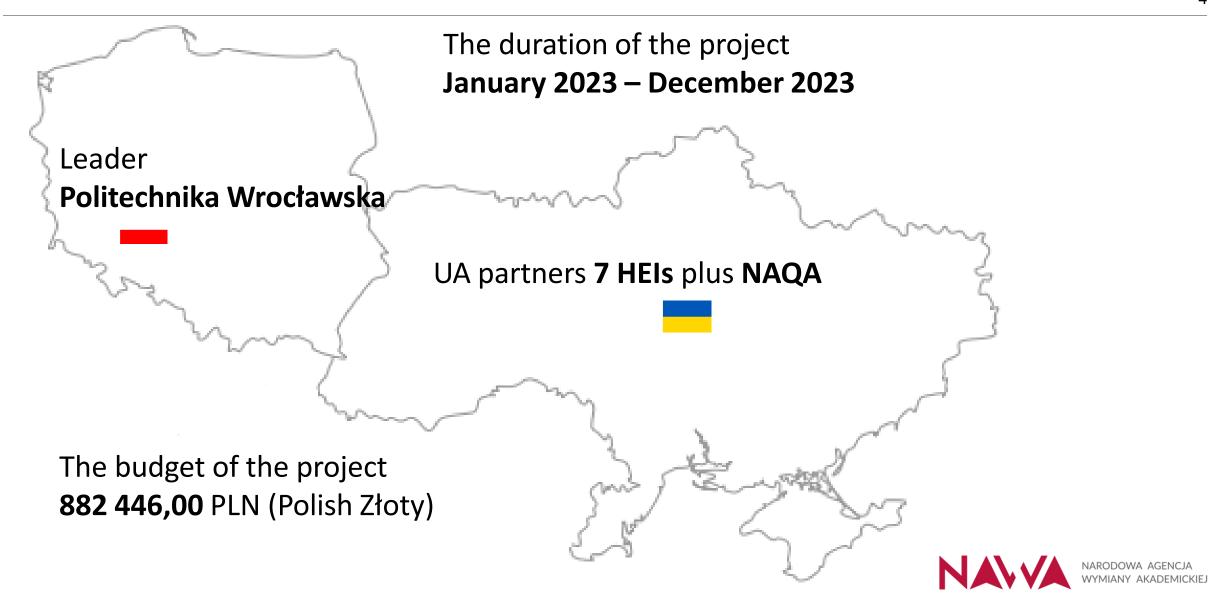


The key for selection of Ukrainian partners for Wrocław Tech is the cooperation (including further in view of 2023) on board of Erasmus+projects in the period 2015-2023, engineering (in part) profile of activity.



Green Transition in Ukrainian Universities, NAWA project





Green Transition in Ukrainian Universities

Inclusion of Leading Ukrainian Universities in

the cooperation within the framework of Work Package 8

UNITE! E+ project





















Green Transition in Ukrainian Universities

The aim is to involve **7 Ukrainian universities** in the activities of the Unite! network carried out within the framework of the ERASMUS+ UNITE! project (2022-2026) in the field of green transformation with the further perspective of establishing permanent and wider cooperation with the Unite! network





















WP 8 and Green Transition in UA HEIs in line with Unite! Key Objectives



- Unite! Key Objective 1: Strategic long-term collaboration Unite! makes agile and programmatic allocations of shared resources for supporting research collaboration, community building, and for initiating teaching and learning collaboration.
- Unite! Key Objective 2: Strong and inclusive community Unite! engages in building bottom-up communities consisting of students, staff, and academics; Unite! enables and promotes the emergence of thematic communities in its focus areas and beyond; Unite! fosters the building of an open innovation community.
- Unite! Key Objective 3: Innovative teaching and learning opportunities Unite! pioneers new ways for joint programmes
- Unite! Key Objective 4: Transeuropean Campus Unite! trans-European campus provides efficient, digital Erasmus compliant service processes; Unite! trans-European campus offers and supports multilingualism and multiculturalism, alternative ways of mobility, and makes the sustainable and green campus a reality

