



Pilot Projects of The University of Maribor for A Green and Resilient Transition to Society 5.0

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Abstract. In 2022, the University of Maribor has successfully acquired 23 pilot projects for a green and resilient transition to Society 5.0 as part of the Recovery and Resilience Plan of the Republic of Slovenia, which will be implemented in the period 2022-25. The aim of the pilot projects is thus to achieve curricular renewal and changes for a green, resilient, sustainable, and digitally connected university. We strive for sustainable, socially responsible, and high-quality development of scientific sciences and artistic disciplines as well as research fields and subfields developed by UM, considering the principles of smart specialization with an emphasis on solving social challenges. The pilot projects of the University of Maribor thus relate to the reduction of the mismatch between the knowledge of graduates and the needs of the labor market, as they address the harmonization of expectations regarding the knowledge of graduates on the part of the labor market and future professions on the one hand, and the creation of competences that the graduate should acquire through higher education studies on the other side. In this way, the study programs will be coordinated with the needs of the economy and society, and in addition to the competences dictated by the labor market, they will also acquire digital knowledge and competences for the green transition. With the planned contents of the pilot projects, we are thus linked to the sustainable development goals of the United Nations, which call on all learners to acquire the knowledge and skills necessary to promote sustainable development by 2030, also by including environmental and climate issues in higher education, which while simultaneously using digital technologies as additional powerful enablers of the green transition, promote sustainable behavior in the development and use of digital solutions. Recognizing that universities are the key stakeholders in dealing with major social challenges, in the proposed pilot projects we fully address the objectives of the Guidelines for the renewal of higher education professional education with the proposal of an implementation plan, namely the green transition, the digital transition and the area of lifelong education and micro-evidence.

Keyword:

Sustainable, Green University, Resilience Plan, Recovery, Lifelong Education, Digitalization, Green and Digital Transformation

1. Introduction

In the years 2013-2020 UM planned the activities of the development of the strategy and policy of the Sustainable and Socially Responsible University (TDOUM), UM created TDOU Council, the TDOU Commission and the TDOU working groups. More important activities were the involvement of UM members in the development of TDOU content, care for a healthy lifestyle, green workplaces, ensuring safety and health at work, with an emphasis on preventive health examinations of students and employees, a family-friendly university, satisfaction at the workplace, physical activity and sustainable mobility and code of ethics. Participation in the implementation of the annual IRDO international conference and cooperation with the Municipality of Maribor in the socially responsible development of Maribor as an integral green city was also one of the many carried out activities.

These were the beginnings and first steps of a green university. Over the years, sustainability was introduced into study processes as well as parallel projects. The commissions and the strategic council were therefore abolished, as they fulfilled their task, and the University of Maribor has even more importantly addressed sustainability and socially responsible university in its current strategy. The University of Maribor (UM) puts the principles of social responsibility and sustainable development at the forefront of its activities. In its goals, the strategy of the University of Maribor pursues an inclusive, innovative, and connected higher education space that will train active, critical, and responsible citizens, guarantee the quality of education and research, academic integrity and take care of the sustainable development of society.

The Strategy of the University of Maribor pursues an inclusive, innovative, and integrated higher education area that will train active, critically thinking, and responsible citizens, guarantee the quality of education and research, academic integrity, and cultivate concern for sustainable development of society. It stresses the importance of the freedom of research and institutional autonomy, development of lifelong learning, digitalization, and green infrastructure.

The transition to a low-carbon circular economy is one of the key factors in ensuring the long-term productivity of the economy and the overall resilience of society. With the reforms and investments of the Recovery and Resilience Plan, we support the achievement of the goals of the National Energy and Climate Plan of the Republic of Slovenia and contribute to the implementation of the European Green Deal.

The University of Maribor has successfully acquired 23 pilot projects for a green and resilient transition to Society 5.0 as part of the Recovery and Resilience Plan. The purpose of the planned activities is to achieve curricular renewal and changes for a green, resilient, sustainable, and digitally connected university. The activities that we started on July 1, 2022, will continue until the end of 2025, the value of the project is EUR 26,009,119.83, of which EUR 24,095,588 is financed from the funds of the Recovery and Resilience Mechanism.

With the funds of the Recovery and Resilience Mechanism, we will support the implementation of reforms in the field of energy efficiency, the use of renewable energy sources and sustainable mobility, and implement measures for better adaptation to the consequences of climate change.

In its activities, the University of Maribor places the emphasis on the principles of social responsibility and sustainable development. In its objectives, the Strategy of the University of Maribor pursues an inclusive, innovative, and interconnected higher education environment, which will educate active, critical and responsible citizens, provide quality in education and research, academic integrity and ensure sustainable development of society.

With the planned contents of the pilot projects, we are thus linked to the sustainable development goals of the United Nations, which calls on all learners to acquire the knowledge and skills necessary to promote sustainable development by 2030, including by including environmental and climate issues in higher education, which while simultaneously using digital technologies as additional powerful enablers of the green transition, it promotes sustainable behavior in the development and use of digital solutions.

2. Points of Results and Discussions

Due to the wide spectrum of study and scientific fields (University of Maribor has 19 members - 17 faculties, university library and student dorms, as well as the Rectorate and all members cooperate in the pilot projects) developed by the employees of the faculties of the University of Maribor, the projects will influence many key social and economic areas, among them in particular: green digital business practice, climate-innovative agri-food systems, sustainable construction, green mobility, regenerative urbanism and architecture, green logistics and supply chains, protection, preservation and restoration of biodiversity, sustainable engineering, green chemistry, chemical engineering, biotech companies and healthcare, renewable sources and sustainable energy use, sustainable tourism 5.0, healthy lifestyle for human health, communicating the climate crisis for a successful transition to a green society, transition to paperless business for a green and digitally connected University of Maribor, etc.

3. Conclusion or Concluding remarks

The Recovery and Resilience Plan is the basis for using the resources of the European Recovery and Resilience Mechanism. It will help the recovery of the Slovenian economy and contribute to mitigating the social consequences of the covid-19 pandemic. By carrying out the planned reforms and investments for the green and digital transition, Slovenian society will be more sustainable, more resilient, and better prepared for the challenges of the future. Within the framework of the pilot projects, various ways, methods, and forms of education for sustainable development will be introduced and tested, while the projects will simultaneously contribute to the achievement of two national strategic goals of sustainable education, namely:

- youth and adults are empowered to work and live in a sustainable, environmentally responsible society, and to transition to a low-carbon circular economy;
- environmental literacy is a key component of functional literacy.

The projects are co-financed by the Republic of Slovenia, the Ministry of Higher Education, Science and Innovation, and the European Union - NextGenerationEU. The projects are implemented in accordance with the plan within the development area Smart, sustainable and inclusive growth, component Strengthening of competences, especially digital and those required by new professions and the green transition (C3 K5), for investment measure F. Implementation of pilot projects, the results of which will be the basis for the preparation of starting points for the reform of higher education for a green and resilient transition to Society 5.0: the project Pilot projects for the renovation of higher education for a green and resilient transition.

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