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ENVIRONMENTAL MANAGEMENT SYSTEMS AS THE PREREQUISITES FOR THE SUCCESSFUL DEVELOPMENT OF THE GREEN ECONOMY

The green economy is focused on improving indicators of environmental protection and saving resources, which should ensure improvement of the quality of life in local and global dimensions. The green economy mechanism has a complex structure that includes political, legal, economic, environmental, and social aspects with an emphasis on innovation, investment and knowledge management.

The main beneficiaries of green investments are companies that create fixed assets for environmental protection, offer eco-friendly products to the market, and monitor compliance with environmental and social standards in the supply chain. Significant environmental efforts of enterprises are associated with large investments, so enterprises must, on the one hand, have incentives to introduce high-cost measures, and on the other hand, have access to investments. In the EU, for example, political and legal levers are used to force EU member states “to systematic, expensive investments” (Rzeńca, 2016, p. 99). Access to investments is provided through special funds and banks based on the country’s environmental policy and ESG criteria. Environmental, Social, Governance pillars are “to capture all the non-financial risks and opportunities inherent in a company’s day to day activities. [...], the ESG framework has become synonymous with reporting.” (Deloitte). “During the last decade, ESG has become a globally widespread doctrine of good investment principles. ESG defines investing for broader, extra-financial goals by the use of ‘environmental, social and governance’ (ESG) factors.” (Nielsen & Villadsen, 2023). In the research (Ronalter et al., 2023), it was proven that companies implemented an environmental management system (EMS) have better ESG results than companies without an EMS. In addition, it has been proven that the joint application of EMS and quality management system (QMS) leads to even better environmental and social results according to the ESG criteria. Although the joint influence of EMS and QMS slightly worsens the indicators of the governance aspect compared to the separate influence of each of the two MSs.

In a study (Ronalter et al., 2023), most companies that had an EMS built it according to ISO 14001. This allows us to reasonably argue that an EMS formed according to ISO 14001 is an effective tool for achieving better ESG results that means higher satisfaction of requirements of all interested parties of the enterprise, access to green financing of activities and ensuring the contributions to the sustainable development of the country. In 2020, Ukraine lagged the EU countries in terms of the number of certified EMSs (ISO 14001) per 1,000 enterprises (Fig. 1). It also lagged by the indicator of number of certified QMSs (ISO 9001) per 1,000 enterprises.

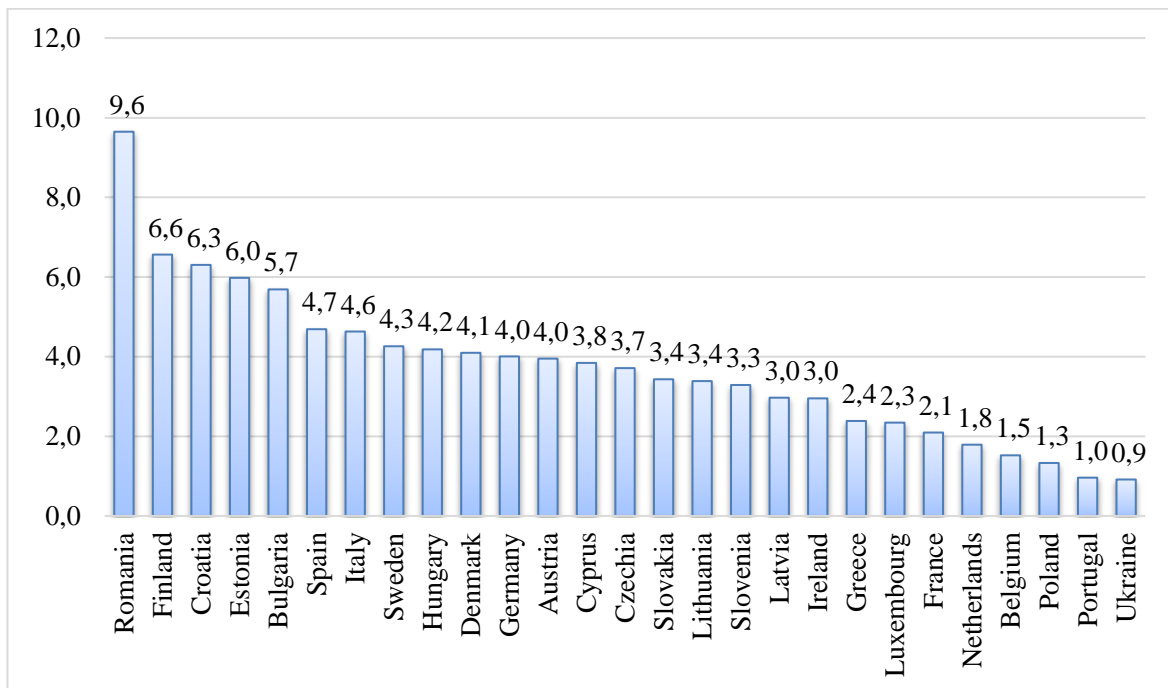


Figure 1. Number of certified management systems formed in accordance with ISO 14001 per 1,000 enterprises in EU-countries and Ukraine in 2020

Source: own collaboration based on: (Eurostat, 2020; International Organization for Standardization, 2023b)

According to the indicator of number of certified EMSs (ISO 14001) per 1,000 enterprises, Ukraine has the closest values with Poland and Portugal. The experience of Poland, with which Ukraine has long-standing extensive economic, political, and cultural ties, is very important. The analysis of Poland’s environmental indicators showed that it lags the EU average in most indicators.

