



Climate Change 2016 Information Request Carnival Corporation

Module: Introduction

Page: Introduction

CC0.1

Introduction

Please give a general description and introduction to your organization.

Headquartered in Miami, Florida, U.S.A. and London, England, Carnival Corporation and Carnival plc, known together as 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, Seabourn and our new brand Fathom in North America; P&O Cruises(UK) and Cunard Line in the United Kingdom; AIDA in Germany; Costa Cruises in Southern Europe; and P&O Cruises(Australia) in Australia.

These brands, which comprise the most recognized cruise brands in North America, the United Kingdom, Germany, Italy, and Australia, 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.

Our new brand Fathom's unique business model for sustained impact and lasting development creates a brand with size, scale and global vision that reaches beyond what the world has ever seen. Pioneered by Fathom™, impact travel is a whole new category of travel: mindful, purpose-driven, and with an easily accessible framework for making an impact on the wider world we live in. Impact travel with Fathom provides the opportunity to build community with like-minded travellers, become immersed in another culture, and work alongside its people to create enduring social impact. In April, 2016 Fathom started sailing to the Dominican Republic, its first impact destination. Our Lead impact partners are Entrena and IDDI. They both have strong community connections in the Dominican Republic. Fathom made history in May 1st, 2016, completing its inaugural voyage to Cuba, marking the first time in over 50 years that a U.S. cruise line has sailed from the U.S. to Cuba. In Cuba, guests connect and engage directly with the Cuban people through a program of educational and cultural exchanges.

We also own a tour company that complements our cruise operations: Holland America Princess Alaska Tours in Alaska and the Canadian Yukon. Combined, our vacation companies attract over 10 million guests annually.

Carnival's wide-ranging product offerings provide our guests with exceptional vacation experiences at an outstanding value. Our success in providing quality cruise vacations has made Carnival among the most profitable company in the leisure travel industry. Traded on both the New York and London Stock Exchanges, Carnival Corporation & plc is the only group in the world to be included in both the S&P 500 and the FTSE 100 indices.

As of February 19, 2016, Carnival operated a fleet of 99 ships, with another seventeen ships scheduled for delivery between 2016 and 2020.

CC0.2

Reporting Year

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

The current reporting year is the latest/most recent 12-month period for which data is reported. Enter the dates of this year first.

We request data for more than one reporting period for some emission accounting questions. Please provide data for the three years prior to the current reporting year if you have not provided this information before, or if this is the first time you have answered a CDP information request. (This does not apply if you have been offered and selected the option of answering the shorter questionnaire). If you are going to provide additional years of data, please give the dates of those reporting periods here.

Work backwards from the most recent reporting year.

Please enter dates in following format: day(DD)/month(MM)/year(YYYY) (i.e. 31/01/2001).

Enter Periods that will be disclosed

Mon 01 Dec 2014 - Mon 30 Nov 2015

CC0.3**Country list configuration**

Please select the countries for which you will be supplying data. If you are responding to the Electric Utilities module, this selection will be carried forward to assist you in completing your response.

Select country
Australia
Bahamas
Canada
Germany
Honduras
Indonesia
Italy
United Kingdom
United States of America
International Waters
International Air Space
Rest of world

CC0.4**Currency selection**

Please select the currency in which you would like to submit your response. All financial information contained in the response should be in this currency.

USD(\$)

CC0.6**Modules**

As part of the request for information on behalf of investors, electric utilities, companies with electric utility activities or assets, companies in the automobile or auto component manufacture sub-industries, companies in the oil and gas sub-industries, companies in the information technology and telecommunications sectors and companies in the food, beverage and tobacco industry group should complete supplementary questions in addition to the main questionnaire.

If you are in these sector groupings (according to the Global Industry Classification Standard (GICS)), the corresponding sector modules will not appear below but will automatically appear in the navigation bar when you save this page. If you want to query your classification, please email respond@cdp.net.

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 <https://www.cdp.net/en-US/Programmes/Pages/More-questionnaires.aspx>.

Further Information**Module: Management****Page: CC1. Governance**

CC1.1**Where is the highest level of direct responsibility for climate change within your organization?**

Board or individual/sub-set of the Board or other committee appointed by the Board

CC1.1a**Please identify the position of the individual or name of the committee with this responsibility**

The Chief Executive Officer has overall responsibility for climate change within Carnival Corporation & plc. The Health, Environmental, Safety & Security ("HESS") Committee is a committee of the Boards of Directors (the "Boards") of Carnival Corporation and Carnival plc ("Carnival"). Its purpose is to assist the Boards in fulfilling their responsibility to supervise and monitor health, environmental, safety, security and sustainability policies, programs, initiatives at sea and onshore, and compliance with health, environmental, safety and security legal and regulatory requirements.

CC1.2**Do you provide incentives for the management of climate change issues, including the attainment of targets?**

Yes

CC1.2a**Please provide further details on the incentives provided for the management of climate change issues**

Who is entitled to benefit from these incentives?	The type of incentives	Incentivized performance indicator	Comment
Management group	Monetary reward	Energy reduction target	The incentive is based on meeting fuel related KPIs. Shipboard Senior Management and Operating Line Senior Management - Meeting fuel consumption budgeted targets.
Corporate executive team	Recognition (non-monetary)	Energy reduction project Energy reduction target	The recognition is based on meeting fuel related KPIs. Driving and managing fuel reduction initiatives among Operating lines. Considered as part of discretionary award consideration.
Management group	Monetary reward	Energy reduction target	The incentive is based on meeting fuel related KPIs. Shoreside and Shipboard Management - As part of their respective Environmental Management Systems (EMS), each Operating Line establishes annual objectives, targets, and plans to improve its environmental performance related to energy. Shoreside and shipboard management are held accountable for meeting these goals, which are closely tracked and affect their annual performance, including pay and bonuses.
Corporate executive team	Recognition (non-monetary)	Emissions reduction target	The recognition is based on meeting the emissions reduction KPIs. We set a corporate target to reduce the intensity of carbon dioxide emissions from shipboard operations by 25 percent by 2020, from our 2005 baseline, as measured in grams of CO ₂ e per ALB-km (Available Lower Birth per kilometer). In addition, our new liquefied natural gas (LNG) ships and LNG ashore projects continue to support our emissions KPI's.

Further Information

CC2.1

Please select the option that best describes your risk management procedures with regard to climate change risks and opportunities

Integrated into multi-disciplinary company wide risk management processes

CC2.1a

Please provide further details on your risk management procedures with regard to climate change risks and opportunities

Frequency of monitoring	To whom are results reported?	Geographical areas considered	How far into the future are risks considered?	Comment
Six-monthly or more frequently	Board or individual/sub-set of the Board or committee appointed by the Board	All the countries in which we are headquartered and which our ships visit.	1 to 3 years	

CC2.1b

Please describe how your risk and opportunity identification processes are applied at both company and asset level

Risk and opportunities are identified by management using a holistic risk framework and a risk management capability model aligned with the organization's strategy and Board/ Management priorities. This framework is part of the Enterprise Risk Management (ERM) program.

The corporate risk department works closely with management to perform annual assessments, identify risks and evaluate controls to ensure compliance with company policies and procedures, as well as laws and regulations. Management reviews the assessments and updates with the Audit Committee.

The Boards of Directors have established a Board-level Health, Environmental, Safety & Security (HESS) Committee to assist the Boards in fulfilling their responsibility to supervise and monitor HESS and sustainability-related policies, programs, initiatives at sea and onshore, and compliance with HESS legal and regulatory requirements. The HESS Committee meets on at least a quarterly basis. Senior management reviews the HESS Policy at least annually. If changes are warranted, it will be updated; otherwise the policy remains the same. The full text of our HESS Policy attached.

Carnival Corporate performs annual HESS audits of each Operating Line and 100% of the fleet of cruise ships. These are in addition to the internal HESS audits performed by the Operating Lines performed under their respective management systems and by external third-party certification and regulatory auditors.

Every two years we perform a materiality assessment. This includes an analysis to identify significant economic, environmental and social aspects of our operations and to determine the relative impacts of these aspects. This enables us to recognize and act effectively in relation to sustainability-related risks and opportunities.

In 2015, as part of our continuous improvements we expanded the third party assurance of our environmental data to include additional environmental indicators beyond GHG and energy.

CC2.1c

How do you prioritize the risks and opportunities identified?

Risk prioritization occurs by actively engaging management and the Board of Directors to determine which risks within the ERM risk framework are appropriate for further evaluation. Consequently, the Environmental Risk Management (ERM) program acts as a catalyst for facilitating the process to recognize critical variables and risk/ uncertainties with the greatest potential to impact the achievement of objectives. Additionally, the ERM program provides a risk framework along with a consistent risk management capability model that enables the identification of gaps between the current and desired state. It is through this evaluation process that opportunities to manage risk are identified.

Pursuant to this program, the Risk Advisory & Assurance Services department works closely with management to perform annual assessments, identify risks and evaluate controls to ensure compliance with company policies and procedures, as well as laws and regulations. Management reviews the assessments and updates with the Audit Committee. In 2015, we updated our ERM risk matrix to include additional standalone risk categories such as climate change and other sustainability related risks.

CC2.2**Is climate change integrated into your business strategy?**

Yes

CC2.2a**Please describe the process of how climate change is integrated into your business strategy and any outcomes of this process**

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. There are multiple aspects of climate change that influence our strategy including regulatory changes, stakeholder influence and economic efficiencies, specifically as it relates to our dependence on fossil fuels. Also, as further evidence of commitment to climate change, Carnival Corporation & plc appointed retired U.S. Navy Vice Admiral William Burke to the newly created position of Chief Maritime Officer (CMO) in December 2013. The CMO reports directly to the Chief Operating Officer and has oversight of the company's maritime operations (including sustainability) around the world. In addition, to address internal communication/reporting process at senior management level, the Maritime Policy department provides quarterly reports and briefs the HESS Committee concerning Carnival's health, environmental (including climate change), safety, security regulatory matters and sustainability. Similarly, at the quarterly Board meetings, the HESS Committee's Chairman reports to the full Boards of Directors on issues raised by these quarterly reports that include climate change. The HESS committee assists the Boards in fulfilling their responsibility to supervise and monitor HESS and Sustainability-related policies, programs, initiatives and compliance with HESS legal and regulatory requirements (see the HESS policy attached).

