

# Low Carbon Construction – From Urban Planning to Building Design

## Final Words and Closing of the Webinar

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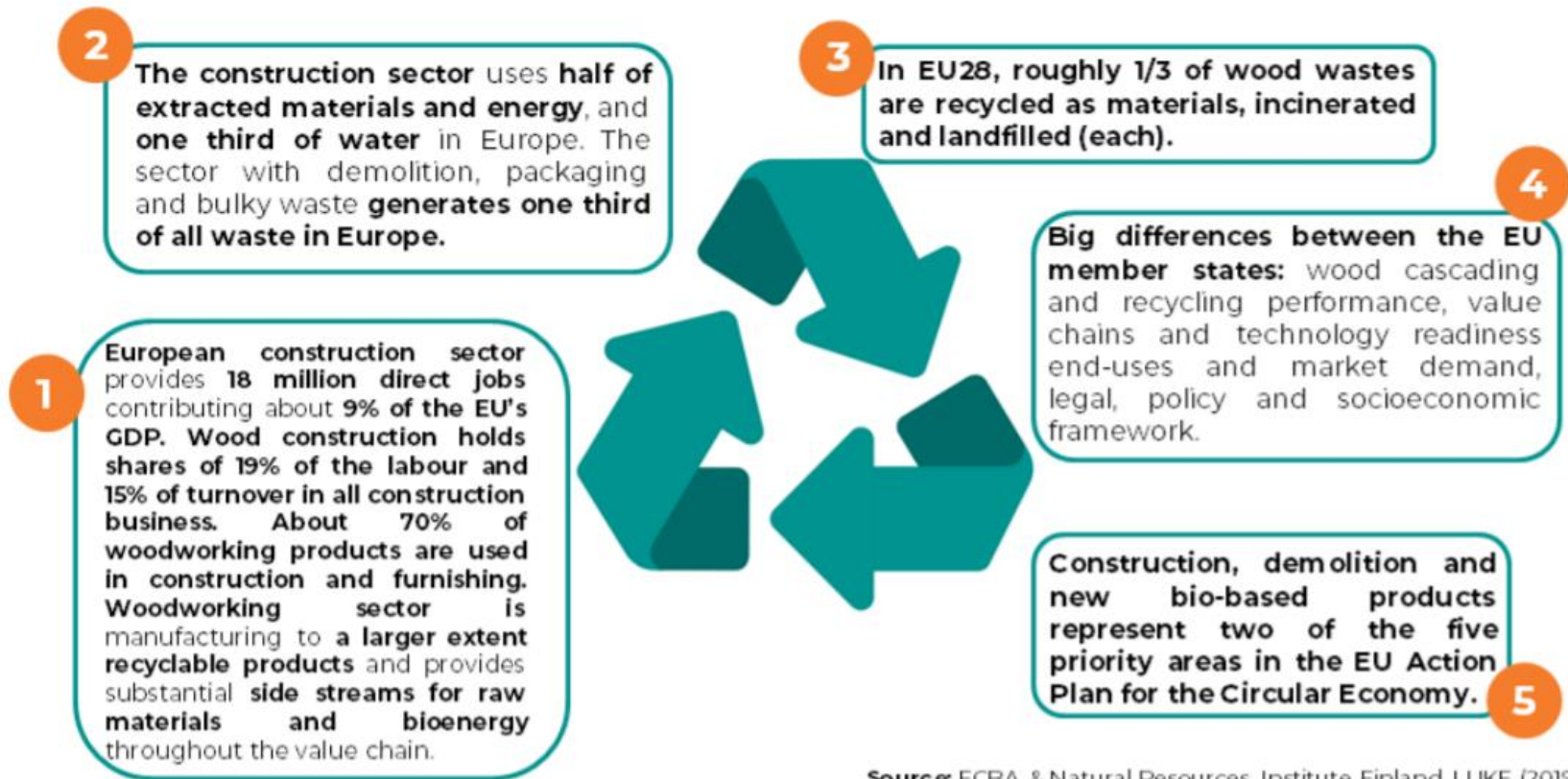
BASAJAUN – Building A SustainAble Joint between  
rurAl and UrbaN Areas Through Circular And  
Innovative Wood Construction Value Chains



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# Overall role of building with wood and wood products sector in European circular economy



Source: FCBA & Natural Resources Institute Finland LUKE (2019)



