Welcome Aboard

We invite you to cruise with us, enjoy the exhilaration of ocean travel and be a part of our sustainability journey. We have a portfolio of nine of the world’s leading cruise brands, complementing each other - serving nearly every segment of the cruise industry, and providing our guests with virtually endless vacation choices.
TABLE OF CONTENTS

MESSAGE FROM THE PRESIDENT AND CEO
SUSTAINABILITY AT CARNIVAL
2020 SUSTAINABILITY GOALS
2019 GOALS UPDATE
CRUISING
   About Carnival Corporation & plc
   Introducing Our New Ships
   Grand Totals
   Brands at a Glance
   Enhancing Governance & Compliance
COMMUNITY
   Guest Experience
   Community Engagement
   Supporting Our Communities
   Human Capital
COMMITMENT
   Risk Management
   Safety
   Security
   Health
   Environmental Management
      Operation Oceans Alive
      Single Use Plastics
      The Value of Food
   Energy and Emissions
      Advanced Air Quality Systems
      Pioneering Liquefied Natural Gas
      Pathway to Decarbonization
      Energy and Greenhouse Emissions
APPENDIX
   Performance Summary
   Our Approach to Sustainability
   Environmental Officer Responsibilities
   Boards of Directors and Committees
   Modern Slavery Act
   Health Procedures
   Energy Saving Initiatives
   HESS Policy
   Assurance Statement
   Our Partners
   Sustainability Management
   Waste Stream Details
   Glossary
   GRI Index
Carnival Corporation & plc is a strong and resilient organization, and I’m honored to be president and CEO and to be working with the best in the industry. Some of our nine brands have been around since the 1800s and together we have centuries of history and experience. We have seen good times and we have also weathered many storms, both literally and figuratively, as a company. It seems in any given year we face challenges – hurricanes, typhoons, geopolitical tensions and occasionally disease scares like Ebola, SARS and Zika. And now, in August of 2020, we continue to face COVID-19, an unparalleled global pandemic.

At Carnival Corporation & plc, our highest responsibility and top priorities are compliance, protecting the environment, and the safety, health and wellbeing of our guests, the people in the communities we touch, and our crew members. As of the time of this report, our nine world-leading cruise lines have voluntarily and temporarily paused cruise operations around the world.

During this time we are working in close coordination with the U.S. Centers for Disease Control and Prevention (CDC) as well as other global health experts, to develop enhanced procedures and protocols to further elevate our already high standards for health and safety onboard our ships. When the time is right to resume cruise operations, we are committed to providing our guests with a safe and healthy environment based on the latest advancements in health protocols. These comprehensive restart protocols will include key areas such as medical care, screening, testing, mitigation and sanitization that will address arrival and departure at cruise terminals, the boarding and disembarkation process, onboard experience and shore excursions.
We remain deeply committed to our goal of protecting the health and safety of everyone and we aspire to deliver unmatched joyful vacations for our guests, always exceeding their expectations while driving outstanding shareholder value. We are committed to a positive and just corporate culture, based on inclusion and the power of diversity. We operate with integrity, trust and respect for each other – seeking collaboration, candor, openness and transparency at all times. As part of our sustainability strategy, we strive to be an exemplary corporate citizen, leaving the people and the places we touch even better.

2019 Sustainability Accomplishments

I’m pleased to report that thanks to the commitment of our team members from ship to shore, in 2019 we achieved the remaining targets within our 2020 sustainability goals and have committed to new goals that will carry us beyond 2020. The following are some of our main sustainability accomplishments and commitments within our cruising, commitment and community efforts in 2019:

Cruising

• Our Costa brand delivered two new ships, Costa Venezia and Costa Smeralda. Costa Smeralda joins our AIDA brand’s AIDAnova as the only two cruise ships in the world powered 100% by environmentally friendly liquefied natural gas (LNG). Also in 2019, our Princess brand introduced Sky Princess and Carnival Cruise Line introduced Carnival Panorama.
• We continued our long history of third-party recognitions, earning nearly 600 awards and honors in 2019 across our nine global cruise line brands. The recognitions include: 152 Cruise Critic awards; 23 USA Today 10 Best Readers’ Choice Awards; 23 CruiseLine.com awards; and 10 awards from Conde Nast Traveler - being named as best in the industry for cruise ships, value, service, shore excursions, itineraries, family friendliness, private islands, onboard entertainment and more. We were also recognized in Newsweek’s first ranking of America’s Most Responsible Companies, and as one of Corporate Responsibility Magazine’s 100 Best Corporate Citizens. Forbes media recognized us as one of America’s Best Large Employers for the second consecutive year, and we earned a perfect score of 100 for the third consecutive year from the Human Rights Campaign.
• We welcomed to our company and to our executive leadership team, a Chief Ethics and Compliance Officer, a newly formed position focused on further developing our ethics and compliance program across the entire corporation. The Boards of Directors also established a new Compliance Committee to oversee the ethics and compliance program.

Commitment

Our entire management team, including our Boards of Directors, is committed to addressing climate change. Our path to decarbonization involves multimillion-dollar investments and a multi-faceted strategy, and as part of our commitment, in 2019 we:

• Committed to a new carbon goal of 40% reduction in the intensity of CO\textsubscript{2}e (carbon dioxide equivalent) emissions from our operations by 2030 relative to our 2008 baseline, as measured in grams of CO\textsubscript{2}e per ALB-km. In 2019, we achieved a 24.8% reduction.
• Continued to pioneer the use of LNG in the cruise industry by introducing Carnival Corporation & plc’s second LNG-powered ship, Costa Smeralda.
• Signed an agreement with the world’s leading marine battery supplier to begin production and installation of a first-of-its-kind lithium-ion battery storage system onboard a cruise ship.
• Announced a joint venture project to develop a decentralized energy network and a hybrid energy system using a new generation of fuel cells in oceangoing passenger vessels. The fuel cells will be powered by hydrogen derived from methanol.
• Became the first cruise company to join the Getting to Zero Coalition. This is a global alliance of organizations across the maritime, energy, infrastructure, and finance sectors committed to accelerating the decarbonization of the international shipping industry.

As part of Operation Oceans Alive, our environmental stewardship program, we made new environmental commitments that support our sustainability strategy:

• Reducing all non-essential single-use items, including plastics, on board our ships by the end of 2021. In our first six months we reduced single use plastics by approximately 80 million items and other single-use materials by approximately 95 million items. Single-use items such as straws, cups, lids, stir sticks, cocktail picks, toothpicks, butter foil packets, and plastic shopping bags have been eliminated or replaced with sustainable alternatives.
• Committing to a food waste reduction goal across our entire fleet of 10% by the end of 2021.
• Continuing to implement food waste digester technology in our fleet over the next few years, further reducing the volume of food waste discharged.

Community

• Partnered with ocean explorer and environmental advocate Jean-Michel Cousteau and his Ocean Futures Society, a nonprofit marine conservation and education organization that serves as a “Voice for the Ocean” on the importance of effective environmental and sustainability policy. Cousteau is providing valuable external expertise on environmental initiatives as we continue our commitment to sustainability and our oceans.
• As part of our global disaster relief commitment, we strive to make a difference in affected areas by working with government officials, local and international relief organizations, and coordinating corporate and employee donations for emergencies such as hurricanes, earthquakes, and other natural disasters. In 2019, Hurricane Dorian became the most intense hurricane on record to strike The Bahamas. We pledged up to $2 million for Hurricane Dorian relief efforts. We also partnered with Tropical Shipping, World Central Kitchen and others to support disaster relief efforts.
• Signed an agreement with The Bahamas to build two new major port developments. Under the agreement, we will develop a new cruise port destination on Grand Bahama and construct a new addition, including a pier, on the Bahamian island of Little San Salvador, home to Holland America Line’s award-winning Half Moon Cay. Due to the COVID-19 outbreak in the first quarter of 2020 and the pandemic impact on our industry, the permitting and startup of construction for both projects are expected to be delayed.

Thank you for the opportunity to share some of our sustainability milestones. We look forward to resuming cruise operations when it is safe to do so and to set sail again soon.

Arnold W. Donald
President and Chief Executive Officer
Sustainability at CARNIVAL CORPORATION & PLC

Our entire management team, including our Boards of Directors, is committed to addressing climate change and defining our path to decarbonization. We are also pleased to report that we have achieved the remaining three environmental targets within our 2020 sustainability goals in 2019, and achieved our carbon reduction goal in 2017. As such, we have accomplished all our numerical sustainability 2020 targets ahead of schedule in 2019 and have committed to new goals that will carry us beyond 2020:

• Committed to a new goal to reduce the intensity of CO$_2$e (carbon dioxide equivalent) emissions from our operations by 40% by 2030 relative to our 2008 baseline, measured in grams of CO$_2$e per ALB-km.
• Continued to pioneer the use of LNG in the cruise industry by introducing Carnival Corporation & plc’s second 100% LNG-powered ship, Costa Smeralda, and having nine new LNG ships on order between 2020 through 2025.
• Continued the installation and retrofitting of our fleet with Advanced Air Quality Systems (AAQS), which reduce sulfur and particulate matter from our engine exhaust with over 77% of our fleet already equipped.
• Supporting new technologies and installation of a lithium-ion battery storage system on board as well as forming a joint venture project to develop a decentralized energy network and a hybrid energy system by using a new generation of fuel cells.
• Reducing all non-essential single-use items, including plastics, on board our ships by 50% by the end of 2021.
• Committing to a food waste reduction goal across our entire fleet by 10% by the end of 2021.
• Continuing to implement programs that support our diverse and inclusive workforce.

These new goals are part of our initial 2030 sustainability goals, which are in alignment with the United Nations (UN) Agenda 2030. The agenda follows recognized frameworks such as the UN Guiding Principles on Business and Human Rights, the UN Sustainable Development Goals (SDGs) and the Paris Agreement on climate change. As members of the maritime industry, our new goals are also in alignment with the requirements of the International Maritime Organization (IMO).
2020 SUSTAINABILITY GOALS
environmental • safety • labor & social

CARBON FOOTPRINT
Reduce the intensity of CO₂e (carbon dioxide equivalent) emissions from our operations by 25% by 2020 relative to our 2005 baseline, measured in grams of CO₂e per ALB-km.

ADVANCED AIR QUALITY SYSTEMS
Continue to improve the quality of our emissions into the air by developing, deploying, and operating Advanced Air Quality Systems across the fleet capable of reducing sulfur compounds and particulate matter from our ship's engine exhaust.

AWWTS TECHNOLOGY
Increase Advanced Waste Water Treatment System (AWWTS) coverage of our fleetwide capacity by 10 percentage points by 2020 relative to our 2014 baseline.

COLD IRONING CAPACITY
Increase cold ironing coverage of our fleetwide capacity in relation to future port capabilities.

WASTE REDUCTION
Continue to reduce waste generated by our shipboard operations by 5% by 2020 relative to our 2016 baseline*, as measured by kilograms of non-recycled waste per person per day.

WATER EFFICIENCY
Continue to improve water use efficiency of our shipboard operations by 5% by 2020 relative to our 2010 baseline, as measured by liters per person per day.

DIVERSITY & ETHICS
Continue to build a diverse and inclusive workforce and provide all employees with a positive work environment and opportunities to build a rewarding career to further drive employee engagement.

GUEST AND CREWMEMBER HEALTH, SAFETY & SECURITY
Striving to be free of injuries, we continue to build on our commitment to protect the health, safety and security of our guests, employees and all others working on our behalf.

BUSINESS PARTNER CODE OF CONDUCT AND ETHICS
Further develop and implement vendor assurance procedures ensuring compliance with Carnival Corporation & plc's Business Partner Code of Conduct and Ethics.

OUR COMMUNITY
Continue to work on initiatives and partnerships that support and sponsor a broad range of organizations for the benefit of our local and global communities throughout our brand.

*Based on new waste management accounting practices, the baseline has been revised to 2016.
2020 GOALS AND BEYOND - 2019 UPDATE

CARBON FOOTPRINT

• Made more progress on our 2020 goal and achieved a 29.1% reduction relative to our 2005 baseline.
• Committed to a new goal to reduce the intensity of CO₂e (carbon dioxide equivalent) emissions from our operations by 40% by 2030 relative to our 2008 baseline, measured in grams of CO₂e per ALB-km. In 2019, we achieved a 24.8% reduction.
• Delivered the second cruise ship in the world to be powered by liquefied natural gas (LNG) both at sea and in port.
• First cruise company to join The Getting to Zero Coalition for decarbonization.
• Invested in fuel-cell technology.
• Invested in battery technology.
• Received Greenest Shipowner of the Year Neptune Award.
• Received Germany’s Blue Angel award for AIDAnova’s environmentally-friendly ship design.

ADVANCED AIR QUALITY SYSTEMS

• 77% of fleet equipped with Advanced Air Quality Systems.
• 236 engines equipped with Advanced Air Quality Systems.
• Developed a public website dedicated to Advanced Air Quality Systems updates.

AWWTS TECHNOLOGY

• Reached our goal by achieving a 10.3 percentage points in our Advanced Waste Water Treatment System (AWWTS) coverage of fleetwide capacity relative to our 2014 baseline.

COLD IRONING CAPACITY

• 47 ships equipped with the ability to utilize cold ironing/shore power technology.
• We connected to 12 cruise ports equipped with cold ironing technology globally.

WATER EFFICIENCY

• Surpassed our goal by achieving an 8.7% reduction relative to our 2010 baseline.
• Further improved our water efficiency by supplying 82% of our water needs from the ocean and purchasing only 18% at designated ports.

BUSINESS PARTNER CODE OF CONDUCT AND ETHICS

• Committed to further our commitment to human rights by developing a human rights policy in 2020.
• Completed 100% of animal welfare audits for tour encounters offering dog sledding in Alaska.
• Completed more than 50% of animal welfare audits for tour encounters with dolphins in captivity between FY2018 and FY2019.
WASTE REDUCTION

- Reached our goal by achieving a 5.6% reduction in our waste rate relative to our 2016 baseline.
- Committed to a new food waste reduction goal of 10% across our entire fleet by the end of 2021.
- Committed to a new goal to reduce all non-essential single-use items, including plastics, on board our ships by 50% by the end of 2021.
- Completed Phase I of single-use items and plastic program by eliminating or replacing straws, cups, lids, stir sticks, cocktail picks, toothpicks, butter foils, and plastic shopping bags with sustainable alternatives.
- Installed additional food waste digesters throughout the fleet.

GUEST AND CREWMEMBER HEALTH, SAFETY & SECURITY

- Continued to implement a series of initiatives to prevent guest and crew injuries.
- Continued to enhance our health and safety procedures.
- Completed the implementation of active assailant program.
- Carnival Corporation & plc - CSMART Academy received the SAFETY4SEA training award for the 2nd consecutive year.

DIVERSITY AND ETHICS

- Continued to build a diverse and inclusive workforce.
- Recognized by Newsweek’s first ranking of America’s Most Responsible Companies.
- Recognized as one of America’s Best Large Employers and America’s Best Employer for Diversity by Forbes Magazine.
- Recognized by Corporate Responsibility Magazine 100 Best Corporate Citizen.
- Earned a perfect score of 100 for the 3rd consecutive year from the Human Rights Campaign (HRC), the leading LGBTQ in the U.S.
- Continued to work with Catalyst, the leading U.S. nonprofit with a mission to expand opportunities for women.
- Carnival UK became a Value 500 member, an organization committed to putting disability and inclusion on business leadership agenda.

OUR COMMUNITY

- Pledged up to $2 million for Hurricane Dorian relief efforts in The Bahamas.
- Signed a memorandum of understanding with The Bahamian government to rebuild the main hospital impacted after Hurricane Dorian.
- Continued with the 2018 Caribbean Region Support Efforts program.
- Committed to build a new port destination in The Bahamas.
- Carnival Cruise Line expanded operations to Long Beach, California as a new home port.
- Costa Cruises donated more than €100,000 to the port of Venice Foundation after the 2019 flooding.
- Costa Cruises partnered with Ferrero/Kinder Joy of Moving to promote motoric skills and the cognitive, emotional and relational development of children.
CRUISING

14  About Carnival Corporation & plc
20  Introducing our New Ships
26  Grand Totals
28  Our Brands at a Glance
30  Enhancing Governance & Compliance
About Carnival Corporation & plc

Carnival Corporation & plc is one of the world’s largest leisure travel companies with a portfolio of nine of the world’s leading cruise lines.
OUR COMPANY

Carnival Corporation is incorporated in Panama, and Carnival plc is incorporated in England and Wales. Carnival Corporation and Carnival plc operate a dual listed company (DLC) arrangement, whereby the businesses of Carnival Corporation and Carnival plc are combined and they function as a single economic entity through contractual agreements between separate legal entities. Shareholders of Carnival Corporation and Carnival plc have the same economic and voting interest but their shares are listed on different stock exchanges and are not fungible. Carnival Corporation is traded on the New York Stock Exchange (NYSE) under the symbol CCL. Carnival plc is traded on the London Stock Exchange under the symbol CCL and as an American Depository Share on the NYSE.1

OUR HISTORY

Although the name Carnival Corporation didn’t come into existence until 1994, the foundation for our company was laid when our flagship brand, Carnival Cruise Line, was formed. Carnival Cruise Line got its start in 1972 with a single ship, Mardi Gras, a converted ocean liner.

