Circular economy in practice at the higher education institution: A case study from Slovenia

Maja Fošner¹, Rebeka Kovačič Lukman^{1,2*} and Kristijan Brglez^{1,2}

¹ Faculty of Logistics University of Maribor, Celje, Slovenia

² Faculty of Natural Science and Mathematics University of Maribor, Maribor, Slovenia

Abstract

The motivation for research is in current circumstances regarding circular economy (CE) innovations at higher education institutions (HEIs). HEIs were identified as an important player in transitioning towards CE. Education is encompassed in the Sustainable Development Goal (SDG) No.4 (UN, 2017), which strives to increase the number of youth and adults with relevant green skills. In line with this SDG goal, the European Union (EU) identified the need to incorporate an approach similar to the CE's. To achieve the CE goals. the European Commission (EC) implemented policies, such as to support circular-related skills and job creation. Developing CE competences is of paramount importance for the green transition (European Council, 2022). The results of a Eurobarometer (2022) survey shows that young people in EU consider "protecting the environment and combating climate change" to be one of the key priorities. Kovačič Lukman and Brglez at al. (2022) evaluated young people's awareness and attitudes towards the CE, surveying 286 young people from five European countries. The analysis showed that young people believe in the principles and priorities of CE but do not receive enough support to participate and implement CE actively. Formal education does not provide enough knowledge to work in this field actively. Young people do not see themselves as creators of change towards the CE (Kovačič Lukman and Brglez at al., 2022). According to the study Kovačič Lukman at al. (2013), education accounts for a third of the factors influencing the environmental behaviour of learners, which means that HEIs can actually contribute to positive changes. While there is a definitive push from Governmental organisations towards improving sustainable and CE principles at HEIs, there are still challenges in incorporating this in real-world scenarios. However, there is insufficient coverage that could help transition from the theoretical to the practical CE. There is an increasing number of curricula covering CE and SD, however a practical part is lacking (Mifsud et al., 2023), especially the opportunities for students and employees at HEIs in improving CE practice at universities, including innovative learning approaches.

Our research focuses on CE practices at the Faculty of Logistics, University of Maribor. It is important to notice that the Faculty of Logistics already integrated CE in the existing curricula at all the study levels as separate courses (e.g. Circular economy and value chains, Technologies and innovations for circular economy). The Faculty is also practicing the circular economy principles e.g. waste management and material use (the Faculty received the Eco-Flag), decreasing the impacts of climate change, where employees and students are using public transport, car sharing, etc.

Keywords: circular economy, higher education institution, education and practice.

^{*} Corresponding author: prof. dr. Rebeka Kovačič Lukman, University of Maribor, Faculty of Logistics, Mariborska c. 7, SI-3000 Celje; email: rebeka.kovacic@um.si