Each ship in our fleet has a full-time Environmental Officer (EO), who oversees environmental compliance and implementation of procedures. Each EO reports directly to the ship's Captain, and has a direct line of communication to the Brand's shoreside Environmental Management Executive or his/her designated representative.

Our short term strategy to address climate change is managed by the environmental management systems of our Operating Lines (OL), which are each audited by an independent, third-party organization. Some components of the short term strategy to reduce carbon emissions include changes in operational practices, upgrades to existing shipboard equipment, installation of more energy efficiency equipment, etc. Carnival's OLs have established plans, annual objectives and targets within their respective ISO 14001 Environmental Management Systems to reduce fuel consumption. Fuel consumption by our ships is the most significant contributor to Carnival's carbon footprint.

Our long term strategy is to meet the new emission target reduction that was set in 2015 after achieving our previous target. Carnival set an overall corporate target of 25 percent reduction from our 2005 baseline in the intensity of carbon dioxide emissions from shipboard operations by 2020 (as measured in kg of CO₂ per ALB-km; see Note). In addition, Carnival also set 2020 goals for Exhaust Gas Cleaning Technology and cold ironing in 2015 and announced that it will pioneer the usage of alternative fuels by ordering the cruise industry first LNG cruise ships.

Some components of the long term strategy include installing best available energy reduction technologies in new builds, conducting research and development in new ship's ability to use alternative fuels, and in emission reduction technologies etc.

(Note: ALB means "Available Lower Berth", which is a standard cruise industry metric of ship passenger capacity.)

We continue to expand our cross-brand efforts to efficiently address technical innovation via a corporate-funded approach to R&D for critical business issues related to climate change, e.g. new technologies with high fuel saving potentials. These efforts apply to both existing fleet and to new ships that will be delivered in the future. We believe that our GHG emission reduction efforts give us strategic advantage over our competitors because they are the result of our fuel consumption reduction efforts, which help to reduce operational costs.

In 2015 we continued to support The Nature Conservancy global marine protection priorities with a \$2.5 million gift over an initial five year period. Our support to The Nature Conservancy will significantly scale the coral reefs restoration initiatives, the value of marine ecosystem services through the Mapping Ocean Wealth program and continue to advance important science that show how natural systems can help reduce risks to coastal communities from storms and sea levels rising. In particular these efforts support the important mangrove research as these trees are considered as one of the key and most efficient carbon sequestration

ecosystems available. Mangroves capture carbon from the air and use their long root systems to bury it deep within the soil on the ocean floor, while terrestrial forests keep most of it in trees and branches.

As a result of our practices and disclosure, we were listed on the CDP's Climate Disclosure Leadership Index (CDLI) in 2015.

Additional information can be found in our FY2014 sustainability report in the Environmental section on page 38 and Biodiversity section on page 48, report is attached.

CC2.2c

Does your company use an internal price of carbon?

No, and we currently don't anticipate doing so in the next 2 years

CC2.3

Do you engage in activities that could either directly or indirectly influence public policy on climate change through any of the following? (tick all that apply)

Direct engagement with policy makers
Trade associations
Funding research organizations
Other

CC2.3a

On what issues have you been engaging directly with policy makers?

Focus of legislation	Corporate Position	Details of engagement	Proposed legislative solution
Energy efficiency	Support	The International Maritime Organization under the International Convention for the Prevention of Pollution from Ships (MARPOL) added regulations on energy efficiency for ships to MARPOL Annex VI, to make mandatory the Ship Energy Efficiency Management Plan (SEEMP) for all ships by January 2013. The regulations apply to all ships of 400 gross tonnage and above. The SEEMP establishes a mechanism for operators to improve the energy efficiency of ships. Ships are required to keep on board a ship specific Ship Energy Efficiency Management Plan (SEEMP).	We support this legislation with no exceptions.
Clean energy generation	Support	The International Maritime Organization under the International Convention for the Prevention of Pollution from Ships (MARPOL) added regulations for air emissions control areas for ships to MARPOL Annex VI, to make mandatory the control of emissions of sulfur oxides (SOX). As means to comply with this requirement, shore power connection while some ships are docked as well as higher fuel quality is used as allowed within the regulation.	We support this legislation and are working within the regulatory framework to evaluate additional compliance options.
Adaptation resiliency	Support	United States Security and Exchange Commission, requirement to report on risk factors related to climate change.	We support this legislation with no exceptions.

Focus of legislation	Corporate Position	Details of engagement	Proposed legislative solution
Mandatory carbon reporting	Neutral	The EU adopted an EU Directive for monitoring, reporting and verification (MRV) of CO2e emissions in April 2015, where ships entering Europe must provide their emissions for that itinerary. Implementation will begin in July 2018. Actively participating in the workshops and providing comments for final drafting. Leading European Sustainable Shipping Forum (ESSF) subgroup focused on monitoring requirements.	The solution should continue to improve overall efficiency of shipping and not exclude or eliminate the advancements already made.
Clean energy generation	Support	We reached an agreement in principle with the U.S. Environmental Protection Agency (EPA) and the U.S. Coast Guard (USCG) to develop advanced emission control technology to be used in waters surrounding U.S. Coasts. These new controls combine the use of sulfur oxide (SOx) cleaning systems with diesel particulate filters, thus combining technologies well known in the power plant and automotive sectors, but not previously used together on a marine vessel. After initial trials proved successful, we announced plans to install this industry-first exhaust gas cleaning system (EGCS) technology to more than 70 vessels. We have committed over \$400 million to carry out this initiative. We also incorporated EGCS into our 2020 sustainability goals.	We support this legislation with no exceptions.
Clean energy generation	Support	In order to stay ahead of forthcoming MARPOL regulations in regards to air emissions and energy efficiency, we developed our LNG vision. The vision consists of using LNG while in port and at sea. We started using LNG while at port through an LNG barge and then transitioned to using LNG directly by the ship. We have signed a multi-billion dollar contract to build four next-generation cruise ships with the largest guest capacity in the world. The four new ships will also feature a revolutionary "green cruising" design. The ships will be the first in the cruise industry to be powered at sea by Liquefied Natural Gas (LNG) -- the world's cleanest burning fossil fuel, representing a major environmental breakthrough. Pioneering a new era in the use of sustainable fuels, the four new ships will be the first in the cruise industry to use LNG in dual-powered hybrid engines to power the ship both in port and on the open sea. LNG will be stored onboard and used to generate 100 percent power at sea – producing another industry-first innovation for Carnival Corporation and its brands. Using LNG to power the ships in port and at sea will eliminate emissions of soot particles and sulfur oxides.	We support this legislation with no exceptions.

CC2.3b
Are you on the Board of any trade associations or provide funding beyond membership?

Yes

CC2.3c
Please enter the details of those trade associations that are likely to take a position on climate change legislation

Trade association	Is your position on climate change consistent with theirs?	Please explain the trade association's position	How have you, or are you attempting to, influence the position?

Cruise Lines International Association (CLIA)	Consistent	Our position is consistent with the organization in most cases. Carnival is a member and board member of and actively participates in CLIA, the world's largest cruise association. CLIA exists to promote all measures that foster a safe, secure and healthy cruise ship environment, educate, train its travel agent members, and promote and explain the value, desirability and affordability of the cruise vacation experience. CLIA has an Environmental Committee, comprised of representatives from the cruise lines, who meet regularly with groups such as the U.S. Coast Guard and the Environmental Protection Agency to discuss issues related to compliance with environmental regulations. CLIA works with NGOs, universities, regulators and scientists around the globe to continually improve their environmental practices. The cruise line industry also employ engineers and environmental experts who lead programs to assure compliance with today's requirements and direct investments to reduce our environmental footprint in the future.	We have employees on the board of CLIA and on many of the CLIA committees, including the Environmental committee, which address climate change. We play an active role on this committee.
CLIA Europe	Consistent	European divisions of CLIA. Our position is consistent with the organization in most cases. Carnival is a member of and actively participates in CLIA, which represents the leading cruise companies operating in Europe, and aims to promote the interests of cruise operators with the EU Institutions (European Parliament, Council of the European Union, and European Commission) in all matters of shipping policy and ship operations. CLIA is involved with Carbon issues, specifically as they relate to Energy Efficiency Design Index (EEDI).	We have employees on the board of CLIA Europe, as well as on committees.
International Chamber of Shipping (ICS) & International Shipping Federation (ISF)	Consistent	Our position is consistent with the organization in most cases. ICS is leading industry representation on the discussions at IMO to develop a Market Based Measure (MBM) for shipping, with IMO having a view to adoption in 2014. In 2011, ICS members took the important decision to declare the industry's preference for an MBM directly linked to fuel consumption, rather than an emissions trading scheme (ETS). If governments decide that an MBM should be adopted, ICS members have agreed that a mechanism linked to fuel consumption is the one that most shipping companies could probably live with in order to ensure a level playing field and the avoidance of serious market distortion, concluding it would be far simpler to manage and more transparent than an ETS.	We participate in relevant workshops and meetings.
The UK Chamber of Shipping	Consistent	Our position is consistent with the organization in most cases. Safety and Environment Committee Issues covered by the committee include: emissions, climate change, pollution, ballast water convention, all aspects of ship safety, technical and navigation, offshore renewable, offshore operations, marine planning and coastal management.	We are active members and participate in workshops and meetings.
Global Environmental Management Initiative (GEMI)	Consistent	Our position is consistent with the organization in most cases. GEMI is a global leader in developing insights and creating environmental sustainability solutions for business. GEMI is an organization of leading companies dedicated to foster global environmental, health and safety (EHS) and sustainability excellence through the sharing of tools and information to help business achieve environmental sustainability excellence. Through the collaborative efforts of its members, GEMI also promotes a worldwide business ethic for EHS management and sustainable development through example and leadership. GEMI is unique in that it provides a way for companies in a wide range of industrial sectors to work together in a cost effective manner. Members address strategic and tactical issues impacting progressive corporate environmental, health and safety activities in their companies around the world.	We are active members and participate in workshops and meetings.
Sustainable Shipping Initiative (SSI)	Consistent	Our position is consistent with the organization in most cases. The Sustainable Shipping Initiative (SSI) is seeking to create systemic change in the shipping industry, achieving a shift in practices so that sustainability becomes the norm. The SSI is designed around principles of 'System Innovation', which looks at bringing together players from across a system (in this case the shipping value chain), to tackle tricky global issues, which are too big for any one organisation to solve on its own.	We are active members and participate in workshops and meetings.
The National Association for Environmental Management (NAEM)	Consistent	Our position is consistent with the organization in most cases. NAEM is a professional association that empowers corporate leaders to advance environmental stewardship, create safe and healthy workplaces, and promote global sustainability. It is the largest network for Environmental, Health and Safety (EHS), and Sustainability decision-makers, and provides peer-led educational conferences and an active community for sharing solutions to today's corporate EHS and Sustainability management challenges.	We are active members and participate in workshops and meetings.

