

Authority Services

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Finland's response to the letter regarding the environmental impact assessment of the offshore windfarms in the Liivi 1 and Liivi 2 areas in Estonia

The Finnish Environment Institute acknowledges that Finland has received the letter dated 11 June 2025 and the consultation documents from Estonia regarding the environmental impact assessment (EIA) of the offshore windfarms in the Liivi 1 and Liivi 2 areas. The letter is based on the Convention on Environmental Impact Assessment in a Transboundary Context (Espoo Convention).

Estonian Offshore Wind DevCo OÜ is planning to build offshore wind farms in two areas, Liivi 1 and Liivi 2, located 21 kilometres off the coast of Saaremaa. The EIA procedures for the areas have been combined because the areas are close to each other and the environmental impacts of the projects are expected to be similar. The project area covers approximately 192.6 square kilometres. The project consists of a maximum of 145 wind turbines with a total capacity of up to 2,300 megawatts (MW). The maximum planned capacity of a single wind turbine is 25 MW and the maximum height above sea level is 400 metres. The sea depth in the project area varies between 18 and 40 metres.

Consultation in Finland

In accordance with Section 30 (911/2022), Subsection 1 of the Finnish Act on Environmental Impact Assessment (252/2017), the Finnish Environment Institute is the competent authority and responsible for tasks under the Espoo Convention. The Ministry of Climate of Estonia requested an indication whether Finland intends to participate in the EIA procedure of the offshore windfarm in the Liivi 1 and Liivi 2 areas, comments and proposals regarding the assessment of the environmental impacts of the project in Finland, and comments from the public and authorities in Finland regarding the EIA programme.

The public and the authorities were given the opportunity to comment from 13 June to 31 July 2025 on the consultation documents, which were available on the website of Finland's environmental administration (ymparisto.fi) and on a platform by Ministry of Justice in Finland for requesting and submitting statements electronically (lausuntopalvelu.fi). Statements were also asked from relevant stakeholders.

Remarks received during the consultation

The Finnish Environment Institute has prepared an English summary of the ten (10) statements received in Finland. The original statements in Finnish or Swedish, which are enclosed to this



letter, include important and detailed remarks which need to be examined and taken into consideration in their entirety.

Natural Resources Institute Finland

Most of the bird migration through the area is related to spring and autumn migration to the Russian Arctic tundra. Birds nesting in Finland may use the marine areas near the project area as resting places during migration or hibernation. Regarding impacts on birds, special attention should be paid to migration routes in relation to wind turbines and the significance of impacts on Finnish species should be assessed in this respect.

For Finland, migration through the site could affect the common scoter (*Melanitta nigra*), the velvet scoter (*Melanitta fusca*), the loons (*Gaviiformes*), the common crane (*Grus grus*) and the highly endangered lesser white-fronted goose (*Anser erythropus*). The overall impact will be through cumulative impacts across the whole Baltic Sea region, through multiplier effects. The impact of wind power projects located on important bird migration routes in the Baltic Sea region could result in potential collision mortality at the population level, which could have a negative impact on bird populations, which could also be felt in Finland for some species. This may be influenced by the location of the project site in the immediate vicinity of bird sanctuaries.

Bird observations are planned to be carried out in an appropriate manner, including in Natura 2000 areas that are important for birdlife.

Centre for Economic Development, Transport and the Environment of Southwest Finland

The Centre for Economic Development, Transport and the Environment of Southwest Finland considers that Finland should participate in the environmental impact assessment procedure.

From Finland's perspective, the most significant environmental impacts of the project are likely to affect bat species and birdlife migrating through the area, fish stocks, marine mammals and the network of Baltic Sea marine protected areas, particularly through the Natura 2000 network in the Baltic Sea.

The cumulative impacts are likely to be greatest on birds, fish and mammals, so it is necessary to involve the examination of the impacts on them and possible mitigation measures in the process.

The assessment should also address the project's transboundary impacts. Numerous offshore wind farm projects are planned in and near the Baltic Sea Natura 2000 protection network, and the EIA procedure should also focus on the cumulative effects of the projects on the objectives of the Natura 2000 protection network. The underwater noise caused by the construction of offshore wind farms often has far-reaching impacts, and it would be advisable to discuss noise mitigation methods in the EIA procedure.

