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NEWSLETTER

SOUTH BALTIC FARMS
AN ESSENTIAL PART OF RENEWABLE ENERGY SYSTEMS

Interreg South Baltic

Co-funded by the European Union

WELCOME TO THE BIOSOLFARM PROJECT UPDATE!



BIOSOLFarm is a forward-looking project supporting the uptake of renewable energy in agriculture across the South Baltic region. Running from September 2023 to August 2026, it helps small farms and farmers' associations become more energy-efficient, resilient, and environmentally sustainable through practical solutions and knowledge exchange. The project is co-financed by the Interreg South Baltic Programme, with a total budget of €1.72 million, including €1.38 million from the ERDF.

LITHUANIA WHAT'S NEW?

MAY 12–14, BIOSOLFARM SESSIONS IN BIRŠTONAS AND KAUNAS



During a three-day international event organised by the ENACT project, we implemented a dedicated programme of BioSolFarm Sessions fully aligned with the BSF framework. The sessions gathered around 40 international and local participants, including farmers, cooperatives, innovation actors, and other stakeholders.

The activities were designed to:

- present the BioSolFarm project objectives and planned actions;
- facilitate stakeholder engagement and dialogue on energy use in agriculture;
- support cross-project networking and knowledge exchange.

Although held in parallel with the ENACT event, the BioSolFarm Sessions were independently developed and delivered under the working title "*BioSolFarm: Smart Energy and Digital Solutions for Sustainable Farming (Interreg South Baltic)"*. All sessions were led, implemented, and reported by the BioSolFarm project team, ensuring full consistency with the project's objectives and communication strategy.

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MAY 29, KNOWLEDGE EXCHANGE VISIT IN ANYKŠČIAI

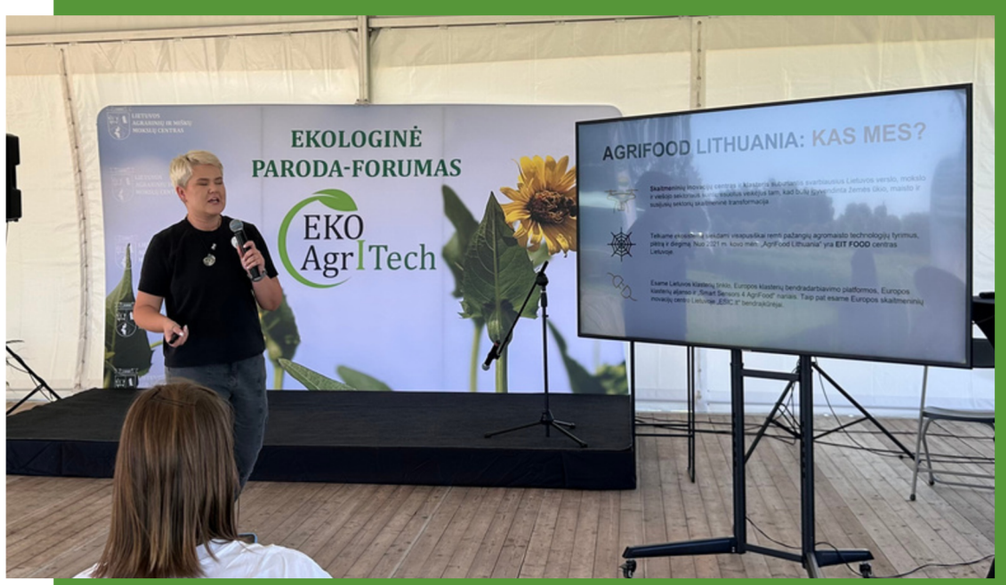
The BIOSOLFarm team has been invited by the **ZeroW project** to join a targeted knowledge-exchange visit to farms in Anykščiai, Lithuania, together with farmers, policymakers, and other stakeholders. Our contribution was focused on **smart energy use in agriculture**, reflecting the strong stakeholder demand for practical knowledge exchange, sustainable energy solutions, and cross-project cooperation.



