



Visit to Finland

SEEING IS BELIEVING

BioHub arranged a terminal visit 26.-27.9.2017 to Finnish and Swedish terminal operators, the most important target group of the project. Magnus Matisons who has been building the cross-border terminal network, says about the visit:



"We believe that seeing is believing and that new ideas can be implemented because of the study visit. We also believe that after a personal meeting, terminal owners can continue interaction in a terminal network for a long time to come. In spring, we will bring the Finnish terminal stakeholders for a study tour to Sweden."



VISITS TO FINNISH TERMINALS

PK Bioenergi Ab, Pedersöre

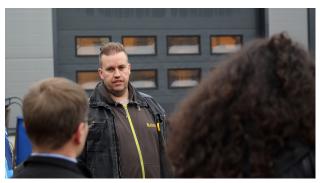
PK Bioenergi is a privately owned "traditional" terminal that delivers wood chips to small heating plants. At the moment, the terminal is using up to 20 000 solid m³ wood per year. From their point of view, the most important thing is to try to avoid material losses and consider the terminal design.

Alholmens kraft Ab, Pietarsaari

Alholmens Kraft Ab is the largest bio-fuelled power plant in the world, and they have a good example of an industrial terminal. Their typical annual consumption of fuels is 2-4.8 TWh and at the moment they are using 50-60 % biofuels, 20-30 % peat, 10-20 % coal and 7 % household waste. Read more: www.alholmenskraft.com

Bio West Ab, Närpiö

Bio West is an independent terminal and a good example of expanding business from forest biomass to other materials such as re-cycling of plastic and other wastes. In addition to traditional terminal operations, Bio West can provide transportation services to their customers.



Workshop: From forest terminals to biohubs



Project leader Juha Nurmi is interviewed by Vasabladet.

The terminal visit ended with a cross-border workshop. The project manager, Juha Nurmi from Luke, welcomed everyone and talked about why we need the BioHubproject and also about the astonishing number of biorefinery plans in Finland.

Magnus Matisons talked about Swedish bioeconomy and gave some snapshots about the policy process in Sweden and in Europe. Kalvis Kons presented what the Swedish Terminals look like. Juho Lahti representing TKI Project from SeAMK told about the burning of fresh wood for heating and Tatu Viitasaari from Metsäkeskus pointed out identified places in Central Ostrobothnia that could be used as terminals.

Most important part was the Finnish and Swedish terminal operators presenting their own operations and the discussion that continued over dinner.

SWEDISH TERMINALS

Bastuträskterminalen

Bastuträskterminalen is partner in BioHub and Per Rud-Petersen told us more about the operation. This is an open terminal – not bound to a larger company or a single client. They offer rational and competitive cargo- and material handling. Norsjö kommun is the land owner and has leased out the total area and resposibility to a privately owned company called Terminalen i Bastuträsk AB (TBAB)

Storumanterminalen

Storuman terminal is an open terminal located at the intersection of E12 and E45. They also have a railway connection to the main railroad network, the "Inlandsbanan", through a rail line called "Tvärbanan". They provide cross-loading possibilities and/or storage and set-up. The terminal area and equipment for loading







and un-loading are developed continuously. The terminal is owned by the municipality of Storuman and operated by a municipally owned company ILC AB. The terminal is part of the "Nordic Logistic Corridor" that runs from the Atlantic coast in Norway via Storuman to Vaasa in Finland.



We have published 7 infosheets covering e.g. terminal design and localisation as well as formation of the terminal operators' network:

- 1. Nordic Forest Biomass Terminals describes three different biomass terminals. Kalvis Kons, SLU:
- 2. Terminal workshop 5 key questions is about forest terminal workshop in Umeå 2-4.11.2016. Dimitris Athanassiadis, SLU, Ida Norberg and Magnus Matisons, BioFuel Region
- 3. Characteristics of Sweden's Biomass Terminals provides a detailed overview of the state of Sweden's terminals and is useful in the design of future terminals. Kalvis Kons, SLU
- 4. Characteristics of Terminals in BA Region is a summary of 110 terminals that are used permanently or temporarily for the storage of roundwood or forest fuels. Dimitris Athanassiadis, SLU and Ron Store, Luke
- 5. BioHub Terminal Road Trip During Spring 2017 tells about visits and data collection from terminal operators. Anna Claydon, LUKE and Magnus Matisons, BioFuel Region.
- 6. Direct versus Via-Terminal Delivery of Small-Diameter Trees is about how terminals secure the procurement of forest raw materials and level out the differences in supply and demand along the year. Raul Fernandez Lacruz, SLU
- 7. Windrowing and Fuel-Chip Quality of Residual Forest Biomasses in North Sweden summarises a study where the storage conditions and fuel-chip quality of different windrows were compared and a model for estimating dry mass contents was developed. Raul Fernandez Lacruz, SLU
- 8. The Comminution of Dried Spruce Bark with a Cone Crusher is about size reduction of dried spruce bark to recover valuable chemicals. Mikko Karjalainen, Luke
- 9. Cross-loading at a Biomass Terminal benefits collecting small loads into bigger loads but the disadvantage is increased material handling cost. Mikko Karjalainen, Luke

Here you can find all infosheets

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