

CARBON DISCLOSURE PROJECT

CDP6 Greenhouse Gas Emissions Questionnaire

Responding corporation: Dampskibsselskabet "NORDEN" A/S

General Information

It is not a requirement of the CDP questionnaire to give an introduction to your answer, but if you would like to do so, please give it here in the text box below or attach a document.

D/S NORDEN's response to the sixth CDP Greenhouse Gas Emission Questionnaire:

Dear Sirs

Thank you for your interest in D/S NORDEN's climate activities.

We are pleased to provide our answers to the 2008 CDP questionnaire. This is our first time reporting through the questionnaire, and we are thus looking forward to following up on our responses in the years to come and inviting stakeholders and other interested parties to continuously follow our specific efforts in this important area.

If you have questions regarding D/S NORDEN's climate activities, please do not hesitate to contact me.

Yours sincerely

Ivar Hansson Myklebust
EVP & Chief Financial Officer
D/S NORDEN

Where available please can you provide the following identification numbers for your primary listings/ordinary shares and information for your company:

Company Turnover (also known as sales) in millions of US\$

2933.1

ISIN number

DK0010269844

CUSIP number

Not applicable to NORDEN

SEDOL number

Not applicable to NORDEN

1 - Risks and Opportunities

Question 1(a)(i) Regulatory Risks

How is your company exposed to regulatory risks related to climate change?

We consider our company to be exposed to regulatory risks because...

Currently the shipping industry is not subject to regulation in the area of greenhouse gas (GHG) emissions. However, considering the industry's contributions to climate change as a whole and the related ongoing debate amongst various stakeholders, including politicians, regulation is expected to follow.

Climate management and CO2 emissions are global challenges requiring a global solution. The Kyoto Protocol places regulation of the shipping industry in the hands of the UN's international shipping organisation, IMO (International Maritime Organization). IMO is working on determining a measure of how energy-efficiently a vessel transports its cargo. This work is to form the basis for regulation of the shipping industry's CO2 emissions.

Whether regulation on GHG emissions will have an impact on D/S NORDEN depends on the scope of the regulation.

D/S NORDEN supports a global solution and a global regulation scheme. D/S NORDEN is of the opinion that only a global regulation scheme can reduce the risk of regional regulation schemes being used.

D/S NORDEN supports IMO's work through the Danish Shipowners' Association and considers it important to find international solutions to this global problem, as such solutions result in the best environmental improvements and ensure equal competition for all shipping companies around the world. D/S NORDEN believes that a coherent and comprehensive future IMO framework should be:

- a) effectively contributing to the reduction of total GHG emissions
- b) binding and equally applicable to all Flag States in order to avoid evasion
- c) cost-effective
- d) limiting - or at least - effectively minimizing competitive distortion
- e) based on sustainable environmental development without penalizing global trade and growth
- f) target based and not prescribing specific methods
- g) promoting and facilitating technical innovation and R&D in the shipping industry
- h) accommodating to frontrunners in the field of energy efficiency
- i) practical, transparent, fraud free and fairly easy to administer.

These principles have been laid down by IMO's Marine Environment Protection Committee (please see page 5 in Annex 2: <http://www.endseuropedaily.com/docs/80403c.pdf>).

Hence D/S NORDEN welcomes industry-specific regulation given that it is transparent, global and fair in its scope and thus does not affect the competitive market mechanisms. Under these circumstances, regulation will favour those shipping companies which are most carbon-efficient, e.g. in terms of fuel efficiency. D/S NORDEN would consider such regulation an opportunity rather than a risk.

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

No

Question 1(a)(ii) Physical Risks

How is your company exposed to physical risks from climate change?

We consider our company to be exposed to physical risks because...

To the shipping industry, physical conditions related to changing and rough weather (such as cyclones and a high sea, regions with ice etc.) are inherent challenges. These challenges are continuously dealt with through daily operations.

Whereas physical challenges related to climate change are already known to the industry, the increase in abnormal and severe weather conditions, as forecasted by the Intergovernmental Panel on Climate Change (IPCC), are likely to alter the intensity and significance of those challenges (e.g. as a result of an increase in the frequency of severe storms and freak waves (> 25 meters)).

Physical challenges related to extreme weather conditions are integrated into D/S NORDEN's daily operations of owned and chartered vessels - e.g. by using the best available technology for constant monitoring of the position of vessels (using GPS), monitoring of weather conditions, weather routing, route planning, the type of vessel in operation (i.e. special requirements regarding construction) and well-trained, educated and qualified staff. Hence, different types of physical challenges posed by climate change are already factored in. An increase in intensity and significance of those risks can immediately be responded to by escalating the activities already in place. Thus, D/S NORDEN considers the physical challenges to be manageable in the short term.

It is clear that the newest technology and training of staff are mandatory to be able to ensure proper management of extreme weather events both in the shorter and longer run.

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

No

Question 1(a)(iii) General Risks

How is your company exposed to general risks as a result of climate change?

We consider our company to be exposed to general risks because...

