

BUILDING OF WOODEN HOUSES

Building wooden houses offers future possibilities for the Bezhanitskiy Rayon. *Investments* and *expertise* are needed in order to utilize the wood as construction material to work in favor of climate change mitigation and local development.

Bezhanitskiy

Rayon:

- 353 528 ha
- Located in Western Russia
- 30% forests
- Population 14 462

Superiority of wood as building material:

- Renewability
- Carbon storage
- Availability, price and energy efficiency

Forestry	Processing	Transport	Building / maintenance	Recycling/disposal
Strengths				
2	Availability of wood			
3	Low energy Intensity			
2	Short distances			
2	Renewable, energy efficient			
2	Simple, light, cheap material			
3	Carbon storage			
1	Many reuse options			
Weaknesses				
1	Weak quality of wood			
3	Old technologies			
3	Absent processing plants			
1	1	1	1	1
1	Emissions to air			
1	Capacity of road network			
3	3	3	3	3
3	Lack of expertise			
2	Bureaucracy			
3	3	3	3	3
3	Low investment activity			
Opportunities				
3	Better growing options			
1	Export possibilities			
3	New technologies, innovations			
3	Clean technology for housing			
2	New regulations			
1	Eco-tourism			
2	3	2	2	2
2	Creation of jobs			
Threats				
1	Natural catastrophes			
1	Loss of biodiversity			
1	1	1	2	2
1	New regulations			
3	Outdated facilities & methods			
1	Road damage			
2	Exposure to climate change			
1	2	2	1	1
1	Energy price			

Table 1. SWOT for building wooden houses in Bezhanitskiy Rayon

Based on the analysis, climate change will increase the potential of using wood as a construction material in the area. Wood as a carbon storage material is crucial for climate change mitigation.

Building wooden houses in Bezhanitskiy Rayon also offers social and economic advantages such as local development, improvement of infrastructure and cost effectiveness of housing. Creating jobs can additionally increase the attractiveness of the entire area and turn around the declining population trend.

To ensure profitability, feasibility and sustainability of wooden houses, it is essential to attract investments and knowhow in all the life-cycle stages of wooden houses building.