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## Statement regarding – Notification from Lithuania concerning planned offshore wind farm off Palanga in the Lithuanian Exclusive Economic Zone in accordance with Article 3 of the Convention on Environmental Impact Assessment in a Transboundary Context (Espoo Convention)

The Swedish Meteorological and Hydrological Institute (SMHI) acknowledges the opportunity given by the Ministry of Environment of the Republic of Lithuania to supply a view on the proposed plans.

SMHI appreciates that the environmental impacts of only one wind farm may be relatively minor, but there is a growing number of planned offshore wind farm projects in the Baltic Sea. If these plans are realized, large-scale transboundary impacts on ocean mixing and stratification are likely to occur largely as a result of reduced wind energy (Arneborg et al., 2024)<sup>1</sup>. This can have consequences for primary production as well as for fluxes of greenhouse gases and oxygen between the ocean sediments, water column, and atmosphere.

Following the EU Marine Strategic Framework, Descriptor 7, that focuses on permanently altered hydrographical conditions, it is important that offshore

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<sup>&</sup>lt;sup>1</sup> 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



infrastructure does not adversely affect marine ecosystems. To meet this goal, it is necessary to gain knowledge on how biological dynamics may be affected by the above-described changes in hydrography. The latter is dependent on the total amount of wind farms in the Baltic Sea and international cooperation is consequently of fundamental importance.

SMHI suggests that an international marine council should be given the opportunity to map the cumulative environmental effects of offshore wind farms in the Baltic Sea. This would facilitate the individual countries' decisions about projects within their Exclusive Economic Zone.

Finally, SMHI proposes that Sweden continues to take part in the Environmental Impact Assessment.

Head of Department of Community Planning Services Magnus Rödin has decided on this matter prepared by Ylva Ericson.

For SMHI

Magnus Rödin Head of Department of Community Planning Services

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