Due to the increasing debate about the industry's contributions to climate change, climate change is generally considered a reputation issue in the shipping industry. Shipping accounts for almost

90% of all transport. There are no precise figures on how much CO2 is presently emitted by shipping, but it is estimated to be around 4% of global CO2 emissions (Danish Shipowners' Association).

Despite the fact that shipping is the most environmentally sound means of transport with far lower CO2 emissions, and thus less environmental impact per transported ton of cargo than for example train, lorry or air transport, it is essential that the industry continuously take measures to reduce emissions and participate in the debate.

Climate change can also cause market related impacts as the demand for and supply of transportation of different types of goods to and from different geographical regions of the world may change.

To D/S NORDEN, these challenges imply a constant and high awareness of the developments in the debate and an increasing effort to communicate actively. It is important that stakeholders know that D/S NORDEN works to address the issue of climate change through for example different efficiency measures. D/S NORDEN's response to the CDP Questionnaire is an example of the company's increased awareness and of its wish to communicate its efforts.

With regard to changes in the demand for as well supply of goods transported by D/S NORDEN, D/S NORDEN's business model is "adapted" to such changes. D/S NORDEN has owned and chartered vessels (D/S NORDEN has more chartered vessels than owned). This implies that D/S NORDEN, to a great extent, is equipped to meet changes and demands in the market place. Hence, the impact is currently manageable and not considered to be significant in the short run.

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

No

Question 1(a)(iv) Risk Management

Has your company taken or planned action to manage the general and regulatory risks and/or adapt to the physical risks you have identified?

We have taken or planned action.

As indicated by the answers provided above, D/S NORDEN has and is planning to take further action as part of the daily efforts to address and manage the different types of challenges which climate change poses to the company.

Management of general climate challenges:

Through D/S NORDEN's CSR executive body, the company keeps abreast of the development in the climate change debate and has made a decision to increase its efforts to actively communicate to stakeholders how D/S NORDEN works to address the issue of climate change. For example D/S NORDEN's 14 point plan (please see question 3 (a) (iv) for details), which sets out efficiency measures, has been initiated in 2007 and communicated in the 2007 Annual Report. D/S NORDEN's response to the CDP questionnaire is another example of the company's efforts to communicate its actions to stakeholders.

Management of regulatory climate impacts:

Through the Danish Shipowners' Association, D/S NORDEN and the International Association of Independent Tanker Owners (INTERTANKO) support IMO's work to determine a measure of how energy-efficiently a vessel transports its cargo. This work is to form the basis for the regulation of the shipping industry's CO2 emissions. D/S NORDEN considers it crucial to find global solutions to this global challenge as such solutions result in the best environmental improvements and ensure equal competition for shipping companies around the world.

Management of physical climate challenges:

Through new technology as well as trained and qualified staff, D/S NORDEN has established processes for monitoring vessel position, weather conditions, route planning etc. and factored these into daily operations. D/S NORDEN's efforts in this regard can be intensified with short notice.

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

No

Question 1(a)(v) Financial and Business implications

How do you assess the current and/or future financial effects of the risks you have identified and how those risks might affect your business?

We assess current and/or future financial effects by...

To this day, D/S NORDEN has not experienced any significant financial or business implications that can be directly related to climate change challenges and identified impacts.

However, in the long run implications might be expected, for example as a result of increased investments in new technologies, education of staff and changes in demand for/supply of goods to be transported. D/S NORDEN is aware of these long-term challenges and continuously monitors the development in the respective areas.

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

No

Question 1(b)(i) Regulatory Opportunities

How do current or anticipated regulatory requirements on climate change offer opportunities for your company?

We consider that current or anticipated regulatory requirements offer opportunities because...

As described in question 1 (a), the shipping industry is likely to be included in GHG regulation in the near future. IMO is currently working to develop and lay down the groundwork for this regulation.

On the basis of IMO's work, which supports transparent and global GHG regulations, D/S NORDEN welcomes the regulation. D/S NORDEN considers regulation which follows the nine principles (please see question 1 a i) set out by IMO's Marine Environment Protection Committee in 2008 an opportunity as such regulation would be global and thus binding and equally applicable to all Flag States as well as favour those shipping companies which are most carbon-efficient, e.g. in terms of fuel efficiency.

In addition to global regulation targeted at the shipping industry, D/S NORDEN would be pleased to see more holistic legislation after 2012 where the transport sector, as a whole, will be included in the post-Kyoto regulations. This would be advantageous for the shipping industry which has far lower CO2 emissions (and thus less environmental impact per transported ton of cargo) than for example train, lorry or air transport.

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

No

Question 1(b)(ii) Physical Opportunities

How do current or anticipated physical changes resulting from climate change present opportunities for your company?

We do not consider that current or anticipated physical changes offer opportunities because...

Currently, no significant opportunities exist for D/S NORDEN related to the physical challenges resulting from climate change.

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

No

Question 1(b)(iii) General Opportunities

How does climate change present general opportunities for your company?

We consider that climate change offers opportunities because...

At industry level, it is essential that measures are taken to further reduce emissions (thereby ensuring that the industry keeps its current position as best in class). I.e. the shipping industry accounts for almost 90% of all transport and is the most environmentally sound means of cargo transport.

