



Karelia

KARELIA-AMMATTIKORKEAKOULU | KARELIA UNIVERSITY OF APPLIED SCIENCES

Matchmaking event for Russian/Nordic stakeholders in wood construction

Timo Pakarinen

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Karelia University of Applied Sciences

3

- Founded in 1992
- Located in Joensuu
- 7 fields of study (22 departments)
- Total number of students 3800
- 135 exchange students
- Number of graduates, about 750 per year
- Staff 300



Strategic choices

- Vitality to working life through competence
- Education-based immigration and internationalisation
- Sustainable well-being in a sparsely populated area!
- Intelligent production and services
- Carbon neutral solutions



Wood construction for Strategic focus area in Karelia UAS 2014

5

Why:

1. Long term work in the field
2. Obvious potential for region development
3. Good base knowledge in Karelia UAS in different departments
4. Requirements for sustainable construction material and recycling
5. Active discussion with companies in the field
6. Vision for the future

Development of timber construction cluster in region – Karelia UAS

2015

2017

2019

2021

Actions:

- Increase design knowledge (STR / ARC)
- Increase knowledge of construction contracting
- R&D laboratories development
- Pilot cases to region
- Product development for industrialize timber construction

Bino – Timber construction knowledge transfer

Bino – Investment to laboratory facilities(EAKR)

Wood Innovation Network (EAKR)

Actions:

- Development of value chains in timber construction
- Knowledge transfer related to construction site action and maintenance
- Digitalization in construction BIM etc.
- Export readiness
- Product development for industrialize timber construction

Solutions for industrialized construction

Digitalization in construction

Actions:

- Stabilization of value chains in timber construction
- Support for export activities
- Product development for industrialize timber construction

Timber products for export market?

Prowo



RESEARCH AND DEVELOPMENT

Current R&D-activities in wood construction

- Structural engineering: demanding wooden structures
- Construction physics: especially building acoustics
- Product development: CLT, LVL -applications
- Digitalisation in construction
- Low carbon construction



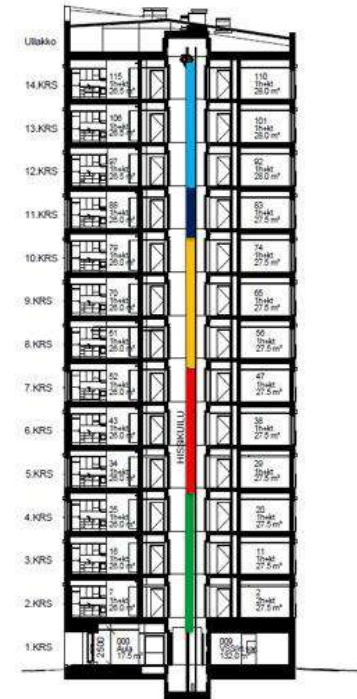
PARTNERS



Karjalaisen Kulttuurin
Edistämissäätiö
Est. 1950



Research activity in fields











Prowo

- Funding from Karelia CBC program
- Partners Karelia University of applied sciences, Petrozavodsk State University and Saint Petersburg State Forest Technical University
- Wood industry create great potential for competitive businesss in both side the border
- Importance in use of wood in construction is growing



Prowo

Micro project PROWO aims at three goals:

- 1) Identifying and analyzing in details the bottle-necks hindering the growth and full use of the potential of the wood construction business
- 2) Building the network of key players to develop the business
- 3) Building common understanding on how to solve the existing problems -> main development projects



Prowo

Activities:

- 1) Surveys in every three region
- 2) Analysing the results and make conclusion
- 3) Combining the main results from three areas
- 4) Formulate guidelines for next activities
- 5) Create network of those companies who are interested of cooperation



Key results (1/5)

- Lack of knowledge
 - Markets information
 - Building regulations
 - Designs codes
 - Market channels
 - Customer preferences
 - Key players
- > broad training program**



Key results (2/5)

- Cooperation in production
 - Knowledge in production technology
 - Good quality of raw material -> CLT, glulam, **logs**, prefabricated houses
 - Value added products
- > **Competitive wood product cluster**

Key results (3/5)

- Design codes
 - Building process is controlled in both countries
 - In Finland Eurocodes and Russia national regulations
 - Harmonization would help a lot
- > **Training and common workshops are needed**

Key results (4/5)

- Value added products
 - In construction a lot of different products are needed
 - Windows, stairs, doors, flooring material etc.
 - Most of those are made out of wood
 - Great potential for many companies for cooperation
- > **Need for active training and information for possibilities**

Key results (5/5)

- Business point of view
 - In Finnish point of views logistic works nicely
 - The business process like money transfer works nowadays nicely
 - In both counties was mentioned the importance of agents (middleman)
- > **Database for firms helping in start to business between Finland and Russia**



Timo Pakarinen
Karelia University of Applied Sciences
Karjalankatu 3, FI-80200 Joensuu