After achieving its position as “The World’s Most Popular Cruise Line,” in 1987 Carnival Cruise Line made an initial public offering of 20 percent of its common stock, which provided the initial influx of capital that allowed our company to begin expanding through acquisition.

In 2003, agreements were finalized to combine Carnival Corporation with P&O Princess Cruises plc, creating the world’s first global cruise operator - Carnival Corporation & plc. Over the years, we have acquired a leadership position in virtually every market segment of the cruise industry.

In May 2016, Carnival Corporation & plc became the first U.S. cruise operator in over 40 years to bring U.S. cruise guests directly from the U.S. to Cuba.

1 Carnival Corporation & plc includes divisional brand Carnival Cruise Line, referred to in this report as “Carnival Cruise Line.”
Scale of Organization
We employ approximately 150,000 employees worldwide. As of November 30, 2019, we operated 104 cruise ships with a total passenger capacity (based on double occupancy) of 248,790 guests.

With annual cash from operations of $5.5 billion, 2019 marked another strong year for Carnival Corporation & plc as we delivered record revenues of $20.8 billion.

Key information for 2019 compared to the prior year (additional financial data and details can be found in the 2019 Annual Report on Form 10-K):

- Record total revenues were $20.8 billion, higher than $18.9 billion in 2018.
- Gross revenue yields (revenue per available lower berth day or ALBD) increased 5.4%.
- Gross cruise costs including fuel per ALBD increased 8.6%.

Services and Operating Structure
With operations in North America, Australia, Europe and Asia, Carnival Corporation & plc's portfolio of brands features Carnival Cruise Line, Holland America Line, Princess Cruises, Seabourn, P&O Cruises (Australia), P&O Cruises (UK), Cunard, AIDA Cruises and Costa Cruises. Each of our cruise brands is a leader in its respective market segment, has a well-known brand name and has a responsibility to operate sustainably as part of our strategy. We manage the company in a “Group” or “Operating Line” structure. During 2019, the following Carnival Corporation & plc Operating Lines operated and managed one or more of our cruise brands:

- Carnival Cruise Line.
- Carnival UK, which operates Cunard and P&O Cruises (UK).
- Costa Group, which operates AIDA Cruises and Costa Cruises.
- Holland America Group, which operates Holland America Line, P&O Cruises (Australia), Princess Cruises and Seabourn.

In addition to our cruise operations, we own Holland America Princess Alaska Tours, the leading tour company in Alaska and the Canadian Yukon, which complements our Alaska cruise operations. Our tour company owns and operates hotels, lodges, glass domed railcars and motorcoaches. We also operate a portfolio of leading port destinations and private islands in select geographies around the world.

Additional details relating to our company, Corporate Operating Structure and organization are disclosed in the Carnival Corporation & plc 2019 Annual Report to Shareholders and in our Annual Report on Form 10-K, which are available on the Carnival Corporation & plc website.
**Business Expansion**
We continue to grow our presence in established markets and increase our penetration in developing markets, such as Asia. In 2019, Carnival Corporation & plc along with Carnival Cruise Line and Holland America Line signed an agreement with The Bahamas to build two major port developments. Under the agreement, Carnival Corporation & plc will develop a new cruise port destination primarily for Carnival Cruise Line on Grand Bahama and construction of a new addition, including a pier, on the Bahamian island of Little San Salvador, home to Holland America Line’s award-winning Half Moon Cay port. In 2019, Carnival Panorama became Carnival Cruise Line’s first new cruise ship to home-port in Long Beach on the West Coast of the United States.

**Fleet Investments**
We are building new, innovative, purpose-built ships that are larger, more efficient, have an improved mix of guest accommodations and present a wider range of onboard amenities and features. These ships further enhance the attractiveness of a cruise vacation while achieving greater economies of scale and resulting in improved returns on invested capital.

During 2019, we added four new ships and removed four ships from the fleet:

- Costa Smeralda was delivered to Costa Cruises (ship operations commenced in December 2019).
- Costa Venezia was added to Costa Cruises.
- Sky Princess was added to Princess Cruise Line.
- In December 2018, Carnival Panorama was added to Carnival Cruise Line.
- Prinsendam was removed from the Holland America fleet. Oriana was removed, Pacific Eden and Pacific Jewel were sold from P&O Cruises.

As of November 2019, we have a total of 17 cruise ships scheduled to be delivered through 2025.

We continue to make substantial investments in our existing ship enhancement programs to improve our onboard product offerings and enrich our guests’ vacation experiences.

Reflecting on our commitment to sustainability and to play a leading role in matters of environmental protection in the cruise industry, we are expanding our investment in the use of low carbon fuels, in particular, liquefied natural gas (LNG). In December 2019, we took delivery of our second cruise ship able to be completely powered by LNG, our Costa Smeralda. We have an additional nine next-generation cruise ships on order that will also be powered by LNG (both in port and on the open sea) - an innovation that reduces carbon emissions to help protect the environment.

**Awards & Recognitions**
We are honored by the recognition we receive as a corporation as well as the recognition our individual cruise brands receive for their collective commitment to protecting and sustaining healthy oceans, seas, and communities around the world. The independent accolades come from environmental groups, port communities, industry publications, and associations that have recognized our long-standing commitment to being one of the cruise industry’s leaders in environmental innovation and best practices.

Following are noteworthy recognitions received in 2019:

**100 Best Corporate Citizens 2019**
*Corporate Responsibility Magazine* - Carnival Corporation & plc
Carnival Corporation & plc has been recognized among Corporate Responsibility Magazine’s (CR Magazine) 100 Best Corporate Citizens for 2019. The recognition marks the fourth consecutive year and eighth time in the past nine years that Carnival Corporation & plc has received the distinction in CR Magazine’s annual survey, which recognizes transparency and corporate governance among the 1,000 largest U.S. public companies. [Click here to view the full list.](#)
FTSE4Good Index
Since 2006, Carnival Corporation & plc has been a member of the FTSE4Good Index, the socially responsible investment index calculated by global index provider FTSE Group. The FTSE4Good Index measures the performance of companies that meet globally recognized corporate responsibility standards and facilitates investment in those companies.

Forbes: America’s Best Large Employer and America’s Best Employer for Diversity
Carnival Corporation & plc was recognized for the second consecutive year by Forbes Magazine among America’s best employers. Carnival was also recognized among America’s best employer for diversity. Carnival Corporation & plc was ranked as the top overall cruise company on both lists. The list of companies can be viewed here.

Human Rights Campaign’s Corporate Equality Index: Carnival Corporation & plc earns perfect score
Building a diverse and inclusive workforce continues to be a priority. We were honored to be recognized by the HRC Foundation with a perfect score of 100 for the third consecutive year in its 2019 Corporate Equality Index, which rates U.S. companies for their treatment of LGBTQ consumers, investors and employees. The index also recognizes Carnival Corporation & plc with the designation of a Best Place to Work for LGBTQ Equality by HRC Foundation. Click here for more information.

Newsweek: Carnival Corporation & plc among top 300 of America’s Most Responsible Companies
Carnival Corporation & plc has been recognized in Newsweek’s ranking of America’s Most Responsible Companies 2020. Companies were evaluated based on their environmental, social, and corporate governance performance. A total of 2000 American public companies were evaluated and the top 300 are included on the list. We are honored to be listed as the highest-ranking company in the cruise sector. The list of companies can be viewed here.

CSMART: Safety4Sea Award — Training Services
Carnival Corporation & plc’s CSMART Training Center received the 2019 SAFETY4SEA EUROPORT Training Award for the 2nd consecutive year. The center was recognized for providing high-quality maritime training services for industry-wide safety, sustainability, and operational excellence.

Neptune Award: Carnival Corporation & plc winner of the Greenest Ship Owner Award
Carnival Corporation & plc has been honored by maritime industry peers with the Greenest Shipowner of the Year Neptune Award, which recognizes a company that has shown excellence in reducing environmental impact in the operation of its fleet in the past year. Winners were chosen by executives from ship owners, ports, and marine technology companies who had gathered to share best practices and cutting-edge technologies to enable continued reductions in the environmental impacts of shipping. Click here for more information.

German Blue Angel Eco-label: AIDA Cruises receives certification for environmentally friendly ship design
AIDA Cruises has been awarded the “Blue Angel,” Germany’s Federal Government eco-label, for AIDAnova’s environmentally-friendly ship design. Through the use of liquefied natural gas (LNG), the ship emissions of particulate matter and sulfur oxides are almost completely eliminated; nitrogen oxide and CO₂ emissions are sustainably reduced. In September 2019, the “Blue Angel” logo was painted onto AIDAnova’s side at the Port of Marseille. Click here for more information.

InterMundial Foundation: Costa Cruises winner of Responsible Tourism Award
The award recognizes the work and involvement of tourism companies to achieve responsible and sustainable tourism.
FROM SHIP TO SHORE
INTRODUCING

Carnival Panorama

Carnival Panorama is the third ship in the line’s popular Vista-class series. Carnival Panorama sails from Long Beach, California, and is the line’s first ship homeported on the West Coast in more than 20 years. Click here to learn more.
INTRODUCING

Sky Princess

Sky Princess honors the women of the U.S. Space Program with special recognition to U.S. Navy Aviator and Captain, Kay Hire, and NASA engineer and civil rights attorney, Frances Northcutt, during the ship’s naming ceremony. Sky Princess also debuted the new luxurious Sky Suites, with expansive views from the largest balconies at sea, along with new exciting entertainment experiences and dining choices. Click here to learn more.
INTRODUCING

Costa Venezia

Costa Venezia is Costa’s first ship specifically built for the China market. Costa Venezia offers Costa’s authentic Italian experience tailored for its Chinese customers, introducing guests to Italian culture, lifestyle and excellence – starting with details in the ship’s interiors, which are inspired by the city of Venice. Guests can also savor Italian entertainment, including a masquerade ball that will recreate the magical atmosphere of the famous Carnival of Venice, while also enjoying familiar comforts such as a wide array of Chinese cuisine available, Chinese-style karaoke bars and more.
INTRODUCING

Costa Smeralda

Costa Smeralda launched as Costa’s first cruise ship to be powered at sea and in port by liquefied natural gas (LNG), the world’s cleanest fossil fuel. Costa Smeralda is the second of a new class of next-generation ‘green’ cruise ships and a significant product innovation. Costa Smeralda commenced operations in December 2019. Click here to learn more.
FY 2019 Business Dimensions & Direct Economic Value Generated and Distributed\(^1\)

**Business Dimensions**

**NUMBER OF GUESTS**
12.9 MILLION

**NUMBER OF SHIPS**\(^2\)
104

**GUEST CAPACITY**\(^3\)
248,790

**APPROXIMATE NUMBER OF EMPLOYEES WORLDWIDE**
150,000

**CONTACT US**
For questions or to provide feedback regarding this Sustainability Report or its contents, please contact:
Elaine Heldewier, Director Sustainability Programs or
Alana Enge, Manager Sustainability Programs
Maritime Policy & Analysis at Carnival Corporation & plc
3655 N.W. 87th Avenue, Miami, Florida 33178-2428 U.S.A.
Email: Sustainability@Carnival.com
# Totals

## Financial Data

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenues</td>
<td>$20.8 Billion</td>
</tr>
<tr>
<td>Total Assets</td>
<td>$45.1 Billion</td>
</tr>
<tr>
<td>Payroll &amp; Related</td>
<td>$2.2 Billion</td>
</tr>
<tr>
<td>Interest Expense, Net of Capitalized Interest</td>
<td>$0.2 Billion</td>
</tr>
<tr>
<td>Operating Costs</td>
<td>$17.5 Billion</td>
</tr>
<tr>
<td>Cash From Operations</td>
<td>$5.5 Billion</td>
</tr>
<tr>
<td>Dividends</td>
<td>$1.4 Billion</td>
</tr>
<tr>
<td>Debt to Capital</td>
<td>31.2%</td>
</tr>
</tbody>
</table>

1. As of November 30, 2019 Annual Report on Form 10-K
2. Does not include Costa Smeralda as ship operations commenced in December 2019
3. Capacity is based on two guests per cabin
4. Additional financial data can be found in the 2019 Annual Report on Form 10-K
OUR BRANDS
at a glance

At Carnival Corporation & plc, our top priorities and responsibilities are to operate safely, to protect the environment, and to be in compliance everywhere we operate in the world. On this foundation, we aspire to deliver unmatched joyful vacations for our guests, always exceeding their expectations and in doing so driving outstanding shareholder value. We are committed to a positive and just corporate culture, based on inclusion and the power of diversity. We operate with integrity, trust and respect for each other - seeking collaboration, candor, openness and transparency at all times. And we intend to be an exemplary corporate citizen leaving the people and the places we touch even better.
CARNIVAL CRUISE LINE  
Miami, FL, USA // 27 Ships

CUNARD  
Southampton, UK // 3 Ships

COSTA CRUISES  
Genoa, Italy // 14 Ships  
Ship-count does not include Costa Smeralda

P&O CRUISES AUSTRALIA  
Sydney, Australia // 3 Ships

HOLLAND AMERICA LINE  
Seattle, WA, USA // 14 Ships

PRINCESS CRUISES  
Santa Clarita, CA, USA // 18 Ships

P&O CRUISES UK  
Southampton, UK // 6 Ships

AIDA CRUISES  
Rostock, Germany // 14 Ships

SEABOURN  
Seattle, WA, USA // 5 Ships
Enhancing Governance & Compliance

Our corporate governance model provides the structures and processes for the direction and control of our company. Good corporate governance and ethics processes help us operate more efficiently, improve our access to capital, mitigate risk and safeguard against mismanagement. It makes us accountable and transparent and gives us the tools to respond to stakeholder concerns.
BUSINESS PARTNER CODE OF CONDUCT & ETHICS

Further develop and implement vendor assurance procedures ensuring compliance with Carnival Corporation & plc’s Business Partner Code of Conduct and Ethics.

