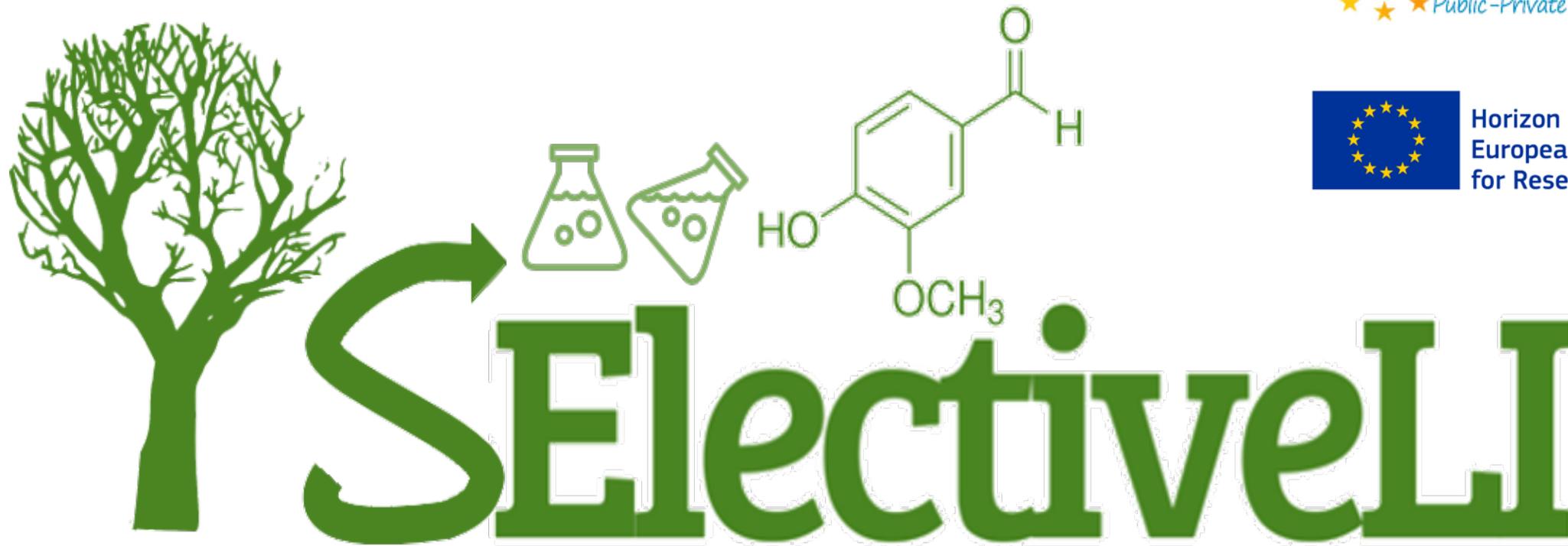




Horizon 2020
European Union Funding
for Research & Innovation



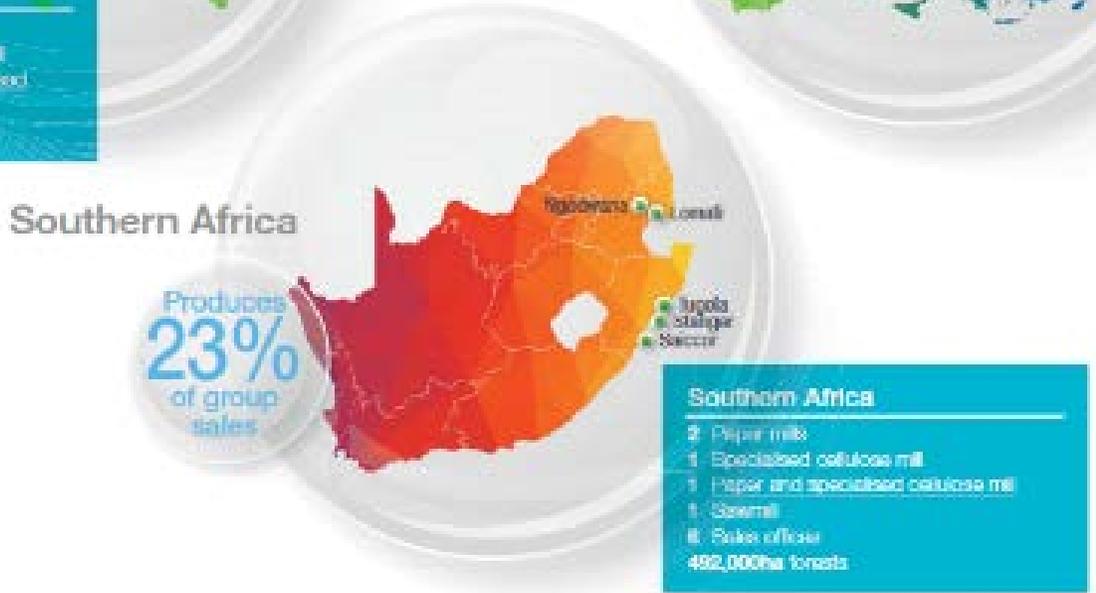
Stakeholderdialog „Biobased Industry“

5. November 2019

Wien



Where we operate



Mills

Our business - Unlocking the full potential of trees

Making the most of a renewable, natural material

Managed forest



Cellulose

Hemicellulose

Lignin

End use



**Graphic papers
Specialities and
packaging papers**

Commercial print
Product packaging
Technical papers



**Dissolving
wood pulp**

Textiles
Pharmaceuticals
Cellophane



Fibre composites

Automotive parts
Furniture
Audio speakers



Nanocellulose

Reinforcing agent
Control release agent
Viscosity modifier



**Casting and release
papers**

Textures for materials
Functional films
Automotive wraps



**Xylitol and chemicals
from sugars**

Low calorie sweetener
Toothpaste
Recyclable plastics



**Chemicals from
lignin**

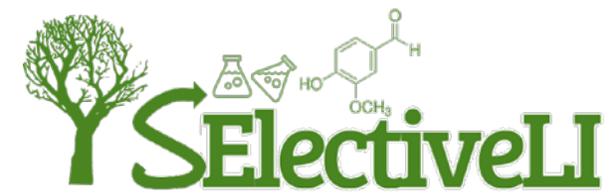
Binding agent
Dispersion agent
Emulsion stabiliser

Biobased Materials – Lignin



- The origin of Sappi's lignin business is in Europe and dates back almost **100 years**.
- Lignosulphonate is a highly soluble lignin derivative and a **product of the sulphite pulping process**.
- Lignin gives materials **stability** and has a **wide variety of uses** due to its binding ability, and dispersing, emulsification and sequestration properties.
- Referred to as a '**green binder**', it is used in the production of glass wool, chipboard, fertilisers and other products where lignin replaces the incumbent materials derived from petrochemical origin.
- Current market size **~1.2 Mio tpa**

