



 **Green** Inland Ports

Good Practices

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Discount on port fees for cleaner ships

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1.1 Description

There are initiatives/programs to demonstrate that a ship meets high environmental and safety standards. Certification from such a programme gives a ship access to multiple incentives, including discounts on port fees. Ports can join these programs as incentive provider and provide discounts on port fees for ships certified under these programs that have achieved certain levels or scores. Ports can use the discounts as a tool to reduce their environmental impacts while promoting the use of green fuels and the use of low-emission technologies in inland and maritime transport (Camargo-Díaz et al., 2022).

Examples of such programs are:

- The Environmental Ship Index (ESI): The ESI index identifies seagoing ships that perform better in reducing air pollutant, GHG, and noise emissions than required by the current emission standards of the International Maritime Organization. ESI evaluates the amount of nitrogen oxide (NO_x), sulphur oxide (SO_x) and carbon dioxide (CO₂) that is released by a ship and includes a reporting scheme on the greenhouse gas emissions of a ship. With over 8,000 registered vessels, ESI has become the standard tool used by the world's ports to reward and incentivise shipowners meeting and exceeding IMO emissions standards (ESI, n.d.-a).
- Green Award: Green Award is a quality mark for ships that demonstrate high safety and environmental standards and is currently only active in the Netherlands and Belgium. The Green Award certificate gives a ship access to multiple incentives including discounts on port fees, products and services. Green Award has a very broad range of requirements within the office audit and ship survey, for example, GHG emissions (carbon dioxide and methane), air pollutants (particulate matter, NO_x, SO_x), biofouling, grey water management and (underwater) noise emissions/management. There are two separate programmes, one for seagoing vessels and one for inland shipping. When a ship complies with the Green Award requirements, a discount can be offered on port fees. A certificate is valid for three years from the inspection date.

As introduced above, Green Award is programme that also takes into account inland shipping. The reason why we have included ESI in this fact sheet, is that results and data for Green Award has been very difficult to gather, as only the relevant ports might have an overview of the amount of Green Award discounts that have been handed out, but we have not been able to receive further information from ports. By reporting the effects of ESI discount, a picture can be drawn on the impact of waterway discount programmes, even though ESI applies only on seagoing vessels.

1.2 Specific aim of the measure

The goal of these initiatives is to make shipping more sustainable. By joining and supporting these initiatives and by providing discounts on port fees, inland ports can give shipping companies a financial incentive to become more sustainable.

At the moment, port and waterway discounts serve as a financial support to make sustainable ships with less emissions more attractive, but the benefits are currently relatively small, as the benefits cut into the profits of the ports. More incentive is needed from the market side or regulation to make sustainable shipping interesting. This good practice will lead to a reduction of greenhouse gas emissions and air pollutant emissions.

1.3 Inland ports that give discounts to cleaner ships

- Compagnie Nationale du Rhône (port of Lyon)
- Havendienst gemeente Utrecht
- Niedersachsen Ports
- Bremen Ports
- Groningen Seaports
- Port of Roermond
- Port of Rotterdam
- Port of Amsterdam
- North Sea Port
- Port of Arnhem
- Port of Moerdijk
- Port of Nijmegen
- Port of Twente
- Port of Antwerp-Bruges
- Port of Seville

1.4 Stakeholders

- The port authority: The port authority has the choice to connect with waterway discount initiatives such as Green Award and ESI. Ports determine themselves how high the discount is.
- ESI Administration: ESI is a voluntary system developed to illustrate the environmental performance of sea going vessels. It provides a numerical representation of the environmental performance of ships regarding air pollutants, CO₂, and noise (ESI, n.d.-b). The system and discount offered by some ports on this basis currently only apply to seagoing ships.
- Green Award: Green Award discusses with port authorities (often municipalities in the Netherlands) the rewards. Green Award is a non-profit organization, so they are not able to offer the ports some form of compensation for waterway discounts. The discounts can thus be considered as costs for the port authority.

- The shipowners: The shipowners can decide to increase sustainability and reduce emissions of their ships to get (higher) discounts. The reward acts as a financial incentive to achieve more sustainable shipping.

1.5 Voluntary or mandatory

Green Award and ESI discount are voluntary for all parties. The framework, which includes the decision making to receive a score, is fixed. The reward offered by ports (discount on port fees) varies and ports can choose the rewards themselves. Ports can decide whether to participate in a program, and shipowners can decide whether to modify their ships to qualify for waterway discounts, or increased discounts when the discounts cover more levels.

1.6 Realised/potential impact

The percentages of seagoing ships that make use of ESI discounts have been shared by Bremen Ports and the Port of Amsterdam for the period between 2019 and 2023. This gives an idea of the effectiveness of such as sustainability programme. It gives an indication of how impactful this good practice is, and how this has grown over the years.

Table 1 – ESI discounts in Bremen Ports and port of Amsterdam (Bremen Ports, 2024; Port of Amsterdam, 2019, 2022, 2024)

Indicator	2019	2020	2021	2022	2023
Ships with an ESI score discount calling at Bremerhaven	49%	56%	39%	37%	41%
Ships with an ESI score discount calling at Bremen	21%	27%	14%	16%	14%
Ships with an ESI score discount calling at Amsterdam	31%	24.4%	21.6%	21.8%	24.2%

The effect of the initiatives fluctuates a lot over the years. In general, a decrease of the number of ESI discounts that have been awarded to ships is visible after 2019 and 2020. However,

Bremerhaven and Port of Amsterdam do see an increase between 2022 and 2023 in the amount of ships that make use of ESI discount.

1.7 Possible obstacles

More push is necessary from government entities and from the market to make shipping more sustainable. Interviews reveal that the current waterway discounts are financially not strong enough incentives to make the inland shipping industry more sustainable. The discount on port fees is often a very limited amount. Many shippers regard the discount as too low to become more sustainable (Van Wijlick, 2023).

- When labelling inland ships, the certification is primarily based on the type of engines that are installed onboard and not how efficiently it is being used (Van Wijlick, 2023).
- Offering discount on port fees can lead to lower revenues for ports. This impact can be relatively large for smaller ports and can lead to a disadvantage for these ports.
- The interest from inland ports in this good practice seems to be rather limited as they rated it with a 4.6 on average (1 being not interested in implementing the good practice, 10 being very interested in implementing the good practice (Ecorys et al., 2024).

1.8 Key learnings

- Discounts on port fees create a financial incentive for ships to become more sustainable, but more effort is likely to be needed to achieve this task.
- A business case in which the discount becomes financially more interesting for the shipowner to switch to more sustainable ships, contributes to accelerating sustainability.

1.9 Sources

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