- Committed to further our commitment to human rights by developing a human rights policy in 2020.
- Completed 100% of animal welfare audits for tour encounters offering dog sledding in Alaska.
- Completed more than 50% of animal welfare audits for tour encounters with dolphins in captivity between FY2018 and FY2019.
LEADERSHIP TEAM

Arnold Donald
President and Chief Executive Officer, Carnival Corporation & plc

Peter Anderson
Chief Ethics & Compliance Officer, Carnival Corporation & plc

Josh Weinstein
Chief Operations Officer, Carnival Corporation & plc

Jan Swartz
Group President, Princess Cruises and Carnival Australia

Christine Duffy
President, Carnival Cruise Line

Stein Kruse
Group CEO, Holland America Group and Carnival UK

Michael Thamm
Group Chief Executive Officer, Costa Group and Carnival Asia

Vice Admiral William Burke USN (Ret.)
Chief Maritime Officer, Carnival Corporation & plc

David Bernstein
Chief Financial Officer and Chief Accounting Officer, Carnival Corporation & plc

Jeffrey J. Gearhart
New Boards of Directors member

* Leadership Team members at the time the report was published.
**AWARDS & RECOGNITION**

**America's 100 Best Corporate Citizens (Governance & Transparency)**
Carnival Corporation & plc has been recognized among Corporate Responsibility Magazine’s (CR Magazine) 100 Best Corporate Citizens for 2019. The recognition marks the fourth consecutive year and eighth time in the past nine years that Carnival Corporation & plc has received the distinction in CR Magazine’s annual survey, which recognizes transparency and corporate governance among the 1,000 largest U.S. public companies. [Click here to view the full list.](#)

**Newsweek (Most Responsible Companies – Environmental, Social and Governance)**
Carnival Corporation & plc has been recognized in Newsweek’s first ranking of America’s Most Responsible Companies 2020. Companies were evaluated based on their environmental, social, and corporate governance performance. A total of 2000 American public companies were evaluated and the top 300 are included on the list. We are honored to be listed as the highest-ranking company in the cruise sector. [The list of companies can be viewed here.](#)

**Forbes: America's Best Large Employer and America's Best Employer for Diversity**
Carnival Corporation & plc was recognized for the second consecutive year by Forbes Magazine among America’s best employers. Carnival was also recognized among America’s best employer for diversity. Carnival Corporation & plc was ranked as the top overall cruise company on both lists. [The list of companies can be viewed here.](#)

**Corporate Equality Index (Best Place to Work for LGBTQ Equality)**
Carnival Corporation & plc earned a perfect score of 100 in the Corporate Equality Index for the third consecutive year from the Human Rights campaign, the leading LGBTQ civil rights organization in the United States. [Click here for more information.](#)

**Neptune Award (Greenest Shipowner)**
Carnival Corporation & plc has been honored by maritime industry peers with the Greenest Shipowner of the Year Neptune Award, which recognizes a company that has shown excellence in reducing environmental impact in the operation of its fleet in the past year. Winners were chosen by executives from ship owners, ports, and marine technology companies who gathered to share best practices and cutting-edge technologies to enable continued reductions in the environmental impacts of shipping. [Click here for more information.](#)

**Germany’s Blue Angel Eco-Label Award (Environmentally Friendly Ship Design)**
Carnival's AIDA Cruises has been awarded the “Blue Angel,” Germany’s Federal Government eco-label, for AIDAnova’s environmentally-friendly ship design. Through the use of liquefied natural gas (LNG), the ship emissions of particulate matter and sulfur oxides are almost completely eliminated; nitrogen oxide and CO2 emissions are sustainably reduced. In September 2019, the “Blue Angel” logo was painted onto AIDAnova’s side at the Port of Marseille. [Click here for more information.](#)

**CSMART: Safety4Sea Award (Training Services)**
Carnival Corporation & plc’s CSMART Training Center received the 2019 SAFETY4SEA EUROPORT Training Award, for providing high-quality maritime training services for industry-wide safety, sustainability and operational excellence. [Read more here.](#)
In 2019, we focused on enhancing our compliance framework by developing a dedicated ethics and compliance program and corresponding strategic plan. Through this, we were able to significantly increase the resources devoted to our compliance function. Our new Chief Ethics and Compliance Officer (CECO), a member of the executive leadership team, leads the effort to further develop our ethics and compliance program across the entire corporation. The CECO is assisted by other leaders who focus on key areas (including environmental, health, safety and various general compliance issues), as well as important processes (investigations, compliance training, risks, and communications). It is important to note that the Ethics & Compliance is not just a single department within All Brands Group – but rather a corporate wide program – with key Ethics & Compliance Officers (also known as “ECO’s”) who help shape and implement the program initiatives in each of the operating companies.

Through the collective efforts of these leaders, this corporate-wide program involves compliance risk management, improved compliance training programs for our employees, thorough investigations and remedial actions relating to health, environmental and safety incidents, and efforts to strengthen our corporate culture. To further heighten the focus on ethics and compliance, the Boards of Directors established the Compliance Committees to oversee the ethics and compliance program, maintain regular communications with the CECO, and ensure implementation of the ethics and compliance program’s strategic plan across the corporation.

In 2019, to further support our commitments and clarify our priorities, the Corporate Leadership developed the following new Corporate Vision Statement: At Carnival Corporation & plc, our top priorities and responsibilities are to operate safely, to protect the environment, and to be in compliance everywhere we operate in the world. On this foundation, we aspire to deliver unmatched joyful vacations for our guests, always exceeding their expectations and in doing so driving outstanding shareholder value. We are committed to a positive and just corporate culture, based on inclusion and the power of diversity. We operate with integrity, trust and respect for each other – seeking collaboration, candor, openness and transparency at all times. And we intend to be an exemplary corporate citizen leaving the people and the places we touch even better.
Carnival’s Pathway to Decarbonization

Addressing climate change is one of our top priorities and we are committed to continue to lead the path within the cruise industry. Our entire management team, including our Boards of Directors, is committed to addressing climate change. Our path to decarbonization involves multimillion-dollar investments and a multi-faceted strategy. Key components of this strategy include adopting international frameworks and working with industry regulatory bodies to: address upcoming regulatory requirements and conditions, maximize efficiency opportunities/gains, implement low carbon fuels, invest in carbon-efficient technologies, support and accelerate industry-specific research & development projects, establish internal goals supporting the path as well as partner with other companies, NGOs, and relevant stakeholders.

In the coming years, we are likely to see an array of emerging technological innovations as currently there is not a single (nor a combination of technologies) that can move the maritime industry straight into a decarbonization path. As we navigate this journey, we are committed to evaluate options, work with various stakeholders, and adjust our path as needed. Please see the page 109 for further details.

Ethisphere Partnership

The Ethisphere® Institute is a global leader in defining and advancing standards of ethical business practices that fuel corporate character, marketplace trust, and business success. We are honored to be a member of The Business Ethics Leadership Alliance (BELA) within the Ethisphere organization. BELA supports the sharing of experiences and best practices within its members to improve ethics and compliance programs globally.

Human Rights Policy

As part of our ongoing efforts and support for human rights, we are committed to develop a human rights policy that will be in alignment with the Universal Declaration of Human Rights in 2020.

Animal Welfare

Tour Operators

• We continue our partnership with the Association of British Travel Agents (ABTA) to help us ensure we are responsibly managing excursions involving animals.
• We continue to work with third-party animal welfare auditors.
• Completed 100% of animal welfare audits for tour encounters offering dog sledding in Alaska.
• Completed more than 50% of animal welfare audits for tour encounters with dolphins in captivity between FY2018 and FY2019.

Seatrade Cruise Global - Agent Essentials: Navigating the Complex Waters of Compliance

In 2019, we co-sponsored a seminar during the Seatrade cruise industry annual meeting on corporate governance, which focused on the topics of ethics and compliance.
**Boards of Directors**

- Quarterly performance data, including relevant summaries and trends, are reported to our corporate and brand management, Board-level Committees and Boards of Directors. Specifically, the Health, Environmental, Safety and Security (HESS) Committees are briefed by management on the status, progress of, and plans for HESS and sustainability related matters, as well as on HESS audit results. In 2019, the Boards of Directors established a new Compliance Committee, bringing the total number of committees to six, for additional details [click here](#).

- In 2019, the Boards started the search for a new Board member with substantial compliance experience. The search led us to Jeffrey J. Gearhart, retired Executive Vice President, global governance and corporate secretary for Walmart, Inc. (“Walmart”). During his leadership tenure with Walmart, Gearhart was responsible for oversight of Walmart’s global legal, compliance, ethics and security and investigative functions, among others, until 2018. He joined Walmart in 2003 as Vice President and General Counsel, Corporate Division. In 2007, he became Senior Vice President and Deputy General Counsel, and then took over as the head of Walmart’s legal department when he was promoted to General Counsel in 2009. Gearhart was appointed Corporate Secretary in 2010, and in 2012 his responsibilities were expanded to include oversight of compliance, ethics and investigations, in addition to legal. Before joining Walmart, he was a partner with Kutak Rock LLP, practicing in the corporate, securities and mergers and acquisitions areas. Gearhart will serve in a non-executive capacity on Carnival Corporation & plc’s Boards of Directors effective April 2020. He will also serve on both the Compliance and the Health, Environmental, Safety & Security (HESS) Committees. For additional details [click here](#).

**Audits & Investigations**

- Our ships are regulated by various international, national, state and local laws, regulations and treaties enforced in the jurisdictions in which they operate. Compliance with these laws and regulations is verified through regular third-party inspections, surveys and audits.

- Internal Health, Environment, Safety and Security (HESS) compliance audits are conducted annually of each of our brands’ head offices, 100% of our fleet, our ports, hotels and land transport assets. HESS investigations are also carried out as needed to determine the root cause of incidents and identify corrective and preventative actions that will reduce the risk of future occurrences. In 2019, we made a number of improvements to our investigative function, which included: a) adding additional investigators; b) revising our investigation policies to reduce the tendency to place blame and to emphasize the need to learn from incidents; c) improving investigative training on root cause analysis; d) reducing the backlog of investigations. Additional improvements to the investigation program are planned and on-going throughout 2020.

- To better promote sharing of “lessons learned” throughout the corporation, all incident investigation recommendations, audit observations, findings and non-conformities are periodically reviewed by HESS leaders, reported to the brands and to relevant corporate groups for review and resolution. Additionally, internal focus reviews are performed based on identified root causes from incident investigations, audits, and management risk assessments.
**Code of Conduct & Ethics**
To further detail our requirements and expectations within our supply chain and when engaging with all stakeholders, we committed to revise our Business Partner Code of Conduct and Ethics and our Code of Business Conduct and Ethics in 2020.

**Fines & Sanctions**
As part of the previously disclosed settlement approved by the U.S. District Court of the Southern District of Florida in June 2019, Carnival Corporation & plc paid a financial penalty, and is subject to ongoing oversight, environmental goals, and certain reporting requirements. In this settlement, the Corporation also agreed to restructure and further strengthen its compliance function. This settlement related to violations of probation conditions that were set after Princess Cruises entered into a plea agreement with the U.S. Department of Justice in 2016. We may be subject to further conditions and penalties in the event of future environmental incidents.

**HESS Event Reporting System**
In 2019, we completed the fleetwide rollout of a new health, environment, safety and security (HESS) event reporting system. This platform has allowed us to standardize our HESS event reporting and analysis capabilities across the entire fleet.

**Transparency**
As part of our transparency efforts, we disclose key environmental and social data in our annual reports, the Performance Summary of this report (found on pages 156 and 157), as well as internationally recognized sustainability platforms.
We recognize our responsibility to provide industry leadership and to conduct our business as a responsible corporate citizen. We are committed to achieving and maintaining the highest standards of professional and ethical conduct. Adherence to the rule of law, ethical working practices, good corporate governance and transparency are extremely important to our stakeholders, and they are central to our sustainable business success.

Our ships are regulated by the various international, national, state and local laws, regulations and treaties in force in the jurisdictions in which our ships operate. Our ships are registered in The Bahamas, Bermuda, Italy, Malta, the Netherlands, Panama and the UK. They are regulated by these countries and by the international conventions that govern health, environmental, safety and security matters in relation to guests, crew members and the ships themselves. Representatives of each “Flag,” or country of registry, conduct periodic inspections, surveys and audits to verify compliance with these regulations. In addition, we are subject to the decrees, directives, regulations and other requirements of the more than 700 ports that our ships visit every year as they apply to the various aspects of our ships’ operations.

Peter C. Anderson joined Carnival Corporation & plc as Chief Ethics and Compliance Officer in August 2019. Anderson is also a member of the corporations’ executive leadership team, and reports directly to CEO Arnold Donald. In this newly created role, Anderson directs strategy for and drives a culture of compliance and integrity that ensures adherence to legal and statutory requirements, company policies, and the highest ethical principles. He also leads the effort to develop a well-resourced, effective, and well-integrated compliance program, that will be built upon compliance risk, innovative compliance training, robust investigations, open communications, and continuous improvements. This ethics and compliance program will involve the collective efforts of the compliance leaders throughout the operating lines, as well as the company’s employees around the world, and will help advance the company’s commitment to environmental performance, safety, health, security, and overall compliance.

Anderson is a former federal prosecutor with over 20 years of experience in corporate compliance. Prior to joining Carnival Corporation & plc, he had previously been the head of the White Collar and Compliance Group at the law firm of Beveridge & Diamond, PC. Anderson also led the environmental compliance team on the Volkswagen monitorship.
The daily operations of our company are executed by our employees under the direction and supervision of our President and Chief Executive Officer (CEO), Arnold W. Donald, and the CEOs and Presidents of each of our brands. Micky Arison is Chairman of the Boards. Our Boards of Directors are responsible for governance of our performance and strategies. We provide further details in the Corporate Governance section on our website and in the annual proxy statement on our website including:

- Mechanisms for shareholders and employees to provide recommendations or direction to the Boards of Directors.
- Processes for the Boards of Directors to ensure conflicts of interest are avoided.
- Processes for determining the required qualifications and expertise of the members of the Boards of Directors.
- Processes for evaluating the performance of the Boards of Directors.
- Linkages between compensation for executives and senior managers, and the company’s performance.

We have policies and safeguards in place which exceed regulatory requirements and promote high ethical standards. Our leadership is committed to our Code of Business Conduct and Ethics and our Business Partner Code of Business Conduct and Ethics, which require that every employee, member of the Boards of Directors, and business partner use sound judgment, maintain high ethical standards and demonstrate honesty in all business dealings. As part of our ethics program, we conduct periodic risk assessments and audits to help us direct and focus our compliance resources and work plans to address identified compliance risk.

Integrity is a fundamental value for all business units. Our employees are informed about our Code of Business Conduct and Ethics when they are hired and at pre-defined intervals thereafter.

In addition, all shoreside employees at the director level and above, or the local equivalent, and personnel in purchasing or recruiting roles, complete and sign a Business Ethics Disclosure Form annually, indicating that they have read, understood and agree to comply with our Code of Business Conduct and Ethics (available in eight languages internally). To reinforce our commitment to ethical business behavior, we also provide issue-specific ethics training to employees.
and board members on the basis of their roles and responsibilities in relation to identified compliance risk.

Transparency and disclosure are key to our corporate governance and ethics strategy. We monitor, track and report grievances, environmental incidents and other incidents. To facilitate reporting, we have established formal procedures to report concerns in person or via a dedicated hotline telephone number and website. We have a rigorous internal incident reporting system that requires the reporting of spills, releases or discharges internal within the ship or external to the ship. Spills, releases or discharges are reported to external authorities as required by applicable regulations.

We occasionally receive grievances about labor practices, human rights, impacts on society, environment, guest privacy and guest relations, among others. We evaluate all grievances that we receive. Our goal is to complete their evaluation within a reasonable time frame based on circumstances and legal complexity. However, thorough investigation may require an extended period of time to close some complaints.

Since 2019, we are partnering with The Ethisphere® Institute, a global leader in defining and advancing standards of ethical business practices that fuel corporate character, marketplace trust, and business success. We are honored to be a member of The Business Ethics Leadership Alliance (BELA) within the Ethisphere organization. BELA supports the sharing of experiences and best practices within its members to improve ethics and compliance programs globally.

We abide by the Cruise Lines International Association's (CLIA) anti-corruption principles. The principles cover for example bribery and corruption, facilitation payments and hospitality. For more details, please refer to the CLIA website.
Risk Management

Risk management is ingrained in our corporate culture. Effective risk management strategies allow us to identify impacts, risks and opportunities, thereby helping us to mitigate risks while executing our business strategies.
2020 GOAL & UPDATE

BUSINESS PARTNER CODE OF CONDUCT & ETHICS

Further develop and implement vendor assurance procedures ensuring compliance with Carnival Corporation & plc’s Business Partner Code of Conduct and Ethics. We comply with regulatory requirements and follow best management practices addressing human rights, ethics, and environmental protection throughout our operations and expect our business partners to adopt and incorporate these into their own organization.

HUMAN RIGHTS

- We are committed to furthering our commitment to human rights by developing a human rights policy in 2020.

ANIMAL WELFARE

- We continue our partnership with the Association of British Travel Agents (ABTA) to help us ensure we are responsibly managing excursions involving animals.
- We continue to work with third-party animal welfare auditors.
- Completed 100% of animal welfare audits for tour encounters offering dog sledding in Alaska.
- Completed more than 50% of animal welfare audits for tour encounters with dolphins in captivity between FY2018 and FY2019.
Ethics & Compliance

In 2019, we focused on enhancing our compliance framework by developing a dedicated ethics and compliance program and corresponding strategic plan. Through this, we were able to significantly increase the resources devoted to our compliance function. Our Chief Ethics and Compliance Officer (CECO), a member of the executive leadership team, leads the effort to further develop our ethics and compliance program across the entire corporation. The CECO is assisted by other leaders who focus on key areas (including environmental, health, safety and various general compliance issues), as well as important processes (investigations, compliance training, risks, and communications). It is important to note that the Ethics & Compliance is not just a single Department within All Brands Groups - but rather a corporate-wide program - with key Ethics & Compliance Officers (also known as “ECO’s”) who help shape and implement the program initiatives in each of the operating companies.

Through the collective efforts of these leaders, this corporate-wide program involves compliance risk management, improved compliance training programs for our employees, thorough investigations and remedial actions relating to health, environmental and safety incidents, and efforts to strengthen our corporate culture. To further heighten the focus on ethics and compliance, the Boards of Directors established Compliance Committees to oversee the ethics and compliance program, maintain regular communications with the Chief Ethics and Compliance Officer, and ensure implementation of the ethics and compliance program’s strategic plan across the corporation.

