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**Promoting safe and extended use of  
wood products in health buildings  
through development of antimicrobial  
surfaces, hygiene concepts, and  
guidelines - WOODforHEALTH**

<https://www.woodforhealth.eu/about/>

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**Wood** *for*  
**Health**



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## Project partners

1. University of Oulu, Finland
2. White Arkitekter, Sweden
3. Fraunhofer Institute for Wood Research, Germany
4. NTI, Norwegian Institute of Wood Technology
5. Latvian State Institute for Wood Chemistry
6. Auro Pflanzenchemie AG, Germany
7. Iecavnieks&Co, Latvia

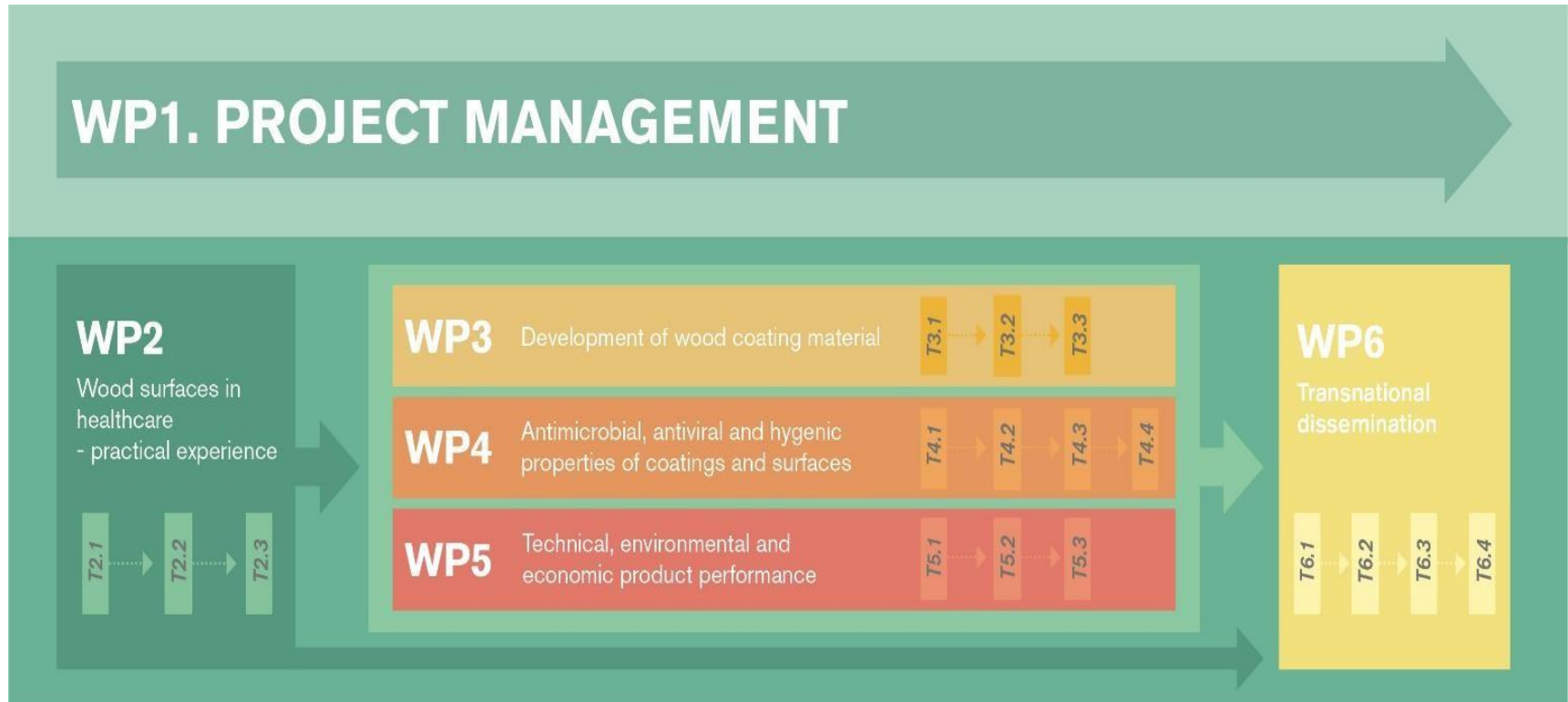
Project runs 36 months  
from 1.2.2022 to spring 2025  
Budget 1 318 076 €



# Introduction

- Wood has been experiencing a recent renaissance as construction material mainly due to its environmental assets.
- However, wood has the reputation of being prone to contamination and difficult to clean, which has limited its use in hospitals, healthcare units and other facilities with high demands towards surface hygiene.
- This is unfortunate since wood greatly aids the indoor environment quality (IEQ) and can be utilized to reduce energy use for heating and/or ventilation.
- WOODforHEALTH will promote safe and increased use of wood products through the development of antimicrobial surfaces, hygiene concepts and by providing the first extensive guideline for use of wood in healthcare buildings.

## Approach





## Approach

### WP2

Wood surfaces in  
healthcare  
- practical experience



WOOD for HEALTH will use a fictional re-design of Queen Silvia Children's Hospital in Gothenburg as a point of departure for the experimental development.

The hospital was designed by White Arkitekter and has an unusual quantity of exposed wood in the interior.

Good practices of using wood in health care buildings are collected in all partner countries.



## Approach



- Three coating approaches are employed at different TRL levels.
- Non-film-forming and film-forming coating systems, new binders by synthesis of non-leaching functional groups to the polymer, natural polymers with antimicrobial effect.
- Uncoated and coated surfaces are holistically characterized for their technical, environmental, and economic performance.
- Hygiene, mechanical and chemical resistance, photostability, flammability and water vapor damp diffusability

## Approach

### WP6

Transnational  
dissemination

T6.1

T6.2

T6.3

T6.4

WOODforHEALTH will provide the first extensive guideline for use of wood in healthcare buildings.

A wide range of other dissemination activities will communicate the project results to stakeholders and the scientific community throughout Europe.







With funding from



## Impacts

- The highest potential in immediate future in wood construction is in public building
- For health care building, wood would have natural benefits
- Currently, use of wood in health care buildings is in much lower level than e.g. in schools and kindergartens.

## The value of scientific cooperation

With support from



by decision of the German Bundestag



Latvian Council of Science

WOODforHEALTH brings together expertise in architecture, wood chemistry & technology, polymer chemistry, microbiology, measurement technology and coating development.

- In particular, collection of good practices and creating a guide applicable in many European countries would not be possible without transnational network.



## Thank you!

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# ForestValue

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