

VISITS TO ESTONIAN FORESTS AND PELLET MILLS – APRIL 2018 AND JULY 2019

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BACKGROUND: THE EXPANSION OF PELLET PRODUCTION AND THE OVER-EXPLOITATION OF ESTONIAN FORESTS

Estonia is around 60% forested. Under the UN FAO's forestry definition, this includes clearcut and highly degraded 'forests', as well as monoculture tree plantations. The vast majority of Estonia's forests are secondary forests, i.e. forests that were

logged in the past and have naturally regenerated.

During the Soviet occupation, Estonia's (and Latvia's) forests were less intensively logged than those of many other countries of the former Soviet Union. This

means that most of the forests logged today are nearly 80 years old. According to Global Forest Watch,¹ oldgrowth forests account for just 1.3% of the country's area.

In recent years, forestry companies have experimented

with converting forests to spruce plantations, however those are not extensive so far.

Logging volumes reached a record 12.5 million m₃ in 2018. A post-2020 forestry plan is going through Parliament now and the government supports the forestry industry's push to further increase logging rates. Scandinavian forestry companies appear powerful. There are attempts to replace forests with monoculture sitka spruce plantations, but they do not look very successful so far and much of the logged forest is left to very slowly regrow. 2018 saw a record logging volume of 12.5 million m₃.² Earlier that year, the Nature Conservation Commission of the Estonian Academy of Sciences warned: "Today's forest management as a

whole is unsustainable in its present trend, does not guarantee biodiversity conservation, takes little account of ecosystem services and therefore needs to change."³

According to Estonian Fund for Nature, statistics show that at least half of all the wood logged, and likely more, is burned for bioenergy, most of it within Estonia, but increasing amounts as pellets burned in other countries.⁴ According to those figures, 8-9 million m₃ a year are burned for domestic energy,⁵ mostly for heating.

In addition to the domestic biomass use, pellet exports have been increasing steeply in recent years, from around 400,000 tonnes in 2010 to around 1.3

million tonnes in 2017.⁶ Most of those pellets got to Denmark, followed by Drax in the UK.

The Estonian company Graanul Invest is the country's – and Europe's – biggest pellet producer, and the second biggest worldwide after Enviva in the southern USA. Out of its 11 pellet mills worldwide, four are located in Estonia. However, Estonian wood supplies Graanul pellet mills in the other Baltic States, and vice versa.

An anticipated steep increase in pellet demand for power stations in the Netherlands, as well as new demand in several other European countries, are likely to accelerate the increase in pellet production and exports.

2. OVERVIEW OF OUR VISITS

On 28th April 2018, Almuth Ernsting and Oliver Munnion from Biofuelwatch visited Graanul Invest's Ebavere and Imavere pellet mills together with a member of Estonian Forest Aid. However, at the time of our visit, the Ebavere pellet mill, located in Järva County in central Estonia had temporarily suspended most of its operations. We also looked at logging sites in a 10km radius around each of those mills. There is no evidence linking those particular logging sites to the supply of wood for Graanul Invest's pellet mills. However, according to our observations when travelling

through Estonia, and according to information from Estonian Forest Aid, they are representative of logging practices across the country.

On 25th July 2019, Almuth Ernsting from Biofuelwatch, Rita Frost from Dogwood Alliance, and Peg Putt from the Environmental Paper Network visited Graanul Invest's Osula pellet mill and Haanja Nature Park together with Siim and Liis Kuresoo from Estonian Fund for Nature. In Haanja Nature Park, we observed the aftermath of clearcutting and selective cutting in an oldgrowth

forest inside a Natura 2000 Special Protection Area. Again, we have no evidence to link those logging activities to Graanul Invest's pellet production, however they are a strong indication of how the serious over-exploitation of Estonia's forests is pushing logging activities even into protected areas in terrain where logging is more difficult and costly. Furthermore, logging in Haanja Nature Park illustrates the weakness of forestry and conservation regulations in Estonia.

3. GRAANUL INVEST'S IMAVERE AND OSULA PELLET MILLS

Imavere Pellet Mill:

Graanul Invest built the Imavere pellet plant in Järva County, central Estonia, in 2004. Its capacity has since been increased from an initial 105,000 tonnes to 330,000 tonnes a year.⁷ In 2015/16, Graanul

commissioned a combined heat and power plant on the site which supplies energy to the pellet plant and sawmill and sells excess electricity to the grid.⁸ Graanul's site is located next to a Stora Enso sawmill. The pellet and combined heat and power plant is separated from the sawmill by an

access road. During our visit, we noticed a complete lack of dust control, even though woodchips, as well as roundwood, were stored openly on the site without any suitable fencing or enclosure.



Imavere Pellet Plant



Combined Heat and Power Plant next to the Pellet Plant



Roundwood in Graanul's woodyard



Close up of some of the roundwood

Osula Pellet Mill:

The Osula Pellet mill, which has the same capacity as the one in Imavere, was commissioned by Graanul Invest in 2012 in Võru County in the south-east of the

country. It, too, is located adjacent to a sawmill, operated by a company called AS Toftan. Again, both are separated by an access road, with a Graanul Combined

Heat and Power plant supplying energy to both.⁹ As in Imavere, we saw no signs of any dust control, despite there being large open woodchip piles.