An Open Innovation Community for the Green Transition, Main Tasks $U\cap ite!$



- T8.1 WP coordination and quality assurance
- **T8.2** Developing a role model for a green trans-European Campus (standards, green learning outcomes, campus and R&D followed by Unite! internal assessment)
- **T8.3** Preparing and conducting innovative actions for the campuses to become green villages for the innovation
- **T8.4** Reinforce the trans-regional open innovative community according to the Smart Specialization Strategy in each Region and steering the green and digital transition towards a regional impact
- **T8.5** Developing LLL programmes (micro-credentials system) to support the green transition in the extended environment of U! Open Innovation Community



■ **T8.2** Developing a role model for a green trans-European Campus (standards, green learning outcomes, campus and R&D followed by Unite! internal assessment)

Preparation of a general model of a **green university** in three pillars of activity: **education, research, service to society** through the development of green standards for HEI, elaboration of mechanism for quality assurance in terms of standards and evaluation based on self-assessment reports by the Unite! HEIs. The task will include: pilot implementations of green standards in the Unite! universities, pilot assessment of green standards at the Unite! universities and awarding a Unite! Green Label for selected initiatives.



T8.2 wider description



■ **T8.2** Developing a role model for a green trans-European Campus (standards, green learning outcomes, campus and R&D followed by Unite! internal assessment)

what: Establishment of the basic/conceptual requirements to be considered a green trans European campus based on three pillars of activity: education, research and service for society. The assessment of recent compliance of Unite! institutional members.

how: Through the development of a set of standards for a trans-European green campus by consensus among experts, followed by the elaboration of a self-assessment report within Unite! and **Ukrainian partners**

by whom: all members of the Alliance and Ukrainian partners coordinated by Wrocław Tech

when: months 1-12



Specific activities T8.2



- **T8.2** Developing a role model for a green trans-European Campus (standards, green learning outcomes, campus and R&D followed by Unite! internal assessment)
 - A1 Setting up thematic working groups of experts in the fields: green campus, green education and innovations/Standards for a green campus including facilities, teaching and learning activities as well as research and innovation.
 - A2 Development of standards of a green trans-European campus
 - A3 Self-assessment and evaluation by the members of the alliance by experts. Pilot assessment of green standards in selected HEIs
 - A4 Green label(s) for HEIs in fields: green campus, green curriculum, green research. Green Label (s) Awarding Unite! Committee. The rules.



T8.2 as preparation of academic communities for T8.3



■ **T8.3** Preparing and conducting innovative actions for the campuses to become green villages for the innovation

Implementation of activities aimed to improve the functioning of the campus in the direction set by green standards and practical implementation of the developed standards on the campus through the enhancement of green activities on the campus, wider involvement of students and young researchers, implementation of the concept of living lab in thematic fields related to the sustainability, innovations, green transformation.

Next stage (beyond 2023)...

T8.2 as preparation of academic communities for T8.3



■ **T8.3** Preparing and conducting innovative actions for the campuses to become green villages for the innovation

Implementation of activities aimed to improve the functioning of the campus in the direction set by green standards and practical implementation of the developed standards on the campus through the enhancement of green activities on the campus, wider involvement of students and young researchers, implementation of the concept of living lab in thematic fields related to the sustainability, innovations, green transformation.

Next stage (beyond 2023)...



■ **T8.5** Developing LLL programmes (micro-credentials) to support the green transition in the extended environment of U! Open Innovation Community

Enhancement of inclusiveness of higher education through the creation of LLL online courses and a post-graduate programme (micro-credentials) in green transition, based on an in-depth analysis of the needs of stakeholders. This leads to the development of unified Unite! certificates for the recognition of micro-credentials/postgraduate programme for engineers. It aims to stimulate the upskilling and reskilling processes in the Unite! community through planning and implementation of activities in new areas in accordance with the needs of the relevant stakeholders, and support of upskilling and reskilling processes in stakeholders' organisations.

Next (in part) stage (beyond 2023)...



Green Transition in Ukrainian Universities Tasks and Activities for 2023





















Green Transition in Ukrainian Universities, Main Tasks



- Green standards for Ukrainian universities in the field of education and research activities in the area of engineering and technical sciences (creation of a local version of green standards in the field of research and teaching activities taking into account the specifics of Ukrainian universities with compatibility with standards developed in the Unite! network, implementation of standards);
- Green campus (development of a green campus model; implementation of standards and evaluation of the process of implementation of green standards in the area of research and teaching activities and campus functioning);
- Summer school entitled GREEN TECHNOLOGIES FOR UKRAINE'S SOCIETY DEVELOPMENT (development and implementation of a 2-week course covering issues in disciplines that will be applied in the process of reconstruction and modernisation of industry and infrastructure of Ukraine for students of partner universities);
- Unite! micro-credentials system for Ukrainian partners (development of a system of Unite! micro-credentials in a thematically related field of green transformation and making it available to students from Ukrainian HEIs).



