



AND THE ENVIRONMENT

IMO is the United Nations specialized agency charged with developing and adopting global regulations on the safety, security and efficiency of ships and on the protection of the environment – both marine and atmospheric – from shipping operations. The Organization's 170 Member Governments are responsible for implementing and enforcing those regulations, once they enter into force for the international merchant fleet of some 100,000 ships (above 100 GT).

Today, however, the pressure is mounting for every potential polluter, every user of energy and every contributor to environmental degradation, climate change or biodiversity loss to both clean up their act and adopt greener practices. Shipping is no different and, therefore, IMO's vision for the industry is to eliminate, or reduce to the barest minimum, all adverse environmental impacts from ships.

IMO's vision is to eliminate all adverse environmental impacts from ships by developing regulations that apply universally to all ships.



INTERNATIONAL
MARITIME
ORGANIZATION

Shipping's Credentials

Shipping – which transports around 90 per cent of global trade – provides the principal mode of transport for the supply of raw materials, consumer goods, essential foodstuffs and energy to the global population. The vast majority of these products could not be transported any other way than by ship and, accordingly, shipping is a prime facilitator of global trade and economic growth. Yet, set against land-based industries, shipping is a comparatively minor contributor, overall, to marine pollution from human activities.

While there is no doubt that the shipping industry, and IMO, still have more to do to mitigate risks to the environment, human health, property and resources, there is, nevertheless, an impressive track record of continued environmental awareness, concern, action, response and overall success scored by the Organization and the maritime community.

Increasingly, such achievements are recognized as being both good for the environment and good for the business of shipping. Moreover, as we approach the 2012 United Nations Conference on Sustainable Development (Rio+20), flowing from the 1992 Earth Summit on environment and development, shipping's continuing contribution to economic growth, employment at sea and ashore, and environmental protection, means that its ever improving credentials are also good for sustainable development.

IMO's Role

IMO's original mandate was mainly focused on maritime safety. However, as the custodian of the 1954 OILPOL Convention, the Organization, soon after it began functioning in 1959, assumed responsibility for pollution issues. As a consequence, it has, over many years, adopted a wide range of measures to prevent and control pollution caused by ships and to mitigate the effects of any damage to the environment, human health, property and resources that may occur as a result of maritime operations and accidents. In order to address the increasing focus on environmental issues and to clearly demonstrate the importance the Organization attaches to such issues, in 1973 IMO established its Marine Environmental Protection Committee (MEPC) to consider any matter concerned with marine pollution from ships. MEPC meets three times biannually and is open to all member States and observers. MEPC 62 was held in July 2011 with about 900 participants from 93 Member States and 67 observer organizations.

The regulatory measures adopted by IMO have shown to be successful in reducing vessel-sourced pollution and illustrate the commitment of the Organization and of the shipping industry towards protecting the environment. Of the 53 treaty instruments IMO has adopted so far, no less than 21 are directly related to environmental protection, rising to 23, if the environmental aspects of the Salvage and Wreck Removal Conventions are included.

Environmental Concerns and Responses

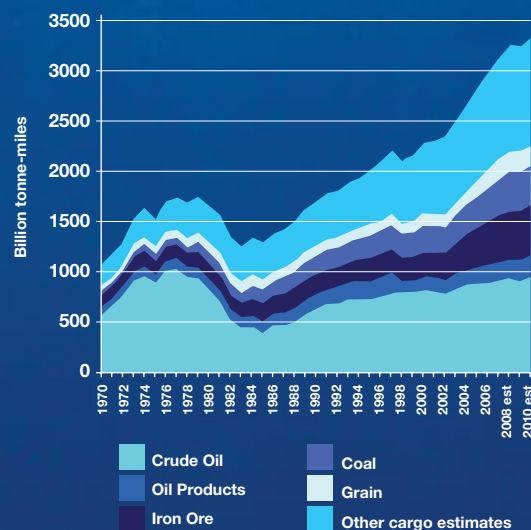
In 1973, IMO adopted the International Convention for the Prevention of Pollution from Ships, now known universally as MARPOL, which has been amended by Protocols adopted in 1978 and 1997 and kept updated through other relevant amendments. The MARPOL Convention addresses pollution from ships by oil; by noxious liquid substances carried in bulk;

