



Partnership of European Regions on Energy Efficiency in Buildings

Interregional Pilot project Development and Interactive
Discussion for next year

**Tytti Ahoranta, Digiopolis
Bilbao, 28th november 2018**

1. What kind of issues and projects will be a priority for your entity in the next period?

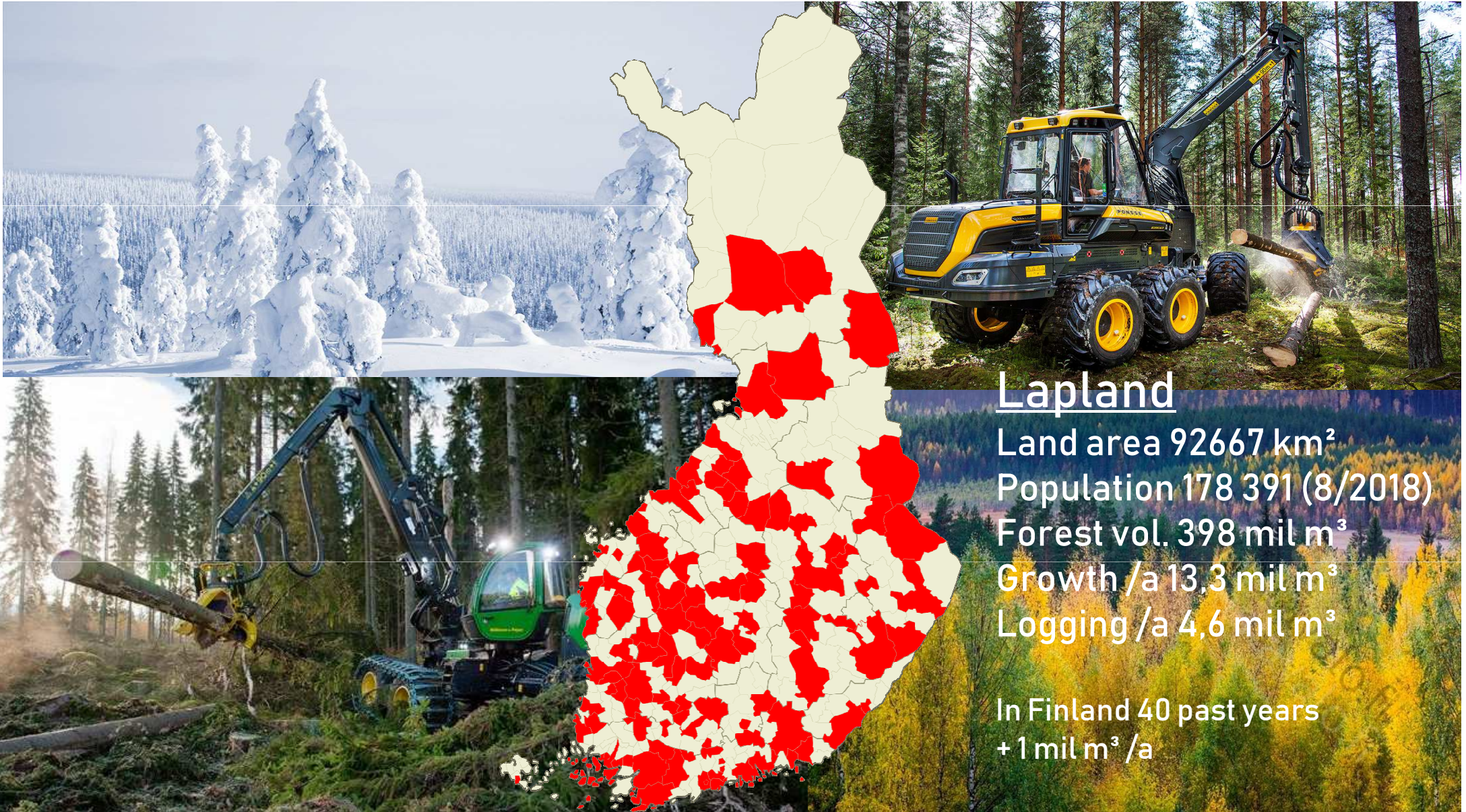
The issues are based on the target to cut down the greenhouse emissions in Finland by 2030 39% of 2005 level.