To D/S NORDEN, an advantage exists in the market place due to the high efficiency of the vessels owned by the company. The average age of D/S NORDEN's vessels is generally low, and the newest technologies are installed onboard. Currently the newest technologies used are focusing on optimizing the usage of burning fossil fuels in the diesel engines of the vessels. This has been the objective for many years now – and since diesel engines are foreseen to stay as the main propulsive power in shipping - this is expected to continue. However, D/S NORDEN has an opportunity to gain a competitive edge by actively increasing its profile as a responsible shipping company which continuously works to lower CO2 emissions. A factor of influence for future customers that is likely to increase in significance.

Furthermore, D/S NORDEN would look forward to doing business with customers who are interested in informing consumers etc of transportation specific emissions (when appropriate).

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

No

Question 1(b)(iv) Maximizing Opportunities

Do you invest in, or have plans to invest in products and services that are designed to minimize or adapt to the effects of climate change?

Climate change has led to investment or planned investment in order to maximise climate change opportunities.

D/S NORDEN includes climate change in its approach to sustainability management and CSR issues. Investments within these areas are viewed as an integral part of the business.

To be able to meet and promote customers' interest in greener transportation, D/S NORDEN is in the process of implementing procedures for consulting customers and for stakeholder dialogues regarding preferences and upcoming issues.

The specific actions taken through the 14 point plan to minimize emissions from D/S NORDEN owned vessels are described in section 3 (a) of this questionnaire.

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

No

Question 1(b)(v) Financial and Business Implications

How do you assess the current and/or future financial effects of the opportunities you have identified and how those opportunities might affect your business?

We assess current and/or future financial effects by...

So far, D/S NORDEN has not experienced any significant financial or business implications which are directly relatable to climate change opportunities identified.

In the shorter run, the documented reputation as a shipping company working to lower CO2 emissions may be reflected in the demand and the choice made by D/S NORDEN's customers. In the longer run, opportunities might be expected as a result of changes in supply and demand for "greener" products. These can be met by D/S NORDEN's flexible business model. D/S NORDEN is aware of the short and long-term opportunities and continuously monitors the development in the respective areas.

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

No

2 - Greenhouse Gas (GHG) Emissions Accounting

Question 2(a)(i) Reporting Boundary

Calculation tools that will assist companies in calculating GHG emissions from particular activities, such as the combustion of fuels, production processes, etc can be found at: <http://www.ghgprotocol.org/calculation-tools/all-tools>. Companies new to emissions reporting are strongly recommended to use these tools to assist them in their calculations. If you have used a calculation tool, please list it under the question on methodologies.

Please indicate the category that best describes the company, entities or group for which your response is prepared:

[Companies over which financial control is exercised – per consolidated audited Financial Statements.](#)

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

[Yes](#)

[D/S NORDEN's reporting boundaries:](#)

[D/S NORDEN's reporting comprises GHG emissions from the company's shipping operations at sea and the land-based administration activities.](#)

[Shipping itself is the company's primary and significant source of GHG emissions in the form of CO2 emissions. D/S NORDEN has decided to start this first round of GHG emissions reporting with those areas most significant to the company. The land-based activities are therefore not included in the 2007 reporting. The GHG emissions from land-based activities are highly insignificant compared to the GHG emissions from the shipping operations at sea.](#)

[At the end of 2007, D/S NORDEN owned 14 vessels \(all under the company's full control\). "Full control" in this connection means that D/S NORDEN owns the vessels, has the decision-making rights and has the opportunity to invest in the best available technology \(BAT\). As a result of D/S NORDEN's flexible business model, the company also operates some 200 vessels held on charter for shorter or longer periods of time. The company controls these vessels only commercially. GHG emissions from D/S NORDEN's fleet are thus influenced by the combination of vessels the company chooses to include in its portfolio.](#)

[D/S NORDEN's emissions are divided into the GHG Protocol's Scope 1 and Scope 3.](#)

[Scope 1: Includes emissions from the vessels owned by D/S NORDEN in 2007. Here, the company has full financial and operational control within the boundaries of the international shipping rules, regulations and planning which all shipping companies are subject to. Some of the owned vessels have, during 2007, been chartered to other companies. As D/S NORDEN is the owner and thus responsible for securing BAT \(for the purpose of reducing GHG emissions from vessels\), all owned vessels are categorised as Scope 1.](#)

[Scope 3: Includes emissions from the vessels which D/S NORDEN chartered for shorter or longer periods of time during 2007. Having the commercial control, D/S NORDEN provides bunker fuel for these vessels. Some of the chartered vessels have, during 2007, been re-chartered to other companies. As D/S NORDEN is not responsible for securing BAT \(for the purpose of reducing GHG emissions from the chartered vessels\), all chartered vessels are categorised as Scope 3. Emissions are calculated on the basis of bunker fuel purchased in 2007.](#)

Question 2(a)(ii) Reporting Year

Please explicitly state the dates of the accounting year or period for which GHG emissions are reported.

