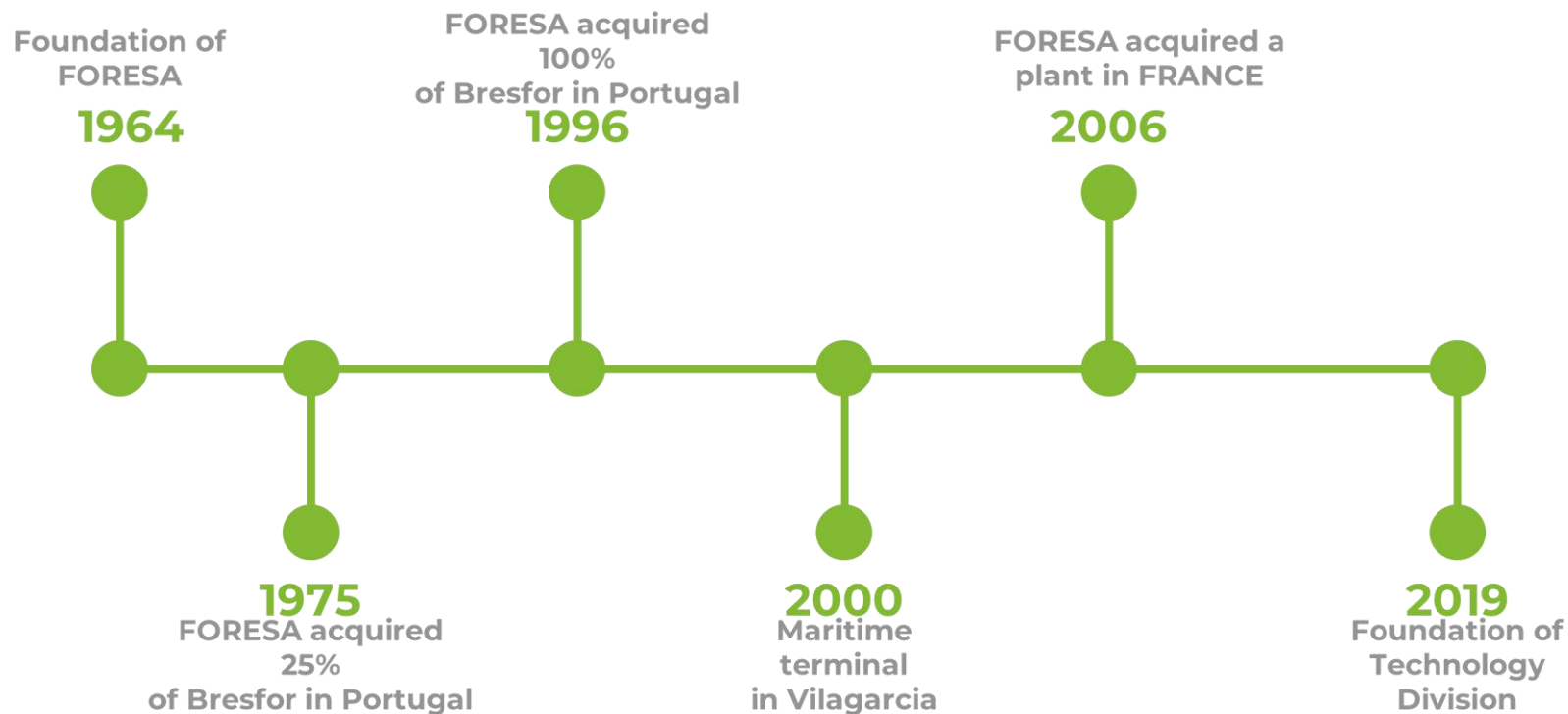


Colles biosourcées : Adhésives à base de protéines, lignine et tanins

Luis Alberto Otero Vázquez
FORESA TECHNOLOGIES



Jeudi 3 décembre 2020, en visioconférence





CORE BUSINESS



Process innovation

New process
Productivity improvement
Process re-engineering



Product & Service Innovation

New markets, new specifications - Sectors
Technical troubleshooting packages
Product & Services upgrades

FOCUS

PRODUCT STEWARDSHIP

(ADR, Reach, CLP, FoodContact, Standards Compliance, Environmental Compliance)

SUPPORT

INDUSTRIAL BACKGROUND



Biobased Adhesives

Objective

Bio-based adhesives that enhance circularity and use renewable raw materials

Strategy

Short term. Focusing on the use of low-concern products that comply with REACH legislation. Raw materials of renewable origin to reduce dependence on petroleum derivatives.

Medium - Long term. Bio-based solutions is expected in most of the current sectors

SDGs





Vegetal protein Adhesive

- High shelf life
- High resistance to pre-curing
- Improvement of properties with temperature.
- Lower reactivity to an aminoplast resin
- Free of formaldehyde



Patent

- ES2541716B1. Water-based composition, procedure for obtaining it and use of the composition as a bioadhesive
- Priority date: 2014-01-23
- Publication date: 2016-05-13

Industrial Products

- Medium Density Fiberboards: 12 - 18 MDF



Lignin Adhesive

SmartLi : Smart Technologies for the Conversion of Industrial Lignins Into Sustainable Materials

LIGNIN

BIORESIN

MDF

- ✓ Depolymerized and fractionated
- ✓ Commercial

- ✓ 50% substitution
- ✓ High Formaldehyde
- ✓ More expensive if you want the same properties

- ✓ Worse properties than standard PF resin



Lignin Adhesive

REHAP : Reduction of greenhouse gas Emissions transforming Harvesting waste into high Added value Products.

