



Corporate Sustainability Summary 2009

Updated 29 April 2011

Summary Overview

This Corporate Sustainability Summary provides information related to Carnival's Fiscal Year 2009 (1 December 2008 to 30 November 2009), and the Sustainability Reports published by the following Carnival Operating Lines, also for Fiscal Year 2009:

- AIDA Cruises
- Carnival Cruise Lines
- Carnival UK (P&O Cruises and Cunard Line)
- Costa Cruises
- Holland America Line
- P&O Cruises Australia
- Princess Cruises
- The Yachts of Seabourn

Sustainability performance data included in this summary are based on information supplied to Carnival Corporation & plc by its subsidiary Operating Lines and the fleets of cruise ships operated by each. Operating Line Sustainability Reports include quantitative data that were collected, aggregated and analyzed utilizing the Corporation's in-house reporting systems. Qualitative data were collected from each published Operating Line Sustainability Report and other in-house and industry sources. Each Operating Line's Sustainability Report was developed in accordance with the [G3 \(third generation\) Sustainability Reporting Guidelines](#) of the [Global Reporting Initiative \(GRI\)](#).

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Sustainability Management Approach

The Carnival Corporation & plc [Health, Environmental, Safety and Security Policy](#) describes our commitments to:

- Protecting the health, safety and security of our passengers, guests, employees and all others working on behalf of the Company;
- Protecting the environment, including the marine environment in which our vessels sail and the communities in which we operate;
- Fully complying with or exceeding all legal and statutory requirements related to health, environment, safety and security throughout our business activities; and
- Assigning health, environment, safety and security matters the same priority as other critical business matters.

The Boards of Directors of Carnival Corporation and Carnival plc have established a Board-level Health, Environmental, Safety & Security ("HESS") Committee to assist the Boards in fulfilling their responsibility to supervise and monitor HESS policies, programs, initiatives at sea and onshore, and compliance with HESS legal and regulatory requirements. Our governance structure is described in more detail under [Corporate Governance](#) on the Carnival Corporation & plc website.

Carnival's Corporate Maritime Policy & Compliance Department, headed by a Senior Vice President, with a full-time professional and administrative staff, is responsible for providing a common, integrated approach to management of HESS matters, and for reporting to the HESS Committee on such matters. This includes establishing HESS policy and standards, conducting HESS audits of Carnival's Operating Lines, and measuring and reporting on HESS-related performance.

In addition, Carnival has established a hotline telephone number and website to permit reporting of HESS concerns. The hotline can be contacted at:

- 1-888-290-5105 (toll-free in North America)
- 1-305-406-5863 (from all other locations)
- www.carnivalcompliance.com

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Stakeholder Engagement and Commitments

Carnival Corporation & plc and its subsidiary Operating Lines are members of the following organizations, whose members work together and with key stakeholders to address sustainability issues in the cruise industry, in the broader maritime industry and with companies representing other industries:

- [Cruise Lines International Association](#)
- [Florida Caribbean Cruise Association](#)
- [European Cruise Council](#)
- [International Chamber of Shipping/International Shipping Federation](#)
- [European Community Shipowners' Associations](#)
- [The Chamber of Shipping \(UK\)](#)
- [Ship Emission Abatement and Trading \(SEAaT\)](#)
- [Global Environmental Management Initiative \(GEMI\)](#)

Carnival Corporation & plc and its subsidiary Operating Lines regularly and proactively engage with a very broad range of stakeholder groups that have interests in our sustainability policies, standards and performance. Such stakeholder groups include:

- Banks and other financial institutions
- Employees
- Government Agencies
- Guests/Passengers
- Home and Destination Port Communities
- Industry Associations
- Media
- Non-governmental organizations (NGOs)
- Sales Networks
- Shareholders
- Socially responsible investment ratings agencies
- Suppliers

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Environmental Summary

Carnival's environmental footprint is defined by all of the environmental aspects associated with the operation of a cruise ship and other related activities. We take a proactive approach to assessing and improving the environmental impacts of our operations. Carnival has taken and continues to take significant actions to reduce the impacts of its operations on the environment. Environmental impact reduction is also considered in the design of new ships. Environmental impact considerations are being integrated into the operations of existing vessels to help reduce our current environmental footprint and to decrease the risk of non-compliance with possible future environmental legislation.

Climate Change and Energy Consumption

Climate change is at the top of the agendas of many governments, businesses and individuals. Carnival actively participates in and contributes to the process of determining our industry's role in addressing climate change. We have publicly disclosed our carbon footprint since 2006 and are taking specific and proactive steps to reduce this footprint.

Carnival subsidiary lines have established annual objectives, targets and plans within their respective ISO 14001 Environmental Management Systems to reduce fuel consumption. Fuel consumption is the most significant contributor to Carnival's carbon footprint. Carnival has set an overall corporate target of 20 percent reduction from our 2005 baseline in the intensity of carbon dioxide emissions from shipboard operations by 2015 (as measured in kg of CO₂ per ALB-km). We will achieve this target primarily by reducing energy consumption by our ships.

Carnival is actively participating in the discussions on greenhouse gas emissions and climate change currently underway in the International Maritime Organization and in Europe through its membership in organizations such as the European Cruise Council, the UK Chamber of Shipping, the International Chamber of Shipping, and the Cruise Lines International Association. Carnival has also participated in various industry seminars related to improving fuel efficiency, use of cleaner fuels and carbon trading.

Carnival is a sponsoring member of the UK-based Shipping Emissions Abatement and Trading (SEAaT) organization (www.seaat.org). This cross-industry, unique, pro-active and self-funded group has a mission to encourage and facilitate efficient reduction of harmful emissions to air from shipping. Formed in 2002, SEAaT raises awareness and promotes acceptance of solutions for emissions reductions that are sustainable, cost effective, and achievable. Founding sponsors include shipping and oil companies committed to exploring and implementing cost effective

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methods of reducing emissions. SEAA membership represents the broader shipping community and includes ship owners, brokers, technology companies and fuel suppliers.

In May 2010, Carnival responded, for the fifth consecutive year, to the well-known Carbon Disclosure Project (CDP), which provides visibility of companies' carbon footprint and activities regarding carbon emissions. The CDP rates companies on the depth and scope of their disclosures and the quality of their reporting. Our response to CDP2010 (see Appendix I), based on our fiscal year 2009 (1 Dec 2008 - 30 Nov 2009), was publicly released by the CDP on 20 September 2010. It included details of Carnival's most recently compiled emissions data and reduction efforts. Based on our CDP responses, Carnival was named to the Carbon Disclosure Leadership Index (CDLI) for 2008, 2009 and 2010. More detailed CDP reports are available at: www.cdproject.net/en-US/Results/Pages/reports.aspx.

Carnival's most recent (CDP2010) carbon emissions disclosures include the following data:

- Scope 1 CO₂e Emissions: 10,264,098 Metric Tonnes (MT)
- Scope 2 CO₂e Emissions: 53,123 MT
- CO₂e Emissions Intensity: 0.33 kg-CO₂e per ALB-km (for ship operations)

In addition to the CDP, Carnival discloses its carbon footprint in the Sustainability Reports published by each of Carnival's subsidiary Operating Lines. These reports also describe a number of voluntary management and technical initiatives implemented to address climate change and other significant environmental aspects.

As disclosed in their respective Sustainability Reports, each Carnival Operating Line measures performance in this area using GRI G3 indicator EN16, total direct and indirect greenhouse gas emissions by weight.

We can measure our ability to use energy efficiently by calculating the amount of energy we consume. Fuel oil used for propulsion of Carnival's ships and power requirements throughout is the primary source of energy consumed and has a direct effect on operational costs. Reduction of fuel consumption is one of the objectives of each of our lines. In addition, consumption of fossil fuels is a major source of greenhouse gas emissions. By managing our energy consumption, we are controlling our greenhouse gas emissions.

Each of Carnival's Operating Lines has set specific objectives and targets in accordance with their respective ISO 14001 Environmental Management Systems (EMS). Such objectives and targets include reducing fuel consumption as well as usage of electricity and other forms of energy, which equate to reductions in CO₂ and CO₂e emissions.

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Reduction targets range from 0.25 - 2.5% across the various operating lines. From 2005 to 2009, Carnival achieved an overall reduction across the Corporation of 10.9% in fuel consumption rate and related CO₂ emissions intensity (as measured in kg of fuel, and kg of CO₂, per ALB-km).

Carnival is investing in the following energy reduction initiatives that go considerably beyond the requirements of current laws and regulations:

- Itinerary and arrival/ departure changes
- Vessel shore power installations (“Cold Ironing”)
- Optimization of diesel generator use at sea and in port
- Installation of more energy efficient lighting
- Use of anti-fouling release coating (marine coating) technology
- Heating, Ventilation, and Air Conditioning (HVAC) Control/ Automation Systems
- Periodic cleaning of propellers and hulls
- Dynamic Trimming Assistant (DTA) systems
- Evaporator management
- Development of new ships’ ability to use alternative fuels

As disclosed in their respective Sustainability Reports, each Carnival Operating Line measures performance in this area using the following GRI G3 indicators:

- EN3, Direct energy consumption by primary energy source.
- EN4, Indirect energy consumption by primary source.
- EN6, Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives.

Environmental Footprint

Carnival’s environmental footprint is defined by all of the environmental aspects associated with the operation of a cruise ship. We take a proactive approach to assessing and improving the environmental impacts of our operations and have taken significant actions to reduce the impacts of our operations on the environment. Environmental impact reduction is considered in the design of new ships. Environmental considerations are also being integrated into the operations of existing vessels to help reduce our environmental footprint and to decrease the risk of non-compliance with possible future environmental legislation.

Carnival has invested in the following environmental initiatives that go considerably beyond the requirements of current laws and regulations:

- Corporate and CLIA Environmental Standards
- Advanced Waste Water Purification Systems (AWWPSs)

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- Treated blackwater discharge limitations
- A seawater scrubber feasibility study
- JETS vacuum (reduced water usage) sewage system
- Dry-cleaning chemical (PERC) reductions
- Refrigeration engineer training
- Refrigerant recovery units
- Plasma incinerator waste disposal
- Biodegradable oils
- Water lubricated shaft bearing systems

The Sustainability Reports published by each of Carnival's subsidiary Operating Lines provide further details of these efforts to reduce Carnival's environmental footprint under GRI G3 Performance Indicator EN26, Initiatives to Mitigate Environmental Impacts of Products and Services, and the extent of impact mitigation.

Water

At Carnival we are concerned about water consumption because clean water is becoming an increasingly scarce resource. In regions where water sources are highly restricted, our water consumption patterns can also influence relations with our stakeholders. Purchasing water or producing it from seawater has financial and energy cost implications. Therefore, we systematically monitor and strive to improve the efficient use of water on board Carnival's ships.

As disclosed in their respective Sustainability Reports, each Carnival Operating Line measures performance in this area using GRI G3 indicator EN8, Total Water Withdrawal by Source.

Shipboard Waste Management

Carnival collects and manages information on waste generation to assess the level of progress we are making in waste reduction. This helps us to identify potential opportunities for improvements in the efficiency of waste management. In addition, waste reduction can have a positive financial impact, since reducing waste can contribute directly to lower costs for materials and for waste transportation, subsequent processing and disposal. Our waste minimization approaches emphasize prioritizing source reduction, reuse, or recycling over other disposal options wherever possible.