Carnival’s Pathway to Decarbonization

Addressing climate change is one of our top priorities and we are committed to continue to lead the path within the cruise industry. Our entire management team, including our Boards of Directors, is committed to addressing climate change. Our path to decarbonization involves multimillion-dollar investments and a multi-faceted strategy. Key components of this strategy include adopting international frameworks and working with industry regulatory bodies to: address upcoming regulatory requirements and conditions, maximize efficiency opportunities/gains, implement low carbon fuels, invest in carbon-efficient technologies, support and accelerate industry-specific research & development projects, establish internal goals supporting the path as well as partner with other companies, NGOs, and relevant stakeholders.

In the coming years, we are likely to see an array of emerging technological innovations as currently there is not a single (nor a combination of technologies) that can move the maritime industry straight into a decarbonization path. As we navigate this journey, we are committed to evaluate options, work with various stakeholders, and adjust our path as needed. Please see page 109-117 for further details.

Civil Unrest

Throughout the world in 2019, as countries experienced outbreaks of civil unrest, we worked closely with industry partners and regional governments. We implemented appropriate security measures which allowed us to navigate through protests with limited impact.
Visible Body Worn Cameras
Most of our onboard security teams now use Body Worn Cameras to record interactions with guests and gather video evidence of developing security situations. The use of cameras is clearly marked on the security officer’s uniform. These cameras have proven useful in capturing interactions between guests and crew members and in preventing confrontations by defusing tense situations.

Port & Destination Vulnerability and Threat Assessments
We regularly conduct port vulnerability and threat assessments to ensure the safety and well-being of our passengers and crew. These assessments document a port’s physical security, vulnerabilities, and any threats specific to the location. The assessments dictate the risk-mitigation actions that must be taken by ships calling on the port.

Audit & Investigations
- Our ships are regulated by various international, national, state and local laws, regulations and treaties enforced in the jurisdictions in which they operate. Compliance with these laws and regulations is verified through regular third-party inspections, surveys, and audits.
- Internal Health, Environment, Safety and Security (HESS) compliance audits are conducted annually of each of our brands’ head offices, 100% of our fleet, our ports, hotels, and land transport assets.
- HESS investigations are also carried out as needed to determine the root cause of incidents and identify corrective and preventative actions that will reduce the risk of future occurrences.

In 2019, we made a number of improvements to our investigative function, which included: a) adding additional investigators; b) revising our investigation policies to reduce the tendency to place blame and to emphasize the need to learn from incidents; c) improving investigative training on root cause analysis; d) reducing the backlog of investigations. Additional improvements to the investigation program are planned and ongoing throughout 2020.
- To better promote sharing of “lessons learned” throughout the corporation, all incident investigation recommendations, audit observations, findings and non-conformities are periodically reviewed by HESS leaders, reported to the brands and to relevant corporate groups for review and resolution. Additionally, internal focus reviews are performed based on identified root causes from incident investigations, audits, and management risk assessments.

CyberSecurity
In 2019, we continued to enhance cybersecurity capabilities and data privacy initiatives to protect the fleet, employees and our guests from any threats that could impact operational technology systems and data privacy. We introduced data privacy and cybersecurity training for applicable shipboard staff and shoreside employees. Cybersecurity policies and procedures were introduced into our Global Health, Environment, Safety and Security (HESS) management system. We also have implemented procedures to ensure compliance with applicable data privacy laws in various jurisdictions.
Psymetric Evaluation Program
We continue to evaluate our Deck, Technical and Environmental Officers through a Psychometric Evaluation Program. The program is utilized across all brands for the selection and promotion of officers through the evaluation of specific psychological attributes at certain career stages. To ensure that all officers possess the attributes required for each of their roles, a variety of psychometric evaluations, both online and in-person with psychologists are utilized. The program includes a series of online and proctored evaluations as part of the new hire process including a comprehensive in-person evaluation as part of the senior officer promotion process and ongoing “check in” evaluations of our senior officers.

HESS Event Reporting System
In 2019, we completed the fleetwide rollout of a new health, environment, safety and security (HESS) event reporting system. This platform has allowed us to standardize our HESS event reporting and analysis capabilities across the entire fleet.

Human Rights Policy
As part of our ongoing efforts and support for human rights, we are committed to develop a human rights policy that will be in alignment with the Universal Declaration of Human Rights in 2020.

Animal Welfare
- We continue our partnership with the Association of British Travel Agents (ABTA) to help us ensure we are responsibly managing excursions involving animals.
- We continue to work with third-party animal welfare auditor.
- Completed 100% of animal welfare audits for tour encounters offering dog sledding in Alaska.
- Completed more than 50% of animal welfare audits for tour encounters with dolphins in captivity between FY2018 and FY2019.

Ethisphere Partnership
The Ethisphere® Institute is a global leader in defining and advancing standards of ethical business practices that fuel corporate character, marketplace trust, and business success. We are honored to be a member of The Business Ethics Leadership Alliance (BELA) within the Ethisphere organization. BELA supports the sharing of experiences and best practices within its members to improve ethics and compliance programs globally.

Arison Maritime Center - CSMART
- We continue to train our officers in our world-class facility equipped with the latest maritime simulation technology and equipment. The Center provides rigorous safety training for bridge, engineering and environmental officers responsible for the navigation, operation and environmental compliance of the world’s largest fleet of cruise ships. Participants receive a maritime training experience that fosters critical thinking, problem solving, ethical decision making and skill development. Click here for more information.
- Carnival Corporation & plc’s CSMART Training Center received the 2019 SAFETY4SEA Training Award, for providing high-quality maritime training services for industry-wide safety, sustainability and operational excellence. Read more here.
Our COMMITMENT

Like companies in any industry, we face a number of challenges and opportunities related to our performance, including the regulatory environment, global political and socioeconomic landscape and the advancement of science and technology. We take an active approach to identifying risks and opportunities and use a variety of strategies to manage and take advantage of them. We work to identify the best approaches to managing these issues, while simultaneously focusing on our sustainability.

Our STRATEGY

Risk management is embedded throughout our organization. Our strategy to manage our risks and seek out opportunities consists of a system of internal controls comprised of our management systems, organizational structures, audit processes, investigations, standards, and our Code of Business Conduct and Ethics. Risks are managed at every level of the organization and discussed openly with leadership in order to minimize the impact of foreseen and unforeseen events. Upper management and the Boards of Directors are regularly advised on corporate risk management issues and on the status of compliance with our health, environment, safety, security and sustainability policies and procedures.

Our key impacts, risks and opportunities are addressed throughout this report. The following is a partial list of our impacts, risks and opportunities:

- Recruiting, training and retaining qualified employees.
- Operating in a changing geopolitical climate.
- Improving our performance through technological solutions and initiatives.
- Conserving fuel and minimizing engine emissions.
- Climate change - reducing greenhouse gas (GHG) emissions.
- Operating in an evolving regulatory landscape.
- Improving natural resource management.
- Strengthening stakeholder engagement.
- Partnering with communities/ports-of-call.

- Protecting the health and safety of our guests and crew.
- Ensuring the security of our guests, crew and ships.
- Building and maintaining trust and integrity in our supply chain.
- Preserving the natural environment.
- Remaining transparent in our sustainability performance accountability and reporting.
Our health, environment, safety, security and sustainability principles focus on detection, prevention, implementation, feedback and improvement. We plan and establish objectives and processes necessary to achieve the required and expected results. We then implement the plan and processes. Studying the actual results of implementation and comparing against the expected results, we then take action on significant differences between actual and planned results. Finally, we analyze these differences to determine their root causes and then determine where to apply changes that will improve the process or results.

Identification and mitigation of risks is a management responsibility. To facilitate this process, the Risk Advisory and Assurance Services department (RAAS) provides the enterprise with a holistic risk framework and methodology for quantifying risk and assessing management’s capabilities for improving risk management. RAAS also provides services via their internal audit program that can provide assurance that risk mitigations are designed and operating effectively.

Pursuant to this program, the RAAS 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 Committees.
Safety

Safety is paramount to our success, and we focus on delivering safe operations fleetwide every day, and everywhere around the world. We take this responsibility seriously and continuously evaluate ways to further improve and build a culture where safety is always intrinsic in everything we do.
GUEST AND CREWMEMBER HEALTH, SAFETY & SECURITY

Striving to be free of injuries, we continue to build on our commitment to protect the health, safety and security of our guests, employees and all others working on our behalf.

ACROSS OUR CRUISE BRANDS...

We have implemented a series of initiatives to prevent guest and crew injuries. Some examples include:

- Implemented additional programs to support Health, Environmental, Safety and Security culture
CSMART - Safety4Sea Award - Training Services
Carnival Corporation & plc’s CSMART Training Center received the 2019 SAFETY4SEA EUROPORT Training Award, for the second consecutive year for providing high-quality maritime training services for industry-wide safety, sustainability and operational excellence.

HESS Event Reporting System
In 2019, we completed the fleetwide rollout of a new Health, Environment, Safety and Security (HESS) event reporting system. This platform has allowed us to standardize our HESS event reporting and analysis capabilities across the entire fleet.

Emergency Response Efficiency - Electronic Mustering System
Electronic mustering systems improve the speed with which we can account for personnel in emergency situations. In 2019, we completed fleetwide implementation of these systems which are designed to deliver a faster, more efficient mustering process and provide accurate, real-time measurement of assembly and evacuation, if ever needed.

Civil Unrest
Throughout the world in 2019, as countries experienced outbreaks of civil unrest, we worked closely with industry partners and regional governments. We implemented appropriate security measures which allowed us to navigate through protests with limited impact.

Security Support Teams
In 2019, some of our brands created Security Support Teams to augment security staff during priority activities or incidents. The teams serve to deter potential confrontations or physical altercations amongst guests.

Monitoring
Management monitors safety performance through a weekly company-wide safety performance dashboard and monthly meetings designed to evaluate trends and assess performance. We actively seek opportunities to learn from our experiences. Additionally, we take part in cross-industry working groups which include shipbuilders and Classification Societies to ensure best practices from throughout each sector are considered for adoption.

Fire Prevention
Our entire fleet has been upgraded with the latest engine room fire prevention, detection and suppression technologies.
Audit & Investigations

- Our ships are regulated by various international, national, state and local laws, regulations and treaties enforced in the jurisdictions in which they operate. Compliance with these laws and regulations is verified through regular third-party inspections, surveys and audits.
- Internal Health, Environment, Safety and Security (HESS) compliance audits are conducted annually of each of our brands’ head offices, 100% of our fleet, our ports, hotels and land transport assets. HESS investigations are also carried out as needed to determine the root cause of incidents and identify corrective and preventative actions that will reduce the risk of future occurrences. In 2019, we made a number of improvements to our investigative function, which included: a) adding additional investigators; b) revising our investigation policies to reduce the tendency to place blame and to emphasize the need to learn from incidents; c) improving investigative training on root cause analysis; d) reducing the backlog of investigations. Additional improvements to the investigation program are planned and on-going throughout 2020.
- To better promote sharing of “lessons learned” throughout the corporation, all incident investigation recommendations, audit observations, findings and non-conformities are periodically reviewed by HESS leaders, reported to the brands and to relevant corporate groups for review and resolution. Additionally, internal focus reviews are performed based on identified root causes from incident investigations, audits, and management risk assessments.

We have also supported the development of an international design and performance standard against which we will require these systems to be certified. The standard has now been finalized and will require a high detection rate with a low false alarm rate (to avoid unnecessary distractions to the Bridge team navigating the ship) under a variety of maritime conditions. We continue to engage with manufacturers as they continue to develop systems intended to meet the standard.

Visible Body Worn Cameras

Most of our onboard security teams now use Body Worn Cameras to record interactions with guests and gather video evidence of developing security situations. The use of cameras is clearly marked on the security officer’s uniform. These cameras have proven useful in capturing interactions between guests and crew members and in preventing confrontations by defusing tense situations.

Dual-View X-Ray Systems

In 2019, we expanded our investment in cutting-edge screening equipment and technology, equipping ports with dual-view X-ray systems. These systems enhanced the passenger experience by improving throughput, thereby helping to expedite security checks.

Port and Destination Vulnerability and Threat Assessments

We regularly conduct port vulnerability and threat assessments to ensure the safety and well-being of our guests and crew. These assessments document a port’s physical security and vulnerabilities along with any threats specific to the location. The assessments dictate the risk-mitigation actions that must be taken by ships calling on the port.

Man Overboard Detection Systems

We continue to research, test and pilot man overboard detection systems and associated technologies. These systems are intended to support shipboard personnel by identifying an incident involving a person falling or jumping overboard as it occurs.
Our COMMITMENT

A core part of our company vision is to deliver safe and memorable vacations for our guests while delivering safe operations fleetwide everyday, and everywhere around the world. We have developed and implemented best-practice safety policies and procedures that go beyond compliance with the International Maritime Organization’s Safety of Life at Sea (SOLAS) requirements. Our occupational health and safety management system is based on and incorporates the principles and practices delineated in OHSAS 18001:2007, the world’s most recognized occupational health and safety management system standard. In fact, several of our brands have obtained voluntary third-party certification in accordance with the OHSAS 18001 standard. We continually update our safety standards and practices by leveraging the expertise across our brand teams to introduce improved training procedures, incorporate new knowledge and learnings, identify and implement best management practices and evaluate new technologies.

Our STRATEGY

Crew
Because our crew work and live on board our ships, we maintain a 24/7 responsibility for their safety. Our Safety Management Systems (SMS), workplace safety committees and focused shipboard and shoreside training programs are in place to ensure the safest possible working environment.

The vast majority of our workforce is represented through formal joint management and worker health and safety committees. During regularly scheduled meetings, shipboard safety committees review and address specific workplace safety topics. These committees play a key role in reducing shipboard accidents through hazard assessments, accident reviews and inspections. These sessions also serve as a forum for promoting safety awareness and for raising, discussing and identifying solutions for shipboard safety issues. Safety representatives in brand shoreside departments communicate and share experiences and best practices throughout their respective fleets and across fleets through cross-brand safety working groups.
Guests
We take the safety of our 12 million annual guests very seriously. International, national, flag state administration, and most importantly, our own regulations via our Safety Management System (SMS) require us to provide a safe physical environment on board for our guests and ensure they are informed about what to do in an emergency situation.

Our safety strategy is based on injury and accident prevention through the implementation of related procedures and processes, performance measurement, and continuous improvement activities. Our SMS establishes accountability for safety throughout the organization and incorporates both regulatory and company management safety requirements that go beyond compliance.

Our safety practices comply with or exceed international ship safety standards, employ state-of-the-art technologies in ship design and operations, require rigorous staff safety training and proficiency drills, utilize a variety of guest communication tools, administer ongoing ship audit and inspection programs and ensure all safety equipment is maintained. We examine new technologies that have the potential to positively influence the safety environment of our guests.
Security

Criminal activities are always a potential threat to our business given our global footprint and reach. Therefore, we are focused on maintaining a high-level of security for our guests, crew and assets. We take every possible action to anticipate, prepare and guard against such risks. These efforts start long before any guests board our vessels or any voyage sails.
GUEST AND CREWMEMBER HEALTH, SAFETY & SECURITY

Striving to be free of injuries, we continue to build on our commitment to protect the health, safety and security of our guests, employees and all others working on our behalf.

ACTIVE ASSAILANT PROGRAM

Carnival completed the implementation of an Active Assailant Program with the objective of reducing any potential risk while protecting guests and crewmembers from bodily harm on our ships. In 2019, we introduced a fleetwide Active Assailant Procedure requiring annual training and exercises for our staff.
In 2019, we continued to enhance cybersecurity capabilities and data privacy initiatives to protect the fleet, employees and our guests from any threats that could impact operational technology systems and data privacy. We introduced data privacy and cybersecurity training for applicable shipboard staff and shoreside employees. Cybersecurity policies and procedures were introduced into our Global Health, Environment, Safety and Security (HESS) management system. We also have implemented procedures to ensure compliance with applicable data privacy laws in various jurisdictions.

Port and Destination Vulnerability and Threat Assessments
We regularly conduct port vulnerability and threat assessments to ensure the safety and well-being of our guests and crew. These assessments document a port’s physical security and vulnerabilities along with any threats specific to the location. The assessments dictate the risk-mitigation actions that must be taken by ships calling on the port.

