

COSUN BEET HACKATHON

Transforming Sugar Beet Residues from Waste to Value

The processing of sugar beets into white sugar and bioethanol, as well as biomethane, at the Cosun Beet Company's Anklam site in Germany, generates various biogenic residues. With a goal to become a green beet-biorefinery, we aim to offer sustainable and climate-friendly products for different markets.

Therein we actively seek solutions and partnerships to transform residues from beet processing into valuable resources. Our focus areas include utilizing beet leaves, beet soil, digestate from our biogas plant and vinasse from the bioethanol plant. We are open to exploring new business opportunities and research collaborations.

What is it about?

The Cosun Beet Company's Anklam site processes sugar beets into white sugar, bioethanol, and biomethane, resulting in various biogenic residues. Approximately 2 million tons of sugar beets are processed from September to January, with intermediate products stored and bioethanol and biomethane produced throughout the year. The goal is to transform the factory into a green biorefinery, offering a diverse product portfolio for different markets. The company aims to provide sustainable and climate-friendly products for various purposes by exploring new technologies, solutions, and partnerships to convert the residues into valuable resources.

Welcome to solve the challenge!



What is Cosun Beet looking for?

Specifically, the company is seeking solutions for:

- utilizing beet leaves currently left on the field
- 50,000 tons per year of beet soil from cleaning processes (60-70% of dry matter)
- 6,000 tons per year of sewage sludge from the own waste water treatment plant (5-8% of dry matter, based on ongoing expansion up to 10,000 tons per year)
- 70,000 tons of carbonation lime from the juice purification
- 90,000 tons per year of digestate from the biogas plant (5% of dry matter, with planned expansion), and
- 190,000 tons per year of vinasse from the bioethanol plant (6% of dry matter)

Cosun Beet Company is actively searching for providers who can offer innovative concepts, technologies, and equipment to effectively utilize the specified residues. Our interest extends beyond discovering new business opportunities to potentially establishing partnerships in research projects. Depending on the level of development of the proposed ideas, participants in the Cosun Beet hackathon have the chance for either business cooperation or the initiation of joint projects or pilots to test their presented concepts. The nature of the solution will determine whether Cosun Beet Company becomes directly involved in joint piloting and/or commercial collaboration. It is possible to send in suggestions for only one of the listed residues or a combination of a few. A further perspective might be to collect and integrate other regional plant-based residuals. A way of thinking might be to create mixtures of the residues to convert the material into new products f.i. for the agricultural sector, the food industry, the chemical industry, and others.

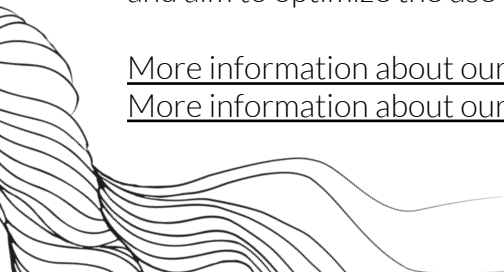
What is “Cosun Beet”?

Cosun Beet (CBC) is a modern and innovative company in the food industry. Currently, we primarily produce white sugar and bioethanol from sugar beets at our Anklam site in Germany. Anklam is located close to the Baltic Sea, 190 km north of Berlin. Our sugar beets are grown by 350 farmers in Northeast Germany. We make sure to utilize residual materials from the production in our biogas plant to produce biogas.

Our goal is to create plant-based solutions for a sustainable future, including food products, animal feed, proteins, biobased products, and green energy. We call these solutions Bright Beet Solutions. Our team is passionate about maximizing the potential of sugar beets and working together towards a circular economy. We strive for zero waste and aim to optimize the use of all parts of the sugar beets.

[More information about our Anklam site](#)

[More information about our corporate group Royal Cosun](#)



Hackathon participants

This Challenge is open for all interested teams: startups, established companies, research institutes, educational organizations, and other actors. Your team can also consist of collaboration between several organizations. The Hackathon is international and working language is English. Hackathon participation is free. We will also offer compensation for travel expenses to international teams from the Baltic Sea region (Norway, Finland, Denmark, Germany, Poland, Estonia, Latvia, and Lithuania).

[Read more about the rules here](#)

Hackathon jury

Jury consists of representatives of Cosun Beet Company GmbH & Co. KG and of the German Biomass Research Centre (DBFZ) supported by organizer's representatives.

Why should You participate in the Cosun Beet Hackathon?