Each of Carnival's Operating Lines is required by Carnival's Corporate Environmental Standards to:

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- Comply with the CLIA Industry Standard, ‘Cruise Industry Waste Management Practices and Procedures’ (www.cruising.org/industry/environment.cfm)
- Implement and maintain certification of its management systems related to the operation and management of cruise ships in accordance with the current version of the ISO 14001 standard.

Carnival’s shipboard waste is disposed of in strict accordance with internal procedures that are designed to meet international, national, regional and local environmental regulatory requirements and industry standards.

As disclosed in their respective Sustainability Reports, each Carnival Operating Line measures performance in this area using the following GRI G3 indicators:

- EN19, Emissions of Ozone-Depleting Substances by Weight.
- EN20, NO_x, SO_x, and Other Significant Air Emissions by Type and Weight.
- EN22, Total Weight of Waste by Type and Disposal Method.
- EN23, Total Number and Volume of Significant Spills.

Shipboard Wastewater Management

Carnival is working to progressively improve the quality of discharged wastewater and/or reduce the volumes of wastewater discharged, thereby reducing its potential impact on the marine environment. Prior to discharge, all blackwater (sewage) from Carnival’s ships is processed through a sewage treatment plant (Marine Sanitation Device) that is approved in accordance with applicable international and national regulations. Discharges of treated blackwater take place only when the ship is at a distance of more than 12 nautical miles from the nearest land and when the ship is travelling at a speed of not less than six knots.

Graywater from Carnival’s ships is discharged only while the ship is underway and proceeding at a speed of not less than six knots. Graywater is not discharged in port and not within four nautical miles from shore or such other distance provided for by local law or as agreed with the authorities that have jurisdiction, except in case of an emergency, or where the ship is geographically limited.

On over one-third of Carnival’s ships, blackwater and graywater are treated in advanced wastewater purification systems (AWWPSs) that utilize technologies designed to produce a higher quality effluent that may meet or surpass standards for secondary and tertiary effluents and reclaimed water.

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The distance and speed limits described above do not apply to blackwater or graywater discharges that have been processed through an AWWPS. However, such discharges comply with all applicable international and national laws and regulations.

All bilgewater from Carnival's ships is discharged only when the ships are under way at sea. The bilgewater is processed through approved oil filtering equipment such that the oil content of the treated bilgewater without dilution does not exceed 15 parts per million. This discharge is in strict compliance with all applicable international and national laws and regulations.

When necessary, Carnival's ships may also land blackwater, graywater, and/or bilgewater to an approved shoreside reception facility.

As disclosed in their respective Sustainability Reports, each Carnival Operating Line measures performance in this area using the GRI G3 indicator EN21, Total Water Discharge by Quality and Destination.

Environmental Compliance

Carnival's policies, management systems and procedures focus on eliminating environmental non-compliance within the organization and on helping management to ensure that operations conform to specified international, national and local environmental laws, regulations and other performance parameters.

Each of Carnival's ships has assigned an Environmental Officer, who is responsible for oversight and verification of shipboard environmental management and compliance.

Each of Carnival's Operating Lines has assigned a member of senior management the responsibility for assuring environmental management system implementation and for monitoring environmental performance and compliance.

In addition, Carnival's Corporate Maritime Policy & Compliance Department (MP&C), headed by a Senior Vice President with full-time professional and administrative staff, is responsible for providing a common, integrated approach to management of health, environmental, safety and security matters. To achieve this, MP&C develops and issues Corporate Standards, audits Carnival's Operating Lines and ships, and measures and reports on Carnival's HESS-related performance.

The ISO 14001 Environmental Management Systems at Carnival's Operating Lines are also subject to regular independent third-party audits.

As disclosed in their respective Sustainability Reports, each Carnival Operating Line measures performance in this area using the GRI G3 indicator EN28, Monetary Value of Significant Fines

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and Total Number of Non-Monetary Sanctions for Non-Compliance with Environmental Laws and Regulations.

Environmental Training

One of Carnival's most significant environmental investments is related to developing and implementing programs to train its people to ensure compliance with environmental requirements.

Carnival has established and implemented a Corporate Environmental Awareness and Training Standard that requires, among other things, that each Operating Line has an environmental training plan and related procedures to ensure that:

- All shipboard and applicable shoreside personnel have environmental awareness training;
- Any person whose job could significantly impact the environment has job-specific training, including comprehensive equipment training, prior to commencing work in that job;
- Any person whose job entails oversight and verification of environmental management, performance or compliance is competent to perform his/her assigned oversight and verification functions based on appropriate education, training or experience;
- There are means for sharing knowledge among shipboard and shoreside personnel to communicate best practices, new training requirements, and other information that may enhance environmental awareness and performance.

ISO 14001 Certifications

Carnival has adopted the requirements of International Standard ISO 14001:2004 for the environmental management systems of its subsidiary Operating Lines. This standard enables Carnival to develop and implement policies and objectives which take into account legal requirements, other requirements to which we subscribe, and information about significant environmental aspects. We apply these requirements to those environmental aspects that we can control and/ or influence. A key element of our Operating Lines' environmental management systems is the requirement to set objectives and targets for improvement of environmental performance.

ISO 14001 is one of the series of ISO 14000 environmental management standards that was developed to help organizations manage their processes, products and services to minimize environmental impact. ISO 14001 focuses on the processes – the comprehensive outcome – of

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how services are delivered and products are produced, rather than on the actual service or product itself. ISO 14001 also presents a structured approach to setting environmental objectives and targets and provides a framework for any organization to apply these broad conceptual tools to their own processes.

Carnival maintains processes within each of its Operating Lines for identifying and prioritizing the environmental aspects of its activities, products and services that it can control or over which it can expect to have an influence. Carnival has identified those operations and activities that are associated with the identified significant environmental aspects and plans these activities to ensure that they are carried out under controlled conditions. These controlled conditions include well-documented environmental management systems and procedures.

Each of Carnival's subsidiary Operating Lines sets its own objectives and targets for improvement of environmental performance. These objectives and targets are reviewed at the Operating Lines' management review meetings and are reported to Carnival's corporate offices.

The environmental management systems of all of our cruise brands are certified in accordance with ISO 14001, with the exception of Ibero, which is expected to be implemented in late 2011 or early 2012. Each of Carnival's Operating Lines' Sustainability Reports provides more detail on their respective environmental aspects, objectives and targets.

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Social Summary

Employment

Carnival demonstrates its commitment to its employees by offering opportunities for development, rewarding performance, valuing diversity and providing a safe and healthy workplace.

Carnival employs approximately 75,000 crew, including officers, onboard our 98 ships at any one time. Carnival's shoreside operations have approximately 10,200 full-time and 4,000 part-time/seasonal employees. Due to the highly seasonal nature of our Alaskan and Canadian operations, Holland America Princess Alaska Tours increases its work force during the late spring and summer months in connection with the Alaskan cruise season, employing additional seasonal personnel, which have been included above.

We source our shipboard officers primarily from Italy, the UK, Holland, Germany and Norway. The remaining crew positions are manned by persons from around the world. We utilize various manning agencies in many countries and regions to help secure our shipboard employees.

Carnival management gains insight into the magnitude of labor issues affecting our employees by monitoring statistics of people employed both shipboard and shoreside. Further analyses of our employee population by employment type, employment contract, and geographic region support implementation of an overall human resources strategy that is aligned with Carnival's business model. This strategy provides appropriate job stability and benefits to Carnival's employees.

Carnival management measures employee turnover rates to assess levels of job satisfaction among our employees. We recognize that employee turnover results in changes to the Company's human and intellectual capital can impact productivity and has direct cost implications, especially in terms of replacement and training expenses.

As disclosed in their respective Sustainability Reports, each Carnival Operating Line measures performance in this area using the following GRI G3 indicators:

- LA1, Total Workforce by Employment Type, Employment Contract, and Region.
- LA2, Total Number and Rate of Employee Turnover by Age Group, Gender, and Region.

Labor/Management Relations

Carnival's management recognizes that freedom of association is a human right as defined by the Maritime Labor Convention 2006 and by other international declarations and conventions,

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particularly ILO Core Conventions 87¹ and 98², which are referenced in the Maritime Labor Convention 2006. We have entered into agreements with unions covering certain employees in our hotel, transportation and shipboard operations. We consider our employee and union relations generally to be good.

Reorganizations and other significant operational changes are low-probability events, due to Carnival's long-term history of business expansion and growth. However, it is Carnival's practice to ensure timely discussion of such changes and to engage with its employees to implement these changes, which may have positive or negative implications for affected employees. Such discussions help to minimize any adverse impacts of the changes on employees and help to maintain employee satisfaction and motivation during the change process.

As disclosed in their respective Sustainability Reports, each Carnival Operating Line measures performance in this area using the following GRI G3 indicators:

- LA4, Percentage of Employees Covered by Collective Bargaining Agreements.
- LA5, Minimum Notice Period(s) regarding Significant Operational Changes, Including Whether It Is Specified in Collective Agreements.
- SO1, Nature, Scope, and Effectiveness of any Programs and Practices that Assess and Manage the Impacts of Operations on Communities, Including Entering, Operating, and Exiting.

Occupational Health and Safety

Carnival's management recognizes that one way to involve employees in driving improvement of occupational health and safety in the workplace is to have health and safety committees that include representatives of both workers and management. We use this approach to foster the development and maintenance of a positive health and safety culture.

Carnival's management measures safety performance to determine how well we are doing in achieving one of the aims of our HESS Policy – *“protecting the health, safety and security of our passengers, guests, employees and all others working on behalf of the Company”*. We recognize that injury rates are generally linked to positive trends in employee morale and productivity and measure these rates to assess whether health and safety management practices that we are implementing result in fewer occupational health and safety incidents.

Carnival's management also recognizes that formally establishing occupational health and safety policies, responsibilities and practices is an effective way to ensure the health and safety of our

¹ The Freedom of Association and Protection of the Right to Organise Convention, 1948 (No. 87)

² The Right to Organise and Collective Bargaining Convention, 1949 (No. 98)

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employees. The management systems of each Carnival Operating Line define these requirements. Such formal definition helps to promote the acceptance of responsibilities both by employees and by management and develop a positive health and safety culture. Such requirements are also included in employment agreements, where such agreements are necessary and appropriate.

As disclosed in their respective Sustainability Reports, each Carnival Operating Line measures performance in this area using the following GRI G3 indicators:

- LA6, Percentage of Total Workforce Represented in Formal Joint Management-Worker Health and Safety Committees that Help Monitor and Advise on Occupational Health and Safety Programs.
- LA7, Rates of Injury, Occupational Diseases, Lost Days, and Absenteeism, and Number of Work-Related Fatalities by Region.
- LA9, Health and Safety Topics Covered in Formal Agreements with Trade Unions.

Employee Training and Benefits

As a part of its corporate commitments to health, the environment, safety and security, Carnival and its Operating Lines provide appropriate support, training, advice and information to employees and others who work on behalf of the Company. These commitments include implementation of policies and standards related to treatment of shipboard and shoreside employees, ensuring that employees have the knowledge and skills necessary to perform their jobs properly, and providing appropriate employee benefit programs. Carnival's corporate HESS Policy describes our commitment to providing appropriate health, environmental, safety and security support, training, advice and information to employees and others working on behalf of the Company.

