

ENVIRONMENTAL SHIP INDEX

Environmental Ship Index

Port Sustainability in East Africa and the Indian Ocean

28 April 2021

Environmental Ship Index ESI: what it is

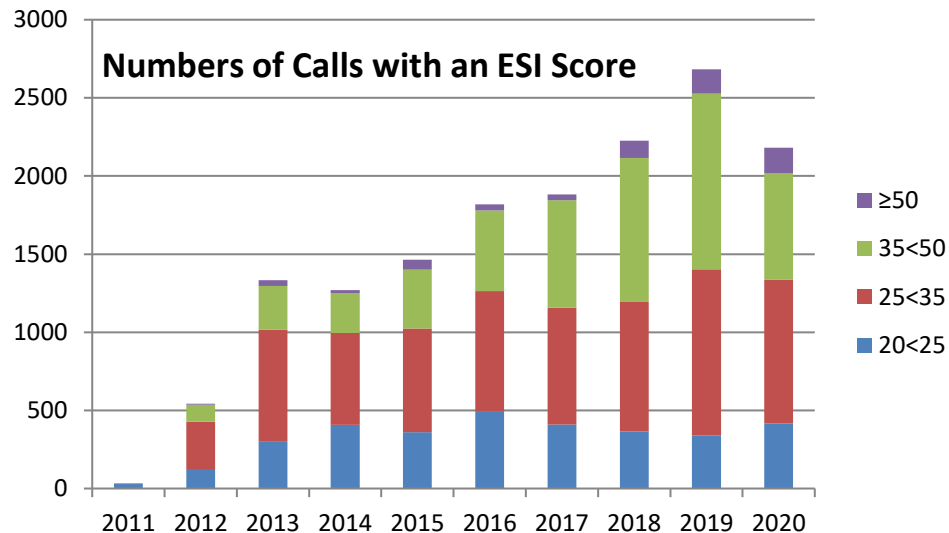
- **The ESI is a measure for the environmental performance of seagoing ships (air emissions) relative to IMO rules**
- **Provides a tool that assists ports and other parties to promote clean shipping**
- **Use is on a voluntary base using self declaration**
- **Maximum responsibility with the ship owner**
- **Suitable for all sizes and types of ships, actual 7,000 ships included**
- **From ports for ports under the umbrella of IAPH**

ESI: how it works

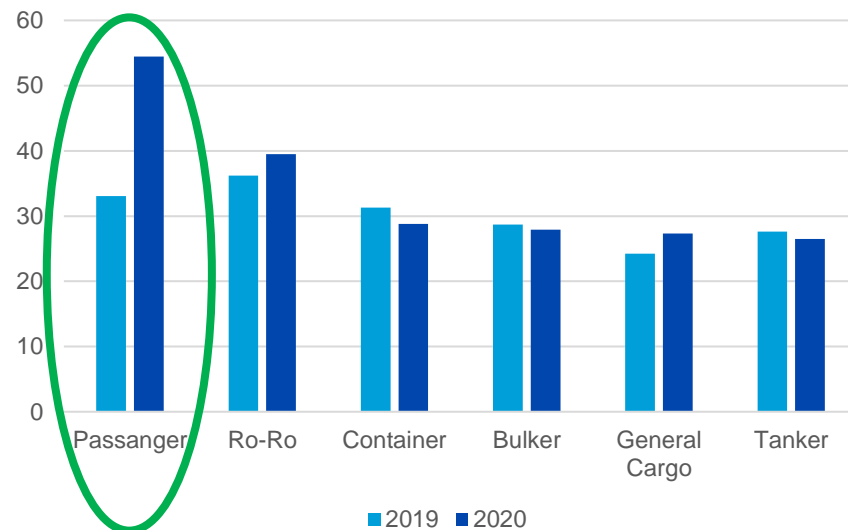
ESI is composed of credits (0 – 100) for above-baseline environmental performance regarding NO_x, SO_x (indirectly PM), CO₂ and OPS

