



Accounting Policies

The report boundary includes assets in the parent company, subsidiaries and joint ventures, as well as employees in the parent company and subsidiaries. This report is published annually and covers the period 01.01.11-31.12.2011. The last CSR report was published in April 2011 and covered the period 01.01.2010-31.12.2010.

The reporting boundary can be divided into several categories: NORDEN's owned vessels, owned vessels which are operated by NORDEN, all operated vessels (owned and chartered), chartered vessels and owned vessels on contract to 3rd parties. Throughout the report, it is specified what category the data refers to.

Energy and climate

CO₂ emissions

NORDEN's CO₂ emissions are calculated in accordance with the Greenhouse Gas Protocol and the financial control approach, where emissions are divided into scope 1, 2 and 3, is applied. Scope 1 emissions include emissions from owned vessels as well as owned company cars. Scope 2 emissions include emissions from land-based activities at NORDEN's offices worldwide, except the Annapolis office since electricity is integrated in rental costs. Scope 3 emissions include emissions from chartered vessels, leased company cars and business travel by air transport.

Scope 1

Fuel figures for Tanker vessels when arriving/bunkering/departing at port are automatically updated from MOEPS (Master's Operation Environmental Performance System) by synchronization of the fuel figures. In MOEPS the figures are partly updated manually by the operators and automatically by the vessel Captain through the MOEPS Client. For DryCargo vessels, the fuel figures are manually entered by the operator into GLOMARIS (Global Maritime Information Suite).

The total fuel consumption for Tanker and Dry Cargo is calculated by adding the fuel that already exists on the vessel prior to departure with the purchased vessel and thereafter subtracting the remaining fuel on the vessel when the voyage ends. This is done for each vessel and registered in the MOEPS and GLOMARIS systems.

CO₂ emissions from vessels are calculated on the basis of the fuel quantity consumed on a voyage multiplied by the duration of the voyage (calculated pro rata) multiplied by the CO₂ emissions factor for each fuel type (for residual fuel oil the CO₂ emissions factor is 3.13, and for marine diesel oil and marine gas oil the CO₂ emissions factor is 3.19. Source: "Second IMO GHG Study 2009"). This data is applicable for all NORDEN operated vessels.

CO₂ emissions from owned company cars are calculated based on the following assumptions: all the cars are diesel cars with a yearly usage of 20,000 km per car, 12 km/l, and CO₂ emissions of 2.65 kg/l. The conversion factor is from Key2Green.

Scope 2

Emissions from offices are based on electricity, heating and air condition consumption for each office, except the Annapolis office where the electricity costs are integrated in the rental costs and therefore



cannot be specified. The electricity, heating and air condition consumption data has been provided by each office by reading the meter at the beginning and end of the year. These figures are converted to CO₂ emissions from kWh using the International Energy Agency's conversion indicators for 2009 in the specific countries we are located in. (United States 508 grams CO₂/kWh, Denmark 303 grams CO₂/kWh, India 951 grams CO₂/kWh, Singapore 519 grams CO₂/kWh, China 743 grams CO₂/kWh and Brazil 64 grams CO₂/kWh)

The energy from our headquarters in Hellerup comes from the following primary energy sources: coal, natural gas, biofuel, oil, garbage and nuclear power. We do not have the data for our other offices.

Scope 3

Emissions from chartered vessels based on their fuel consumption are calculated in the same way as described for owned vessels in scope 1.

Leased company cars are calculated based on the following assumptions: all the cars are diesel cars with a yearly usage of 20,000 km per car, 12 km/l, and CO₂ emissions of 2.65 kg/l. The conversion factor is from Key2Green.

The CO₂ emissions from business travel are calculated according to the guidelines from the travel agencies which have provided us with the data. For voyage distances of less than 1,000 km, the factor 0.18 per km is used to calculate the CO₂ emissions, while for voyage distances of more than 1,000 km, the factor 0.11 per km is used.

Energy Efficiency Operational Indicator (EEOI)

EEOI is defined as: CO₂ emitted per metric ton of cargo transported, per nautical miles sailed. The formula used to calculate EEOI is

$$\text{Average EEOI} = \frac{\sum_i \sum_j (FC_{ij} \times C_{Fj})}{\sum_i (m_{\text{cargo},i} \times D_i)}$$

Where:

- *j* is the fuel type
- *i* is the voyage number
- *FC_{ij}* is the mass of consumed fuel *j* at voyage *i*
- *CF_j* is the fuel mass to CO₂ mass conversion factor for fuel *j*
- *m_{cargo}* is cargo carried (tonnes) or work done (number of TEU or passengers) or gross tonnes for passenger ships
- *D* is the distance in nautical miles corresponding to the cargo carried or work done.

Climate action plan

Regarding the reduction of CO₂ emissions from the initiatives in the climate action plan, the effect is calculated based on assumptions about engine size, engine type and ballast conditions, and the effect of the initiatives is estimated based on guidelines from IMO and Intertanko. The data is applicable for owned vessels.