LIGNIN

BIORESIN

MDF -
PLYWOOD

✓ Provided by our partner
(patent)

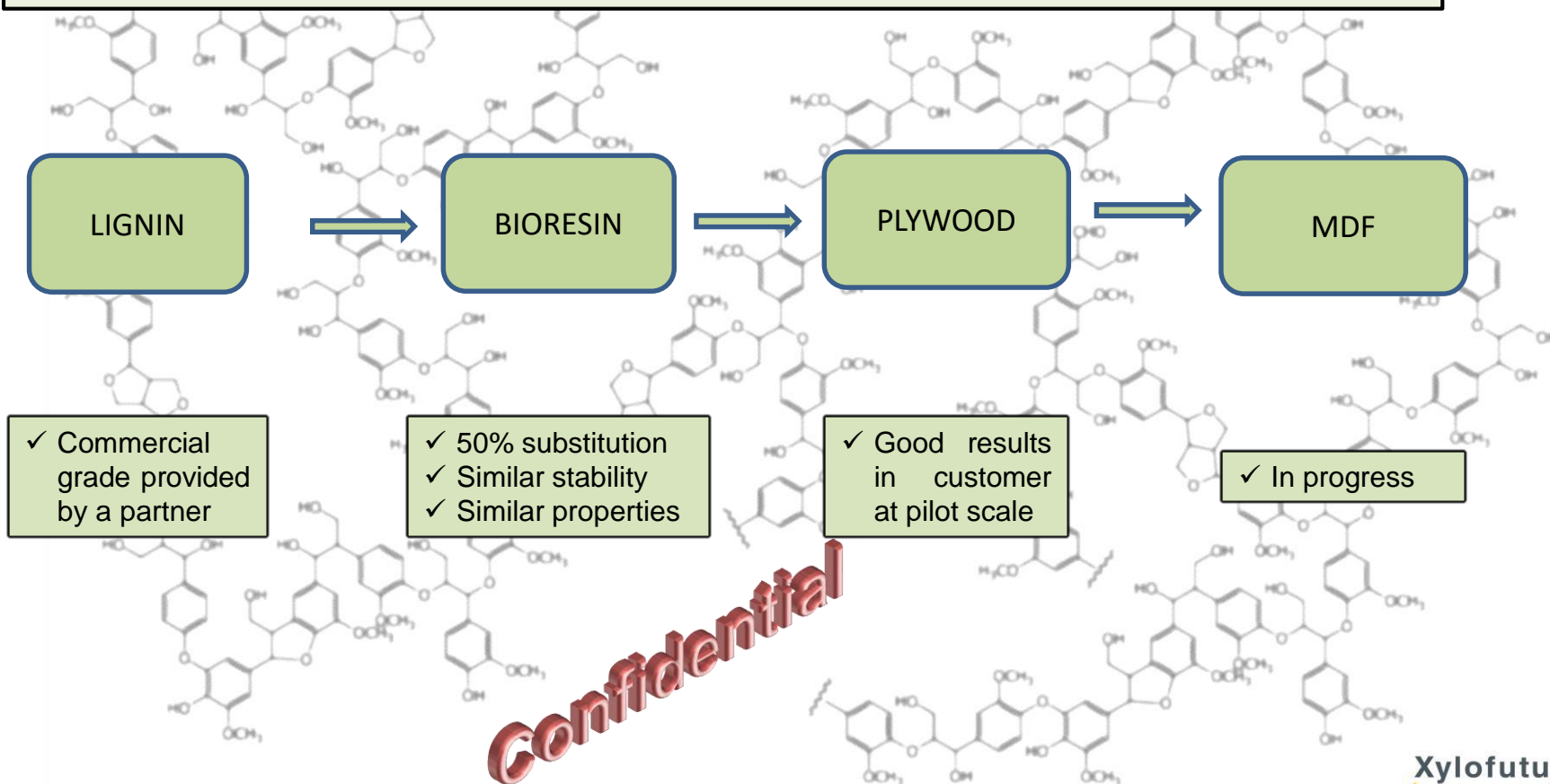
✓ 50% substitution
✓ Low stability
✓ Similar properties

✓ Slightly worse than
standard PF



Lignin Adhesive

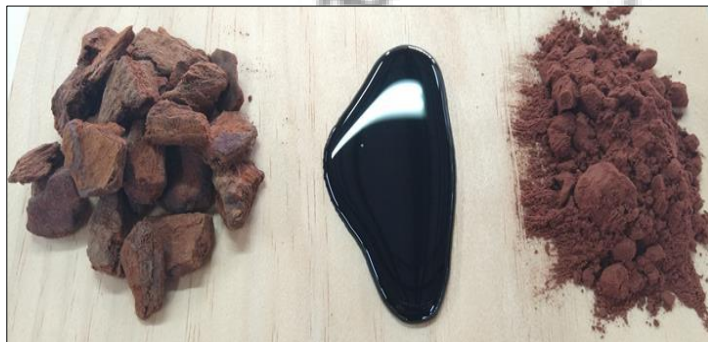
FORESA TECHNOLOGIES PROJECT





Tannin Adhesive

- Renewable raw material
- Not contain toxic substances
- Not concern emission



Confidential
(opened
development)

MERCI DE VOTRE ATTENTION

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