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ALIGNED

A framework for the LCA of bio-based products

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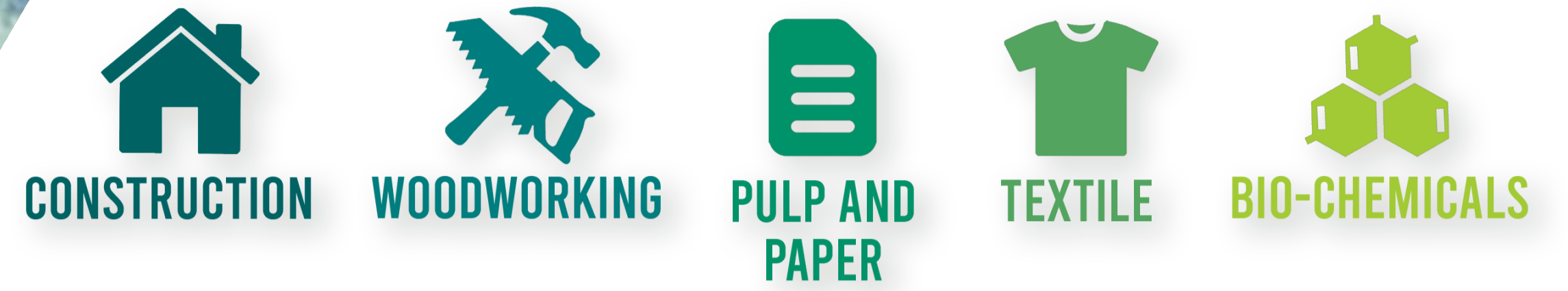
ALIGNED: A framework for the LCA of bio-based products

Massimo Pizzol, Søren Løkke, **Agneta Ghose**, Karen Nørgaard Bollesen, Jurjen Spekreijse, Patrick Reumerman, Steven Van Passel, Maxim Tschulkow, Lorie Hamelin, Marcos D. B. Watanabe, Narie R.D. Souza and Francesco Cherubini

ALIGNED

CONSTRUCTION - PULP AND PAPER - WOODWORKING - TEXTILE - BIO-CHEMICALS.

Aligning Life Cycle Assessment methods and bio-based sectors for improved environmental performance



About

ALIGNED will advance LCA and collaborate with industries and representatives from five bio-based sectors:

The models and tools developed in ALIGNED will allow the performance of high-quality assessment studies across the bio-based sectors, with industrial relevance and interoperability.

This is made possible by the iterative application and improvement of the new and harmonised models and tools in five specific cases of biobased industrial technologies (TRL 2-6), one for each sector.

Objectives

1. Improve, harmonize, and align LCA methodology for the assessment of bio-based industries covering environmental and socioeconomic aspects.
2. Demonstrate the power of the methodology on five specific technology development cases in industries within these sectors, to improve their environmental performance.
3. Inform, involve, and empower all relevant stakeholders, enabling an efficient methodological uptake and practice improvement to support a sustainable growth of the bio-based sector in Europe.

Implementation



WP1 in detail

- T1.1 Framework for background life cycle inventory of bio-based sectors
- T1.2 Framework for foreground life cycle inventory of bio-based sectors
- T1.3 Framework for Life Cycle Impact Assessment (LCIA)
- T1.4 Framework for interpreting uncertainty
- T1.5 Framework for socio-economic assessment
- T1.6 Learning from life cycle modelling in bio-based sectors: roadmap and policy advice

Framework:

- Scientifically sound, evidence-based
- Ensures consistency across models

Approaches:

- Model reality as close as possible
 - Avoid normative choices

Tools:

- High applicability (simple, work across sectors, open)
- Tested on the case studies, continuous improvement



14 Scientific + industrial partners

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