

# LUNCH & LEARN

## BIOBASED vs. CONVENTIONAL CONSTRUCTION

December 14, 2023

WELCOME!

WE WILL START AT 12:15H



# LUNCH & LEARN

## Program

12:15h: Introduction by Jack Doomernik, professor Smart Energy – MNEXT

12:20h: Presentation Annine Rozema, researcher Biobased Bouwen – MNEXT

12:50h: Questions/discussion

13:00h: Closure

- Please ask your questions via the chat
- Presentation slides will be shared afterwards
- This Lunch & Learn will be recorded

# Biobased vs. Conventional Construction

Ir. Annine Rozema

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MNEXT biobased construction

# RESEARCH GROUPS MNEXT

*Centre of Expertise for Materials- and Energytransition*

## ENERGY

## MATERIALS

RENEWABLE  
ENERGY  
CARRIERS



SMART  
ENERGY



BIOBASED  
RESOURCES &  
ENERGY



BIOBASED  
TRANSITIONS



BIOBASED  
BUILDING  
BLOCKS &  
PRODUCTS



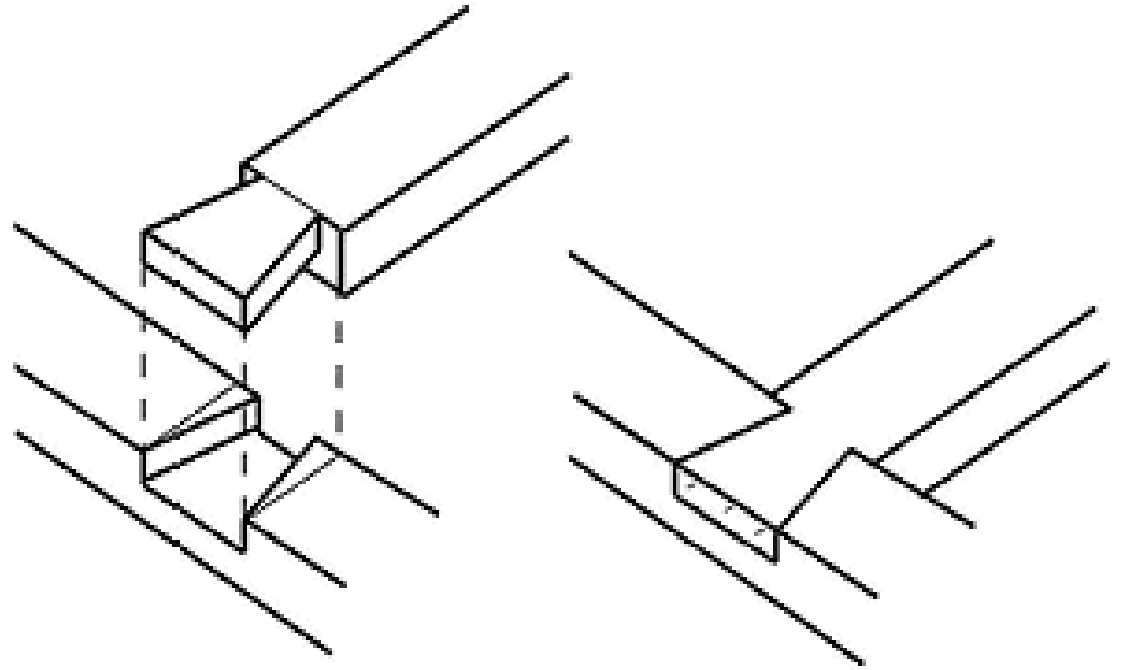
BIOBASED  
CONSTRUCTION



MARINE  
BIOBASED  
CHEMISTRY