The plan for assessing the most significant transboundary impacts appears to be well targeted and appropriate. The planned studies appear to be comprehensive and sufficient to support the assessment. It is important that the impacts on organisms migrating through the area, such as birds and bats, are also examined in terms of their cumulative impacts with other wind power projects in the Baltic Sea.

The impact assessment principles presented in the programme appear to be adequate and focus on impacts that may be significant for the marine environment. The EIA process should also take into consideration the Estonian Maritime Spatial Plan and its objectives.



Metsähallitus

Metsähallitus notes that the offshore wind farms in the Liivi 1 and Liivi 2 areas are located far (> 150 km) from the outer limit of Finland's Exclusive Economic Zone. For this reason, Metsähallitus considers that the project will not have a significant impact on areas managed by Metsähallitus in Finnish territorial waters. Metsähallitus does not see the need for Finland to participate in the EIA procedure for an individual offshore wind farm, but as there are many offshore wind farm projects planned in the southern Baltic Sea, it may be advisable for Finland to follow the development of the project and participate in the EIA procedure.

Metsähallitus considers that the Liivi 1 and Liivi 2 offshore wind farms may have an impact on migratory birds and bats in Finland.

For birdlife, the Liivi 1 and Liivi 2 offshore wind farm areas are located on an important migration route for Arctic waterbirds and wading birds for the Gulf of Finland, which runs close to the Finnish coast, especially in spring. The Gulf of Riga may also be important for species that nest in Finland or migrate through Finland, such as the velvet scoter (*Melanitta fusca*), common scoter (*Melanitta nigra*), long-tailed duck (*Clangula hyemalis*), loons (*Gaviiformes*) and common crane (*Grus grus*). Individual wind farms are unlikely to have a significant impact on the above-mentioned species, but rather the combined effects of several wind farms, which Metsähallitus believes should be given sufficient attention in the environmental impact assessment.

The planned offshore wind farm is in an area that may also be important as a migration route for bats. As for the species found in Finland, at least the Nathusius' pipistrelle (*Pipistrellus nathusii*), which is known to migrate long distances and is known to breed at least in the southern parts of Finland, may be affected. The Nathusius' pipistrelle is listed as endangered in Finland and is a species listed in Annex IV of the EU Habitats Directive.

Metsähallitus states that the environmental impact assessment programme for the Liivi 1 and Liivi 2 offshore wind farms is comprehensive and considers the key environmental impacts of the project. Numerous additional studies are required to support the assessment programme, which will significantly improve the knowledge base for the final assessment. Metsähallitus considers that additional surveys, such as those according to the StUK4 and HELCOM 2021 methods, as well as aerial counts, are sufficient to determine the importance of the area for birdlife. In addition, the assessment programme requires two years of monitoring of bats in the marine area, which can be considered to clarify the importance of the area for bats.

The Federation of Finnish Fisheries Associations

Although the fishing in the Gulf of Riga does not directly affect Finland, we are concerned about the cumulative impacts of the numerous offshore wind farm projects in the Baltic Sea on fish stocks, spawning areas and migratory fish routes. For example, migratory European eels (*Anguilla anguilla*) from Finland are known to migrate along the coast of Estonia. The Federation of Finnish Fisheries Associations states that not enough attention has been paid to cumulative impacts in the planning and permitting processes to date.

Earlier this year we commented on the environmental impact assessment documents for the Saare-Liivi offshore wind farm planned for the Gulf of Riga, stating that the impacts of construction and wind power use on migratory fish had not been adequately addressed. We hope that attention will be paid to this issue also in the environmental impact assessment procedure for the Liivi 1 and Liivi 2 offshore wind farms.



Finnish Transport and Communications Agency Traficom

From the perspective of maritime transport, wind farms planned for the sea area may affect, among other things, the functioning of the transport system, maritime radar and radio systems, and maritime safety if they are located, for example, in the vicinity of maritime traffic area.

The consultation document for the project shows the location of the offshore wind power areas on a small-scale map. Based on a graphical review, it appears that the planned areas are partly located in areas used for maritime transport.

