

Oleg Kucher, PhD
Higher educational institution
Podillia State University, Ukraine

FELLOWSHIP REPORT
for the period September 2024 – June 2025

Oleg Kucher, PhD Higher educational institution «Podillia State University», Ukraine beneficiary of funding from Visegrad Scholarship Program, has completed the program (September 2024 – June 2025) in accordance with the approved research plan. General research topic: «Energy Potential of Biogas Production in the EU and Ukraine».

The main sources of data used in the study were the WULS-SGGW Main Library databases, as well as annual reports "BP Statistical Review of World Energy" on the developments of Renewable energy in Europe, State Agency for Energy Efficiency and Energy Saving of Ukraine and the Bioenergy Association of Ukraine, the annual reports "BP Statistical Review of World Energy" on the developments of Renewable energy in Europe, State Agency for Energy Efficiency and Energy Saving of Ukraine and the Bioenergy Association of Ukraine.

In accordance with the objective and work plan of the scientific research, the potential of renewable biogas energy in EU countries has been determined (data source: Academic Research Source, CABI Digital Library).

Literature review on the relevance of energy production from renewable resources and the conceptual foundations of the development of renewable energy sources have been performed based on the ELSEVIER (Science Direct) and Oxford Journals databases.

The World experience of renewable energy production systems and the possibility of its application in the EU countries and Ukraine were studied (databases IBUK libra Platform, Knovel).

A study was conducted on the features of obtaining biogas from organic residues coming from agriculture and methods of its use. (databases EBSCO, EMIS, Statista).

Oleg Kucher got acquainted with the legislative framework of the EU and Ukraine on supporting the development of renewable energy sources. During his fellowship, he took part in various activities and events that were recommended by supervisor:

1. Scientific conference VIII School of Biotechnical Systems Engineering. September 11-14, 2024, Guzowy Piec, Poland.
2. 1st International conference of Thermochemical Conversion & Bioenergy. Presenting a poster Application of marketing tools in the bioeconomy sector. September 26-28, 2024, Łódź, Poland.
3. Seminar "Sustainability and risk management in agriculture and food sector". Presenter Michal Solivoda (Institute of Agricultural and Food Economics, October 11, 2024
4. Debate «Social Sciences: Between Neutrality and Engagement», IRWiR PAN, October 17, 2024
5. 10th International Scientific Conference «Trends in Regional Development in the EU Countries 2024», October 18, 2024 - online;
6. Seminar "Institutional Barriers to Rural Development in Ukraine", IRWiR PAN, November 4, 2024.

7. Seminar: "Common Agricultural Policy and the European Green Deal and Ukraine", Institute of Agricultural and Food Economics, November 22, 2024 - online.

8. Evaluation thesis MBA: Economic conditions for investment in an agricultural biogas plant at Zakład Rolno-Przemysłowy PFM Sp. Z.O.O. December 19, 2024

9. Participation in the meeting of the Department of Economics and Organisation of Enterprises, December 20, 2024.

10. Seminar: "Optimal Asset Market Operations", Warsaw School of Economics and the Faculty of Economics at University of Warsaw, January 9, 2025.

11. Seminar: "Społeczno-ekonomiczne uwarunkowania cyfryzacji rolnictwa w Polsce". IRWiR PAN, March 3, 2025.

12. 24th International Scientific Conference "Engineering for Rural Development" 21-23.05.2025. Jelgava, Latvia

13. 4th International Round Table «Alternative energy sources in the context of the "green" economy development» Podilskyi State University, Kamianets-Podilskyi. May 27, 2025 - online

14. 16th International Scientific and Practical Conference. "Environment. Technology. Resources". June 19-20, 2025, RTU Rezekne Academy, Rezekne, Latvia

15. Seminar: "Ukraina w perspektywie integracji z Unią Europejską: możliwości oraz wyzwania dla wsi i rolnictwa w Polsce oraz w Unii Europejskiej", IRWiR PAN June 25, 2025.

16. 22nd International Scientific Conference entitled "Global Issues of Agriculture and the Food Economy", Warsaw and Rogów 26–27 June 2025.

The results of the study were published:

1. An article on the topic: "Application of marketing tools in the bioeconomic sector" for the Journal Sustainability (MDPI Switzerland) <https://doi.org/10.3390/su17083590>.

2. A conference paper on the topic: "Biogas market research in EU countries". <https://doi.org/10.17770/etr2025vol1.8623>

3. A conference paper on the topic: "Current state and prospects for the development of biogas in Ukraine". <https://doi.org/10.22616/ERDev.2025.24.TF150>

4. A chapter in a monograph on the topic: "Methodology of marketing research for biogas market development in EU countries and Ukraine". <https://doi.org/10.30525/978-9934-26-560-0-11>

Oleg Kucher

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/ Dr hab. Agata Malak-Rawlikowska, prof. SGGW /