In 2022, Ukraine surpassed Poland in the number of certified EMSs (ISO 14001) per 1,000 enterprises (Figure 2). In Ukraine, as a result of war, the number of enterprises decreased by 29.4% in 2022 compared to 2021, while in Poland it increased by 8%. However, the number of certified EMS

(ISO 14001) in Ukraine increased by 12% (+36 EMSs) in 2022, and in Poland – decreased by 1.6% (– 45 EMSs).

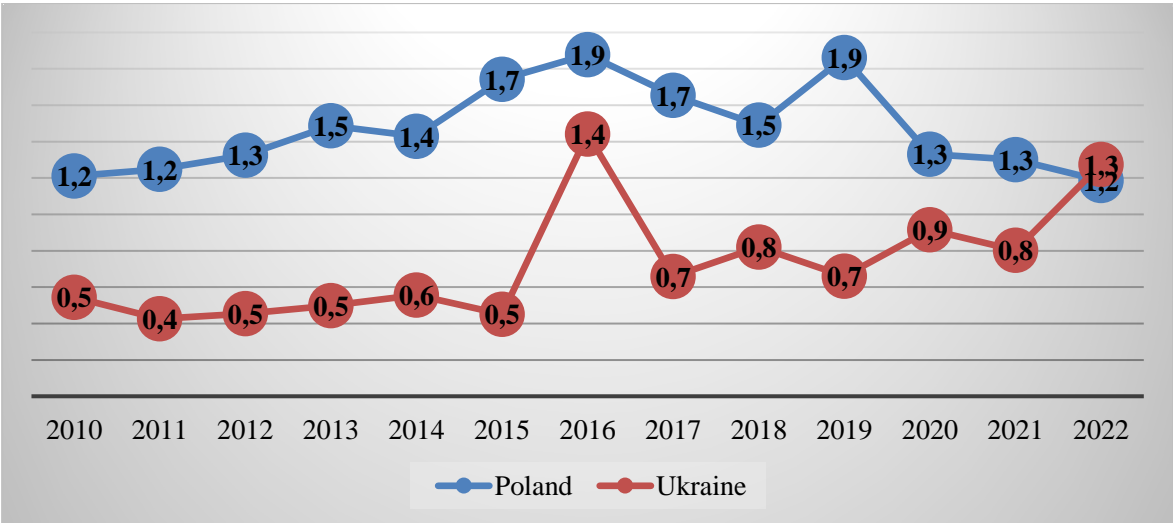


Figure 2. Number of certified management systems formed in accordance with ISO 14001 per 1,000 enterprises in Poland and Ukraine in 2010-2022

Source: own collaboration based on: (Eurostat, 2020; International Organization for Standardization, 2023a, 2023b)

In terms of the number of certified EMSs (absolute indicator), Ukraine lags behind Poland: 334 and 2,786 units, respectively, in 2022. The lag is observed in all types of economic activity. The lag is very significant in the following types of economic activity: rubber and plastic products; non-metallic mineral products; concrete, cement, lime, plaster, etc.; basic metal and fabricated metal products; machinery and equipment; electrical and optical equipment; construction; wholesale and retail trade, repairs of motor vehicles, motorcycles, and personal, and household goods; hotels and restaurants; transport, storage and communication; engineering services; health and social work; education; other social services. Note that most types of economic activity, where a shortage of certified EMSs is found, exert high pressure on the environment.

Thus, in Ukraine, insufficient number of enterprises have a certified EMS. A critically small number of certified EMS operate in areas of economic activity that have the greatest impact on the environment. For increasing the effectiveness of Ukrainian enterprises as subjects of the country’s green economy, it is necessary to motivate enterprises to implement ISO 14001 more actively, in particular, by spreading knowledge about the important positive role of EMC in the processes of planning, control and reporting in accordance with ESG criteria.

References:

1. Deloitte. *What is ESG?* Retrieved 02.12.2023 from <https://www2.deloitte.com/hu/en/pages/energy-and-resources/articles/esg-explained-1-what-is-esg.html>
2. Eurostat. (2020). Annual enterprise statistics for special aggregates of activities. https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=sbs_na_sca_r2&lang=en
3. International Organization for Standardization. (2023a). The ISO Survey 2022. <https://www.iso.org/the-iso-survey.html>
4. International Organization for Standardization. (2023b). *The ISO Survey. Documents. Past Surveys.* ISO. Retrieved 01.12.2023 from <https://www.iso.org/committee/54998.html?t=fe1zmUJZEtBwW44bXQaxEEhXyPBIT9cUALIPSY3kL8J4-GrZ6jquix38wwjCPeg4&view=documents#section-isodocuments-top>
5. Nielsen, H., & Villadsen, K. (2023). The ESG Discourse Is Neither Timeless Nor Stable: How Danish Companies ‘Tactically’ Embrace ESG Concepts. *Sustainability*, 15(3), 2766.
6. Ronalter, L. M., Bernardo, M., & Romaní, J. M. (2023). Quality and environmental management systems as business tools to enhance ESG performance: a cross-regional empirical study. *Environment, Development and Sustainability*, 25(9), 9067–9109.
7. Rzeńca, A. (2016). Polityka ekologiczna miasta. In A. Rzeńca (Ed.), *ekoMiasto#Środowisko. Zrównoważony, inteligentny i partycypacyjny rozwój miasta* (pp. 89–115). Wydawnictwo Uniwersytetu Łódzkiego.