CC2.3d

Do you publicly disclose a list of all the research organizations that you fund?

Yes

CC2.3e

Please provide details of the other engagement activities that you undertake

USCG and NOAA - Mandatory Ship Reporting System for North Atlantic Right Whales

Collisions with ships are a major source of injury and death of the critically endangered North Atlantic right whale. In an effort to reduce the number of ship strikes, the U.S. National Oceanographic and Atmospheric Administration (NOAA) and the U.S. Coast Guard (USCG) developed and implemented Mandatory Ship Reporting Systems. The systems were endorsed by the International Maritime Organization, a specialized organization of the United Nations.

When ships greater than 300 gross tons enter two key right whale habitats--one off the northeast U.S. and one off the southeast U.S.--they are required to report to a shore-based station. In return, ships receive a message about right whales, their vulnerability to ship strikes and locations of recent sightings.

Climate changes have affected the migration patterns of these marine mammals and tracking their locations also provides critical information for the scientific community.

CC2.3f

What processes do you have in place to ensure that all of your direct and indirect activities that influence policy are consistent with your overall climate change strategy?

We are committed to protecting the environment. Through our Business Partner Code of Business Conduct and Ethics we communicate our expectations that our business partners will join us in following the same standard of behavior. We also developed a Supplier Evaluation Questionnaire (SEQ), which includes specific questions regarding environmental certifications.

Within our Maritime Policy Department, we have a corporate level Sustainability Group and Environmental Policy Group. We communicate and collaborate on our overall climate change strategy through sustainability and environmental working groups. The Chief Maritime Officer (CMO) has oversight over Maritime Operations and reports directly to the Chief Operations Officer. See the Sustainability Management Organizational chart on page 30 of our FY2013 Sustainability Report attached below.

Further Information**Attachments**

[https://www.cdp.net/sites/2016/70/2870/Climate Change 2016/Shared Documents/Attachments/ClimateChange2016/CC2.Strategy/Carnival_2014SustainabilityReport_Web_F\(1\)\(1\).pdf](https://www.cdp.net/sites/2016/70/2870/Climate%20Change%202016/Shared%20Documents/Attachments/ClimateChange2016/CC2.Strategy/Carnival_2014SustainabilityReport_Web_F(1)(1).pdf)

Page: CC3. Targets and Initiatives**CC3.1**

Did you have an emissions reduction or renewable energy consumption or production target that was active (ongoing or reached completion) in the reporting year?

Intensity target

CC3.1b

Please provide details of your intensity target

ID	Scope	% of emissions in scope	% reduction from base year	Metric	Base year	Normalized base year emissions covered by target	Target year	Is this a science-based target?	Comment
Int1	Scope 1	97%	25%	Other: grams CO ₂ e per available lower berth kilometer	2005	347	2020	No, and we do not anticipate setting one in the next 2 years	We set a Corporate target to reduce the intensity of carbon dioxide emissions from shipboard operations by 25 percent by 2020, from our 2005 baseline, as measured in grams of CO ₂ e per ALB-km. Available lower berth (ALB) is a standard measure of ship passenger capacity for the reporting period. Target relates to Scope 1 emissions, FY 2005 (base year) through FY2020(target year) for ship operation and to Scope 1 emissions from ship's fuel only. Ship's fuel GHG emissions account for approx. 97 percent of our carbon footprint.

CC3.1c

Please also indicate what change in absolute emissions this intensity target reflects

ID	Direction of change anticipated in absolute Scope 1+2 emissions at target completion?	% change anticipated in absolute Scope 1+2 emissions	Direction of change anticipated in absolute Scope 3 emissions at target completion?	% change anticipated in absolute Scope 3 emissions	Comment
Int1	Increase	18			Intensity target relates to Scope 1 emissions from ship's fuel only. Ship's fuel GHG emissions account for approx. 97 percent of our carbon footprint.

CC3.1e

For all of your targets, please provide details on the progress made in the reporting year

ID	% complete (time)	% complete (emissions or renewable energy)	Comment
Int1	66.67%	23.4%	

CC3.2

Do you classify any of your existing goods and/or services as low carbon products or do they enable a third party to avoid GHG emissions?

Yes

CC3.2a

Please provide details of your products and/or services that you classify as low carbon products or that enable a third party to avoid GHG emissions

Level of aggregation	Description of product/Group of products	Are you reporting low carbon product/s or avoided emissions?	Taxonomy, project or methodology used to classify product/s as low carbon or to calculate avoided emissions	% revenue from low carbon product/s in the reporting year	% R&D in low carbon product/s in the reporting year	Comment
Company-wide	<p>Carnival's plans include locating home ports at strategic positions around the coastlines of the countries where we operate. Some of these home ports eliminate the need for air travel or reduce the driving distances for passengers purchasing cruise vacations. Some of our cruise offering also includes the opportunity to begin the cruise in your home port rather than at the home port of the cruise vessel. Visiting multiple destinations during the cruise eliminates the need for air travel if one were to fly to each of these destinations. These types of arrangement allow our passengers to avoid additional transportation related emissions. Carnival provides bus services for passengers embarking and disembarking a ship. By using the bus service, passengers' emissions related to driving in their own automobiles are avoided. When passengers are cruising they avoid some emissions that would have been generated during the same period at home i.e. if they were not cruising. Similarly, crew members who live 24 hours per day on board during their work contracts are avoiding similar type of emissions when compared to employees who work normal work-day hours at the employer's office and drive to and from work each day. Overall, it is very challenging to estimate avoided emissions because a cruise ship is more than just a hotel; in fact, it is more like a city. Cruise ships manage complex operations that include (among others) generating their own electricity; producing and treating potable water from seawater; storing, preparing, and serving food; storing, treating and processing wastes, including wastewater and garbage; and providing numerous recreational and entertainment amenities.</p>	Avoided emissions	Other: Strategic home port locations			<p>Since the above mentioned emissions avoided are small compared to our overall emissions, it is not cost effective to collect the data required to provide an estimation of avoided emissions.</p>
Group of products	<p>We are pioneering the use of LNG to power cruise ships. We ordered two new cruise ships with dual powered engines. The ships are to be commissioned in 2019-2020.</p>	Low carbon product	Other: This fuel has less CO ₂ e than conventional Marine Diesel Oil.			<p>We are pioneering the use of LNG to power cruise ships. The ships are to be commissioned in 2019-2020. Switching from Marine Diesel to LNG results in a 25% reduction in carbon emissions.</p>

CC3.3
Did you have emissions reduction initiatives that were active within the reporting year (this can include those in the planning and/or implementation phases)

Yes

CC3.3a
Please identify the total number of projects at each stage of development, and for those in the implementation stages, the estimated CO2e savings

Stage of development	Number of projects	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	5	
To be implemented*	2	2900
Implementation commenced*	71	85000
Implemented*	3	8000
Not to be implemented	0	

CC3.3b
For those initiatives implemented in the reporting year, please provide details in the table below

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
Energy efficiency: Processes	Various shipboard data systems for improved energy management	9200	Scope 1	Voluntary	650000	590000	<1 year	6-10 years	
Energy efficiency: Building services	Upgrades to mechanical and electrical components to improve engine efficiency and reliability.	16800	Scope 1	Voluntary	1180000	7280000	4-10 years	16-20 years	
Energy efficiency: Building services	Upgrades to chilled water production, chilled water distribution, and ventilation systems to improve ship's cooling efficiency.	41600	Scope 1	Voluntary	2930000	8330000	1-3 years	16-20 years	
Energy efficiency: Building services	Improving hull hydrodynamic efficiency through a range of underwater modifications.	6800	Scope 1	Voluntary	480000	2030000	4-10 years	16-20 years	
Energy efficiency: Building services	Upgrade or replacement of waste heat recovery systems, LED lighting upgrades, advanced waste water treatment plants, and various other ship components.	17800	Scope 1	Voluntary	1260000	6560000	4-10 years	16-20 years	

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
Energy efficiency: Building fabric	Four new cruise ships to be powered at sea by Liquefied Natural Gas (LNG) with dual-powered hybrid engines.		Scope 1	Voluntary				>30 years	Estimated annual CO2e savings and investment required are confidential at this time.
Behavioral change	Creating energy savings awareness together with consumption reduction training and development programs.		Scope 1	Voluntary			1-3 years	16-20 years	Studies show that behavioral changes contribute to reductions in CO2e emissions. Quantitative data is not available at this time.