INTERNATIONAL SHIPPING

The most efficient, safe and environmentally friendly mode of transporting goods around the world



World seaborne trade 1969-2010
(Source: Fearnley's Review)





harmful substances carried by sea in packaged form; sewage; garbage; and the prevention of air pollution from ships.

MARPOL has greatly contributed to a significant decrease in pollution from international shipping and applies to 99% of the world's merchant tonnage. Other treaties address anti-fouling systems used on ships, the transfer of invasive aquatic species by ships' ballast water and the environmentally sound recycling of ships.

The significant reductions of pollution generated by ships have been achieved by addressing technical,

operational and human element issues and those reductions are all the more noteworthy when account is taken of the simultaneous and equally significant growth in the world's shipping industry – both in the size of the world fleet and the distances that it travels. Nevertheless, IMO is continuously pursuing a proactive approach to enhance implementation and enforcement of its global standards, by flag, port and coastal States, including a proactive action plan to ensure that shore-based reception facilities for ship-generated wastes keep up with international regulatory requirements. Key to this is the building of capacity in Member States – through institutional and human resource development – to improve their ability to comply with and enforce these requirements.

Chemical Pollution Prevention

Annex II of MARPOL provides rules for the prevention of pollution caused by noxious liquid substances carried in bulk. Its requirements, supplemented by those of the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (the IBC Code), ensure that chemical tankers nowadays conform with most stringent standards of construction, including the protection of cargo tanks. Highly restrictive limits for operational discharges of tank washings, in force since January 2007, have also helped greatly in the protection of the marine environment from the release of chemical cargoes.

Oil Pollution Prevention

The operational and construction regulations introduced by MARPOL, which entered into force in 1983, have been a success, with statistics from reputable industry and independent bodies showing that these regulations, along with other safety-related regulations such as the introduction of mandatory traffic separation schemes and international standards for seafarer training, have been instrumental in the continuous decline of accidental oil pollution that has taken place over the last 30 years.

The MARPOL convention, in 1983, introduced a number of radical new concepts, such as a requirement for new oil tankers to be fitted with segregated ballast tanks, so as to obviate the need to carry ballast water in cargo tanks. This was superseded by the requirement for oil tankers delivered from 1996 onwards to be fitted with a double hull. The protection of the marine environment was thus greatly enhanced.

Over **90%**
of the world's trade
is carried by sea



As far as operational oil pollution is concerned, the many innovations introduced by MARPOL on allowable discharges of bilge water through the oily water separator (with the well known 15ppm standard), or oily waters from the cargo tanks, through the oil discharge and monitoring system, have contributed greatly to a noticeable decrease in the pollution of the world's seas, though it is fair to recognise that a greater effort to impose compliance must be carried out.

Preparedness for and Response to Pollution Incidents

According to shipping market analysts; world seaborne trade increased by around 135 per cent between 1985 and 2006. Oil and petroleum products accounted for a significant part of this increase, rising by a similar percentage. In sharp contrast, estimates of the quantity of oil spilled in to the sea during the same period show a steady reduction by some 85 per cent. In the current decade, the average number of oil spills over 700 tonnes has shrunk from over 25 per year in the 1970s to just 3.7. One major oil company has estimated that the tankers it owns, or uses under long-term charter, spill less than one teaspoon of oil for every million gallons transported; while tanker owners take pride in statistics that show that 99.9996 per cent of all oil transported by sea is delivered safely and without impact on the marine environment.

