

- **Wooden construction in Estonia**
- *New technologies and methods for sustainable urban development in the Baltic Sea Region*



KESTI project presentation at café Klaus
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House of your dreams

Could it be something like that?

www.hobbiton.ee





The idea of wood

- **Not only for eyes!** (Pärnu... etc)
- **Not only for “warm” and “good” feeling!** (Kalamaja, Nõmme.. etc)

More important

- **Energy efficiency!**
- **Combines not produces Carbon dioxide- CO₂**
- **Is renewable resources** – and we do have it a lot!
- **Gives an opportunity to “pre-build” houses.**

➤ This is the reason why we should think of more building wood constructions

Estonian Woodhouse Association

... is founded in 1999 – by 17 entrepreneurs

... currently involves 35 companies

- 32 produceres
- 3 supportiv members

... represents 50% of the industry's total turnover and number of employees

... is the leading organization of Estonian Wooden Houses Cluster

... is a member of International Log Builders Association



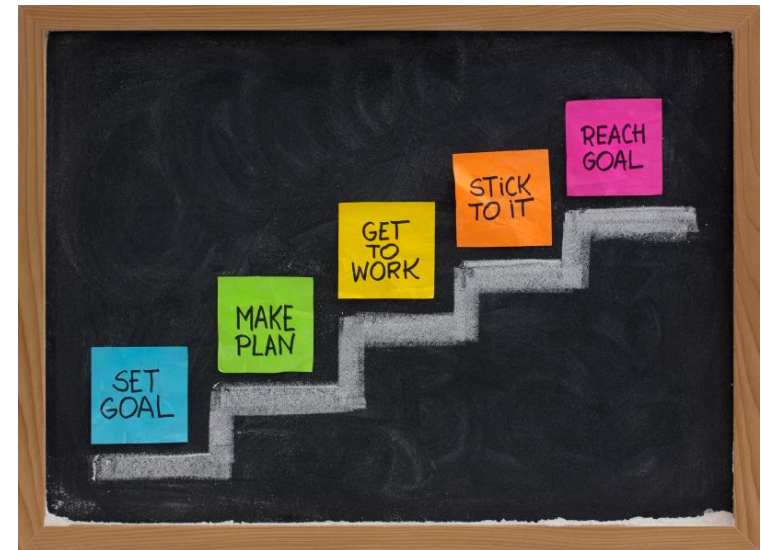


Estonian Woodhouse Association

- Joint marketing, **joint sales** and purchase
- Joint communication and reputation building
- General development activities
- Joint vocational activities
- **Information exchange** and lobbying

Cluster program main goals

- **To improve the international competitiveness**
- the increase of turnover
- the increase of export turnover
- the increase of profitability
- the increase of productivity
- the increase of added value
 - 2010 – 2015





How?!

- Development of Estonian Woodhouse Portal www.woodhouse.ee
- Systematical communicational activities and Estonian Wooden Houses newspaper once a year
- Competence building events for cluster members - seminars, conferences. workshops etc
- Different studies - Air-tightness and thermovisional studies, minimum requirements for log houses
- Juridical support for member
- Cooperation with educational institutions
- Study trips/trade fair visits to the priority markets

Estonian timber house industry

Long traditions

- timber frames have been used in Europe since the 11th century;
- timber buildings in Scandinavia date back to the 13th century;
- there are log houses older than 300 years present in Estonia;
- industrial production of timber houses in Estonia started in 1950's.



Products

- Timber frame houses
- Machined and handcrafted log homes
- Garden houses
- Architectural designing

www.puitmajaliit.ee



Planning

Old towns : A lot of historical housing estates: Tallinn, Pärnu, Haapsalu, Kurssaare, Tartu, Viljandi etc.

New building areas?