- **NO_x** dependent on performance of main and auxiliary engines
- **SO_x** dependent on the sulphur content of the fuels used
- **CO₂** dependent on reporting of fuel consumption, distance sailed and increase in efficiency
- **OPS** dependent on reporting of onboard installation

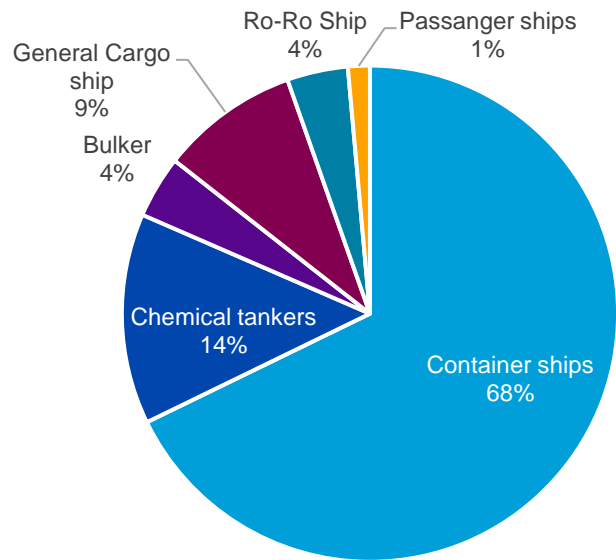
ESI in Hamburg - Success story since 2011



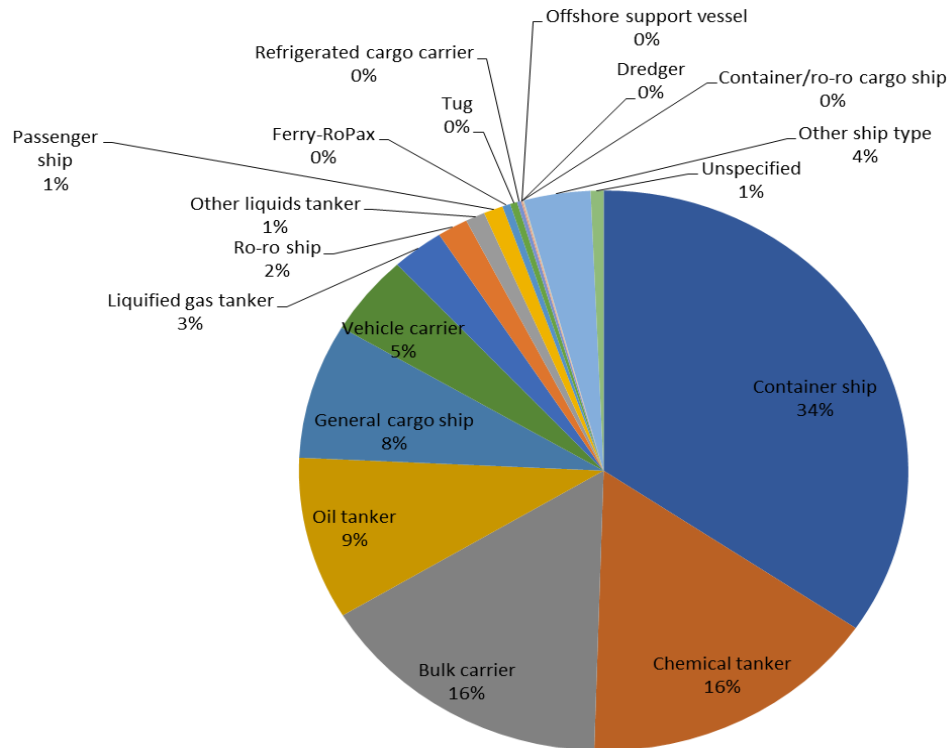
Average ESI Score per ship type



Distribution of Ship types



Port of Hamburg



General

Ports using ESI – Port Reunion the only port in the African and Indian Ocean region



- ESI Next Developments

