A.P. MOLLER - MAERSK GROUP

Environmental Report 2007

A.P. Moller - Maersk Vessels

MAERSK

Contents

This report has been prepared by Technical Organisation,
Corporate SQHE Fleet Support, April 2008

1. Scope

This is the annual environmental report prepared for all vessels owned by A.P. Moller - Maersk and operated by Maersk Tankers, Maersk Supply Service, Maersk Line, Safmarine, Maersk Line Limited, and Norfolkline. The purpose of the report is to present the environmental performance of the company's vessels during 2007.

The number of vessels covered by the scope of this report is presented in the table below.

BUSINESS UNIT	VESSEL TYPE	NUMBER OF VESSELS
Maersk Line	Container	162
Maersk Tankers	LNG	2
	LPG	7
	Product	20
	Chemical	12
	Crude	6
	Car carrier	12
Maersk Supply Service	Offshore Support Vessels	54
Norfolkline	Ro/Ro	7
	Ro/Pax	5
Safmarine	Container	14
Maersk Line, Limited	Container	21
	Tanker	1
Total		323

The report describes A.P. Moller - Maersk's environmental management programmes in relation to our vessel operations, including initiatives and results for 2007. Our ongoing developments aimed at reducing emissions are described as well.

When the term A. P. Moller - Maersk is used in this report it refers to the scope explained above.

2. Environmental impacts from vessel operations

Navigating and operating a vessel requires various inputs, including fuel and materials, resulting in a number of environmental impacts. The main inputs and outputs associated with vessel operations are illustrated in the figure below.

The inputs and outputs are referred to as *environmental aspects*. The operational activities linked with the environmental aspects shown above are presented in Appendix 1. The appendix also details the most significant potential environmental impacts associated with these aspects.

3. Environmental management principles and ISO 14001

In the A.P. Moller - Maersk Group we believe in sustainability, and we support initiatives that promote environmental responsibility. Complying with environmental legislation is obviously fundamental, but where we believe it to be prudent, we will strive to do more than what is simply necessary to comply with legislation, in recognition of the fact that individual contributions make a difference. We pursue a balanced and sustainable approach to long-term economic growth and quality of life, while seeking solutions that help minimise the impact on the environment.

Consequently, our **Environmental Policy** is as follows:

The A.P. Moller - Maersk Group is committed to the protection of the environment and places high priority on environmental considerations in managing its business.

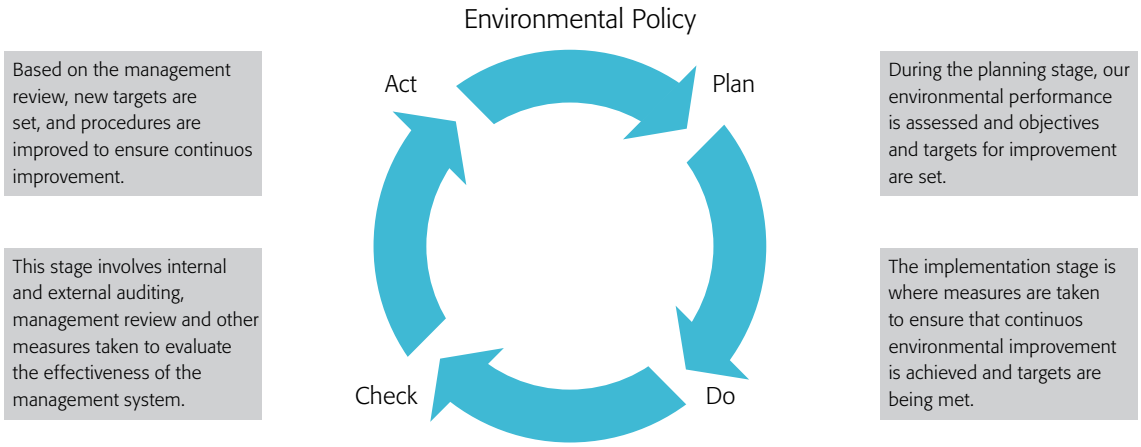
We will honour these commitments by:

- Minimising the environmental impact of our business through constant care – careful use of resources, optimisation of operations and handling of waste streams.

- Striving continuously for improvement in our environmental performance and pollution prevention across all our activities. This involves source reduction efforts, environmental awareness and the application of environmentally friendly technologies.

The Environmental Management System

The Environmental Policy Statement is implemented through our Environmental Management System (EMS), which is an integrated part of our Global Ship Management System (GSMS). The overall purpose of the EMS is to ensure a systematic approach to environmental improvements and compliance, which is achieved through the PDCA (Plan, Do, Check, Act) cycle (see figure below).



The Plan-Do-Check-Act cycle

As part of the management system, we set objectives and targets for environmental improvements on a continuous basis, and we implement best available technology/best environmental practice where technically and economically feasible. We also conduct training to improve environmental awareness and we improve operational procedures to ensure our targets are met.

Fleet-wide environmental objectives and targets are set annually and programmes are initiated to meet the targets set. In addition to fleet-wide environmental targets, all our vessels are subject to annual reviews of environmental impacts and on this basis we set vessel specific targets for environmental improvements. Examples of such targets and achievements include fuel savings, reduction of paint and chemicals, garbage segregation, waste minimisation, environmental awareness, recycling programmes and energy reduction initiatives.

ISO 14001

Once a year, our Environmental Management System (EMS) is audited internally and externally by independent bodies. The EMS has been certified to the ISO 14001 standard for environmental management systems since 2003. By the end of 2007, all our vessels had been certified. In 2007, more than 40 vessels were subject to an external ISO 14001 audit. All non-conformances have been reflected upon and corrective actions have been taken. All relevant recommendations from the external audit reports have also been evaluated and corrective actions have taken place where necessary.

In 2007, A.P. Moller - Maersk assisted the Danish Maritime Authority (DMA) in becoming accredited as ISO 14001 certifiers. This included three office audits and audits on seven Danish-flagged container vessels. During the process with DMA, room for improvement was found and implemented in our environmental management system.

Increasing environmental awareness

One of A.P. Moller - Maersk's main assets is our employees and they play a key role in achieving continuous improvements of our environmental performance as well as environmental compliance. As part of our environmental policy and environmental management system, seafarers are trained at the Maersk Training Centre and through computer-based training.

All seafarers have received environmental training through an environmental awareness CD-ROM with a thorough introduction to environment and shipping, including ISO 14001 familiarisation training. In addition, office personnel in Technical Organisation in Copenhagen and Singapore have received environmental training through office training sessions.

In 2007, an ISO 14001 computer-based training course was initiated and will be distributed to all vessels in April 2008. This course must be completed by all seafarers and will raise the environmental awareness on the vessels even further.

Compliance
Obviously, it is our policy to ensure strict compliance with all national and international rules and regulations, local legislation as well as our own procedures.

The EMS ensures compliance with appropriate international regulations, flag state regulations, port state regulations, relevant ISO standards and requirements from classification societies. In cases of non-compliance or incidents, we have procedures in place to follow up with all relevant parties and to document that corrective actions are taken. This is done through our corrective action process system where the root cause of a deficiency is identified and actions taken in order to prevent the same incident to occur again. Local regulations are regularly monitored by local agents in order to ensure continual compliance with all local legislations.

In 2007, compliance audits were carried out by third parties onboard our vessels. Several environmental compliance courses were also developed in 2007 and offered to our seafarers to support our compliance culture. These include a comprehensive computer-based training course and a fourday environmental compliance course given to all senior engineers. All chief engineers and first engineers must complete the environmental compliance course within a two-year period. Furthermore, an Environmental Compliance Manual was developed and implemented in 2007.

4. Fuel consumption and air emissions

The operation of vessels involves burning of fossil fuels, resulting in the emission of exhaust gasses. The predominant emissions to air are carbon dioxide (CO_2), sulphur oxides (SO_x), nitrogen oxides (NO_x), and particulate matters (PM). CO_2 is a well known green house gas contributing to global warming. Almost all carbon entering the engine combustion is oxidized to form CO_2 which is emitted into the atmosphere with the exhaust gases. Hence, the CO_2-emissions from the engine are practically directly proportional to the carbon content of the fuel and the fuel consumption.

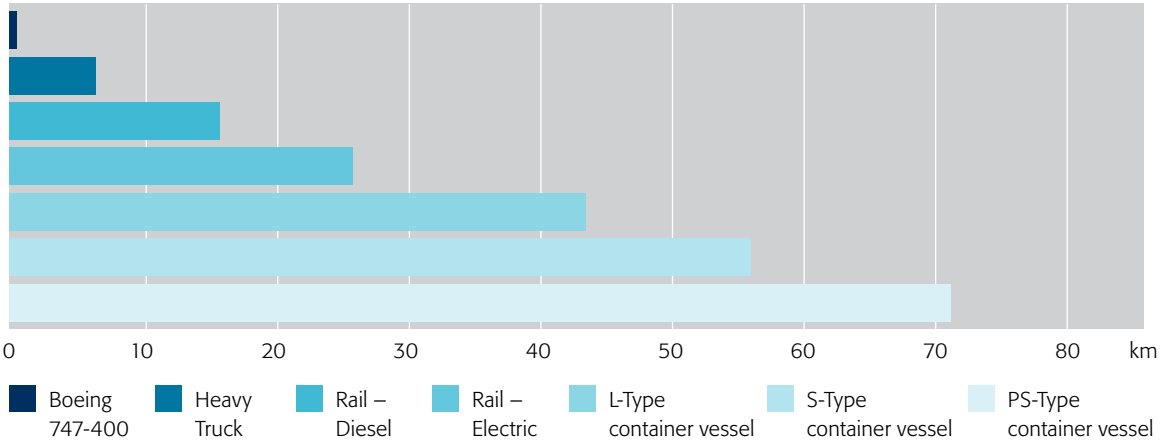
The table below illustrates that sea transportation is by far the most energy efficient way of cargo transportation. It also shows that large vessels are more energy efficient than smaller vessels. As expected, the new PS-type vessels like EMMA MÆRSK set new standards for energy efficiency on container vessels. The figure also indicates that shipping has room for improvement regarding SO_x, NO_x and PM emissions.