[Start date: 01 January 2007](#)

[End date: 31 December 2007](#)

[Financial accounting year: 01 January 2007](#)

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

[No](#)

Question 2(a)(iii) Methodology

Please specify the methodology used by your company to calculate GHG emissions.

Please select the methodology that you have used using the radio buttons.

If you have used the GHG Protocol or ISO 14064-1, please also give references to any calculation tools that you have used or an explanation of any calculation methods that you have devised yourself. Please explain the data sources of the Global Warming Potentials and emission factors used in your calculations. If you cannot find a reference for them within a supplied calculation tool, please contact the provider of the calculation tool for the information.

If you have used a methodology that you have devised yourself, please would you explain your methodology, including methods of calculation, and the data sources of the Global Warming Potentials and emission factors.

[Other](#)

D/S NORDEN's GHG emissions accounting under Scope 1:

The methodology used by D/S NORDEN to calculate its GHG emissions under Scope 1 is based on data registered in the log systems in compliance with Danish Flag State regulation for shipping companies. These log systems shows the bunker fuel consumed by owned vessels in operation in 2007.

The total registered consumption of bunker fuel for 2007 for all owned vessels is multiplied by the CO2 emissions factor 3.312502 provided by Lloyd's Register of Shipping, London, "Marine Exhaust Emissions Research Programme," 1995. The result of this calculation is the reported annual CO2 emissions for vessels owned by D/S NORDEN.

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

No

Question 2(b)(i) Scope 1 and Scope 2 of GHG Protocol

Are you able to provide a breakdown of your direct and indirect emissions under Scopes 1 and 2 of the GHG Protocol and to analyse your electricity consumption?

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

Yes

Details on D/S NORDEN's Scope 1 emissions are provided under question 2(b) (ii) as this year's reporting does not include Scope 2. This year's reporting includes Scope 1 and 3 as the fuel consumed by the vessels constitutes D/S NORDEN's most significant contribution to climate change. The emissions come from D/S NORDEN's global operations at sea and are not confined to specific countries. Hence, D/S NORDEN finds it appropriate to report the Scope 1 emissions under question 2(b) (ii).

Question 2(b)(i)(y) Scope 1 and Scope 2 of GHG Protocol - Year 1 answers

Please enter the dates for the reporting period that you specified in (answer to question 2(a)(i)) , and then answer the questions for that period. By selecting the "Add Additional Year Figures" button at the end of this webpage, you can repeat the process for the previous reporting period, and then for the reporting period before that, and so on. If possible, please give data going back to the reporting period ending in 2004. You do not have to enter historical data if you have already reported this information in response to previous CDP questionnaires.

Please enter the accounting year used to report GHG emissions details below.

Dates not selected.

Scope 1 Direct GHG Emissions: Please provide:

a. Total global Scope 1 activity in Metric Tonnes CO2-e emitted.

b. Total Scope 1 activity in Metric Tonnes CO2-e emitted for Annex B countries.

By country - Scope 1 activity in metric tonnes of CO2-e by individual country

Using the same methodology please state your emissions per country. NB : If it is not practical for you to list emissions on a full country by country basis, please list here countries with significant emissions in the context of your business and combine the remainder under "rest of world". If you already have this information in another format (e.g Excel) please attach it.

Country Scope 1 Emissions (metric tonnes CO2-e)

Scope 2 – Indirect GHG emissions: Please provide:

c. Total global Scope 2 activity in metric tonnes CO2-e emitted

d. Total Scope 2 activity in metric tonnes CO2-e emitted for Annex B countries

By country - Scope 2 activity in metric tonnes of CO2-e by individual country

Country Scope 2 Emissions (metric tonnes CO2-e)

Electricity consumption

e. Total global MWh of purchased electricity

f. Total MWh of purchased electricity for Annex B countries

By country – MWh of purchased electricity by individual country.

Country

g. Total global MWh of purchased electricity from renewable sources

h. Total MWh of purchased electricity from renewable sources for Annex B countries

By country – MWh of purchased electricity from renewable sources by individual country.

Country

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

Question 2(b)(ii) Scopes 1 and 2 of GHG Protocol

If you are unable to detail your Scope 1 and Scope 2 GHG emissions and/or electricity consumption, please report the GHG emissions you are able to identify together with a description of those emissions. If you have answered 2(b)(i), please go to question 2(c)(i).

D/S NORDEN's Scope 1 emissions:

Based on the bunker fuel consumed by D/S NORDEN's owned vessels, the CO2 emissions from its owned fleet (Scope 1) are calculated to approximately 362000 CO2e metric tonnes in 2007.

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

No

Question 2(c)(i) Other Emissions – Scope 3 of GHG Protocol

How do you identify and/or measure Scope 3 emissions?

Scope 3: Includes emissions from the vessels that D/S NORDEN charters for shorter or longer periods of time. Having the commercial control, D/S NORDEN provides bunker fuel for these vessels.

Only operations from chartered vessels are included in Scope 3 in the 2007 reporting. Emissions from chartered vessels are included here under the category: Company supply chain.

