

Annex I Regulations for the Prevention of Pollution by Oil (entered into force 2 October 1983)

Covers prevention of pollution by oil from operational measures as well as from accidental discharges; the 1992 amendments to Annex I made it mandatory for new oil tankers to have double hulls and brought in a phase-in schedule for existing tankers to fit double hulls, which was subsequently revised in 2001 and 2003.

Annex II Regulations for the Control of Pollution by Noxious Liquid Substances in Bulk (entered into force 2 October 1983)

Details the discharge criteria and measures for the control of pollution by noxious liquid substances carried in bulk; some 250 substances were evaluated and included in the list appended to the Convention; the discharge of their residues is allowed only to reception facilities until certain concentrations and conditions (which vary with the category of substances) are complied with.

In any case, no discharge of residues containing noxious substances is permitted within 12 miles of the nearest land.

Annex III Prevention of Pollution by Harmful Substances Carried by Sea in Packaged Form (entered into force 1 July 1992)

Contains general requirements for the issuing of detailed standards on packing, marking, labelling, documentation, stowage, quantity limitations, exceptions and notifications.

For the purpose of this Annex, "harmful substances" are those substances which are identified as marine pollutants in the International Maritime Dangerous Goods Code (IMDG Code) or which meet the criteria in the Appendix of Annex III.

Annex IV Prevention of Pollution by Sewage from Ships (entered into force 27 September 2003)

Contains requirements to control pollution of the sea by sewage; the discharge of sewage into the sea is prohibited, except when the ship has in operation an approved sewage treatment plant or when the ship is discharging comminuted and disinfected sewage using an approved system at a distance of more than three nautical miles from the nearest land; sewage which is not comminuted or disinfected has to be discharged at a distance of more than 12 nautical miles from the nearest land.

Annex V Prevention of Pollution by Garbage from Ships (entered into force 31 December 1988)

Deals with different types of garbage and specifies the distances from land and the manner in which they may be disposed of; the most important feature of the Annex is the complete ban imposed on the disposal into the sea of all forms of plastics.

Annex VI Prevention of Air Pollution from Ships (entered into force 19 May 2005)

Sets limits on sulphur oxide and nitrogen oxide emissions from ship exhausts and prohibits deliberate emissions of ozone depleting substances; designated emission control areas set more stringent standards for SO_x, NO_x and particulate matter. A chapter adopted in 2011 covers mandatory technical and operational energy efficiency measures aimed at reducing greenhouse gas emissions from ships.

ENVIRONMENT – OUR STRATEGY FOR CLIMATE CHANGE & ENVIRONMENTAL SUSTAINABILITY



Transporting petrochemical products and livestock is a challenge we face every day to meet our customers' needs while upholding stringent environmental and safety standards.

We work responsibly, implementing sustainable practices, procedures and policies based on good corporate governance, integrity and care for the environment. These are reflected in the way we take decisions, interact with one another and behave with our customers and stakeholders.

GULFNAV's environmental strategy and approach to sustainability demonstrate a clear commitment to running a responsible business while respecting the environment and embracing precautionary efforts to mitigate broad global climate change and environmental impacts.

To achieve its vision, GULFNAV promotes a strategic focus on cleaner seas, land and cargo through monitoring and maintaining Inventory of Hazardous Materials (IHM) in line with IMO Hong Kong Convention 2009 on Recycling of Ships and EU SRR 2013, and by investments in innovative low-carbon technology, energy efficiency and operational efficiency. Additionally, GULFNAV fleet was greatly enhanced

in recent years by a retrofitting programme. We have invested extensively in the latest generation of marine technologies, such as new energy-efficient propellers and bows to reduce fuel consumption and therefore improve our energy efficiency.

Our commitment to pass cleaner environment to our future generation is displayed by our continues efforts to not only meet prevailing Statutory requirements but also to act proactively to forth coming requirements. Above mentioned IHM requirements not only ensure controls of hazardous material during ship building and operational life of the ship, but also ensure environmentally safe recycling of the ships too.

We continuously monitor our environmental performance and have implemented a number of operational measures to further reduce our CO₂ emissions to meet expected new regulations, including those to be adopted by the International Maritime Organization (IMO).