ENERGY USE	PS-TYPE CONTAINER VESSEL	S-TYPE CONTAINER VESSEL	L-TYPE CONTAINER VESSEL	RAIL– ELECTRIC*	RAIL – DIESEL*	HEAVY TRUCK*	BOEING 747-400*
kWh/tonne x km	0.014	0.018	0.023	0.043	0.067	0.18	2.00

EMISSIONS (g/tonne x km)	PS-TYPE CONTAINER VESSEL (11,000 TEU)	S-TYPE CONTAINER VESSEL (6,600 TEU)	L-TYPE CONTAINER VESSEL (3,700 TEU)	RAIL– ELECTRIC*	RAIL – DIESEL*	HEAVY TRUCK*	BOEING 747-400*
CO_2	7.20	8.6	12.27	18**	17	50	552
PM	0.008	0.01	0.01	N/A	0.008	0.005	N/A
SO_x	0.11	0.13	0.20	0.010	0.00005	0.00006	0.17
NO_x	0.18	0.22	0.34	0.044	0.35	0.31	5.69

*Source: Network for Transport and the Environment (NTM).
** Based on global average emission factors from electricity generation (Source IEA).

Distance travelled with 1 tonne cargo using 1 kWh energy for different transportation modes



Even though it is clear that the energy requirements for cargo transportation by A.P. Moller - Maersk vessels are lower per tonne of cargo than any other mode of transportation and has the lowest overall impact on air quality, we constantly seek to identify and implement cleaner and more fuel-efficient means in order to maximise energy efficiency and reduce air emissions from our vessels. To ensure an efficient operation, all container vessels, tanker vessels and car carriers are monitored on a daily basis by a very detailed performance system, enabling inefficient operation to be corrected. Any discrepancies from vessels performance will be investigated to ensure as optimal vessel operation as possible.

In 2007, the performance system was improved even further in order to ensure an even smoother and more efficient and flexible vessel monitoring.

Maximising the energy efficiency and reducing CO_2 emissions

At A.P. Moller - Maersk, minimisation of fuel consumption and air emissions are high priorities. Our project list currently contains more than 100 different projects, all with the aim of reducing fuel consumption and air emission from our vessel operations. Projects include initiatives such as optimisation of pump and ventilation systems, development of optimal docking programmes, electronically controlled engines, propeller maintenance, optimum trim, unconventional propeller designs, innovative propulsion systems and closed loop engine control.

Our efforts start in the vessel design phase, with the construction of the vessel's hull, propeller and engines in an energy-efficient manner. All three remaining M-class vessels (4,300 TEU), all six G-class container vessels (7,000 TEU) as well as all eight PS-class container vessels (11,000 TEU) built at the Odense Steel Shipyard are equipped with a sophisticated waste heat recovery system enabling waste heat to be used for propulsion, reducing the fuel consumption significantly (up to 10%). The six new vessels in the Lindø-211 series (7,000 TEU) being delivered in 2008 will also be equipped with waste heat recovery systems.

Even though the waste heat recovery system has a documented fuel saving potential with associated emission reduction, not all our new vessels are equipped with such a system. With a potential fuel reduction and consequent reduction of CO_2 emission of up to 10% it would be an environmental improvement to install such systems on all new builds. However, most shipyards are not capable of installing waste heat recovery systems at a cost justifying implementation of such technologies. Therefore, for the time being, the only Maersk vessels with waste heat recovery systems are built on our own Lindø shipyard. On tanker vessels and supply vessels, present waste heat recovery systems are not feasible as the service speed does not provide enough excess exhaust gas.

However, A.P. Moller - Maersk continuously seek the most beneficial energy reduction initiatives for each vessel type.

During a vessel's lifetime, a number of operational means are applied to achieve fuel savings. Optimised voyage planning is an essential tool. A "just in time" steady running strategy is applied to keep the engine load at a minimum. The Voyage Efficiency System (VES) – an A.P. Moller - Maersk developed voyage planning programme – is used on all large vessels to identify the most fuel efficient route. Weather routing is considered while planning the voyage, minimum safe ballast is carried, optimal trim is ensured, and hull and propeller maintenance is conducted. VES is installed on all our container and tanker vessels as well as on our car carriers.

Due to the large size of our fleet, our CO_2 emissions measured in absolute numbers are high. In this report we present our relative CO_2 emissions in order to show improvement in our performance. However, the absolute numbers are presented in Appendix II.

EMMA MÆRSK. The world's largest container vessel built in 2006.

Specific fuel saving initiatives in 2007 include the installation of waste heat recovery systems on our PS-type container vessels (11,000 TEU) from Odense Steel Shipyard, implementation of the VES voyage planning on all vessels, improvement of the Maersk Ship Performance System and optimisation system onboard container, tanker, gas and car carriers as well as environmental awareness training. The importance of environmental and operational training in existing and new technologies is integral to ensure optimal operation and maintenance of vessels. All our seafarers receive operational and environmental awareness training in order to use the energy saving equipment onboard as efficiently as possible.

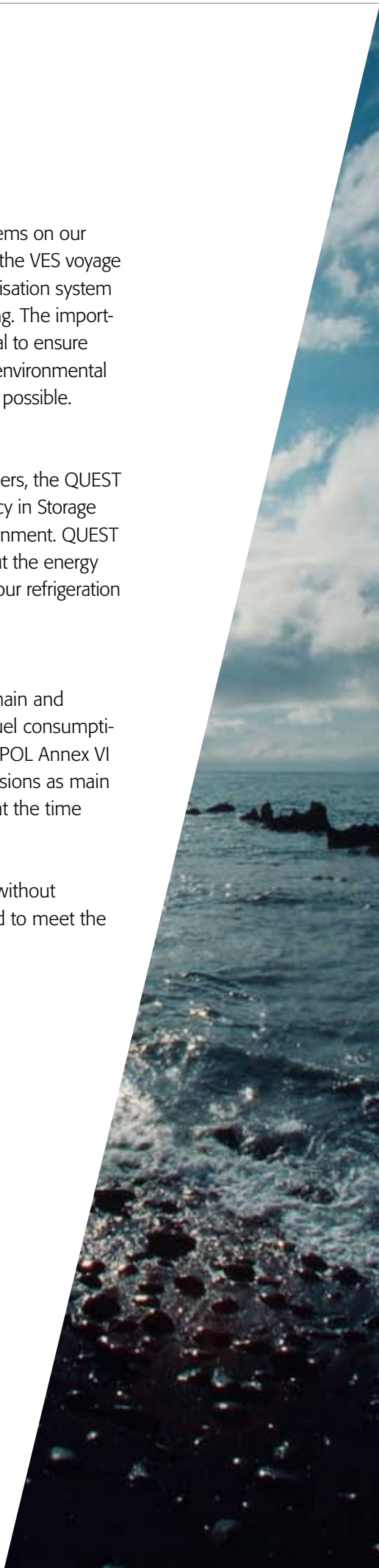
Reefer containers

In order to reduce electricity consumption, and thus emissions caused by cooling containers, the QUEST reefer programme was initiated by Maersk Line. The QUEST (Quality and Energy efficiency in Storage and Transport) programme is a joint development project sponsored by the Dutch Government. QUEST is a software solution that provides a new temperature control regime. It enables us to cut the energy consumption used for cooling by up to 50% without having an impact on the quality of our refrigeration solutions

Reduction of NO_x emissions

Emissions of NO_x from vessels are very dependent of the combustion process in the main and auxiliary engines. In general, a NO_x reduction effort on an engine results in increased fuel consumptions, hence CO_2 emissions. We are currently complying with NO_x regulations from MARPOL Annex VI and our intensive new-building programme are contributing to reductions on NO_x emissions as main and auxiliary engines shall comply with the NO_x limits stipulated in MARPOL Annex VI at the time of construction.

We are proactively engaged in research in new technologies to reduce NO_x emissions without increasing fuel consumption and CO_2 emissions from our vessels and are well prepared to meet the upcoming strengthened MARPOL Annex VI Tier-II NO_x limits.



Reduction of sulphur oxides emissions

Sulphur occurs naturally in crude oil and remains as a residue of the refining process in fuel oils. The quantity of SO_x produced in the exhaust gases is directly related to the quantity of sulphur in the fuel.

The International Maritime Organization (IMO) has introduced regulations limiting the maximum sulphur content of marine heavy fuel to 4.5%. In cooperation with a major oil company and an engine builder, we have conducted long term tests of low-sulphur fuels in order to investigate the technical aspects of engine operation. However, a consistent fuel quality cannot yet be guaranteed by our suppliers, thereby increasing the risk of unforeseen engine stoppages.

In addition, we have ensured compliance with the existing Sulphur Emission Control Area (SECA) in the Baltic Sea, the English Channel and the North Sea, where the maximum sulphur content allowed in fuel oil is 1.5%. According to Maersk Oil Trading, the fear that the sulphur content of heavy fuel would increase when SECA entered into force has shown not to be the case.

In 2007, the A.P. Moller - Maersk average sulphur content in fuel per delivery was 2.2% which was better than the target of 2.5% for container and supply vessels and 3.0% for tanker vessels. The total average sulphur content in fuel was approximately 2.5%. Another environmental initiative continued in 2007 was the California Fuel Switch Initiative. This is a voluntarily pilot project in which Maersk Line switches from "conventional" fuel with relatively high sulphur content to low-sulphur distillate fuel on the main and auxiliary engines of its vessels 24 miles from port, while docked and until 24 miles out on departing journeys. This removes a significant amount of vessel related emissions annually from our vessels that call the port of Los Angeles and Oakland.

Furthermore, various scrubbing technologies which remove SO_x from the exhaust gases are being evaluated.

Most of our supply vessels only use diesel oil with a sulphur content of less than 0.5%. Additionally, Norfolkline vessels only use distillate fuel at Vlaardingen port with a sulphur content of below 0.2%. Our two LNG vessels run on LNG fuel approximately two thirds of the time also contributing to decreased NO_x and SO_x emissions.