Notwithstanding the improvements in the area of pollution prevention, pollution incidents will inevitably still occur. To address the preparedness aspects and the response to incidents of oil and chemical pollution or 'hazardous and noxious substances (HNS)', IMO's International Convention on Oil Pollution Preparedness, Response and Cooperation, 1990 (OPRC 1990) and its Protocol on Preparedness, Response and Co-operation to Pollution Incidents by Hazardous and Noxious Substances, 2000 (OPRC-HNS Protocol 2000) together provide the foundation for ensuring an adequate level of response capacity and a mechanism for international cooperation and mutual assistance. OPRC 1990, in particular, recognizes that successful preparedness and response relies on good co-operation between government and industry. There are numerous examples of how this co-operation has served to strengthen the collective capacity for oil spill response around the world.

Liability and Compensation

Over the years, the IMO has put in place a comprehensive set of regulations covering liability and compensation for damage caused by oil transported by ship, through which the shipping industry (in conjunction with oil importers) provides automatic cover of up to US\$1 billion for any single incident, regardless of fault. This tiered system of compensation includes the International Convention on Civil Liability for Oil Pollution Damage (CLC) and the International Oil Pollution Compensation (IOPC) Funds, which collectively provide more coverage than ever before to those affected by oil spills.

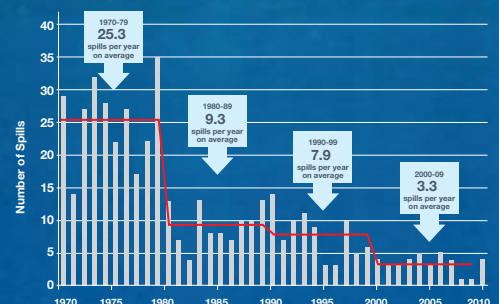
The International Convention on Civil Liability for Bunker Oil Pollution Damage entered into force in November 2007, extending the liability and compensation regimes to damage caused by spills of oil when carried as fuel in ships' bunkers.

The International Convention on Liability and Compensation for Damage in connection with the Carriage of Hazardous and Noxious Substances by Sea, 1996, once in force, will serve to complete this framework by establishing a regime to provide compensation for spills involving hazardous and noxious substances. A Protocol aimed at bringing the HNS Convention into force was adopted in 2010.



Number of large spills (over 700 tonnes) from 1970 to 2010

(Source: ITOPF Annual Statistics)

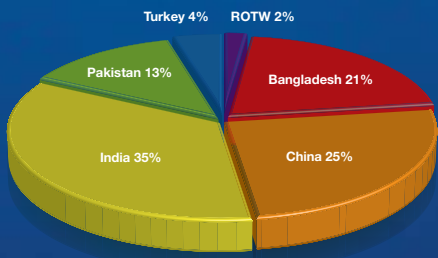


Location of major oil spills
(Source: ITOPF Annual Statistics)



The Hong Kong Convention in a nutshell:
Certified ship seeks authorized facility

Ship Recycling volume of the largest
ship recycling countries, 2010
(Source: IHS-Fairplay)



India	6,533,954 GT	35%
China	4,723,151 GT	25%
Bangladesh	3,927,297 GT	21%
Pakistan	2,443,304 GT	13%
Turkey	658,473 GT	4%
Rest of the World	387,853 GT	2%

Ship Recycling

When ships reach the end of their working lives, recycling is the most environmentally friendly way to dispose of them. Many of the components and virtually all of the steel are re-used in the countries where the ships are recycled, into new ships, in agriculture, in hospitals, at homes, and in other products. However, there are concerns about environmental and working conditions in ship recycling yards.

In May 2009, IMO adopted the Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, 2009 (the Hong Kong Convention). The new Convention balances safety and environmental concerns with the commercial realities of seaborne trade and the ship recycling industry.

Following the adoption of the Convention, Member States of IMO will need:

- 1 to initiate work to accede to the Convention at the earliest possible opportunity so as to expedite its entry into force;
- 2 to initiate action to provide technical assistance to requesting countries without awaiting the Convention's entry into force; and
- 3 to initiate action, as may be necessary, to ensure the effective implementation and proper enforcement of the Convention when it comes into force.