Carnival has adopted and implemented a comprehensive set of policies and standards related to treatment of employees in its Operating Lines and on its cruise ships. For shipboard employees, these policies and standards, issued by the Cruise Lines International Association (CLIA – www.cruising.org) address, among other things:

- The Shipboard Workplace Code of Conduct, which includes compliance with the employee treatment standards of International Labour Organization (ILO) Convention No. 147 concerning Minimum Standards in Merchant Ships, as well as standards related to General Conditions of Employment, Hours of Work, Living Conditions, Health and Safety, Seafarer Identification, Recruitment, Repatriation, Wages, Security, Complaint Resolution and Crew Awareness.
- Personal Safety and Security standards.
- Safety Standards.

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- Medical Facilities.

Carnival's treatment of employees includes ensuring that they have the knowledge and skills necessary to perform their jobs properly, create guest satisfaction, and enhance safety, and environmental protection. Carnival's Operating Line management systems include policies and procedures that address training and benefit programs.

As disclosed in their respective Sustainability Reports, each Carnival Operating Line measures performance in this area using the following GRI G3 indicators:

- LA10, Average Hours of Training per Year per Employee by Employee Category.
- LA12, Percentage of Employees Receiving Regular Performance and Career Development Reviews.

Non-discrimination

Carnival is an equal employment opportunity/affirmative action employer. In this regard, it does not discriminate against any qualified individual on the basis of sex, race, color, national origin, religion, sexual orientation, age, marital status, mental, physical or sensory disability, or any other classification protected by local, state, federal, and/or international law. To prevent discrimination in employment this policy includes but is not limited to hiring, placement, promotion, demotion, transfers, training or selection for training after employment, rates of pay or other forms of compensation, benefits, reduction in staff, position elimination, position re-engineering or termination.

Carnival has established a website (www.carnivalcompliance.com) that allows employees to report suspected issues of non-compliance and have their report reviewed and investigated by the company.

As disclosed in their respective Sustainability Reports, each Carnival Operating Line measures performance in this area using the following GRI G3 indicator: HR4, Total Number of Incidents of Discrimination and Actions Taken.

Freedom of Association and Collective Bargaining

Carnival's management recognizes that freedom of association is a human right as defined by the Maritime Labor Convention 2006 and by other international declarations and conventions, including ILO Core Conventions 87³ and 98⁴, which are referenced in the Maritime Labor Convention 2006.

³ The Freedom of Association and Protection of the Right to Organise Convention, 1948 (No. 87)

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As disclosed in their respective Sustainability Reports, each Carnival Operating Line measures performance in this area using the following GRI G3 indicator: HR5, Operations Identified in Which the Right to Exercise Freedom of Association and Collective Bargaining May Be at Significant Risk, and Actions Taken to Support These Rights.

Child Forced and Compulsory Labor

As part of our comprehensive Health, Environment, Safety and Security Policy and related commitments in our Code of Business Conduct and Ethics, we condemn all forms of exploitation of children and involuntary servitude. We do not recruit child labor, and we fully respect all applicable laws establishing a minimum age for employment. As a matter of policy, and in accordance with recognized international maritime labor conventions, our Operating Lines do not employ any crewmembers less than eighteen (18) years of age.

As disclosed in their respective Sustainability Reports, each Carnival Operating Line measures performance in this area using the following GRI G3 indicators:

- HR6, Operations Identified as Having Significant Risk for Incidents of Child Labor, and Measures Taken to Contribute to the Elimination of Child Labor.
- HR7, Operations Identified as Having Significant Risk for Incidents of Forced or Compulsory Labor, and Measures to Contribute to the Elimination of Forced or Compulsory Labor.

Corruption

We recognize our responsibility to provide industry leadership and to conduct our business as a responsible global citizen. Our corporate leadership is manifested in our Code of Business Conduct and Ethics and requires that every employee and each member of the Board of Directors will use sound judgment, maintain high ethical standards and demonstrate honesty in all business dealings.

As a responsible global citizen, we are ardently committed to achieving and maintaining the highest standards of professional and ethical conduct. Integral to our Code of Business Conduct and Ethics are the processes that build internal awareness and capacity necessary to prevent incidents of corruption by ensuring that our employees are aware of anti-corruption issues and understand the related standards of behavior.

⁴ The Right to Organise and Collective Bargaining Convention, 1949 (No. 98)

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As disclosed in their respective Sustainability Reports, each Carnival Operating Line measures performance in this area using GRI G3 indicator SO3, Percentage of Employees Trained in Organization's Anti-Corruption Policies and Procedures.

Public Policy

Carnival establishes its public policy positions and participates in public policy development and lobbying on behalf of Carnival's subsidiary Operating Lines via the associations listed below. Details of Carnival's public policy positions on significant issues beyond those disclosed in Carnival's Sustainability Reports are addressed on the websites of these associations.

- [Cruise Lines International Association](#)
- [Florida Caribbean Cruise Association](#)
- [European Cruise Council](#)
- [International Chamber of Shipping/International Shipping Federation](#)
- [European Community Shipowners' Associations](#)
- [The Chamber of Shipping \(UK\)](#)
- [Ship Emission Abatement and Trading \(SEAaT\)](#)
- [Global Environmental Management Initiative \(GEMI\)](#)

As disclosed in their respective Sustainability Reports, each Carnival Operating Line measures performance in this area using the following GRI G3 indicator: SO5, Public Policy Positions and Participation in Public Policy Development and Lobbying.

Compliance

As indicated in our Corporate Health, Environmental, Safety and Security Policy, Carnival and its Operating Lines are committed to fully complying with or exceeding all legal and statutory requirements related to health, environment, safety and security throughout all of our business activities. To implement this policy, we promptly report and properly investigate all health, environmental, safety and security incidents, and take appropriate action to prevent recurrence.

As disclosed in their respective Sustainability Reports, each Carnival Operating Line measures performance in this area using GRI G3 indicator SO8, Monetary Value of Significant Fines and Total Number of Non-Monetary Sanctions for Non-Compliance with Laws and Regulations.

Passenger Health, Safety and Security

Carnival Corporation & plc and its Operating Lines place the highest priority on passenger health, safety and security. More than 8.5 million passengers cruised on our ships in 2009. Therefore, we go to great lengths to ensure that our passengers are safe, health and secure and

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that they have a fun and enjoyable vacation experience. We maintain an excellent health, safety and security record and continually strive to improve our health, safety and security standards and procedures.

Cruising is one of the most popular vacation options, in large part because of its excellent safety record and the high level of quality service provided on board cruise ships. We are committed to providing a secure environment for all of our passengers and will continue to work with all appropriate national, state and local agencies to ensure the safety and well-being of all passengers on board our vessels.

The measures outlined below and elaborated in detail in Carnival's Operating Lines' Sustainability Reports apply to all Carnival ships:

- Safety on board, including complying with international safety standards, safety inspections and safety training;
- Security on board, including security standards, training and support and crime prevention;
- Health and sanitation, including routine sanitation inspections;
- Medical care, including on board medical facilities, staffing, equipment and procedures.

As disclosed in their respective Sustainability Reports, each Carnival Operating Line measures performance in this area using the following GRI G3 indicators:

- PR1, Life Cycle Stages in which Health and Safety Impacts of Products and Services are Assessed for Improvement, and Percentage of Significant Products and Services Categories Subject to Such Procedures.
- PR2, Total Number of Incidents of Non-Compliance with Regulations and Voluntary Codes concerning Health and Safety Impacts of Products and Services during Their Life Cycle, by Type of Outcomes.

Passenger Satisfaction and Privacy Protection

Carnival's management recognizes that measuring satisfaction of our passengers provides a powerful indicator of our Operating Lines' sensitivity to their needs and, from an organizational perspective, is essential for our long-term success. In the context of sustainability, passenger satisfaction provides insight into how we approach our relationships with this key stakeholder group.

Carnival Corporation & plc has established standards and guidelines to be observed by each Operating Line in their respective privacy programs. Based on these standards and guidelines, each Operating Line has developed its own privacy policy, describing the principles and

Carnival Corporation & plc Corporate Sustainability Summary 2009

practices that guide the way personal information is collected, used, shared, safeguarded, and disposed of during the normal course of business.

As disclosed in their respective Sustainability Reports, each Carnival Operating Line measures performance in this area using the following GRI G3 indicators:

- PR5, Practices Related to Customer Satisfaction, Including Results of Surveys Measuring Customer Satisfaction.
- PR8, Total Number of Substantiated Complaints regarding Breaches of Customer Privacy and Losses of Customer Data.

Carnival Corporation & plc Corporate Sustainability Summary 2009

Economic Summary

Economic Value and Benefits

Carnival takes leadership roles in enhancing our communities, both in our homeports and in the destinations that our ships visit throughout the world. Expenditures by Carnival, and our passengers and crew generate employment, income and other economic benefits throughout the economies of the shoreside communities where our businesses are located, in the ports where our cruises originate and where ships visit, and in the home communities of our crewmembers. These economic benefits arise from five principal sources:

- Spending by cruise passengers and crew for goods and services associated with their cruise, including travel between their places of residence and the ports of embarkation and pre- and post-cruise vacation spending.
- Shoreside staffing by our Operating Lines for their headquarters, marketing and tour operations.
- Expenditures for goods and services necessary for cruise operations, including food and beverages, fuel, hotel supplies and equipment, navigation and communication equipment and so forth.
- Spending for port services at ports-of-embarkation and ports-of-call.
- Expenditures for the maintenance and repair of vessels, as well as capital expenditures for port terminals, office facilities and other capital equipment.

For example, in 2009, the cruise industry in the United States alone generated⁵:

- \$35.1 billion in total economic benefits.
- \$17.2 billion in direct spending by the cruise lines and passengers on U.S. goods and services.
- 313,998 total U.S. jobs generated by cruise expenditures.
- \$14.23 billion in total wages for U.S. employees.

In addition, Carnival and its Operating Lines support and encourage the extraordinary efforts of its employees whose involvement in a wide variety of volunteer programs provide aid, donations and services to a huge array of charitable organizations. From employee fundraisers and hands-on volunteer service initiatives to cash and cruise donations and innovative philanthropic programs, Carnival strives to make a difference, both nationally and internationally. Over the years, these efforts have made Carnival a stronger company and have created extraordinary pride among its employees. Carnival supports the accomplishments of its employees and will continue its efforts to build better and stronger communities throughout the world.

⁵ Cruise Lines International Association 2009 U.S. Economic Impact Study

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As disclosed in their respective Sustainability Reports, each Carnival Operating Line measures performance in this area using GRI G3 indicator EC1, Direct Economic Value Generated and Distributed, Including Revenues, Operating Costs, Employee Compensation, Donations and other Community Investments, Retained Earnings, and Payments to Capital Providers and Governments.

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EN8	Total Water Withdrawal by Source	8
EN16	Total Direct and Indirect Greenhouse Gas Emissions By Weight	6
EN19	Emissions of Ozone-Depleting Substances by Weight	9
EN20	NOx, SOx, and Other Significant Air Emissions by Type And Weight	9
EN21	Total Water Discharge by Quality and Destination	10
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EN23	Total Number and Volume Of Significant Spills	9
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Labor Indicators		
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LA4	Percentage of Employees Covered by Collective Bargaining Agreements	14
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LA9	Health and Safety Topics Covered in Formal Agreements with Trade Unions	15
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GRI Indicator	GRI Indicator Description	Page
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PR2	Total Number of Incidents of Non-Compliance with Regulations and Voluntary Codes Concerning Health and Safety Impacts of Products And Services, by Type of Outcomes	19
PR5	Practices Related to Customer Satisfaction, Including Results of Surveys Measuring Customer Satisfaction	20
PR8	Total Number of Substantiated Complaints Regarding Breaches of Customer Privacy and Losses of Customer Data	20
Economic Indicators		
EC1	Direct Economic Value Generated and Distributed, Including Revenues, Operating Costs, Employee Compensation, Donations and Other Community Investments, Retained Earnings, and Payments to Capital Providers and Governments	22

**Carnival Corporation & plc
Corporate Sustainability Summary 2009**

Appendix I, Carnival Response to CDP 2010 Information Request

Module: Introduction

Page: Introduction

0.1

Introduction

Please give a general description and introduction to your organization.

