



Sector characteristics

Maritime transport

Maritime shipping is a mature and growing sector that is responsible for large parts of world trade. Short Sea Shipping accounts for 60% of the total maritime transport of goods within Europe.

The sector is highly diverse in terms of the type and size of vessels involved.

Maritime transport generates different pressures on the environment and natural ecosystems.

Area-based marine conservation

Marine conservation can be broadly differentiated into approaches that target overall ecosystem health (such as reducing fishing pressure or reducing pollution), approaches that target specific species (such as marine mammals), and area-based approaches (such as MPAs).

Impacts caused by shipping can reduce the conservation benefits of area-based marine conservation. Even when MPAs themselves are well managed, they can still be affected by pressures originating outside of the protected area

Conflict description

Direct and indirect impacts

Conflicts between the maritime transport sector and marine conservation are due to the various direct and indirect impacts that maritime shipping has on marine ecosystems and life.

Major pressures

- a) noise pollution;
- b) collision;
- c) accidental oil spills,
- d) discharge of hazardous waste,
- e) invasive species;
- f) exhaust emissions;
- g) physical damage to habitats;
- h) (indirectly) port expansion.

Noise and ship strikes as spatial concerns

Noise pollution is a particular concern in the context of cumulative impacts on cetaceans. Ships sometimes hit large animals such as whales. Both impacts are expected to increase due to the increasing number of vessels at sea.

Drivers of conflict

Increasing demand for goods globally

Shipping is considered a strategic sector by countries and it is expected to grow further as demands for goods (e.g. oil, minerals, and products) is expected to increase.

Conservation targets

Countries need to meet a range of international conservation targets, such as the Aichi targets, achieving Good Environmental Status for the marine environment as required by the EU MSFD, or achieving SDG 14 "life under water". They also need to comply with national legislation regarding species and habitat protection.

A partnership approach

Much has already been achieved by the maritime transport sector in terms of mitigating the negative environmental impacts of shipping. The sector needs to comply with environmental regulations and is open to developing joint solutions.

Possible solutions

Prevention

- 1 Develop sea basin maps of areas with high ecological values.
- 2 Use PSSAs for broader marine areas
- 3 Design new shipping routes or re-route shipping lanes
- 4 Develop investigation areas for shipping
- 5 Designate anchorage areas

Mitigation

- 6 Impose ship speed restrictions within certain areas.
- 7 Promote the use of the REPCET or similar software
- 8 Use the MSP process to promote ship-quieting techniques.
- 9 Involve the sector in developing joint solutions

Future trends

The shipping sector will continue to grow in the coming years with larger ships being built.

Cargo may increasingly be loaded onto smaller vessels, which will require new spaces in the sea and will create new impacts whilst minimising others.

New technology will play an important role as shipping companies are likely to optimise shipping hulls with new design, optimise propulsion and implement alternatives to the use of ballast waters. All these innovations will make vessels more efficient and will reduce the environmental impacts of the sector.

Marine conservation players will most likely call for more MPAs in order to achieve the Aichi targets. They will also call for better species protection and the establishment of the Ecosystem-based Approach in MSP with the aim of successfully managing MPAs and achieving better protection.

Technology will play an important role as the use of GPS and similar technologies will help scientists to map important ecological areas and design new important areas for protection.