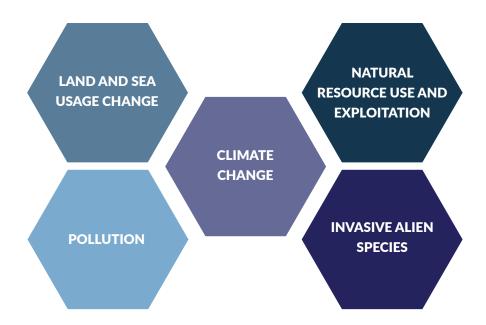
# Ecosystems and Biodiversity

Biodiversity, the variety of flora and animals on our world, is declining quickly which might have long-term detrimental consequences. Biodiversity aids in the maintenance and support of healthy ecosystems of all sizes.

More than half of global Gross Domestic Product (GDP) is reportedly dependent on a functioning biodiversity and ecosystem. A decline in biodiversity due to collapsing ecosystems would threaten economies around the world. It is estimated that a fifth of countries globally (20%) are at risk.



## THERE ARE FIVE DIRECT FACTORS DRIVING 90% OF THIS THREAT:

SEASPAN IS TAKING ACTION TO LIMIT THE IMPACT OF ITS BUSINESS ON MARINE ECOSYSTEMS AND BIODIVERSITY, AS OUTLINED BELOW:

## **ENVIRONMENTAL POLICY**

All Seaspan employees are bound by the company's Environmental Policy, which includes:

- Extensive procedures, training and drills for safe operation of vessels
- A well-established planned maintenance system
- Regular management and third-party inspections and forensic analyses of records and operations
- 24/7 shore based qualified technical support
- A dedicated Open Reporting Hotline available for staff to report any environmental non-compliance
- Investigation of incidents of marine pollution and implementing preventive measures across the fleet
- A zero-tolerance approach to violations of environmental regulations and cooperation with authorities in addressing such breaches



#### WASTE MANAGEMENT

#### Garbage

Garbage from ships can be just as hazardous to marine life as oil and chemicals. Seaspan provides training and resources to ship and shore staff to ensure strict compliance with ANNEX V of MARPOL. Seaspan has implemented a Garbage Management Plan and vessels have been equipped with garbage compactor and comminutors. Shore facilities are used for disposal and recycling where available and permitted as per local regulations.

Seaspan encourages reporting of violations via open reporting hotline to support timely corrective action.

#### Plastic Waste

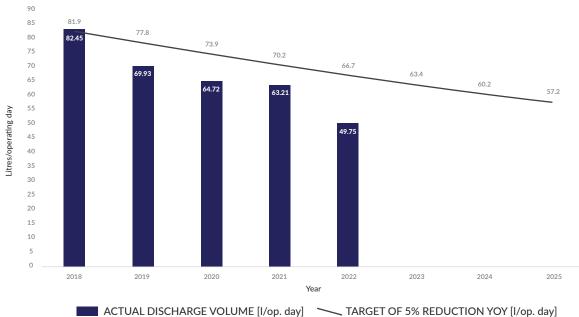
Plastic waste, which can float for decades, is one of the greatest threats to marine ecosystems. Fish and marine mammals can sometimes confuse plastics for food and become entangled in plastic ropes, nets, bags, and other items, including seemingly harmless items such as the plastic rings used to hold beer and soft drink cans together.

# In response to this growing concern, Seaspan has taken the following actions to reduce plastic waste:

- Reduced the dependency on plastic bottled drinking water by supplying water filtration units onboard and personal stainless steel water bottles for crew members. Potable water testing is part of planned maintenance to ensure the water is safe to drink.
- New vendors are vetted for their policy on plastic packaging materials and discouraged from supplying it onboard the ships. Crew members are encouraged to return plastic packaging materials to suppliers for recycling.
- Encourage ship staff to accurately report volumes of plastic discharged
- A ban on single use plastics imposed by various states, extending to vessels calling on ports in those jurisdictions, has further discouraged the use of such materials on board vessels. These actions and increased awareness have resulted in a gradual behavior shift among Seaspan seafarers, resulting in a reduction in the quantity of plastic waste disposed from our ships.

To support our actions, we have set ourselves a target of a 5% annual reduction in plastic waste discharged from our ships, in comparison to 2018.





#### Plastic waste landed per vessel operating day

53

#### **OIL POLLUTION**

Oil spills are one of the most well-known environmental catastrophes and can result in the physical and chemical modification of natural habitats and have a substantial influence on fauna and flora.

Due to marine pollution's negative impact on the environment, the maritime sector has consistently adapted and improved rules regarding design, operation, effluent limitations, liability, and crew training.