Task 1, Green Standards



The objectives of the task are

- To involve Ukrainian partners in the planned activities of the Unite! network scheduled for the same period concerning the development of green standards in research and education in the field of engineering.
- Adapting Unite! Green Standards for research and teaching activities, taking into account the specific character of Ukrainian HEIs and the needs of Ukrainian stakeholders (internal and external) in compliance with the standards developed within the Unite!
- Creating a functioning network of HEIs capable to improve green standards by piloting, evaluation and continuous improvement including improvement and extension of quality assurance system in HEI.



Green Standards, Activities



- Unite! recent achievements in the field of green standards. The general role of the standards in quality assurance activities within HEIs. Training (on-site) for representatives of Ukrainian HEIs and NAQA.
- Creation of a Ukrainian working subgroup within the working group of WP8 Unite! also consisting of representatives of Unite! universities. Direct involvement of the subgroup in the work of Unite! on the preparation of green standards packages.
- Needs analysis of Ukrainian stakeholders in view of green standards developed in Unite! network. Adaption of Unite! green standards to the recognized needs of Ukrainian stakeholders.
- Working group interim meeting in Wrocław focused on the approval of first version of green standards for Ukrainian HEIs. Elaboration of methodological basis for involvement of green standards (in part) as the basis for internal and external quality assurance activities in Ukrainian HEIs.

Task 2, Green Campus



The objectives of the task are:

- To integrate Unite! actions and Ukrainian HEIs actions conducted in the general framework of green campus (wasting management, energy consumptions, footprints reductions, distance learning, digitalization etc.) into the general model of Green Trans-European Campus.
- To create thematic communities in the Unite! network and Ukrainian HEIs capable to act in the field of greening campuses of HEIs with special attention focused on involvement of the students and young researchers in greening activities.
- To involve non-teaching staff of Ukrainian HEIs in green campus activities.
- To pilot green standards in Ukrainian HEIs.
- To evaluate piloted green standards in Ukrainian HEIs
- To improve the model of green campus in view of needs of non participating (in the project)
 Ukrainian HEIs for further implementations



Green Campus, Activities



- Creation of Ukraine Unite! working subgroup within Unite! working group for green campus. Direct involvement of this subgroup in Unite! activities in the field.
- Two study visits in Unite! HEI's venues for Ukrainian partners. Both visits combined with sessions on the principles of the green campus model, i.e. activities aimed at improving the functioning of the university and the campus in the direction set by the green standards and the ways of practical implementation of the developed standards.
- Hybrid mode open sessions for Ukrainian stakeholders focused on strengthening pro-environmental attitudes within academic communities and beyond. Organization of thematic communities within academic community regarding the actions on campus itself, broader involvement of students and young researchers, implementation of the living lab concept in thematic areas related to sustainability, innovations, green transformation etc.
- Evaluation report on the implementation of green standards in Ukrainian HEIs. The tangible outcome of the work on developing green standards in the area of research and teaching activities and green campus activities is their implementation at Ukrainian HEIs. The effects of the implementation of the green standards is going to be evaluated by experts from the Unite! network.

Task 3, Summer School



The objective of the summer school is to conduct a 2-weeks training/workshops covering topics in disciplines that will be applied in the process of green modernisation of industry and infrastructure in Ukraine.

The trainings topics will include modules selected on the basis of a previously conducted needs' analysis of Ukrainian students (in the form of an online survey and consultations) regarding the implementation of ideas of green transformation in Ukraine. The survey will be conducted among stakeholders of Ukrainian partner universities and deepened through consultations with the university's external stakeholders. With the course curriculum designed in this way, participants will have the opportunity to acquire the competencies necessary to rebuild the damaged infrastructure in such a way that it meets the expectations of the developing Ukrainian society and requirements of green transformation.





