



# Wood it be possible: constructing sustainable timber-framed houses in the Netherlands

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## Building Materials

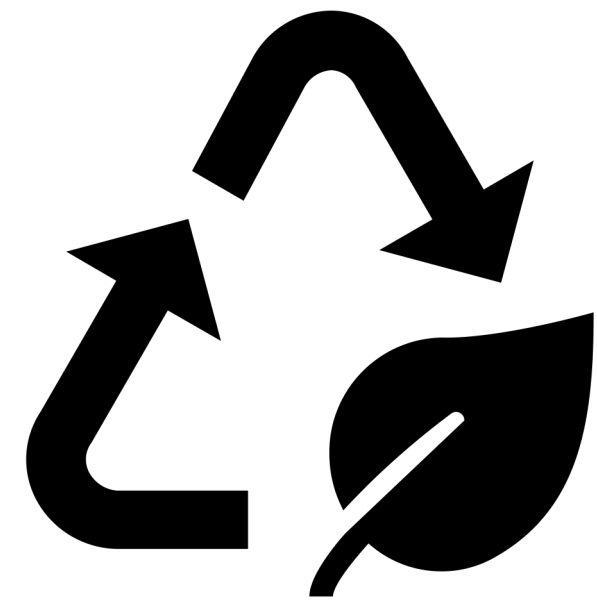
Wood as building material

### What are you exploring? With what objective?

We aim to **identify the underlying structural barriers in wooden house construction in the Netherlands** that stand in the way of realizing the Dutch government's circular and sustainable housing expansion goal.



900.000 houses in 2030



circular and sustainable

### Why is this interesting scientifically?

Our research focusses on the sociology of, as well as on the economic perspectives behind, the sustainable transition towards building with wood. This transdisciplinary research aims to examine **existing barriers** and provide **potential solutions** to advance the housing debate in the Netherlands, paying particular attention to the sustainability and circular dimensions of the discussion.

### How is this relevant to the materials transition?

Wood is an important alternative for construction, it captures CO<sub>2</sub> and can readily be reused. However, the current construction industry appears to be resistant to the use of wood as a primary building material. Understanding how to overcome the barriers in building with wood could also pave the way for other biobased building materials in the construction sector.



Bouwbedrijf De Vree & Slieden B.V. – Tiel, 2023

From concrete to wood  
Concrete ca **160 kg** CO<sub>2</sub> emission per m<sup>3</sup>  
(Betonhuis, 2018)

Cross laminated timber emission ca 150 kg CO<sub>2</sub>  
but wood captures ca 1000kg CO<sub>2</sub>  
Nett ca **-850 kg** CO<sub>2</sub> per m<sup>3</sup>  
(Lught, 2020)



Koen verheijden, 2021

### What are the key activities or steps?

- **Literature and policy document review** on wooden house construction to find instrumental barriers / non-instrumental barriers within institutions, policy, supply, and culture
- **Interviews with stakeholders** to validate or expand on the range of barriers found in the literature and policy documents

### Sneak preview results barriers

Knowledge	Supply	Policy	Cultural
Lack of knowledge on building with wood	Not enough wood in the right conditions to fulfil demand for example cross laminated timber	Not all provinces allow wooden houses because of the welfare note (welstandsnota)	People don't like trees to be cut People think wood is not durable

### Key deliverable

We aim to **publish** our results within the **journal 'Economisch Statistische Berichten'**. We think this journal fits our research since it adds to the relevant economic and policy debate regarding the housing crisis in the Netherlands. We want to map the structural underlying barriers that prevent achieving the government's goals of building houses in a circular and sustainable manner.

### On what issues would you like to get input from others?

- What barriers do we face as researchers at WUR to work on transitions towards biobased materials?
- We want to focus not only on production but especially on consumer behaviour, policy and the whole value chain. Is this something you also consider in your projects?