- Could be:



or:



- Take your time



Building of wood in Estonia

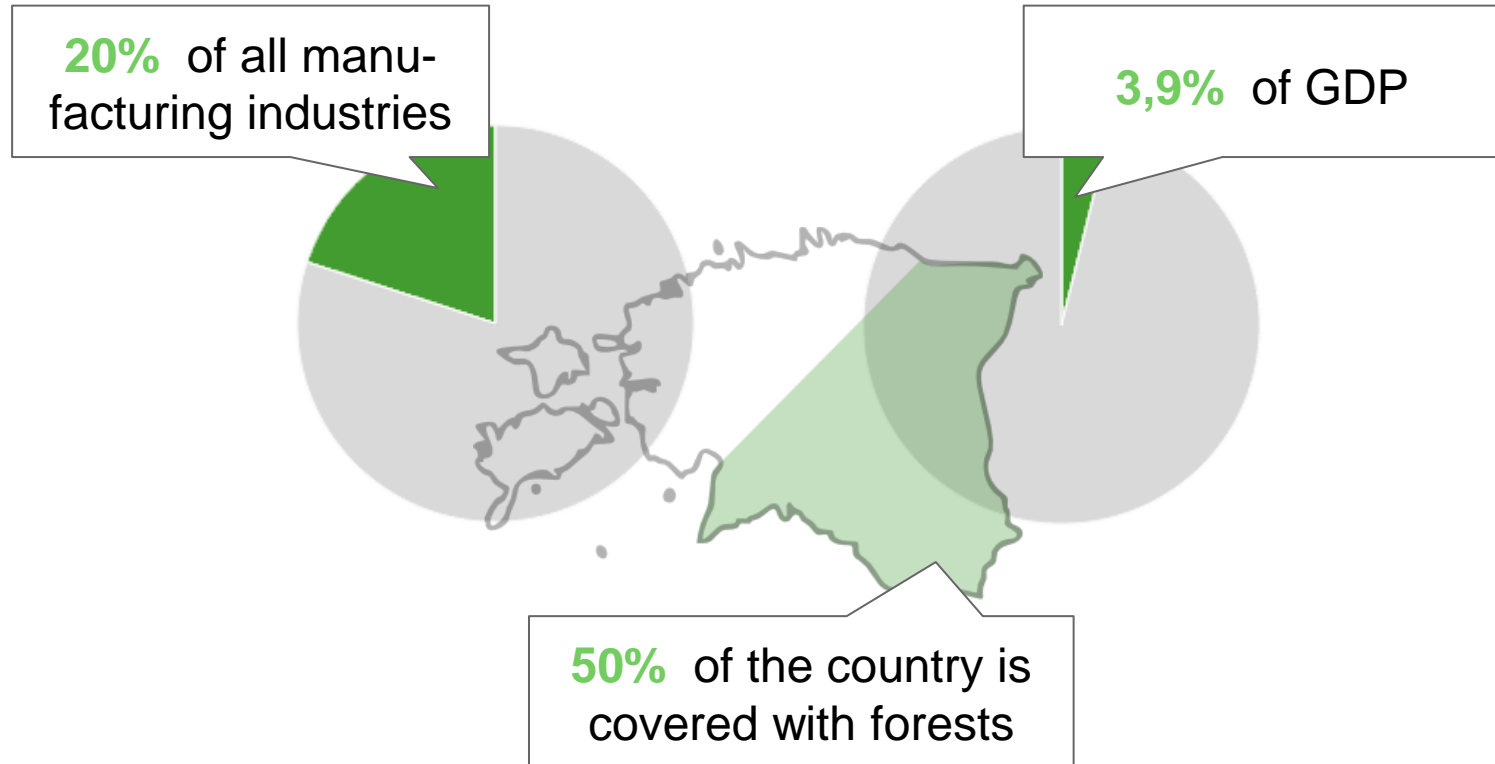
Governmental role:

- State has to develop to “Smart subscriber”
 - Public procurements
 - Wider understanding of wood
 - Wider understanding of energy efficiency

Fire regulations

- Higher than 2-storage buildings?

Estonian forestry and timber industry



Estonian timber house industry



Aprox. 2000 workers

140 producers

85% exported

total export in 2012: >200M€

i.e. 3% of global prefab house export

Estonian timber house industry

Challenges:

- Product development
- Production development
- Which product is needed?
- For who?
- How to sell with bigger profit?
- Input – energy, materials, salaries



New technologies and methods for sustainable urban development in the Baltic Sea Region

Factory house conception:

Prefab modules:

- Fast production and lower costs
- well-designed and tested structural and technical solution
- Flexible and easy to put up
- the production process in the factory is effective and easily controlled

New technologies and methods for sustainable urban development in the Baltic Sea Region

Nearly Zero house:

www.matek.ee

- Tallinn University of Technology
N-zero testhouse built by
Matek AS.



Smart house from Estonia?

www.passionhouses.com





Thank you!