

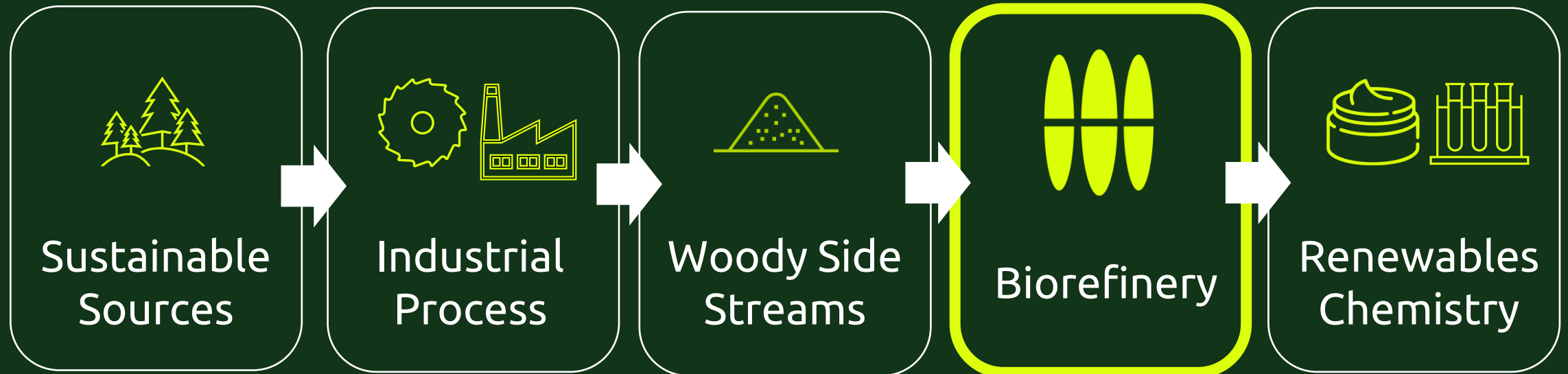
Biopolymers from Woody Sidestreams

NOVEMBER 2024



**Boreal
Bioproducts**

We Upcycle Wood Residues and Side Streams



Industry Partners



Metsä

cm_pc



**Boreal
Bioproducts**

Presenting Boreal Bioproducts® Biopolymers



SpruceSugar™

POLYSACCHARIDES



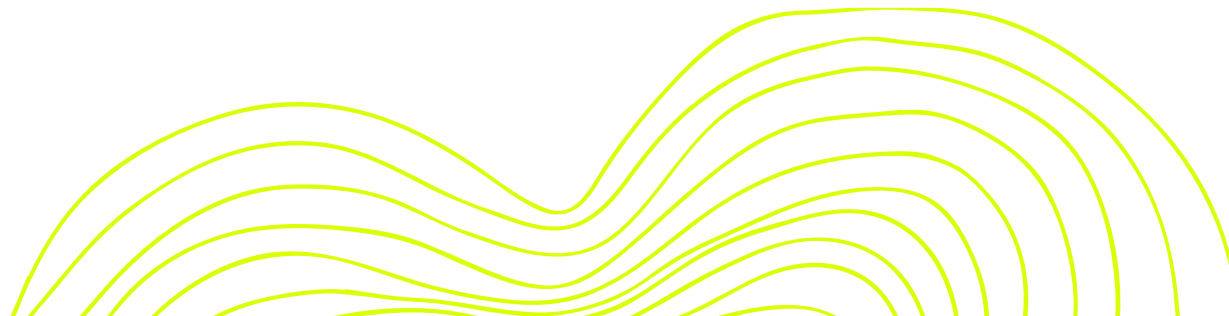
SpruceLigno™

LIGNIN POLYPHENOLS



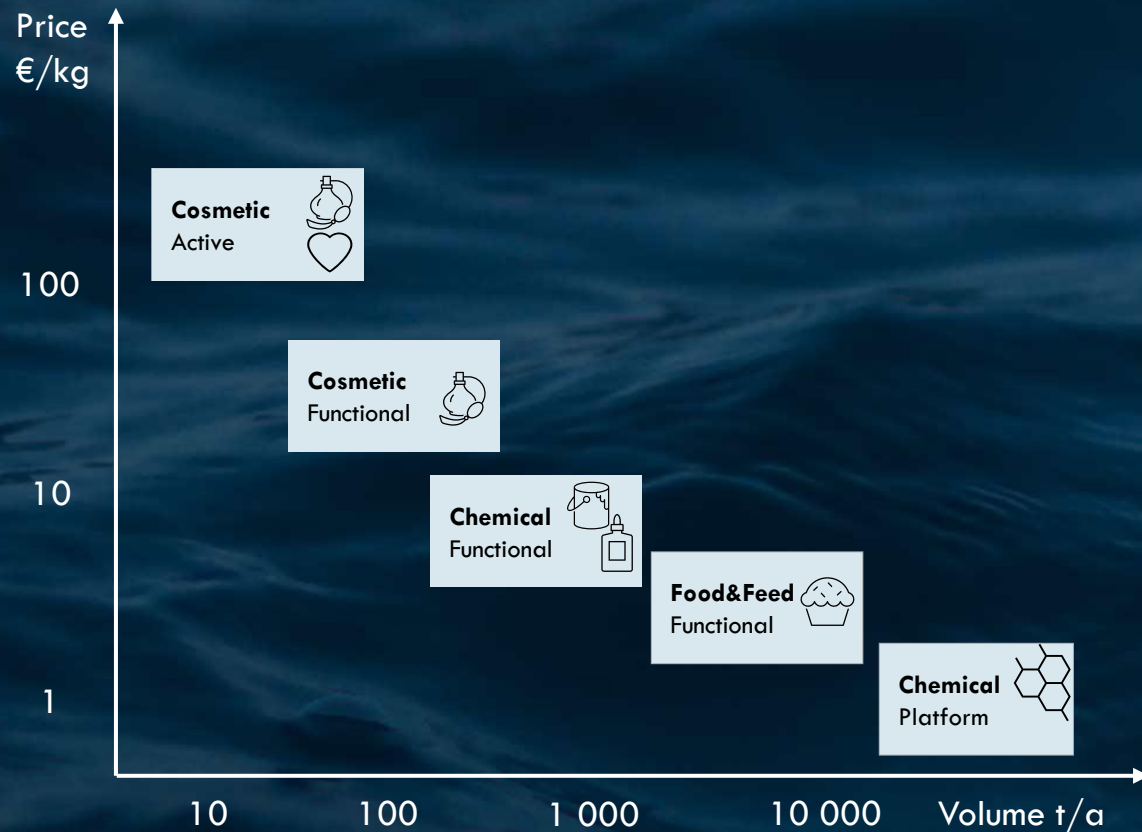
SpruceFiber™

CELLULOSES



Application Partnerships Delivering Traction

Balance with value and volume



Applications development with partners

Chemical industry applications

