

Naturvårdsverket
Att. Richard Kristoffersson
Samhällsplaneringsenheten
106 48 Stockholm

Datum: 2024-12-17
SMHI Dnr: 2024/2325/5.4.1
Er referens: NV-06364-23 Baltica-1

registrator@naturvardsverket.se

kopia: richard.kristoffersson@naturvardsverket.se

Statement regarding - Transboundary consultation pursuant to Articles 4 and 5 of the Espoo Convention on the planned project to develop the Baltica-1 offshore wind farm

The Swedish Meteorological and Hydrological Institute (SMHI) acknowledges the opportunity given by the Polish Environmental Impact Assessment Department to supply a view on the planned project and its environmental impact assessment.

Transboundary consequences

In the entire Baltic Sea area, both in Polish, Swedish and other countries' sea areas, a large number of wind farms are planned. Although the impact on the marine environment from each individual facility may be considered small, the combined consequences could be significant. If these plans come to fruition, a large-scale and transboundary impact on mixing and stratification as a result of reduced wind energy is likely (Arneborg et al., 2024)¹. This can affect primary production as well as the flow of greenhouse gases and oxygen between the sediment, the water column and the atmosphere. The potential effects of OWF Baltica-1 on hydrographic conditions are lacking, and considered negligible without actual calculations or modelling, in the environmental impact assessment.

International agreements

The countries that have ratified the Helsinki Convention have undertaken to protect the Baltic Sea against all sources of pollution from land, air, and sea as well as to

¹ Arneborg, L., Pemberton, P., Grivault, N., Axell, L., Saraiva, S., Mulder, E., Fredriksson, S. 2024. Hydrographic effects in Swedish waters of future offshore wind power scenarios. Report Oceanography No. 77. ISSN: 0283-1112 © SMHI

SMHI – Sveriges meteorologiska och hydrologiska institut

Postadress SMHI 601 76 • Norrköping • Växel 011-495 80 00 • Fax 011-495 80 01 • E-post registrator@smhi.se

SMHI huvudkontor

Besöksadress Folkborgsvägen 17
601 76 Norrköping

SMHI

Besöksadress Stationsgatan 23, 6 tr.
753 40 Uppsala

SMHI

Besöksadress Göteborgskaderns plats 3
426 71 Västra Frölunda

preserve habitat and biological diversity. As an EU member, Poland is also obliged to follow the Union's framework on the marine strategy, which includes that permanent changes to the hydrographic conditions must not be allowed to affect the marine ecosystems in a negative way. Therefore, managing authorities should be aware of the processes in the sea that may be affected by offshore infrastructure facilities, including wind farms.

International cooperation

The Baltic Sea is an inland sea whose sea area is shared by nine nations and whose marine environment has for a long time been exposed to the extensive impact of human activity. The increasing number of planned and completed wind farms in the Baltic Sea may lead to further cross-border environmental effects, the solution of which lies in international cooperation.

Therefore, SMHI believes that a superior and multinational marine council with an overview of the entire Baltic Sea environment should be given the opportunity to map the cumulative environmental effects of all projects. Such an overall mapping would mean that cross-border impacts can be better considered in the Baltic Sea countries' decisions about individual facilities in the relevant areas.

Director of the Department of Community Planning Services Magnus Rödin has decided on this matter prepared by Amanda Nylund and Maria Karlberg.

For SMHI

Magnus Rödin
Director of the Department of Community Planning Services

SMHI – Sveriges meteorologiska och hydrologiska institut

Postadress SMHI 601 76 • Norrköping • Våxel 011-495 80 00 • Fax 011-495 80 01 • E-post registrator@smhi.se

SMHI huvudkontor

Besöksadress Folkborgsvägen 17
601 76 Norrköping

SMHI

Besöksadress Stationsgatan 23, 6 tr.
753 40 Uppsala

SMHI

Besöksadress Göteborgs eskaderns plats 3
426 71 Västra Frölunda