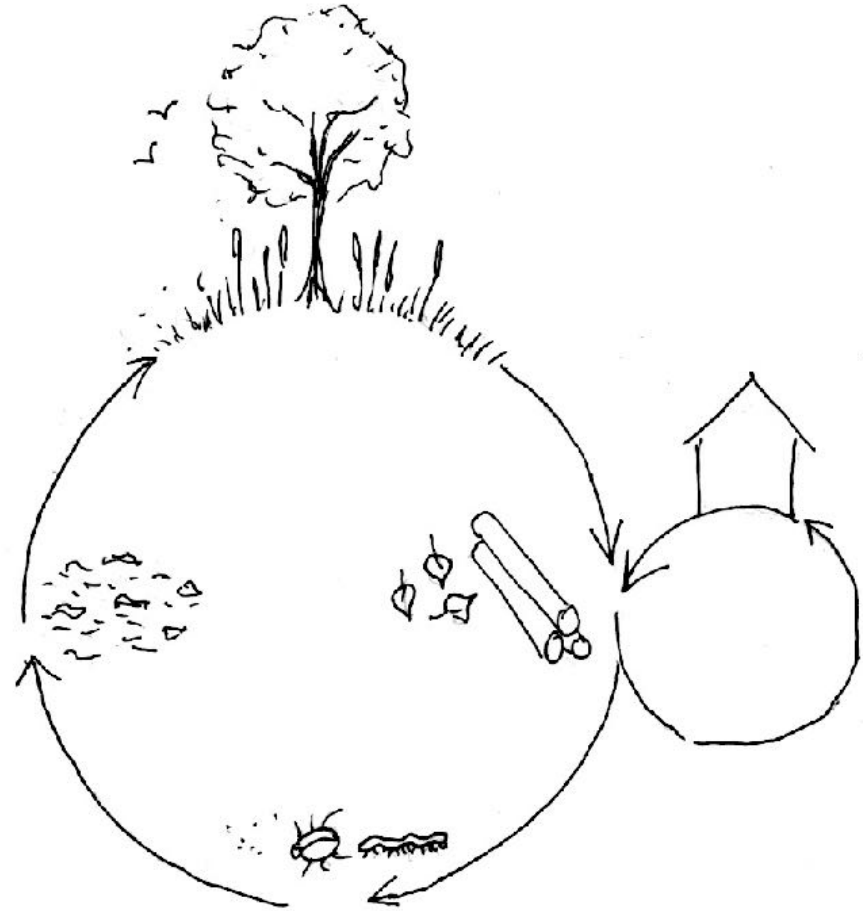






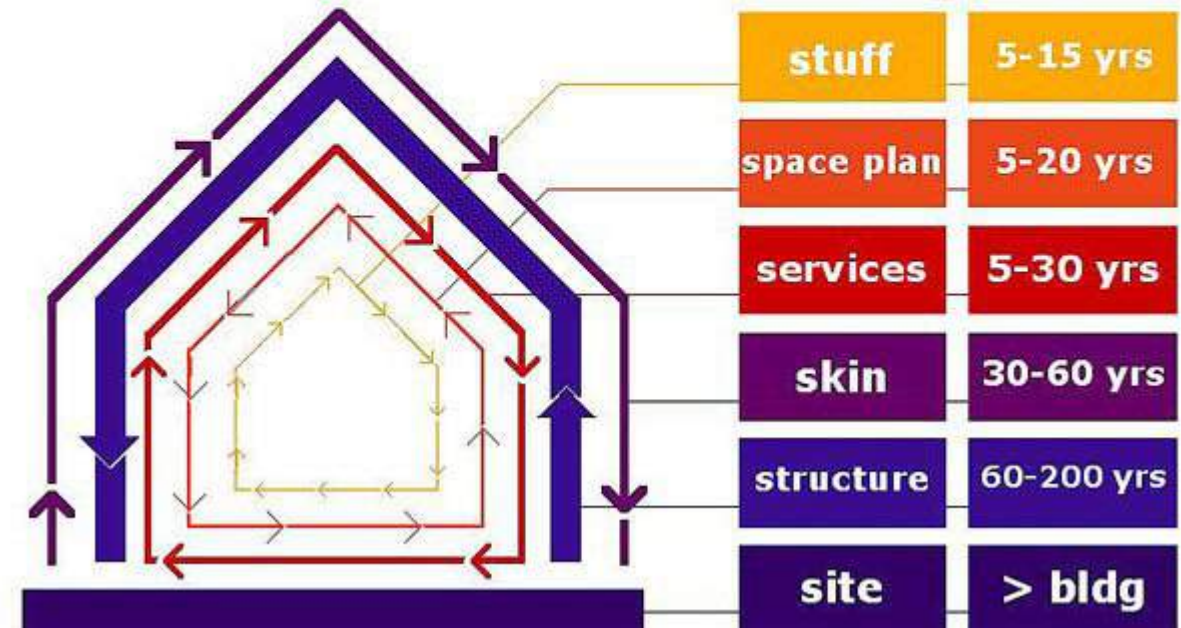
# Biobased construction

- Rapid renewable materials



# Biobased construction

- Rapid renewable materials









Source: Rijksmonumenten

# Characteristics



**WEIGHT**



**WATER VAPOR  
RESISTANCE**



**LIFESPAN**



**FIRE SAFETY**



**PERFORMANCE**



## Rapid renewable materials are lighter

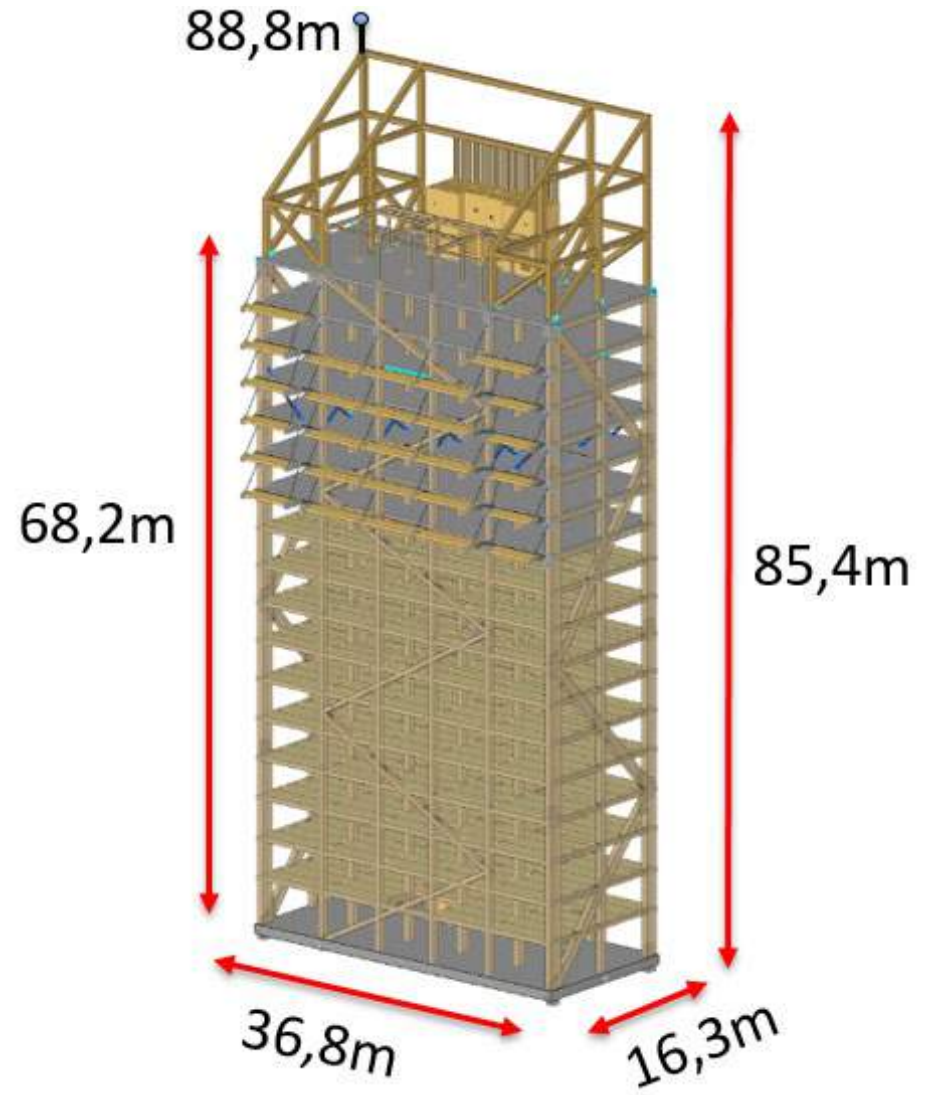
- Easier to handle
- Building on existing foundations
- High-rise building