In the further planning of Liivi 1 and Liivi 2 offshore wind farms, it must be ensured that the international maritime safety and efficiency are taken into consideration accordingly. The EIA procedure for the project must also consider other offshore wind farm projects in the surrounding areas and the potential cumulative impacts of wind farms on shipping and maritime infrastructure in the area. In addition, the EIA procedure should, where possible, examine intentional actions aimed at damaging the infrastructure of the wind farm, for example by using anchors.

In Traficom's view, Finland's participation in the environmental impact assessment procedure for the Liivi 1 and Liivi 2 offshore wind farms is justified.

Finnish Meteorological Institute

As the area is more than 20 kilometres from the nearest weather radar and the Finnish Meteorological Institute does not carry out measurements in the Gulf of Riga, and since any impacts related to marine hydrography would be local, the Finnish Meteorological Institute does not need to participate in the environmental impact assessment procedure for the Liivi 1 and Liivi 2 offshore wind farms.

Regarding the weather radar network and marine hydrodynamics, the Finnish Meteorological Institute considers that the offshore wind farms in the Liivi 1 and Liivi 2 areas will have no impact on Finland.

Regarding marine research, the Finnish Meteorological Institute considers that the environmental impact assessment plan is comprehensive.

The Government of Åland

There is no need for Åland to participate in the environmental impact assessment procedure. No direct impacts are expected to arise for Åland due to the considerable distance.

Helsinki-Uusimaa Regional Council, ELY Centre of Southwest Finland – Fisheries Authority and **The Finnish Heritage Agency** replied but did not have any comment on the matter.

Participation in the transboundary EIA procedure

Based on the received statements and reflecting its own views, the Finnish Environment Institute states that Finland intends to participate in the transboundary EIA procedure of the offshore windfarm in the Liivi 1 and Liivi 2 areas in Estonia.



Conclusions

The Finnish Environment Institute considers it important to examine and assess all the impacts mentioned in the statements given in Finland. The statements focused on impacts on birdlife, bats, marine mammals and fish stocks. They also addressed the marine traffic and maritime safety. Based on the statements received during the consultation, the EIA programme is mostly comprehensive and focuses on the key impacts that may be significant for the marine environment.

The project may have significant transboundary impacts, particularly on migratory bird and bat species, given that their migration routes may intersect with the project area. The impact of the project on these species should be assessed in sufficient detail using appropriate nature surveys. Particular attention should be paid to migration routes and hibernation areas. The bird and bat species that are most vulnerable to wind power should be identified. Any adverse impacts should be mitigated and compensated for.

Due to its location, the project may also have a significant impact on migratory fish populations and their spawning areas. Migratory eels from Finland, for example, are known to migrate along the Estonian coast. Additionally, the construction of offshore wind farms often causes underwater noise with far-reaching impacts. It would therefore be advisable to discuss noise mitigation methods in the EIA procedure.

The cumulative impact of the several planned wind farms in the Baltic Sea region is likely to affect birds, bats, fish stock and marine mammals to a large extent. Additionally, the cumulative impact on shipping and maritime infrastructure in the area must also be considered. The need to assess cumulative effects has been recognised in the EIA programme, which the Finnish Environment Institute considers very important given the large number of wind farm projects along the Estonian coast and in the wider Baltic Sea region.

To conclude, the Finnish Environment Institute expects the EIA documentation to provide a transboundary environmental impact assessment from Finland's perspective, paying particular attention to the statements provided.

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This document has been electronically signed. The electronic signatures can be verified from the register office of the Finnish Environment Institute



Appendices

Statements received in Finland

For information

Ministry for the Foreign Affairs
Ministry of the Environment
The Government of Åland
Natural Resources Institute Finland
Helsinki-Uusimaa Regional Council
Metsähallitus
Finnish Meteorological Institute
Centre for Economic Development, Transport and the Environment of
Southwest Finland
Centre for Economic Development, Transport and the Environment of
Southwest Finland – Fisheries Authority
Finnish Transport and Communications Agency Traficom
The Federation of Finnish Fisheries Associations
The Finnish Heritage Agency