CC3.3c

What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Dedicated budget for energy efficiency	Technical Operations management reviews and analyzes energy efficiency improvements for ships in their fleet, and develop annual budgets for investing in these technologies.
Dedicated budget for low carbon product R&D	Dedicated position within Corporate Shipbuilding to manage processes related to researching and testing fuel efficiency technologies that would result in lower carbon footprints applicable to both existing ship fleet and future new builds. The Program Manager develops annual budgets for corporate management's approval, provides regular updates to the responsible management, and periodically updates senior management. Note: Product in our case refers to the ship itself which provides a service.
Employee engagement	We have a dedicated working group of technical experts from across our Brands who focus energy and time on evaluating existing as well as new technologies with a view to reducing energy consumption onboard and resultant emissions. This group tests potential solutions and share their findings and recommendations across all Brands.
Dedicated budget for energy efficiency	Some of our Operating Lines have a separate Capital Expenditure (CAPEX) budget for energy efficiency initiatives.
Other	Dedicated software to track KPIs. Energy consumption KPIs tracked for all brands in a dedicated sustainability software.

Further Information

Note that the information provided in 3.3a and 3.3b is for corporate projects only (about 15% of the projects), it does not include all the Brand projects.

Page: CC4. Communication**CC4.1**

Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s)

Publication	Status	Page/Section reference	Attach the document	Comment
In mainstream reports (including an integrated report) in accordance with the CDSB Framework	Complete	Page 22-23/ Sustainability	https://www.cdp.net/sites/2016/70/2870/Climate Change 2016/Shared Documents/Attachments/CC4.1/CarnivalCorporationplc_10K_FY2015.pdf	
In voluntary communications	Underway - previous year attached	Page 38-43 / Environmental Management and Energy & Emissions	https://www.cdp.net/sites/2016/70/2870/Climate Change 2016/Shared Documents/Attachments/CC4.1/Carnival_2014SustainabilityReport_Web_F.pdf	
In voluntary communications	Complete	Corporate Website/Sustainability Section		Website is available here: http://phx.corporate-ir.net/phoenix.zhtml?c=140690&p=irol-sustainability

Further Information**Module: Risks and Opportunities****Page: CC5. Climate Change Risks****CC5.1**

Have you identified any inherent climate change risks that have the potential to generate a substantive change in your business operations, revenue or expenditure? Tick all that apply

- Risks driven by changes in regulation
- Risks driven by changes in physical climate parameters
- Risks driven by changes in other climate-related developments

CC5.1a

Please describe your inherent risks that are driven by changes in regulation

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Air pollution limits	The EU adopted an EU Directive for monitoring, reporting and verification (MRV) of CO2e emissions in April 2015, where ships entering Europe must provide their emissions for that itinerary. Implementation will begin in July 2018. Actively participating in the workshops and providing comments for final drafting. Plan to lead European Sustainable Shipping Forum (ESSF) subgroups focused on monitoring or verification. This	Increased operational cost	>6 years	Direct	About as likely as not	Low-medium	An absolute threshold may be difficult while the Corporation continues to grow and increase the number of ships in the fleet. The financial implications could be major depending on the absolute CO2e threshold. Additionally, implementing new technology could involve additional capital costs. For example Carnival has	We have 2020 sustainability goal to reduce the Corporation's CO2e emissions, as well as Exhaust Gas Cleaning System and Cold Ironing goals. We have dedicated departments that evaluate technology and new systems for installation throughout our fleet. These departments evaluate technical, regulatory, safety, environmental and operational aspects associated with the systems/technologies. Among the challenges typically encountered when adapting shore-based technologies to shipboard use are adjustments for space, weight and access limitations, material standards, operating environment and regulatory approvals. All of these factors increase the complexity of projects to improve environmental technologies. In order to expedite the process, ships within the fleet are selected to test systems/technologies. There are three basic outcomes of such tests: GREEN LIGHT is given for ship installation; YELLOW LIGHT is given where manufacturers typically need to make adjustment to the	Cost will depend on the technology. There is an annual cost associated with R&D.

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Systems/technology management evaluation	Cost of management
	could lead to a potential EU directive to limit absolute CO2e emissions.						costs over \$100 million for exhaust gas cleaning technology throughout the fleet.	systems/technology could be considered; and RED LIGHT is given and systems/technologies are not approved for installation. Carnival also participates in policy setting meetings directly or through the cruise trade association providing cruise industry technical expertise at international meetings including the International Maritime Organization (IMO). Our established R&D process and input through the trade organization significantly reduces the potential magnitude of this risk.	
							The costs could be high	We have a 2020 sustainability goal to reduce the Corporation's CO2e emissions, as well as Exhaust Gas Cleaning System and Cold Ironing goals. We have dedicated departments that evaluate technology and new systems for installation throughout our fleet. These departments evaluate technical, regulatory, safety, environmental and operational aspects associated with the systems/technologies. Among the challenges typically encountered when adapting shore-based technologies to shipboard use are adjustments for space, weight and access limitations, material standards, operating environment and regulatory approvals. All of these factors increase	Cost will depend on an analysis of

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management approach	Cost of management
Carbon taxes	Regulations may impose economic incentive on GHG emissions from the consumption of marine fuel.	Increased operational cost	>6 years	Direct	About as likely as not	Low-medium	In addition, implementing new technology could involve additional capital costs.	the complexity of projects to expedite the process, ships within the fleet are selected to test systems/technologies. There are three basic outcomes of such tests: GREEN LIGHT is given for ship installation; YELLOW LIGHT is given where manufacturers typically need to make adjustment to the systems/technology before further evaluations could be considered; and RED LIGHT is given and systems/technologies are not approved for installation. Carnival also participates in policy setting meetings directly or through the cruise trade association providing cruise industry technical expertise at international meetings including the International Maritime Organization (IMO). Our established R&D process and input through the trade organization significantly reduces the potential magnitude of this risk.	the cost of the carbon tax versus the technology to reduce direct emissions. There is an annual cost associated with R&D.
								We have a 2020 sustainability goal to reduce the Corporation's CO2e emissions, as well as Exhaust Gas Cleaning System and Cold Ironing goals. We have dedicated departments that evaluate technology and new systems for installation throughout our fleet. These departments evaluate technical, regulatory, safety, environmental and	

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	operational aspects associated with the method systems/technologies.	Cost of management
Cap and trade schemes	Regulations may impose caps on the amount of release of Greenhouse Gases (GHGs) in cruising areas. This might require Carnival to purchase allowances in the future, which would increase the operating expenses.	Increased operational cost	>6 years	Direct	About as likely as not	Low-medium	The costs could be high depending on the cost of the allowance. In addition, implementing new technology could involve additional capital costs.	Among the challenges typically encountered when adapting shore-based technologies to shipboard use are adjustments for space, weight and access limitations, material standards, operating environment and regulatory approvals. All of these factors increase the complexity of projects to improve environmental technologies. In order to expedite the process, ships within the fleet are selected to test systems/technologies. There are three basic outcomes of such tests: GREEN LIGHT is given for ship installation; YELLOW LIGHT is given where manufacturers typically need to make adjustment to the systems/technology before further evaluations could be considered; and RED LIGHT is given and systems/technologies are not approved for installation. Carnival participates in policy setting meetings directly or through the cruise trade association providing cruise industry technical expertise at international meetings including the International Maritime Organization (IMO). Our established R&D process and input through the trade organization significantly reduces the potential magnitude of this risk.	Cost will depend on an analysis on the cost of the allowances versus the technology. There is an annual cost associated with R&D.

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Uncertainty surrounding new regulation	Diverse regulations in different ports of call and countries/areas of operation.	Increased operational cost	Unknown	Direct	More likely than not	Low	The financial implications depend on the location and type of regulation.	Management monitors potential regulation throughout the world. Carnival is also member of Cruise Lines International Association, the world's largest cruise association. Through this association Carnival can put forth opinions on forthcoming regulations. Also, depending on the location and type of regulation, the Operating Lines could change their itineraries to manage the costs.	Management will determine the cost of changing itineraries versus the cost of adapting to local regulation. There is an annual cost associated with this.
	Related to meeting energy efficiency operational and design index requirements for ships in the fleet. The International Maritime Organization (IMO) under the International convention for the Prevention of Pollution from Ships (MARPOL) added							We have a 2020 sustainability goal to reduce the Corporation's CO2e emissions, as well as Exhaust Gas Cleaning System and Cold Ironing goals. We have dedicated departments that evaluate technology and new systems for installation throughout our fleet. These departments evaluate technical, regulatory, safety, environmental and operational aspects associated with the systems/technologies. Among the challenges typically encountered when adapting shore-based technologies to shipboard use are adjustments for space, weight and access limitations, material standards, operating environment and regulatory approvals. All of these factors increase the complexity of projects to improve environmental	Cost will depend on an analysis on the type of efficiency requirements.

Product Risk Driver regulations and standards	Description	Potential capital impact	1 to 3 Timeframe years	Direct/ Indirect	Likelihood Likely	Low- Medium Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>regulations on energy efficiency for ships to MARPOL Annex VI to make mandatory the Ship Energy Efficiency Management Plan (SEEMP) for all ships, which entered into force in January 2013. Beginning in September 2015, it will require the Energy Efficiency Design Index (EEDI) for certain ships.</p>						<p>The cost of this financial implications included in our R&D projects.</p>	<p>technologies. In order to explore new technologies within the fleet are selected to test systems/technologies. There are three basic outcomes of such tests: GREEN LIGHT is given for ship installation; YELLOW LIGHT is given where manufacturers typically need to make adjustment to the systems/technology before further evaluations could be considered; and RED LIGHT is given and systems/technologies are not approved for installation. Carnival also participates in policy setting meetings directly or through the cruise trade association providing cruise industry technical expertise at international meetings including the International Maritime Organization (IMO). Our established R&D process and input through the trade organization significantly reduces the potential magnitude of this risk.</p>	<p>There is an annual cost associated with R&D. Implementing new technology could involve additional capital costs.</p>

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Fuel/energy taxes and regulations	Regulations have entered in to force restricting the marine fuels in certain geographical areas that ships may use to more expensive grades of fuel. The International Maritime Organization's (IMO) MARPOL Annex VI places a cap on Sulfur content of fuel used within Emission Control Areas (ECAs) at 1.0%. In 2015, the fuel sulfur limit in the North American and other ECAs was changed to 0.1%. The IMO's global sulfur limit in non-ECA areas is currently 3.5 % and is expected to drop to 0.5% by 2020 or 2025.	Increased operational cost	1 to 3 years	Direct	Virtually certain	High	1) The cost of Marine Diesel Oil (MDO) or Marine Gas Oil (MGO) is about 50% more expensive than High Sulfur Fuel Oil. Our FY2015 fuel costs were \$1,249 million. 2) Carnival has committed over \$400 million for exhaust gas cleaning technology throughout the fleet that will allow us to more cost-effectively comply with the regulatory requirements.	There are currently two methods to comply with these regulations: 1) Purchase lower sulfur fuel (MDO/MGO). This action reduces the risk and is immediate. 2) We have developed a breakthrough solution for cleaner air. A new exhaust gas cleaning system. These new controls combine the use of sulfur oxide (SOx) cleaning system with diesel particulate filters, thus combining technologies well known to the power plant and automotive sectors, but not previously used together on a marine vessel.	1) This is an annual cost of purchasing lower sulfur fuel. As a comparison our FY2015 fuel costs were \$1,249 million. 2) R&D and piloting efforts associated with developing the Exhaust Gas Cleaning System.

