Uneven Grounds, Diverging Paths: Biogas Systems in Sweden, Poland & Ukraine

BioPart Project – Descripitve Comparative Study

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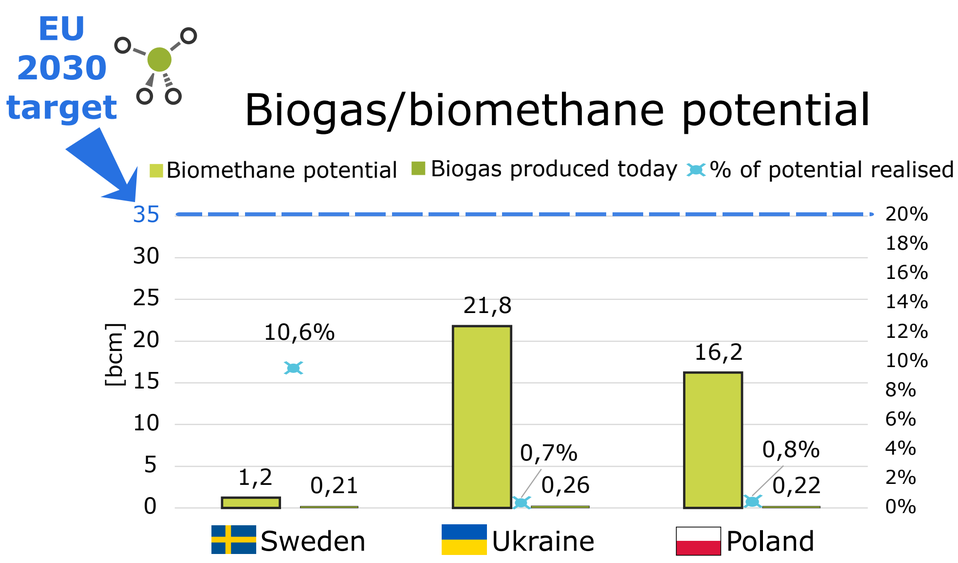
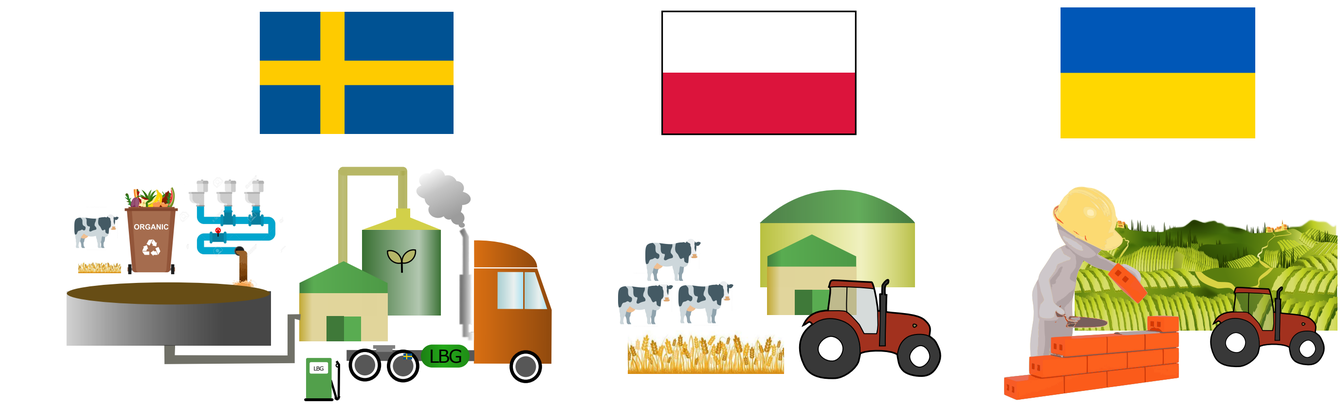
BioPart Project

1. Introduction

This poster presents a comparative study developed within the BioPart Project, analysing biogas systems in Sweden, Poland, and Ukraine. The paper explores how each country's policies, technical capacity, and biomass resources shape their biogas development, with Sweden as a reference case. The BioPart Project, funded by the Swedish Institute, brings together academic institutions and sector organizations from the three countries to promote knowledge exchange and identify pathways for sustainable biogas solutions across the Baltic Sea Region.



2. Country Comparison Snapshots



3. Research Framework

Methodology:

Comparative system analysis:

Country Contexts
(Sweden, Poland, Ukraine)
↓
Biogas System Features & Inputs
(Policies, Infrastructure
Feedstocks)
↓
Associated Sustainability Effects
(Environmental, Economic, Social)
↓
Comparative Analysis
(Patterns, bottlenecks, transferable lessons)

Data: workshops, reports, national strategies, literature

4. Key Insights & Discussion Points

Sweden (mature)

- Strong municipal integration (waste-to-transport)
- Policy synergy: carbon tax + local mandates
- High multifunctionality (GHG, nutrient recycling)

Poland (transitional)

- High technical potential, but uneven policy execution
- Biogas still mostly agriculture-based
- Biomethane auctions = promising step, but confidence issues remain

Ukraine (emerging/recovery)

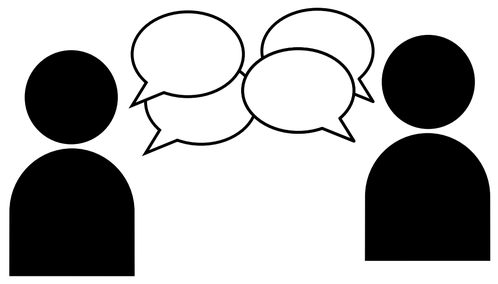
- Large agro-waste base, policy frameworks exist
- Post-war potential for decentralised energy resilience
- Financing, technical capacity & continuity are key gaps

5. About the project

The BioPart Project fosters cross-border collaboration between Sweden, Poland, and Ukraine to accelerate biogas development. Through workshops, study visits, and webinars, the project connects academia, public authorities, and industry to promote knowledge exchange and joint solutions. Led by Linköping University with partners including Poznan University of Life Sciences, Sumy State University, Polish Biomethane Organisation, and Bioenergy Association of Ukraine, the project supports strategic pathways for converting local waste into energy and biofertilizers. Funded by the Swedish Institute.

6. What We'd Love Your Input On:

1. What's missing from our comparative lens?
2. What kind of sustainability impacts are most valued in your work?
3. Have you seen policy or tech transfer work across biogas regions?
4. What barriers aren't visible in the data but matter in practice?



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Sumy State University
POZNAŃ UNIVERSITY OF LIFE SCIENCES
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