



The German Seaports' Position Paper on ZeroEmission@Berth

In May 2021, the German Seaports signed a memorandum of understanding to set up a framework for a joint course of action on reducing ships' emissions in the ports. This paper is intended to elucidate the substantive positions:

Statement of Requirements

The ZeroEmission@Berth project stands for:

- **Fair competitive conditions for all market participants (level playing field)** – all ships must reduce emissions
- **Technology-neutral approach** – batteries, fuel cells, onshore power supplies, as well as fuels produced by renewable energy from non-biological sources and other innovative technologies should be employed
- **Polluter Pays Principle** – those responsible, these are the ship operators, should bear the costs of reducing emissions

Background

Ships are a significant source of emissions in many ports. Particular challenges in reducing their emissions are posed by the fact that they are powered almost entirely with fossil fuels, are mobile, are spread out around the port at various berths, that different types of ships have different schedules of calling, and that in part they require very large amounts of electricity on board.

Status Quo

With its amendment to the Climate Change Act, the German Federal Government has tightened climate regulations and set the goal of achieving greenhouse gas neutrality by 2045. Emissions are to be reduced to 65 percent of 1990 levels by 2030.

The EU is aiming at a similarly ambitious target and is striving to decrease net emissions to at least 55 percent below 1990 levels by 2030 and to become the first climate-neutral continent by 2050. In its recently released "Fit for 55 package" (July 2021), the EU Commission has proposed concrete measures regarding ships at berth. Beginning in 2030, certain types of vessels (containerships, cruise ships, and RoPax ferries) of a specified size (GT >5,000) will be required to meet zero emissions while berthed (FuelEU Maritime, Article 5), with onshore power supply, batteries, and fuel cells being defined as possible

solutions. Thus, use of internal combustion engines while docked would be forbidden for such ships. At the same time, ports where a specified annual number of these ships call would be required to provide shoreside power at berth (Alternative Fuels Infrastructure Regulation, Article 9).

Evaluation of the EU Approach

Principally, the efforts of the German Federal Government and the EU Commission to reduce emissions are viewed positively. The proposal from the EU Commission to regulate CO₂ emissions from docked ships is also seen as an important step. However, the following points in the Commission's proposal must be viewed critically:

1. The level playing field is not implemented consistently

The proposed regulation only pertains to selected classes and sizes of ships. A large part of shipping is thus exempted from the reduction of CO₂ emissions at berth, which would lead to distortion of competition.

2. Technological bias

Only onshore power, fuel cells, and batteries are permitted as zero emission technologies. The German seaports are of the opinion that other solutions, such as use of regenerative fuels from non-biological sources, also offer substantial potential to reduce CO₂ emissions. This technology would also provide for a reduction of ships' emissions at sea (which account for approximately 95 percent of the total emissions from ships) as well as at berth.

3. The Polluter Pays Principle is not applied

According to the current EU plans – contrary to the polluter pays principle –, ports would be required to provide shoreside power on all quays where the regulated types of ships berth (around 550 berths for seagoing ships in German ports). There is no differentiation between heavily and lightly frequented berths. The economic impact of the necessary investments is not taken into account and according to current plans the shipping companies would only cover a part of the costs. Public funding will thus be needed to launch new technology and fuels on the market, but in the long run the costs must be carried by the ship operators themselves.


The German Seaports' Position

The German seaports take the position that a European CO₂ emission limit should be introduced for **all seagoing and inland waterway vessels** at berth. However, **across-the-board implementation of on-grid shoreside power facilities is not necessarily the way to reach that goal**. If they operate with 100 percent renewable power, on-grid land-based power supply facilities can be an effective measure to reduce emissions from seagoing and inland waterway vessels docked in port, but not for every port, not for every berth, and not for every ship. How often a berth is used and by what types of ships must also be considered. Cost sharing or an allocation of costs among ship operators (for example through a financing fund) needs to be ensured.

The EU Commission defines **batteries and fuel cells** as possible alternatives, along with onshore power. The German seaports support this approach, but favor its being technology-neutral, so that for instance the use of **fuels produced by renewable energy from non-biological sources** is possible. Their use can, for instance, avoid high costs for investments in older ships. Furthermore, such fuels have the advantage of reducing emissions not only in port, but when the ships are underway as well, and therefore to a far greater degree. Within the framework of this project, the German seaports not only want to take a position in favor of a level playing field, an unbiased approach to technology, and the polluter pays principle, but also to work with the shipping industry to focus on innovative solutions for zero CO₂ at berth. Therefore, an innovation competition will be launched to identify and present such concepts.

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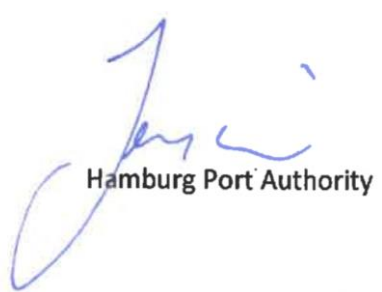


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