

SUSTAINABLE BIOGAS

Sustainable Biogas is an Interreg Central Baltic -funded project running from 2020 to 2022. It focuses on reducing the risks of nutrient loading from biogas production to the Baltic Sea.



The project Sustainable Biogas supports biogas operators, authorities, educational institutions and other expert organisations by

- providing **guidance** for nutrient management at biogas plants and in digestate use, and
- developing **new tools** for planning and permitting as well as for market creation for recycled nutrients.
- In addition, the project increases knowledge and awareness of the nutrient management issue in biogas production.

Biogas is an important renewable energy source

for reducing dependency on fossil fuels and tackling climate change. However, as biogas production is dependent on nutrient-rich organic biomasses, it can be a significant source of nutrients to the environment and the Baltic Sea if the production is not managed in a sustainable way.



Minimising nutrient leakages from biogas operations

Sustainable Biogas develops regulatory and operational practices which take into account and minimise nutrient leakages to watercourses from biogas operations. The focus is on learning from best practices in forerunner countries and on improving nutrient management at the plants with EIA (environmental impact assessment), permitting and informational instruments. The findings will be compiled in *the regulatory and management guidelines for sustainable biogas production* as well as in a *policy brief on nutrient management at biogas plants*.



Making use of regional nutrient balances in planning and permitting

Sustainable Biogas develops strategies for good nutrient management in three case regions (Zemgale in Latvia, Southwest Finland and Åland Islands). Available information on nutrient flows will be integrated into *nutrient maps*, and *regional nutrient management plans* will guide decision-making so that nutrient balances are taken into account in the planning and permitting of the plants. Moreover, a *policy brief* will adjust the findings to the whole Baltic Sea region.



Creating markets for recycled nutrients by establishing quality assurance systems

Sustainable Biogas supports market creation and nutrient recycling by developing *quality systems* for digestates and recycled fertilizers, by providing *information* on the correct and optimal usage of recycled nutrients, and by developing *plans* for overcoming current regulatory obstacles. A *policy brief* on market creation for digestate based products and recycled nutrients will also be produced.



Facilitating a dialogue on the usage and disposal possibilities for sewage-based biomasses

Sustainable Biogas contributes towards finding feasible solutions for the challenge of usage and disposal of sewage-based digestates and sludges by providing information and opportunities for a stakeholder dialogue. E.g. a pilot for monitoring of nutrient leakage from digestate usage in green areas will increase our understanding of risks and opportunities. The outcomes for Finland and Latvia will be gathered in a report on *alternative national future usage or disposal possibilities*. Conclusions that are relevant Baltic Sea region-wide will be compiled in a *policy brief*.

EXPECTED RESULTS

- 1 *Improved nutrient management at current and future biogas plants in Latvia's Zemgale, Southwest Finland and Åland Islands.*
- 2 *Nutrient-balanced use of inputs and digestates in the case regions, leading into reduced nutrient levels in fields and reduced leakage to water courses.*
- 3 *Improved nutrient recycling and less discharges from excessive usage of digestates through Latvian and Finnish digestate quality systems.*
- 4 *Analysis and dialogue on usage and disposal possibilities of sewage-based digestates.*

HOW TO PARTICIPATE?

Please contact the project consortium
(contact details available at
<https://sustainablebiogas.eu/>)
or see the project website
for workshops and other project events.

LEAD PARTNER

- John Nurminen Foundation

PROJECT PARTNERS

- Centre for Economic Development, Transport and the Environment for Southwest Finland
- Finnish Biocycle and Biogas Association
- Latvian State Environmental Services
- Latvian Biogas Association

FOCUS AREAS

- Nutrient management at biogas plants
- Planning of digestate usage
- Opening markets for recycled nutrients
- Usage and disposal possibilities for sewage-based biomasses

CONTACT

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Centre for Economic Development
Transport and the Environment



SUOMEN
BIOKIERTO &
BIOKAASU RY



Valsts vides dienests



LATVIJAS BIOGĀZES ASOCIĀCIJA



EUROPEAN UNION
European Regional Development Fund