# Wood as construction material in circular economy approach

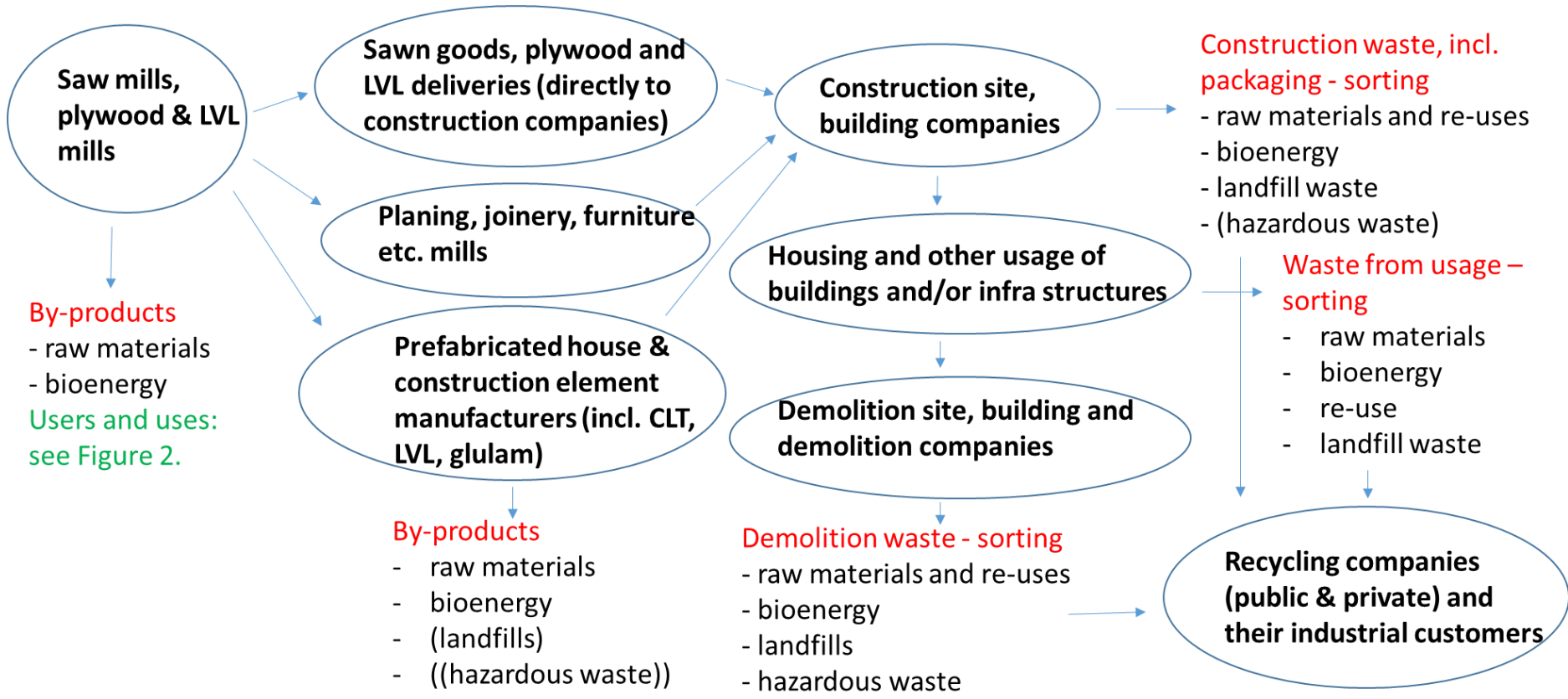
## Wood-based products are the only construction materials which

- are both renewable, largely recyclable and available for uses in industrial scale
- are manufactured with the energy obtained from their own residuals
- enable largely closed-loop and zero-waste manufacturing and utilization
- provide simultaneous weather protection, insulation and load carrier
- provide positive psycho-physiological and restorative effects and benefits for health and well-being for humans
- show objectively a transparent certificate of sustainable sourcing
- enable integrating urban development and vitality of rural regions in the sense of sustainable development and long life cycle
- help climate in three ways: wood growth of one cubic metre results in 0.8 t of carbon sequestration (CO<sub>2</sub>) and 0.7 t of oxygen release (O<sub>2</sub>), and the uses of the products result in long-term binding of carbon

Sources: Henrik Heräjärvi & Erkki Verkasalo, LUKE



# Wood construction driven side streams and cascading: build-up of value chains



Source: Erkki Verkasalo, LUKE & Giovanni Tosi, COSMOB (2019)



# Acknowledgements



Underpinning the vital role of the forest-based sector in the Circular Bio-Economy

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