

Sensor to monitor vessel emissions in North Sea

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A Belgian Coast Guard sniffer plane flies over a container ship in search of illegal pollution, in Northern sea on September 30, 2021. (Photo by Kenzo TRIBOUILLARD / AFP)

A new sensor, named Ship Emission Monitoring by Passive Remote Sensing (SEMPAS), has been installed in Zeebrugge to monitor how many and which substances passing ships emit.

The innovation aims to enable a more efficient sanctioning of vessels that do not follow the rules on one of the busiest shipping routes running along the Belgian part of the North Sea.

To minimize the negative effects of the ships' tactic to keep the economic engine running with the emissions bringing public health disadvantages, a low-emission zone was established over the North Sea, where the ships have to meet very strict emission requirements.

The new sensor can monitor the emissions of passing ships seven days a week from a distance of 10 kilometres. If a vessel possibly exceeds the permitted standards, the Shipping DG will be notified. Those ships can then be targeted for further inspection with a so-called sniffer plane, which flies through the emission plumes of ships, or by boarding them.

"The international goal is to get shipping to net zero greenhouse gas emissions by 2050," said outgoing Belgium's North Sea minister Paul Van Tigchelt. "With new techniques, such as this sensor, we will soon be able to monitor ships to our ports 24/7. This test project in Zeebrugge proves once again that Belgium is leading the way thanks to our innovative companies and top experts in the fight against climate change."