## THE SIGNIFICANCE OF THE SUSTAINABLE INNOVATION CONCEPT Savchenko O., Ugur Turan National technical university «Kharkiv polytechnic institute», Kharkiv

Innovation, which is one of the keys to stand out in the competition race, is an essential tool on the road to sustainability. One of the most mentioned concepts of the past decades in terms of economic advantage was innovation. "Innovation", which we can describe as "innovation that brings economic success", is now known with the word "sustainability". Sustainable innovation goes beyond the concept of innovation in the classical sense and also considers social and environmental impacts. In order for a technological innovation that facilitates humankind lives to be accepted as a decent sustainable innovation, it has to consider not only the economic and vital benefits, but also the world. The concept points to social, environmental and economic dimensions. For instance, when it comes to packaging design, the easy-toopen cover can be considered an upright innovation, but it is not possible to talk about sustainable innovation if a material that is insoluble in nature is used when developing this cover or if extra energy is consumed during production (Kuzma et al., 2020). Sustainable innovation appears in many different cases that make our lives easier, protect the environment and serve the society. Technology that is developing rapidly every day also supports the studies carried out in this field. The number of innovative business ideas focusing on issues such as supporting renewable energy sources, using recycled materials, saving resources and energy is increasing day by day, in examples: Special window systems developed to reduce energy consumption in homes and change location according to sun and weather, Kiosks that allow recyclable waste to be collected more easily, Storage solutions that collect waste foods from restaurants and turn them into biogas, Anti-allergic carpets produced from recycled material etc.

To develop these motivating products, it is necessary to pay attention to many different criteria. Such are, minimizing the materials used in production, use of environmentally friendly materials, packaging and transportation solutions that do not increase the carbon footprint of the product, development of concentrated products for less consumption, designs that reduce energy consumption, the product is easily recyclable, paying attention to energy and resource efficiency in the production facility, ensuring employee safety, keeping in touch with all relevant stakeholders for the positive effects of products and production... Although sustainable innovation seems to be a process that requires more overtime with all these criteria, social, environmental and economic sustainability seems possible with new generation innovative ideas on the planet, where ecospheres resources are decreasing day by day (Whittaker, 2019).

## **References:**

1. Kuzma, E., Padilha, L. S., Sehnem, S., Julkovski, D. J., & Roman, D. J. (2020). The relationship between innovation and sustainability: A meta-analytic study. Journal of Cleaner Production, 120745. <u>http://doi.org/10.1016/j.jclepro.2020.120745</u>

<sup>2.</sup> Whittaker, A. (2019). Sustainable innovation - Addressing the world's great challenges. Retrieved from <u>https://www.businessgreen.com/sponsored/2395757/sustainable-innovation-addressing-the-world-s-great-challenges</u>