

# BIOREFINERY

From forest resources to high-value bioeconomy products



**>37%**

of the forest area is occupied by birch and aspen, which are rich in cellulose and hemicelluloses



**6th**

in Europe in terms of per capita consumption of local wood material (economy-wide)



**TRL 4–6 pilot facility**

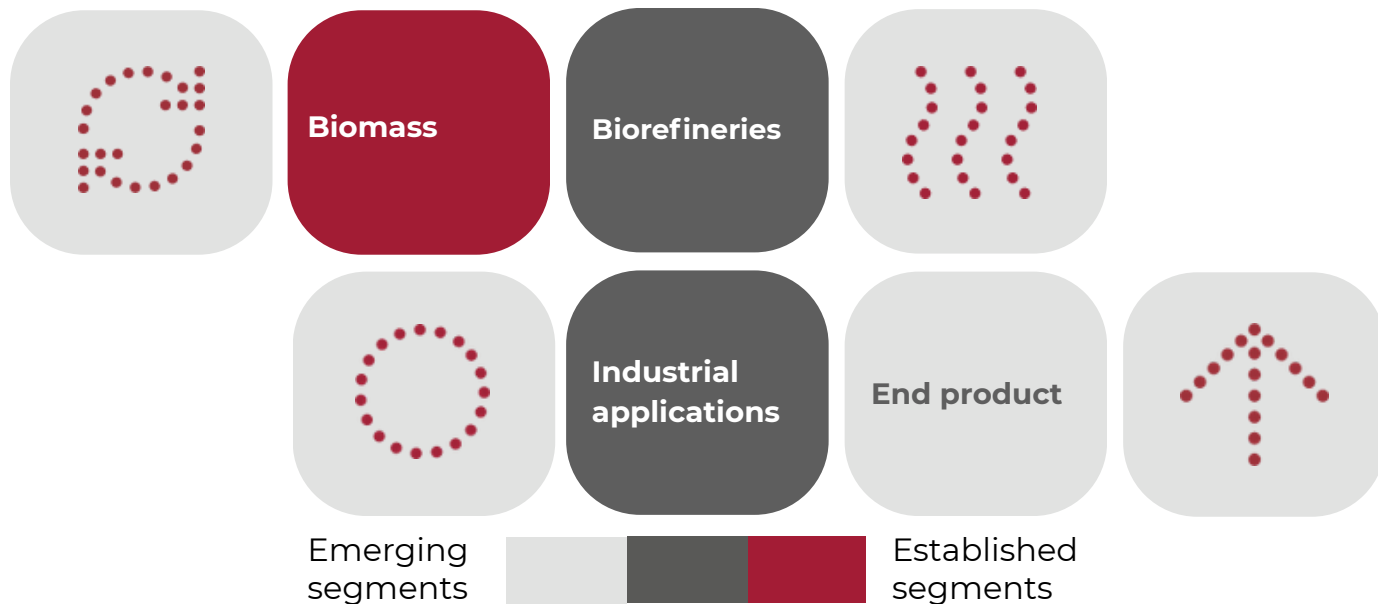
A dedicated pilot facility enables technology validation from TRL 4 to TRL 6



**Ariane 6 flight-proven material**

Cryogenic polyurethane insulation developed in Latvia is used in the Ariane 6 launcher, demonstrating space-grade materials capability

## Bio-based industry value chain



### Leading companies



**FibenoL**

**BetulinLab**

### Latvia State Institute of Wood Chemistry commercialized product brands



# Industrial wood chemistry at emerging commercial scale



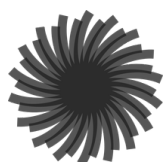
## Latvijas Finieris

One of Europe's leading birch plywood and wood chemistry players, integrating advanced materials R&D with large-scale industrial production and global exports, while actively developing bio-based resins, adhesives and high-value wood components.



## BetulinLab

Deep-tech biotech company developing high-purity betulin and betulinic acid from birch bark for pharmaceutical, cosmetic and biomedical applications, converting forestry by-products into high-value bioactive compounds.



storaenso

## StoraEnso

Part of a global renewable materials group, with industrial-scale wood processing and bio-based product development, strengthening Latvia's position in sustainable materials and circular bioeconomy value chains.

## Relevant Education Institutions



UNIVERSITY OF  
LATVIA



LATVIAN STATE  
INSTITUTE OF  
WOOD CHEMISTRY



Latvia University  
of Life Sciences  
and Technologies



Bio-based Industries  
Consortium

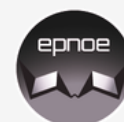


IUFRO  
Interconnecting  
Forests, Science and People

## Applied research supporting industrial bio-based innovation



SILAVA



### Latvian State Institute of Wood Chemistry

Over 75 years of expertise in wood chemistry, specialising in biomass processing, bio-based polymers and functional materials, with a strong track record in applied research and industry collaboration.

### Latvian State Forest Research Institute "Silava"

Applied research in forest biomass, biorefining and sustainable resource utilisation, supporting the development of bio-based materials and green fuels aligned with industrial needs.

### European research integration

Active participation in EU research consortia (e.g. BBI JU, UFRO), strengthening access to international funding, shared infrastructure and pathways to commercial deployment.

### Riga Technical University & University of Latvia

Academic research in bio-based binders, composites and advanced materials, contributing to pilot-scale development and technology transfer through collaboration with industry and European partners.