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## CORRELATIONS OF ECOLOGICAL TRENDS IN POST-SOCIALIST EUROPEAN COUNTRIES, 1993–2023

**Abstract:** During the 2025 conference of the World Economic History Congress (WEHC) in Lund, Sweden, Csaba Lakócai, post-doctoral researcher at the University of Ostrava, presented his research topic in the session “Equalities and Sustainability Challenges in Transition Economies in Central and Eastern Europe after 1989”. The research topic has been produced with the financial support of the European Union under the REFRESH – Research Excellence For REgion Sustainability and High-tech Industries project number CZ.10.03.01/00/22\_003/0000048 via the Operational Programme Just Transition.

**Keywords:** environmental impact, consumption, post-socialist Europe, transition

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The primary research objective of the REFRESH project at the Department of History, Faculty of Arts, University of Ostrava is to explore the human impact on the environment in socialist and post-socialist Europe. In a recently published article, related to the current research project, the author analyzed the wellbeing and environmental performance of four CEE countries, collectively referred to as the Visegrad countries (V4), namely the Czech Republic, Hungary, Poland and Slovakia, from the 2000s until the end of the 2010s. The article’s findings indicate that the V4 possessed the necessary resources to transition towards a more sustainable development model with a reduced direct environmental impact. Nevertheless, they maintained adherence to conventional industrial policies oriented towards growth. The current research is an extension of the analyses to the entire former socialist area of Europe (Lakócai, 2025).

A further pertinent research question pertains to the extent to which Central and Eastern Europe has experienced a distinguished environmental history throughout the period of socialist and post-socialist transition. The subject matter presented at the conference centered on the post-socialist transitional period.

The evaluation of the environmental performance of post-socialist Central and Eastern European (CEE) countries is as controversial as their socioeconomic evaluation. This controversy goes back to the socialist era. For example, despite the high levels of pollution associated with industrial production in state-socialist economies, these countries demonstrated a more effective management of their own postconsumer waste compared to Western nations. The decline of large-scale industrial production, which had become outdated and polluting, had positive environmental effects, although these were frequently accompanied by adverse social consequences. After the collapse of the planned economies, however, the material composition of post-consumer waste production in CEE became similar to the western one, resulting in a smaller recycling rate.

The presentation employed a statistical analysis of the environmental performances of post-socialist CEE countries in terms of the indicators of the National Ecological Footprint and Biocapacity Accounts between 1993 and 2023. The analysis used descriptive statistics, data visualizations, and regression modeling.

The findings demonstrated that during the first transitional decade in the 1990s, the *domestic* environmental impact of consumption did not correlate with the *global* environmental impact of consumption habits. However, since the turn of the millennium, there has been a negative correlation between the domestic environmental impact of consumption and the global environmental impact of consumption. This suggests that certain post-socialist CEE countries have begun to adopt a “green” economic policy approach, which is analogous to the Western economic and environmental policy approach. This policy approach is characterized by the enhancement of the domestic socioeconomic and environmental wellbeing, while not offering a comprehensive systemic solution to the global environmental challenges. Moreover, the observed correlation between economic growth and environmental impact signifies systemic sustainability issues, a characteristic of the global economy, not solely limited to post-socialist economies.

The primary conclusion of the presented research topic is that achieving true sustainability necessitates systemic changes, which can be realized through inter- and supranational collaboration in CEE and other macro-regions worldwide.

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**Csaba Lakócai** is a postdoctoral researcher at the University of Ostrava in the Czech Republic. He has experience in quantitative social science methodologies. His research interest focuses on the controversies of development, sustainability, and social wellbeing, including economic, sociological, environmental, cultural, geographic, and historical implications, with a particular focus on post-socialist Europe.

## REFERENCES

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