Please provide where possible:

a. Details of the most significant Scope 3 sources for your company.

The chartered active vessels under D/S NORDEN's commercial control in 2007 are considered to be the most significant source of emissions under Scope 3. The emissions from chartered vessels are based on bunker fuel purchased during 2007 for chartered vessels. D/S NORDEN does not have the exact log information as is the case for the owned vessels reported under Scope 1. Emissions are calculated on the basis of bunker fuel purchased in 2007.

b. Details in metric tonnes CO2-e of GHG emissions in the following categories:

i Employee business travel.

ii External distribution/logistics

iii Use/disposal of company's products and services.

iv Company supply chain.

2200000 CO2e metric tonnes

c. Details of the methodology you use to quantify or estimate Scope 3 emissions.

[D/S NORDEN's GHG emissions accounting under Scope 3:](#)

The methodology used by D/S NORDEN to calculate its GHG emissions under Scope 3 is based on data registered in the company's internal system. This system registers bunker fuel purchased for owned and chartered vessels. The purchase of bunker fuel for chartered vessels is allocated in accordance with accounting principles, including pro rata consolidation. This purchase is multiplied by the CO2 emissions factor 3.312502 provided by Lloyd's Register of Shipping, London, "Marine Exhaust Emissions Research Programme," 1995. The result of this calculation is the reported annual CO2 emissions for D/S NORDEN's chartered vessels.

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

[No](#)

Question 2(d) External Verification

(i) Has the information reported in response to Questions 2(b)- (c) been externally verified or audited or do you plan to have the information verified or audited?

[No \(Please go to question 2 \(e\)\)](#)

(ii) If your answer to question 2d(i) is Yes, please provide or attach a copy of the audit or verification statement or state your plans for verification.

(iii) Please specify the standard or protocol against which the information has been audited or verified.

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

Yes

The CO2 emissions under Scope 1, as reported here, are included in D/S NORDEN's 2007 Annual Report. In the report, the estimated emissions resulting from the total purchase of bunker fuel (for chartered and owned vessels) are also included. Please see page 32 of the report.

[attachedfiles/Responses/45628/2232/NORDEN-Annual-Report-2007.pdf](#)

Question 2(e) Data Accuracy

Does your company have a system in place to assess the accuracy of GHG emissions inventory calculation methods, data processes and other systems relating to GHG measurement? If so, please provide details. If not, please explain how data accuracy is managed.

Yes, we do have a system.

The data from which CO2 emissions are calculated are from the data system part of D/S NORDEN's ordinary and required business processes.

The bunker fuel consumed by D/S NORDEN's owned vessels is registered in D/S NORDEN's ordinary log system which complies with the requirements set up by the Danish Flag State. This system registers the daily consumption of different types of fuel (e.g. heavy fuel and marine diesel).

The bunker fuels purchased for D/S NORDEN's owned and chartered vessels are registered in D/S NORDEN's internal financial system for purchase of bunker fuel.

The system used to collect data has thus been developed to ensure factual measurement of the total amount of bunker fuel consumed and purchased and not factual measurement of CO2 emissions from the vessels and their activities in different regions. As 2007 is the first year of reporting on CO2 emissions, D/S NORDEN will evaluate this system and process going forward.

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

No

Question 2(f) Emissions History

Do the emissions reported for your last accounting year vary significantly compared to previous years? If so, please explain reasons for the variations.

No, they do not vary significantly.

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

Yes

2007 is the first year in which D/S NORDEN reports on CO2 emissions from operations at sea. Accordingly, D/S NORDEN cannot compare and comment on whether the emissions vary significantly.

Looking forward, CO2 emissions resulting from D/S NORDEN's operations at sea may be expected to vary significantly on an annual basis. A number of external factors exist strongly influencing the consumption of bunker fuel during operation and thus the associated CO2 emissions. Weather related factors such as high sea, wind and current have a significant influence on consumption. The same goes for fleet composition and type of bunker fuel. Efficiency measures implemented to reduce fuel consumption might then be effected by variations in these external factors. These circumstances are also of importance when discussing target setting and forecasts of CO2 emissions for vessels, the fleet and the industry in general.

Question 2(g) Emissions Trading

i) Does your company have facilities covered by the EU Emissions Trading Scheme?

No, we do not. ([Please go to question 2\(g\)\(ii\) below](#))

If so:

a) Please provide details of the annual allowances awarded to your company in Phase I for each of the years from 1 January 2005 to 31 December 2007 and details of allowances allocated for Phase II commencing on 1 January 2008.

In all cases, please enter whole numbers without punctuation, For example, enter 2000 instead of 2,000.

Please enter allowance in Metric Tonnes of CO2:

1 January 2005-31 December 2005

1 January 2006-31 December 2006

1 January 2007-31 December 2007

b) Please provide details of actual annual emissions from facilities covered by the EU ETS with effect from 1 January 2005.

Please enter emissions in Metric Tonnes of CO2.