This activity have enhance peer learning, networking, and the development of synergies with relevant initiatives and actors.

Both planned activities have had contributed to:

- Strengthening BIOSOLFarm's **learning, dissemination, and stakeholder engagement** efforts;
- Increasing the project's **visibility and impact** beyond the core South Baltic regions;
- Achieving the objectives of **A4.1 and A4.4**, particularly in cross-project cooperation, peer exchange, and knowledge sharing.



3 JULY, EKOAGRITECH, KĖDAINIAI

We have been invited to participated during the EKOAgriTECH exhibition-forum in Kėdainiai district, where was presented key innovations and ongoing transformations in the Lithuanian and European agri-food ecosystem. Throughout the event, we engaged with farmers, researchers, businesses, and technology providers, strengthening networks and exploring future collaboration.

SEPTEMBER 26, COMMUNICATION AND ROUND TABLE

As part of BioSolFarm project we have been invited to participate in the session *"Climate-Neutral Agrifood Sector: Green Scenarios and Solutions"* brought together representatives from the economics, energy, environmental, and agriculture ecosystems to discuss strategic pathways towards climate neutrality. Participants explored possible green transition scenarios, key challenges, and policy needs for transforming the agrifood sector. The audience was invited to actively contribute by sharing feedback on policy progress, governance readiness, and practical steps required to implement sustainability and green transition measures.



POLAND WHAT'S NEW?

JUNE 16, THE CONFERENCE IN LUBAŃ

The conference opened with welcoming remarks by Aleksander Mach from the Pomeranian Agricultural Advisory Centre in Lubań. Prof. Dr.-Ing. Mariusz Stolarski delivered two keynote presentations, outlining Poland's renewable energy progress in the EU context and highlighting the significant untapped potential of Polish agriculture — especially the role of biomass as a local energy resource for rural areas and farms. Marcin Gregorowicz, Head of the Energy Advisors Department in Gdańsk, presented available financing

mechanisms for energy investments, emphasising support instruments for farmers and rural businesses.

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The final session, led by Anita Bednarek, focused on the planning and operation of agricultural biogas plants, detailing sustainability benefits and practical considerations for their implementation.

>>> JUNE 17, VISITING FACILITIES

NO. 1 AGRICULTURAL BIOGAS PLANT IN DARŻYNO (SŁUPSK COUNTY)



Operated by *Nadmorskie Elektrownie Wiatrowe Darżyno Sp. z o.o.* The installation, commissioned in 2013, is one of the largest agricultural biogas plants in Poland and represents a practical model of circular economy at an industrial scale.

Key points and learning outcomes:

- *Large-scale renewable energy production:*
  - The plant has an installed capacity of 2.4 MW and generates electricity and heat using maize silage, slurry, and food industry residues.
- *Efficient use of biogas through cogeneration:*
  - The biogas produced via anaerobic digestion is combusted in combined heat and power (CHP) units, ensuring efficient energy conversion.
- *Circular heat utilisation:*
  - Initially, surplus heat was unused. Today, through the construction of a new heat pipeline, the plant supplies heat to the nearby town of Potęgowo, enabling the shutdown of the old coal-fired boiler house. This demonstrates a successful transition from energy loss to local community benefit.
- *Nutrient recycling and soil enhancement:*
  - The digestate (post-fermentation material) is applied as an organic fertiliser on surrounding fields, supporting local farmers and closing the nutrient loop.
- *Circular economy model in practice:*
  - The plant shows how agricultural residues and food waste can be transformed into energy and valuable fertiliser, contributing to regional sustainability and energy independence.

NO. 2 AGRICULTURAL BIOGAS PLANT IN WICKO (LĘBORSKI DISTRICT)

The visited site was an **agricultural biogas plant** located in the municipality of Wicko and operated by **Marcin Pęski.**

- The installation was developed by *PW Energie Odnawialne Sp. z o.o.* and has an installed capacity of **1 MW electric** and **1 MW thermal**;
- The plant operates using *grass silage, maize silage, slurry, and vegetable waste*, with **no animal by-products** used as feedstock;



- The facility processes approximately **60 tonnes of substrate per day**;
- The **thermal energy produced** is supplied to local public buildings in Wicko, including the *primary school and the health centre*, contributing to municipal energy self-sufficiency;
- Future development plans include expanding the plant with a **photovoltaic component**, enabling the creation of a *hybrid renewable energy system (biogas + PV)*.

