

Ship management

Ship management in 2008 was performed by Lauritzen Fleet Management and Gasnaval S.A., Spain and part-owned New Century Overseas Management Inc., Philippines, and Star Management Associates, Japan.

Lauritzen Fleet Management (LFM), located at head office in Copenhagen, was the centre for technical and crew management of JL's fleet of bulk carriers, gas carriers, product tankers, dynamically positioned offshore support vessels as well as specialised reefer vessels (under technical management for third part). JL was responsible for policies and standards according to which other managers, i.e. Gasnaval S.A (semi-refrigerated gas carriers), New Century Overseas Management Inc. (bulk carriers) and Star Management Associates (pressurised gas carriers) conducted their operations.

During 2008, an average of 35 JL-owned vessels and 13 third-party vessels were managed by the Group's fleet managers.

However, a decision was made in early 2009 to decentralize ship management operations previously conducted by LFM. In order to streamline processes and ensure even stronger customer focused services, each business unit will therefore in future be responsible for the ship management operations for their fleets, whether performed in-house or externally.

Safety and Quality

With respect to safety and the environment, internal and customer requirements, JL ship managers are dedicated

to providing world-class ship management whilst also ensuring cost-effective operations.

Crewing

JL's vision and values are prime motivation drivers for our crew onboard the JL fleet. As crewing strategy by its very nature is long-term, it is important for JL to provide fair employment terms and sound working conditions with the emphasis on education, training and teamwork, thus creating and nurturing a working environment in which people feel valued and as being an integral part of the company.

Performance reviews

Key Performance Indicators (KPIs) are used to measure, document and report all vital elements of vessel performance. KPIs are collected and monitored across ship management entities and include measurements of safety, environmental performance, quality, costs, security and crew and office personnel.

Lost Time Accident Frequency (LTAF) statistics fell satisfactorily from 2.46 in 2007 to 1.13 in 2008. Apart from the grounding of a bulk carrier in the Indian Ocean in November 2008, no major casualties were reported and JL's performance trends for observations during port state controls, vetting inspections etc., were again satisfactory.

Environment and climate

Around 90% of world trade is at some time transported by sea so ocean transport is a vital part of globalisation. In ton-kilometer terms it is also the most energy-





FIG 15: ENERGY CONSUMPTION KWh/TONKILOMETER 2006-08

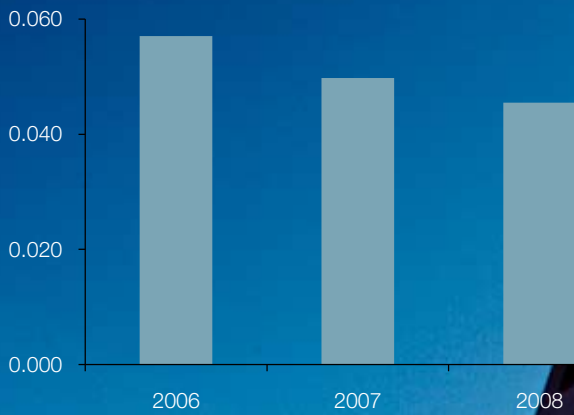


FIG 16: CO₂ ENERGY EMISSIONS G/TONKILOMETER 2006-08



FIG 17: SO_x AND NO_x EMISSIONS 2006-08





efficient and environmentally friendly way of providing any form of transport.

The International Maritime Organisation (IMO) is the international organization for regulating shipping. It provides regulations for emissions from shipping and has already implemented international regulations for SO_x and NO_x emissions.

The shipping industry acknowledges the need to cut CO₂ emissions. At present, carbon emissions from the shipping industry are estimated to account for around 3% of global carbon emissions so shipping is by far the most carbon efficient form of commercial transport (compared to air, rail and road). The amount of shipping required is a function of trade and if the world population and world economy are to continue to expand, shipping will need to expand too. So any regulation on CO₂ emissions from shipping should and must be taken by IMO.

JL's own fleet of ships is modern with a low average age profile and we will continue to launch and drive initiatives to enhance energy efficiency and reduce emissions.

Already in 2007, JL was awarded ISO14001 accreditation for its environmental management system, initially covering product tankers and gas carriers but the system has been designed to cover other types of vessels as well. In 2008 LFM worked hard on the continuous improvement of the Environmental Management System and on the environmental performance through

environmental programmes. These programmes include initiatives to improve propulsion performance, for example by optimising power plant efficiency and hull/propeller resistance, garbage handling and the use of chemicals aboard.

Another challenge in 2008 was preparing for the upcoming "International Convention for the Control and Management of Ship's Ballast Water and Sediments" which aims to prevent the transfer of harmful aquatic organisms and pathogens from pumping ballast water. The task included drawing up approved Ballast Water Management Plans and constant monitoring of the ballast water treatment technologies that are available.

JL includes environmental factors at an early stage of ship design that meet or exceed the requirements in the regulations, systems and the procedures put in place to safeguard the environment.

Energy consumption

JL's own fleet consumed a total of 228,000 tonnes of oil in 2008 to produce 2.6m MWh of energy.

Average energy efficiency was 0.045 KWh/tonkilometer which was slight down on 2007, cf. Figure 15.

The emission figures also show a declining trend, cf. Figures 16 and 17. Emissions figures are based on actual consumption, oil quality and engine emissions factors and are calculated in accordance with IMO MEPC /Circ.471.