CIRCULAR ECONOMY

- The founders and core actors of the Centre For Circular Economy, established in Kemi, are Digipolis Oy, the City of Kemi and Lapland University of Applied Sciences.
- Funded by Finnish Innovation Fund Sitra
- The establishment of the Circular Economy Centre is a logical continuation of Kemin Digipolis Oy's work in promoting the circular economy
- It is possible for Finland to achieve a 60 % reduction in emissions by 2030 in accordance with the Paris Agreement.

TO USE MORE WOOD ESPECIALLY FOR BUILDING

- The Government of Finland: To advance wood building is national wide project
- It is the long-term theme of Digipolis Oy
- Only 6-7% of multi storey buildings are made of wood



Lapland

Land area 92667 km²
Population 178 391 (8/2018)
Forest vol. 398 mil m³
Growth /a 13,3 mil m³
Logging /a 4,6 mil m³

In Finland 40 past years
+ 1 mil m³ /a

Sustainable building solutions



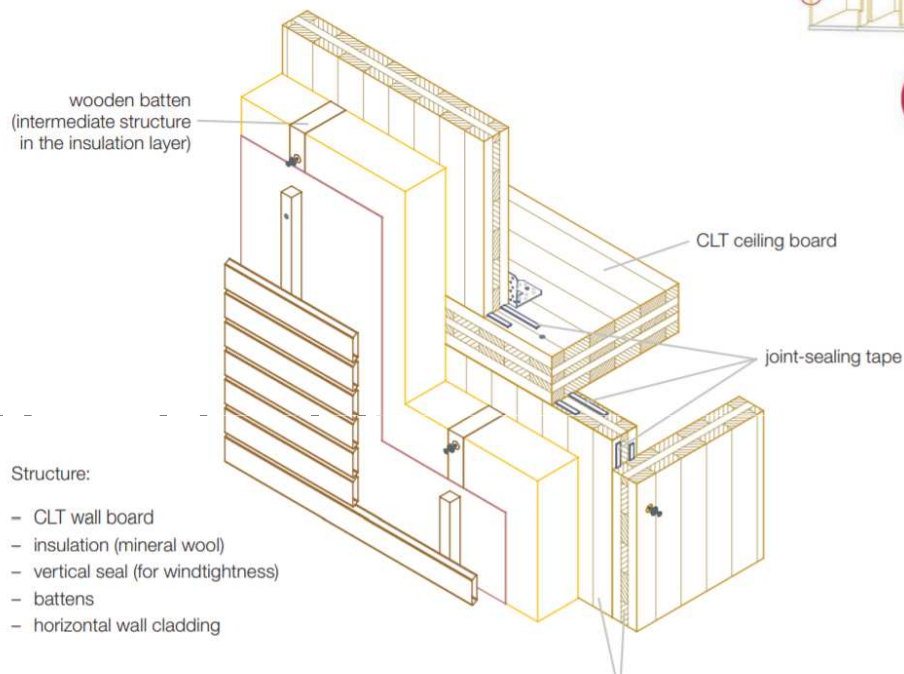
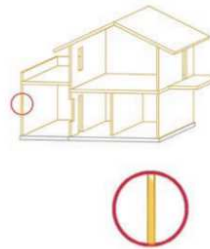
To advance use of wood in public buildings