Reduction of particulate matter (PM) emissions
A.P. Moller - Maersk has reduced PM emission levels by developing a new cylinder lubrication system. The system reduces the cylinder lubricating oil consumption and consequently PM emissions.

We are currently investigating a number of other possibilities for reducing the amounts of particles in the exhaust gas. We are participating in a research project with the Technical University of Denmark (DTU) and other parties aimed at developing a marine diesel engine particle filter, hence reducing particulate emissions.

Reduction of volatile organic carbons (VOC)
All our tanker vessels are equipped with vapour return systems to capture releases of VOC from cargo tanks during cargo operations.

Reduction of chlorofluorocarbons (CFC), halons and other ozone depleting substances
Chlorofluorocarbons (CFCs), a family of man-made chemicals commonly used in refrigerants, have been identified as contributing factors to the deterioration of the Earth's protective ozone layer.

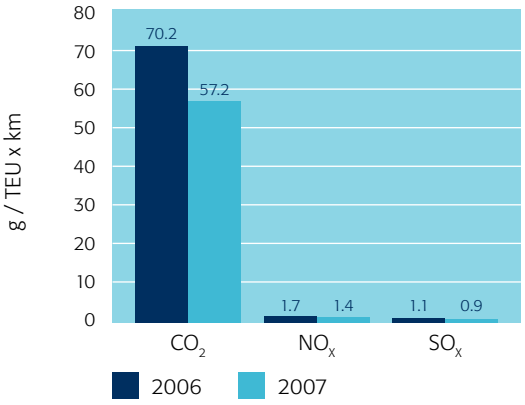
All ozone depleting substances used for fire fighting purposes has been substituted with more ozone friendly alternatives. Refrigerants used for air conditions have not been retrofitted and a few older vessels still use the HCFC-gas R22 for cooling. R22 however has a low ozone depleting potential and these systems will be phased out in the near future. All vessels are compliant with current legislation and we are prepared to meet future requirements.

Today 92% of the Maersk Line refrigerated container fleet operate with R134A, while the remaining 8% operate with R404A, both of which are non-ozone depleting refrigerants. To reduce environmental impacts from refrigerants further, we follow the development of alternative types of refrigerants very closely and, in partnership with our cooling system suppliers, we are constantly looking for even more environmentally friendly alternatives to substitute existing products.

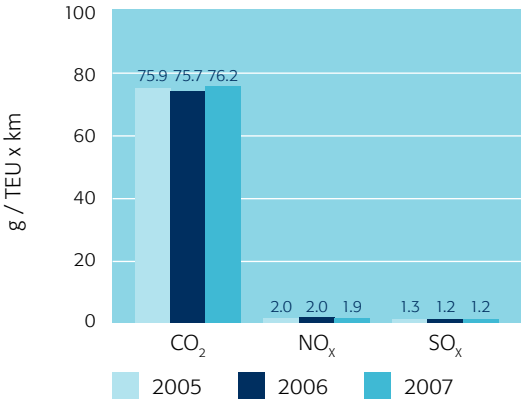
Results – container vessels

The graphs below show actual average emissions levels for different sizes of container vessels for 2005 to 2007. For very large container vessels (>10,000 TEU) only data for 2006 and 2007 is presented as no data has been generated in 2005.

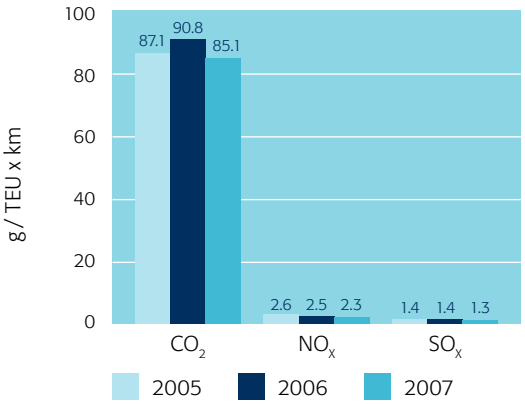
Very Large Container Vessels > 10,000 TEU – Average service speed 21.5 knots



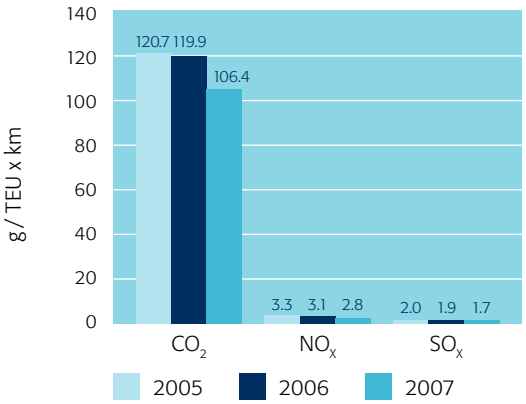
Large Container Vessels > 5,000-10,000 TEU – Average service speed 21 knots



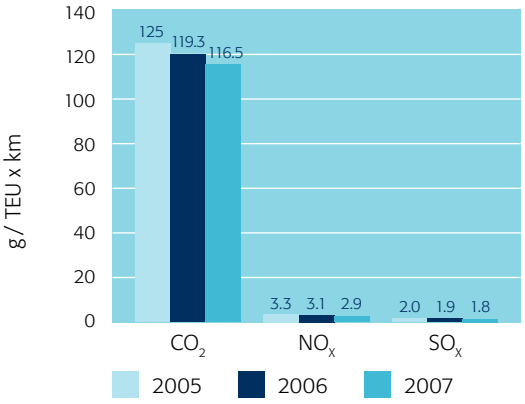
Medium-Large Container Vessels – 3,500-5,000 TEU – Average service speed 19.3 knots



Medium Container Vessels 2,000-3,500 TEU – Average service speed 18.3 knots



Small Container Vessels < 2,000 TEU – Average service speed 13.3 knots



Note: CO_2-efficiency is measured in two ways: gCO_2/TEU x km and g CO_2/tonne x km. TEU is used as a measure to compare efficiency of cargo transport within container vessels, whereas tonne is only used to compare efficiency of vessel transport with other forms of cargo transportation.

Emission levels have been calculated from data reported daily from the vessels throughout 2005 to 2007. Data is averages across the whole section of the fleet for all operations in 2005 to 2007 respectively. Both cargo trips and ballast trips are included.

Levels of CO_2 and SO_x emissions are derived from the actual annual fuel consumption for both main and auxiliary engines. A CO_2 emissions factor of 3170 kg/tonnes fuel (CORINAIR 2002) has been used. SO_x level is calculated using a fleet average sulphur-in-fuel content of 2.21%.

NO_x is calculated using the main engine power and the Certificated IMO E3 cycle NO_x value for that engine.

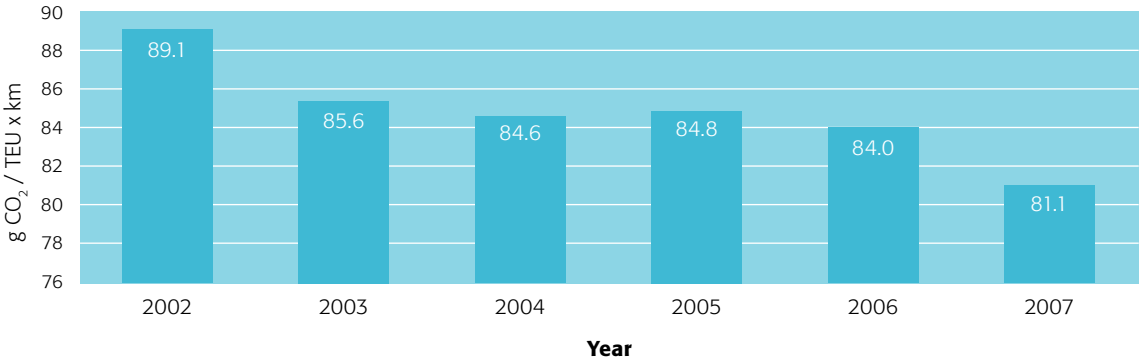
The method of Business for Social Responsibility (BSR) is used when calculating the emission levels for car carriers.

Emissions from Product Gas Carriers are calculated based on the assumption that vessels are carrying propane and is loaded 50% of the travelled distance.

For LNG vessels it is assumed that vessels run on heavy fuel one third of the time and LNG two thirds of the time.

The substantial efforts described above have lead to a significant 8.9% decrease in fuel consumption and CO_2 emissions per TEU x km between 2002 and 2007 for container vessels. This corresponds to a total reduction in CO_2 emissions of more than two million tonnes CO_2 in the period 2002 to 2007. For the period 2008-2012, Maersk Line has set a target to reduce CO_2 emissions by further 10% per TEU x km.

Average CO_2 emissions from A.P. Moller - Maersk owned container vessels 2002 - 2007



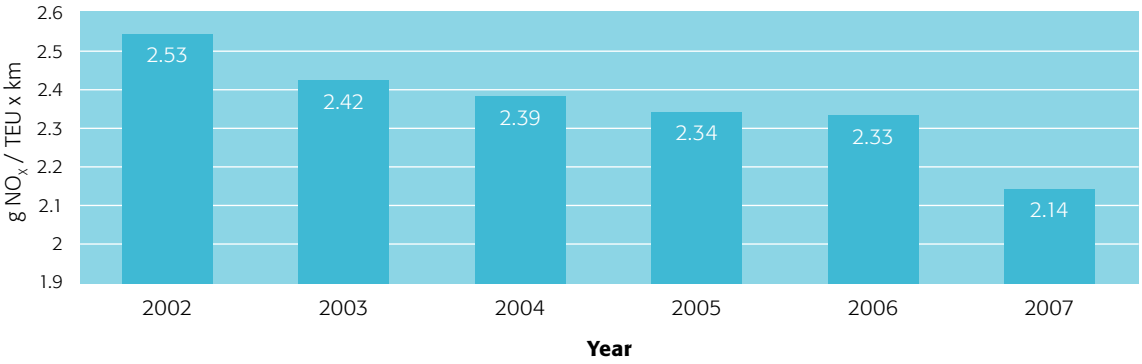
The CO_2 emissions in 2007 have decreased by more than 3% per cargo unit x km compared to 2006 levels. This reduction is due to several factors. First of all, average size per vessel has grown, resulting in direct reductions. Secondly, the average age of the fleet has decreased. In 2007, more than 30 new built container vessels entered the fleet.