1 January 2005-31 December 2005

1 January 2006-31 December 2006

1 January 2007-31 December 2007

Phase II annual allowances

1 January 2008 – 31 December 2008

1 January 2009 – 31 December 2009

1 January 2010 – 31 December 2010

1 January 2011 – 31 December 2011

1 January 2012 – 31 December 2012

c) What has been the impact on your company's profitability of the EU ETS?

ii) What is your company's strategy for trading or participating in regional and/or international trading schemes (eg: EU ETS, RGGI, CCX) and Kyoto mechanisms such as CDM and JI projects? Explain your involvement for each of the following:

EU ETS

D/S NORDEN is not engaged in the EU Emissions Trading Scheme, and at the moment the company does not have any plans to engage.

CDM/JI

D/S NORDEN is not engaged in the Kyoto mechanisms such as the "Clean Development Mechanism" or "joint implementation" projects, and at the moment the company does not have any plans to engage.

CCX

D/S NORDEN is not engaged in the "Chicago Climate Exchange" trading scheme, and at the moment the company does not have any plans to engage.

RGGI

D/S NORDEN is not engaged in the "Regional Greenhouse Gas Initiative", and at the moment the company does not have any plans to engage.

Others

Operating globally at sea, D/S NORDEN supports the development of global regulation. Such regulation could very well include an international trading scheme.

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

Yes

D/S NORDEN will continuously evaluate whether it will be prudent and beneficial for the company to take part in any such trading schemes, however, this will relate closely to the potential introduction of a global emissions schemes.

Question 2(h) Energy Costs

i) Please identify the total costs in US \$ of your energy consumption eg from fossil fuels and electric power.

If you want to enter a number less than 1, please ensure you use a decimal point (e.g. 0.3) and NOT a comma (e.g. 0,3)

296817106 US\$

ii) What percentage of your total operating costs does this represent?

iii) What percentage of energy costs are incurred on energy from renewable sources?

0 %

More details

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

No

3 - Performance

Question 3(a) Reduction Plans

i) Does your company have a GHG emissions reduction plan in place? If so, please provide details along with the information requested below. If there is currently no plan in place, please explain why.

Yes, we have a reduction plan in place. (Please proceed to part (ii))

ii) What is the baseline year for the emissions reduction plan?

2007

If you want to give further information or describe a rolling target, please do so here.

As regards D/S NORDEN's operations at sea, the best way of reducing CO₂ emissions is by using less fuel. Consequently, in 2007 D/S NORDEN launched a number of initiatives to reduce its contribution to climate change by minimising propulsion resistance and optimising fuel efficiency.

Historically, optimising fuel efficiency and thus reducing costs and other emissions which can harm the environment (for example NO_x, SO_x and particulate matter) has been a priority of D/S NORDEN.

The CO₂ target for D/S NORDEN has been set according to the calculated reduction potentials from the initiatives introduced in 2007. The reason being that it is currently not possible to measure the factual emissions from vessels at large with the necessary accuracy. Furthermore, a number of external factors like high sea, load conditions, current and wind exist which significantly influence the consumption of bunker fuel by vessels in operation. This implies that target setting is not a straight forward exercise.

Under the current circumstances, it is thus not possible for D/S NORDEN to measure and demonstrate a direct correlation between the initiatives set up and the consumption of bunker fuel - and the associated emissions.

To this end, D/S NORDEN has decided to establish a target based on the calculated technical reduction potentials which can be realised if initiatives listed in D/S NORDEN's 14 point plan are introduced.

iii) What are the emissions reduction targets and over what period do those targets extend?

In order to minimize the impact on the environment and reduce CO₂ emissions, D/S NORDEN has initiated a 14 point plan targeted at company owned vessels. This plan will help the company reduce CO₂ emissions from owned vessels by 2 % in 2008. Hence, a 2 % reduction in 2008 is the target.

This target is based on the calculated technical reduction potentials from many of the initiatives listed in D/S NORDEN's 14 point plan.

D/S NORDEN's goal is to continuously reduce CO₂ and other emissions related to operations. Currently, however, no quantitative targets have been set.

iv) What activities are you undertaking to reduce your emissions eg: renewable energy, energy efficiency, process modifications, offsets, sequestration etc? What targets have you set for each and over what timescales do they extend?

D/S NORDEN has launched a number of initiatives to improve the environment by minimising propulsion resistance and optimising fuel efficiency. Most of D/S NORDEN's 14 point plan was initiated in 2007 and the rest will be initiated in 2008 when the vessels are drydocking. The 14 points, of which many are targeted at reducing CO₂ emission, are:

1. Latest design of slide valves. Reduces CO₂, NO_x and SO_x emissions.
2. CASPER system. Optimises fuel consumption.
3. FLAME system. Optimises combustion efficiency.
4. Advanced P/V tank valves. Reduces fumes from tanker cargoes.
5. Exxon Mobil Scrape Down analysis system. Optimises combustion efficiency.
6. Alpha Lubrication system. Minimises the consumption of lubricating oil.
7. Torque measuring system. Optimises the engine.
8. Waste monitoring and reporting system.
9. Full blasting of underwater hulls.
10. Propeller polishing.
11. Increased frequency of overhauls of the vessels' turbo chargers.
12. Increased frequency of overhauls of the vessels' scavenger air coolers.
13. Increased frequency of overhauls of the vessels' fuel oil pumps and injectors.
14. Funding of environmental research and development programmes.

