



Hackathon!

SavottaHackathon – New business opportunities from textile industry side streams

The amendment to the EU Waste Directive will significantly change the recovery of textile waste, as by 2025 European countries will have to organize separate collection of textile waste. In Finland, the obligation to collect textile waste separately will take effect from 2023, when companies will have to deliver their waste textiles for recycling. Hackathon's goal is to find new ideas, commercial partners and ways of utilizing Finn-Savotta Oy's by-products and wastes generated as side streams of textile product manufacturing. Hackathon's goal is to start looking for ideas and partners and to stimulate new industries to come up with products that make it possible to utilize separately collected textile waste and replace some of the virgin raw materials with recycled materials. As the old proverb says, the rubbish of one can be a treasure of another!

Finland generates more than 100,000 tonnes of textile waste per year. Up to 80% of this amount still ends up in energy waste and incineration. With the new Waste Act, companies in the textile sector will have a statutory obligation as early as next year to collect separately the textile waste, but there is not yet a treatment path and recycling methods available for all fractions. Hackathon's goal is to

find new ideas, commercial partners and ways of utilizing Finn-Savotta Oy's by-products and wastes generated as side streams of textile product manufacturing.

The goal of the Hackathon is to start looking for ideas and partners and to stimulate new industries to come up with products that make it possible to utilize separately collected textile waste. With the change in the law, new markets will open up for the users of separately collected textile waste, not only in Finland, but also in all other EU countries, so there is also significant export potential in the sector.

The textile waste generated in the manufacture of Finn-Savotta Oy's products (including backpacks and the Finnish Defense Forces' semi-team tents) is a very durable and technical material. In production, a lot of attention is paid to ensuring that as much of the material as possible is utilized and the generation of waste is kept to a minimum. Nevertheless, about 30 t / a of unused by-products are generated, and currently the material goes to energy waste and incineration or landfill in the absence of other recovery methods.

For example, the waste piece produced in the manufacture of the tent is made of a strong (approx. 350 g / m²) blend fabric of cotton and polyester, coated on the inside with polyurethane, and IR-treated on one side of the fabric, which prevents the material from being visible with night vision devices. The material is very durable, treated with flame retardants and also protected against mold. The main material of the backpacks, rucksacks, etc. is made of 1000 denier-thick Cordura polyamide fabric. As a comparison to the durability of the material, it can be said that normal nylon tights are 20-60 denier thick, raincoats are in the order of 200 denier and decent strong outdoor overalls somewhere around 300 denier. The backpack fabric is also coated with polyurethane for waterproofing and has undergone IR treatment.

The material is therefore very strong, durable, tough and technical synthetic fiber. This makes the reuse of waste material challenging.

In the cutting of the fabric, not only smaller pieces of waste are created, but also a long, uniform slender edge, which is constantly generated in production. This material could be easily separated at the cutting stage, if necessary.

Goal of the Hackathon is to find a clear business model and industrial partner or partners that would be able to operate as process-efficiently as possible and receive materials generated as a by-product of textile production on a regular basis. Possible uses of the materials could be, for example, utilization in the manufacture of new textile products or various materials (eg yarn, fiber, nonwovens, insulation materials, acoustic panels, air filters), as a filler or in composite materials. So there are many opportunities outside the textile industry, and the solution to utilizing the material may be found in a completely different industry.

#circulareconomy #recycledmaterials #sidestreams #textilewaste #textileindustry #sustainability

Welcome to solve the challenge!

What is SavottaHackathon?

BioEconomy Business Accelerator BioPaavo and Kasvu Open are opening a Hackathon in co-operation with Finn-Savotta Oy, the aim of which is to find new ideas, commercial partners and utilization methods for the by-products and waste generated during the manufacture of Finn-Savotta Oy's textile products. With the help of Hackathon, Finn-Savotta Oy seeks proposals and win-win business models from potential partners, which could be used as process-efficiently as possible and receive materials generated as a by-product of textile production on a regular basis. The solution for utilizing the material can be found, for example, in another industry.

Finn-Savotta Ltd.