The continuous work to improve efficiency – such as trim optimisation, common rail, waste heat recovery, propeller and hull maintenance – has also shown results. Furthermore, the CO_2 emissions and average service speed for the container vessels have slightly decreased in 2007 also contributing to lower emissions.

NO_x emissions

In the figure below, the development in NO_x emissions from our container vessels the last six years is presented. The development of NO_x emissions is very positive and the NO_x emissions are reduced every year. From 2002 to 2007, the reduction of NO_x emissions from container vessels has been reduced by nearly 15% per TEU x km. The decrease in NO_x is mainly due to reductions in fuel consumption, but is also due to the fact that a still larger fraction of our vessels are built after 2000, meaning that they are NO_x-certified.

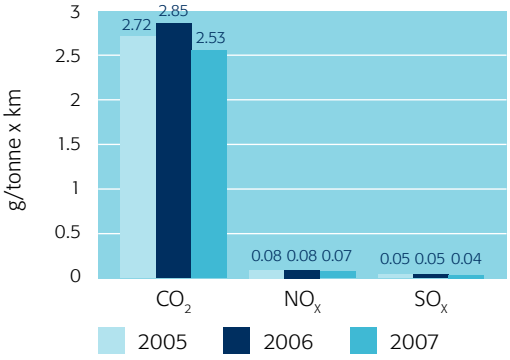
Average NO_x emissions from A.P. Moller - Maersk Container Vessels 2002 - 2007



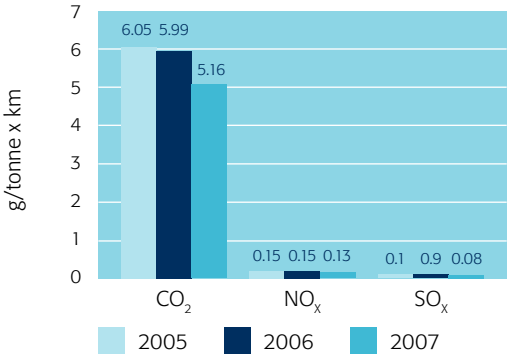
Tanker vessels

The graphs below show actual average emission levels for different vessel types for 2007.

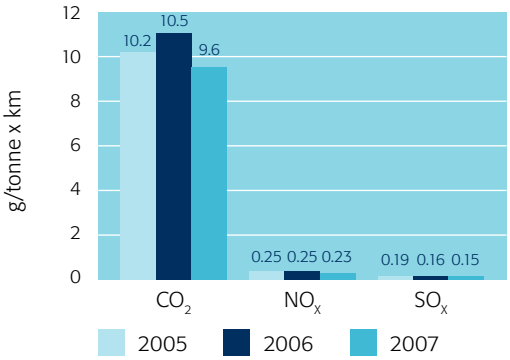
Very Large Crude Carriers – 300,000 DWT – Average service speed 14.7 knots



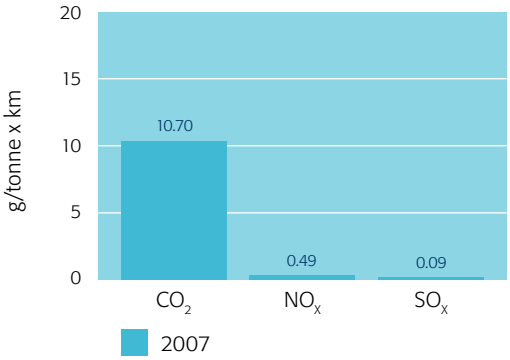
Large Product Tankers – 110,000 DWT – Average service speed 15 knots



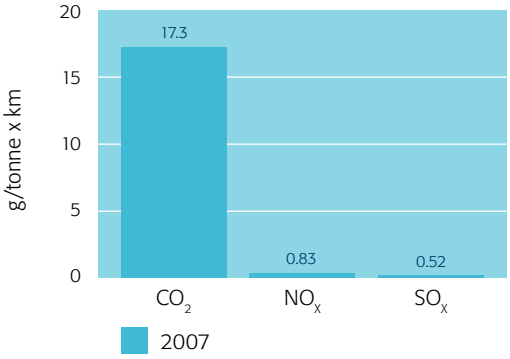
Small Product Tankers – <35,000 DWT – Average service speed 13 knots



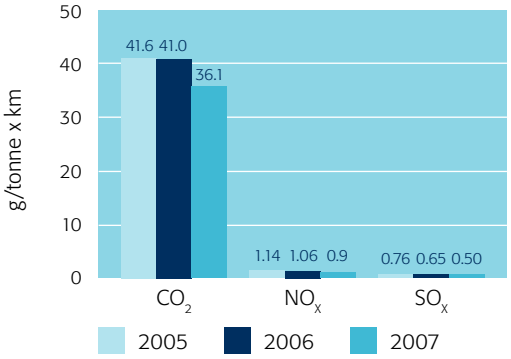
Very Large Gas Carriers <82,000 m³ – Average service speed 15,3 knots



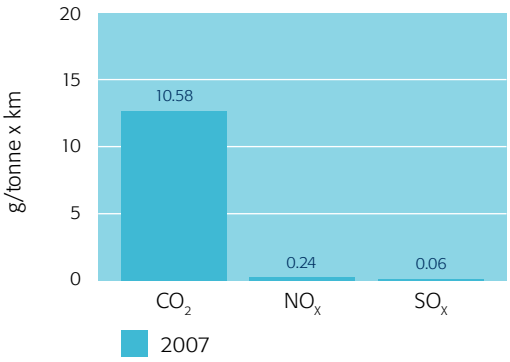
Mid-Size Gas Carriers <38,000 m³ – Average service speed 15 knots



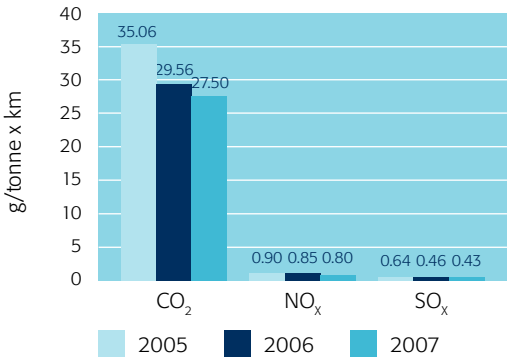
Semi-ref Gas Carriers <21,000 m³ – Average service speed 15 knots



LNG carriers
– Average service speed 17 knots



Car Carriers
– Average service speed 17.2 knots



Our larger vessels are substantially more energy efficient than the smaller ones – with the VLCC being by far the most energy efficient vessel. The general trend is that emissions have decreased from 2006 to 2007. This is likely to be a result of an intensive new building programme in the tanker fleet and the introduction of new and more efficient vessels. With the number of new tanker vessels in the pipeline, this trend is expected to continue.

The new VLGCs that entered our fleet in 2007 show good results, and the new N-class VLCCs have contributed to a decrease in emission levels.

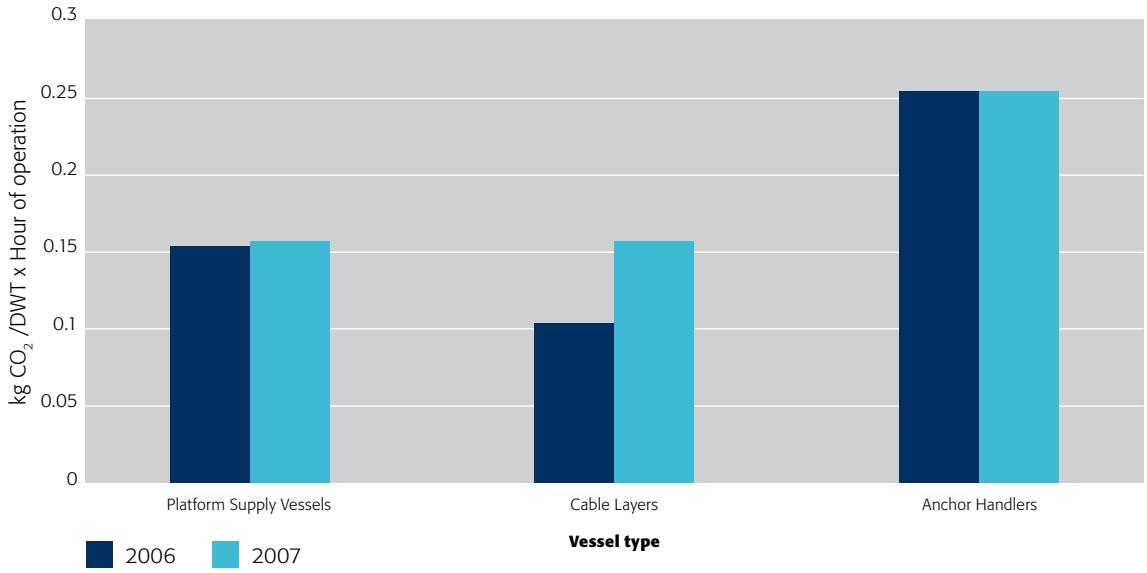
The very low NO_X and SO_X emissions from LNG carriers are a result of the fact that LNG carriers can run on LNG as fuel and have done for approximately two thirds of the time in 2007. This is the charterer's decision.

Supply vessels

Offshore supply vessels are typically involved in more complicated offshore manoeuvring operations, such as anchor handling of oil rigs, laying and repair of underwater cables, etc. Due to the operational pattern for supply vessels, it makes little sense to calculate air emissions per cargo x km. Instead, our supply vessels conduct speed tests on a monthly basis to ensure the engines are running efficiently. If the speed tests are not showing optimal operation, corrective actions are taken. The chart below indicates the level of CO_2 emissions per hour of operation for the three main supply vessel types.