Key Data

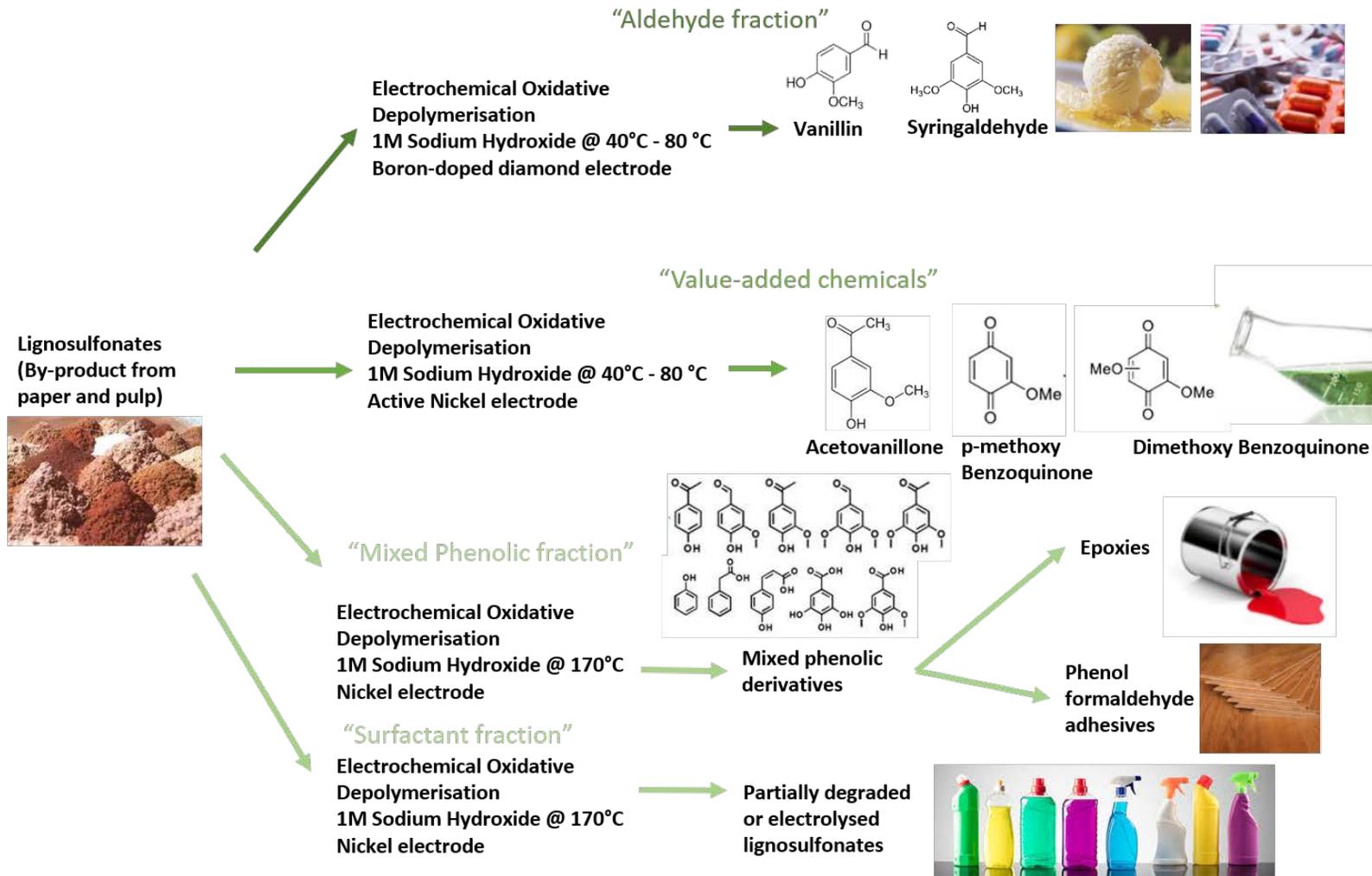


SElectiveLI is a
Conceptual Study of novel electrochemical processes using Lignosulfonates to produce bio-based monomers & polymers

Fact Box

- Type of action: Research & Innovation Action
- Value Chain: VC2 – forest-based
- Start date: 01 May 2019
- End date: 30 April 2023
- BBI JU contribution: € 2,497,224.00