Civil Unrest
Throughout the world in 2019, as countries experienced outbreaks of civil unrest, we worked closely with industry partners and regional governments. We implemented appropriate security measures which allowed us to navigate through protests with limited impact.

Security Support Teams
In 2019, some of our brands created Security Support Teams to augment security staff during priority activities or incidents. The teams serve to deter potential confrontations or physical altercations amongst guests.

Insider Threat Program
Carnival Corporation & plc completed the implementation of an Insider Threat Program across all ships. A part of the program includes additional security screening of potential new employees. Since 2018, Carnival Corporation & plc conducted over 40,000 security screenings of new employees and continues to work closely with Law Enforcement Organizations to identify and mitigate possible insider threats.

HESS Event Reporting System
In 2019, we completed the fleetwide rollout of a new Health, Environment, Safety and Security (HESS) event reporting system. This platform has allowed us to standardize our HESS event reporting and analysis capabilities across the entire fleet.
Active Assailant Program
Carnival Corporation & plc completed the implementation of an Active Assailant Program with the objective of reducing any potential risk while protecting guests and crew members from bodily harm on our ships. In 2019, we introduced a fleetwide Active Assailant Procedure requiring annual training and exercises for our staff.

Visible Body Worn Cameras
Most of our onboard security teams now use Body Worn Cameras to record interactions with guests and gather video evidence of developing security situations. The use of cameras is clearly marked on the security officer’s uniform. These cameras have proven useful in capturing interactions between guests and crew members and in preventing confrontations by defusing tense situations.

Security Officer Training Program (SOTP)
Carnival Corporation & plc’s SOTP is based in the Philippines and provides a comprehensive two-week curriculum that prepares our new hire security team members for duty on board any of our ships as a security officer. The curriculum is regularly reviewed and updated by brand security experts so that the training reflects the company’s latest procedures, requirements, and best practices.

Dual-View X-Ray Systems
In 2019, we expanded our investment in cutting-edge screening equipment and technology, equipping ports with dual-view X-ray systems. These systems enhanced the passenger experience by improving throughput, thereby helping to expedite security checks.

Man Overboard Detection Systems
We continue to research, test, and pilot man overboard detection systems and associated technologies. These systems are intended to support shipboard personnel by identifying an incident involving a person falling or jumping overboard as it occurs. We have also supported the development of an international design and performance standard against which we will require these systems to be certified. The standard has now been finalized and will require a high detection rate with a low false alarm rate (to avoid unnecessary distractions to the Bridge team navigating the ship) under a variety of maritime conditions. We continue to engage with manufacturers as they continue to develop systems intended to meet the standard.
Our COMMITMENT

The security of our guests and crew is of paramount importance. Our ships are subject to the International Ship and Port Facility Security (ISPS) Code, a set of regulations and guidelines created and approved by the International Maritime Organization (IMO). All of our ships and their daily operations meet or exceed the requirements of the ISPS Code. The code defines security standards, requirements, arrangements and procedures for ships, ports, and governments. It also prescribes the responsibilities for governments, shipping companies, shipboard personnel, and port/facility personnel, among others, to develop security plans, detect security threats and take preventative measures against potential security incidents affecting ships or port facilities.

Compliance is verified by inspections and surveys conducted by the Flag State, or by its delegated representative (usually a classification society), and certificates are issued that confirm compliance. Cruise ships are also subject to domestic security in the countries they visit. Our ships meet or exceed the requirements of the U.S. Maritime Transportation Safety Act (MTSA) and domestic regulations in the other countries we visit. We have developed and issued a comprehensive set of security procedures that go beyond regulatory requirements to further ensure the security of our guests, crew and ships.

Our STRATEGY

Our security professionals, most of whom come from a military or law enforcement background, maintain close working relationships with law enforcement, coast guards, naval authorities and governmental agencies around the world. They participate in, and many times lead, government/private sector and industry maritime security working groups. Some of these relationships include the U.S. Department of Defense, U.S. State Department, Federal Bureau of Investigation (FBI), UK Foreign & Commonwealth Office (FCO) and International Criminal Police Organization (INTERPOL). Specifically, our security leaders serve in various roles/capacities on the following organizations: The U.S. Department of State's Overseas Security Advisory Council’s Maritime Security Working Group, the FBI’s Domestic Security Alliance Council’s (DSAC) Intelligence and Threats Committee and the DSAC’s Leadership Council.

These relationships result in information-sharing arrangements and collaborative efforts that are essential to our proactive security program. Further, our security professionals monitor numerous information and intelligence platforms to detect issues before they impact our passengers, crew, or vessels. Many of the ports that our vessels call on are assessed by our security professionals on a scheduled basis beyond any requirements set forth by applicable laws, rules, or code.

Our security processes are designed to minimize security-related risks while allowing for the smooth but controlled flow of guests, crew, and supplies. Guests and crew will notice a visible security presence while embarking the ship and throughout each cruise. Security personnel maintain strict access control to our ships. We employ a variety of technologies to assist security personnel. These include surveillance technologies such as closed-circuit television and screening technologies such as metal detectors, x-ray machines and explosives detection equipment. We also are constantly assessing and evaluating new technologies for future projects and security enhancements.

Our security processes guard against criminal activity threats. Each ship in our fleet must report alleged criminal activity. Depending on jurisdictional considerations and the severity of alleged offenses, we coordinate investigative efforts with appropriate law enforcement authorities.
Protecting and maintaining the health of our guests and crew is a priority.
GUEST AND CREWMEMBER HEALTH, SAFETY & SECURITY

Striving to be free of injuries, we continue to build on our commitment to protect the health, safety and security of our guests, employees and all others working on our behalf.

HEALTH

- We continued to implement a series of initiatives to prevent guest and crew injuries.
- We continued to enhance our health procedures.
Public Health Training
In 2019, additional interactive food safety training modules were developed and launched on all of our ships. New innovative training videos using a combination of live action and animation have been added to the training library.

Public Health Inspections
All of our ships that call on U.S. ports are subject to unannounced, twice-yearly public health inspections from the Center of Disease Control (CDC) – Vessel Sanitation Program (VSP). In 2019, two of our ships received a perfect score of 100 and one of our ships received a failing score of 77 in July. Immediate corrective actions were implemented and when the ship was inspected again in October it received a score of 99. In 2019, four of our ships received a perfect score from the Public Health Agency of Canada (PHAC).

SeaCare
Enhancements to our fleetwide standard electronic health record (EHR) platform were made and SeaCare now helps support many aspects of our medical operations and services.

Measles
In 2019, a worldwide increase in measles cases was widely reported with significant outbreaks occurring in the United States, Europe and the Pacific regions. We proactively provided our ships with additional procedures and guidance for the prevention and control of measles cases on board including:

- Recommendations for crew and passenger vaccinations.
- Specific health information and advice.
- Measures to ensure identification and management of any possible measles cases and their close contacts.
- Information on country-specific requirements and control measures.

In 2019, no significant health impacts from measles were reported on any of our ships.

Guest & Crew Care Team
Our Care Team continues to provide compassionate care for guests and crew in the event of an emergency while on board. Care Team employees have received specialized training on how to sensitively and appropriately support guests, crew and their families during an emergency. They are available 24 hours a day, seven days a week and respond to a variety of guest and crew emergencies, primarily medical related situations, and are dispatched to locations throughout our cruising regions to provide personalized support and assistance as needed to all of our brands.

Officer Wellness Program
The 2018 executive health assessment pilot program provided by the clinic and medical wellness facility at the Arison Maritime Center (known as CSMART) for Deck and Technical Officers was adopted by all our Operating Lines. This program promotes long-term health improvements among our officers over time.
Maritime Medical Procedure Development
Our entire suite of comprehensive medical procedures was reviewed and improved in 2019. The key enhancements included:

- Providing a more user-friendly procedure structure and formats to help effective use by our medical teams.
- Updating clinical guidance and requirements in line with recognized international healthcare best practices.
- Providing additional and enhanced fleetwide procedures and guidance covering issues such as clinical pathways, the provision of medical assistance ashore, use of X-rays, management of controlled drugs, onboard emergency medical response, and the management of measles cases.

Industry Communication and Best Practice Sharing
As members of the Cruise Lines International Association (CLIA), we regularly discuss health matters and communicate with all member lines to share best practices. In 2019, we participated in several CLIA health programs and initiatives such as:

- Consultation on changes to the ANVISA Brazilian ship sanitation manual.
- The development of European Union Healthy Gateways joint action provisions for grading of ship inspections.
- Proposals to provide a new score grading approach to ship inspections conducted by the U.S. Vessel Sanitation Program.

HESS Event Reporting System
In 2019, we completed the fleetwide rollout of a new health, environment, safety and security (HESS) event reporting system. This platform has allowed us to standardize our HESS event reporting and analysis capabilities across the entire fleet.
Our COMMITMENT

We have established comprehensive health standards that go beyond regulatory requirements to help protect the health of our guests, crew and port employees. These standards are implemented and enforced by each of our brands on all of our ships and within the port facilities that we own and operate. As part of our commitment, we also lead and participate in health-related cruise industry task forces and working groups.

We have taken a proactive role in addressing the quality of shipboard medical care. All of our medical personnel are expected to meet the qualification standards outlined in our medical and public health procedures. Our onboard facilities are designed to be able to provide emergency medical care for guests and crew, stabilize patients and initiate reasonable diagnostic and therapeutic intervention and facilitate the evacuation of seriously ill or injured patients when deemed necessary.

Our STRATEGY

Our public health programs have been developed from worldwide health and sanitation regulations, best practices and ship operating experience. Our programs are audited both internally by public health specialists and externally by officers from health authorities worldwide. We coordinate internal cross-brand and external cross-company Medical and Public Health Working Groups, which help to drive our ongoing health strategies and focus on continuous improvement. Through these forums, we are able to leverage the extensive health expertise and experience that exists both within our individual brands and across the cruise industry. In the U.S., we collaborate with the Centers for Disease Control and Prevention (CDC), an agency of the U.S. Department of Health and Human Services, which oversees health and sanitary conditions on all passenger vessels visiting U.S. ports. The CDC provides guidelines, reviews plans and conducts unannounced ship inspections. We continue to work with the CDC throughout a ship’s life to maintain safe standards through regular inspections, crew training, and guest education.

One of our priorities remains promoting the prevention of gastrointestinal illness on board our ships and the port facilities we own and operate. Our fleetwide Outbreak Prevention and Response Plan guides our actions to prevent and respond to outbreaks of illness on board our ships. The strategy detailed in the plan addresses health screening and surveillance measures, the communication and provision of health advice, isolation of ill guests and crew, medical treatment, reporting to health authorities and the use of proven sanitation and infection control measures.

Additionally, we collect relevant data on all cases of gastrointestinal illness and report this information to international health agencies. This information helps with identification of types of infection, potential sources, and the likely methods of transmission, thereby allowing us to implement even more effective risk mitigation strategies.
Environmental Management

Across our nine brands, we host 12.9 million guests a year and visit over 700 ports of call around the world. The health and vitality of the oceans, seas, and communities through which we travel is absolutely essential to our business. That makes protecting the environment and biodiversity one of our most critical areas of focus. Our employees not only take great pride in making sure our guests’ vacation exceeds their expectations, but are also deeply committed to protecting the oceans and seas.
2020 Goal: Reduce the intensity of CO₂e (carbon dioxide equivalent) emissions from our operations by 25% by 2020 relative to our 2005 baseline, measured in grams of CO₂e per ALB-km.

2030 Goal: Reduce the intensity of CO₂e (carbon dioxide equivalent) emissions from our operations by 40% by 2030 relative to our 2008 baseline, measured in grams of CO₂e per ALB-km.

Reducing Emissions: We achieved our 2020 goal in 2017 and made more progress by:
- A 29.1% reduction relative to our 2005 baseline.
- A 24.8% reduction relative to 2008 baseline, in line with our 2030 goal.
- Delivering the second cruise ship in the world to be powered by liquefied natural gas (LNG) both at sea and in port.
- Becoming the first cruise company to join the Getting to Zero Coalition.
- Investing in fuel-cell technology.
- Investing in battery technology.

AWWTS TECHNOLOGY

Increased Advanced Waste Water Treatment System (AWWTS) coverage of our fleetwide capacity by 10 percentage points by 2020 relative to our 2014 baseline.
- Reached our goal by achieving a 10.3 percentage points in our AWWTS coverage of fleetwide capacity relative to our 2014 baseline.
WATER EFFICIENCY  ACHIEVED IN 2019

Improve water use efficiency of our shipboard operations by 5% by 2020 relative to our 2010 baseline, as measured by liters per person per day.

• Surpassed our goal by achieving an 8.7% reduction relative to our 2010 baseline.
• Further improved our water efficiency by supplying 82% of our water needs from the ocean and purchasing only 18% at designated ports.

WASTE REDUCTION  ACHIEVED IN 2019

Continue to reduce waste generated by our shipboard operations by 5% by 2020 relative to our 2016 baseline, as measured by kilograms of non-recycled waste per person per day.

• Reached our goal by achieving a 5.6% reduction in our waste rate relative to our 2016 baseline.
• Committed to a new food waste reduction goal of 10% across our entire fleet by the end of 2021.
• Committed to a new goal to reduce all non-essential single-use items, including plastics, on board our ships by 50% by the end of 2021.
• Completed Phase I of the single-use items and plastics program by eliminating or replacing straws, cups, lids, stir sticks, cocktail picks, toothpicks, butter foils, and plastic shopping bags with sustainable alternatives.
• Installed additional food waste digesters throughout the fleet.

ADVANCED AIR QUALITY SYSTEMS (AAQS)  ON TRACK

Continue to improve the quality of our emissions into the air by installing Advanced Air Quality Systems across the fleet. These systems significantly reduce sulfur compounds and particulate matter, including black carbon, from our ship’s engine exhaust.

• 77% of our fleet is equipped with Advanced Air Quality Systems.
• Developed a public website dedicated to Advanced Air Quality Systems.
• 236 engines equipped with Advanced Air Quality Systems.
**Newsweek (Most Responsible Companies — Environmental, Social and Governance)**
Carnival Corporation & plc has been recognized in Newsweek’s first ranking of America’s Most Responsible Companies 2020. Companies were evaluated based on their environmental, social, and corporate governance performance. A total of 2000 American public companies were evaluated and the top 300 are included on the list. We are honored to be listed as the highest-ranking company in the cruise sector. [The list of companies can be viewed here.](#)

**Neptune Award (Greenest Shipowner)**
Carnival Corporation & plc has been honored by maritime industry peers with the Greenest Shipowner of the Year Neptune Award, which recognizes a company that has shown excellence in reducing environmental impact in the operation of its fleet in the past year. Winners were chosen by executives from ship owners, ports, and marine technology companies who gathered to share best practices and cutting-edge technologies to enable continued reductions in the environmental impacts of shipping. [Click here for more information.](#)

**Germany’s Blue Angel Eco-Label Award (Environmentally Friendly Ship Design)**
Carnival’s AIDA Cruises has been awarded the “Blue Angel,” Germany’s Federal Government eco-label, for AIDAnova’s environmentally-friendly ship design. Through the use of liquefied natural gas (LNG), the ship emissions of particulate matter and sulfur oxides are almost completely eliminated; nitrogen oxide and CO₂ emissions are sustainably reduced. In September 2019, the “Blue Angel” logo was painted onto AIDAnova’s side at the Port of Marseille. [Click here for more information.](#)
Carnival’s Pathway to Decarbonization
Addressing climate change is one of our top priorities and we are committed to continue to lead the path within the cruise industry. Our entire management team, including our Boards of Directors, is committed to addressing climate change. Our path to decarbonization involves multimillion dollar investments and a multi-faceted strategy. Key components of this strategy include adopting international frameworks and working with industry regulatory bodies to: address upcoming regulatory requirements and conditions, maximize efficiency opportunities/gains, implement low carbon fuels, invest in carbon-efficient technologies, support and accelerate industry-specific research & development projects, establish internal goals supporting the path as well as partner with other companies, NGOs, and relevant stakeholders. In the coming years, we are likely to see an array of emerging technological innovations as currently there is not a single (nor a combination of technologies) that can move the maritime industry straight into a decarbonization path. As we navigate this journey, we are committed to evaluate options, work with various stakeholders, and adjust our path as needed. Please see page 109-117 for further details.

Carnival Corporation Environmental Excellence Awards
We continue to honor excellence in environmental performance throughout our fleet. The Carnival Corporation & plc environmental excellence award honors the accomplishments of the ship’s management and crew that best represents our commitment to protecting and preserving the environment. Their example promotes continuous improvement throughout our fleet. Every year one ship from each cruise brand is selected and from those nine total ships, one is recognized as the best in environmental excellence. For FY2019 performance, Carnival Cruise Line’s ship Carnival Horizon was the recipient of the Environmental Excellence Award.