The data is based on the fuel consumption and operation hours on a yearly basis. Not even operation hours are always comparable for supply vessels and this makes it very hard to compare CO_2 emission data for supply vessels.

CO_2 emissions from supply vessels 2006-2007



It is difficult to see an improvement in emission reduction from our supply vessels. Platform supply vessels and anchor handlers have remained nearly constant whereas the cable layers have increased regarding CO_2 emissions. The increase in CO_2 emissions from cable-layers is due to the fact that the cable layers are now mainly used as platform supply vessels hence the operating pattern has changed.

The fleet has remained constant and the operation pattern has not changed significantly. However, efforts are done to reduce CO_2 emissions further. For example, whenever possible, typically when vessels are standby outside the 500 meter zone of the rig, a great effort is done in order to keep the use of main engines to a minimum.

From 2008, the supply fleet will be increased by a number of new builds. Some of these vessels will be equipped with sophisticated NO_x measurement devices enabling to monitor NO_x emissions in the future. It is also in pipeline that these devices should be able to measure CO_2 and SO_x emissions.

The SO_x emissions from supply vessels are very limited as the vast majority of our vessels solely run on marine distillate fuel with an SO_x content of below 0.5%.

Norfolkline Vessels

The 12 vessels operated for Norfolkline in the North Sea, the English Channel and the Irish Sea have a very tight schedule hence improvement in voyage efficiency is difficult. The efficiency improvements must be achieved in port.

Decreasing port stays make the vessels able to have longer journeys, hence reducing speed and thereby air emissions. For the six vessels operating from Vlaardingen, the average port stays have been reduced by more than 10% over the last 5 years. Similar efforts are done on Ro/Pax vessels trading Dover-Dunkerque and vessels from Birkenhead in the Irish Sea.

Since nine of the vessels are trading in SECA areas, only low sulphur fuel is used on these vessels. In Vlaardingen Terminal, vessels auxiliary engines run on distillate fuel with sulphur content below 0.2%. A feasibility study covering cold ironing[1] is currently being carried out in Vlaardingen. If this is successful and cold ironing[1] is implemented, the NO_x, SO_x and PM emissions from Vlaardingen Port will be nearly eliminated. If the feasibility study has a successful outcome, the same study will be carried out in Birkenhead Terminal.

[1] Cold ironing is shore based electricity supplied to vessels while in port. This solution may be feasible for ferries as these vessels trade fixed ports. For other vessels types, however this is not recommended as it limits the flexibility of our vessels' trade pattern.

5. Protecting the marine environment

Prevention of oil spills

Operating our vessels safely is a high priority for A.P. Moller - Maersk. Recognising that accidental oil spills at sea or in port can harm the marine environment significantly, we continuously take preventive actions to avoid any environmental incidents.

Our crews are trained in safe navigation of vessels, our operational procedures are centred on safe vessel operation, and we have contingency plans in place to deal with all uncontrolled and emergency situations such as collisions, grounding, spills during bunkering or other causes. The Maersk Training Centre conducts various courses on environmental matters and safe operations on vessels. In 2007, more than 500 of our seafarers received training in shipboard management and vetting. Additionally, more than 150 senior engineers received training in environmental compliance. Most of the participants were vessel senior management who passed their knowledge onto the rest of the crew. They ensured their colleagues had an even broader understanding of environmental issues when operating a vessel. Additionally, all seafarers received e-learning on topics such as weather routing and voyage efficiency, etc.

All vessels have monthly oil spill drills onboard to ensure that the entire crew is continuously updated and aware of how to deal with oil spills effectively and safely.

In case of an incident, our Casualty Committees (which consists of key personnel from various technical and operational areas within the A.P. Moller - Maersk Group) are called into action. It ensures measures are taken quickly to minimise environmental risks.

We have proactively conducted the accelerated phase out of single-hull tankers ahead of MARPOL requirements. A.P. Moller - Maersk took delivery of the world's very first double-hull VLCC in 1992 and the entire tanker fleet has been double-hulled since 2002, even though it is still not a regulatory requirement.

In 2005, to further reduce the risk of oil spills, it was decided that all new built A.P. Moller - Maersk vessels must be equipped with inboard protected fuel tanks. The phase out of single-hull tankers and the introduction of inboard protected fuel tanks help minimise the risk of oil spills if an incident should occur.

Result 2007

The number of reported oil spills and the reported amounts of oil spilled due to incidents in 2007 are presented in the table below.

	NUMBER OF OIL SPILLS < 200L	NUMBER OF OIL SPILLS > 200L	AMOUNT OF OIL SPILLED (TONNES)	NUMBER OF VESSELS
2005	11	5	280	251
2006	8	1	2.2	298
2007	20	3	363	323

2005 data does not include Safmarine and Maersk Line Limited vessels

The 2007 oil spill statistics are relatively high, especially reflected from the incident of SA HELDERBERG in Malaysia. On 17 February 2007, the Safmarine operated 3,101 TEU container vessel SA HELDERBERG was involved in a collision with the 77,356 DWT, Singapore-registered oil tanker OCEAN SAPPHIRE off the coast of Malaysia.

No member of the crew onboard the SA HELDERBERG was injured. No damage was sustained to any of the cargo onboard the vessel. The SA HELDERBERG sustained some damage on her starboard side with water inflow, but this was kept under control and a pump was used to discharge ingress into the 5,000 tonne chartered barge MARIOTT INTERNATIONAL, with a third, smaller, vessel ferrying bilges to a safe disposal area unit on shore.

Following the impact, some oil leaked from a fuel tank from SA HELDERBERG into the sea. The Malaysian authorities took control over anti-pollution measures, deploying two Malaysian anti-pollution vessels to disperse the oily sheen, and placed a boom around the vessel to ensure no further fuel escapes from area.

The Malaysian authorities are satisfied with the pollution control measures already take. The overboard spill was estimated to 200 m^3 heavy fuel oil (HFO) and 142.8 m^3 marine diesel oil (MDO).

On 14 April 2007, Maersk Line Limited vessel SEALAND INNOVATOR spilled 10 m^3 of HFO in Durban. During bunkering, the connection between shore side pump and supply inlet pipe failed. Cleanup was effective and corrective actions were taken.

Apart from above two spills, only one additional spill of more than 100 litres occurred in 2007. DIRCH MAERSK spilled 200 litres due to leakage in a manhole en route from Le Havre to Newark.

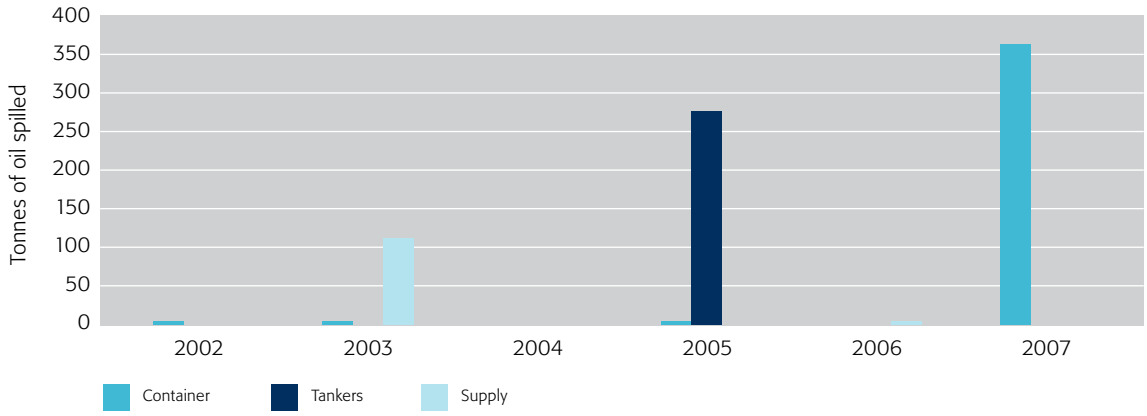
All spills had very effective cleanups and did not affect the surrounding environment significantly. All spills were recorded as incidents and have been reviewed.

The development in the number of oil spills and the amount of oil spilled in the period 2002-2007 is illustrated in the figures below. The chart below is dominated by the SA HELDERBERG incident described above and the MAERSK HOLYHEAD incident that took place on 6 November 2005 in the Maracaibo Channel in Venezuela and by two large spills from supply vessels in 2003. MAERSK HOLYHEAD collided with bulk carrier PEQUOT and subsequently spilled 275 tonnes of oil.

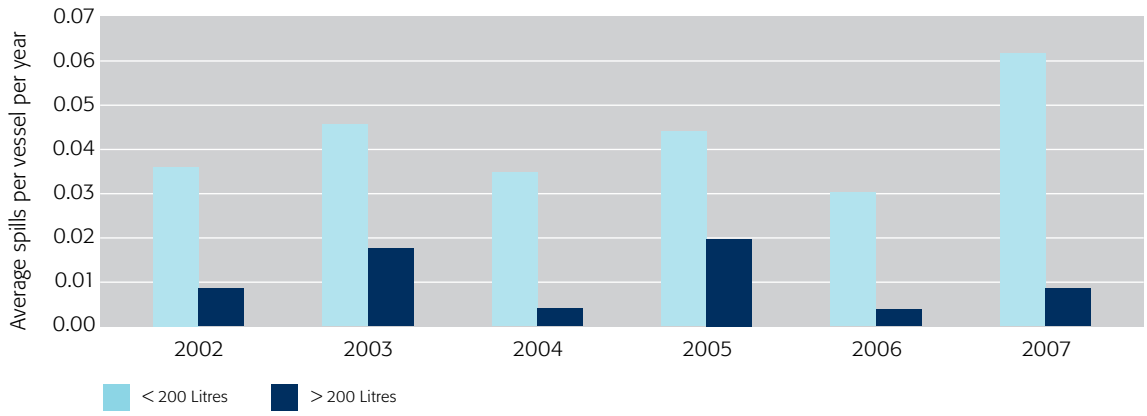
There have been no oil spills of more than five tonnes from oil tankers, car carriers or Ro-Ro vessels in this period.