## Rapid renewable materials are lighter

- Easier to handle
- Building on existing foundations
- High-rise building

# Mjøstårnet – Noorwegen



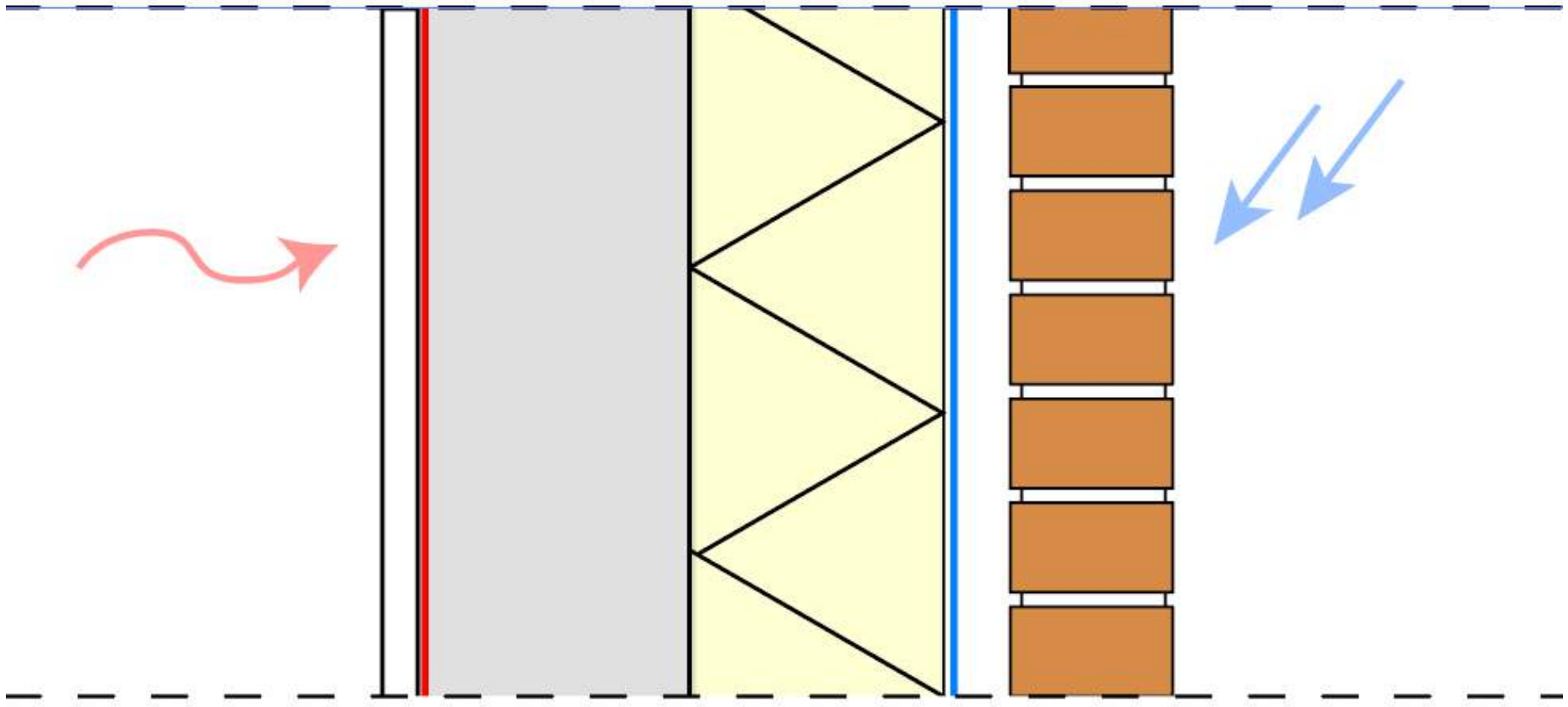