The individual best in brand Environmental Excellence Award winners are:

- AIDA Cruises: AIDAVita
- Carnival Cruise Line: Carnival Vista
- Costa Cruises: Costa Fascinosa / Costa Asia: Costa Serena
- Cunard: Queen Victoria
- Holland America Line: Koningsdam
- P&O Australia: Pacific Dawn
- P&O Cruises: Ventura
- Princess Cruises: Ruby Princess
- Seabourn: Seabourn Sojourn
Audit & Investigation

- Our ships are regulated by various international, national, state and local laws, regulations and treaties enforced in the jurisdictions in which they operate. Compliance with these laws and regulations is verified through regular third-party inspections, surveys and audits.
- Internal Health, Environment, Safety and Security (HESS) compliance audits are conducted annually of each of our brands’ head offices, 100% of our fleet, our ports, hotels and land transport assets. HESS investigations are also carried out as needed to determine the root cause of incidents and identify corrective and preventative actions that will reduce the risk of future occurrences. In 2019, we made a number of improvements to our investigative function, which included: a) adding additional investigators; b) revising our investigation policies to reduce the tendency to place blame and to emphasize the need to learn from incidents; c) improving investigative training on root cause analysis; d) reducing the backlog of investigations. Additional improvements to the investigation program are planned and ongoing throughout 2020.
- To better promote sharing of “lessons learned” throughout the corporation, all incident investigation recommendations, audit observations, findings and non-conformities are periodically reviewed by HESS leaders, reported to the brands and to relevant corporate groups for review and resolution. Additionally, internal focus reviews are performed based on identified root causes from incident investigations, audits, and management risk assessments.

Partnership - Getting to Zero Coalition

The Getting to Zero Coalition is an alliance of organizations across the maritime, energy, infrastructure, and finance sectors committed to accelerating the decarbonization of the international shipping industry. Carnival Corporation & plc is the first cruise company to join this global alliance.

The coalition’s goal aligns with the International Maritime Organization’s (IMO) strategy to reduce greenhouse gas emissions from shipping by at least 50% by 2050 as compared to 2008 emissions. To meet the target, the Getting to Zero Coalition aspires to having technically feasible, commercially viable zero-emission deep-sea vessels (ZEVs) entering the global shipping fleet as early as 2030. The alliance’s goal also includes scalable infrastructure for zero-carbon energy sources, including production, distribution, storage, and bunkering.

Supported by key governments and intergovernmental organizations, the coalition represents a leading group of over 80 companies, including global stakeholders from a variety of shipping-related industries such as fuel suppliers, engine manufacturers, marine classification societies, shipping companies, major ports, and more.
Partnership - Jean-Michel Cousteau - Ocean Futures Society
Carnival Corporation & plc partnered with renowned ocean explorer and life-long environmental advocate Jean-Michel Cousteau and his Ocean Futures Society, a nonprofit marine conservation and education organization that serves as a “Voice for the Ocean” on the importance of effective environmental and sustainability policy. Cousteau is providing valuable external expertise on environmental initiatives as we continue our commitment to sustainability and our oceans.

Partnership - Ocean Plastics Leadership Network
We have become members of the Ocean Plastics Leadership Network, a new global community of retailers, brands, and non-governmental organizations committed to sharing best practices, new business models, to develop new approaches, innovations and solutions-based projects to address the impacts of plastic waste on the marine environment.

Carnival Cruise Line’s Partnerships with Clean the World and Soap Aid
Our Carnival Cruise Line brand partnered with Clean the World and Soap Aid, both organizations recycle hotel soap and hotel amenities. Discarded soap from Carnival’s guest and crew staterooms are gathered throughout the fleet and sent to a Clean the World or Soap Aid recycling center where the soap is sanitized, melted down, and reprocessed. Together, Carnival Cruise Line and their soap recycling partners will distribute more than 400,000 recycled, clean bars of soap to people in need across the globe each year. Through its partnership with Carnival Cruise Line, Clean the World was able to expand its existing recycling program to locations throughout the Bahamas, Puerto Rico, Mexico, Bermuda, and Central America providing life-saving hygiene services to residents in these areas.

Food Waste Reduction
In 2019, Carnival Corporation & plc committed to a new food waste reduction goal across our entire fleet of 10% by the end of 2021. As part of this initiative, a new baseline was established and we are working on solutions that involve the development of new and the revision of existing food waste management systems and practices on board our ships.

Food Waste Biodigesters
In 2019, we continued to evaluate technologies and operational changes to minimize the volume of food waste generated and installed additional biodigesters throughout the fleet. Biodigesters use an aerobic digestion process that takes place within the machines and efficiently breaks down food waste. This green technology also supports and enhances operations on board, making it more efficient for crew members to manage and control food waste. We are excited about this technology and are planning to expand the use of these systems across our fleet as part of our commitment to environmental excellence.
Costa Cruises and AIDA - Sahara Forest Project
Costa Cruises Foundation – Costa Crociere joined forces with the Norwegian nonprofit Sahara Forest Project Foundation to enlarge the scope to revegetate the desert in Jordan with sustainable technologies and to promote social and environmental improvement within the region. Currently, the Sahara Forest Project operates three hectares of commercial facility, located 12 kilometers north of the port of Aqaba. The project focuses on combining saltwater-cooled greenhouses, solar energy panels, and different techniques for outdoor revegetation in dry areas. An important part of the agreement is represented by the involvement of Costa Cruises and AIDA Cruises guests: guests cruising on Costa and AIDA ships calling at Aqaba will have the unique chance to taste, for the very first time in the world, at least ten different environmentally-friendly vegetables produced by using solar power and saltwater in the Jordan desert, through special recipes created by the Executive Chefs of the two cruise companies to emphasize their taste and quality.

CDP Disclosure
We have reported our carbon emissions in the CDP (formerly known as the Carbon Disclosure Project) since 2007. In 2019, we submitted our disclosures and received a management score level (B-) for both carbon and water scarcity.

Arison Maritime Center - CSMART
Carnival Corporation & plc partnered with University of West Florida, Innovation Institute to launch a new Environmental Excellence course designed to foster a culture of learning, ownership and greater understanding of environmental compliance. The course uses the Innovation Institute’s challenge-based learning concepts to provide interactive instruction and continuous professional development for environmental officers across the Carnival Corporation & plc fleet.

HESS

HESS Event Reporting
In 2019, we completed the fleetwide rollout of a new health, environment, safety and security (HESS) event reporting system. This platform has allowed us to standardize our HESS event reporting and analysis capabilities across the entire fleet.

Animal Welfare
Tour Operators
• Completed 100% of animal welfare audits for tour encounters offering dog sledding in Alaska.
• Completed more than 50% of animal welfare audits for tour encounters with dolphins in captivity between FY2018 and FY2019.

Water Use Efficiency
We are committed to finding innovative ways to improve our water use efficiency and in 2019 we:
• Improved our water use rate to 57.1 gallons per person per day vs. the U.S. national average of 90 gallons per person per day. This represents a 0.6 gallon per person reduction achieved from our FY2018 performance.
• We produce approximately 82% of the water we use on board our ships from sea water.
• We purchased approximately 18% of our water from the ports or the water suppliers in the ports we visit.
In 2018, we launched Operation Oceans Alive, a new environmental stewardship program. Operation Oceans Alive is a call to action for all employees to care about and protect our oceans, seas, and waterways from environmental harm - ensuring their ecosystems, plant life, and aquatic animals thrive both now and in the future. In its second year (2019), Operation Oceans Alive continued to grow through new programs and procedural changes, commitments, educational and training channels, and, perhaps most importantly, through individual choices and actions. The following is a list of accomplishments in 2019:

- Committed to a new food waste reduction goal of 10% across our entire fleet by the end of 2021.
- Committed to a new goal to reduce all non-essential single-use items, including plastics, on board our ships by 50% by the end of 2021.
- Completed Phase I of the single-use items and plastics program by eliminating or replacing straws, cups, lids, stir sticks, cocktail picks, toothpicks, butter foils, and plastic shopping bags with sustainable alternatives.
- Installed additional food waste digesters through the fleet.

The first phase of the process was completed in FY2019 and single-use items such as straws, cups, lids, stir sticks, cocktail picks, toothpicks, butter foils, and plastic shopping bags have been eliminated or replaced with sustainable alternatives. The second phase will begin in 2020 and includes the elimination or reduction of items such as individual servings of selected packaged food items, toiletry items, and chopsticks, among others.

Removing Single-Use Items, Including Plastics
Following the global movement to reduce single-use item consumption we are eliminating all non-essential single-use items, including plastics, on board our ships by the end of 2021. Our journey started in 2018 and we have already made great progress since. In 2019, we further supported this commitment with the implementation of our Single-Use Item Policy. We also established a single-use item task force to coordinate the reduction and elimination process of these items.
We are committed to protecting and preserving the beauty and majesty of the oceans, seas, and land environments that we visit. We are also committed to continuously improving our operations and heightening our environmental focus. We actively participate in the process of determining our company and industry’s role in addressing climate change and understanding our impact areas. We focus on four main environmental pillars:

- Energy & Emissions
- Waste Management
- Water Management
- Biodiversity

We continue to lead the decarbonization path within the cruise industry. This involves closely monitoring our energy & emissions profile. Our shipboard fuel consumption contributes to 97.3% of our direct carbon emissions (Scope 1) and is therefore the most significant contributor to our carbon footprint. Please see page 118 for further details. Responsible waste management is also an essential component of our environmental program. To better manage our waste, we are working towards adopting the principles of a circular economy. Waste generated by our operations and activities of our guests and crew mirrors the waste generated by hotels and resort complexes worldwide. We are committed to minimize waste generated by our operations and activities. Our shipboard waste is disposed of in strict accordance with our environmental procedures that are designed to meet and exceed internal, international, regional, and local environmental regulatory requirements as well as industry standards. A challenge that limits the volume of recycling materials is the lack of recycling infrastructure available at certain ports we visit worldwide. Our approach is to hold recycling materials on board, where possible, until a port that offers recycling services is reached within the itinerary.

To minimize our impact on watersheds and biodiversity, we work diligently to protect marine life and closely collaborate with our supply chain and shore excursion providers to ensure ethical and environmentally-safe practices. We produce approximately 82% of the water we use on board our ships from sea water, while the remaining 18% is purchased from the water suppliers in the ports we visit. In ports or regions experiencing water scarcity or restrictions, our water sourcing patterns are modified in order to only bunker water from ports where water is abundant, of high-quality and is cost-efficient to purchase. Our ships’ holding capacities and equipment, allows us to adapt our water sourcing patterns in times of water scarcity.

Sustainable tourism is also an important component of environmental management and we recognize our responsibility. To protect ecosystems, and to contribute to improved biodiversity of the communities we visit, we partner with environmental protection and conservation organizations in order to support programs and initiatives related to our operations. We actively engage our guests in supporting our sustainability initiatives by raising awareness for the importance of saving natural resources. This includes guest-facing communications that encourages water conservation and waste segregation/recycling. To keep things fun and engaging, we invite our guests to join us in celebrating environmental holidays and to support our efforts to raise awareness for the importance of environmental protection.
Our environmental management strategy is based on the values and objectives set forth in our Health, Environment, Safety and Security Strategy (HESS) Policy and our 2020 and beyond sustainability goals. As part of our 2020 sustainability strategy and as we finalize our 2030 sustainability goals, we have aligned our strategy with the United Nations (UN) Global Sustainable Development Agenda. The agenda follows recognized frameworks such as the UN Guiding Principles on Business and Human Rights, the UN Sustainable Development Goals (SDGs) and the Paris Agreement on climate change. Our pathway towards decarbonization involves multimillion dollar investments and a multi-faceted strategy. We carefully manage environmental activities and address environmental stewardship at every level of our organization. Our strategy encompasses multiple elements, including addressing climate change, investing in port communities, complying with a changing regulatory landscape, evaluating new technologies, addressing stakeholder needs, and expanding partnerships – all of which are designed to protect the environment while supporting our objective to exceed expectations. Our entire management team, including our Boards of Directors, is committed to addressing climate change.

We evaluate environmental risks, develop standards and procedures, and put high emphasis on our associated environmental leadership and performance. We have consolidated our brand’s best environmental practices and procedures into a single corporate-wide HESS management system to ensure a consistent approach across all our brands.

Our management teams identify and manage environmental aspects and impacts, supervise the environmental performance of our ships, and ensure compliance with environmental statutory requirements including best management practices and company environmental procedures. Most importantly, our dedicated ships’ officers and crew carry out our policies and procedures on board daily.

To further support our environmental strategies, our Environmental Management System (EMS) is certified in accordance with the ISO 14001:2015 Environmental Management System standard. An independent, third-party organization audits and certifies our EMS in accordance with ISO 14001. We have also developed a greenhouse gas inventory management plan (GHG IMP) in accordance with the requirements of the ISO 14064-1:2006 and The Greenhouse Gas Protocol, which enables our third-party GHG verifier to certify our GHG emissions inventory to that standard. Each ship in our fleet has a full-time Environmental Officer (EO), who oversees environmental compliance and implementation of environmental procedures (for more details see the EO section in the Appendix).

In addition, Operation Oceans Alive forms a central element of our environmental management strategy. The environmental stewardship program was launched in 2018, and is a call to action for all employees to care about and to protect our oceans, seas, and waterways from environmental harm – ensuring their ecosystems, plant life, and aquatic animals thrive both now and in the future. Further information can be found on page 84.

We are also actively involved in research and development projects for our existing ships and for new ships under development. We have dedicated departments that evaluate technologies and new systems for installation throughout our fleet. These departments evaluate technical, regulatory, safety, environmental, and operational aspects associated with maritime environmental systems/technologies. Among the challenges typically encountered when adapting shore-based technologies to maritime
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 the maritime domain. In order to efficiently evaluate these opportunities, ships within the fleet are regularly selected to test systems and technologies while also running pilot programs, where applicable.

We pioneered the use of Liquefied Natural Gas (LNG), the marine industry’s most advanced fuel technology, and are expanding our LNG investment as part of our decarbonization pathway. We began the implementation of our LNG vision by using LNG while in port in Hamburg, Germany 2015. Since then, we have expanded our LNG capabilities. In 2018, we made history with the launch of AIDAnova, the first cruise ship in the world powered 100% by LNG both at sea and in port. In 2019, we launched the second LNG cruise ship in our fleet, and in the world, Costa Smeralda. We are leading the cruise industry’s use of LNG to power cruise ships; we have nine additional sister vessels due for delivery between 2020 and 2025.

We recognize that successful, long-term environmental change requires significant collective action and as such we collaborate closely with our suppliers and industry peers within the travel and tourism industry to address environmental challenges and opportunities. This includes close partnerships with a variety of environmentally-focused organizations, local communities, and our shore excursion providers as well as close collaboration with industry associations such as The World Tourism Council (WTC) and The International Maritime Organization (IMO). Even though the goals of these partnerships vary depending on the type of organization, the input from these partners enable us to develop strategies around key environmental areas, including climate action, destination stewardship, sustainable waste and water management as well as biodiversity. Learn more about our partnerships on page 176-179.
In 2018, we launched Operation Oceans Alive, a new environmental stewardship program. Operation Oceans Alive began as an internal effort and call to action to further ensure all employees continue the companywide commitment to protecting our oceans, seas, and waterways from environmental harm – ensuring their ecosystems, plant life, and aquatic animals thrive both now and in the future.

Now in its second year, Operation Oceans Alive continued to expand through new programs and procedural changes, commitments, educational and training channels, and, perhaps most importantly, through individual choices and actions. Below we list some of the initiatives we accomplished in 2019.

**REDDUCING SINGLE-USE ITEMS**

Our efforts to drastically reduce single-use items are a key part of the program. We are strongly committed to significantly reducing non-essential single-use items, including plastics, on board our ships by the end of 2021. The objective to reduce the purchase and consumption of single-use items as part of our overall commitment to reducing our environmental impact is also manifested in our Single-Use Item Policy, which went into effect in 2019. The policy eliminates the procurement of prohibited single-use items. In parallel, we established a single-use item cross-brand task force.

The phase-out and reduction process is clustered into two phases and aligns with the Single-Use Item Policy. The first phase was completed by the end of FY2019 and single-use items such as straws, cups, lids, stir sticks, cocktail picks, toothpicks, butter foils, and plastic shopping bags have since been eliminated or replaced with sustainable alternatives wherever possible.

