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

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











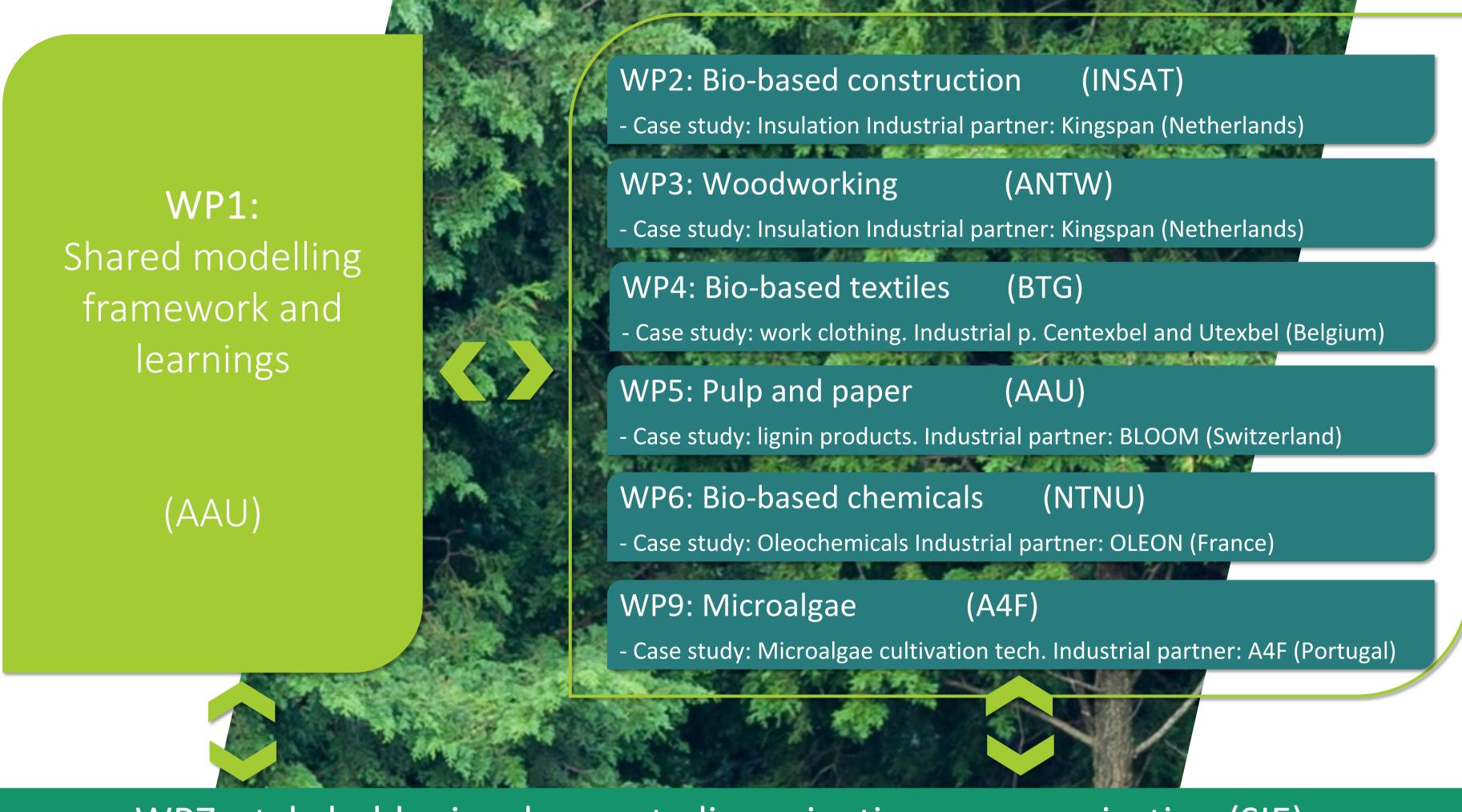
### About

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 highquality 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.

# Implementation



WP7: stakeholder involvement, dissemination, communication (SIE)

WP8: Management (AAU, BTG)

### 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

## 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.

#### 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







