Currently IMO is working on the development and adoption of guidelines associated with the Hong Kong Convention. Six guidelines are envisaged by the Convention. The "guidelines on the development of the Inventory of Hazardous Materials" and the "guidelines for the development of the Ship Recycling Plan" have already been adopted. The remaining guidelines are expected to be finalized and adopted during 2012.

Prevention of Air Pollution from Ships

Although air pollution from ships does not have the direct cause and effect associated with, for example, an oil spill incident, it causes a cumulative effect that contributes to the overall air quality problems leading to poor respiratory health encountered by populations in many areas, and also affects the natural environment, such as through acid rain.

MARPOL Annex VI, first adopted in 1997, limits the main air pollutants contained in ships exhaust gas, including sulphur oxides (SO_x) and nitrous oxides (NO_x), and prohibits deliberate emissions of ozone depleting substances.

MARPOL Annex VI also regulates shipboard incineration, and the emissions of volatile organic compounds from tankers.

In October 2008, IMO adopted the Revised MARPOL Annex VI and the NO_x Technical Code 2008, which entered into force on 1 July 2010. The main changes are a progressive reduction in emissions of SO_x, NO_x and particulate matter and the extension of designated emission control areas (ECAs) for more stringent control of the emission of SO_x to NO_x and particulate matter (PM) as well.

Under MARPOL Annex VI, the global sulphur cap for fuel oil used on-board ships is reduced initially to 3.50%*m/m* (from the current 4.50%), effective from 1 January 2012; then progressively to 0.50%, effective from 1 January 2020, subject to a feasibility review to be completed no later than 2018. The sulphur limits for fuel oil applicable in ECAs for SO_x and particulate matter are 1.00%, and further reduced to 0.10%, effective from 1 January 2015.

Progressive reductions in NO_x emissions from marine diesel engines are also included, with more stringent controls being a "Tier II" emission limit required for those marine diesel engines installed on or after 1 January 2011; then with the most stringent controls being "Tier III" emission limit for marine diesel engines installed on or after 1 January 2016, that are used on ships operating in ECAs designated for controlling NO_x. Marine diesel engines installed on or after 1 January 1990 but prior to 1 January 2000 are also required to comply with "Tier I" emission limits, if an approved method for that engine has been certified by an Administration.

The Control of Greenhouse Gas Emissions from International Shipping

IMO recognizes the increasing importance and urgency to control greenhouse gas (GHG) emissions worldwide and is determined to be in the frontline of the global campaign to tackle this defining challenge of our age.

According to the Second IMO GHG Study 2009, the most comprehensive and authoritative assessment of the level of GHG emitted by ships, as well as the potential for reduction, international shipping was estimated to have emitted 870 million tonnes, or about 2.7% of the global emissions of carbon dioxide (CO₂) in 2007.

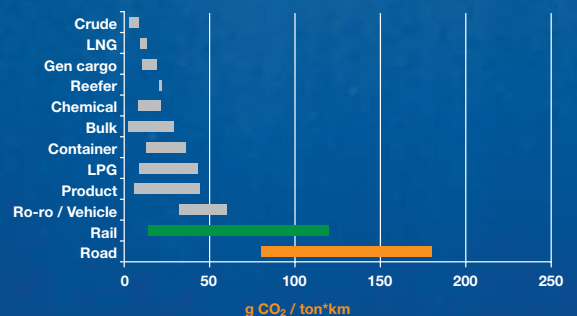
Exhaust gases are the primary source of emissions from ships. Carbon dioxide is the most important GHG emitted by ships, both in terms of quantity and of global warming potential, other GHG emissions from ships are less important.