Carnival Corporation & plc is a global cruise company and one of the largest vacation companies in the world. Our portfolio of leading cruise brands includes Carnival Cruise Lines, Holland America Line, Princess Cruises and Seabourn Cruise Line in North America; P&O Cruises, Cunard Line and Ocean Village in the United Kingdom; AIDA in Germany; Costa Cruises in southern Europe; Iberocruceros in Spain; and P&O Cruises in Australia.

These brands offer a wide range of holiday and vacation products to a customer base that is broadly varied in terms of cultures, languages and leisure-time preferences. We also own tour company that complements our cruise operations: Holland America Princess Alaska Tours in Alaska and the Canadian Yukon. Combined, our vacation companies attract 8.5 million guests annually.

Carnival's stock is dually listed on both the New York Stock Exchange and on the London Stock Exchange under symbol CCL. Carnival is the only company in the world to be included in both the S&P 500 index in the United States and the FTSE 100 index in the United Kingdom.

Headquartered in Miami, Florida, U.S.A. and London, England, Carnival operates a fleet of 95 ships, with another 12 ships scheduled for delivery between now and Spring 2014. With approximately 200,000 guests and 70,000 shipboard employees, there are more than 270,000 people sailing aboard the Carnival fleet at any given time.

0.2

Reporting Year

Please state the start and end date of the year for which you are reporting data.

Enter Periods that will be disclosed

Mon 01 Dec 2008 - Mon 30 Nov 2009

0.3

Are you participating in the Walmart Sustainability Assessment?

No

0.4

Modules

As part of the Investor CDP information request, electric utilities, companies with electric utility activities or assets, companies in the automobile or auto component manufacture sectors and companies in the oil and gas industry should complete supplementary questions in addition to the main questionnaire.

If you are in these sectors, the corresponding sector modules will be marked as default options to your information request.

If you have not been presented with a sector module that you consider would be appropriate for your company to answer, please select the module below. If you wish to view the questions first, please see www.cdproject.net/cdp-questionnaire.

0.5

Country list configuration

Please select the countries for which you will be supplying data. This selection will be carried forward to assist you in completing your response.

Select country
Australia
Bahamas
Canada
Germany
Italy
United Kingdom
Turks and Caicos Islands
United States of America
International Waters
International Air Space
Spain
Rest of world

0.6 Please select if you wish to complete a shorter information request.

Further Information

Attachments

Module: Governance

Page: Governance

1.1 Where is the highest level of responsibility for climate change within your company?

Board committee or other executive body

1.1a

Please specify who is responsible.

Committee appointed by the Board

1.1b Select the lower level department responsible.

1.2 What is the mechanism by which the board committee or other executive body reviews the company's progress and status regarding climate change?

The Senior Vice President – Maritime Policy & Compliance provides quarterly reports and briefs the HESS Committee concerning Carnival's health, environmental (including climate change), safety, security and regulatory matters. Similarly, at the quarterly Board meetings, the HESS Committee Chairman reports to the full Boards of Directors on issues raised by these quarterly reports.

1.3a Please explain how overall responsibility for climate change is managed within your company.

1.3b

Please explain how overall responsibility for climate change is managed within your company.

1.4 Do you provide incentives for the management of climate change issues, including the attainment of greenhouse gas (GHG) targets?

Yes

1.5 Please complete the table.

Who is entitled to benefit from those incentives?	The type of incentives
Other: Shipboard Senior Management	Monetary reward
Other: Operating Line Senior Management	Monetary reward

Further Information

Not all Operating Lines (OL) offered incentives. If incentives were offered, they were tied to fuel consumption targets.

Attachments

Module: Risks and Opportunities

Page: Risks & Opportunities Identification Process

2.1 Describe your company's process for identifying significant risks and/or opportunities from climate change and assessing the degree to which they could affect your business, including the financial implications.

Risks and/or opportunities are identified and addressed by Carnival's formal Enterprise Risk Management (ERM) process in the risk categories of Regulatory and Brand Quality/Innovation. Risk assessment activities within ERM occur at two levels: risk categories and prioritized risk categories. The ERM process is managed by the Vice-President of Strategic Projects and the output of this process is communicated to the HESS Committee on a quarterly basis.

At the risk category level, management at each Operating Line scores each category in terms of impact, likelihood and other factors that increase or decrease the risk. This involves discussions among senior management of the Operating Lines and considers the underlying risk events in the overall evaluation. Risk categories are prioritized to create a high level company risk profile that is shared with the Boards of Directors as part of ERM reporting.

From the prioritized risk categories, some are identified for more in-depth evaluation, including a cross-company review of mitigation methods at the risk event level. This involves reviews of the detailed elements of mitigation, identification of the "key elements" of mitigation and benchmarking among companies to identify gaps, best practices and areas of opportunities. It also involves assessments of the impact and likelihood of the risk events and an assessment of management's capability to manage each risk. Defined scales are used for scoring.

Areas of opportunities are translated into action plans, which are highlighted to senior Operating Line (OL) and corporate management and to the Boards of Directors. The ERM process is executed by risk committees established at each Operating Line and at corporate. These committees review risks, define action plans for improvement and support ERM reporting requirements.

Carnival is working to develop a Regulatory Risk Map that can be used for strategic planning and corporate-wide dissemination of regulatory risk and their financial impacts.

In addition, at the business unit level, each Operating Line has implemented an International Organization for Standardization (ISO) 14001 Environmental Management System (EMS) to address risks related to environmental regulations, including those related to climate change. Carnival has chosen a proactive approach to managing this issue by including Greenhouse Gas (GHG) emissions as a significant environmental aspect in each Operating Line's EMS. This process is managed routinely by OL management.

Further Information

Attachments

[Page: Regulatory Risks](#)

3.1 Do current and/or anticipated regulatory requirements related to climate change present significant risks to your company?

Yes

Do you want to answer using:

The table below

3.2A

What are the current and/or anticipated significant regulatory risks related to climate change and their associated countries/regions and timescales?

Risk	Region/Country	Timescale in Years	Comment
International agreements	International Waters	0 -- 5	The cruise industry is a very highly regulated industry. The convention regulating and preventing marine pollution by ships is the International Maritime Organization's (IMO) International Convention for the Prevention of Pollution from Ships (MARPOL).
Air pollution limits	International Waters	0 -- 5	Absolute GHG emission limits will be challenging due to organic growth.
Carbon taxes	International Waters	0 -- 5	Regulation will impose specific economic incentive on use of marine fuel.
Uncertainty surrounding new regulation	International Waters	Uncertain	Diverse regulations in different ports of call.

3.2B

What are the current and/or anticipated significant regulatory risks related to climate change and their associated countries/regions and timescales?

3.3

Describe the ways in which the identified risks affect or could affect your business and your value chain.

New air emission regulations may require that additional abatement technologies be installed on board our ships. Meeting new efficiency standards may require additional research and development and new partnerships with ship builders, ship's engine and equipment manufacturers. New operational efficiency standards may increase the need for new monitoring and tracking solutions. New training solutions may be needed for shipboard management to understand and address the above issues.

The regulatory requirements for reduction of NOx emissions from ships could have an adverse impact on climate change since reducing NOx emissions reduces operating efficiencies and thus increases GHG emissions as a result of burning more fuel.

Climate change legislation and regulations could affect our operations, such as causing fuel shortages, supply disruptions, and changes in fuel specifications,

Carbon taxes provide no incentives for installing abatement technologies or end-of pipe solutions.

3.4 Are there financial implications associated with the identified risks?

Yes

3.5 Please describe them.

We expect that these forthcoming regulations may adversely impact our costs, including, among other things, increasing fuel prices, fines for non-compliance, new taxes on bunker fuel, increasing new build and operational cost, increased training cost, and increased cost from participating in emissions trading schemes.

Liabilities arising from future air emission releases could increase our cost of compliance or otherwise adversely affect our business, results of operations and financial condition.

Fuel shortages, supply disruptions, and changes in fuel specifications, may increase our operating cost and profitability.

The increase in fuel prices impacts not only our fuel costs, but also some of our other expenses, such as crew travel, freight, and commodity prices, and can have an adverse impact on our profitability.

As some of the same risks also apply to parts of our value chain, it may result in increased costs of doing business. Carbon taxes could increase operating costs for upstream and downstream value chains.

3.6 Describe any actions the company has taken or plans to take to manage or adapt to the risks that have been identified, including the cost of those actions.

Carnival is actively involved both at the corporate new shipbuilding level and at Operating Line level in research and development for new abatement technologies and new equipment to improve energy efficiency. Some of these technologies and equipment have been implemented on new ships being built and being retrofitted onto some existing ships.

At the operational level, Carnival is tracking distances and speed for each ship with more advanced software solutions to further optimize the total distance travelled and ship's speed for a given cruise with the objective of reducing fuel consumption and resultant GHG emissions.

Carnival's management teams participate in and/or lead cruise industry-wide associations and stakeholder engagements addressing regulatory risks associated with climate change.

Carnival continues to be a sponsoring member of the Shipping Emissions Abatement and Trading (SEaT) organization. This cross-industry self-funding group investigates how efficient reduction of harmful emissions from shipping can be achieved, and provides a platform to discuss emissions trading. This group is continuously investigating new emission reduction technologies for the maritime industry.

Carnival continues to be a member of Cruise Lines International Association (CLIA), the world's largest cruise association, composed of major cruise lines serving North America and dedicated to the promotion and growth of the cruise industry. CLIA serves as a non-governmental consultative organization to the IMO, and is actively involved in national and international regulatory processes.

3.7 Please explain why you do not consider your company to be exposed to significant regulatory risks - current and/or anticipated.

3.8
Please explain why not.

Further Information

Attachments

[Page: Physical Risks](#)

4.1 Do current and/or anticipated physical impacts of climate change present significant risks to your company?

Yes

Do you want to answer using:

The table below

4.2A
What are the current and/or anticipated significant physical risks, and their associated countries/regions and timescales?

Risk	Region/Country	Timescale in Years	Comment
Changes in frequency of extreme weather events	International Waters	Uncertain	Increased incidence of hurricanes and floods may disrupt current cruise itineraries.
Induced changes in supply chain and/or customers	International Waters	Uncertain	Disruption to energy and material supplies and disruption to cruise embarking and disembarking at home ports due to the effects of extreme weather events.
Uncertainty of physical risks	International Waters	Uncertain	The actual impact is not predicable until the event has occurred.

4.2B

What are the current and/or anticipated significant physical risks, and their associated countries/regions and timescales?

4.3

Describe the ways in which the identified risks affect or could affect your business and your value chain.

Adverse weather conditions or natural disasters could affect the environment and/or the health or vacation satisfaction of our passengers. Physical damage may cause the lack of continued availability of attractive, convenient and safe port destinations. Operating our ships in areas where we find increased sea states or differing wind patterns may lead to increased use of fuel.