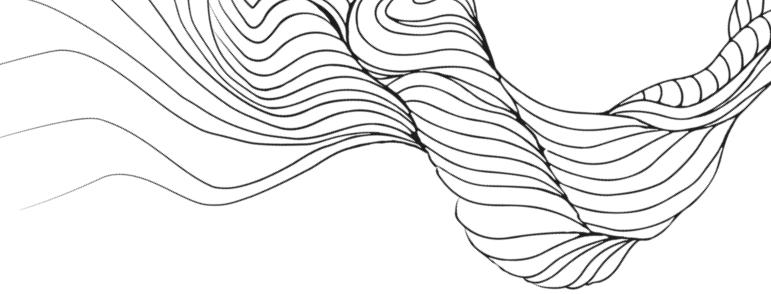
As a finalist, you will have a chance to establish long-term business or research cooperation. Furthermore, you get to:

- Establish cooperation and network with other companies and specialists with interest to the same field
- Establish international contacts and connections in the field of your interest
- Test your ideas with feedback from a potential client and discover how to fit your solution idea to the needs of the end-users
- Develop the commercialization potential of your idea and discover new business opportunities with expert mentors' support
- Get international recognition and visibility for your teams' know how

**#residues#sugarfactory#nutrients#sustainability#newvalue#innovation
#sustainability#BioBoosters #CosunBeetHackathon #MadewithInterreg
#climateneutralBSR**



APPLY HERE



Evaluation criteria

- 1. Sustainability and Ecological Assessment:** The extent to which the proposed solution aligns with sustainable practices and contributes to ecological preservation is assessed. This includes energy and resource efficiency as well as minimum environmental impact.
- 2. Degree of Innovation:** The level of novelty and originality of the proposed solution is considered. Innovative approaches that offer unique and creative ways to convert the residues into valuable products are given preference.
- 3. Potential for Economic Viability:** The solution's potential to become economically viable is evaluated. This includes assessing its market potential, cost-effectiveness, and potential for generating revenue or cost savings.
- 4. Technical Feasibility:** The technical feasibility of implementing the proposed solution is considered. This involves evaluating the availability of necessary resources, the TRL, infrastructure and expertise required for successful implementation.
- 5. Quality of the New Products:** The quality of the products derived from the residues is an important factor. The proposed solution should ensure that the resulting products meet or exceed industry standards and customer expectations.
- 6. Compliance with Regulatory Requirements in Germany:** The solution must in perspective comply with relevant regulations and standards in Germany. This includes environmental regulations, safety standards, and any other legal requirements applicable to the specific industry or sector.

Timetable

January 31, 2024, 10.00 CET: Publication of the Hackathon invitation in a [webinar](#).

March 1, 2024, 16.00 CET: Deadline for submitting an application; The application includes your preliminary idea proposal and a short description of the expertise in your team.

March 6, 2024, 16.00 CET: Selection of teams published

March 14, 2024, 10.00-12.00 CET: Kick-off event of the Cosun Beet Hackathon organized as online event. Participant teams will meet each other and the Cosun Beet representatives to hear more about the challenge and expectations of Cosun Beet. Teams will present their preliminary ideas and get feedback for further development.

April 16-17, 2024: Hackathon will be organized in Cosun Beet Factory in Anklam (Bluthsluster Str. 24). On 16/04, the program will start in the afternoon with mentoring for the participant teams and networking in the evening. On 17/04, there will be a pitching session for presentations on teams' solution proposals to Cosun Beet. After Jury deliberation, winner(s) are announced. Online participation is possible if you are not able to travel onsite.

More information

Dr. Gudrun Mernitz, WITENO GmbH,
mernitz@witeno.de, +49 151 15273020

Jenny Stukenbrock, Cosun Beet Company GmbH & Co. KG,
jenny.stukenbrock@cosunbeetcompany.com; +49 151 40457346

Organiser

WITENO is a science and technology park with long lasting expertise e.g. in the fields of bioeconomy and startup consulting. Our goal is to support emerging businesses and promote impactful solutions on a global scale to address climate change within the regional and international bioeconomy landscape. WITENO focuses on assisting the growth of bioeconomy enterprises and fostering sustainable business models through the adoption of innovative practices, leveraging new technologies and digitalization, enhancing capabilities and expertise, and fostering robust business networks and ecosystems.

We are based in Greifswald, Germany, but are connected worldwide, especially in the Baltic Sea Region.

In collaboration with

JAMK, Jyväskylä University of Applied Science has long experience in organizing hackathons. BioPaavo by JAMK is a Bioeconomy Business Accelerator that aims to create new businesses and globally significant solutions to combat climate change in the international bioeconomy environment. BioPaavo's key tasks are to develop business within bioeconomy and create sustainable business based on new innovations, utilizing new technologies and digitalization, developing abilities and know-how, and building business networks and ecosystems.

Bioboosters project network supports CosunBeetHackathon via communication and marketing cooperation. The network features 9 prominent bioeconomy innovation hubs around the Baltic Sea – from Finland, Sweden, Germany, Estonia, Latvia, Lithuania, and Poland. The BioBoosters project will organize a total of 18 Hackathons to support the sustainability mission of the bioeconomy companies. The project is co-funded via the Interreg BSR program and the European Regional Development Fund.

[More here](#)