SOx and NOx

When buying bunkers the amount of low sulphur fuel is registered in MOEPS and GLOMARIS. SOx emissions are weighted as SO₂ emissions since this is presumably what the emissions will eventually become. SO₂ emissions are calculated from the fuel quantity consumed during the year multiplied by the average sulphur content in the fuel (in 2011: 2.06%) multiplied by 0.02 since sulphur is about twice as heavy as oxygen. The formula is provided by MAN Diesel & Turbo SE. The data is applicable for all NORDEN operated vessel.

NOx emissions are weighted as NO₂ emissions since this is presumably what the emissions will eventually become. NO₂ emissions are calculated from the energy that the main engine produces multiplied by the Tier I NOx limit which is 17 gr/kwh, as NORDEN's owned and operated vessels are Tier I compliant. The energy produced is calculated using the fuel oil consumed in kg divided by the SFOC which in this case is estimated to be 0.173 kg/kWh. Source: "Project Guide for MAN S50MC-C7 two-stroke engine, 6th Edition, January 2009". The data is applicable for all NORDEN operated vessel.

Waste

The data for waste is applicable for owned vessels which are operated by NORDEN. The waste handled on board is categorized in six categories in accordance with the MARPOL convention. These categories are: [1] plastics, [2] floating dunnage, lining, or packing materials, [3] ground paper products, rags, glass, metal, bottles, crockery etc., [4] cargo residues, paper products, rags glass, metal, bottles, crockery etc., [5] food waste and [6] incinerator ash except from plastic products which may contain toxic or heavy metal residues.

The amount of waste is reported to the office by the master of a vessel each month. The records of the disposed waste are registered in the garbage record book. Our waste is disposed of in accordance with Marpol Annex V. All records are conducted in cubic meters.

Maritime safety and security

Vetting

Vetting inspections are performed by inspectors from oil companies in accordance with the Ship Inspection Report Programme (SIRE). Observations identified during the inspection are reported to vessel and office by the inspector (results are also recorded in the SIRE database by OCIMF). The data is applicable for owned vessels which are operated by NORDEN.

PSC

Port State Controls are performed by inspectors from a relevant PSC MOU, and the result of the inspection is reported to the master of the inspected vessel, who forwards the inspection report to office. The data is applicable for owned vessels which are operated by NORDEN.

Near-miss, LTIF and TRCF

The data is applicable for employees at sea on NORDEN owned vessels which are operated by NORDEN.

Near-miss, Lost Time Injury Frequency and Total Recordable Case Frequency are reported monthly from the master of the vessel to office in accordance with OCIMF's 'Marine Injury Reporting Guidelines'.

Near-misses refer to situations, which could have led to an accident if they had developed further.



NORDEN measures Lost-Time Injury (LTI) frequency rate as work-related incidents per 1 million working hours which result in occupational illness causing absence from work for more than 24 hours. The LTI frequency rate is measured as an average over the past 12 months.

The Total Recordable Case Frequency (TRCF) indicates the number of incidents that have resulted in medical treatment. It is calculated per 1 million working hours.

Employee conditions

We have decided to commence our reporting with 2011 data, as GRI has updated the content of their indicators.

The number of employees has been divided according to GRI by gender, age, employment contract and type. We have divided our reporting into employees at sea and employees on shore.

Employees at sea

When an employee at sea is hired, his information is putted into our system "Omega" manually by an employee on shore. All the employees at sea are full-time.

An indefinite or permanent contract is a contract with an employee for full-time for an undefined period.

A fixed-term or temporary contract is a contract of employment that ends when a specific time period expires, or when a specific task, that has a time estimate attached, is completed.

The retention rate is calculated based on the average number of employees in the reporting period. It is calculated as the number of employees that left in the reporting period divided by the average number of employees in that same period. The data is drawn from Omega and sorted by employment date and eventual dismissal date.

Rest hours are monitored in accordance with ILO and STCW conventions. All violations of rest hours conventions are recorded onboard each vessel and they are all reported to office on a monthly basis. Rest hour non-conformity is calculated per full-time equivalent, i.e. how many violations have occurred per 1 crew member onboard a vessel during 1 month.

Employees on shore

Employees on shore are employees hired for a position on land in one of our offices.

When hired employees are registered manually in our HR system, People Focus, data such as gender, age, position and work office is recorded. Management includes employees above General Manager level.

Full-time employees are employees who work 37 hours a week, while part-time employees are employees who work under 37 hours a week. Student workers are included in part-time employees.

An indefinite or permanent contract is a contract with an employee for full-time or part-time work for an undefined period.

A fixed-term or temporary contract is a contract of employment that ends when a specific time period expires, or when a specific task, that has a time estimate attached, is completed. Trainees and maternity leave replacements are included in this category.



The retention rate is calculated based on the average number of employees in the reporting period. It is calculated as the number of employees that left in the reporting period divided by the average number of employees in that same period. The data is drawn from People Focus and sorted by employment date and eventual dismissal date.

Anti-corruption

The external investigator has solely provided us with data on the amount of reported incidents, as the nature of the incidents is confidential.