Wind4Bio

Increasing the Social Acceptance of Wind Energy

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D I.2.2 Wind4Bio study visit to Laflora's wind farm – lessons learned

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The opinions put forward in this report are the sole responsibility of the author(s) and do not necessarily reflect the views of the Federal Ministry for Economic Affairs and Climate Action (BMWK).







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1 The visit

The Wind4Bio project, funded by EUKI, organized a study tour to a prospective wind farm site in the Zemgale Region – the Kaigu peat bog, managed by the company Laflora.¹ The visit was organized in two parts – a guided bus tour through the peat bog and a discussion session with presentations.

On June 14, 2023, a group of 19 stakeholders from NGOs, research institutions, the wind sector and public authorities in Latvia, Greece and Poland visited the planned Laflora wind farm near Jelgava, Latvia. Laflora wind farm had successfully passed the environmental impact assessment in 2021 and the project demonstrates an innovative approach to reuse of degraded peatlands.

Laflora Latvia is the second largest peat processing company in Latvia (300 employees). One of its development goals is transforming former peat extraction sites into a joint wind and solar energy project with a green industrial zone. The hybrid project with cover 28 ha area, combining 16-22 wind turbines with a 60-150 ha large solar power plant; its total capacity will be 200 MW. The green industrial zone is planned to have greenhouses (40 ha) and energy-intensive production facilities. The first stage will require 120 MEUR investment. The project is developed by "Laflora Energy" in cooperation with another enterprise "Windy". The construction stage will begin after the financial contracts are completed in 2024.

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¹ http://laflora.lv/lv



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2 Lessons learned

Laflora Latvia's business model focuses on peat production and processing for domestic use and especially export. The company has been active since 1995. Its owners are a Latvian enterprise and two German investors. Although only a small fraction of peat products is used in the energy sector, peat extraction is a significant source of GHG emissions in Latvia's LULUCF sector.

According to the National Inventory Report on GHG emissions, between 1990 and 2021, emissions increased in wetlands by 506.7 kt CO2 eq. mostly due to increased emissions from organic soil (peat used in horticulture): "The net GHG emissions in wetlands in 2021 were 1525.77 kt CO2 eq.. Wetlands remaining wetlands is a key category of CO2 emissions mainly due to peat extraction for horticulture which contributed 90.8% (1385.28 kt CO2 sum of on-site and offsite emissions) from total net GHG emissions from Wetland category in 2021."



Due to its relatively large contribution to Latvia's GHG emissions and implementation of the Green Deal policies, Laflora's business strategy must incorporate measures for emissions reductions, energy transformation and wetland restoration. Recultivation of depleted peat bogs is a requirement set in

² https://unfccc.int/documents/627724, p.382

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the national environmental legislation and partly supported with just transition funding. Development of green industrial areas is an economically viable alternative; however, it does not include actual wetland restoration because changing the hydrological regime to a more natural state would not be compatible with maintaining solid ground conditions for the wind farm infrastructure.

The bus tour through the peatlands (present and former fields) was guided by the managers of the company (Uldis Ameriks and Sabine Alta). Cultivating good relationships with the community of workers, other enterprises, the citizens, and the municipality are key elements of Laflora's identity. The local embeddedness of Laflora's peat business activities has had a positive effect on social acceptance. The local government has approved the wind farm project without objections, and it has not caused any protests from other stakeholders.

After the tour, all participants gathered in Laflora's office building to hear presentations from the energy company Windy, the Nature Protection Agency, Latvian Wind Energy Association and a guest from Poland representing Pomeranian Offshore Platform.³

^{3 &}lt;u>https://www.offshore-pomerania.com/en/news-txt,meeting-of-the-pomeranian-offshore-platform</u>







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Site location





Kaigu peatbog Jelgava county



Aleksejs Mitosovs from Windy presented the insights from the environmental impact assessment. The solar power plant will be in the peat fields, but a group of wind turbines will be sited in the surrounding forest areas. When investigating different alternatives for wind turbine placement, the existing road and irrigation network formed the basis structure – the foundations for the turbines will be placed at the edges of forest blocks to minimize deforestation during the build-out of infrastructure. Also, the underground connection to the nearest transmission system will be put next to an existing road.

The studies for the permitting process included impacts on birds, bats, habitats, and other environmental factors (flickering, noise). The findings were discussed in meetings with the local public and expert audiences.







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Noise emissions





Flickering (shadow) effect





The collaboration with ornithologist led to a discovery of new eagle and owl nests. The project developers acquired GPS equipment for bird monitoring that will allow collection of new data. Although the environmental permits are granted, it is required to monitor impacts on birds during construction and operation of the wind farm. Bats are also endangered by wind farms when they impact the migration routes and feeding habitats of these protected animals.



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in Latvia.





Gita Strode from Nature Protection Agency noted that Laflora's wind farm is a well-designed solution because the actual territory of the bog is already degraded area that needs to be recultivated and there will not be big loses regarding the landscape that usually is one of the main concerns of local inhabitants. The expert also stressed the good practice of collecting data before the planning and assessing the environmental impact well before the construction works start. It is not uncommon to plan wind farms in forest areas

According to the Nature Protection Agency, the main principles of planning sustainable wind farms are:

- To develop wind farms in degraded areas & agricultural areas.
- Do not plan wind parks where spatial conflicts exist with EU habitats,
 NATURA 2000 areas, near large bird nests, on bird and bat migration routes, etc.
- Mitigation measures should be applied as there will be impact on biodiversity. In many cases compensatory measures will be necessary;
- Currently challenges with biodiversity expert work, data availability and data sharing.

However, Strode highlighted that the wind farm itself is not the main problem. We can expect more damage from the communication lines, deforestation, and drainage areas. To speed up wind park permitting, institutions need skilled environmental experts and reliable decision-making systems – for Latvian authorities, a shortage of personnel to collect and interpret data is a problem.

One of Wind4Bio's objectives is to encourage the wind industry to adopt novel approaches to mitigating biodiversity risks through comprehensive data



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sources and collaboration with other stakeholders, especially Nature Protection Agency.

Gatis Galvins, the Chairman of the Board of the Latvian Wind Energy Association, stressed that wind industry is a "reputation business" where environmental impacts are a large part of the picture. Regardless of the political decisions it is still necessary to convince the potential renewable energy consumers of the real merits of wind energy - environment advocacy groups are key stakeholders to demand more transparency, public involvement, and high standards for environmental measures. The wind energy sector in Latvia is still young and the association is determined to oversee its members – breach of environmental law would not be tolerated. There's a lot of work ahead.

The study tour was organized by the NGO Green Liberty – Krista Pētersone, Ieva Zālīte, Līga Krastiņa