The number of oil spills reported has not changed significantly in the period 2002-2007.

Amount of oil spilled from A.P. Moller - Maersk Vessels 2002-2007



Number of oil spills reported 2002-2007 per vessel operated by A.P. Moller - Maersk



Years 2002-2005 do not include Safmarine and Maersk Line Limited vessels.

The figure above shows the average frequency of overboard oil spills on A.P. Moller - Maersk operated vessels. The general trend is that the frequency has decreased in the last six years. A frequency of 0.05 corresponds to an average time-span between oil spills of 20 years per vessel whereas a frequency of 0.01 corresponds to an average period between oil spills of 100 years per vessel.

Antifouling Paint

Vessels have lower friction and are able to reduce fuel costs when their hulls are clean and smooth, free from fouling organisms, such as barnacles, algae or molluscs. Antifouling paints are applied on hulls to limit the growth of such organisms thus increasing speed and reducing fuel consumption. The anti-fouling underwater hull paint produced in the past contained TBT – tributyltin. However, TBT is toxic and acts as a hormone disrupter.

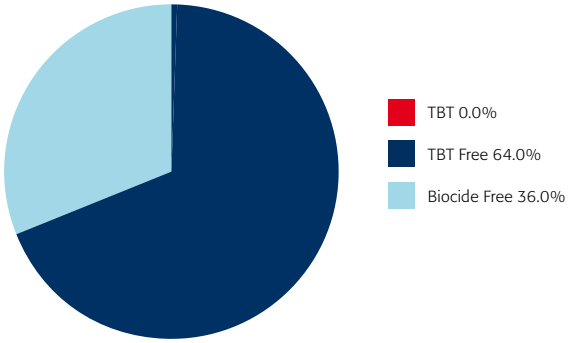
According to an IMO regulation, which enters into force in September 2008, TBT paint is to be phased out. A. P. Moller - Maersk decided to start a phase out of TBT in 2000 and has applied TBT-free coatings since then, and will thus comply with the IMO Antifouling convention well ahead of time. As of early 2007, all our vessels are TBT-free.

As an additional step, A. P. Moller - Maersk started application of biocide-free silicone based paint in 2003, which is applied whenever feasible. Today, more than 50 container vessels have had environmentally friendly silicone-based foul release coating applied.

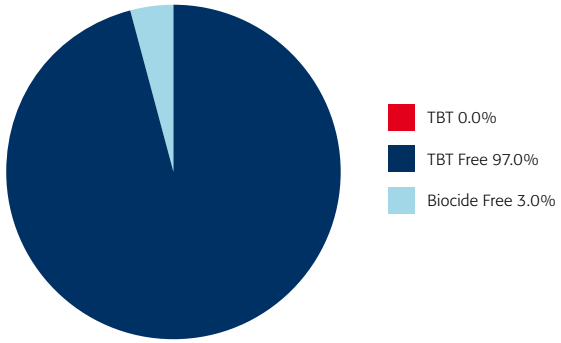
Application of silicone-based hull paint

The figures below show the break down of different antifouling systems by the end of 2007 divided into container vessels, tanker vessels and supply vessels. Antifouling systems presently used on our vessels include biocide-free antifouling, e.g. silicone-based paint, and TBT-free antifouling, which contain biocides but is free of TBT. Additionally, a few of our supply vessels serving in cold waters have not had antifouling paint applied, as antifouling organisms do not cause problems in cold waters.

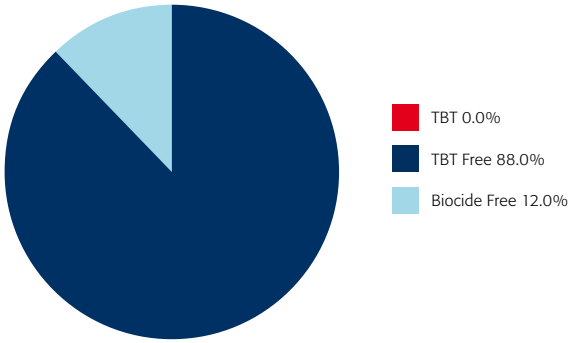
Antifouling Paint – Container Vessels 2007



Antifouling Paint – Tanker Vessels 2007

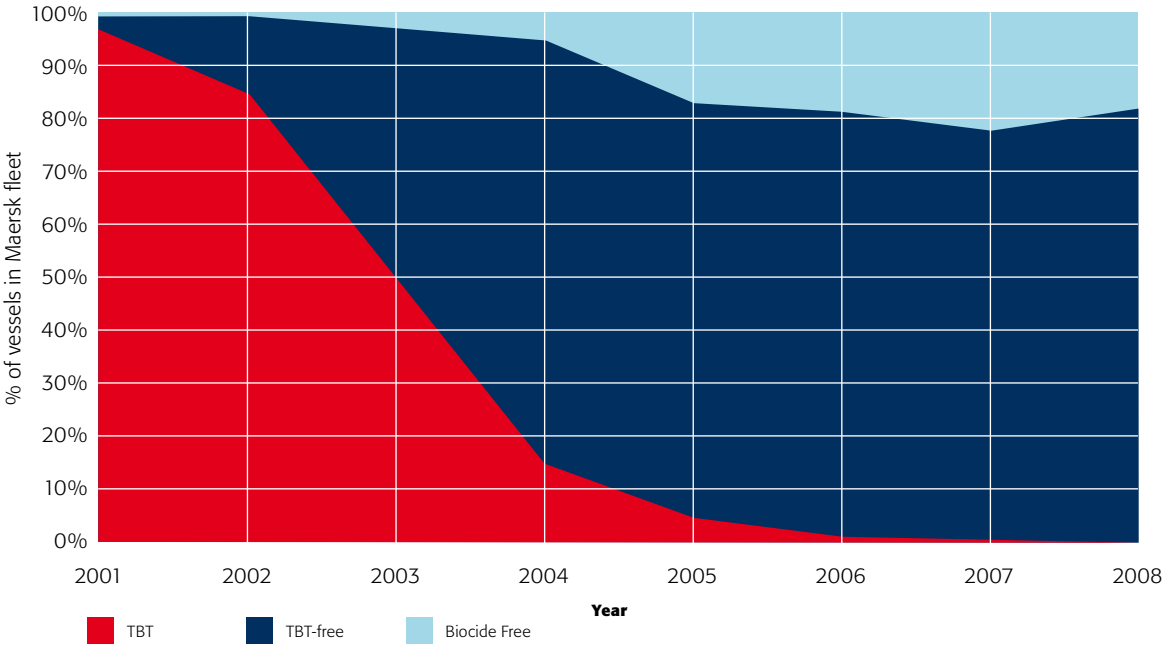


Antifouling Paint – Supply Vessels 2007



The development in the phase-out of TBT and the introduction of biocide-free antifouling paint on our vessels is illustrated in the graph below. As illustrated, approximately one fifth of our fleet is now biocide free.

Antifouling systems on A.P. Moller - Maersk Vessels 2001-2007



It was the target for 2007 that 60 container vessels should use biocide-free antifouling paint. This would place A.P. Moller - Maersk as an industry leader in regard to application of this environmentally friendly antifouling paint. The application however stopped with 58 vessels due to the development of the slime layer and fast decrease in efficiency of vessels with silicone-based paint. This increase in fuel consumption and subsequently air emissions has been evaluated as having a higher environmental impact than the increase in toxicity of the biocide based paint. The stop in application of silicone-based paint on container vessels is reflected in the decrease in percentage of biocide free paint in the figure above.

New biocide free antifouling products are continuously introduced on the market. We are constantly aware of new technologies and always looking for feasible alternatives, both regarding fuel efficiency and environment.

We are in continuous dialogue with paint suppliers and we are currently testing second generation paint on a handful of vessels. Until consolidated results show that second or third generation paint is efficient over time we will apply all new vessels with biocide-based underwater hull paint.

Ballast Water Management

Ballast water is carried by vessels to provide stability and adjust a vessel's trim, stress and torsion for optimal steering and propulsion. However, ballast water often originates from ports and other coastal regions rich in plankton and other marine organisms. The discharge of ballast water from vessels can cause undesirable organisms to be transferred between different marine ecosystems, threatening the ecological balance and acting as a medium for the spread of epidemic diseases.

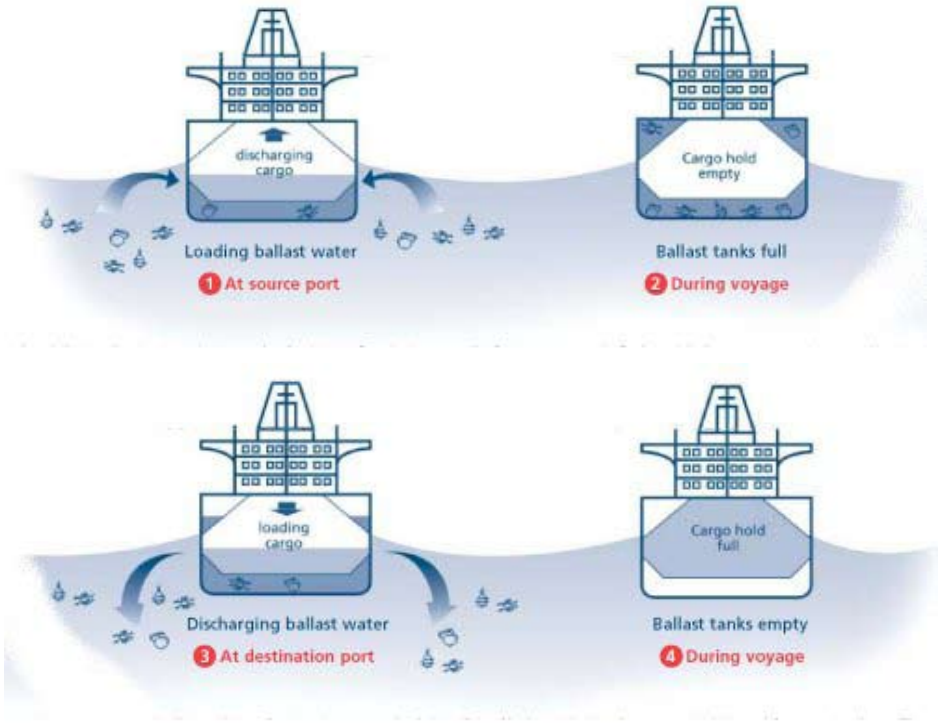


Illustration of the ballast water problem. Source: www.globallast.imo.org

To ensure proper handling of ballast water, we have ballast water management plans and ballast water logs on all our vessels. We also seek to minimise the use of ballast water and to conduct mid-ocean ballast exchange whenever possible. Internal ballast transfer is conducted whenever possible.