As an example of funding (point 14), D/S NORDEN decided (in March 2008) to sign an agreement with Decision3 to test the GreenSteam™ trim system onboard one of the company's new product tankers currently under construction at the GSI shipyard in Guangzhou, China, and scheduled for delivery in September 2008. The ambition is to reduce fuel consumption. This would be advantageous both in terms of environment and costs.

GreenSteam™ is a so-called intelligent system based on mathematical models of the factors which affect a vessel's speed and consumption of bunkers. Data on wind, draught, wave height, the vessel's GPS speed and logging speed, the angle of the rudder and how much the rudder works, combined with engine settings, consumption of bunkers, combustion efficiency etc. are collected during sailing.

Another example of funding of research and development projects is the sponsorship of a PhD stipend at the Copenhagen Business School (CBS) focusing on the subject "Building Social Performance Capabilities in the Shipping Industry". The project will be the focus area of a larger shipping research group at CBS. The project will focus on how major challenges in terms of pollution and relevant issues in relation to safety at sea and ashore may be translated into concrete requirements for the shipping companies to comply with.

The 14 point plan and the GreenSteam development project are both mentioned in the 2007 Annual Report and in D/S NORDEN's news magazine, spring 2008 - please see pages 30-32 of the Annual Report and pages 6-9 of the magazine.

v) What investment has been or will be required to achieve the targets and over what time period?

The investments required for the implementation of the 14 point plan have been provided for in the ordinary operating costs.

vi) What emissions reductions and associated costs or savings have been achieved to date as a result of the plan?

As D/S NORDEN initiated the plan in 2007, the results remain to be seen. The plan is rolled out as the vessels are docking.

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

No

[attachedfiles/Responses/45628/2234/NORDEN-Annual-Report-2007.pdf](#)

[attachedfiles/Responses/45628/2235/NORDEN-News-Spring-2008.pdf](#)

Question 3(b) Emissions Intensity

i) What is the most appropriate measurement of emissions intensity for your company?

Other

Emissions' intensity measure is not currently in use by D/S NORDEN.

Please give your company's emissions intensity figure for the measurement given above.

If you want to enter a number less than 1, please ensure you use a decimal point (e.g. 0.3) and NOT a comma (e.g. 0,3)

ii) Please state your GHG emissions intensity in terms of total tonnes of CO₂-e reported under Scope 1 and Scope 2 per US \$m turnover and EBITDA for the reporting year.

Scope 1/ US\$millions turnover

Scope 2/ US\$millions turnover

Scope 1/ EBITDA

Scope 2/ EBITDA

iii) Has your company developed emissions intensity targets?

No, we have not developed emission intensity targets for the following reason(s):

2007 is the first year in which D/S NORDEN reports on CO2 emissions. D/S NORDEN has not yet calculated emissions intensity figures for the vessels and has therefore not developed emissions intensity targets. D/S NORDEN is considering developing such targets.

a) If the answer to part (iii) above is yes, please state your emissions intensity targets

b) If the answer to part (iii) above is yes, please state what reductions in emissions intensity have been achieved against targets and over what time period.

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

No

Question 3(c) Planning

Do you forecast your company's future emissions and/or energy use?

Yes, we do. (Please answer questions (i) to (iii) below.)

i) Please provide details of those forecasts, summarize the methodology used and the assumptions made.

If you are able to give quantified forecasts of Scope 1 and Scope 2 emissions and/or electricity consumption, you can enter numerical data on the next page.

D/S NORDEN forecasts the use of bunker fuel for owned and chartered vessels on the basis of expected shipping days etc.

ii) How do you factor the cost of future emissions into capital expenditure planning?

D/S NORDEN does not factor the cost of future emissions into capital expenditure planning, but D/S NORDEN considers the important parameters prior to vessel investments carefully. Increasingly the speed consumption of a design is considered important in this process whereby the fleet gradually is becoming more energy efficient.

iii) How have these considerations made an impact on your investment decisions?

The considerations have, for example, impacted the investment decision recently made regarding GreenSteam™ (see Question 3 (a) iv of this questionnaire for more details).

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

No

Question 3(c) (i) Planning - Forecasted emissions/electricity use - Year 1 answers

This page gives you the opportunity to give numerical forecasts for emissions and electricity use. If possible, please provide emissions forecasts for the next five reporting periods. Use the "Add additional year figures" button at the end of the page to enter emission forecasts for successive reporting periods. Note: Please enter whole numbers without punctuation. For example, use 2000 instead of 2,000

Please enter the accounting period used to report GHG emissions details below.

Dates not selected.

Forecasted Scope 1 Direct GHG Emissions: Please provide:

a. Forecasted Total global Scope 1 emissions in Metric Tonnes CO2-e.

b. Forecasted Total Scope 1 emissions in Metric Tonnes CO2-e for Annex B countries.

