



PROJECT

Biogas Partnership:
co-creating a pathway to
boost biogas solutions in
the Baltic Sea Region

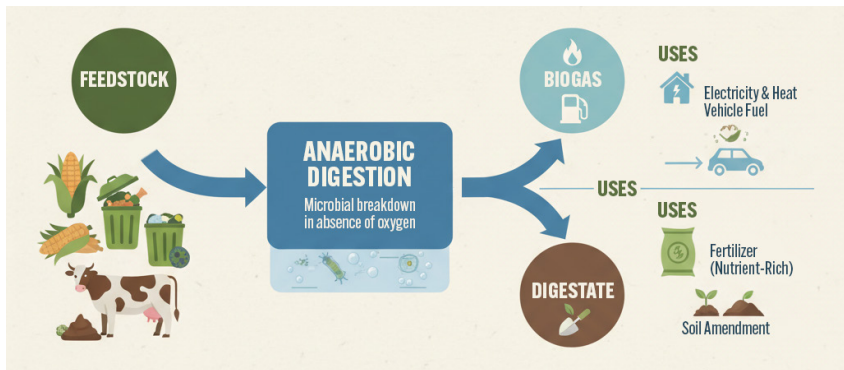
BIO

PART

SI. Funded by
**Swedish
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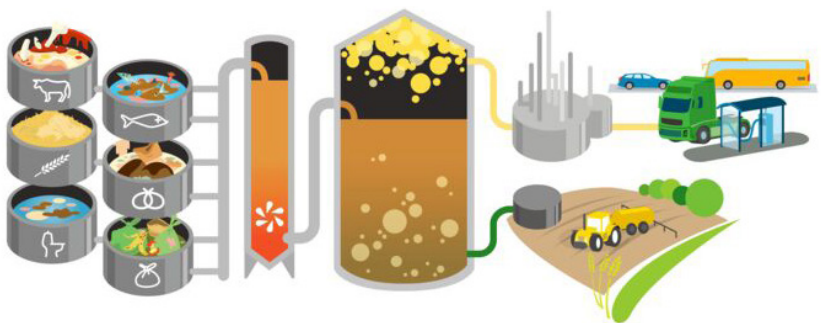
Problem Statement

Europe faces growing challenges in securing sustainable energy and fertiliser supplies under the pressures of climate change. Anaerobic digestion of biomass offers a double benefit: producing renewable biomethane and generating digestate, a valuable biofertiliser and soil improver.



Overall scheme for digestion process.

In this project, partners from Sweden, Ukraine, and Poland join forces to explore how local residues can be more effectively utilised in biogas plants – advancing the transition to cleaner energy and circular nutrient management.



Nordic biogas model. Copyrights BSRC <https://www.biogasresearchcenter.se/en>

Goal

The **main aim** of this project is to develop a network between Swedish, Polish and Ukrainian academia and actors in the private and public sectors to share experiences and boost the development of biogas solutions.

What We Do



Build a network of universities, public & private sector actors across Sweden, Poland, Ukraine.



Organize interactive workshops, webinars & study visits.



Compare national frameworks, share best practices & co-design strategies.



Explore use of local feedstock, methods to improve digestate as biofertiliser.

Activities & Outputs

Past & upcoming events: workshops, webinars, conferences and study visits.

WORKSHOPS (WEBINARS)

- **Workshop 1 “National potential of biogas and biomethane production in participating countries (Sweden, Poland and Ukraine)”** was held on November 22, 2024, in Warsaw, bringing together around 30 participants from academia, NGOs, municipalities, and the biogas industry. The event showcased the biogas and biomethane potential of Sweden, Poland, and Ukraine, with experts presenting national assessments and sharing methodologies for identifying opportunities. The workshop concluded with a joint vision on how to better harness national resources to accelerate the expansion of biogas across the Baltic Sea Region.
- **Webinar 2 “Challenges, drivers and barriers in biogas sector development in Sweden, Poland and Ukraine”** was held online on February 25, 2025, with 56 participants from academia, industry, agriculture, government, and other stakeholders. The session focused on the key drivers, challenges, and barriers shaping biogas and biomethane development in Sweden, Poland, and Ukraine. Expert presentations from each country sparked active discussions on regulatory, financial, and technological hurdles, as well as opportunities for collaboration across the Baltic region.
- **Workshop 3 “Boosting of biogas solutions through cross-country collaboration”** took place online on April 15, 2025, with around 35 participants from across the energy sector, including industry, academia, and government. The event focused on accelerating biogas solutions through cross-border collaboration, covering topics such as biomethane market trends, technological development, and trading challenges. Expert presentations and a lively panel discussion highlighted opportunities for regional cooperation and knowledge exchange to advance sustainable biogas production in the Baltic Sea Region.
- **Workshop 4 “Development of digestate biofertilizer market in the Baltic Sea Region”** took place online on September 29, 2025, with around 20 participants from across fertilizer manufacturing and agri-