In addition, we carefully observe related port regulations in all countries and we are in close co-operation with ballast water treatment system suppliers in order to meet the forthcoming IMO requirements. In 2006, the process of updating ballast water management plans for all vessels was initiated. All the updated ballast water management plans are to be approved by Classification Societies in order to quality check the new ballast water management plans. The process will be finalised by the end 2008.

In 2007, no ballast water operations resulted in legal prosecutions. All discrepancies with ballast water management plans have been reported to relevant authorities and the office and were handled according to procedures and legislation. For Norfolkline vessels, ballast water is not an environmental issue, as these vessels are not trading globally.

6. Waste handling

Vessel operations generate different types of waste, including oil waste, bilge, garbage, sewage, and various amounts of hazardous waste. A waste management programme has been implemented throughout the A.P. Moller - Maersk fleet to ensure all types of waste streams are handled in a responsible and environmentally sound manner. We constantly strive to minimise the environmental impacts from waste streams by reducing the amount of waste generated and simultaneously improving waste handling.

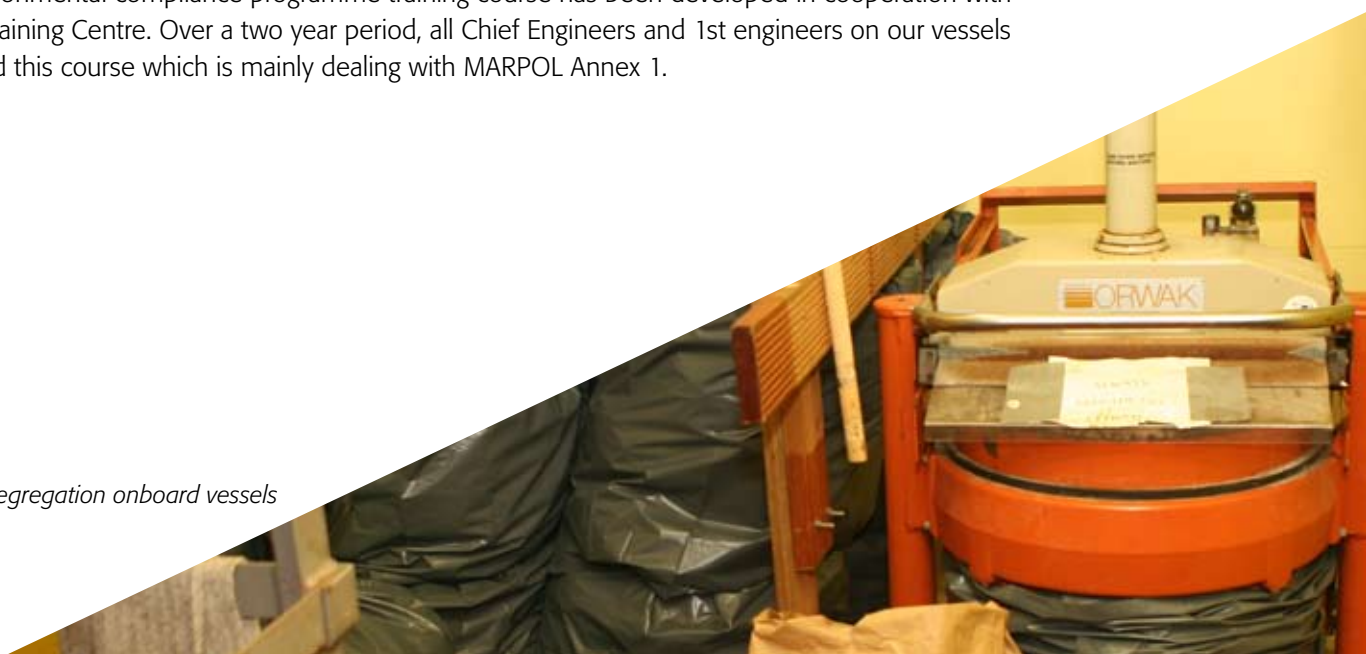
In late 2007, a new sludge and garbage management system was launched and is continuously being improved. This is a part of the ongoing efforts adhering to the ISO 14001 environmental drive. The system also strives to establish the best possible tools onboard the vessels to facilitate planning and optimisation when landing sludge.

The sludge and garbage management system provides stakeholders access to information in nominated key ports. These are rated based on their service level and ability to handle sludge and garbage in an environmentally correct manner fulfilling all international as well as local regulations and ISO 14001 standards at any time. In addition, vessels are required to report amounts of sludge and garbage disposed. While fulfilling the environmental requirements, necessary information ensuring best possible monetary optimisation is included as well. The system will be continuously developed in 2008 and onward.

Oily waste

Pre-treatment of fuel oil prior to combustion leads to the generation of sludge. A.P. Moller - Maersk is currently developing a sludge handling unit that is capable of removing all water from the sludge oil, thereby reducing the amount of sludge oil to be discharged ashore.

To improve the performance of oily water separators, we have, in 2007, further continued the installation of emulsion breaking filters on separators without such capability. This initiative will ensure an environmental performance well beyond the regulative requirements for 15 ppm. In addition, MARPOL training is conducted for all officers, to ensure proper handling of oily waste. Furthermore, a new environmental compliance programme training course has been developed in cooperation with Maersk Training Centre. Over a two year period, all Chief Engineers and 1st engineers on our vessels will attend this course which is mainly dealing with MARPOL Annex 1.



Garbage segregation onboard vessels

Garbage
Each vessel has a Garbage Management Plan onboard and segregation of garbage is carried out on all vessels. This ensures that recyclable waste, such as glass and aluminium, can be reused. Hence we strive to reduce resource use instead of contributing to pollution of air or soil by incineration or dispose at landfill. By the end of 2007, all container vessels have initiated the implementation of a zero dumping policy on board prohibiting the disposal of any unprocessed non-biodegradable solid waste into the ocean. No Norfolkline vessels dispose off non/biodegradable garbage at sea.

Garbage is always handled in compliance with regulations, and we strive to dispose of garbage at land rather than at sea. Some of our vessels are equipped with a waste incinerator. Residues from the incineration are disposed of on land. In addition, a large number of our vessels have implemented a garbage recycling programme.

In 2007, the garbage management plan for all vessels was updated. The garbage management plan is now easing the garbage segregation efforts on board.

Shore-based reception facilities have at times been inadequate in regard to receiving garbage sorted in a number of different fractions and handling it in a responsible manner. This is being dealt with now with IMO engaging itself in improving reception facilities on shore. In order to ensure that garbage is treated with environmental responsibility on the shore site reception facilities, questionnaires dealing with environmental matters have been distributed to key ports of all vessel types. Ports have been rated and ratings are used to choose port for landing sludge/garbage for all vessel types.

Sewage
Sewage is kept in holding tanks until it can be discharged in an approved manner or processed at a treatment plant. Some container vessels are fitted with a three-phase biological sewage treatment system that ensures effective treatment of sewage to the highest standards prior to discharge.

All generation and disposal of oily waste and garbage is currently being logged on all our vessels. It is the intention in future to collect these quantitative data in order to obtain a full overview of our waste streams. The sludge reception facilities are also a part of the upcoming waste monitoring and environmental rating system described above.

Hazardous waste
The operation of vessels also results in generation of various amounts of hazardous waste, such as batteries, light bulbs, medical waste, chemicals etc. This waste is segregated and disposed off in a safe and environmentally responsible manner.

7. Consumption of Paints, Chemicals and Grease

A number of paints, chemicals and grease products are used onboard the vessels for operation and maintenance purposes. As part of our effort to improve the environmental performance we constantly strive to substitute these products with more environmentally friendly ones without loss of efficiency or increase of cost. Additionally we strive to minimise the number of chemical articles used in the fleet to ensure a uniform safe handling of chemicals throughout the fleet.

The average use of paints, chemicals and grease products in 280 vessels centrally purchased is shown in the table below (unconsolidated figures). The number of articles from each chemical group is also presented.

PRODUCT	PAINTS	CLEANING MATERIALS AND CHEMICALS	GREASE AND OIL PRODUCTS	TOTAL
2005				
Litres/vessel	6,600	8,600	1,000	16,200
No of articles	402	284	36	722
2006				
Litres/vessel	3,600	13,,500	1,700	18,800
No of articles	253	234	34	521
2007				
Litres/vessel	2,700	15,400	640	18,740
No of articles	253	222	35	510

It is seen that the amount of chemicals used per vessel on average has increased from 2005 to 2007. The increase has approximately 15%. This is mainly due to two reasons:

- The average size of the vessels has increased, hence average amount of chemicals and paints used for maintenance have increased.
- It has been emphasized that vessels should not purchase chemicals locally. Less chemicals purchased locally will result in an increased amount purchased centrally, hence reflected in these figures.

However, the number of articles has decreased by 29%, which is positive and indicates better control with the chemicals purchased.

Since there is currently no distinction between harmful and less harmful chemicals in the reporting system, it is very difficult to determine whether the trend is going in a positive environmental and health-wise direction regarding control of chemicals on the vessels.