CC5.1b

Please describe your inherent risks that are driven by changes in physical climate parameters

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
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<p>Tropical cyclones (hurricanes and typhoons)</p>	<p>Increased incidence of hurricanes and floods may disrupt current cruise itineraries.</p>	<p>Increased operational cost</p>	<p>1 to 3 years</p>	<p>Direct</p>	<p>Virtually certain</p>	<p>Medium</p>	<p>This will need to be estimated on a case-by-case basis based on whether a port-of-call is not available due to the weather event and if the ship was diverted. The financial implications could range from minor to major in scale, depending on the magnitude of the hurricane and its impact on the ports-of-call.</p>	<p>We have experience dealing with weather events such as hurricanes. In such situations, we divert ships to different ports-of-call . For our shore facilities we have a Business Continuity and Disaster Recovery Plan. This reduces the magnitude of the risk.</p>	<p>This will need to be estimated on a case-by-case basis based on costs associated with the change in pots-of-call and logistics. There would be a one-time cost associated with diverting the ship.</p>
<p>Tropical cyclones (hurricanes and typhoons)</p>	<p>Increased incidence of hurricanes and floods may disrupt supply chain operations.</p>	<p>Increased operational cost</p>	<p>1 to 3 years</p>	<p>Indirect (Supply chain)</p>	<p>Likely</p>	<p>Low</p>	<p>This will need to be estimated on a case-by-case basis based on whether a port-of-call is not available due to the weather event and if the ship was diverted. The financial implications could range from minor to major in scale, depending on the magnitude of the hurricane and its impact on the ports-of-call and the supplier.</p>	<p>We have experience dealing with weather events such as hurricanes. In such situations, we divert ships to different ports-of-call and we procure from other suppliers . For our shore facilities we have a Business Continuity and Disaster Recovery Plan. This reduces the magnitude of the risk.</p>	<p>This will need to be estimated on a case-by-case basis based on costs associated with the change in pots-of-call and logistics. There would be a one-time cost associated with diverting the ship.</p>

<p>Uncertainty of physical risks</p>	<p>The actual impact is not predictable until the event has occurred.</p>	<p>Increased operational cost</p>	<p>1 to 3 years</p>	<p>Direct</p>	<p>More likely than not</p>	<p>Unknown</p>	<p>This will need to be estimated on a case-by-case basis based on whether a port-of-call is not available due to the weather event and if the ship was diverted. The financial costs will range from minor (diverting a ship) to major (loss of the island).</p>	<p>Diverting ships to different ports-of-call. For our shore facilities we have a Business Continuity and Disaster Recovery Plan. This reduces the magnitude of this risk.</p>	<p>This will need to be estimated on a case-by-case basis based on costs associated with the change in pots-of-call and logistics. There would be a one-time cost associated with diverting the ship.</p>
<p>Sea level rise</p>	<p>The rise in sea level may impact full use of our private islands and ports-of-call.</p>	<p>Other: Limit to amenities provided to passengers</p>	<p>1 to 3 years</p>	<p>Direct</p>	<p>More likely than not</p>	<p>Low</p>	<p>This will need to be estimated on a case-by-case basis based on occupancy of the ships and on whether the itineraries change as a result.</p>	<p>Potential change in itineraries. For our shore facilities we have a Business Continuity and Disaster Recovery Plan. This reduces the magnitude of this risk.</p>	<p>This will need to be estimated on a case-by-case basis based on costs associated with the change in pots-of-call and logistics. There would be a one-time cost associated with diverting the ship.</p>

Change in precipitation extremes and droughts	Availability of potable water for operational use due to climate change factors (drought). It could also impact the desirability of the port to our guests.	Increased operational cost	1 to 3 years	Direct	Virtually certain	Low	The ships may have to make more water from sea water, which will lead to an increase in fuel costs. This could have a medium financial impact depending on fuel prices. Itineraries may have to be changed if the port is no longer desirable to guests. This would be a minor financial costs.	Some ports-of-call are already experiencing drought issues. Before our ships visit a port, we must determine whether potable water is available and abundant for our passengers. If there is a drought, we will change our water procurement so as not to purchase water from the port at the expense of the local population. This allows us to determine whether a ship will bunker water at the port, at another port or increase the amount made from seawater. For our shore facilities we have a Business Continuity and Disaster Recovery Plan. These plans reduce the magnitude of this risk.	Costs associated with adjusting the water procurement locations and/or securing increased fuel deliveries. This increases the annual operational costs.
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CC5.1c

Please describe your inherent risks that are driven by changes in other climate-related developments

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Fluctuating socio-economic conditions	Since our ships operate globally, we may be impacted by fluctuating socio-economic conditions in any specific country or regional area that we visit.	Increased operational cost	1 to 3 years	Direct	Likely	Low	This will need to be estimated on a case-by-case basis based on whether a port-of-call is not available due to conditions at the port-of-call and if the ship was diverted.	Diverting ships to different ports-of-call	This will need to be estimated on a case-by-case basis based on costs associated with the change in ports-of-call and logistics. There would be a one-time cost associated with diverting the ship.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Reputation	We may be impacted by negative perceptions by local public and lobby groups around our carbon performance.	Reduced demand for goods/services	1 to 3 years	Direct	More likely than not	Low	Potential decrease in revenues depending on how widespread the issue is.	Educating the public on our carbon footprint and performance	Cost of educating the public. This is an annual cost.
Increasing humanitarian demands	Due to climate change there may be increasing demand for humanitarian aid as potential food shortage and weather related destruction increase.	Increased operational cost	1 to 3 years	Direct	Virtually certain	Low	This will need to be estimated on a case-by-case basis based on the location of the port and magnitude of the event.	Providing financial donations as well as transporting supplies to affected areas.	This will need to be estimated on a case-by-case basis based on costs associated with the change in ports-of-call and logistics. There would be a one-time cost associated with diverting the ship.

Further Information

Page: CC6. Climate Change Opportunities

CC6.1

Have you identified any inherent climate change opportunities that have the potential to generate a substantive change in your business operations, revenue or expenditure? Tick all that apply

- Opportunities driven by changes in regulation
- Opportunities driven by changes in physical climate parameters
- Opportunities driven by changes in other climate-related developments

CC6.1a

Please describe your inherent opportunities that are driven by changes in regulation

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
International agreements	<p>International agreements set forth by countries or organizations such as the International Maritime Organization (IMO) in relation to energy efficiency requirements such as EEDI, EEOI and SEEMP. Related to meeting energy efficiency operational and design index requirements for ships in the fleet. The International Maritime Organization (IMO) under the International convention for the Prevention of Pollution from Ships (MARPOL) added regulations on energy efficiency for ships to MARPOL Annex VI to make mandatory the Ship Energy Efficiency Management Plan (SEEMP) for all ships,</p>	Reduced operational costs	1 to 3 years	Direct	Very likely	Low-medium	<p>This depends on the type of regulations and the type of new technology that will need to be installed. This could range from small incremental costs to major capital costs. The potential benefits for energy efficiency regulations mainly rest on the price of fuel. If fuel prices increase significantly, the benefits of greater efficiency will be significant. Efficiency initiatives will have a</p>	<p>Participating in various policy setting meetings directly or through the cruise trade association providing cruise industry technical expertise at international meetings including the International Maritime Organization (IMO) in relation to EEDI, EEOI and SEEMP. We also have dedicated departments that evaluate technology and new systems for installation throughout our fleet. These departments evaluate technical, regulatory, safety, environmental and operational aspects associated with the systems/technologies. Drive energy efficiency initiatives and energy conservation programs to reduce the consumption of</p>	<p>Annual costs of participation in policy setting and annual R&D costs. Initiative costs.</p>

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated cost/financial implications	fuel and/or other Management method	Cost of management
	<p>which entered into force on January 2013. Beginning in September 2015, it required the Energy Efficiency Design Index (EEDI) for certain ships. The increased efficiency of the fleet could reduce operational costs, specifically fuel costs.</p>								
<p>Voluntary agreements</p>	<p>Working with specific geographic regulatory bodies to address their concerns for example Italy - shore power connectivity for ships, and in California - related to in-bound operating speeds of ships.</p>	<p>Reduced operational costs</p>	<p>1 to 3 years</p>	<p>Direct</p>	<p>Likely</p>	<p>Low</p>	<p>Slower speeds may reduce fuel costs. Using shore power will reduce fuel costs, but will increase electricity costs.</p>	<p>Participating in various meetings with communities directly or through the cruise trade association providing cruise industry technical expertise at international meetings. Investing in infrastructure or adjusting procedures.</p>	<p>Annual costs of participation in meetings, infrastructure costs, energy costs.</p>