NO. 3 MICRO-BIOGAS PLANT IN KĘTRZYNO (WEJHEROWO COUNTY)

Small-scale but efficient installation. The visited **micro-biogas plant** (40 kW) is operated by farmer Daniel Pobłocki and is fully adapted to the needs of a farm raising **around 2,000 pigs**.



- *Feedstock based solely on slurry:*
  - *The plant uses only pig slurry from the farm, ensuring a closed and sustainable resource loop.*
- *Energy production and use:*
  - The biogas plant generates both heat and electricity through anaerobic digestion.
    - Most of the energy is used to cover the farm's own consumption.
    - About 40% of surplus electricity is sold to the grid, providing an additional income stream.
- *Digestate used as natural fertiliser:*
  - The digestate is applied on around 200 hectares of the farm's arable land, reducing the need for synthetic fertilisers.
- *Circular farm model:*
  - The system demonstrates an effective closed-loop model, maximising the use of on-farm resources and minimising external inputs.
- *Environmental benefits:*
  - The solution supports sustainable agriculture by:
    - improving waste management,
    - reducing the use of chemical fertilisers,
    - lowering GHG emissions at the farm scale.

GERMANY WHAT'S NEW?

25-28 JUNE, 12TH INTERNATIONAL CONFERENCE ON SUSTAINABLE SOLID WASTE MANAGEMENT



During the presentation, Prof. Dr. habil. Satyanarayana Narra showcased how Hybrid Energy Systems (HES)—integrating solar PV, wind, and biogas—can support sustainable and resilient farming in the South Baltic Region. The findings highlight the potential of combining renewable sources to increase energy efficiency, reduce waste heat, and improve autonomy on farms.

Key highlights:

- Optimization of heat use from CHP biogas systems
- Energy storage integration to balance supply and demand
- Implementation of performance monitoring and smart energy management.

D.2.2 REPORT ON THE POTENTIAL OF USING RENEWABLE ENERGY IN THE SBS REGION, INCLUDING A JOINT GREEN POLICY STRATEGY



Read D2.2 Summary at www.biosolfarm.eu

- The SBS region must prioritize cross-border education, vocational training, and public awareness campaigns alongside investments in pilot projects. Emphasis on innovation and resilience—especially in offshore wind, storage, and cybersecurity—will be key to a sustainable energy system.
- The SBS region is accelerating its shift to a resilient, low-carbon economy in response to energy security concerns intensified by the war in Ukraine and the sharp drop in Russian gas supplies. As part of the broader Baltic Sea Region, it serves as a testbed for innovative energy policies with relevance beyond its borders.

SEPTEMBER 23-25, INTERREG SOUTH BALTIC PROGRAMME ANNUAL EVENT INSPIRES REGIONAL COOPERATION

The Interreg South Baltic Programme Annual Event 2025 took place in Rønne, Bornholm, at the Green Solution House, bringing together more than 100 participants from across the region. The two-day event marked Interreg Cooperation Day and celebrated Interreg's 35th anniversary, highlighting the impact of long-standing cross-border cooperation in the South Baltic area.



The programme featured high-level welcomes from local and programme authorities, updates on current and future Interreg South Baltic activities, and a panel discussion showcasing how projects are driving regional transformation in areas such as sustainability, health, energy, and regional development. Participants also explored around fifteen projects during a mini-expo and took part in thematic study visits focused on circular economy, green transition, blue economy, culture, tourism, and sustainable transport solutions on Bornholm.

The second day focused on practical workshops for project partners, covering project implementation, reporting, and long-term impact creation. The event concluded with a strong message of continued collaboration and innovation, with an invitation to reconvene at the next Annual Event in Lithuania in 2026.

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