Some of our guests depend on scheduled or chartered commercial airline services to transport them to or from the ports where our cruises embark and disembark. Changes or disruptions in commercial or chartered airline services as a result of adverse weather conditions could adversely affect our ability to deliver guests to and from our cruise ships.

Our ability to effectively and efficiently operate shipboard and shoreside activities may be impacted by widespread illnesses resulting in, among other things, reduced demand for cruises, cruise cancellations, and employee absenteeism that could have an adverse affect on our sales and profitability.

4.4 Are there financial implications associated with the identified risks?

Yes

4.5 Please describe them.

Any of the risks identified above could have one or more adverse effects on our costs, sales and ultimately our profitability. These effects might include:

- The inability to continue to utilize, maintain, rebuild, if necessary, and increase the number of ports that our ships call on at attractive, convenient and safe port destinations.
- The inability to embark and disembark guests due to adverse weather.
- Increased port related and other costs as third-party operators seek to charge us additional amounts in order to recover their expenses caused by adverse events.
- The need to alter itineraries or cancel a cruise or a series of cruises or tours, which could result in refunds and/or additional costs.
- Increased costs for disease prevention and treatment.
- Adverse affects on our supply chain.

4.6 Describe any actions the company has taken or plans to take to manage or adapt to the risks that have been identified, including the cost of those actions.

Each Operating Line has documented management systems in place to address the above mentioned risks. Carnival's Operating Lines have included itinerary planning as an environmental aspect. Operating Lines have created a special working group to address the risk of severe weather by planning alternative port rotations and/or by identifying substitute ports of call and homeports. Operating Lines also have policies and procedures in place to deal with various levels of significant higher incidence of diseases.

4.7 Please explain why you do not consider your company to be exposed to significant physical risks - current and/or anticipated.

4.8 Please explain why not.

Further Information

Attachments

[Page: Other risks](#)

5.1

Does climate change present other significant risks - current and/or anticipated - for your company?

Yes

Do you want to answer using:

The table below

5.2A

What are the current and/or anticipated other significant risks, and their associated countries/regions and timescales?

Risk	Region/Country	Timescale in Years	Comment
Changes in the availability and costs of goods and	International	0 -- 5	Related to fuel, food and transportation purchased by

services	Waters		Carnival.
Reputational risks	International Waters	0 -- 5	Adverse publicity affecting demand for cruises.
Unpredictability of risks	International Waters	Uncertain	Related to our global operations.

5.2B

What are the current and/or anticipated other significant risks, and their associated countries/regions and timescales?

5.3 Describe the ways in which the identified risks affect or could affect your business and your value chain.

These risks could potentially affect our business in one or more of the following ways:

- The availability of fuel, food, and transportation may be impacted by supply chain scarcity;
- The "green" shore power consumed by some of our ships that shut down their engines in port (a process called "cold ironing") may increase in cost or become unavailable due to increased local consumer demand; and
- Adverse publicity concerning the cruise industry in general or Carnival in particular, could impact our reputation and with it the demand for cruises.
- Unpredictable climate change impact for the ports visited.

5.4 Are there financial implications associated with the identified risks?

Yes

5.5

Please describe them.

Some of our operating costs, including those for fuel, food, and transportation, could increase impacting our profitability. The cost of green shore power consumed by some of our ships may be subjected to higher prices. Adverse publicity could harm our future sales and profitability. Any changes to our published itinerary port visit due to an unpredicted climate change impact could result in higher operating costs for that visit.

5.6

Describe any actions the company has taken or plans to take to manage or adapt to the other risks that have been identified, including the costs of those actions.

Although we utilize a select number of suppliers for most of our food and beverages, communication services, air transportation services and hotel and restaurant products and supplies, most of these products and services are available from multiple sources at competitive prices. Carnival's Operating Lines are located globally and maintain good working relations with port facility authorities, shore excursion providers, supply chains and other service providers in their area of operations, allowing Carnival to address scarcity and demand related issues and operational disruptions.

Carnival actively engages with its stakeholders to address issues related to its impacts on climate change. The company has been public disclosing its carbon footprint for the last four years.

5.7

Explain why you do not consider your company to be exposed to other significant risks - current and/or anticipated.

5.8 Please explain why not.

Further Information

Attachments

[Page: Regulatory Opportunities](#)

6.1

Do current and/or anticipated regulatory requirements related to climate change present significant opportunities for your company?

Yes

Do you want to answer using:

The table below

6.2A

What are the current and/or anticipated significant regulatory opportunities and their associated countries/regions and timescales?

Opportunities	Region/Country	Timescale in Years	Comment
	International		Participating in various policy setting meetings providing cruise industry operational and

International agreements	Waters	0 -- 5	technical expertise.
Emission reporting obligations	International Waters	0 -- 5	Environmental, carbon footprint and Sustainability reports publicly available
Voluntary agreements	International Waters	0 -- 5	Working with specific geographic regulatory bodies to address their concerns.
Fuel/energy taxes and regulations	International Waters	0 -- 5	Actively engaged in reducing energy usage.

6.2 What are the current and/or anticipated significant regulatory opportunities and their associated countries/regions and timescales?

6.3

Describe the ways in which the identified opportunities affect or could affect your business and your value chain.

Internationally binding agreements are negotiated within the framework of the IMO. Carnival actively participates in IMO working groups to provide cruise industry knowledge and technical expertise to develop applicable cruise industry regulations. Emission reporting obligations create an opportunity to develop and deploy a robust information management system across company and business units to enhance quality of carbon data collection, calculation and reporting. Voluntary agreements are a particular type of environmental instruments where contracts between responsible authorities and companies are agreed. Carnival is actively working with a number of such regulatory bodies to further improve working relations. Fuel/energy taxes provide the opportunity to further pursue additional energy savings through various technologies.

6.4 Are there financial implications associated with the identified opportunities?

Yes

6.5

Please describe them.

Participating in IMO and other regulatory body meetings increases operating cost due to travel and personnel requirements. Research and development and new ship build expenses are optimized by being involved in the development of the ship efficiency index. Carnival will further benefit from reduced operating expenditure due to compliance with ship design efficiency and operational efficiency regulations that is being developed. There is the potential to receive monetary benefits from government or responsible authorities and equipment manufacturers through subsidies for installing and pilot testing energy saving technologies. Increased cost for personnel involved in gathering and reporting carbon related data and cost related to the development of database software solution. Operating Lines also receive dockage fee discounts for voluntarily participating in port air emission reduction schemes.

6.6

Describe any actions the company has taken or plans to take to exploit the opportunities that have been identified, including the investment needed to take those actions.

Carnival actively participates in the IMO Marine Environmental Protection Committee's (MEPC) Working Group meetings on GHG Emissions from ships. Carnival is also actively involved in providing valuable input to the Energy Efficiency Design Index (EEDI) for cruise ships, particularly for cruise ships with electric propulsion. In addition, Carnival is directly involved in developing standards for equipment that will allow ships to plug into shore power. Carnival is also actively engaged with national shipping associations, Passenger Shipping Association (PSA), the Ship Emission Abatement and Trading (SEaT) organization, the European Cruise Council, and the Cruise Lines International Association (CLIA) in developing greenhouse gas emission reduction strategies for both the cruise industry and the wider shipping industry.

The company continues to provide its ships for pilot testing new technologies. The company continues to develop partnerships with ship builders, ship equipment and engine manufacturers for new energy saving and emission reduction technologies, and voluntarily participates in local agreements.

6.7

Explain why you do not consider your company to be presented with significant opportunities - current and/or anticipated.

6.8

Please explain why not.

Further Information

Attachments

[Page: Physical Opportunities](#)

7.1 Do current and/or anticipated physical impacts of climate change present significant opportunities for your company?

Yes

Do you want to answer using:

The table below

7.2A What are the current and/or anticipated significant physical opportunities and their associated countries/regions and timescales?

Opportunities	Region/Country	Timescale in Years	Comment
Changes in frequency of extreme weather events	International Waters	0 -- 5	Could deviate from area experiencing extreme weather events.
Induced changes in supply chain and/or customers	International Waters	0 -- 5	Develop new ports, increased demand.

7.2B

What are the current and/or anticipated significant physical opportunities and their associated countries/regions and timescales?

7.3 Describe the ways in which the identified opportunities affect or could affect your business and your value chain.

As changes to land and ocean occur, the potential to access new areas could increase which may lead to development of new ports and related shore excursions including new homeports. New home ports in a unaffected area could provide easy access to embark and disembark passengers in case of extreme weather events affecting a particular area. Attractive port destinations are among the major reasons why our guests choose a cruise versus an alternative vacation option. Increasing the number of home ports allows cruise passengers to drive to the ship docked closer to home and counters the unavailability of scheduled airline services impacted by severe weather.

Weather related damage to an existing cruise port provides the opportunity to rebuild the port with modern and latest amenities further increasing cruising value. Since cruise vessels are literally floating hotels, they have the ability to move away from areas impacted by bad weather and provide alternate cruise destinations.

7.4

Are there financial implications associated with the identified opportunities?

Yes

7.5

Please describe them.

Some environmentally protected and/or remote areas may only be accessible by sea, increasing demand for cruises to these areas thus increasing sales and profitability. Increasing the number of home ports allows cruise guests to drive to the cruise vessel docked in a port closer to home and counters the unavailability of scheduled airline services impacted by severe weather thus increasing sales. New ports and related shore excursions creates demands for cruises increasing sales. The ability to continue the cruise and provide alternate cruise destinations when the advertised destination is impacted allows Carnival to maintain its guest satisfaction and reduces costs related to disrupting the cruise.

7.6

Describe any actions the company has taken or plans to take to exploit the opportunities that have been identified, including the investment needed to take those actions.

Carnival is developing new itineraries and new home ports to take advantage of this opportunity to increase sales. Significant investments are needed to develop new itineraries and new home ports and Carnival invests in these opportunities to provide additional value to our passengers. Carnival routinely evaluates alternate substitute ports on current itineraries based on historical weather patterns to avoid cruise disruptions.

7.7

Explain why you do not consider your company to be presented with significant opportunities - current and/or anticipated.

7.8

Please explain why not.

Further Information

Attachments

[Page: Other Opportunities](#)

8.1 Does climate change present other significant opportunities - current and/or anticipated - for your company?

Yes

Do you want to answer using:

The table below

8.2A What are the current and/or anticipated other significant opportunities and their associated countries/regions and timescales?

Opportunities	Region/Country	Timescale in Years	Comment
New services and/or product market opportunities	International Waters	0 -- 5	New market opportunities refer to the ability to cruise environmental sensitive remote areas.
New energy products or services	International Waters	0 -- 5	Educational opportunities for passengers and crew.
Reputational opportunities and increased ability to attract and retain talent	International Waters	0 -- 5	Employment opportunities to hire higher calibre staff.

8.2B

What are the current and/or anticipated other significant opportunities and their associated countries/regions and timescales?

8.3

Describe the ways in which the identified opportunities affect or could affect your business and your value chain.

Developing new cruise itineraries to visit environmentally sensitive remote areas accessible only by ships create new demand for cruises. Good stewardship reputation allows the company to attract a higher quality of job applicants. By educating passengers and crew on energy-saving practices there is the potential to avoid unnecessary energy usage while the passenger and crew are sailing on board. This information can also be utilized by the passengers and crew in their day-to-day activities when at home.

8.4 Are there financial implications associated with the identified opportunities?

Yes

8.5

Please describe them.

Cruises to environmentally sensitive areas could be expanded as a result of the demand increasing sales and thus profitability. By educating passengers and crew the potential to further reduce energy consumption is increased thus reducing operating costs.