# Sawa - Rotterdam



## Rapid renewable materials have lower water vapor resistance

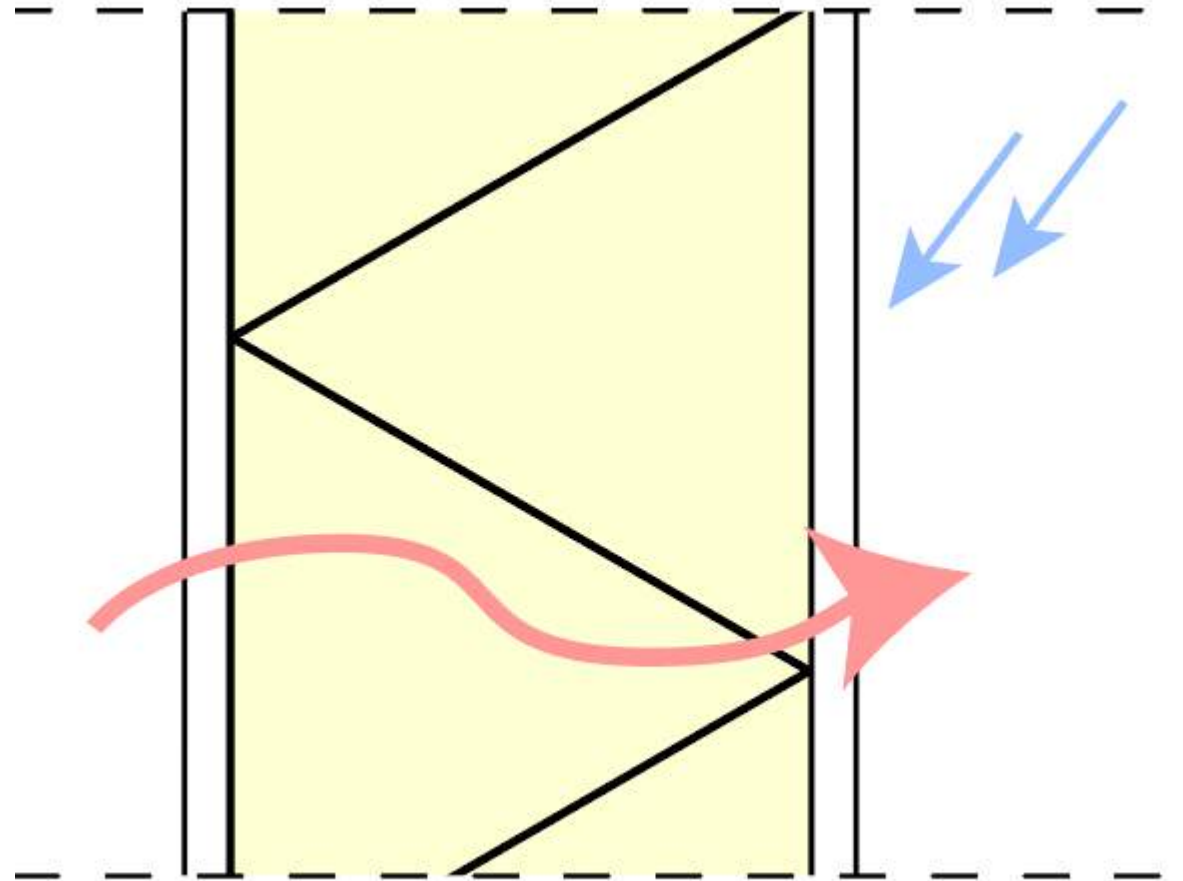
- Water vapor permeability is an important characteristic







