

Policy guidance on scrubber wash water

To comply with the recent international regulations on ship emissions, such as the implementations of Sulphur Emission Control Areas (SECA) regulations and IMO 2020 global low sulphur cap for marine fuel, some ships limit their emissions by installing exhaust gas cleaning systems. These systems are called scrubbers.

A scrubber will literally wash the exhaust gases with water. The SO₂ in the exhaust originating from sulphur in the fuel will be together with some other gaseous and particulate pollutants removed by the scrubber. The wash waters will collect these harmful compounds. If the wash waters are released directly to sea, the system is called “open loop”. When the wash waters are treated, recirculated in the system and the waste sludge is stored onboard the ship to be disposed to a treatment reception facility in a port, it is a “closed loop” system. This method also releases part of the treated wash waters, the so-called bleed-off, to the sea, the volume is however, much lower while the concentration of pollutants is higher than in case of the open-loop scrubber.

The so-called open loop scrubbers pump sea water into the scrubbers and release acidified water polluted with metals, nitrates and toxic organic compounds, such as polyaromatic hydrocarbons, into the sensitive coastal marine environment. In essence it just transforms pollution from one form to another.

The use of scrubbers by ship owners is known to be driven by a strong economic incentive: installing a scrubber can reduce operating costs as dirtier (but cheaper) fuel oil can be used while still complying with the new international regulations.

The European Commission proposed to IMO Marine Environment Protection Committee (MEPC) 74 to work on the restrictions of use of open-loop scrubbers.

The discharge of scrubber wash waters in the marine environment was identified as a priority policy option by CSHIPP. During the Policy Workshop held on 4 September 2019 in Gothenburg, experts from different Baltic Sea countries and also from countries outside the Region and the EU helped to define the next steps to produce guidance for this policy option in the Baltic Sea Region.



Clean Shipping Project Platform (CSHIPP) brings together several projects and organisations focused on promoting and developing clean shipping in the Baltic Sea region. By concentrating on collaboration, CSHIPP strives to increase the impact of and connect the dots between the various projects and organisations which look at the shared topic of clean shipping from different angles.

Main recommendations

The use of open loop scrubbers is currently forbidden in some ports of the European Union, such as Hamburg (Germany) and Antwerp (Belgium). The main guidance identified for this policy option are to:

- Increase knowledge of potential **impacts on marine life and environment** of open and closed loop systems
- Increase the knowledge on the **impacts of local regulations**
- Increase the knowledge on the **economic aspects** of using scrubbers

Policy guidance for the use of scrubbers in the Baltic Sea Region

The aim of this activity within CSHIPP is to highlight to the HELCOM Maritime Working Group some policy guidance on the topic of scrubbers in the Baltic Sea Region. To go further, CSHIPP has identified some first possible steps to work on each recommendation.

Impacts on marine life and environment	Impacts of local regulations	Economic aspects
<p>Research is needed on the impacts on marine life and environment of the use of scrubbers. For example, the monitoring of the use of scrubbers on board ships in the Baltic Sea Region could help to have a better understanding of the release of scrubber wash waters and their impact in the ports and coastal area visited.</p> <p><i>First step identified by CSHIPP outside the scope of HELCOM Maritime WG:</i></p> <ul style="list-style-type: none"> - <i>To highlight this topic in the EUSBSR Policy Area (PA) Ship Steering Committee and other sectoral meetings to promote this research concepts for future activities (i.e. projects application).</i> 	<p>The use of open loop scrubbers is banned in some or coastal areas in the EU (i.e. Water Framework Directive). The knowledge on the compliance and impacts of such local regulations on sensitive areas would support to translate the same motivation and regulations to the Baltic Sea area.</p> <p><i>First step identified by CSHIPP outside the scope of HELCOM Maritime WG:</i></p> <ul style="list-style-type: none"> - <i>To highlight this topic in the EUSBSR Policy Area (PA) Ship Steering Committee and other sectoral meetings to promote this research concepts for future activities (i.e. projects application)</i> 	<p>More knowledge on the economic incentives on installing and using scrubbers while using high sulphur fuel instead of using clean fuels is needed.</p> <p><i>First step identified by CSHIPP outside the scope of HELCOM Maritime WG:</i></p> <ul style="list-style-type: none"> - <i>To highlight this topic in the EUSBSR Policy Area (PA) Ship Steering Committee and other sectoral meetings to promote this research concepts for future activities (i.e. projects application, funding instruments).</i>

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