It is the intention in future to monitor the use of paints and chemicals divided into different categories based on their safety and environmental effects. One G-class container vessel managed to reduce chemicals used by 25% in one year. If this can be successfully implemented throughout the fleet, there is a potential for a significant environmental reduction as well as a major cost saving. This will be followed up in 2008 and a pilot project has been initiated in order to try to reduce chemicals and paints on one container vessels and one VLGC.

8. Vessel Recycling

Historically, A.P. Moller - Maersk has sold vessels long before the end of their service life and consequently recycling vessels has not been necessary. Nevertheless, our vessels are designed and built to ensure a very high recycling ratio.

After the acquisition of P&O Nedlloyd, A.P. Moller - Maersk adopted a company policy on vessel recycling. The approach is to take responsibility for the environmental, safety and occupational health of the vessel right through its lifetime. Procedures have been developed for environmentally and socially responsible vessel recycling. These procedures require a vessel to be rigorously checked before it is delivered to a recycling yard. This involves conducting a radiation survey, auditing hazardous materials, and highlighting any parts of the vessel which require particular care when being demolished.

Before recycling a vessel, we ensure that the chosen facility has trained management and staff, as well as safety and environmentally aware procedures in place. These include, tank cleaning, asbestos removal, refrigerant recovery, removal of hazardous materials, stripping and removing insulating materials, removal of all electric cables and wiring, as well as the removal of PVC piping and other plastics. When a new shipyard is selected for recycling a vessel, a supervisor appointed by us monitors the pre-cleaning at the facility, the actual recycling and the waste management to ensure that it is done properly and according to agreed procedures.

The planning, implementation and launch of this approach to vessel recycling ensure minimisation of environmental impacts of vessel recycling (no oil spills, no discharge of toxic waste, proper dealing with asbestos, no burning of cables, proper refrigerant recovery, recycling of all recyclable materials and environmentally sound disposal of all materials). Additionally, it ensures and documents a safe and secure working environment for shipyard recycling staff.

In 2007, it was decided that all new built as well as existing crude carriers, product carriers, chemical carriers as well as LPG vessels will be assigned a Green Passport and this process has started. Two LPG vessels have already received Green Passport, a detailed Class approved inventory list of hazardous materials of a vessel's hazardous materials. The Green Passport accompanies the vessel throughout its working life and ensures that dismantling the vessels at the end of its lifetime can be conducted in an environmentally responsible and safe matter. Four vessels from Maersk Line Limited (US) have also received the Green Passport.

9. Innovation

In 2007, the Innovation Department of the Technical Organisation was created with a view to initiate and coordinate new developments across the shipping entities of the A.P. Moller - Maersk Group. The innovation activities have been clustered in four areas:
- energy efficiency
- environment
- safety
- service performance

The primary focus of the department is to identify and develop technology aimed at increasing the energy efficiency of vessels and at reducing the environmental impact of shipping. In 2007, activities with regard to these two areas included the following:

- closed loop control of main engines
- electronic cylinder lubrication
- optimization of energy consumption of machinery systems
- engine and waste heat recovery system performance monitoring and analysis
- improved propeller design
- novel propulsion concepts
- scrubber system development
- NO_x reduction technology
- particulate filter development
- ballast water treatment system evaluation

Some of the developments involve national and international universities and research institutes, as well as industry project partners. A.P. Moller - Maersk employees are encouraged to submit new ideas with regard to the different innovation areas.

10 . Future Challenges

The main future challenges within environmental legislation are presented in the table below. These challenges are based upon requirements and expectations from different stakeholders, including costumer requirements, regulatory developments and environmental NGO focus areas. Additionally the overall most significant environmental impacts from vessel operations, as described in a previous section in this report, are taken into consideration.

NO_x, SO_x, and PM emissions	In April 2008, IMO agreed to amend existing MARPOL annex VI covering NO_x and SO_x emissions. Revised MARPOL Annex VI will enter into force March 2010. The new rules mean that from 2011, emissions of NO_x from all new vessels must be reduced by 15-25% compared with the current level. By 2016 NO_x emissions from new vessels must be as low as 80% of the current level when they sail in special, coastal areas (Emission Control Areas), which will include the Baltic, the North Sea and the English Channel. With regard to sulphur, the agreement is even more ambitious. The new rules are toughest precisely where the harmful effect on the environment and health is greatest; close to the shore. For sulphur pollution and particles, the agreement includes the following elements: • the sulphur limit for vessel fuels applicable in Emission Control Areas, including the Baltic, the North Sea and the English Channel, beginning in 2010 will be 1%, (reduced from the current 1.5%) and from 2015 the limit will be reduced to 0.1%; • the global sulphur cap will be reduced to 3.5% from the current 4.5%, effective from 2012, and further to 0.50% effective from 2020. However, this is subject to a feasibility review so that if there is not enough supplies of fuel with 0.5%, the effective date would default to 2025. The agreement is expected to be finally adopted at the next IMO meeting in October 2008, with entry into force in April 2009. A.P. Moller - Maersk supports this international solution, and our Regulatory Affairs Department is in close dialogue with IMO regarding this matter.
CO_2 emissions	A CO_2 indexing scheme for newbuildings as well as a kind of taxation for vessel fuels is currently being developed within IMO's environmental committee (MEPC). We will participate in the process to ensure that future CO_2 indexing methodologies take into consideration all relevant aspects.
Ballast water	Ballast water is another issue that is gaining much attention. The forthcoming IMO Ballast Water Convention is expected to enter into force soon and will entail mandatory ballast water treatment from 2009. However, the ratification status of the convention is still very limited. Only 12 countries corresponding to 3.5% of world's tonnage have ratified. However, all new-built A.P. Moller - Maersk supply vessels will have Ballast Water Treatment Systems in place from 2009.
Antifouling paints	The IMO Antifouling Convention enters into force 17 Sept 2008 prohibiting TBT containing antifouling paints. We already comply with this convention.
Vessel Recycling	IMO is currently working on preparing a convention for vessel recycling, which will then contain requirements for sound recycling practices. The new convention must be agreed to by Spring 2009. A.P. Moller - Maersk follow this work closely.
Customer	Our customers are increasingly focused on their carbon emission footprint and ask for our assistance in providing them with such info. Maersk Line and Maersk Logistics have developed a Carbon Footprint Calculator as a service to their customers.
Others	The tightened NO_x-regulations are contradicting the CO_2 emissions target as a NO_x reduction from existing engines generally increases fuel consumption. Larger vessels obviously contribute to reduction of CO_2 as well as NO_x. However NO_x optimising existing vessels or introducing vessels meeting the upcoming MARPOL annex VI standard will result in increased CO_2 consumption.

Appendix I: Environmental impacts from vessels and its causes

Normal operating conditions

OPERATIONAL ACTIVITY	ENVIRONMENTAL ASPECT	ENVIRONMENTAL IMPACT
Running of engines	Fuel consumption	Use of non-renewable natural resources.
Running of engines	CO_2 emissions	Global warming.
Running of engines	NO_X emissions	Eutrophication. Acidification. Ozone/smog formation.
Running of engines	SO_X emissions	Acidification. Respiratory effects.
Cargo operations	VOC emissions	Ozone/smog formation. Carcinogenic.
Running of engines	PM emissions	Carcinogenic.
Refrigeration and fire fighting	HCFC, HFC, etc.	Degradation of the stratospheric ozone layer. Global warming
Running of engines	Lube oil consumption	Use of non-renewable resources
Ballast water operations	Ballast water discharge	Introduction of invasive species to ecosystems thus posing a threat to biodiversity.
Engine room operation and maintenance	Oily water discharge	Pollution of the marine environment. Toxic effects on marine organisms.
Vessel operation	Release of toxic substances from antifouling paint	Pollution of the marine environment. Toxic and hormone disrupting effects on marine organisms.
Vessel operation, catering, etc.	Garbage disposal	Pollution of sea, air or land.
Maintenance	Use of paints and chemicals	Pollution of the marine environment.
Vessel design and maintenance	Use of materials	Use of non-renewable natural resources.

Abnormal operation conditions

OPERATIONAL ACTIVITY	ENVIRONMENTAL IMPACT	ENVIRONMENTAL ASPECT
Bunkering	Oil Spill	Pollution of the marine environment. Toxic effects on marine organisms.
Cargo handling	Cargo spill	Pollution of the marine environment. Toxic effects on marine organisms.

Emergency conditions

OPERATIONAL ACTIVITY	ENVIRONMENTAL IMPACT	ENVIRONMENTAL ASPECT
Unsafe operation of vessel	Accidental discharges of fuel and/or cargo	Pollution of the marine environment. Toxic effects on marine organisms.
Unsafe operation of vessel and improper handling of equipment	Fire	Pollution of toxic substances to air and marine environment

Results from environmental impact studies (life-cycle assessments) covering the entire life-cycle of vessels as well as internal risk assessments, show that the overall, the most significant environmental impacts from vessels are:

- Global warming, acidification, eutrophication, smog and energy consumption from the combustion of fuel and generation of air emissions in the operational phase.
- Biodiversity impacts from ballast water discharge during operation.
- Toxicity for humans and ecology from leaking of antifouling during operation.
- Accidental oil spills from vessels, either as bunkering, cargo or by accidents.
- Resource use in the production phase and generation of solid waste from the scrapping phase.

Appendix II: CO_2 emissions

Please find in tables below, 2007 CO_2 emissions in absolute numbers from A.P. Moller - Maersk vessels. The first table show the CO_2 emissions divided on business units whereas the second table shows the emissions based on vessel flag.

BUSINESS UNIT	NUMBER OF VESSELS	CO_2 EMISSIONS (1000 TONNES)
Maersk Line	162	13,565
Maersk Tankers	59	1,880
Maersk Supply Service	54	800
Norfolkline	12	260
Safmarine	14	925
Maersk Line Limited	22	1,470
Total	323	18,900

FLAG	NUMBER OF VESSELS	CO_2 EMISSIONS (1000 TONNES)
Denmark	123	9,200
Singapore	50	2,300
UK/Isle of Man	67	3,500
Netherlands	18	1,100
Others	65	2,800
Total	323	18,900