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Assessment of Digital Waste Management in the Baltic States and the Experience of Taiwan

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The twenty-first century was marked by intensifying processes of digitalization, transformation in the economies of countries. At the same time, a new challenge has arisen to solve digitalization processes - these are digital waste, which has acquired particular relevance in the scientific and practical fields. The adoption of the UN document "Strengthen the means of implementation and revitalize the global partnership for sustainable development" (United Nations, 2015) poses the important task of not only collecting digital waste but also recycling it. Scientists from various countries, including Kiyan, E., Ikizoglu, B (Kiyan et al. 2020), NK Singh, (Singh et al. 2020), analyze the growing influence of digital waste on the formation of a green economy in countries. The subject of the study is the factors of the formation of digital waste, and the object of the research is digital waste. Based on theoretical analysis, the authors of this research analyze the dynamics of digitalization processes in countries and the level of digital waste.

The research goal is a comparative analysis of the level of digitalization in countries and the generation of digital waste in the Baltic States and Taiwan.

Based on the concept of the triple planetary crisis (UN, 2020), the authors assess the dynamics of change in digital waste in the world by the regions, as well as in the Baltic States and Taiwan under study.

During the research process, the authors analyze the experience of the Republic of Taiwan as one of the leaders in the global economy in processing digital waste in the world (Executive Yuan, 1997) and, based on them, formulate suggestions for managing digital waste in the Baltic States.

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References:

- 1. The Sustainable Development Goals, https://unstats.un.org/sdgs/report/2023/
- Massimo Saita, Maria Vittoria Franceschelli The Role of Waste Management in the Green Economy: an Empirical Analysis of Economic data of the Business. Edited by Andrei Jean Vasile, Domenico Nicolo, Sustainable Entrepreneurships and Investments in the green Economy, IGI global, USA 2018, pp 169-199
- 3. NK Singh, S Pandey, H Sharma, S Goel 2020 Green Innovation, Sustainable Development, and Circular Economy Taylor and Francis group 2021 258pp
- 4. Kiyan, E., Ikizoglu, B. (2020). Types of waste in the context of waste management and general overview of waste disposal in Turkey. Int. J. Agric. Environ. Food Sci., 4(4), 520-527. DOI: https://doi.org/10.31015/jaefs.2020.4.17
- 5. The United Nations, Climate Change, https://unfccc.int/news/what-is-the-triple-planetary-crisis?gad_source=1&gclid
- 6. Recycling and waste electrical and electronic equipment management in Taiwan, Environmental Protection Administration, Executive Yuan, 1997
- 7. United Nation Institute Training and Research, Global E-waste Monitor 2024 release, https://ewastemonitor.info/ the-global-e-waste-monitor-2024/
- 8. European Commission, Eurostat https://ec.europa.eu/eurostat/databrowser/view/isoc_e_envn2/default/ table?lang=en
- 9. National Statistics Republic of China (Taiwan) https://eng.stat.gov.tw/