8.6 Describe any actions the company has taken or plans to take to exploit the opportunities that have been identified, including the investment needed to take those actions.

By conducting in-depth research and analysis of cruise ship operational activities to fully understand the major energy consumers on board to be able to evaluate alternative technology and best practices that will further reduce energy consumption. Carnival is developing shipboard educational programs for both passenger and crew regarding the benefits of energy-saving practices.

8.7

Explain why you do not consider your company to be presented with significant opportunities - current and/or anticipated.

8.8

Please explain why not.

Further Information

Attachments

Module: Strategy

Page: Strategy

9.1

Please describe how your overall group business strategy links with actions taken on risks and opportunities (identified in questions 3 to 8), including any emissions reduction targets or achievements, public policy engagement and external communications.

Carnival's environmental efforts are focused where they have the greatest impact. These efforts include reducing our carbon footprint by lowering energy use on our ships. About 96-97% of our GHG emissions come from the combustion of marine fuel oil consumed by our ships. Hence, improving fuel consumption is a key business strategy at the corporate level. In order to achieve this objective a Fuel Synergy Working Group (FSWG) is managed at a corporate level. Operating Line and Corporate senior management are part of this group and are responsible for achieving results. The FSWG holds meetings on a monthly basis and progress/results are provided to the executive management on a quarterly basis. The goal of this group is to identify both short term and long term opportunities for fuel savings in the operation of existing ships as well as in the designs of new ships.

In addition to reducing fuel consumption, Carnival is actively monitoring and investigating new abatement technologies for use on board our ships. As and when such abatement technologies become available and feasible for the cruise industry, they will help to reduce further our GHG emissions.

Each of Carnival's subsidiary Operating Lines sets specific yearly objectives and targets in accordance with their respective ISO 14001 Environmental Management

Systems (EMS). Such objectives and targets include reducing fuel consumption which equates to GHG emissions reductions. Annually, senior management of each Operating Line conducts a review of the EMS performance and sets fuel reduction objectives and targets for the following year.

To address public policy concerning climate change, Carnival actively participates in and contributes to the process of determining the role of our industry in addressing climate change. The cruise industry is generally regulated as part of the shipping industry. However, cruise ships are unique in their operating profile when compared to conventional transportation ships. For example, a cruise ship generates its own power and water. It also treats its wastes on board and then stores them until able to be safely disposed of (unlike land-based hotels). In fact, a cruise ship is more akin to a small city or large land based resort complex. Carnival actively engages with the various stakeholders like regulators, NGOs, employees, value chains, etc., both through industry associations and through direct company engagements to address these cruise industry challenges.

Carnival has been responding to the Carbon Disclosure Project since 2005. Since then it has improved the quality of its disclosure thus increasing its carbon footprint transparency to the public through these communication methods. As a result, Carnival has been named to the Carbon Disclosure Leadership Index in 2008 and 2009 and continues to respond to other disclosure requests on climate change issues. In 2010, each of Carnival's Operating Lines will release its own Sustainability Report based on Fiscal year 2009 data. These reports will include climate change performance indicators as listed in the Global Reporting Initiatives guidance document.

Further Information

Attachments

[Page: Strategy - Targets](#)

9.2

Do you have a current emissions reduction target?

No

9.3

Please explain why not and forecast how your Scope 1 and Scope 2 emissions will change over the next 5 years. **(If you do not have a target)**

On a year-over-year basis, the following reductions in emission intensity have been achieved in terms of Kg. CO₂/ALB-Km.

FY 2009 over FY 2008 - 3.4%

FY 2008 over FY 2006 - 3.5%

FY 2007 over FY 2006 - 2.0%

FY 2006 over FY 2005 - 2.5%

Note: The above emission intensity metrics excludes Ibero Cruises because information on kilometers traveled is not available for this Operating Line.

No emission reduction targets have been set at the corporate level; however, within their respective ISO 14001 Environmental Management Systems. Operating Lines have set fuel consumption reduction targets ranging from 0.25-2.5% based on previous year's normalized performance figures and budgets. Some Operating Lines have also set targets for reduction in refrigerant fugitive emissions ranging from 0.25- 1%. Operating Lines' targets apply mostly to Scope 1 or direct emissions for shipboard activities.

Over the next five years Carnival's Scope 1 emissions will decrease based on a normalized intensity metric i.e. Fuel Kg./ALB-Km due to operational and technical efficiencies. They will however, increase on an absolute basis due to a number of new ships that will be entering the fleet over the next five years. Carnival's Scope 2 is not expected to change much over the next five years.

9.4

Please give details of the target(s) you are developing and when you expect to announce it/them. **(If you are in the process of developing a target)**

9.5

Please explain if you intend to set a new target. **(If you have had a target and the date for completing it fell within your reporting year, please answer questions 9.5 and 9.6)**

9.6

Please complete the table. **(If you have a current emissions reduction target or have a recently completed target)**

Target Type	Value of Target	Unit	Base year	Emissions in base year (metric tonnes CO ₂ -e)	Target Year	GHGs and GHG sources to which the target applies	Target met?	Comment
-------------	-----------------	------	-----------	---	-------------	--	-------------	---------

Further Information

Attachments

¿
Is question 9.7 relevant for your company?

Yes

9.7
Please use the table below to describe your company's actions to reduce its GHG emissions.

1. Actions - please describe	2. Annual energy saving	3. Annual energy savings - number	4. Annual energy saving - units	5. Annual emission reduction in metric tonnes CO2-e	6. Reduction - achieved or anticipated	7. Investment - number	8. Investment - currency	9. Monetary savings - number	10. Monetary savings - currency	11. Monetary savings	12. Timescale of actions & associated investments (if relevant)
Group of energy reductions measures on existing ships (see 9.9 for details)	Achieved	81788	Other: metric tonnes	254933	Achieved	12000000	USD(\$)	30000000	USD(\$)	Achieved	The monetary savings are for the fiscal period 1 Dec. 2008 to 30 Nov. 2009.
Group of additional energy reduction measures on new ships being built. Note: The investment number reported in Column 7 excludes the investment number (cost) of the energy reduction measures that is included in the contracted price of the vessel.	Anticipated	10000	Other: metric tonnes	31170	Anticipated	9764500	EUR(€)	897500	EUR(€)	Anticipated	As indicated in previous CDP report, Carnival spent a total of approx. 10 million Euro on a number of additional technical initiatives related to fuel savings on seven new ships that will be delivered between 2010-2012.

9.8
Please explain why not.

9.9
Please provide any other information you consider necessary to describe your emission reduction activities.

A brief summary of the energy saving initiatives is listed below:

Optimized Ship Trimming System – Eniram system and Dynamic Trimming Assistant solutions.

Heating Ventilation Air Conditioning (HVACs) - Automation for air handling units, 3-way valves, time-based control programs, network-based control of passenger cabins, frequency converters on engine room fans, and new efficient compressors.

Equipment upgrades - Heat Recovery Systems, fresh water production, fuel handling system, dishwashers.

Hull Surface - Hull & propeller Cleaning, dry-dock & in-water, hull coating and paint, Silicone anti-fouling paint, anti-fouling paint, heat-reflective paint on (dark) hulls.

Hydrodynamics - Trim wedge for hull transom, hull shape optimized for service conditions, twisted rudders, stabilizer openings and operations, hull transom

interceptor plate, rudder design.

Itinerary Management - Passage planning, schedule optimizations, optimizing itineraries with respect to estimated time of arrival and speed.

Lighting - Low consumption lighting fixtures, electronic ballasts in TL lights, LED/energy efficient bulbs

Fuel Additives - Fuel oil Additive.

Marine Operating Procedures - Speed management, only use one engine in port, power management, limit RPM's of Azipods, disengage PEM winding when sailing at low speed, monitoring of engine performance.

Education and Training - Crew Training and Re-Education, Awareness Posters/ Signage/Video for crew/passengers.

Technical Operating Procedures - Hot well temperature control, reduction of liquid carried in on-board tanks, reduce unnecessary inventory/ stores carried onboard, Azipod cooling logic, Dry-cleaning of turbo-chargers.

Voyage Optimization tools - IAMCS optimization software, trim draft diagram (TDD), installation of NAPA fuel management system.

New Build Initiatives - Fresh water cooling systems, light weight materials, thermal insulation on decks, tunnel washing machines, hot water pipes, natural lighting, hull shape and stabilizers.

Propeller - Efficient propeller design, sail on lever stops. R&D and Emerging Technologies- wind turbines, solar panels.

Studies & Metrics - RINA Index, CETENA Studies, engine reports analysis, review fuel consumptions curves for each vessel, cost analysis for burning sludge

9.10

Do you engage with policy makers on possible responses to climate change including taxation, regulation and carbon trading?

Yes

9.11

Please describe.

Carnival actively participates in and contributes to the process of determining the role of our industry in addressing climate change. The cruise industry is generally regulated as part of the shipping industry. However, cruise ships are unique in their operating profile when compared to conventional transportation ships. Carnival actively engages with the various stakeholders like regulators, Non-Governmental Organizations (NGOs), employees, value chains, etc., both through industry associations and through direct company engagements to present these cruise industry challenges.

Carnival is a member of Cruise Lines International Association (CLIA), the world's largest cruise association, composed of major cruise lines serving North America and dedicated to the promotion and growth of the cruise industry. CLIA serves as a non-governmental consultative organization to the IMO, and is actively involved in national and international regulatory processes.

Carnival is a sponsoring member of the Shipping Emissions Abatement and Trading (SEaT) organization. This cross-industry self-funding group investigates how efficient reduction of harmful emissions from shipping can be achieved, as well as provides a platform to discuss emissions trading. This group is continuously investigating new emission reduction technologies for the maritime industry. Carnival is also a member of the European Cruise Council that engages with regulators in Europe on climate change issues.

Carnival has taken the lead in the cruise industry in developing shore power for cruise ships in Juneau, Alaska; Seattle, Washington; and Vancouver, British Columbia. Carnival is engaged in planning shore power in several other United States and European ports and participates in a working group that is establishing international standards for shore power.

Further Information

Attachments

[Module: GHG Emissions Accounting, Energy and Fuel Use, and Trading](#)

[Page: Emissions Boundary - \(1 Dec 2008 - 30 Nov 2009\)](#)

10.1

Please indicate the category that describes the company, entities, or group for which Scope 1 and Scope 2 GHG emissions are reported.

Companies over which operational control is exercised

10.2

Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions within this boundary which are not included in your disclosure?

Yes

10.3

Please complete the following table.

Source	Scope	Explain why the source is excluded
Shoreside Emergency Generator	Scope 1	Fuel usage is very small and considered de minimis source of GHG emissions.
Shoreside Refrigeration and Air-conditioning equipment	Scope 1	Fugitive emissions of refrigerant gases from these equipment are very small.
Commercial properties leased that are less than 5000 sq. foot per space	Scope 2	Leased properties less that 5000 sq. ft. as the electricity consumed by these facilities are very small.

Further Information

Attachments

[Page: Methodology - \(1 Dec 2008 - 30 Nov 2009\)](#)

11.1a

Please give the name of the standard, protocol or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions and/or describe the procedure you have used (in the text box in 11.1b below).

Please select the published methodologies that you use.
ISO 14064-1
The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
Other: CDP2010 Reporting Guidance
Other: US EPA Climate Leaders - Optional Emissions from Commuting, Business Travel and Product Transport

11.1b

Please describe the procedure that you use.

