

## Hackathon invitation



### Hackathon name

**Wendre Hackathon – From Textile Residues to Circular Products**

### Teaser

Industrial textile and foam manufacturing creates comfort and functionality – but also generates valuable production residues that remain underutilized.

Wendre Group, a global bedding manufacturer committed to circular innovation, is launching the Wendre Hackathon in collaboration with Pärnu County Development Centre and the BioBoosters Network to accelerate the transformation of these side streams into high-value circular solutions.

The Wendre Hackathon **invites startups, researchers, material innovators and industry experts** to develop scalable and economically viable ways to turn industrial textile and foam residues into new products and business opportunities.

### Challenge

Wendre generates several production side streams in the manufacturing of pillows, duvets, mattresses and textile-based furniture components. These include upholstered furniture fabrics, such as dark-colored and jersey fabric waste (~30 tons per annum), mostly white but mixed textile waste (~80 tons per annum), and polyurethane foam block skins (~20 tonnes per annum). While white textile residues are mechanically recycled internally and reused as filling material, dark and jersey textile waste and foam block skins currently lack viable reuse pathways.

Although these residues are technically suitable for filling, Wendre does not currently operate shredding equipment suitable for processing these materials stream. In addition, with dark fabrics, visible dark fibers may show through light pillowcases, creating a psychological barrier for consumers.

**The challenge is to develop economically viable and scalable solutions** that transform these textile and foam residues into higher-value materials, products or circular business models. The objective is not only to reduce material loss but to enable new value chains and **create tangible pilot opportunities within an industrial context.**

Solutions may explore advanced material applications, textile-to-textile recycling, composite or technical materials, fiber processing technologies, color neutralization or encapsulation approaches, or new circular product concepts. Wendre is also open to innovations that enable the introduction of new circular products into its portfolio or the integration of new processing technologies into its production system.

#### Evaluation criteria

Inspired by the BioBoosters circular transition model, the Wendre Hackathon aims to identify solutions with genuine industrial pilot potential within the next 12–18 months. The evaluation jury will be led by Wendre and composed of representatives of Wendre, the organiser and external experts.

Proposals will be evaluated based on their **level of innovation, technical feasibility at industrial scale, economic viability and environmental impact.** Particular attention will be given to added value creation, scalability and compliance with EU regulatory requirements. Solutions that move beyond low-value downcycling and demonstrate clear potential to create new value chains will be prioritized.

Wendre is open to piloting selected solutions, forming strategic partnerships and integrating promising technologies or product concepts into its production system and portfolio.

#### Offer for the teams

**Participation in the hackathon is free of charge** and applying is easy. The hackathon is open to startups, SMEs, researchers, designers, material innovators and technology providers from across sectors, and cross-industry collaboration is strongly encouraged.

Selected teams will receive additional technical information about the materials and production context to support the development of feasible solutions. Participants will also have the opportunity to explore pilot projects, joint development activities or strategic cooperation with Wendre, depending on the maturity and potential of their proposed solutions.

Teams will benefit from international mentoring and networking opportunities within the BioBoosters Network ecosystem, including access to experts and innovation partners working in circular economy

and bioeconomy fields. Limited travel and accommodation support is available for selected teams attending the Hackathon Days onsite.

## Timetable

**March 27, 2026, 13.00 CET:** Publication of the Hackathon call in a public webinar.

**April 19, 2026, 23.00 CET:** Deadline for submitting an application by teams. The application includes preliminary idea proposal and a short description of the expertise in the team.

**April 21, 2026, 16.00 CET:** Selection of teams to be published.

**April 28, 2026 10.00-12.00 CET:** Kick-off of the Wendre Hackathon.

Organized as an online event, where participating teams will meet each other and representatives of Wendre to hear more about the challenge and expectations of Wendre. Teams will present their preliminary ideas and get feedback for further development.

**May 13-14, 2026:** Hackathon Days in Pärnu. The program includes:

- consultation sessions about the idea/solution with all mentors (5-10 experts and practitioners)
- preparation of the final version of the presented idea/solution
- presentation of the idea/solution by teams/individual innovators.

Wendre Hackathon will be organized by Pärnu County Development Centre in its Business Incubator (Ringi 35, Pärnu, Estonia). The program will start in the afternoon of 13/05 with mentoring for the participant teams and networking in the evening. On 14/05, there will be a pitching session with presentations on teams' solution proposals to Wendre. After Jury's deliberation, winner(s) are announced. If teams are not able to travel onsite, online participation is also possible.

## Contact persons

Contact persons from the organizing team: Toomas Toodu, Pärnu County Development Centre, [toomas@parnumaa.ee](mailto:toomas@parnumaa.ee), +372 5301 2992; Svea Uusen, [svea@parnumaa.ee](mailto:svea@parnumaa.ee), +372 505 1797

Contact persons from Wendre: Käthe Malmre, Quality Manager, [Kathe.Malmre@wendre.com](mailto:Kathe.Malmre@wendre.com), +372 5645 1688

[Märt.Kees@wendre.com](mailto:Märt.Kees@wendre.com), +372 53325947 (Production/Technology)

[Elerin.Kaasik@wendre.com](mailto:Elerin.Kaasik@wendre.com), +372 53421634 (Product Development)

[Mai.Ree@wendre.com](mailto:Mai.Ree@wendre.com), +372 53486336 (Key Account/Team Lead)

## Client info

**Wendre - a global bedding producer committed to circular solutions and reducing environmental impact.**

Wendre Group is one of Europe's largest bedding producers with its own manufacturing units in Estonia and Poland, producing yearly 20 million duvets & pillows and 600 000 beds & mattresses. The company views circularity not merely as compliance or cost reduction, but as a strategic pathway to competitiveness and resilience. By addressing industrial

textile and foam residues through open innovation, Wendre aims to strengthen its role as a forward-looking and sustainability-driven manufacturer.

#### **Organizers**

**Pärnu County Development Centre** steers the development of Pärnu County, develops entrepreneurship, youth entrepreneurship and entrepreneurial education, and civic engagement. We are part of the nationwide network of county development centres all over Estonia. The regional Innovation Hub KOBAR, which connects the various business development and educational competencies of Pärnu County and is implemented based on the triple helix innovation model, is a future-oriented development accelerator for the whole region of Western Estonia, with focus on facilitating green transition and sustainable development, including circular bioeconomy and renewable energy. We are based in Pärnu, Estonia, but connected worldwide.

**BioBoosters Network** creates cooperation opportunities across bioeconomy sectors to address real industry innovation needs through international, industry-driven open innovation. Operating across nine regions in seven Baltic Sea countries, the network brings together innovation hubs, universities, research institutions, development agencies, clusters and industry partners to accelerate the circular and green transition. By matching solutions to challenges, growth opportunities to innovations, and expertise to transition needs, BioBoosters Network fast-tracks the development of new value chains and sustainable business models. The network connects cross-sectoral know-how, bridges business and research, and supports companies in strengthening their competitiveness through practical collaboration activities such as hackathons and pilot projects. Through its ecosystem-based approach, BioBoosters enables impactful solutions to move from idea to implementation across the Baltic Sea Region and beyond.

#### **Keywords**

circular textiles, industrial textile waste, textile residues, polyurethane recycling, foam recycling, circular manufacturing, textile-to-textile recycling, fiber recovery, composite materials, industrial symbiosis, sustainable bedding, circular product design, material innovation, closed-loop systems, circular economy.