cultural sectors, academia and other key actors in the field. Discussions focused on digestate quality, ecological safety, processing technologies, certification, and strategies to expand its use in the fertilizer market across Sweden, Poland, and Ukraine. Experts explored key areas for joint efforts and knowledge exchange, including how to motivate farmers for digestate application due to possible challenges that can appear for local farmers, and which steps should be taken at national and EU level to expand digestate fertilizer market.

CONFERENCES AND FORUMS

- **Biogas Solutions Research Center BSRC Summer conference on June 12–13, 2025, in Linköping (Sweden).** *Poster of BioPart project – Descriptive Comparative Study on the topic “Uneven Grounds, Diverging Paths: Biogas Systems in Sweden, Poland & Ukraine” was prepared based on results of previous project workshops and presented during the poster session.*



- **3rd Forum of the Polish Biomethane Organization – “From Words to Action”** on October 29, 2025, in Warsaw (Poland)
- **Study visits to biogas plants** in Sweden (June 2025) and Poland (planned for October 2025)

- **Study visits to St1 Biokraft biogas plant in Mönsterås and biogas plant at HAGELSRUMS GÅRD AB in Sweden on June 11, 2025.** At the first biogas plant the main substrates are cow manure, chicken manure and slaughterhouse waste. At the second plant cow manure is the main feedstock for anaerobic digestion. Both plants upgrade biogas to biomethane (bio-LNG) via amine scrubbing and membrane separation, consequently. All partners got a lot of inspiration and motivation as well as specific characteristics of biogas production and how to improve it.



Deliverables: infographics, factsheet, policy research papers

Infographics “National potential of biogas and biomethane production in Sweden, Poland and Ukraine”.

Factsheet “Challenges in biogas sector (Sweden, Poland and Ukraine)”.

Paper “**Biogas Development in Sweden, Poland, and Ukraine: A Comparative System Analysis of Infrastructure, Stakeholders, Policies, and Regional Patterns**” aims to provide a system-level comparative analysis of the biogas and biomethane sectors in Sweden, Poland, and Ukraine by

mapping their institutional, infrastructural, and socio-technical characteristics. It uses Sweden as a mature reference case to explore how sustainability effects and development rationales have evolved, and what lessons or limitations can inform transitional and emerging contexts.

Paper “**Digestate Valorization in Sweden, Poland, and Ukraine: Legislation, Applications, and Policy Gaps**” aims to define challenges and opportunities of digestate valorization in Sweden, Poland and Ukraine using criteria of comparative assessment for each country. Based on the research policy recommendations will be given for Sweden, Poland and Ukraine to boost digestate using for the fertilizer market.

Key Outcomes



Building knowledge, competencies and skills across biogas solutions in the Baltic Sea Region.



Network and platform building for solving problems in the biogas sector in the Baltic Sea Region.



Stakeholder engagement with actors from biogas companies as a specific project target group to learn best practices and potential for development in the biogas sector.



Strategy and policy input through two policy research papers on biomethane development and digestate valorization in Sweden, Poland, and Ukraine.

Facts

Funding

Project is funded by Swedish Institute.

Project partners

- Linköping University – LiU (Sweden)
- Poznan University of Life Sciences – PULS (Poland)
- Polish Biomethane Organization – PBO (Poland)
- Sumy State University – SUMDU (Ukraine)
- Bioenergy Association of Ukraine – UABIO (Ukraine)



Budget and time

Budget: 1 million SEK

Time: October 2024 – December 2025

More information about the project