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Product efficiency regulations and standards	Review the proposed upcoming efficiency regulations and standards and to include it into the technical specifications of the new ships being built. Remaining abreast of potential regulations may provide us with competitive advantage.	Reduced capital costs	>6 years	Direct	More likely than not	Low	Implications would likely include capital costs for new energy efficient machinery.	We have dedicated departments that evaluate technology and new systems for installation throughout our fleet. These departments evaluate technical, regulatory, safety, environmental and operational aspects associated with the systems/technologies.	Financial impacts of staying abreast of potential regulation is minor.
Emission reporting obligations	The EU adopted an EU Directive for monitoring, reporting and verification (MRV) of CO2e emissions in April 2015, where ships entering Europe must provide their emissions for that itinerary. Implementation will begin in July 2018. The increased transparency may attract more guests.	Increased demand for existing products/services	1 to 3 years	Direct	Likely	Low	The costs will be low to submit per the MRV.	The company has been reporting GHG emissions voluntarily for the past seven years through its environmental, carbon disclosure and sustainability reports.	Cost will be minimal as we already capture and report on similar data.
								We have dedicated departments that evaluate technology and new systems for installation	

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
General environmental regulations, including planning	There are several geographic regions in the world that in order for the ships to operate, will require policy changes or additional investment in equipment.	Increased demand for existing products/services	1 to 3 years	Direct	Very likely	Low	Policy change costs will likely be minimal. Capital costs could be major.	throughout our fleet. Management method evaluate technical, regulatory, safety, environmental and operational aspects associated with the systems/technologies. Among the challenges typically encountered when adapting shore-based technologies to shipboard use are adjustments for space, weight and access limitations, material standards, operating environment and regulatory approvals. All of these factors increase the complexity of projects to improve environmental technologies. In order to expedite the process, ships within the fleet are selected to test systems/technologies. There are three basic outcomes of such tests: GREEN LIGHT is given for ship installation; YELLOW LIGHT is given where manufacturers typically need to make adjustment to the systems/technology before further evaluations could be considered; and RED LIGHT is given and systems/technologies are not approved for installation. Carnival Corporation also Participates in various	Ongoing costs related to R&D and participation in policy setting meetings.

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								policy setting through the cruise trade association providing cruise industry technical expertise at international meetings including the International Maritime Organization (IMO).	

CC6.1b

Please describe the inherent opportunities that are driven by changes in physical climate parameters

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Change in mean (average) temperature	Change in mean temperatures could open up new routes and ports	Increased demand for existing products/services	>6 years	Direct	More likely than not	Low	Minor costs of planning new itineraries.	Planning itineraries and researching potential new ports-of-call.	Ongoing annual cost as part of current business activities.
Change in precipitation pattern	Change in precipitation make some ports more attractive.	Increased demand for existing products/services	>6 years	Direct	More likely than not	Low	Minor costs of planning new itineraries.	Planning itineraries and researching potential new ports-of-call.	Ongoing annual cost as part of current business activities.

CC6.1c

Please describe the inherent opportunities that are driven by changes in other climate-related developments

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
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Reputation	Climate change mitigation efforts could be seen as positive by passengers, suppliers, and non-governmental organizations (NGOs).	Increased demand for existing products/services	Up to 1 year	Direct	Likely	Low	This could lead to positive impact in the form of increased revenues. The financial implication will be minor.	We continue to seek opportunities to reduce the environmental impacts from our operations by reducing emissions, reducing the generation of waste and implementing conservation initiatives. We have set a corporate target to reduce our CO2e emissions from operations and all of our Brands have set ISO14001 objectives and targets. We communicate our efforts through our sustainability reports, interviews and articles, investor groups and inquiries and other related methods.	The cost of reporting through various methods in minor.
Changing consumer behaviour	Communicating our climate change efforts and performance may change consumer behaviour.	Wider social benefits	1 to 3 years	Indirect (Client)	Likely	Low	This could lead to positive impact in the form of increased revenues. The financial implication will be minor.	We continue to seek opportunities to reduce the environmental impacts from our operations by reducing emissions, reducing the generation of waste and implementing conservation initiatives. We have set a corporate target to reduce our CO2e emissions from operations and all of our Brands have set ISO14001 objectives and targets. We communicate our efforts through our sustainability reports, interviews and articles, investor groups and inquiries and other related methods.	The cost of reporting through various methods in minor.

Further Information

Module: GHG Emissions Accounting, Energy and Fuel Use, and Trading

Page: CC7. Emissions Methodology

CC7.1

Please provide your base year and base year emissions (Scopes 1 and 2)

Scope	Base year	Base year emissions (metric tonnes CO2e)
Scope 1	Wed 01 Dec 2004 - Wed 30 Nov 2005	8576713
Scope 2 (location-based)	Fri 01 Dec 2006 - Fri 30 Nov 2007	82106
Scope 2 (market-based)		

CC7.2

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

Please select the published methodologies that you use
ISO 14064-1
The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
Other

CC7.2a

If you have selected "Other" in CC7.2 please provide details of the standard, protocol or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions

Direct Emissions from Mobile Combustion Sources - May 2008
US EPA Climate Leaders Optional emissions from Commuting, Business Travel and Product Transport

CC7.3

Please give the source for the global warming potentials you have used

Gas	Reference
CO2	IPCC Fourth Assessment Report (AR4 - 100 year)
CH4	IPCC Fourth Assessment Report (AR4 - 100 year)
Other: N2O	IPCC Fourth Assessment Report (AR4 - 100 year)
Other: CFC-11	IPCC Fourth Assessment Report (AR4 - 100 year)
Other: CFC-12	IPCC Fourth Assessment Report (AR4 - 100 year)
Other: HCFC-22	IPCC Fourth Assessment Report (AR4 - 100 year)
Other: HFC-134a	IPCC Fourth Assessment Report (AR4 - 100 year)
Other: R 401A	Other: UNEP 2008
Other: R 404A	Other: Unitor Refrigerant Handling Guide
Other: R 407A	Other: Unitor Refrigerant Handling Guide
Other: R 407C	Other: Unitor Refrigerant Handling Guide

Gas	Reference
Other: R 409A	Other: Unitor Refrigerant Handling Guide
Other: R 408A	Other: Unitor Refrigerant Handling Guide
Other: R 410A	Other: Dupont 2008 International Symposium
Other: R 417A	Other: UNEP 2008
Other: R 502A	Other: Unitor Refrigerant Handling Guide
Other: R 507A	Other: Unitor Refrigerant Handling Guide
Other: R 422a&d	Other: Isceon MO 79 - Climalife

CC7.4

Please give the emissions factors you have applied and their origin; alternatively, please attach an Excel spreadsheet with this data at the bottom of this page

Fuel/Material/Energy	Emission Factor	Unit	Reference
Other: Marine Heavy Fuel Oil	0.08	metric tonnes CO2e per GJ	IMO MEPC/Circ.471 (2005)
Other: Marine Diesel/Marine Gas Oil	0.07	metric tonnes CO2e per GJ	IMO MEPC/Circ.471 (2005)
Distillate fuel oil No 2	0.07	metric tonnes CO2e per GJ	GHG Protocol tool for stationary combustion 3.0
Diesel/Gas oil	0.08	metric tonnes CO2e per GJ	GHG Protocol Mobile Guide
Diesel/Gas oil	0.08	metric tonnes CO2e per GJ	GHG Protocol tool for stationary combustion 3.0
Aviation gasoline	0.07	metric tonnes CO2e per GJ	EIA Emissions Factors
Propane	0.06	metric tonnes CO2e per GJ	GHG Protocol tool for stationary combustion 3.0
Natural gas	0.06	metric tonnes CO2e per GJ	GHG Protocol tool for stationary combustion 3.0

Further Information

Page: **CC8. Emissions Data - (1 Dec 2014 - 30 Nov 2015)**

CC8.1

Please select the boundary you are using for your Scope 1 and 2 greenhouse gas inventory

Operational control

CC8.2

Please provide your gross global Scope 1 emissions figures in metric tonnes CO2e

10320701

CC8.3

Does your company have any operations in markets providing product or supplier specific data in the form of contractual instruments?

Yes

CC8.3a

Please provide your gross global Scope 2 emissions figures in metric tonnes CO2e

Scope 2, location-based	Scope 2, market-based (if applicable)	Comment
54221	56533	Supplier specific data or residual grid factors used when available. Otherwise reverted to grid mix.

CC8.4

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

Yes

CC8.4a

Please provide details of the sources of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure

Source	Relevance of Scope 1 emissions from this source	Relevance of location-based Scope 2 emissions from this source	Relevance of market-based Scope 2 emissions from this source (if applicable)	Explain why the source is excluded
Shoreside Emergency Generator	Emissions are not relevant	No emissions from this source	No emissions from this source	De minimis emissions from this source.
Commercial properties leased that are less than 8,000 sq. feet	No emissions from this source	Emissions are not relevant	Emissions are not relevant	De minimis emissions from this source.
Shoreside refrigeration and air-conditioning equipment in hotels and offices	Emissions are not relevant	No emissions from this source	No emissions from this source	De minimis emissions from this source.
Combustion emissions from burning waste in shipboard incinerators	Emissions are not relevant	No emissions from this source	No emissions from this source	De minimis emissions from this source.
Fugitive releases of SF6 gas from shipboard circuit breakers	Emissions are not relevant	No emissions from this source	No emissions from this source	De minimis emissions from this source.
Fugitive releases of CH4 gas from shipboard Marine Sanitation Devices or Advanced Waste Water Treatment plants	Emissions are not relevant	No emissions from this source	No emissions from this source	De minimis emissions from this source.
Small water craft fuel use in private islands	Emissions are not relevant	No emissions from this source	No emissions from this source	De minimis emissions from this source.