Key Data



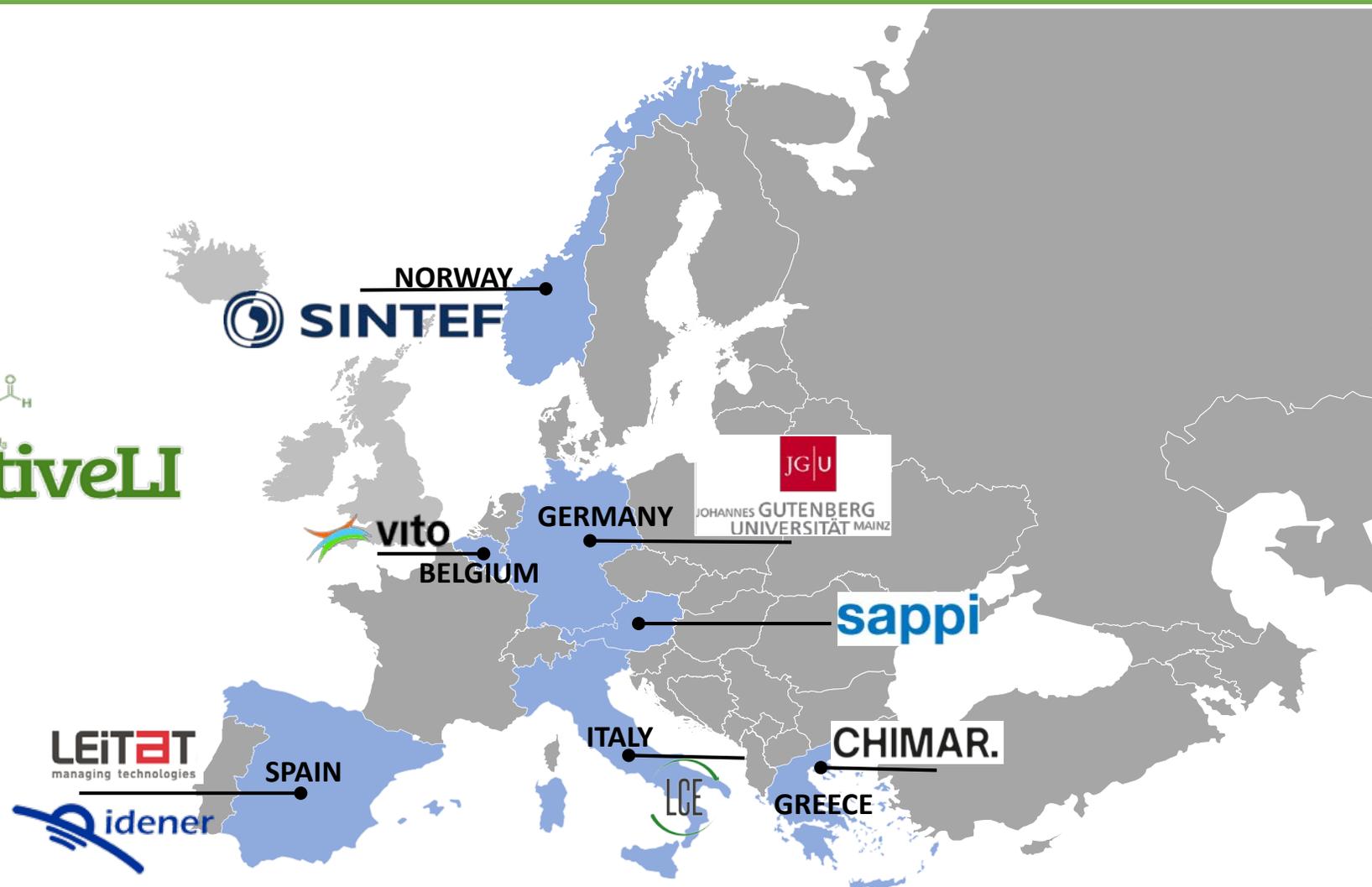
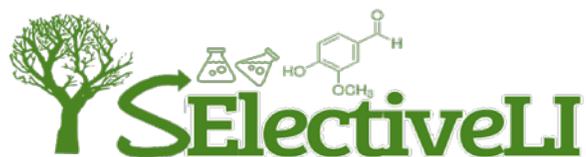
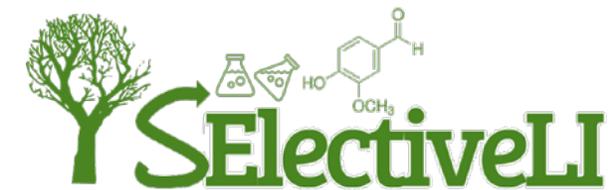
Who?



CHIMAR.



Who?



What?

- Extraction of a range of aldehydes for potential food, adhesive, and pharmaceutical application
- Production of intermediates for conversion into polymers
- Development of downstream separation and purification processes
- Combination of electrochemical processes & surplus energy available via smart grids



Meet Jana & Jesco at the Market Place