Binder
Barrier
Glue

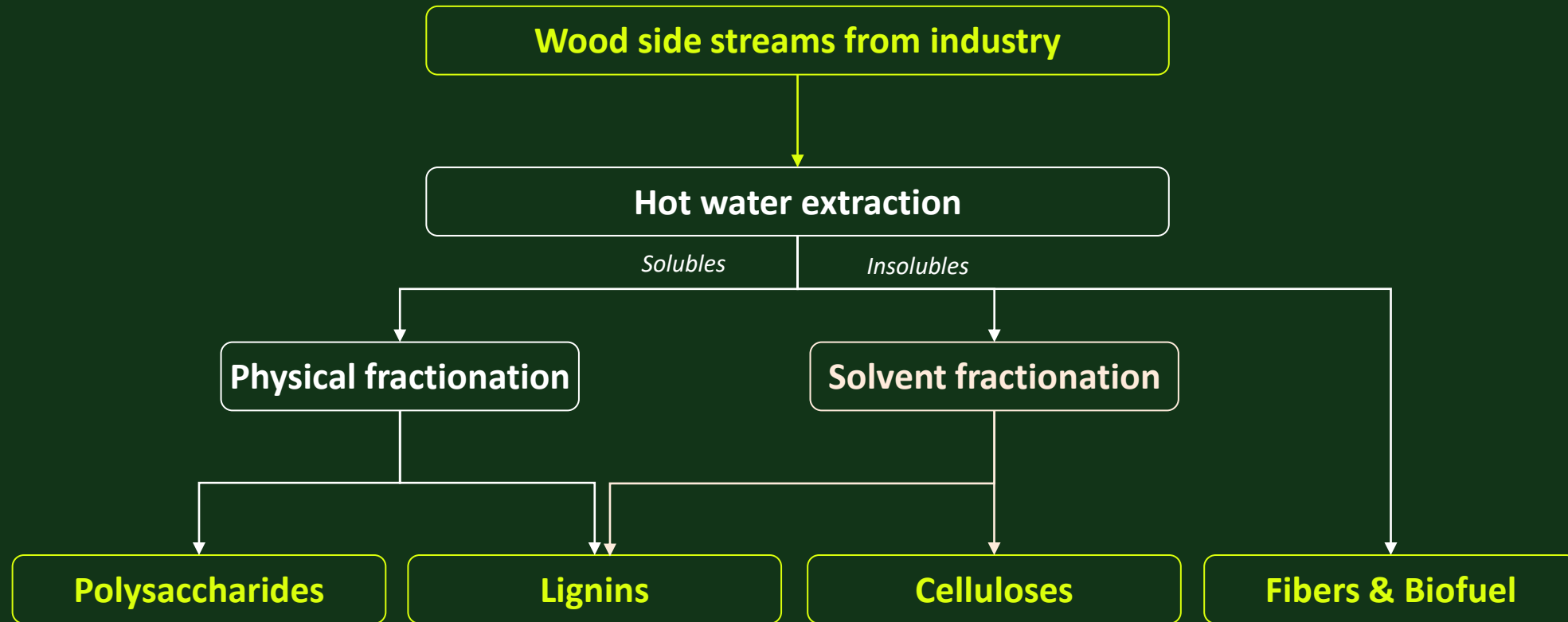
LOIs & CDAs under negotiation prior to fundraising in 2025

Personal care applications

Film former
SPF-booster
Texturizer / Active
Specialty coating

LOIs & CDAs under negotiation prior to fundraising in 2025

Novel Biorefinery Approach



Energy & Water recovery
Solvent recycling
Drying

Upscale Capacity Towards FOAK plant



 Co-funded by the European Union

BUSINESS FINLAND 7 M€ CAPEX subsidy!



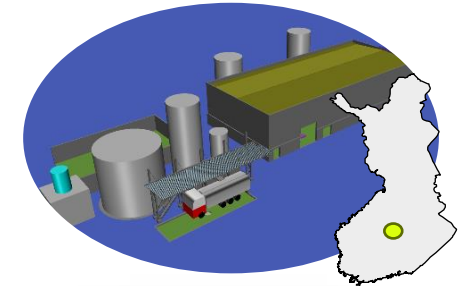
Strategic investor

SpruceSugar™
SpruceLigno™

First Customer
in Cosmetics



First Consumer Application
(pat. pend.)



2021

2022

2023

2024

2025

2026

2027

Pilot Plant 2M€ / 5 ton pa



Technology licensing
partner



Engineering
design



Capacity
Upscaling

Industrial
Pilots

First-of-A-Kind Plant
30 M€ / 25 kton pa



Call for Action to Investors

Join financing syndicate

- Fundraising starting early 2025
- Raise 5 M€ by 6 / 2025
- Existing investors committed

Funds utilized to

- Upscale to meet industry demand
- New application development
- Design and validation of FOAK



Contact:

Jaakko Pajunen, CEO

Jaakko@borealbioproducts.com