MARPOL ANNEX VI
sets limits on SO_x and NO_x
emissions from ship exhaust
and prohibits release of ozone
depleting substances

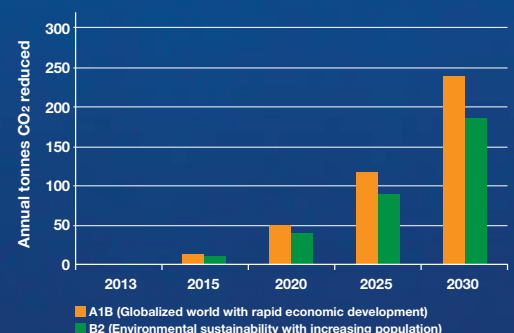
Range of typical fuel efficiencies for various cargo carriers

(Source: 2nd IMO GHG Study 2009)



Estimated CO₂ emissions reduction in mille tonnes

(Source: DNV)



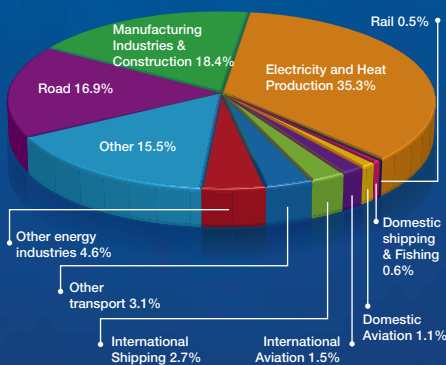


1ST GLOBAL GHG REGULATION

Mandatory energy efficiency measures to reduce GHG from international shipping were adopted at IMO

Shipping contribution to global CO₂ emissions, 2007

(Source: 2nd IMO GHG Study 2009)



Mid-range emissions scenarios showed that, by the year 2050, in the absence of regulations, ship emissions could grow by a factor of 2 to 3 (compared to the emissions in 2007) as a result of the expected growth in world trade.

Energy Efficiency Measures for Ships

The 2009 GHG Study identifies a significant potential for reduction of GHG emissions through technical and operational measures to improve the energy efficiency of ships. Together, if implemented, these measures could increase efficiency and reduce the emissions rate by 25% to 75% below the current levels. Many of these measures appear to be cost-effective.

In July 2011, IMO adopted a new chapter to MARPOL Annex VI that includes a package of mandatory technical and operational measures to reduce GHG emissions from international shipping, with the aim of improving the energy efficiency for new ships through improved design and propulsion technologies and for all ships, both new and existing, primarily through improved operational practices. The measures are expected to come into force on 1 January 2013.

This is a significant achievement for IMO as for the first time in history it establishes a global mandatory GHG emission reduction regime for an entire economic sector and is the first legally binding climate deal with global coverage since the Kyoto Protocol. The measures could see carbon dioxide emissions reduced by between 100 and 180 million tonnes a year by 2020, as from 2013 all ships will be required to implement an energy efficient management plan, including monitoring of fuel consumed, and all new ships built from 2013 and onwards will be required to meet a specific energy requirement (grams of CO₂ per tonne-mile) which will be gradually tightened over time (every five years).

The EEDI is a non-prescriptive, performance-based mechanism that leaves the choice of technologies to be used in a specific ship design to the industry. As long as the required energy-efficiency level is attained, ship designers and builders are free to use the most cost-efficient solutions for the ship to comply with the regulations.

An important focus of future work by IMO will be on capacity building activities to provide technical assistance to maritime Administrations and maritime industries in developing countries to enhance their understanding of the technical and operational measures that have been adopted and assist them in their implementation and enforcement.

Market-Based Measures

The technical and operational measures will not be sufficient to satisfactorily reduce the amount of GHG emissions from international shipping in view of the growth projections of human population and world trade. Therefore, Market-Based Measures have also been considered and would serve two main purposes: providing a fiscal incentive for the maritime industry to invest in more fuel efficient ships and more sophisticated technologies and to operate ships in a more energy efficient manner and off-setting of growing ship emissions. Work on these measures will continue at forthcoming IMO meetings.

