

## MoelvenHackathon - Meeting the Challenge of fossil-free packaging of Wood Products

We invite you to become part of this unique opportunity to tackle our challenge. Together with Moelvens's experts and companies in the BioBoosters network, you will have the opportunity to develop innovative methods and solutions.

Are you the one to solve the challenge? Submit your application by 22.10.2023.

### The challenge

Moelven Wood AB makes interior wood-based panels that are long-lasting sustainable products meant to last for generations. As one of the leading European producers of interior panels, Moelven Wood AB Aims to lead, both in the development of panels as well as when it comes to packaging them.

As part of this, Moelven Wood AB is now looking for a sustainable solution to replace the fossil-based shrink wrap surrounding the wood-based panels and solid wood flooring. To do so, Moelven Wood AB invites you to help develop the next generation of fossil-free packaging through a BioBoosters challenge. It's a forum where ideas from both packing materials and packing techniques can be united to create solutions for sustainable fossil-free packaging — meeting the requirements of protection, humidity control, and a selling display.

### What is Moelven Wood AB looking for?

Moelven Wood AB is looking for a sustainable solution to replace the fossil-based shrink wrap surrounding and protecting their wood-based panels and solid wood flooring.

### The current packaging and use

The Interior Wood-based panels are packaged in bundles – usually containing between 3 and 10 boards. These bundles are wrapped in a fossil-based shrink wrap. In the next step, the bundles are packed in a larger package containing different amounts of bundles. These packages are then protected by a plastic cover.

This challenge focuses on the first layer of packaging of the bundles of wood-based panels.

The purpose of the packaging is to keep the wood safe and even until mounting.

The total volume of bundles per year is approximately one million units.

#### Must haves

The display on the bundle must consist of a label with bundle information such as bar-code, and item number, but also instructions for mounting e.g.

The packaging of the bundle must keep the moisture level stable and ensure shape stability on the wood boards.

The panels are produced in several lengths between 2,4 meters and 5,4 meters and widths between 95 and 225 millimeters. The packaging technique must be able to tackle this variety at high speed to maintain production capacity.

#### Who are Moelven Wood AB?

Moelven Wood AB develops and produces a wide range of wood-based building and interior products with a high degree of processing, mainly for sale in the building materials trade in Scandinavia.

Moelven Wood AB is the sales and marketing company for all production companies in Moelven Wood Sweden. They handle customer inquiries, logistics, marketing, and sales and advice to the building trade, architects, and industry.

They have four product areas; Indoor Wood, Outdoor Wood, Construction Wood, plywood, and boards. This challenge focuses on Indoor Wood.

#### Participants

This challenge, Hackathon, is open for all interested teams: companies, research institutes, educational organizations, and other actors. Your team can also consist of collaboration between several organizations.

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 from: [BioBoosters Hackathon Rules of Participation](#).

Why should I participate?

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

- Establish co-operation 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 idea 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 team's know-how

Evaluation criteria

Evaluation of solution will be based on:

#### **Improvements**

- Strong to resist damages during handling and transportation
- Easy to Recycle
- "Good looking" environmentally friendly ethos
- High-end presentation in store

#### **Maintained properties and characteristics**

- Light weight and thin material to minimize transport and storage volume
- Packing technology meeting the speed in the factory
- Competitive total cost for packaging
- Maintain force of shrink wrap to keep the panels from cupping
- Moderate moisture vaporability to sustain acclimatization

Jury

Jury consists of representatives of Moelven Wood AB.

## Timetable

Publication of the Hackathon invitation 25.09.2023 at 13.00-14.30 CET in a webinar

Send in your application by 22.10.2023. The application includes your preliminary idea proposal and a short description of the expertise of your team.

Selected teams are published by 27.10.2023.

Kick-off event is organized online on 13.11.2023. In the Kick-off event, the participant teams will meet each other and the Moelven representatives to hear more about the challenge and expectations of Moelven. The teams will present their preliminary ideas and get feedback for further development.

Hackathon Days 11.12.2023-12.12.2023 will be organized in Karlstad, Sweden. The program includes mentoring for the participant teams as well as a pitching session for presentations on teams' solution proposals to Moelven Wood AB. After Jury deliberation, the winner(s) are announced at the end of the Day. Online participation is possible if you are not able to travel onsite.

## Contact information

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## Organizer

Paper Province is a world-leading business cluster within the forest bio-economy. We are owned and operated by more than 120 member companies. We are based in Karlstad, Sweden, but are connected worldwide. By working together towards sustainable development, and striving to achieve The Global Goals, we are making a decisive contribution to society.

## 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 MoelvenHackathon 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.