Carbon Footprint in the Domestic Pollock Trawl Fishery

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Abstract: An attempt was made to calculate the carbon footprint using the example of the largest domestic pollock fishery, which is carried out in the northeastern part of the Sea of Okhotsk and takes place from January 1 to April 9 of each year. This fishery provides for the catch of about 1 million tons of pollock out of 5 million tons of the total Russian catch. The parameters of the fishery were analyzed. It was noted that an average of 122 vessels are involved in it annually, which are divided by the capacity of the ship's power plants – the main sources of air pollution: Group 1 – with a capacity of more than 7,000 kW, 2 – from 3,000 to 7,000 kW, 3 – less than 3,000 kW. In each group, a standard vessel design was identified, the parameters of which formed the basis for calculating the carbon footprint. Taking into account the operational and technical characteristics of the vessels, the types of fuel used, the production process and the natural and climatic conditions of the fishing area, it was calculated that 221,776 tons of carbon are emitted into the atmosphere during the pollock fishery in the selected area.

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