- Water vapor open
- Capillary active





# Characteristics



**WEIGHT**



**WATER VAPOR  
RESISTANCE**



**LIFESPAN**



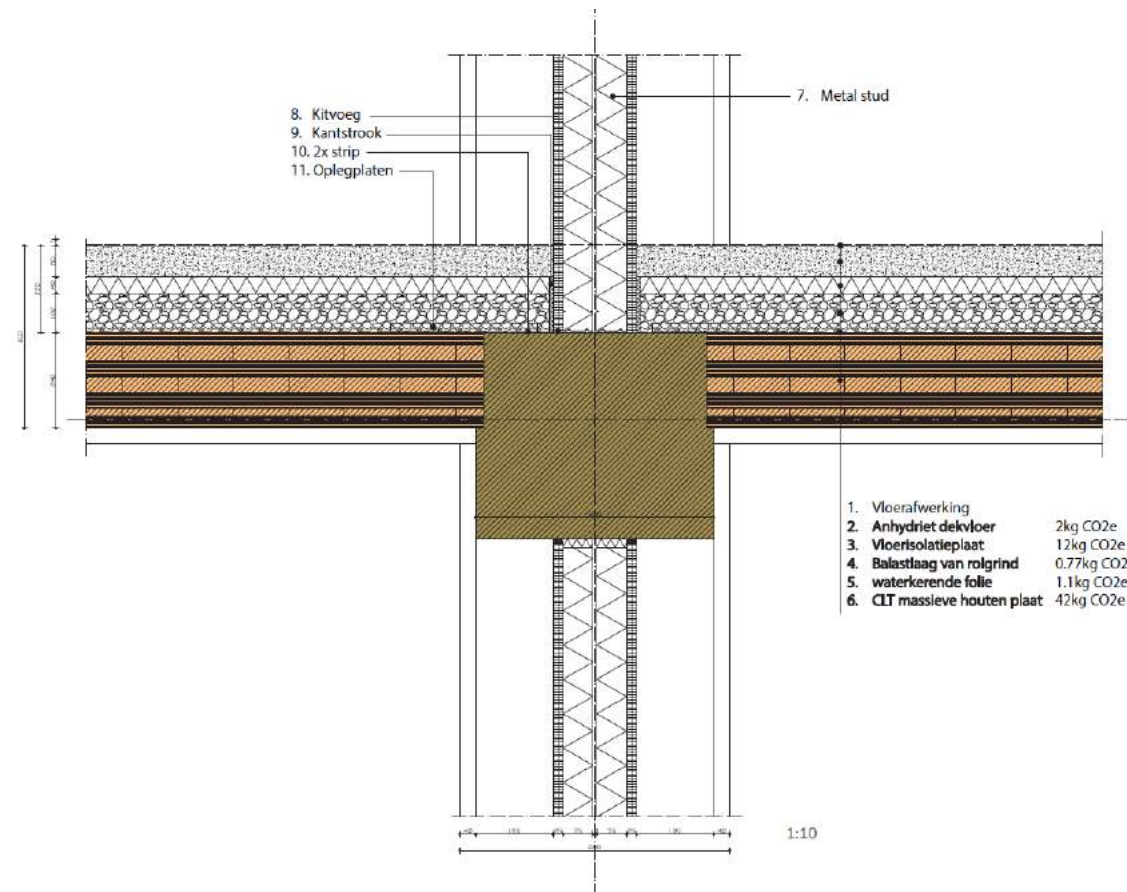
**FIRE SAFETY**



**PERFORMANCE**

# Biobased construction research

- Developing materials
- Testing materials
- Implementing materials



# More information?

Ir. Annine Rozema

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MNEXT biobased construction

# LUNCH & LEARN

## NEXT LUNCH & LEARN

Biobased Transitions: Scale now!

Martijn Zieverink,

Professor Biobased Transitions MNEXT

Thursday February 29, 12:15h

Register  
now



<https://www.mnext.nl/agenda/lunch-learn-biobased-transitions-scale-now/>