Seaspan participates in the Voluntary Environmental Compliance Program (VECP) in order to improve its Environmental Management System (EMS), MARPOL compliance, and other regulatory requirements. During the year, extensive ship and shore training sessions are conducted to increase knowledge and comprehension of VECP program requirements. Physical VECP checks of 25 vessels are scheduled to ensure compliance with the standards.

Seaspan crew members have access to an anonymous reporting hotline for reporting noncompliance to shore management.

To support our actions, we have set ourselves a target of zero incidents of significant noncontained oil spills (significant non-contained oil spills = 5m3)

In 2022 there were NIL incidents of oil spill overboard. Minor operational spillages reported were contained within the ship, either on deck or in the engine room.





## **CONTAINER LOSS OVERBOARD**

Container loss overboard a ship presents a unique marine pollution hazard. The nature and extent of marine pollution from lost containers at sea varies according to their contents. In addition to the threat of contamination posed by the contents of a container, the body and coatings of the container also pose an environmental hazard.

To address this issue, Seaspan brings together several programs and systems, including:

- application of best management practices and procedures
- onboard maintenance regimes
- third-party inspections

- regular crew training
- up-to-date lashing software

Seaspan ensures that all our container-securing software is class-approved and examined annually. This is not a statutory or class requirement, but a voluntary, extraordinary effort to ensure that the vessel is equipped to operate safely. Additionally, we implement additional checks in our container securing software to identify and prohibit high-risk container stack configurations (e.g. stacks with excessive heavy over light arrangements). Because of our proactive approach to container safety, we have an exemplary track record.

To support our actions, we have set ourselves a target of zero containers lost overboard. In 2022, there was one incident that resulted in the loss of four containers overboard.

Onboard two of our ships (13,000 and 14,000 TEU), a successful trial of Lash Force Monitoring system was completed. Lash Force Monitor measures current lash forces depending on the vessel's measured motion. The device gives a visual and audible warning when lashing forces exceed the preset limitations, as well as a warning if the vessel's current design or critical rolling angle is exceeded. In the event of severe weather, operational advice provides the vessel crew with decision-making support about the vessel's course and speed to prevent a detrimental influence on the lashing, ensuring the integrity of the container stack. Seaspan is currently deploying Lash Force Monitor on 27 newbuild vessels.

In 2022, Seaspan vessels safely transported over 33 million TEU from/to 238 unique ports worldwide including more than 205,000 units of dangerous goods.

### **BALLAST WATER MANAGEMENT**

Ballast water refers to seawater that is taken onboard to improve a ship's structural balance and strength, ensuring its safe operation. It is often loaded to counter changes in weather conditions as well as the ship's load, fuel carried, and route taken.

Ballast water is an important environmental concern due to the possibility of transporting invasive aquatic species into local marine ecosystems. The IMO's Ballast Water Management Convention requires ships to manage their ballast water in such a way that aquatic organisms and pathogens are removed or rendered harmless before discharging the water.

Seaspan's vessels are fitted with Ballast Water Treatment System compliant with both IMO and U.S. Ballast Water discharge standards. Thanks to in-house training for seafarers, an internal compliance and verification program, and early adoption of ballast water treatment technology, Seaspan's crew and management are well prepared and trained in the treatment of ballast water onboard its ships.



## SHIP RECYCLING

Seaspan is committed to safe, sustainable, socially responsible recycling of ships and strives to ensure that such recycling is performed at shipyards that do not present any unnecessary risk to human health, safety, or the environment.



The ship recycling industry supports some developing countries' economies and is a contributor to sustainability efforts through its role in recycling metals and other components. However, ship recycling must be performed according to strict standards that protect human health, safety, and the environment. Every year, hundreds of ships are dismantled in poor environmental and social conditions by workers receiving low pay, often with inadequate tools and little protection. Without rigorous processes and strong governance, the process can cause significant safety risk, death, and pollution, offsetting the environmental benefits of ship recycling.

The IMO's Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, introduced in 2009 (the "Hong Kong Convention"), aims to protect workers and the environment during the ship recycling process. Seaspan's newbuild vessels are designed and constructed in conformity with requirements of the Hong Kong Convention.

## Seaspan has taken the following actions to manage the responsible recycling of its ships:

- Implemented its Ship Recycling Policy in 2020
- All vessels maintain certification required under the Hong Kong Convention
- Seaspan's procurement process ensures that hazardous materials noted in the governing legislation are properly identified and declared, and an accurate inventory of hazardous materials is maintained
- In 2022, Seaspan became a signatory of the Ship Recycling Transparency Initiative. This is an online platform that allows shipowners to publicly disclose their ship recycling policies, practice and progress, thereby taking accountability before key stakeholders including customers, financial stakeholders, governments, NGOs and wider public
- No ships came available for recycling in 2022