For Scope 1, Carnival collects activity data and calculates emissions for the following GHGs:

- Carbon dioxide (CO₂);
- Methane (CH₄);
- Nitrous oxide (N₂O);
- Hydrofluorocarbons (HFCs) family of gases.

The following GHGs are excluded from the report because they are not applicable to our type of operations:

- Perfluorocarbons (PFCs) family of gases; and
- Sulphur hexafluoride (SF₆).

Carnival has developed a web-based GHG Information Management System - software solution called SoFi - for recording, calculating and reporting GHG emissions. Designated Data Collectors from each Operating Line are responsible for quality assurance on the data entered. The process for collecting activity data from ships (except electricity from shore power) is through a standard quarterly questionnaire. The process for collecting shoreside activity data and ship shore electricity consumption is through a standard annual questionnaire. Additional annual activity data needed for metrics are obtained from the company's financial reports.

Please note that the primary fuel used on Carnival's ships is Heavy Fuel Oil (HFO). The ships also use Marine Diesel Oil (MDO) and Marine Gas Oil (MGO), which together amount to approximately 4% of total fuel used. Calculations for mobile GHG emissions from shipboard and shoreside operations are done automatically, by using activity data, emission factors, and Global Warming Potentials (GWP) that have been entered in SoFi. The total quantity of a particular fuel type consumed is multiplied by its respective emission factor to give the CO₂ emissions for that fuel type. The CO₂ emissions obtained for each type of fuel are summed to provide the total CO₂ emissions. Methane (CH₄) and nitrous oxide (N₂O) are the other smaller amounts of greenhouse gases that are emitted as by-products of fuel combustion. The total quantity of a particular fuel type consumed is multiplied by the respective emission factor for CH₄ and N₂O to give the total emissions for that fuel type by type of GHG. Next, the total quantity of each GHG type is multiplied by the respective GWP taken over a 100-year time span for CH₄ and N₂O to obtain the total CO₂-e emissions for CH₄ and N₂O. Finally, the CO₂-e for each gas is summed along with the total CO₂ emissions to give total CO₂-e for mobile emissions.

Carnival ships also use a number of refrigerants that belong to the HFC family of gases. The total quantity for each HFC gas released (fugitive emissions of refrigerant gases) is multiplied by the respective GWP of each HFC gas to obtain the carbon dioxide equivalent (CO₂-e) emission for each HFC gas. Finally, the CO₂-e emissions for the shipboard refrigerant gases released are summed to give the Scope 1 CO₂-e emissions related to HFC family of gases.

Calculation for stationary emission is done by using the same SoFi tool as described earlier. Using the SoFi tool, Carnival enters the stationary combustion information related to the fuel type, fuel, amount of fuel, and measuring units, and the tool provided the GHG CO₂-e emissions for each fuel used. All the emission factors and GWPs are stored in the SoFi database. Additional related data is obtained from the company's financial reports.

Scope 2 GHG emissions are calculated from purchased electricity and steam use data for shipboard operations (shore power only) and for the majority of shoreside operations. Activity data is not available for all shoreside operations. In these small numbers of cases, the activity data was either extrapolated from similar activity data sources or estimated from historical data. It should be noted that in some ports ships shut down their auxiliary diesel engines and connect to shore power (a process called cold ironing) for the entire period that they are alongside the berth. The shore electricity purchased is reported in MWh. This data is then grouped by country and totalled for each country. The totals for each country are then multiplied by the respective electricity emission factors for each country to obtain the total Scope 2 GHG emission for each country. SoFi has a database of country-specific default emission factors that is propriety information developed

through PE International research. It should be noted that, in some cases, for both shipboard and shoreside (both owned and leased facilities) operations, the electricity purchased was reported as coming from renewable energy sources (e.g., hydroelectric power). However, Carnival has chosen to use the average country/region grid emission factor when calculating its GHG emissions.

11.2

Please also provide the names of and links to any calculation tools used.

Please select the calculation tools used.

PE-International: SoFi

GHG Protocol - GHG emissions from stationary combustion 3.1 March 2008

11.3

Please give the global warming potentials you have applied and their origin.

Gas	Reference	GWP
Carbon dioxide	IPCC Fourth Assessment Report (AR4 - 100 year)	1
Methane	IPCC Fourth Assessment Report (AR4 - 100 year)	25
Nitrous oxide	IPCC Fourth Assessment Report (AR4 - 100 year)	298
CFC-11	IPCC Fourth Assessment Report (AR4 - 100 year)	4750
CFC-12	IPCC Fourth Assessment Report (AR4 - 100 year)	10900
HCFC-22	IPCC Fourth Assessment Report (AR4 - 100 year)	1810
HFC-134a	IPCC Fourth Assessment Report (AR4 - 100 year)	1430
Other: R 401A	Other: UNEP 2008	970
Other: R 404A	Other: Unitor Refrigerant Handling Guide	3784
Other: R 407A	Other: Unitor Refrigerant Handling Guide	1990
Other: R 407C	Other: Unitor Refrigerant Handling Guide	1653
Other: R 409A	Other: Unitor Refrigerant Handling Guide	1290
Other: R 408A	Other: Unitor Refrigerant Handling Guide	3020
Other: R 410A	Other: Dupont 2008 International Symposium	2088
Other: R 417A	Other: UNEP 2008	1950
Other: R 502A	Other: Unitor Refrigerant Handling Guide	5590
Other: R 507A	Other: Unitor Refrigerant Handling Guide	3850
Halon-1301	IPCC Fourth Assessment Report (AR4 - 100 year)	7140

11.4

Please give the emission factors you have applied and their origin.

Fuel/Material	Emission Factor	Unit	Reference
Other: Marine Heavy Fuel Oil	0.08	metric tonnes CO2-e per GJ	IMO MEPC/Circ.471 (2005)
Other: Marine Diesel/Marine Gas Oil	0.07	metric tonnes CO2-e per GJ	IMO MEPC/Circ.471 (2005)
Natural gas	0.06	metric tonnes CO2-e per GJ	GHG Protocol for stationary combustion 3.0
Anthracite	0.10	metric tonnes CO2-e per GJ	GHG Protocol for stationary combustion 3.0
Gas/Diesel oil	0.08	metric tonnes CO2-e per GJ	GHG Protocol for stationary combustion 3.0
Other: Gasoline	0.07	metric tonnes CO2-e per GJ	GHG Protocol for stationary combustion 3.0
Propane	0.06	metric tonnes CO2-e per GJ	GHG Protocol for stationary combustion 3.0
Distillate fuel oil No 2	0.07	metric tonnes CO2-e per GJ	GHG Protocol for stationary combustion 3.0
Aviation gasoline	0.07	metric tonnes CO2-e per GJ	EIA Emission Factors

Further Information

Country Grid Emission Factors Electricity Unit

Australia 312.94 CO2-e Kg./GJ

Bahamas 268.75 CO2-e Kg./GJ

Canada 81.18 CO2-e Kg./GJ

France 29.98 CO2-e Kg./GJ

Germany 180.87 CO2-e Kg./GJ

Honduras 226.05 CO2-e Kg./GJ

India 397.43 CO2-e Kg./GJ

Italy 164.76 CO2-e Kg./GJ

Mexico 227.74 CO2-e Kg./GJ

Scandinavia 70.97 CO2-e Kg./GJ

Spain 154.71 CO2-e Kg./GJ

Turks and Caicos Islands 268.75 CO2-e Kg./GJ

UK 161.74 CO2-e Kg./GJ

US 98.46 CO2-e Kg./GJ

Steam heating 0.08 metric tonne CO2-e per GJ.

Attachments

Page: Emissions Scope 1 - (1 Dec 2008 - 30 Nov 2009)

12.1
Please give your total gross global Scope 1 GHG emissions in metric tonnes of CO₂-e.

10264098

¿
Is question 12.2 relevant to your company?

Yes

12.2
Please break down your total gross global Scope 1 emissions in metric tonnes CO₂-e by country/region.

Country	Scope 1 Metric tonnes CO ₂ -e
International Waters	10236642
International Air Space	2237
Australia	42
Bahamas	3030
Canada	1185
Germany	619
Italy	84
Turks and Caicos Islands	104
United Kingdom	125
United States of America	19990
Rest of world	40

12.3
Please explain why not.

12.4
Where it will facilitate a better understanding of your business, please also break down your total gross global Scope 1 emissions by business division. (Only data for the current reporting year requested.)

Business Division	Scope 1 Metric tonnes CO ₂ -e

12.5
Where it will facilitate a better understanding of your business, please also break down your total gross global Scope 1 emissions by facility. (Only data for the current reporting year requested.)

Facilities	Scope 1 Metric tonnes CO ₂ -e

¿
Is question 12.6 relevant to your company?

Yes

12.6
Please break down your total gross global Scope 1 emissions by GHG type. (Only data for the current reporting year requested.)

GHG Type	Scope 1 Emissions (Metric tonnes)	Scope 1 Emissions (Metric tonnes CO ₂ -e)
CO ₂	9951950.00	9951950
CH ₄	735.00	18366
N ₂ O	255.00	76117
HFCs	124.00	217665

12.7
Please explain why not.

¿
Is question 12.8 relevant to your company?

Yes

12.8

Please give the total amount of fuel in MWh that your organization has consumed during the reporting year.

36244283

12.9

Please explain why not.

¿
Is question 12.10 relevant to your company?

Yes

12.10

Please complete the table by breaking down the total figure by fuel type.

Fuels	MWh
Other: HSFO	34919410.00
Other: MDO/MGO	1227414.00
Gas/Diesel oil	44399.00
Motor gasoline	10378.00
Liquefied petroleum gas (LPG)	8770.00
Other: Heating Oil	18200.00
Other: Aviation fuel	8695.00
Liquefied Natural Gas (LNG)	6199.00
Other: Coal	818.00

12.11

Please explain why not.

12.12

Please estimate the level of uncertainty of the total gross global Scope 1 figure that you have supplied in answer to question 12.1 and specify the sources of uncertainty in your data gathering, handling, and calculations.

Uncertainty Range	Main sources of uncertainty	Please expand on the uncertainty in your data
More than 2% but less than or equal to 5%	Data Gaps Assumptions Extrapolation Metering/ Measurement Constraints Published Emissions Factors	The main source of uncertainty is the data gap for the shoreside activity from small sources. There are measurement inaccuracies and uncertainty for shipboard refrigeration gases fugitive emissions data. In addition, GWP values are not readily available for some of the refrigerant gases used on board and these values have been taken from supplier documentation. Emission factors vary depending on the referenced sourced document. Some of the emission factors used in the calculation are generic in nature and do not accurately reflect emissions from a specific process or fuel (e.g. nitrous oxides and methane emissions from HFO, MDO, and MGO combustion in ship's engines)

Further Information

Attachments

[Page: Emissions Scope 2 - \(1 Dec 2008 - 30 Nov 2009\)](#)

13.1

Please give your total gross global Scope 2 GHG emissions in metric tonnes of CO2-e.

53123

¿
Is question 13.2 relevant to your company?

Yes

13.2

Please break down your total gross global Scope 2 emissions in metric tonnes of CO2-e by country/region.

Country	Metric tonnes CO2-e
Australia	995
Canada	644

Germany	380
Italy	1850
Other: Spain	645
Turks and Caicos Islands	324
United Kingdom	3911
United States of America	43737
Rest of world	394
Bahamas	243

13.3

Please explain why not.