CC8.5

Please estimate the level of uncertainty of the total gross global Scope 1 and 2 emissions figures that you have supplied and specify the sources of uncertainty in your data gathering, handling and calculations

Scope	Uncertainty range	Main sources of uncertainty	Please expand on the uncertainty in your data
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Scope 1	Less than or equal to 2%	Data Gaps Assumptions Extrapolation Metering/ Measurement Constraints Other: Use of published default emission factors	The main source of uncertainty is the data gap from small sources related to the shoreside activity. 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 fuel combustion in ship's engines).
Scope 2 (location-based)	More than 10% but less than or equal to 20%	Data Gaps Assumptions Extrapolation Metering/ Measurement Constraints Sampling	The main sources of uncertainty are the data gaps and metering /measurement constraints related to our leased facilities. The main reason is that no specific utility electricity bill has been given to these facilities for the actual electricity usage. For a couple of facilities no data was provided for FY2015. Assumptions and extrapolations have been made based on electricity usage for a comparable site of the same size where available. Published emission factors for the electricity source have been taken from the sustainability software database and these may differ from actual site emission factor.
Scope 2 (market-based)	More than 10% but less than or equal to 20%	Data Gaps Assumptions Extrapolation Metering/ Measurement Constraints Sampling	The main sources of uncertainty are the data gaps and metering /measurement constraints related to our leased facilities. The main reason is that no specific utility electricity bill has been given to these facilities for the actual electricity usage. For a couple of facilities no data was provided for FY2015. Assumptions and extrapolations have been made based on electricity usage for a comparable site of the same size where available. Published emission factors for the electricity source have been taken from the sustainability software database and these may differ from actual site emission factor. Residual grid factors are not available for all markets. Suppliers specific data or residual grid factors used when available. Otherwise reverted to grid mix.

CC8.6

Please indicate the verification/assurance status that applies to your reported Scope 1 emissions

Third party verification or assurance process in place

CC8.6a

Please provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements

Verification or assurance cycle in place	Status in the current reporting year	Type of verification or assurance	Attach the statement	Page/section reference	Relevant standard	Proportion of reported Scope 1 emissions verified (%)
Annual process	Complete	Limited assurance	https://www.cdp.net/sites/2016/70/2870/Climate Change 2016/Shared Documents/Attachments/CC8.6a/Carnival FY 2015 Assurance Statement final-rev 1.pdf	Page 1 through 3/ entire document	ISO14064-3	100

CC8.7

Please indicate the verification/assurance status that applies to at least one of your reported Scope 2 emissions figures

Third party verification or assurance process in place

CC8.7a
Please provide further details of the verification/assurance undertaken for your location-based and/or market-based Scope 2 emissions, and attach the relevant statements

Location-based or market-based figure?	Verification or assurance cycle in place	Status in the current reporting year	Type of verification or assurance	Attach the statement	Page/Section reference	Relevant standard	Proportion of reported Scope 2 emissions verified (%)
Location-based	Annual process	Complete	Limited assurance	https://www.cdp.net/sites/2016/70/2870/Climate Change 2016/Shared Documents/Attachments/CC8.7a/Carnival FY 2015 Assurance Statement final-rev 1.pdf	Page 1 through 3/ Entire document	ISO14064-3	100
Market-based	Annual process	Complete	Limited assurance	https://www.cdp.net/sites/2016/70/2870/Climate Change 2016/Shared Documents/Attachments/CC8.7a/Carnival FY 2015 Assurance Statement final-rev 1.pdf	Page 1 through 3/ Entire document	ISO14064-3	100

CC8.8
Please identify if any data points have been verified as part of the third party verification work undertaken, other than the verification of emissions figures reported in CC8.6, CC8.7 and CC14.2

Additional data points verified	Comment
Other: Intensity Metric: Available Lower Berth Kilometer	Carnival Corporation & plc has a Corporate target to reduce the intensity of carbon dioxide emissions from shipboard operations. The numerator is the quantity of greenhouse gases and the denominator is the capacity of the ships and the distance traveled. We measure our capacity in ALB, which is available lower berth. This is the number of passengers the ship is ready to carry.

CC8.9
Are carbon dioxide emissions from biologically sequestered carbon relevant to your organization?

No

Further Information

Page: CC9. Scope 1 Emissions Breakdown - (1 Dec 2014 - 30 Nov 2015)

CC9.1
Do you have Scope 1 emissions sources in more than one country?

Yes

CC9.1a

Please break down your total gross global Scope 1 emissions by country/region

Country/Region	Scope 1 metric tonnes CO2e
Bahamas	2733
Canada	213
Germany	416
Honduras	221
United States of America	15062
International Waters	10301296
International Air Space	464
Rest of world	296

CC9.2

Please indicate which other Scope 1 emissions breakdowns you are able to provide (tick all that apply)

By GHG type

CC9.2c

Please break down your total gross global Scope 1 emissions by GHG type

GHG type	Scope 1 emissions (metric tonnes CO2e)
CO2	9984674
CH4	18314
N2O	75861
HFCs	24852

Further Information

Page: CC10. Scope 2 Emissions Breakdown - (1 Dec 2014 - 30 Nov 2015)

CC10.1

Do you have Scope 2 emissions sources in more than one country?

Yes

CC10.1a

Please break down your total gross global Scope 2 emissions and energy consumption by country/region

Country/Region	Scope 2, location-based (metric tonnes CO2e)	Scope 2, market-based (metric tonnes CO2e)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low carbon electricity, heat, steam or cooling accounted in market-based approach (MWh)
Australia	527	527	640	0

Country/Region	Scope 2, location-based (metric tonnes CO2e)	Scope 2, market-based (metric tonnes CO2e)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low carbon electricity, heat, steam or cooling accounted in market-based approach (MWh)
Canada	1162	1427	6966	0
Germany	1265	21	106	2549
Honduras	1033	1033	1983	0
Indonesia	8658	8658	11475	0
Italy	1903	2022	4739	0
United Kingdom	1974	2428	4479	0
United States of America	35756	38266	79464	0
Rest of world	1942	2151	3418	0

CC10.2

Please indicate which other Scope 2 emissions breakdowns you are able to provide (tick all that apply)

By business division

CC10.2a

Please break down your total gross global Scope 2 emissions by business division

Business division	Scope 2 emissions, location based (metric tonnes CO2e)	Scope 2 emissions, market-based (metric tonnes CO2e)
North America Brands	47908	50797
Europe, Asia, Australia (EAA) Brands	6313	5736

Further Information**Page: CC11. Energy****CC11.1**

What percentage of your total operational spend in the reporting year was on energy?

More than 5% but less than or equal to 10%

CC11.2

Please state how much heat, steam, and cooling in MWh your organization has purchased and consumed during the reporting year

Energy type	Energy purchased and consumed (MWh)
Heat	0
Steam	0
Cooling	0

CC11.3

Please state how much fuel in MWh your organization has consumed (for energy purposes) during the reporting year

36656809

CC11.3a

Please complete the table by breaking down the total "Fuel" figure entered above by fuel type

Fuels	MWh
Other: HSFO	28243150
Other: LSFO	485568
Other: MDO/MGO	7854027
Motor gasoline	8366
Other: Heating Oil	10525
Liquefied petroleum gas (LPG)	10582
Natural gas	1453
Aviation gasoline	1803
Charcoal	819
Diesel/Gas oil	40517

CC11.4

Please provide details of the electricity, heat, steam or cooling amounts that were accounted at a low carbon emission factor in the market-based Scope 2 figure reported in CC8.3a

Basis for applying a low carbon emission factor	MWh consumed associated with low carbon electricity, heat, steam or cooling	Comment
Energy attribute certificates, Guarantees of Origin	2549	This energy is related to our Germany location.

CC11.5

Please report how much electricity you produce in MWh, and how much electricity you consume in MWh

Total electricity consumed (MWh)	Consumed electricity that is purchased (MWh)	Total electricity produced (MWh)	Total renewable electricity produced (MWh)	Consumed renewable electricity that is produced by company (MWh)	Comment
36772629	115819	36656809	0	0	Our ships produce electricity from the fuel we purchase.

Further Information

Page: CC12. Emissions Performance

CC12.1

How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to the previous year?

Decreased

CC12.1a
Please identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined) and for each of them specify how your emissions compare to the previous year

Reason	Emissions value (percentage)	Direction of change	Please explain and include calculation
Emissions reduction activities	.1	Decrease	Due to energy reduction activities implemented during the year, our emissions have decreased. Please see our energy efficiency initiatives described in 3.3b. The figures used to calculate the percentage decrease were the Scope 1 and Scope 2 CO2e emissions for FY2014 these were 10,385,721 and for FY2015 these were 10,374,922 metric tonnes.
Divestment	0	No change	
Acquisitions	0	No change	
Mergers	0	No change	
Change in output	0	No change	
Change in methodology	0	No change	
Change in boundary	0	No change	
Change in physical operating conditions	0	No change	
Unidentified	0	No change	
Other	0	No change	

CC12.1b
Is your emissions performance calculations in CC12.1 and CC12.1a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Location-based

CC12.2
Please describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tonnes CO2e per unit currency total revenue

Intensity figure =	Metric numerator (Gross global combined Scope 1 and 2 emissions)	Metric denominator: Unit total revenue	Scope 2 figure used	% change from previous year	Direction of change from previous year	Reason for change
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0.000660	metric tonnes CO2e	15714000000	Location-based	1	Increase	The increase is partially related to a decreased revenue.
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CC12.3

Please provide any additional intensity (normalized) metrics that are appropriate to your business operations

Intensity figure =	Metric numerator (Gross global combined Scope 1 and 2 emissions)	Metric denominator	Metric denominator: Unit total	Scope 2 figure used	% change from previous year	Direction of change from previous year	Reason for change
.000266	metric tonnes CO2e	Other: ALB-km		Location-based	2.81	Decrease	Denominator did not fit. It is: 37790888508 ALB-km. Carnival Corporation & plc has been working on CO2e emissions reduction initiatives, specifically in regards to fuel reductions. The emissions related to fuel reduced by .03%. However we have become more efficient with per ALB-km. Available lower berth (ALB) is a standard measure of cruise ship passenger capacity. Target relates to Scope 1 emissions, FY 2005 (base year) and FY 2015 (target year) for ship operation only. Intensity relates only to Scope 1 emissions from ships' fuel. Ships' fuel GHG emissions account for approximately 97% of our carbon footprint. Excludes Scope 1 emissions from fugitive refrigerant releases as this information was not available in the base year. Fugitive refrigerant releases account for approximately 2% of total Scope 1 emissions. This rate does not include Scope 2 emissions as these only represent 0.5% of total emissions.