Garbage

In the past few decades, the enforcement of when and where to dispose of all types of wastes produced on a ship's voyage has become better regulated through MARPOL Annex V (Regulations for the Prevention of Pollution by Garbage from Ships). The requirements are much stricter in a number of "Special Areas" but perhaps the most important feature of the Annex is the complete ban imposed on the dumping into the sea of all forms of plastic. However, although Annex V obliges Governments to ensure the provision of facilities at all ports and terminals for the reception of garbage, more work needs to be done to ensure the availability of adequate reception facilities in every port. IMO instigated an "Action Plan on tackling the inadequacy of port reception facilities", which was completed after three years' work in 2010. IMO also embarked on a complete revision of Annex V and of the associated guidelines for its implementation, to take into account new technological developments. The revised Annex V was adopted by MEPC 62 and is expected to enter into force on 1 January 2013.

Control of Harmful Anti-fouling Systems

In order to keep ships' hulls clear of marine growth to ensure maximum performance and to prevent the spread of harmful aquatic organisms and pathogens, the industry uses anti-fouling systems to minimize the build-up of marine life on hulls surface. In the past, many of the coatings used in such systems were themselves harmful to the marine environment and more benign coatings needed to be developed to replace them.

Recognizing the importance of protection of the marine environment and human health from adverse effects of anti-fouling systems the IMO adopted the International Convention on the Control of Harmful Anti-fouling Systems on Ships, which entered into force in September 2008. The Convention prohibits the use of harmful organotins in antifouling marine paints and establishes a mechanism to prevent the potential future use of other harmful substances in anti-fouling systems. 52 Member States have ratified the instrument to date and the number of Parties continues to rise.

Ballast Water Management

Ballast water is absolutely essential to the safe and efficient operation of modern shipping, providing balance and stability to unladen ships. However, it may also pose a serious ecological, economic and health threat due to the transfer of harmful organisms and pathogens in ships' ballast water tanks. When all factors are favourable, the transferred species may survive to establish a reproductive population in the host environment and may even become invasive out-competing native species and multiplying into pest proportions.

The development of larger and faster ships completing their voyages in ever shorter times, combined with rapidly increasing international trade, meant that the natural barriers to the dispersal of species across the oceans were being reduced. The global economic impacts of invasive aquatic species have not been thoroughly quantified but are likely to be in the region of tens of billions of US dollars per year or more. Human health impacts can also be caused by the transfer and spread of pathogens and toxic organisms such as harmful algae in ships' ballast water.

During the last two decades, IMO has been working constantly to address, meet and respond to the challenges associated with ballast water management

USE OF ANTI-FOULING SYSTEMS

to prevent the build-up of organisms on the surface of ships is of critical importance to efficient commerce





US\$10 BILLION

Data relating to 7 specific invasions indicated that the direct economic impacts of these 7 species, alone, are more than US\$10 billion per year (source: GloBallast 2004)

culminating in 2004 with the adoption of the International Convention for the Control and Management of Ships' Ballast Water and Sediments. This far-reaching international treaty aims to prevent, minimize and ultimately eliminate the risks to the environment, human health, property and resources arising from the transfer of harmful aquatic organisms in ships' ballast water and is centred on the precautionary approach principle, giving due consideration to the environmental benefits, technological achievability and, most importantly, to global standardization.

As of July 2011, the BWM Convention has been ratified by 28 countries representing nearly 27% of the world's merchant shipping capacity and it is widely expected to enter into force during the next two years.

Ships' Biofouling

By addressing the risk posed by invasive aquatic species in ships' ballast water, IMO has only dealt with one of the major pathways of species movement. The other major pathway is biofouling of ships, i.e. the undesirable accumulation of micro-organisms, plants and animals on submerged structures. A single fertile fouling organism has the potential to release many thousands of eggs, spores or larvae into the water with the capacity to found new populations.

Biofouling introductions are common to all types of vessel, from small yachts, international fishing vessels, and large trading vessels, through to barges and mobile drilling rigs. Evidence suggests that in some regions more than 50% of invasive aquatic species introductions have occurred through biofouling.