While it is easier to phase out and/or replace some items, it is more challenging for others. As part of the company’s stringent Health, Environment, Safety and Security (HESS) policy and to comply with national and international regulations governing cruise ship operations, there are some single-use plastic items that cannot be completely eliminated, including plastic trash can liners in common areas, medical equipment and sanitary gloves, among others. As such, we are focusing on reducing single-use items that are not used for sanitary or health-related purposes.

**REDUCING FOOD WASTE**

Within the scope of Operation Oceans Alive, we are aiming to reduce the total weight of food waste across our entire fleet by 10% by the end of 2021, with some of our brands setting themselves even more ambitious reduction targets. A first step involved obtaining a standardized list of food loss...
on board. As a result, FY2019 was established as a baseline to measure the weight of all food waste generated on board our ships. To fulfill and eventually surpass this commitment, we are working on solutions that involve the development of new and the revision of existing food waste management systems and practices on board of our ships.

To increase awareness on the issue of food waste and to highlight that reducing food waste can be fun, in 2019 we initiated the ‘Food Waste Shuffle’ music video challenge. The video challenge provided a great opportunity to engage and educate in a creative way on the importance of food waste reduction and separation. The engagement level was high and we received a total of 76 original video submissions from our ships and offices all around the world.

**BIO-DIGESTERS**

In 2019, we continued to evaluate technologies and operations to minimize the volume of food waste generated on board our ships by installing additional bio-digesters throughout the fleet. Through an anaerobic digestion process that takes place within the machines, food waste is efficiently broken down. This green technology provides a number of benefits, and supports and enhances operations on board, making it more efficient for crew members to manage and control food waste. Moving forward, we are excited to expand the use of bio-digesters across our fleet in 2020 as part of our commitment to environmental excellence.

**BUILDING PARTNERSHIPS**

In 2019, we announced a partnership with the University of West Florida (UWF) to enhance our fleetwide environmental officer training program with the launch of an innovative and interactive new Environmental Excellence course. The weeklong course consists of a virtual 23-day voyage aboard the MV Oceans Alive as the “ship” departs on a repositioning cruise from Dubai, United Arab Emirates to Venice, Italy, followed by a 7-day voyage in the Adriatic and Ionian Seas. Participants of varying experience levels work together in small cross-brand teams to enhance communication, collaboration, and leadership skills by investigating real-world challenges, researching rules and regulations, and conducting shared-learning discussions throughout the continuing storyline.

**CELEBRATING ENVIRONMENTAL HOLIDAYS**

We have been celebrating environmental holidays across our fleet to continue promoting environmental awareness and to remind ourselves that every single one of us can make a positive impact in protecting the environment.

In 2019, we adopted the following globally recognized environmental holidays to our celebration activities: Global Recycling Day, Earth Day and World Oceans Day.

Many of the brands celebrated additional environmental holidays on their own.
GLOBAL RECYCLING DAY
Celebrating Global Recycling Day reminded us of the importance of preserving primary resources and protecting and preserving the planet through recycling. At Carnival Corporation & plc, we focus on recycling by gradually increasing the & plc type of recyclable materials we collect.

In addition to celebrating Global Recycling Day, we took the opportunity to rename our “Garbage rooms,” to “Recycling Centers.” This places a greater emphasis on recycling and serves as a reminder to everyone to divert waste from landfills in the first place and recycle as much as possible. In addition, educational activities were celebrated on board the ships as well as ashore.

Our Seabourn brand held competitions on their ships. Seabourn Encore created ship models out of recycled materials, Seabourn Sojourn provided a fun environmental quiz, and Seabourn Ovation held a recycling fashion show with items found on board.

EARTH DAY
Earth Day is an opportunity to celebrate the Earth and remind us to protect and preserve the precious ecosystems in which we live. Across the fleet, ships celebrated this day with special programming for guests and crew that included: Environmental Officer (EO) talks, awareness messaging, and themed activities in kids clubs, among other activities.

Carnival Vista Recycling Center Crew  Seabourn Sojourn celebrating Global Recycling Day
Kids club on Carnival Miracle celebrating Earth Day  Carnival Paradise celebrating Earth Day
WORLD OCEANS DAY

The waters on which we sail are our home – and our future. To honor these waters, we celebrated World Oceans Day with a variety of activities for guests and team members. On board our Holland America Line fleet, the crew participated in festivities such as baking eye-catching cakes, conducting training on food waste, and offering unique kids club activities. Holland America Line and Carnival Cruise Line ships organized beach clean-ups to help make a positive impact on local communities.

RECOGNITIONS

We celebrate and recognize our employees on board and ashore for their hard work and commitment to being stewards of the environment. We have done so through the following recognition and award programs:

Environmental Excellence Award

We continue to honor excellence in environmental performance throughout our fleet. The Carnival Corporation & plc environmental excellence award honors the accomplishments of the ship’s management and crew that best represents our commitment to protecting and preserving the environment. Their example promotes continuous improvement throughout our fleet. Every year one ship from each cruise brand is selected and from those nine total ships, one is recognized as the best in environmental excellence. For FY2019 performance, Carnival Cruise Line’s ship Carnival Horizon was the recipient of the Environmental Excellence Award.

The individual best in brand Environmental Excellence Award winners are:

- AIDA Cruises: AIDAVita
- Carnival Cruise Line: Carnival Vista
- Costa Cruises: Costa Fascinosa / Costa Asia: Costa Serena
- Cunard: Queen Victoria
- Holland America Line: Koningsdam
- P&O Australia: Pacific Dawn
- P&O Cruises: Ventura
- Princess Cruises: Ruby Princess
- Seabourn: Seabourn Sojourn

Environmental Excellence Coin

As part of our environmental recognition program, we award Environmental Excellence coins to personnel who have gone above and beyond in their commitment to environmental stewardship. In November 2019, the Recycling Center team of our Holland America Line ship Koningsdam was awarded the Environmental Excellence coin for their hard work and commitment to environmental excellence.
While plastics are, in many areas, fundamental to everyday life, they are unique examples of a “throw-away society” in which consumer goods are only used for a very short period of time – and in many cases, only once. This is in sharp contrast to a circular economy that is restorative and regenerative by design and where materials constantly flow around a ‘closed loop’ system, rather than being used once and then discarded. As a company, we are doing our share to contribute to a more circular economy where single-use items are drastically minimized and plastic does not become waste in the first place.

PHASING OUT SINGLE-USE ITEMS & PLASTICS

Supporting the global movement to reduce single-use consumption, in 2018 we started an initiative to evaluate our collective use of single-use items. We purposefully made the decision to focus not only on the usage of single-use petroleum-based plastics, but to also take a more holistic approach and tackle the issue of single-use items as a whole.

Our ongoing efforts to significantly reduce non-essential single-use items are a key part of our environmental compliance and stewardship program, Operation Oceans Alive. Launched in 2018 and now in its second year, Operation Oceans Alive continues to grow through procedural changes, educational and training channels, and perhaps most importantly, through our individual choices and actions. We are strongly committed to significantly reducing the purchase and consumption of non-essential single-use items, including plastics, on board our ships by 50% by the end of 2021. As part of our overall commitment to reducing our environmental impact, the objective to reduce the purchase and consumption of single-use items is also manifested in our Single-Use Item Policy, which went into effect in 2019. The policy prohibits the procurement of certain single-use items that are difficult to recycle or separate from food waste. In parallel, we established a single-use item cross-brand task force.

The task force consists of procurement and sustainability/environmental representatives from Carnival Corporation & plc and all nine of the company’s brands. Together, the task force coordinates the reduction and elimination of single-use items and shares best practices such as identifying and sourcing environmentally friendly alternatives, using bulk and reusable containers, and more. We are also working closely with specific suppliers within our supply chain, sharing knowledge and ideas to identify new and innovative environmentally friendly materials wherever possible.
CLOSING THE LOOP

The phase-out and reduction plan has two phases and aligns with our Single-Use Item Policy. The first phase was completed by the end of 2019 with the sourcing of approximately 80 million plastic items reduced, including straws, cups, lids, stir sticks, cocktail picks, toothpicks, and plastic shopping bags, which have since been eliminated or replaced with sustainable alternatives such as plant-based products or reusable options. Additionally, 95+ million other single-use items, such as paper serving packets and butter foils, were reduced or eliminated. In 2018, we started replacing plastic straws and cups on board our ships with non-plastic or biodegradable alternatives. Some of our brands have taken the commitment further by only providing non-plastic straws upon request. The second phase for 2020 is underway and includes the elimination or reduction of single-use items such as individual servings of select packaged food items, toiletry items, and chopsticks, among others. Additionally, we have started to explore alternatives to single-use plastic water bottles. On many of our ships we are already using glass water bottles or providing refillable options in the onboard restaurants. When we use plastic water bottles, they are incorporated into our plastic recycling program and landed wherever possible for recycling ashore. In line with the overall commitment, the completion date for the second phase of single-use item reduction targets is scheduled for the end of 2021.

By the end of 2019, we reduced the sourcing of approximately 80+ million single-use plastic items such as straws, cups, lids, stir sticks, cocktail picks, toothpicks, and shopping bags, which have been eliminated or replaced with sustainable alternatives such as plant-based or reusable options.

Sustainable product alternatives include options that provide environmental, social and economic benefits while protecting public health and the environment over their life cycle. While it is easier to phase out and/or replace some items, it is more challenging for others. As part of the company’s stringent Health, Environment, Safety and Security (HESS) Policy and to comply with national and international regulations governing cruise ship operations, there are some single-use plastic items that cannot be completely eliminated, including plastic trash can liners in common areas, medical equipment and sanitary gloves, among others. As such, we are focusing on reducing single-use items that are not used for sanitary or health-related purposes.

ADDRESSING THE CHALLENGES

While celebrating our successes in reducing single-use plastics, we continue to openly discuss the challenges we face in finding suitable alternative materials that can truly be considered more environmentally friendly. For example, an item labeled as biodegradable must meet certain standards where the product should break down relatively quickly rather than taking years, while at the same time, it must not leave any harmful residuals behind. The biggest issue we have found is the absence of a standard definition for the term biodegradable itself. With such varying standards and criteria, many products take an unsuitable length of time to break down and only do so at ideal conditions that are crucial to encouraging the process of biodegradability in the first place. We will continue to work with our supply chain to find suitable alternatives wherever possible.
Responsible Consumption, Reducing Overconsumption and Reducing Waste

Food loss and waste is a global problem that has a serious impact on food security and goes hand-in-hand with immense ethical, environmental, and financial costs. Food is lost or wasted throughout the entire supply chain – at the production stage through poor farming practices, at the retail stage through inadequate transportation and storage, and at the consumer level when more food is purchased than consumed. Overall, food that is never consumed represents a waste of precious resources, such as land, water and energy, as well as other inputs used in its production.

In 2019, we committed to a food waste reduction goal of 10% across our entire fleet by the end of 2021, with some of our brands setting themselves even more ambitious reduction targets. To achieve our commitment, we are working on solutions that involve the revision of existing, and development of new, food waste management systems and practices on board our ships.

We acknowledge food waste as a key global issue and recognize that everyone has a part to play in reducing food loss and waste. The United Nations Agenda 2030 identifies 17 Sustainable Development Goals (SDGs), one of which, Goal 12, focuses on Responsible Consumption. According to the Food and Agricultural Organization of the United Nations, approximately one-third of food produced in the world annually – approximately 1.3 billion metric tonnes – is lost or wasted.
TACKLING FOOD WASTE ON BOARD OUR SHIPS

In 2019, as part of our environmental compliance and stewardship program, Operation Oceans Alive, we established a Food Waste Task Force. The goal of the task force is to improve food waste management across the global fleet. Its team members have a diverse expertise in hotel food and beverage operations, environmental compliance, technological operations and galley design. Third party consultants were brought in to support the task force with diverse technical expertise regarding food waste processing systems and galley design. In 2019, members of the task force visited several ships across all brands to evaluate food waste management and technical equipment. Based on their observations, the task force provided a detailed recommendation and implementation plan to improve food waste management across the fleet. Recommendations were related to the food waste separation process, simplification/streamlining of procedures, signage and training, as well as a review of technical aspects and equipment, and the adequacy of manning for food waste management responsibilities. The task force also identified many potential best practices that are already in place on board the ships and can function as a blueprint to improve food waste management efficiency across the global fleet.

We are working toward adopting the principles of a circular economy to prevent unnecessary food waste. The circular economy is an economic model that aims to avoid waste and to preserve the value of resources (raw materials, energy and water) for as long as possible. Products and materials are continuously recirculated, as opposed to a linear model in which they are discarded as waste after use.

Considering the unique environment of a cruise ship, in its simplest form, the concept of a circular economy can be applied to food as follows:
REINFORCING THE PROGRAM WITH FUN

With food loss and waste being a global problem, raising awareness and education is a key component of successful food waste management. Even in light of the seriousness of the matter, preventing and reducing food waste can be fun if everyone is on board. In 2019, we initiated the “Food Waste Shuffle” music video challenge. The video challenge provided an opportunity to engage and educate our entire organization in a creative and fun way on the importance of food waste reduction and separation. Each ship and shoreside office was invited to participate in the challenge. The engagement level was high and we received a total of 76 submissions from our ships and offices all around the world.

Shipboard Winners

1st Place
P&O UK Britannia

2nd Place
Carnival Inspiration

3rd Place
Costa Atlantica
P&O UK Arcadia

Shoreside Winners

1st Place
Carnival UK
Southampton Office

2nd Place
Princess Cruises
Santa Clarita Office

3rd Place
Carnival Cruise Line
Miami Office
FOOD WASTE DIGESTERS
In 2019, we continued to evaluate technologies and operations to minimize the volume of food waste generated, and we installed additional bio-digesters throughout the fleet. The bio-digesters use an aerobic digestion process that takes place within the machines and efficiently breaks down food particles. This green technology also supports and enhances operations on board, making it more efficient for crew members to manage and control food waste. We continue to evaluate different digesters and are planning to expand the use of these systems across our fleet as part of our commitment to environmental excellence.

COSTA CRUISES 4GOODFOOD INITIATIVE
In early 2018, our Costa brand unveiled the 4GOODFOOD program, a program it has been developing since 2016 and successfully piloted on the flagship Costa Diadema in the same year. 4GOODFOOD is a far-reaching program that considers every aspect from food preparation and consumption on board to the donation of surplus food – the first of its kind within the cruise industry. The program supports Costa Cruises’ ambitious target to reduce food waste by 50% by 2020. Following its success, we are working on expanding this type of program throughout our brands.

An integral part of the program is the shipboard communication campaign “Taste don’t Waste,” with a focus to encourage responsible consumption in the ships’ buffets. The campaign addresses values and emotions, and is designed to directly involve guests by encouraging responsible behaviors and proactive engagement, particularly in the buffet area. To prevent surplus food from becoming waste, surplus food and meals prepared but not consumed on board are donated to communities in a number of ports in Italy, France, Spain, Guadeloupe and Martinique. This is made possible through a partnership with food bank charity Foundation Banco Alimentare and local port partners.

Over 150,000 portions of quality food have been distributed to a total of 12 associations that look after people in need. Costa Cruises aims to involve other ports as well and further extend the surplus food donation initiative to reach as many disadvantaged communities as possible. Costa Cruises’ innovative approach to reduce food waste and to foster environmentally friendly operations received the Sustainable Performance Award for their 4GOODFOOD program at the Ayming Institute Business Performance Awards in 2019. Costa also earned the MedCruise Award for Cruise Line with the Greatest Charity Program in 2019 and was further recognized as a finalist of the 15th United Nations World Travel Organization (UNWTO) Enterprise Award.

4GOODFOOD is based on four main pillars – Value, Reduction, Return and Recovery – considering every aspect of food waste preparation and consumption on board a ship, involving active participation from crew, cruise guests and local communities as an essential component.
Energy & Emissions

We have initiatives underway across each of our brands to reduce our carbon footprint.
2020 GOAL & UPDATE

CARBON FOOTPRINT

2020 Goal: Reduce the intensity of CO₂e (carbon dioxide equivalent) emissions from our operations by 25% by 2020 relative to our 2005 baseline, measured in grams of CO₂e per ALB-km.

2030 Goal: Reduce the intensity of CO₂e (carbon dioxide equivalent) emissions from our operations by 40% by 2030 relative to our 2008 baseline, measured in grams of CO₂e per ALB-km.

Reducing Emissions: We made more progress on our 2020 goal, and achieved a 29.1% reduction relative to our 2005 baseline, and for our 2030 goal we achieved a 24.8% reduction relative to 2008 baseline.