By country - Forecasted Scope 1 emissions in Metric Tonnes of CO2-e by individual country

Using the same methodology please state your emissions forecasts per country. NB : If it is not practical for you to list emissions on a full country by country basis, please list here countries with significant emissions in the context of your business and combine the remainder under "rest of world". If you already have this information in another format (e.g Excel) please attach it.

Country Scope 1 Emissions (metric tonnes CO2-e)

Scope 2 Indirect GHG emissions: Please provide:

c. Forecasted total global Scope 2 emissions in Metric Tonnes CO2-e

d. Forecasted total Scope 2 emissions in Metric Tonnes CO2-e for Annex B countries

By country - Forecasted Scope 2 emissions in Metric Tonnes of CO2-e by individual country

Country Scope 2 Emissions

(metric tonnes CO2-e)

Forecasted electricity consumption

e. Forecasted total global MWh of purchased electricity

f. Forecasted total MWh of purchased electricity for Annex B countries

By country – Forecasted MWh of purchased electricity by individual country.

Country

g. Forecasted total global MWh of purchased electricity from renewable sources

h. Forecasted total MWh of purchased electricity from renewable sources for Annex B countries

By country – Forecasted MWh of purchased electricity from renewable sources by individual country.

Country

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

No

4 - Governance

Question 4(a) Responsibility

Does a Board Committee or other executive body have overall responsibility for climate change? If not, please state how overall responsibility for climate change is managed. If so, please answer parts (i) and (ii) below.

Yes, an executive body does have overall responsibility for climate change.

i) Which Board Committee or executive body has overall responsibility for climate change?

D/S NORDEN has set up a CSR Executive Body appointed by the Board of Directors in 2008 which has overall responsibility for ensuring that D/S NORDEN has a systematic management approach to environmental and social sustainability (in which the issue of climate change is included). Previously, these issues were handled by an interim taskforce in the company. The increased attention given to environmental and social sustainability has led the company to set up a formal body.

ii) What is the mechanism by which the Board or other executive body reviews the company's progress and status regarding climate change?

It is within the area of responsibility of D/S NORDEN's CSR Executive Body to develop and ensure implementation of future initiatives with regard to climate change and to monitor and review such initiatives. On a semi-annual basis, the body reports to D/S NORDEN's Board of Directors on the status of the work. It is currently debated how the initiatives are to be reviewed.

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

No

Question 4(b) Individual Performance

Do you assess or provide incentive mechanisms for individual management of climate change issues including attainment of GHG targets? If so, please provide details.

No, we do not.

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

Yes

GHG emissions is a direct result of our business activities, and therefore not possible to review or influence separately. Hence our efforts will be towards the relative effects e.g. in terms of efficiency and D/S NORDEN concentrate on performance measures for what the company controls directly.

Question 4(c) Communications

Please indicate whether you publish information about the risks and opportunities presented to your company by climate change, details of your GHG emissions and plans to reduce emissions through any of the following communications:

i) the company's Annual Report or other statutory filings

Yes

In the 2007 Annual Report, D/S NORDEN publishes information pertaining to its approach to sustainability management and CSR issues (including climate change). Please see pages 30-33 of the report. The report is available online and in hard copy.

ii) formal communications with shareholders or external parties

Yes

D/S NORDEN's News Magazine presents the latest news on D/S NORDEN's strategy, activities and organisation to shareholders, customers, employees and other stakeholders globally. It is published four times a year; spring, summer, autumn and winter, and is as a supplement to the news available on D/S NORDEN's website.

This spring (2008), the magazine informed interested readers of D/S NORDEN's approach to environmental and social responsibility and of D/S NORDEN's view on the need for global solutions to a global environmental challenge like climate change. Please see pages 6-9 of the magazine.

D/S NORDEN has also produced a booklet with the title "The Environment & D/S NORDEN" which in simple terms explains the company's environmental efforts and activities as well as how different technologies help reduce CO2 emissions.

The Chairman of the Board informs the shareholders at the Annual General Meeting, on D/S NORDEN's work within the scope of our CSR-approach.

Furthermore, on D/S NORDEN's website ds-norden.com, D/S NORDEN communicates to external parties about its CSR approach, including climate change and any news in relation to these activities.

iii) voluntary communications such as Corporate Social Responsibility reporting

Yes

D/S NORDEN communicates voluntary through different communication channels like the CDP Questionnaire. D/S NORDEN does not produce a separate CSR report, but communicates the company's main CSR initiatives in the Annual Report.

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

No

[attachedfiles/Responses/45628/2236/NORDEN-Annual-Report-2007.pdf](#)

[attachedfiles/Responses/45628/2237/NORDEN-News-Spring-2008.pdf](#)

Question 4(d) Public Policy

Do you engage with policymakers on possible responses to climate change including taxation, regulation and carbon trading? If so, please provide details.

Yes

D/S NORDEN engages with policymakers through its membership and active engagement in organisations like the Danish Shipowners' Association and INTERTANKO.

Furthermore, when appropriate, D/S NORDEN provides input to relevant policies and discussions regarding the shipping industry's contributions to climate change and how to best minimize such changes.

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

No