13.4

Where it will facilitate a better understanding of your business, please also break down your total gross global Scope 2 emissions by business division. (Only data for the current reporting year requested.)

Business division name	Metric tonnes CO2-e
------------------------	---------------------

13.5

Where it will facilitate a better understanding of your business, please also break down your total gross global Scope 2 emissions by facility. (Only data for the current reporting year requested.)

Facility name	Metric tonnes CO2-e
---------------	---------------------

¿ Is question 13.6 relevant to your company?

Yes

13.6

How much electricity, heat, steam, and cooling in MWh has your organization purchased for its own consumption during the reporting year?

Please supply data for these energy types.	MWh
Electricity	53123
Heat	0
Steam	0
Cooling	0

13.7

Please explain why not.

13.8

Please estimate the level of uncertainty of the total gross global Scope 2 figure that you have supplied in answer to question 13.1 and specify the sources of uncertainty in your data gathering, handling, and calculations.

Uncertainty range	Main sources of uncertainty in your data	Please expand on the uncertainty in your data.
More than 5% but less than or equal to 10%	Data Gaps Assumptions Extrapolation Metering/ Measurement Constraints Published Emissions Factors	The main source of uncertainty is the data gap for the shoreside activity from small sources. Energy use figures for small shoreside facilities are not always available or gathered. These gaps are filled by using energy use figures for facilities in the same area and normalized for area. Data uncertainty exists for electricity purchased for some cruise terminals that are under company control but also used by other entities. Grid emission factors uncertainty exists as they factors are taken from P.E. International databases. The electricity usage from leased facilities presents proper metering/measurement constraints.

Further Information

Attachments

[Page: Emissions Scope 2 Contractual](#)

14.1

Do you consider that the grid average factors used to report Scope 2 emissions in question 13 reflect the contractual arrangements you have

with electricity suppliers?

Yes

14.2

You may report a total contractual Scope 2 figure in response to this question. Please provide your total global contractual Scope 2 GHG emissions figure in metric tonnes CO₂-e.

14.3

Explain the origin of the alternative figure including information about the emission factors used and the tariffs.

14.4

Has your organization retired any certificates, e.g. Renewable Energy Certificates, associated with zero or low carbon electricity within the reporting year or has this been done on your behalf?

No

14.5

Please provide details including the number and type of certificates.

Type of certificate	Number of certificates	Comments
---------------------	------------------------	----------

Further Information

Attachments

Page: Emissions Scope 3

¿
Is question 15.1 relevant to your company?

Yes

15.1

Please provide data on sources of Scope 3 emissions that are relevant to your organization.

Sources of Scope 3 emissions	Metric tonnes of CO ₂ -e	Methodology	If you cannot provide a figure for a relevant source of Scope 3 emissions, please describe the emissions.
Business travel	23800	Business travel is calculated from activity data received from Operating Lines (OL) with the exception of 1 OL (data gap exist). In addition, the data provided from some of the other OL were not always in the correct formats and therefore estimates had to be made to calculate the resultant emission figures. The uncertainty range is approx. 10-20%. However, this emission is very small compared to the Scope 1 emissions but Carnival will continue to improve the quality of data gathering in the future. Emission factors were taken from Climate Leaders - Optional Emissions from Commuting, Business Travel and Product transport - May 2008 document. Passenger-mile was multiplied by the appropriate emission factor to obtain total emissions in CO ₂ -e.	
Transportation & distribution of inputs & waste generated in operations	1089	A main source for this emission comes from the fuel consumed by the trucks and road waste water tankers used for transporting solid and liquid wastes from our ships to disposal facilities. Assumptions: • Round trip from the facility to the ship is approximately 40 miles. • Each road tanker carries approximately 6000 gallons of liquid. • Each truck hauls approximately 21 cubic meters of solid waste. • Average truck and road tanker efficiency is 8.8 miles per gallon. Using recorded data for the total amount of solid waste and waste water landed ashore with the assumptions stated above the total fuel consumed and the distances travelled by the trucks and road tankers were obtained. The total emissions from these activities were calculated using the same emission factors and global warming potentials reported earlier for mobile emissions.	
Purchased goods & services - direct supplier emissions	2584	A source for this emission comes from the fuel consumed by the buses used for transporting passengers from the airports to and from our ships. Assumptions: • Round trip from the airport to the ship is approximately 45 miles. • Each bus carries approximately 40 passengers. • Average bus efficiency is 4 miles per gallon. Using recorded passenger transported data from one of our large Operating Lines an extrapolation was done to estimate the total number of passengers carried by Carnival. Using the assumption detailed above the total fuel consumed and distance travelled by the buses were obtained. The total emissions from this activity were calculated using the same emission factors and GWPs reported earlier for mobile emissions.	

Purchased goods & services - direct supplier emissions	15632	A source for this emission comes from the fuel consumed by the following activities: • Delivery of marine fuel by road fuel tankers, barges or tug-barges to Carnival ships. • Delivery of purchased goods by trucks from the warehouses to the ships (for one large Operating Line). Using recorded number of fuel transactions by fuel trucks and barges or tug-barges with the assumptions stated above the total fuel consumed and the distances travelled by the barges or tug-barges and the fuel trucks were obtained. Using the recorded number of trips made to each port by the delivery trucks with the assumptions stated above the total amount of fuel consumed and the distances travelled by the trucks were obtained. The total emissions from these activities were calculated using the same emission factors and GWPs reported earlier for mobile emissions. The total emissions from Carnival's supply chain activities are small when compared to its Scope 1 emissions. Therefore, we have not calculated the emissions from the supply chains for the entire company.	
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15.2
Please explain why not.

Further Information

Attachments

[Page: Emissions 7](#)

16.1
Does the use of your goods and/or services enable GHG emissions to be avoided by a third party?

Yes

16.2
Please provide details including the anticipated timescale over which the emissions are avoided, in which sector of the economy they might help to avoid emissions and their potential to avoid emissions.

Carnival is in the vacation business and therefore emissions avoided through goods are not applicable. Time scales over which emissions are avoided are for cruising activities pertaining to the current fiscal year 2009. Carnival's plans include locating home ports at strategic positions around the coastline of a country. Some of these home ports eliminate the need for air travel and/or reduce driving distances for passengers interested in cruise vacations. Carnival also provides bus services for passengers embarking and disembarking a ship. Both of the above activities avoid and/or reduce emissions that would have otherwise been produced by passengers. These emissions will be avoided and/or reduced in the transportation sector. When passengers are cruising they avoid emissions that would have been generated during the same period at home. Similarly, crew members who live on board are avoiding similar type of emissions. These emissions will be avoided and/or reduced in the Electricity and Heat sector.

¿
Is question 17.1 relevant to your company?

No

17.1
Please provide your total carbon dioxide emissions in metric tonnes CO2 from the combustion of biologically sequestered carbon i.e. carbon dioxide emissions from burning biomass/biofuels.

17.2
Please explain why not.

Carnival does not produce emissions from combustion of biological sequestered carbon.

Further Information

Attachments

[Page: Emissions 8](#)

18.1a
Please describe a financial intensity measurement for the reporting year for your gross combined Scope 1 and Scope 2 emissions.

If you do not consider a financial intensity measurement to be relevant to your company, select "Not relevant" in column 5 and explain why in column 6.

Figure for Scope 1 and
Scope 2 emissions

GHG units

Multiple of
currency unit

Currency
unit

Financial
intensity metrics

Please explain if not relevant.
Alternatively provide
any contextual details that you
consider relevant to
understand the units or figures you

784.00	Metric tonnes CO2-e	Million	USD(\$)	Revenue	have provided. Total revenues for FY 2009 is approx. \$13,157,000,000.
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18.1b

Please describe an activity-related intensity measurement for the reporting year for your gross combined Scope 1 and Scope 2 emissions.

Oil and gas sector companies are also asked to report activity-related intensity metrics in answer to table O&G1.3.

If you do not consider an activity-related intensity measurement to be relevant to your company, select "Not relevant" in column 3 and explain why in column 4.

Figure for Scope 1 and Scope 2 emissions	GHG units	Activity-related metrics	Please explain if not relevant. Alternatively provide any contextual details that you consider relevant to understand the units or figures you have provided.
0.33	Kilograms CO2-e	Other: Kg.CO2-e/ALB-Km.	ALB stands for Available Lower Berth which is a parameter that is related to the passenger carrying capacity of the ship. The distance travelled during the cruise is reported in kilometres (Km.)

19.1

Do the absolute emissions (Scope 1 and Scope 2 combined) for the reporting year vary significantly compared to the previous year?

No

19.2

Please explain why they have varied and why the variation is significant.

20.1A

Please complete the following table indicating the percentage of reported emissions that have been verified/assured and attach the relevant statement.

Scope 1 (Q12.1)	Scope 2 (Q13.1)	Scope 3 (Q15.1)
Not verified	Not verified	Not verified

20.1B

I have attached a external verification statement that covers the following scopes:

Further Information

19.1 - The increase in absolute emissions for Scope 1 is due to our organic growth. In FY 2009 Carnival took delivery of five new ships. Scope 2 emissions do not vary significantly compared to previous year.

Please note that 96-97% of our carbon footprint comes from the fuel consumed by our ships. These fuel numbers are audited during the financial audit by external independent Auditors; hence Carnival has not verified its Scope 1, 2 & 3 GHG emissions.

Attachments

[Page: Emissions 9 Trading](#)

21.1

Do you participate in any emission trading schemes?

No, we don't participate nor do we currently anticipate participating in any emissions trading scheme within the next two years.

21.2

Please complete the following table for each of the emission trading schemes in which you participate.

Scheme name	Period for which data is supplied.	Allowances allocated	Allowances purchased	Verified emissions - number	Verified emissions - units	Details of ownership

21.3

What is your strategy for complying with the schemes in which you participate or anticipate participating?

21.4

Has your company originated any project-based carbon credits or purchased any within the reporting period?

No

21.5

Please complete the following table.

Credit origination or credit purchase?	Project identification	URL link to project documentation	Verified to which standard?	Number of credits (metric tonnes of CO2-e)	Credits retired?	Purpose e.g. compliance
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Further Information

Attachments

Module: Climate Change Communications

Page: Communications 1

22.1

Have you published information about your company's response to climate change/GHG emissions in other places than in your CDP response?

Yes

22.2

In your Annual Reports or other mainstream filing? *(If so, please attach your latest publication(s).)*

Yes

22.3

Through voluntary communications such as CSR reports? *(If so, please attach your latest publication(s).)*

Yes

Further Information

From FY2005 to FY2008 Carnival reported information related to climate change/GHG emissions in its annual Environmental Management Reports, which are currently available in the 'Sustainability' section of the corporate website (www.carnivalcorp.com). Beginning in FY2009, each of the Carnival's Operating Lines will develop and publish their own Sustainability Report (SR) that will contain climate change/GHG emission information. These SRs will be available for public viewing around the beginning of the third quarter of 2010. Carnival will provide links to these reports and summarize this information they contain, including climate change/GHG emission information in the 'Sustainability' section of the Corporate website.

Attachments

[https://www.cdproject.net/Sites/2010/70/2870/Investor%20CDP%202010/Shared Documents/Attachments/InvestorCDP2010/Communications/CARNIVALPLC10K2009.docx](https://www.cdproject.net/Sites/2010/70/2870/Investor%20CDP%202010/Shared%20Documents/Attachments/InvestorCDP2010/Communications/CARNIVALPLC10K2009.docx)

Carbon Disclosure Project