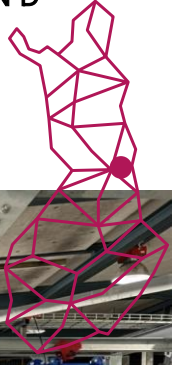


# INVEST IN Biorefinery

SUOMUSSALMI  
FINLAND



We have conducted a preliminary techno-economic assessment using Lixea's advanced biorefinery technology and their Dendronic® ionic liquid fractionation process as a potential investment opportunity for the Suomussalmi region. This area is one of the largest in Finland where by-products from the wood processing industry—such as bark, sawdust, and chips—are not yet comprehensively utilized at the regional level. This creates a unique opportunity for the development of circular economy solutions and green industry. We welcome investors, decision-makers, and regional developers to join us in making Suomussalmi a frontrunner in biorefining and wood-based circular economy.



## TECHNICAL DETAILS

**Location:** Suomussalmi, Kurimo industrial area

**Production technology:** Dendronic® ionic liquid fractionation (TRL 6)

**Feedstock:** 50,000 tonnes of dried hardwood chips

**Temperature / Pressure:** 140–150 °C, low-pressure process

**Main products:**

- Cellulose fibre: 24.2 kt/year
- Lignin: 11.3 kt/year
- Furfural: 6.2 kt/year



- **Overall efficiency:** approx. 83 %
- **Product yields from feedstock:**
  - Cellulose 48,4 %
  - Lignin 22,7 %
  - Furfural 12,3 %



## FINANCIALS

- **CAPEX:** 81,7 M€ (Equipment 72,9 M€, Utilities (OSBL) (8,8 M€)
- **OPEX:** 28,1 M€, variable 24,1 M€, fixed 4 M€
- **Revenue (2029):** 44,0 M€
- **EBITDA:** 15,9 M€
- **NPV (9,18 % WACC):** 46,9 M€
- **IRR** 11,0 %



## PAYBACK PERIOD

- **Estimated Payback Period:** approx 7-8 years



## INFRASTRUCTURE AND CONSTRUCTION

- **Construction time** 2 years
- **Requirements:**
  - Electricity and process water
  - Heat production
  - Integration with wastewater treatment
  - EIA



## TARGET GROUPS AND BENEFITS

- **Investors:** Private equity firms, investment funds
- **Partners:** Wood processing industry, packaging industry, chemical industry
- **End-users:** Composite manufacturers, packaging material producers



*Resources and Lixea's technology together form a strong foundation for sustainable industrial growth*



Co-funded by  
the European Union

INVEST IN  
SUOMUSSALMI

