

# MARKET OF WOODEN APARTMENT BUILDINGS



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# Terms

- ✓ Multi-Residential Timber Framed Construction (MRTFC)
- ✓ Wooden Multistorey Construction (WMC)
- ✓ Multi-storey Timber Buildings
- ✓ Multi-storey Housing
- ✓ Wooden Apartment Buildings
- ✓ Housing Complex with Wood and Wood-based Materials
- ✓ Wood-based Apartment Blocks



# The objective

- ✓ to improve the understanding of consumer perceptions of Wooden Apartment Buildings
- +
- ✓ pilot survey among Slovak respondents
- ✓ focused on preferences when choosing new home





# The issue



Timber construction system - well known in the case of residential houses

BUT

dramatically rarely, wooden products are used in the construction of multi-apartment buildings

# The issue

The key barrier of the wooden housing development:

“the lack of a shared vision for Wooden Multistorey Construction (WMC)”

Viholainen et al., (2021) identified the following barriers:

- “urgency and lack of time due to several overlapping projects”
- “lack of communication within sub-groups”
- “lack of shared understanding on sustainability aspects of material between business and end-users”



# Studies ON WOODEN CONSTRUCTIONS IN GENERAL

Viholainen et al. (2020) - the citizens' views in 7 European countries. They are most often concerned about:

- the suitability of wood as a construction material in humid climate (UK)
- the strong tradition of building with wood and the availability of domestic raw material (Finland, Norway, and Sweden)
- responsible forest management practices as a prerequisite for accepting wood as a construction material (Austria, Denmark, Germany, and the UK)

Lähtinen et al. (2019) in Finland

- two main consumer categories: the ones favouring ecological and physio-technological benefits of wood and the ones favouring aesthetic and well-being benefits of wood



# Studies ON WOODEN CONSTRUCTIONS IN GENERAL

Marfella and Winson-Geideman (2021) - perceptions of Australian stakeholders towards Engineered Wood Systems (EWS):

- The demand for timber in multi-storey projects has promising prospects of growth, but faces circumstantial industry-wide hurdles in the short to medium term
- The pathway: to grow beyond mere promotional strategies of its benefits, seeking to expand technical knowledge through education – to reach other groups of stakeholders



# Studies ON WOODEN APARTMENT BUILDINGS

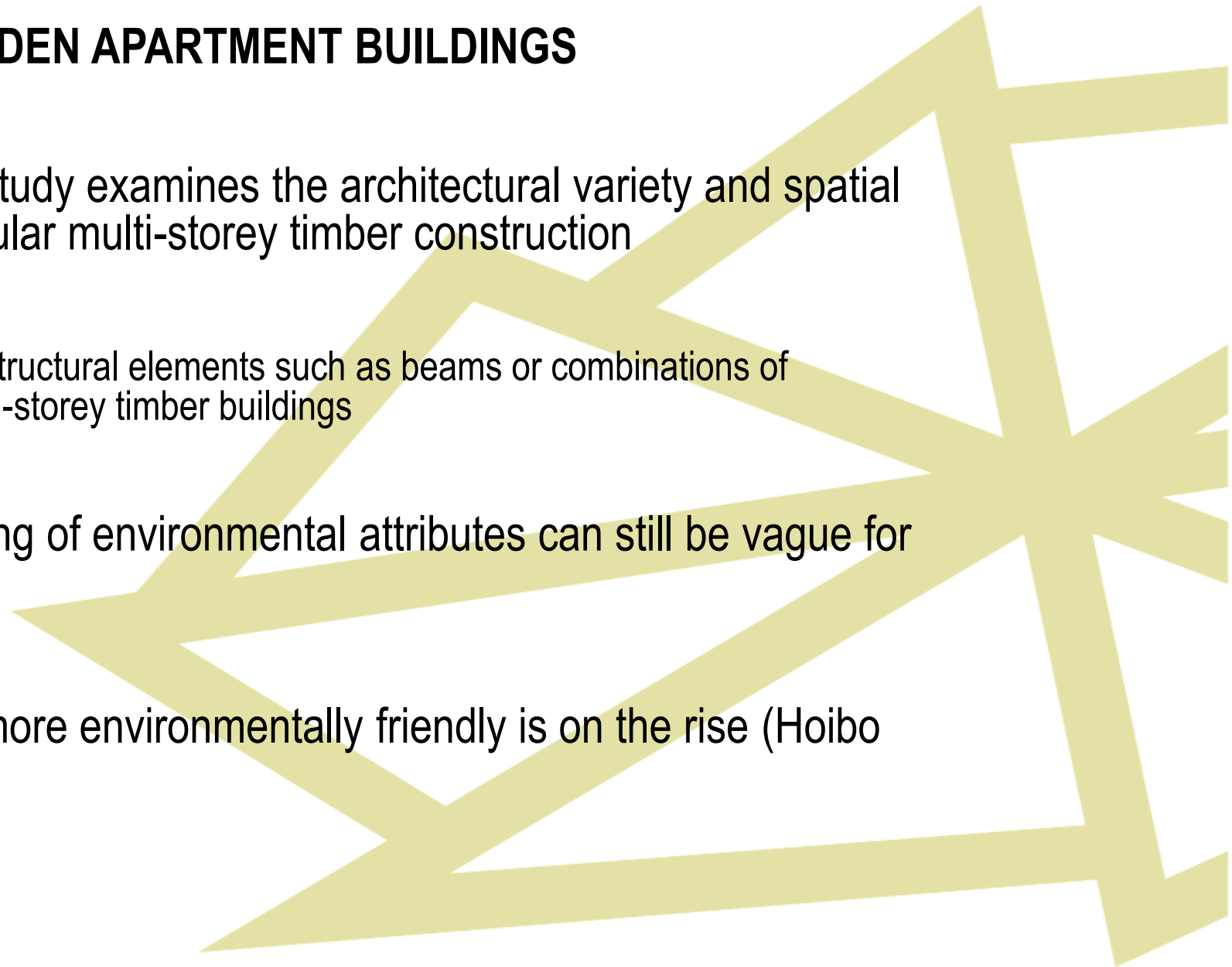
Svatoš-Ražnjević et al. (2022) – the study examines the architectural variety and spatial possibilities in current serial and modular multi-storey timber construction

- It's not just a matter of wood
- Steel and concrete, as well as additional structural elements such as beams or combinations of structural systems, are present in the multi-storey timber buildings

Toivonen (2012): The practical meaning of environmental attributes can still be vague for most consumers

but

a new generation that is considered more environmentally friendly is on the rise (Hoibo et al., 2015; Karjalainen, 2021)





# Studies ON WOODEN APARTMENT BUILDINGS



Hoibo et al. (2015):

„the younger ones prefer wood, including some applications in apartment blocks where wood is currently not commonly used“

So, younger people with strong environmental values = the best target for increasing wood-based urban housing

Nyttel (2022):

- young (Swedish) consumer perceptions of Wooden Multistorey Construction (WMC)
- no matter of construction material
- location and price were of greater importance + values of well-being, safety and freedom
- aesthetic appeal of WMC-apartments was mainly perceived

# THE SLOVAK SURVEY on living in apartment buildings

Most preferred construction materials: brick and concrete followed by wood and wood composites (higher preferences than the steel construction)

All respondents preferred the city (city centre or suburb) over the rural alternative. Because of:

i) availability and quality of infrastructure (hub of schools, medical care, and municipality services), ii) leisure opportunities, iii) work perspective and availability of jobs

The most frequent advantage of living in an apartment: "the apartment is less demanding (for maintenance and care) compared to the house,"



**Ďakujem za pozornosť**