IMO has responded to this challenge by developing a set of international measures for minimizing the translocation of invasive aquatic species through biofouling of ships and, as the body of knowledge on the potential for harmful effects of biofouling of ships continues to expand, IMO remains committed to identifying the most appropriate mechanisms to address this issue in a proactive and global manner.

CONTROL AND MANAGE BIOFOULING

Can greatly assist in reducing the risk of the transfer of invasive aquatic species and can also improve a ship's hydrodynamic performance

London Convention and Protocol

The “Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter 1972” (the “London Convention”) was one of the first global conventions to protect the marine environment from human activities and has been in force since 1975. Its objective is to promote the effective control of all sources of marine pollution and to take all practicable steps to prevent pollution of the sea by dumping of wastes. Currently, 87 States are Parties to this Convention.

In 1996, the “London Protocol” was adopted to modernize and supersede the Convention. The London Protocol entered into force in March 2006 and currently has 40 Parties. Under the Protocol all dumping is now generally prohibited, but Parties may issue permits to allow the dumping of the following materials specifically included on an approved ‘reverse list’, set out in Annex I of the Protocol and subject to a thorough analysis of suitability and of any adverse impacts on the marine environment:

- | | |
|--|--|
| 1 dredged material; | 6 organic material of natural origin; |
| 2 sewage sludge; | 7 bulky items primarily comprising iron, steel and concrete; and |
| 3 fish wastes; | 8 carbon dioxide streams from carbon dioxide capture processes for sequestration (CCS). |
| 4 vessels and platforms; | |
| 5 inert, inorganic geological material (e.g., mining wastes); | |

CO₂ sequestration in sub-seabed geological formations under the London Protocol

In November 2006, the Contracting Parties to the London Protocol adopted amendments to Annex I of the Protocol to regulate CO₂ sequestration in sub-seabed geological formations. These amendments entered into force on 10 February 2007 for all London Protocol Parties and therefore created a legal basis in international environmental law to regulate carbon capture and storage in sub seabed geological formations for permanent isolation. Note that the amendments only address the dumping of CO₂ streams from CO₂ capture processes for sequestration and not the use of such streams for enhanced oil recovery.

Exports of carbon dioxide

In 2009, the Contracting Parties adopted an amendment to Article 6 of the London Protocol allowing cross-border carbon capture and sequestration projects. It will enter into force for those Parties which have accepted it on the sixtieth day after which two-thirds of the Contracting Parties have deposited their instruments of acceptance with IMO.

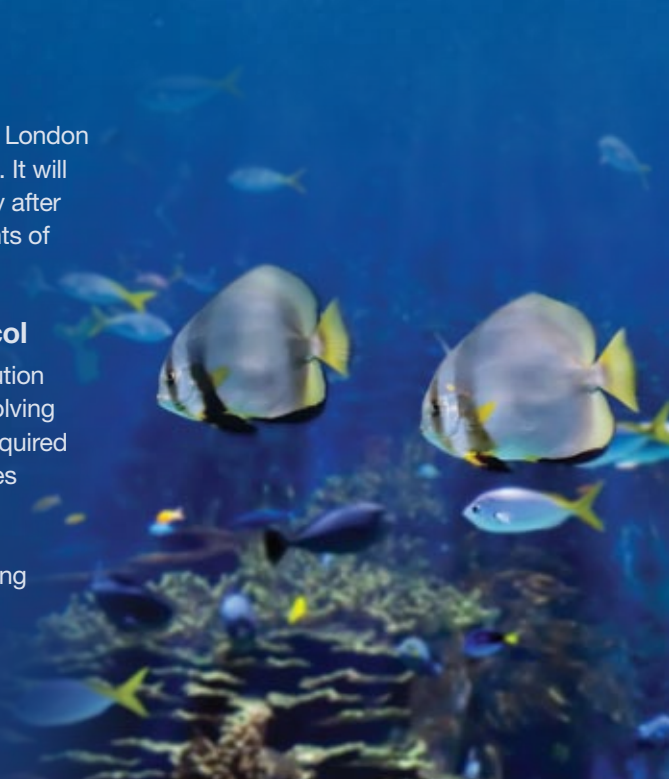
Ocean fertilization under the London Convention and Protocol

