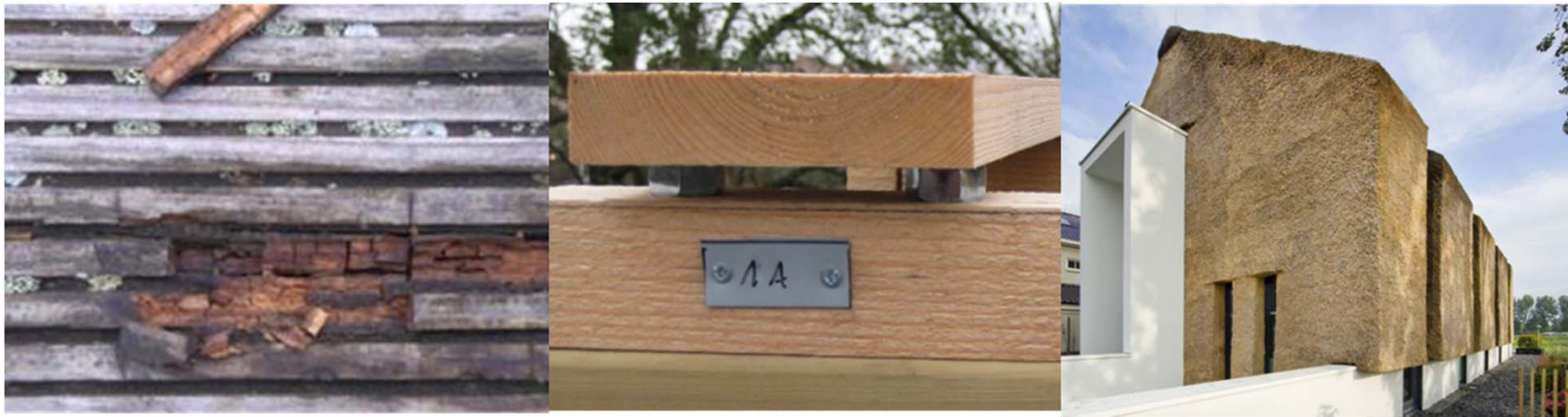


Ongoing R&D projects in COST member countries

January 2014



COST FP1303: Performance of bio-based building materials



Research groups participating in BioBased Performance materials

- SHR bv
- Technical University of Eindhoven
- Wageningen University and Research Centre
- Technical University of Delft
- TNO

Netherlands

Research institute/uni/company

January 2014



SHR b.v.

Wood and Biobased materials for building products

- **Material and product testing**
- **Natural Fibre and natural resin Composites** – for building and interior applications
- **Wood polymer composites**
- **Bio-based coatings and binders**
- **Wood modification**
- **LCA**

Technical University of Eindhoven

- **Woodstructures**
- **Structural design**
- **Building physics**



COST FP1303: Performance of bio-based building materials

Netherlands

Research institute/uni/company

January 2014



Wageningen University and Research Center
Bio-based materials/natural fibers

- **Biobased materials and green chemistry**
- **Natural Fibre Composites** (*extrusion compounding production technology*)
- **Bio-based coatings and binders** (*e.g. lignin based adhesives*)

Delft Technical University

- **Bio-fibres in structural inorganic building materials as improvement of durability** (*e.g. wood fibres in concrete and asphalt*)
- **Service life testing and prediction** (*time dependent mechanical testing*)



COST FP1303: Performance of bio-based building materials



Related Industry *(some examples)*

- **Known wood industry an wood modification**
(several thermal wood treatment plants, Accoya, Nobelwood Foreco, ...)
- **NPSP Composites** *(natural fibers with synthetic and bio-based resins)*
- **Trespa** *(paper-phenol formaldehyde composites)*
- **DSM** *(bio-based resins)*
- **Purac**, *(bio-plastics, PLA,)*
- **Synbra**, *(bio-foam insulation, PLA)*
- *Many more.....*

Natural Fiber Composites Design - platform

- **Product design network group for natural fiber composites**



Specialist equipment

January 2014

INSTITUTE	Properties						Environmental				
	Natural Durability	Moisture / sorption studies	Resistance to mould	Fire resistance / reaction to fire	Insect /termites / pests	Dimensional stability	Life Cycle Assessments	Whole Life evaluations	Product accreditation	Emission testing	Environmental Product Declaration (EPD)
SHR	x	x	x			x	x		x	x	x
TNO							x	x			x
WUR	x	x				x		x			
Efectis				x							
TUD		x				x	x	x		x	



Specialist equipment

January 2014

	Laboratory tests						Field tests				
INSTITUTE	Natural Durability	Mould resistance	Insect /termite testing	Leaching / weathering	Sorption studies	Dimensional stability	In ground contact tests	Out of ground contact tests	Natural weathering	Surface performance / coatings	Moisture data logging
SHR	x	x		x	x	x	x	x	x	x	x
TNO										x	x
WUR	x			x	x	x				x	x
Efectis											
TUD				x	x	x			x		x