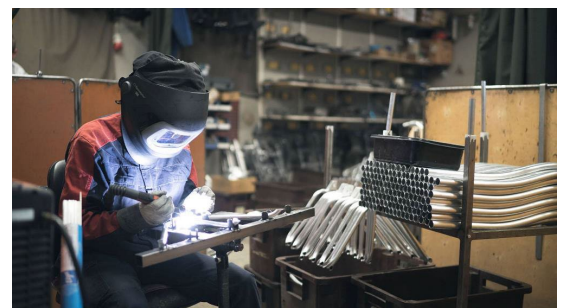
Finn-Savotta designs and manufactures high-quality functional equipment for demanding professional and leisure use. With a focus on carrier and accommodation systems, our comprehensive range includes small items, backpacks, sleeping gear and versatile tents.

We operate in both consumer, B2B and government markets. Our customers are outdoor enthusiasts, rescue organizations, military and many other authorities both domestically and around the world.

Our capabilities include research, development and engineering, heavy textile sewing, laser cutting, 3D design and printing, metalworking, automation, thermoforming, knowledge of materials and a strong will to continuously develop our understanding of end-user needs.



- Founded in 1955, a family business
- Headquarters and production facilities in Karstula, Finland
- Subsidiary Savotta Oü and production facilities also in Tartu, Estonia
- A total of about 110 employees
- More than 50 years of cooperation with the Finnish Defense



Forces

- Certificates: ISO 9001: 2015, AQAP 2110 Ed D, ISO 14001: 2015, Facility Security Clearance

Participants

Hackathon is open to anyone interested: companies, research institutes, educational organizations and students, as well as other actors. Your team can be made up of representatives from your own organization, or you can form a cross-organizational team for just this challenge!

Read more detailed rules for participation: <https://www.jamk.fi/sites/default/files/2022-01/Rules%20of%20participation%20-%20BioPaavo%20Hackathon.pdf>

Jury

Members of Jury include representatives from Finn-Savotta Ltd., BioPaavo by JAMK, and 1-2 other expert organizations.

Why participate?

- Find new business opportunities: You have the opportunity to build long-term business cooperation, get to pilot your solution and, if needed, to do product development cooperation with the sponsoring company.
- As a finalist, you will have access to the experts' know-how and professional mentoring free-of-charge
- Get to network with other participants and experts

Schedule

- Publication of the challenge **Wed 30 March 2022:** <https://www.jamk.fi/fi/projekti/biopaavo/biopaavo-hackathon/savottahackathon>
- In the webinar "The New Life of Waste Textiles" (in Finnish) **Fri 22 April 2022 from 9:00 to 11:00 am** Finn-Savotta Oy will tell you more about the challenge and at the same time hear from experts in the field about the changing textile waste legislation, Textile recycling and Textile reuse. Webinar will be in Finnish. Register here for the webinar: <https://www.jamk.fi/fi/tapahtuma/hukkatekstiilin-uusi-elama>
- Submit your ideas and your team to the challenge no later than **Wed 4 May 2022**. In the preliminary proposal, you should briefly describe your idea and the team with which you will be involved in the challenge.
- The ideas and teams selected for the follow-up will be published no later than **Fri 6 May 2022**
- The kick-off event will be held on **Fri 20 May 2022 from 9 am to 12 noon**, when the participating teams will meet each other and the representatives of the client company. At the kick-off event, Finn-Savotta will tell the participating teams more about the challenge. You can participate in the event at BioPaavo in Saarijärvi or online. After the kick-off event, it is also possible to visit Finn-Savotta's factory in Karstula.
- Hackathon Day will be held on **Fri 17 June 2022 from 9 am to 4 pm** and the winner (s) will be chosen at the end of the day. You can participate in the event at BioPaavo in Saarijärvi or online.
- All times are EET.



Sign up for the challenge!

<https://link.webpolsurveys.com/S/9A80D7CCE063095C>

More information

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Organizer

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

In collaboration with

KasvuOpen Ltd. is a non-profit subsidiary of the Central Finland Chamber of Commerce, whose core idea is to make growth companies and top experts come together. KasvuOpen is a nationwide sparring programme for growth companies. KasvuOpen's sparring process has been applied from the Growth Runway method developed by Mr. Marko Seppä, Professor of growth business operations at the University of Jyväskylä, and his team.

The Bioeconomy Business Accelerator for Saarijärvi project is implemented by the Bioeconomy Institute of Jamk University of Applied Sciences and is funded by the Regional Council of Central Finland with the support of the European Regional Development Fund, Sitra and the City of Saarijärvi. During the project, we will organize hackathons to pilot and develop the services of the accelerator, so participation in them is free-of-charge for both clients and participants.



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