In 2010 the Parties to the London Convention and Protocol adopted resolution LC-LP.2(2010) on the “Assessment Framework for Scientific Research Involving Ocean Fertilization”, which had been developed since May 2007 and as required under resolution LC-LP.1(2008). This Assessment Framework guides Parties as to how proposals they receive for ocean fertilization research should be assessed and provides criteria for an initial assessment of such proposals and detailed steps for completion of an environmental assessment, including risk management and monitoring.



PROTECTING THE MARINE ENVIRONMENT SINCE 1975

London Convention and Protocol was one of the first ever conventions to protect the marine environment from human activities





Currently Parties are finalizing work that would “establish a global, transparent and effective control and regulatory mechanism for ocean fertilization activities and other activities that fall within the scope of London Convention and Protocol and have the potential to cause harm to the marine environment”.

For further information visit: www.londonprotocol.imo.org

Special areas and Particularly Sensitive Sea Areas (PSSAs)

While always advocating a global approach, the IMO nevertheless recognises that some areas need additional protection and the MARPOL Convention defines certain sea areas as “Special Areas” in which the adoption of enhanced special mandatory measures for the prevention of pollution is required.

Outside the MARPOL regulations, the IMO Assembly has adopted Guidelines for the designation of Particularly Sensitive Sea Areas (PSSAs), which are deemed to require a higher degree of protection because of their particular significance for ecological, socioeconomic or scientific reasons, and because they may be vulnerable to damage by international maritime activities. To date, fourteen PSSAs have been designated by IMO.



Technical Co-Operation

More than half of the world's population lives within 60 km of the shoreline, with many of the world's poorest people crowded into coastal areas and dependent on the marine resources. Therefore, on IMO's work agenda, there has been a continuing and growing emphasis placed on marine environmental protection related technical co-operation activities in order to assist the developing countries to give full and complete effect to IMO's environmental instruments. Such assistance is provided through the Integrated Technical Co-operation Programme (ITCP) of IMO, with the sole purpose of assisting developing countries in building up their human and institutional capacities for uniform and effective compliance with the Organization's regulatory framework. IMO's technical co-operation activities are conceived, developed, and implemented through partnership between recipient countries, resource-providers and the Organization and are based on three complementary factors:

- **assessed needs of developing countries, and their full ownership and direction of the assistance process;**
- **interests of the resource-providers in supporting sustainable maritime development; and**
- **promotion of uniform implementation and enforcement of IMO's rules and standards.**

To augment the ITCP activities, IMO also implements a number of major longer-term technical cooperation programmes and projects with the funding support from various multilateral and bilateral funding agencies. Examples of these major programmes and projects include:

GloBallast Partnerships Project (<http://globallast.imo.org>);

Marine Electronic Highway Project (<http://www.meh-project.com>);

SAFEMED Project (<http://www.safemedproject.org>); and

The GI-WACAF Programme (<http://www.giwacaf.org>).

Future Work

The Member States of IMO have made great efforts to develop and adopt measures to protect the environment from pollution by ships. There remains, however, work to be done to ensure full implementation and enforcement of standards by flag, port and coastal States and to increase the pace of ratification of IMO's environmental Conventions, in particular the Ballast Water Management Convention, the Hong Kong Convention (recycling) and the HNS Convention and Protocol.

Ultimately, IMO, its Member States and the shipping industry must all work together towards the Organization's vision to ensure that shipping fulfils its role as the facilitator of global trade, to eliminate all adverse environmental impacts from ships and, accordingly, promote sustainable development.

For further information please visit: <http://www.imo.org/OurWork/Environment/>



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