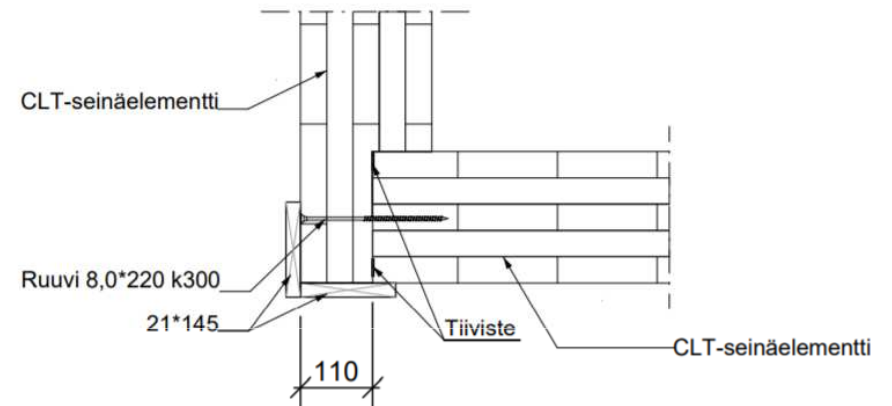
Suitable for solid or multi layer constructions

1 External wall

1.1 Insulation with mineral wool



CLT- ulkonurkka



CLT- sisänurkka

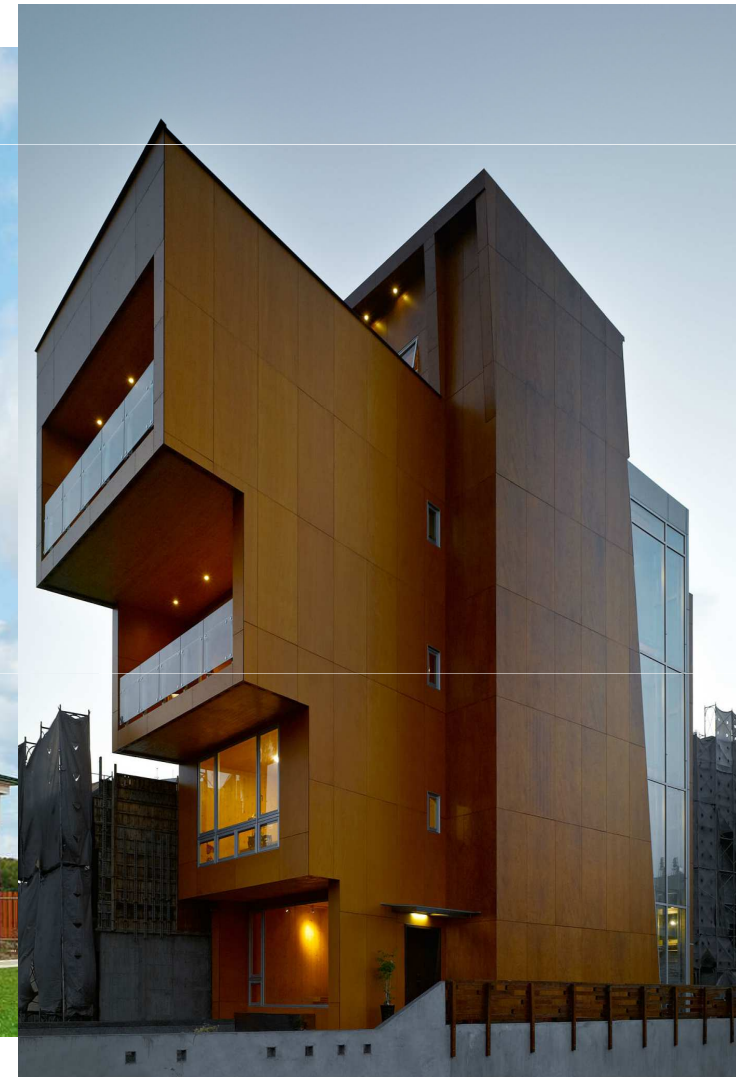
6 things you might not know about the oldest log cabin in the United States, N.J.'s Nothnagle Cabin



The Finnish-made log cabin, built between 1638 and 1643,

Nothnagle Log Cabin restoration in Gibbstown, Thursday, Oct. 23, 2014. Built in the mid-1600's the cabin is the oldest standing wooden structure in North America. (Joe Warner | South Jersey Times)

Capacity of wood as construction material



Energy efficiency

Wood store heat as moisture?



