



# STORA ENSO HACKATHON

Protecting Wood, Preserving Tomorrow

*Are you an expert dealing with sustainability issues, and do you have a solution in mind for reducing water consumption in the wood manufacturing industry? As the temperatures rise, the company Stora Enso tackling the challenges of sustainability and circularity and is seeking innovative, eco-friendly solutions to combat the dual threats of blue stain in sawn logs and wood-damaging insects without increasing water consumption. With ambitious goals to enhance water stewardship and reduce process water discharges, Stora Enso is committed to transforming the forestry sector for a more sustainable future.*

*Join the Stora Enso Challenge and be part of the solution that harmonizes production with environmental responsibility!*

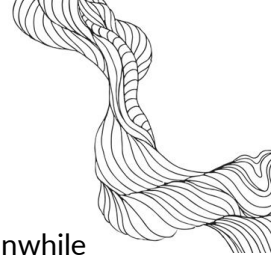
## **What is it about?**

Circularity promotes sustainability in production and consumption, emphasizing the need to minimize waste, maximize resource efficiency, and close the loop by recycling materials. For **Stora Enso**, circularity is underlined by ensuring sustainable forest management, reducing environmental footprint, and fostering a circular bioeconomy with company's fiber-based, renewable products and projects for improving recovery and recycling infrastructure (Stora Enso 2024c).

As freshwater plays a central role in Stora Enso production processes and is a key component in forest growth, both water availability and sustainable water management are of key importance to the company. [...] Water stewardship is an area of increasing strategic importance and provides opportunities to reduce costs by using water and energy more efficiently [...] therefore Stora Enso aims to improve water performance and reduce the intensity of process water discharges through targeted investments combined with continuous improvements in day-to-day activities. As of 2023, the company has set a new target to reduce process water discharges per saleable tons by 17% by 2030 from the 2019 baseline year. For total water withdrawal, the goal is to maintain a decreasing trend from the 2016 baseline. (Stora Enso 2024d).

## **Welcome to Stora Enso Challenge!**

Warmer temperatures and an extended summer period might sound pleasing to some, but to the wood manufacturing industry it possesses a set of obstacles that need to be overcome. Stora Enso sets the challenge to **avoid log quality worsening in Launkalne mill log yard during summer period** by seeking solutions to the following problems:



- 1) Reduction of blue stain in the sawn logs in an environmentally friendly way, meanwhile reducing the amount of water that is used for reducing the blue stain today.

In order to prevent and reduce blue stain, logs need to be watered. However, that requires a large amount of water, significantly increasing consumption rates.

Log watering has a major impact on Launkalne Sawmill's water consumption rate. In fact, it makes up more than a half of the total yearly amount of water consumption (in 2021 – 68%, 2022 – 74%, 2023 – 76%). So far in 2024 the numbers have reached about 57% of the overall total.

Therefore, Stora Enso is looking for an alternative solution – how to reduce blue stains by not having to use so much water?

- 2) Containment measures for wood-damaging insects in an environmentally friendly way.

The spread of different wood-boring insects is an issue that gets addressed more and more frequently in fields of forestry and woodworking. The insects that “eat” their way into the wood damage and notably worsen the quality of the material. During the summer months, the quantity of low-grade logs in the log yard more than doubles due to the impact of wood-damaging insects and pests. Just like the problem with blue stain, the spreading of wood-damaging insects is also especially relevant during the summer period.

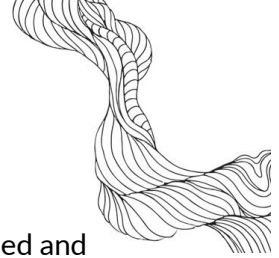
### **About Stora Enso**

Finnish and Swedish based company **Stora Enso** is a leading provider of renewable products in packaging, biomaterials, and wooden construction. Its operations are spread across Europe, Asia, and the USA, reflecting its diverse portfolio and global reach.

The company's operations span across production facilities, sales offices, and research centers. It has strategically placed itself in regions where it can access renewable resources and develop cutting-edge innovations for sustainable solutions.

Stora Enso's vision and aim are centered on sustainability and the circular bioeconomy, as the company seeks to replace fossil-based materials with renewable and innovative solutions. Their aim is to transform industries by providing sustainable alternatives to fossil-based materials through innovation in packaging, biomaterials, wood construction, and paper. They focus on creating value by harnessing the potential of renewable raw materials, such as wood; to drive a more sustainable future - this aligns with their core belief of using "the potential of trees" to meet societal needs while respecting environmental boundaries. Stora Enso emphasizes their commitment to responsible forestry, reducing carbon emissions, and promoting sustainable practices across industries.

**In Latvia, a major point on Stora Enso's map is Launkalne Sawmill.** The Sawmill is located in Smiltene municipality, the Eastern region of Latvia. It is surrounded by a wide area of forest territories; therefore, the sawmill mostly uses logs collected from the forests nearby.



Every year around 500 thousand m<sup>3</sup> of logs in Stora Enso Launkalne Sawmill get processed and produced into different wooden products – sawn timber, processed timber for construction and finishing, granules, ThermoWood and chipped wood biomass.

Annually 260 000 m<sup>3</sup> of sawn timber is produced in the sawmill, as well as 85 000 m<sup>3</sup> of processed timber products and 50 000 t of construction and finishing materials, granules and ThermoWood products. Approximately half of the materials produced stay within the Baltic countries, but the rest of the production is exported to different countries around the world, from Central Europe to Australia.

