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An aerial photograph of a dense forest, likely a mountain range, with a thick layer of mist or fog hanging between the trees. The trees are mostly dark green, with some showing signs of autumn with yellow and orange foliage. The text "BONDING NATURE WITH INNOVATION" is overlaid in the center in a bold, white, sans-serif font.

**BONDING NATURE WITH INNOVATION**

## ABOUT US | WHO WE ARE

Ecco Adhesives was founded with a clear vision: To revolutionize the adhesive industry by replacing harmful, fossil-based resins with sustainable, plant-based solutions—without compromising performance.

The idea was born from a simple question: Why should manufacturers have to choose between environmental responsibility and industrial performance?

Coming from years of experience in wood processing and industrial chemistry, our founders recognized a growing need for adhesives that could meet strict emission regulations, improve workplace safety, and support global sustainability goals—all while maintaining the strength, durability, and reliability manufacturers expect.

We set out to create adhesives that perform where it matters most:

- In high-pressure industrial presses,
- On diverse wood-based materials like PB, MDF, OSB, and plywood,
- And in real-world production environments where every minute counts.



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## **OUR MISSION**

Our mission is to empower the wood panel industry to build a greener future by replacing conventional fossil-based adhesives with safe, high-performance bio-adhesives—contributing to a cleaner, healthier planet without sacrificing product quality, production efficiency, or profitability.

## **OUR DRIVE**

Through continuous research, close collaboration with industry partners, and a relentless pursuit of innovation, we've created bio-based adhesives that deliver on all fronts: Performance, Safety, and Sustainability.

The journey is far from over. We are confident that sustainable adhesives are not just an alternative—they are the future.

At Ecco Adhesives, we are driving the transition toward sustainable bonding solutions for the wood composites industry. From our state-of-the-art production and laboratory facility, we manage the entire value chain—from research and development to manufacturing and quality control.

## **ECCO ADHESIVE VALUES**

**Sustainability at the Core:** We believe that true innovation serves both industry and the environment. Every formulation we develop is driven by the goal of reducing environmental impact—whether by using plant-based raw materials, minimizing energy consumption, or eliminating harmful chemicals. Sustainability is not a feature of our products; it's the foundation of our business.

**Innovation through Science:** Continuous improvement is in our DNA. We combine cutting-edge research in bio-based chemistry with hands-on industrial testing. This approach ensures that our adhesives are not only sustainable but also deliver top-tier performance in real-world conditions.

**Responsibility Beyond Borders:** We contribute to global change, one innovation at a time. As a company operating across regions, we strive to bring sustainable technologies to markets where change is needed most—supporting both industrial development and environmental preservation.

Together with our partners and customers, we bond more than just materials:

**WE BOND NATURE WITH INNOVATION.**



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## WHAT WE OFFER:

Sustainable Bio-Adhesive Solutions: Made from renewable raw materials and industrial by-products—free from harmful substances like formaldehyde and isocyanates—our adhesives are extensively tested in the field and proven to meet or exceed industry standards. They deliver performance, safety, and sustainability across a wide range of wood-based products including PB, MDF, OSB, and plywood as well as other cellulosic materials.

## OUR PRODUCTS

- **EccoCore:** Our standard 100% formaldehyde-free bio-adhesive, providing excellent bonding strength and workability for a wide range of wood fibre-based products.
- **EccoCore+:** A bio-based, water-resistant binder designed for products and materials used in humid environments and areas with frequent moisture exposure. It ensures long-lasting, reliable bond performance—perfect for demanding indoor and outdoor applications.



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## HOW WE WORK

At Ecco Adhesives, every collaboration starts with a deep dive into your production process. We work closely with your team to understand key parameters—such as pressing conditions, raw material characteristics, and performance expectations.

All technical information is exchanged safely and confidentially under a mutual Non-Disclosure Agreement (NDA).

We then produce lab-scale sample boards using your fibres or chips with our adhesive solutions. These undergo rigorous testing—measuring strength, moisture resistance, and emissions—to verify suitability.

Next, we bring the formulation to your production unit, fine-tuning performance directly on your equipment. Our technical experts provide hands-on support during trials, optimizing process settings and ensuring seamless integration.

This collaborative process delivers an adhesive solution that matches your production goals—combining sustainability with industrial-grade performance. A detailed performance report follows, forming the basis for further improvements and success.

## CUSTOMIZED SOLUTIONS

Every production setup requires a distinct bonding solution. That's why we work hand-in-hand with our partners to identify and customize the ideal adhesive. By analysing your specific wood chips, fibres, or raw materials, we fine-tune our formulations to meet production goals—ensuring optimal bonding performance, efficiency, and sustainability.

Our customization goes beyond product formulation.

### WE PROVIDE:

- Custom viscosity & curing times – tailored to your equipment and cycle times.
- Optimization for hot press applications – ensuring consistent results even under demanding conditions.
- Technical support during trials and implementation – our experts are on-site to secure smooth adoption.
- Ongoing service & process optimization – continuous improvements as your production evolves.

With Ecco Adhesives, you get more than a product—You get a partner committed to making your production stronger, cleaner, and more efficient.



An aerial photograph of a dense forest, likely a mountain range, with a thick layer of mist or fog hanging between the trees. The trees are mostly evergreens, but some have turned yellow and orange, suggesting an autumn setting. The word "APPLICATIONS" is written in a bold, white, sans-serif font in the center-right of the image.

# APPLICATIONS



OSB



PARTICLEBOARD



PLYWOOD



MDF/HDF/LDF



## DESIGNED FOR THE FUTURE.

### Outstanding Sustainability & Health Benefits

- 100% bio-based raw materials, derived from reactions based on the patent-pending Milland process, including:
  - *In-house produced plant concentrates and isolates*
  - *By-products from the pulp industry*
  - *Modified carbohydrates*
- Excellent sustainability and health benefits
- A true NAF product (NAF= non added formaldehyd)
- Up to 85% lower energy consumption during production compared to stanard resins/applications
- Significantly lower carbon footprint compared to conventional or even other bio-based binders
- Zero formaldehyde emissions and significant reduction of VOCs, improving indoor air quality

### Environmentally Friendly from Start to Finish

- Easily recyclable, compostable (under evaluation), and safe for thermal recycling
- Supports the circular economy by replacing fossil resources with renewable by-products

### Industrial Performance

- Comparable mechanical strength to stanard resins/applications
- Durable, moisture-resistant, and aging-stable
- Simple one-component, ready-to-use system
- Extended shelf life and easy cold storage (down to -20°C)





## PRODUCT PROPERTIES AT A GLANCE

- Zero Formaldehyde Content
- Fully Renewable & Ecological Ingredients
- Safe & Non-Toxic Handling
- Formaldehyde Scavenging Effect (reduces emissions from raw/recycled materials)
- Energy-Efficient Manufacturing
- Simple water-based cleaning — no chemical agents required for equipment maintenance.
- Seamless integration: ECCO Binder works with standard production setups without the need for adaptation.
- Universal One-Component System
- Pre-Mixed, Ready-to-Use Formulation
- Extended Shelf Life & Safe Cold Storage
- Water-Soluble & Easily Washable
- High Solid Content Formulations Available
- Free of Chemical Crosslinkers – ensures safer handling and simpler formulation.
- Ready for Use at Temperatures as Low as -20 °C – consistent performance even in cold environments.

At Ecco Adhesives, we are reshaping the wood panel industry with eco-friendly, formaldehyde-free bio-adhesives—combining sustainability, safety, and industrial-grade performance for the products of today and tomorrow.



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[www.ecco-adhesives.com](http://www.ecco-adhesives.com)

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