Folkhem, 2013

Strandparken Sundbyberg,
Stockholm

Calculated 75 kWh/m² /year

Real use 49 kWh/m² /year

2017 Moisture is **TROUBLE** in
building physics

Timber makes you feel good and helps you heal

Released in the lead up to World Wood Day on Saturday March 21, the 'Wood – Housing, Health, Humanity' report explored numerous studies analysing the health and well-being benefits of wooden interiors in homes, businesses, and places of learning and healing.



What kind of activities are of your interest within the partnership?

- To be able to advance the **DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL amending Directive 2010/31/EU on the energy performance of buildings** to put to practice
- To present the potential of wood as a sustainable and energy efficient building material with high performance capacity
- Find opportunities for companies to pilot sustainable and energy efficient structures and constructions with interregional co-operation
- To exchange knowledge and information as effectively as possible
- To carry out mutual demonstrations of sustainable building

Directive 2010/31/EU on the energy performance of buildings

Better performing buildings:

- Provide higher comfort levels wellbeing for their occupants.
- Improve health by reducing mortality and morbidity from a poor indoor climate.
- Adequately heated and ventilated dwellings alleviate negative health impacts caused by dampness, particularly amongst vulnerable groups such as children and the elderly and those with pre-existing illnesses.
- The energy performance of buildings also has a major impact on the affordability of housing and energy poverty.
- This proposal could contribute to taking out from energy poverty between 515 000 and 3.2 million households in the EU (from a total of 23.3 million households living in energy poverty - Eurostat).

4 What type of bottlenecks you encounter when developing an innovation project?

- International projects: To form the consortium and find the coordinator
- To find interested companies to get involved with the project
 - How to attract the companies participating the projects

What kind of support may be provided by the partnership when developing interregional innovation actions

- To play active role to point out and the potential issues to be developed in interregional innovation actions
- To transmit the latest news and becoming directives related to sustainable buildings
- To transmit the information of the seminars and conferences related to sustainable building
- To find the partners that are able for effective co-operate to carry out certain innovation actions
- To help to apply interregional projects

What kind of networking activities and services do you envisage within the partnership for next period?

- More possibilities to discuss about the potential topics of mutual development projects (Skype)



DIGIPOLIS

tytti.ahoranta@digipolis.fi
Tel +358 40 50422547

Name of the partner

New pilot project-idea

THEMES	Description
1. Reference theme	
2. Action line	
3. Name of offer of collaboration	
4. Entity that presents the offer	
5. Member of the Partnership that supports the offer	
Annex. Including data of the entity.	

THEMES	Description
1. SCOPE - Brief history of the project:	The scope of the project, briefly describing its main characteristics, the phase it is currently in and the opportunities for collaboration that it wants to take advantage of will be presented.
2. CURRENT MARKET AND POTENTIAL:	Description of the size and characteristics of the market associated with the products or services that are developed as object of the project, of its current state as well as the expected state.
3. ADDED VALUE SOUGHT BY THE COLLABORATION:	The added value of the products or services achieved as a result of the interregional collaborations (whether technological, social, regulatory, etc.) will be described in comparison to their current market situation.
4. ACTORS OF THE VALUE CHAIN:	The actors of the value chain required for the implementation of the collaborative project (design, manufacturers, distributors, execution of works, energy services, recycling, raw materials, etc.) will be defined.
5. REPLICABILITY:	It will be indicated if the solutions developed in the framework of the project could be implemented in other European regions.
6. OFFER OF REGIONAL SUPPORT (and in the case of their national or European entities):	The existing or foreseen regional, national or European support instruments in relation to the development of the collaboration project will be described.