Manufacture of wood and of products of wood and cork (NACE classification - C16) is one of the key sectors in the field of manufacturing in Latvia. In 2023, there were 1350 employers, and 23 385 employees registered within the sector, being the lead manufacturing sector in the country. Stora Enso Latvia permanently employs around 210 employees in the Launkalne Sawmill and has added 80 new positions in the last four years.

More information about Stora Enso here: [About Stora Enso](#)

### **What is Stora Enso looking for?**

The solutions developed will be evaluated mainly based on the following criteria:

- efficiency of solution;
- feasibility;
- profitability;
- compliance with Stora Enso's sustainability goals and reduction of water consumption;
- required resources (human resources, implementation time, costs).

### **Participant**

The hackathon is open to all interested teams: SMEs, start-ups, research institutes, sustainable product developers, educational institutions, forestry experts, experts in sustainability and resource utilization and other actors interested in solutions for wood industry.

The Hackathon challenge is international, and the working language of the events is English.

Participation in the hackathon is free. For international teams from any of the EU countries, including EES organizers will offer travel reimbursements.

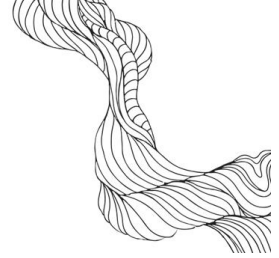
Read more about the rules here: [BioBoosters Hackathon Rules](#)

### **Jury**

The jury consists of representatives of Stora Enso Launkalne Mill with the support of the organizer's representatives.

### **Why should you participate in Stora Enso Hackathon?**

Solution of the winning Team will be potentially piloted in Stora Enso Launkalne mill.



In addition, you will have the opportunity to:

- network with other companies and professionals interested in this field;
- establish international contacts and networking in your field of interest;
- test your idea with direct feedback from a potential customer and learn how to adapt your solution idea to the needs of end-users;
- develop the commercialization potential of your idea and discover new business opportunities with the support of expert mentors;
- gain international recognition and visibility.

## TIMETABLE

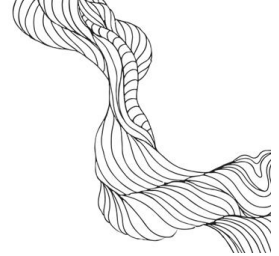
- **17th of OCTOBER** 13:15 - 14:45 CET | 14:15 - 15:45 EEST  
**Stora Enso Launch Webinar** (online)
- **15th of NOVEMBER** Deadline for team submissions for Stora Enso Hackathon
- **21st of NOVEMBER** 13:00 - 14:30 CET | 14:00-15:30 EEST  
**KICK-OFF Stora Enso Hackathon** (online)  
Meet-up of selected teams and representatives of the Challenge Owner company Stora Enso. Company representatives will tell the teams more about the challenge and teams will have a first opportunity to pitch their solution idea and get feedback before the Hackathon.
- **5-6th of DECEMBER**  
**Stora Enso Hackathon Days** (hybrid)  
The two-day event includes sessions with Stora Enso representatives and mentors. At the end of the hackathon, each team will present a proposal of a developed solution in a pitch session. These presentations will be evaluated by the jury, determining the winners that most accurately meet the set criteria. The hackathon will take place on-site, but teams will have the option to join online if travel is not possible.

**[APPLY FOR HACKATHON HERE](#)**

## More information

Inguna Kucina, Vidzeme Planning Region  
[inguna.kucina@vidzeme.lv](mailto:inguna.kucina@vidzeme.lv), +371 26598678

Krišjānis Pundurs, Vidzeme Planning Region  
[krisjanis.pundurs@vidzeme.lv](mailto:krisjanis.pundurs@vidzeme.lv) , +371 26567624



## Organizer

**Vidzeme Planning Region** is Vidzeme development management organization, which represents the interests of all residents of Vidzeme region and based on the region's development program it implements initiatives and projects important for the development of the region.

## In collaboration with

**BioBoosters by Jamk** is a business accelerator that inspires and supports companies to generate new business and develop globally significant solutions to battle the challenges of climate change. The core mission of BioBoosters is to promote business focused on bioeconomy and agritech, create sustainable innovations, utilize digitalization, develop know-how, and strengthen business networks. Our services include accelerator programme for agritech startups and early-stage growth companies, as well as BioBoosters Hackathon and other open innovation services.

Read more about BioBoosters by Jamk [BioBoosters | Jamk](#)

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

Read more about the BioBoosters project. [BioBoosters - Interreg Baltic Sea Region \(interreg-baltic.eu\)](#)

## References

Stora Enso 2024a. Launkalnes kokzāgētava <https://www.storaenso.com/lv-lv/about-stora-enso/stora-enso-locations/launkalne-sawmill>

Stora Enso 2024b. Launkalne Sawmill <https://www.storaenso.com/en/about-stora-enso/stora-enso-locations/launkalne-sawmill>

Stora Enso 2024c. Transitioning to circular bioeconomy <https://www.storaenso.com/en/sustainability/circularity>

Stora Enso 2024d. Safeguarding water systems <https://www.storaenso.com/en/sustainability/responsibility/water-stewardship>

Valsts ieņēmumu dienests 2024. Nozaru statistika <https://www.vid.gov.lv/lv/nozaru-statistika>

Hermanis J. 2024. Kokrūpniecības nozare <https://lddk.lv/wp-content/uploads/2022/04/Janis-Hermanis-leskats-un-perspektivas-kokrupnieciba.pdf>