Regulation	Aim & Effective Date	GULFNAV's Response	Fleet Management Response
IMO Ballast Water Management Convention	Sets standards for proper management of ballast water and sediments to prevent the spread of harmful marine species. Effective Date: 8 Sep 2017.	Installation of advanced ballast water treatment systems in one of our vessels. With the aim to be installed across our entire fleet by 2023.	GULF FANATIR, GULF HUWAYLAT, GULF DEFFI & GULF JALMUDA are planned for the installation of BWTS in next DD. Presently vessel following D-1 method for Ballast water management.
IMO 2020 enhanced global sulphur limit (MARPOL Annex VI, regulation 14)	Enhances existing limits for sulphur content in marine fuel to reduce emissions of sulphur oxides and other pollutants. Effective Date: 1 Jan 2020.	Installation of Exhaust Gas Cleaning Systems (EGCS); evolving fuel strategy including use of Low Sulphur Fuel Oil (LSFO).	Vessels supplied with Low Sulphur Fuel Oil (LSFO) to comply with the global sulphur limit.
IMO Data Collection System (DCS)	Requires collection of fuel consumption data for ships 5,000 GT or over as part of the mandatory Ship Energy Efficiency Management Plan. Effective Date: 1 Mar 2018 for data collection from 1 Jan 2019.	Initiated advanced data acquisition across fleet.	For GULF FANATIR, GULF HUWAYLAT, GULF DEFFI & GULF JALMUDA data acquisition completed for year 2022 and same submitted to NKK for verification and issuance of compliance certificate.
EU Monitoring, Reporting & Verification (MRV)	Requires collection of CO2 emissions data for ships over 5,000 GT calling at EU/EFTA ports. Effective Date: 1 Jul 2015 for data collection from 1 Jan 2018.	Initiated advanced data acquisition across fleet	Vessels on TC to trade in Asia region. Moreover, data acquisition is in progress, but so far none of the vessels under our management called European ports, also EU MRV monitoring plan not available for all four vessels.

CONTINUOUS IMPROVEMENT OF OUR ENVIRONMENTAL PERFORMANCE

We are fully committed to further reducing energy consumption and CO₂ emissions across all our operations. Emissions vary from vessel to vessel and voyage to voyage, for reasons including operational factors, vessel load and waiting times in ports.

To monitor the performance of individual ships and our fleet over time, among other measures, we use the Energy Efficiency Operational Indicator (EEOI) tool, as set out in the IMO Guideline MEPC.1/circ.684. Our EEOI analyses show that we have significantly reduced our carbon dioxide emissions per metric tonne of cargo moved on a per mile basis. To meet forthcoming EEXI compliance we are collaborating with engine builders like Hyundai and MAN ES to retrofit Engine Power Limiting Devices on our vessels as a short term compliance solution and further opting for more greener technologies to upgrade our vessels to meet more stringent IMO future requirements.

As an ISO 9001:2015 certified company accredited by Bureau Veritas, GHN is committed to adhering to the requirements of the international management code for the safe operations of vessels, pollution prevention and environmental control including compliance with all the applicable international laws, regulations and requirements.

CO₂ emission per distance
(Tons / Nautical mile):

0.286

CO₂ emissions per transport work
(grams / Tons * Nautical mile):

15.7225

GULFNAV's vessels routinely maintain the following Certificates in compliances with MARPOL:

- International Anti-Fouling Certificate
- International Oil Pollution Prevention Certificate
- International Ballast Water Management Certificate
- International Sewage Pollution Prevention Certificate
- International Air Pollution Prevention Certificate
- Sanitation Control Certificate
- Garbage Pollution Prevention Certificate
- Certificate of Compliance for Inventory of Hazardous Materials
- Confirmation of Compliance for DCS

GULFNAV endeavors to demonstrate its commitment to environmental protection and the effectiveness

and the compliance of its Environmental Management System (EMS) with the MARPOL and ISO 14001 standards requirements. Furthermore, we follow the International Safety Management – ISM Code for safe ship operation and pollution prevention.

For this purpose, GULFNAV has established, documented, and implemented an Environment Management System designed to comply with the upmost national and international requirements.