Woodchips on Graanul's Osula site



Different sizes of timber on the site



Some of the wood here is deadwood. Removing deadwood from forests causes particular harm to biodiversity.



Particularly large logs next to woodchips.

4. LOGGING IN THE VICINITY OF EBAVERE AND IMAVERE



“Selective” logging near Ebavere, due to the few trees left



“Natural regrowth” following clearcut near Ebavere



Natural forest conversion to planted spruce near Ebavere



Clearcut near Imavere



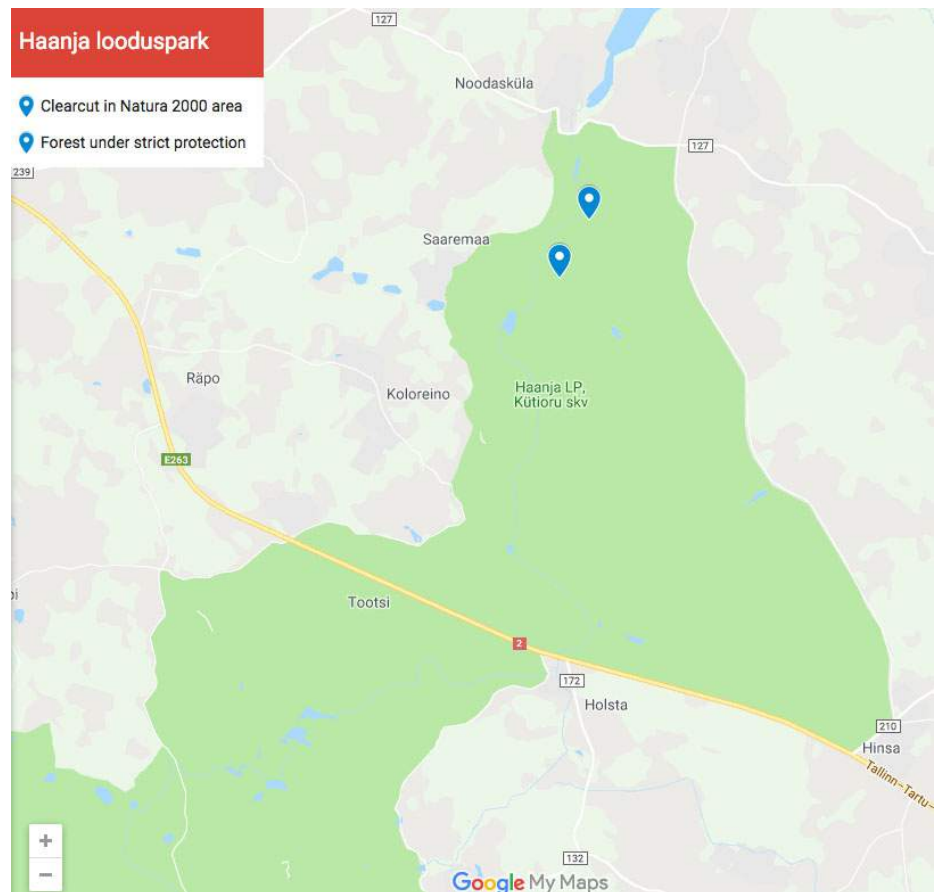
Another clearcut near Imavere with a single tree left

Same clearcut with close-up of damaged soil

5. LOGGING IN HAANJA NATIONAL PARK

Haanja National Park is located in Võru County in the south east of Estonia. It is based in the country's only upland region. The higher cost and difficulty of logging on hillsides has allowed remnants of oldgrowth forests to survive in this area. The National Park has been designated a Natura 2000 Special Protection Area and Special Conservation Area for the protection of natural habitats and birds.¹⁰ It should therefore enjoy the highest level of protection.

The locations we visited are marked on the Google Map below. The selectively logged forest area is located between the clearcut and the strictly protected



Ancient oak in strictly protected forest. Photo: Peg Putt

oldgrowth forest. We were told that the clearcut forest area belongs to a private owner resident in Tallinn. The selectively logged forest was recently bought by our local guide, who wants to protect it from being clearcut in future. According to information from our local guide and Estonian Fund for Nature, both the clearcutting and the selective logging of the oldgrowth forest area had been permitted under

Estonian regulations, with Natura 2000 subsidies continuing to be paid to the landowners even for the clearcut site.

According to our guide, several similar clearcuts within the Haanja Natura 2000 site are found on land belonging to OÜ Valga Puu, a Graanul Invest subsidiary, however we have not been able to verify this.



Strictly protected oldgrowth forest – but for how much longer?



Looking down hillside onto clearcut



Selectively logged oldgrowth forest, with larger trees cut



Selectively logged oldgrowth forest, with larger trees cut



Aftermath of clearcut of former oldgrowth forest



Aftermath of clearcut of former oldgrowth forest



Spruce planted on clearcut of former oldgrowth forest.

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4. <http://elfond.ee/mets/faktileht-ohjeldamatu-puidupoletamine-taastuenergiiana-on-ohtlik-nii-kliimale-kui-okosusteemidele>
5. Note that this figure includes forest residues and waste wood and thus cannot be directly compared with the annual logging volume.
6. <http://www.globaltimber.org.uk/eutradefuelwoodchipsresiduespellets.htm>
7. See endnote one and also <https://bioenergyinternational.com/heat-power/graanul-invest-complete-imavere-chp-pellet-capacity-expansion>
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