



RENEWABLE AND SUSTAINABLE RESOURCES ARE THE FUTURE

WoodBio: Wood Biomass in the Nordic Bioeconomy

Wood is considered to be one of the most common raw materials used by the Nordic countries. Forest products play an important role for the realization of the bioeconomy concept; they are renewable, ecologically friendly and can be recycled. This project aims to highlight the role of forestry in the Nordic bioeconomy with emphasis on wood biomass as raw material. The wood biomass can be used for generating heat and electricity, producing biofuels and making bio-chemicals.

Ongoing tree breeding programs in WoodBio have resulted in more resistant and highly productive trees adapted for Nordic conditions. These trees enable creation of dedicated forest plantations for wood biomass production that can replace fossil carbon products.

The Nordic pellet market is small but increasing. Pellets replace heating oil and coal. Despite large forest reserves and relatively high level of wood pellets production in the Nordic countries, in the coming future import of pellets is needed to meet bioenergy targets.

EXAMPLES OF FUTURE PRODUCTS FROM FORESTRY RELATED INDUSTRIES:

Short-to-medium term:

- Use of charcoal instead of coke in smelting processes
- Fiber-based building products, such as insulation and fiber based construction boards
- Retrofit paper machinery to other qualities
- Packaging, especially niche products
- Packaging for fresh fish transportation
- Viscose (limited possibilities for Nordic industries)
- Soil improvement

Medium-to-long term:

- Chemicals for petroleum industry
- Fish and farm animal feed
- Microfibrillated cellulose, nanocellulose
- Wood fiber composites
- Wood-based plastics and chemicals
- Aromatics (e.g. Vanillin (Borregaard))

For more information please visit: woodbio.com

**Contact information:**

Dr. Ólafur Eggertsson, senior researcher
Icelandic Forest Service, Mógilsá
116 Reykjavik, Iceland
Tel: +354-4702091
Mobile: +354-6904724
E-mail: olie@skogur.is

Project partners:**Iceland:**

Ólafur Eggertsson (IFS) Project manager
Aðalsteinn Sigurgeirsson (IFS)
Halldór Sverrisson (IFS)
Þorbergur H. Jónsson (IFS)

Denmark:

Palle Madsen (KU)
Anders Tærø Nielsen (KU) PhD-student

Finland:

Maarit Kallio (The Natural Resources Institute Finland (Luke))
Jyrki Hytönen (The Natural Resources Institute Finland (Luke))

Norway:

Judit Sandquist (SINTEF)
Hrefna Jóhannesdóttir (Energigarden)

Sweden:

Almir Karacic (SLU)
Anneli Adler (Swetree)

For more information please visit: woodbio.com