Summer School, Activities



- Needs' analysis of Ukrainian students (engineering fields) in view of green transformation.
- In-depth interviews with external stakeholders focused on their needs in view of green transformation.
- Elaboration of enrolment procedures for participants of Summer School (Ukrainian students).
- Preparation of the suitable learning outcomes for Summer School.
- Preparation of courses content for Summer School (Unite! trainers).





Task 4, Unite! Micro-Credentials



The objective is to create a system of Ukrainian micro-credentials incorporated in the future in Unite! micro-credentials system in a thematically related fields of green transformation.

It is planned to make micro-credentials available to students from Ukrainian HEIs. Its aim is to support the process of adaptation of the Ukrainian higher education system to the standards of the alliance universities and to facilitate the process of integration of Ukrainian partners into the European academic exchange network in view of micro-credentials specific activities in European Higher Education Sphere.





Unite! Micro-Credentials, Activities



- Needs analysis survey of knowledge and skills in thematic areas related to green transformation.
- Identification of key areas of micro-credentials trainings.
- Training for the representatives of Ukrainian HEIs responsible for development of on-line courses
 Development of on-line (digital content, bilingual) trainings for micro-credentials.
- Elaboration of the system for recognition of learning outcomes on the basis on micro-credentials trainings in line with Law on Higher Education in Ukraine.
- Launching of micro-credentials trainings for Ukrainian students.
- Identification of the best adapted to the needs of stakeholders and best prepared training (taking into account feedback from the audience) by the Steering Committee of Unite!
- Adaptation of the best training for the future system of Unite! micro-credentials. Incorporation of best micro-credential training to the permanent offer of Unite!



Green Transition in Ukrainian Universities

Deliverables





















Deliverables



Green standards in engineering higher education

A set of recommendations for Ukrainian universities - standards for engineering education and research taking into account the green transition requirements and specific needs of the Ukrainian economy

Green campus

A set of recommendations on how a higher education institutions should operate in line with the requirements of green transformation in terms of the organisation of university work inside the campus(es) and in its environment.

Evaluation of piloted green standards

Evaluation report with conclusions and recommendations for the further implementation of green standards in Ukrainian universities.

Summer School

Training for students of Ukrainian HEIs in fields related to green transformation.

Micro-credentials system for Ukrainian HEIs

3 micro-training programmes (digital content) on competences necessary for the green transformation process. Preparation of digital materials.



Key Performance Indices



Quantitative indices

- Number of involved Ukrainian HEIs, target value 7
- Number of involved Staff representatives of Ukrainian HEIs, target value 32
- Number of participants of Green Unite! summer school in Wrocław, target value 60
- Number of micro-credentials (digital) trainings (bilingual), target value 3
- Number of micro-credentials certificates issued by Unite! network, target value 45

Qualitative indices

- Green standards in engineering education in Ukrainian HEIs, report elaborated
- Green standards in research related to engineering education in Ukrainian HEIs, report elaborated
- Green campus model for technical universities (faculties) in Ukraine, report elaborated
- Implementation of green standards in Ukrainian HEIs, recommendations for Ukrainian HEIs,
 report elaborated
- Needs analysis of Ukrainian students in view of green transformation, report elaborated.





Main tasks

- T1. Green standards for Ukrainian HEIs.
- T2. Green campus model for Ukrainian HEIs. Implementation of green standards.
- T3. Summer school for Ukrainian students in Wrocław.
- T4. Unite! Ukraine system of micro-credentials.



Detailed budget distribution (Polish Złoty)



Task number	Staff cost	Travel and subsistence cost	Others	Total
T1	22548	198000	0	220548
T2	27078	198000	1400	226478
Т3	30360	192000	4402	226762
Т4	7158	198000	3500	208658
TOTAL	87144	786000	9302	882446



Green Transition in Ukrainian Universities, initialization of activities



Timetable for working group of the project

- January 2nd-3rd decade kick-off meeting (on-site) in Wrocław
- February 2nd-3rd decade first draft of green standards
- February 1st-3rd decade consultation in local academic communities
- February 3rd decade preparation of on-line presentation UA working group for Unite!
 GRENOBLE Dialogue







Politechnika Wrocławska



unite!

University Network for Innovation, Technology and Engineering





