Further Information

Please note that for CC12.3 the denominator did not fit in the cell and is entered in the Reason for Change cell instead.

Page: CC13. Emissions Trading**CC13.1**

Do you participate in any emissions trading schemes?

No, and we do not currently anticipate doing so in the next 2 years

CC13.2

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

Yes

CC13.2a

Please provide details on the project-based carbon credits originated or purchased by your organization in the reporting period

Credit origination or credit purchase	Project type	Project identification	Verified to which standard	Number of credits (metric tonnes of CO2e)	Number of credits (metric tonnes CO2e): Risk adjusted volume	Credits cancelled	Purpose, e.g. compliance
Credit purchase	Biomass energy	We are currently piloting an offset program with atmosfair to offset a portion of our business travel CO2 emissions by plane and rental car. The proceeds will go to a biomass power plant in northern India, which produces green electricity from harvest residues for approximately 40,000 households, saves approximately 30,000 tons of CO2 annually, and contributes to the region's development by offering new employment opportunities and income sources for farmers. The project name is: India: Electricity from crop residues. More information on the project can be found at: https://www.atmosfair.de/en/biogas_und_biomasse/indien_stromerzeugung	Gold Standard	5041	5041	Yes	Voluntary Offsetting
Credit purchase	Other: Efficient boiler, biogas, wind, power, water, reforestation	We are currently piloting an offset program with Deutsche Post (the German postal service) to offset CO2 emissions from the transportation of a portion of our mail. The program consists of multiple projects including: Efficient boiler, Household-biogas, Wind power station, Ceramic-water preparer, Alternative watering, Disposal-gas-power plant, and Reforestation. An example of one of the projects included is: Reforestation Panama (VER, GS 2557, CCBS, FSC).	Other: Gold Standard, VER, CCBS, FSC, CDM, VCSR	18.15	18.15	Yes	Voluntary Offsetting

Further Information

CC13.2a The number of credits for the Deutsche Post offset program listed is for 2014. We are pending the 2015 data.

Page: CC14. Scope 3 Emissions

CC14.1

Please account for your organization's Scope 3 emissions, disclosing and explaining any exclusions

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
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Purchased goods and services	Relevant, calculated	3300	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. • 11% of passenger took a bus • 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 assumptions detailed above the total fuel consumed and distance travelled by the buses were estimated. The total emissions from this activity were calculated using the same source of emission factors for mobile emissions and GWPs as reported earlier. The uncertainty range is approx. 10-20%. N/A	0.00%	N/A
Capital goods	Relevant, not yet calculated	N/A			Sustainable Shipping Initiative. The Sustainable Shipping Initiative (SSI) is seeking to create systemic change in the shipping industry, achieving a shift in practices so that sustainability becomes the norm. The materials management workstream is developing systems to trace and track all the materials used to build a ship. The goal is to achieve full transparency and accountability for the social and environmental impacts from construction through to recycling of ships.
Fuel-and-energy-related activities (not included in Scope 1 or 2)	Relevant, calculated	12400	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. Assumption: Round trip for road fuel tanker is 45 miles. Using recorded number of fuel transactions by fuel trucks and barges/ tug-barges the total fuel consumed and the distances travelled were estimated. These estimates of fuel consumed and distance travelled were multiplied by the appropriate emission factor to obtain total emissions in CO2e for this activity.	0.00%	N/A
Upstream transportation and distribution	Relevant, calculated	9400	A source for this emission comes from delivery of purchased goods by trucks from the warehouses to the ships (for one large Operating Line). Assumption: Using the recorded number of trips made to each port by the delivery trucks the total amount of fuel consumed and the distances travelled by these trucks were estimated. These estimates of fuel consumed and distance travelled were multiplied by the appropriate emission factor to obtain total emissions in CO2e for this activity. The total emissions from Carnival's supply chain activities are very small when compared to Scope 1 ship emissions. Therefore, we have not calculated the emissions from the supply chains for the entire company.	0.00%	N/A

Waste generated in operations	Not relevant, calculated	1300	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 estimated. The total emissions from this activity were calculated using the same source of emission factors for mobile emissions and GWPs as reported earlier. The uncertainty range is approx. 10-20%.	0.00%	N/A
Business travel	Relevant, calculated	20700	Business travel is calculated from activity data (passenger miles) received from the Brands. Passenger-miles were multiplied by the appropriate emission factor to obtain total emissions in CO2-e. Emission factors were taken from Climate Leaders - Optional Emissions from Commuting, Business Travel and Product transport - Nov 2015 document. For some Brands, the data provided were not always reported in the correct formats and therefore estimates had to be made to calculate the resultant emission figures. The uncertainty range is approx. 20-30%.	0.00%	
Employee commuting	Not relevant, explanation provided	N/A			Over 85% of our employees are shipboard employees and live on the ships while under contract.
Upstream leased assets	Not relevant, explanation provided	N/A			Categorized as Scope 1, based on organizational boundary approach.
Downstream transportation and distribution	Not relevant, explanation provided	N/A			We do not manufacture products.
Processing of sold products	Not relevant, explanation provided	N/A			We are not manufacturers.
Use of sold products	Not relevant, explanation provided	N/A			We do not manufacture products.
End of life treatment of sold products	Not relevant, explanation provided	N/A			We do not manufacture products.
Downstream leased assets	Not relevant, explanation provided	N/A			We do not manufacture products.

Franchises	Not relevant, explanation provided		N/A		We do not operate franchises.
Investments	Not relevant, explanation provided		N/A		We are not investors or provide financial services.
Other (upstream)					
Other (downstream)					

CC14.2

Please indicate the verification/assurance status that applies to your reported Scope 3 emissions

No third party verification or assurance

CC14.3

Are you able to compare your Scope 3 emissions for the reporting year with those for the previous year for any sources?

Yes

CC14.3a

Please identify the reasons for any change in your Scope 3 emissions and for each of them specify how your emissions compare to the previous year

Sources of Scope 3 emissions	Reason for change	Emissions value (percentage)	Direction of change	Comment
Purchased goods & services	Change in output	4.7	Decrease	Related to passenger bus transportation. Decrease in passengers using bus transport.
Fuel- and energy-related activities (not included in Scopes 1 or 2)	Other: Supply of marine fuel	4.2	Decrease	The fuel transportation mix (pipeline, barge and truck) changed.
Waste generated in operations	Other: Regulatory	0.7	Increase	Increase in wastewater and waste disposed to shore, as required by maritime regulations.
Business travel	Other: Internal Travel needs	7.8	Increase	Related to shoreside personnel travel.
Upstream transportation & distribution	Other: Goods and materials	1.9	Decrease	Related to goods and material transportation to the ships.

CC14.4

Do you engage with any of the elements of your value chain on GHG emissions and climate change strategies? (Tick all that apply)

Yes, our suppliers

CC14.4a

Please give details of methods of engagement, your strategy for prioritizing engagement and measures of success

We work with a wide range of suppliers to provide products and services to our ships and guests, including, but not limited to fuel, food, beverages, retail merchandise, spa services, repair and maintenance services, including dry-docking, hotel supplies and services, equipment and shore excursions. We communicate with these suppliers frequently to ensure that we receive high quality products and services and that our ships receive the goods and services that they need to operate sustainably.

We are committed to protecting the environment. Through our Business Partner Code of Business Conduct and Ethics we communicate our expectations that our business partners will join us in following the same standard of behavior. Each brand also has different levels of engagement with its suppliers and customers.

As part of our continuous stakeholder engagement, we developed a Supplier Evaluation Questionnaire, which covers ethics and sustainability.

From a customer focus, an example of engagement is: brands raising guest awareness by means of distributing specific information on environmental issues in every cabin, and providing a dedicated hot line which passengers can use to report any violation that occurs on board which may threaten the environment. Our brands are also increasing energy use awareness of our guests. We also communicate our climate change strategies through our sustainability website and sustainability reports.

From the partners in the value chain perspective, we engage with a variety of stakeholders such as investors, NGO's and employees, to name a few. We engage with them through our sustainability website, sustainability reports, annual reports such as the 10-k, through internal communications, meetings and conferences.

In 2015 we announced our 2020 Sustainability Goals. The goals incorporate measurement and tracking of our progress against our key material issues, as well as our commitment to continuous improvement. They also embody our continuous commitment to our environmental, safety, labor and social performance.

Please see our FY2014 Sustainability Report for more information on our stakeholder engagement (page 8-9) and Business Partner Code of Conduct and Ethics (page 26-27)

CC14.4b
To give a sense of scale of this engagement, please give the number of suppliers with whom you are engaging and the proportion of your total spend that they represent

Number of suppliers	% of total spend (direct and indirect)	Comment
33000	100%	

CC14.4c
If you have data on your suppliers' GHG emissions and climate change strategies, please explain how you make use of that data

How you make use of the data	Please give details
Other	We are collecting Scope 3 data for future purposes of determining areas of opportunities and risk.

Further Information

CC14.4a FY2014 Sustainability Report attached. Page 8-9.

Attachments

https://www.cdp.net/sites/2016/70/2870/Climate_Change_2016/Shared_Documents/Attachments/ClimateChange2016/CC14.Scope3Emissions/Carnival_2014SustainabilityReport_Web_F.pdf

Module: Sign Off

Page: CC15. Sign Off

CC15.1

Please provide the following information for the person that has signed off (approved) your CDP climate change response

Name	Job title	Corresponding job category
John Haeflinger	Vice President, Maritime Policy & Analysis Carnival Corporation & plc	Other: Corporate Vice President in Charge of Health, Environment, Safety, Security, Sustainability and Maritime Risk Management

Further Information

CDP: [D][-, -][D2]