- Delivered the second cruise ship in the world to be powered by liquefied natural gas (LNG) both at sea and in port.
- Became first cruise company to join The Getting to Zero Coalition for decarbonization.
- Invested in fuel-cell technology.
- Invested in battery technology.
- Received Greenest Shipowner of the Year Neptune Award.
- Received Germany’s Blue Angel award for AIDAnova’s environmentally-friendly ship design.

INTRODUCTION
CRUISING
COMMITMENT
COMMUNITY
APPENDIX
ADVANCED AIR QUALITY SYSTEMS

We continue to improve the quality of our emissions into the air by installing and Advanced Air Quality Systems across the fleet. These systems significantly reduce sulfur compounds and particulate matter, including black carbon, from our ship’s engine exhaust.

- 77% of our fleet is equipped with Advanced Air Quality Systems.
- 236 engines equipped with Advanced Air Quality Systems.
- Developed a public website dedicated to Advanced Air Quality Systems.

COLD IRONING CAPACITY

Increase cold ironing coverage of our fleetwide capacity in relation to future port capabilities.

- 47 ships equipped with the ability to utilize cold ironing/shore power technology.
- We connected to 12 cruise ports equipped with cold ironing technology globally.
FY 2019

AWARDS & RECOGNITION

Newsweek (Most Responsible Companies – Environmental, Social and Governance)
Carnival Corporation & plc has been recognized in Newsweek’s first ranking of America’s Most Responsible Companies 2020. Companies were evaluated based on their environmental, social, and corporate governance performance. A total of 2000 American public companies were evaluated and the top 300 are included on the list. We are honored to be listed as the highest-ranking company in the cruise sector. The list of companies can be viewed here.

Neptune Award (Greenest Shipowner)
Carnival Corporation & plc has been honored by maritime industry peers with the Greenest Shipowner of the Year Neptune Award, which recognizes a company that has shown excellence in reducing environmental impact in the operation of its fleet in the past year. Winners were chosen by executives from ship owners, ports, and marine technology companies who gathered to share best practices and cutting-edge technologies to enable continued reductions in the environmental impacts of shipping. Click here for more information.

Germany’s Blue Angel Eco-Label Award (Environmentally Friendly Ship Design)
Carnival’s AIDA Cruises has been awarded the "Blue Angel," Germany’s Federal Government eco-label, for AIDAnova’s environmentally-friendly ship design. Click here for more.
Carnival’s Pathway to Decarbonization

Addressing climate change is one of our top priorities and we are committed to continue to lead the path within the cruise industry. Our entire management team, including our Boards of Directors, is committed to addressing climate change. Our path to decarbonization involves multimillion-dollar investments and a multi-faceted strategy. Key components of this strategy include adopting international frameworks and working with industry regulatory bodies to: address upcoming regulatory opportunities/gains, implement low carbon fuels, invest in carbon-efficient technologies, support and accelerate industry-specific research & development projects, establish internal goals supporting the path as well as partner with other companies, NGOs, and relevant stakeholders. In the coming years, we are likely to see an array of emerging technological innovations as currently there is not a single (nor a combination of technologies) that can move the maritime industry straight into a decarbonization path. As we navigate this journey, we are committed to evaluate options, work with various stakeholders, and adjust our path as needed. Please see page 109 for further details.

Alternative Fuels: Liquefied Natural Gas (LNG)

The introduction of LNG to power cruise ships is a major development that supports our environmental goals and significantly improves overall air emissions. In 2019, Carnival Corporation & plc continued to pioneer the use of LNG in the cruise industry by introducing Carnival Corporation & plc’s second LNG-powered ship, Costa Smeralda. She follows AIDAnova, delivered in 2018 as the world’s first cruise vessel to be powered by LNG. Carnival Corporation & plc has an additional nine next-generation LNG-powered cruise ships on order using the company’s innovative environmental design with expected delivery dates for these new ships between 2020 and 2025.

Fuel Cells

In 2019, we announced a joint venture between Carnival Corporation & plc’s AIDA brand, the Meyer Werft shipyard, Freudenberg Sealing Technologies and other partners funded by the German Federal Ministry of Transport and Digital Infrastructure. The objective of the joint venture is to find practical solutions for climate-neutral mobility across all of shipping. The groundbreaking “Pa-X-ell2” project specifically aims to develop a decentralized energy network and a hybrid energy system by using a new generation of fuel cells in oceangoing passenger vessels. As early as 2021, AIDA Cruises will be the world’s first cruise company to test the use of fuel cells on a large passenger ship. The fuel cells are powered by hydrogen derived from methanol and will enable cruise ships to cut carbon emissions, reduce noise, and lower vibrations.

Batteries

In 2019, we signed an agreement with Corvus Energy, the world’s leading marine battery supplier, to begin production and installation of a first-of-its-kind lithium-ion battery storage system on board a cruise ship. The battery system is scheduled to be installed in 2020. The technology is currently set to become the world’s largest battery storage system ever installed on a passenger ship.
Cold Iron/Shore Power Plug-In Capabilities
Cruise ships equipped with cold ironing or shore power plug-in capabilities can plug in to specific port connections facilities allowing the ship to receive electricity from the electrical grid in the port instead of using the ship’s engines and fuel to generate power. Electricity generated by renewable sources such as water (hydro), solar, wind, and geothermal have a minimal climate change and air emission impact compared with non-renewable sources such as fossil fuels. In 2019, there were only twelve ports worldwide able to provide shore power connections to our fleet based on our port-itinerary and our ships connected in all of them. Within the Carnival fleet, 47 ships are equipped with the ability to utilize cold ironing/shore power connections.

2020 Global Sulphur Cap - IMO 2020
As of the 1st of January 2020, the global limit for sulphur in fuel oil used on board all ships operating outside designated Emission Control Areas (ECAs) was reduced from 3.50% to 0.50%. This new marine emission requirement is also referred to as IMO 2020. In preparation for the new global requirement, each Carnival Corporation & plc ship developed a ship-specific implementation plan to address using new fuels, fuel oil system modifications, and fuel tank configuration changes. In addition, fuel procurement, sampling requirements, and fuel oil bunkering procedures were revised. We have also equipped our fleet with Advanced Air Quality Systems (also known as scrubbers) which remove 99% of sulphur in fuel.

Advanced Air Quality Systems - Fleet Update
Advanced air quality systems (AAQS), generically known as exhaust gas cleaning systems or scrubbers, remove sulphur compounds and particulate matter from our ships’ engine exhaust at any operating state – at sea, during maneuvering, and in port. As of the end of FY2019, 77% of our fleet has been equipped with AAQS and we plan to deploy additional systems across our global fleet. In 2019, we also released the Carnival/DNVGL 2018 Wash Water Assessment, a four-year scientific wash water study that collected 281 wash water samples from 53 Carnival ships and completed lab analyses on each sample for 54 different parameters. The AAQS wash water samples were well below the limits set by several major national and international land-based water quality standards up to and including the World Health Organization (WHO) standards for drinking water. We also developed a specific website to provide comprehensive AAQS details for all interested stakeholders.

Partnership -
Jean-Michel Cousteau - Ocean Futures Society
Carnival Corporation & plc partnered with renowned ocean explorer and life-long environmental advocate Jean-Michel Cousteau and his Ocean Futures Society, a nonprofit marine conservation and education organization that serves as a “Voice for the Ocean” on the importance of effective environmental and sustainability policy. Cousteau is providing valuable external expertise on environmental initiatives as we continue our commitment to sustainability and our oceans.
**Partnership - Getting to Zero Coalition**

The Getting to Zero Coalition is an alliance of organizations across the maritime, energy, infrastructure, and finance sectors committed to accelerating the decarbonization of the international shipping industry. Carnival Corporation & plc is the first cruise company to join this global alliance.

The coalition’s goal aligns with the International Maritime Organization’s (IMO) strategy to reduce greenhouse gas emissions from shipping by at least 50% by 2050 as compared to 2008 emissions. To meet the target, the Getting to Zero Coalition aspires to having technically feasible, commercially viable zero-emission deep-sea vessels (ZEVs) entering the global shipping fleet as early as 2030. The alliance’s goal also includes scalable infrastructure for zero-carbon energy sources, including production, distribution, storage, and bunkering.

Supported by key governments and intergovernmental organizations, the coalition represents a leading group of over 80 companies, including global stakeholders from a variety of shipping-related industries such as fuel suppliers, engine manufacturers, marine classification societies, shipping companies, major ports, and more.

**CDP Carbon Disclosure**

We have reported our carbon emissions in the CDP (formerly known as the Carbon Disclosure Project) since 2007. In 2019, we submitted our disclosure and received a management score level (B-) for climate change.

**Voluntary Emissions Reduction Agreements**

Carnival’s Costa Cruises signed two voluntary emission reduction agreements in 2019, The Marseille and La Spezia Blue Flag Agreements.

**Direct & Indirect Emissions**

We quantify, report, and verify our greenhouse gas (GHG) emissions, including our direct (Scope 1) and indirect (Scope 2) emissions. Our direct GHG emissions represent 99.6 percent of our total emissions and the emissions generated from our ships’ fuel consumption represented the vast majority of our GHG footprint (97.3 percent). Our indirect GHG emissions represent only 0.4 percent of our total emissions, the majority of which are attributed to electricity purchased to power our shore-based buildings. The graphic on page 118 depicts our energy use and related emissions.

**HESS Event Reporting System**

In 2019, we completed the fleetwide rollout of a new health, environment, safety and security (HESS) event reporting system. This platform has allowed us to standardize our HESS event reporting and analysis capabilities across the entire fleet.
Scope 3 Emissions
We have reported our Scope 3 emissions in the CDP (formerly known as the Carbon Disclosure Project) since 2009. Scope 3 emissions are derived from the energy used in other upstream and downstream indirect emissions like business travel, passenger transportation to and from our ships, fuel transport, waste disposal, and deliveries of supplies.

Carnival Corporation Environmental Excellence Awards
We continue to honor excellence in environmental performance throughout our fleet. The Carnival Corporation & plc environmental excellence award honors the accomplishments of the ship’s management and crew that best represents our commitment to protecting and preserving the environment. Their example promotes continuous improvement throughout our fleet. Every year one ship from each cruise brand is selected and from those nine total ships, one is recognized as the best in environmental excellence. For FY2019 performance, Carnival Cruise Line’s ship Carnival Horizon was the recipient of the Environmental Excellence Award.

The individual best in brand Environmental Excellence Award winners are:
- AIDA Cruises: AIDAVita
- Carnival Cruise Line: Carnival Vista
- Costa Cruises: Costa Fascinosa / Costa Asia: Costa Serena
- Cunard: Queen Victoria
- Holland America Line: Koningsdam
- P&O Australia: Pacific Dawn
- P&O Cruises: Ventura
- Princess Cruises: Ruby Princess
- Seabourn: Seabourn Sojourn
Our COMMITMENT

We believe in communicating transparently about our company and 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. Energy is vital to our business so that guests can enjoy our facilities and amenities on our ships while at sea and in port. Fuel is the primary source of energy consumed for the propulsion of our fleet and our onboard hotel power requirements. Our shipboard fuel consumption contributes to 97.3% of our direct carbon emissions (Scope 1) and is therefore the most significant contributor to our carbon footprint and the number one focus of our carbon reduction efforts. See the graphic on page 118 for further details.

Our STRATEGY

We have implemented multiple energy-savings initiatives to manage our emissions footprint. See Energy-Saving Initiatives in the Appendix for further details.

We have established a Corporate Energy Conservation group charged with reducing our overall energy consumption. The goal of this group is to identify both immediate and long term opportunities for saving fuel.

We are actively involved in new shipbuilding research and development for emission abatement technologies and new equipment to further improve energy efficiency. We are pioneering the use of liquefied natural gas (LNG) for the cruise industry. In 2018, we made history with the launch of AIDAnova, the first cruise ship in the world powered by LNG both at sea and in port. In 2019, we launched the second LNG cruise ship in our fleet, and in the world, Costa Smeralda. We are leading the cruise industry’s use of LNG to power cruise ships; we have nine additional sister vessels due for delivery between 2020 and 2025 for our Costa Cruises, AIDA Cruises, P&O Cruises UK, Carnival Cruise Line and Princess Cruises. We also continue to work on practical, feasible energy reduction and conservation initiatives to help us reach our targets. Reducing fuel use and driving energy efficiency takes multi-million dollar investments and a multi-pronged, multi-year strategy.

These include abatement technologies and equipment to further reduce engine emissions such as:

- Advanced Air Quality Systems (AAQS) that use proprietary technology to remove sulfur oxides and particulate matter from engine exhaust.
- Cold ironing capabilities that allow us to plug into a port’s electrical grid while in port if the shoreside infrastructure is available.
- Air Lubrication Systems using air bubbles to reduce friction between ship’s hull and the water.
- A performance-based maintenance and engine efficiency monitoring agreement with Wärtsilä, our largest main engine manufacturer.
We quantify, monitor, report, and verify our GHG emissions. We developed a GHG Inventory Management Plan (GHG IMP) in 2010 in accordance with the requirements of ISO 14064-1:2006 and The Greenhouse Gas Protocol. Our GHG emissions are independently verified by a third-party, Lloyd’s Register Quality Assurance Inc. (LRQA) certified our scope 1 and scope 2 GHG emissions inventory. For more information on our third-party verification visit our Assurance Statement in the Appendix.

We continue to train and certify employees responsible for main engine, refrigeration and air-conditioning plants. We use recovery units certified to meet refrigerant recycling and recovery requirements and we implement programs to reduce Ozone Depleting Substance (ODS) releases.
In 2013, we announced our plans to install Advanced Air Quality Systems (AAQS), generically known as exhaust gas cleaning systems (EGCS) or scrubbers, on our ships. These systems remove sulfur compounds and particulate matter from our ships’ engine exhaust at any operating state of a ship – at sea, during maneuvering and in port. Due to the initial limited availability of ship-ready AAQS for marine applications, Carnival Corporation & plc led the way in developing the technology to successfully function in the restricted spaces available on cruise ships. Making the necessary investments – totaling approximately $500 million of installations to date – has led to a significant development in shipboard environmental technology.

As of 2019, 77% of our fleet is equipped with AAQS and we plan to develop and deploy the systems across our global fleet – significantly improving the quality of air emissions from our ships and reinforcing our environmental commitment. In 2019, we developed a public website dedicated to Advanced Air Quality Systems updates. Please visit this website for further details.

Through extensive independent testing, the systems have proven capable of outperforming low-sulfur fuel alternatives such as marine gas oil (MGO) in terms of overall cleaner air emissions and no negative environmental impact to oceans and seas. Ships using AAQS to scrub heavy fuel oil (HFO) are also effective in reducing particulate matter and typically have lower sulfur dioxide (SO₂) emission levels than MGO, as well as lower NOx and fewer polycyclic aromatic hydrocarbons (PAHs).

**OPEN LOOP SYSTEM**
Carnival Corporation & plc’s AAQS are open loop systems that use a sea water spray for removing sulfur from engine exhaust, converting it to sulfates (which are abundant in the sea) before returning the seawater to the ocean. The seawater is monitored by pH, PAH and turbidity sensors through this process to ensure that it meets or exceeds the IMO required standards before returning to the ocean. A further filtration process while in port ensures a seawater quality meeting other applicable environmental standards for operations.
INDEPENDENT TWO-YEAR SCIENTIFIC WASH WATER STUDY

In March 2019, we released the Carnival/DNVGL 2018 Wash Water Assessment. The four-year scientific wash water study collected 281 wash water samples from 53 Carnival ships, conducted lab analyses on each sample for 54 different parameters including PAHs and metals, and partnered with DNVGL to evaluate and compare the results to major national and international water quality standards. The study demonstrated that the AAQS wash water samples were well below the limits set by several major national and international land-based water quality standards up to and including the World Health Organization (WHO) standards for drinking water.

Specific to IMO wash water requirements, the study confirmed results from previous studies showing the quality of the water used in the AAQS process was always far below the IMO monitoring limits for PAHs and the annual limits for nitrates. In fact, when measured against IMO standards, the average wash water test results in this study were more than 90 percent lower than maximum allowable levels. In many cases, the materials were completely undetectable in the laboratory testing process.

The results were also compared against other standards such as the German Waste Water Ordinance, which as a “point source discharge” standard was the most directly applicable, and also the EU Industrial Emissions Standards and the Surface Water Standards of the EU’s Water Framework Directive, both “water quality” standards. The AAQS test results compared favorably with all of these major benchmark standards, demonstrating that the composition of the water was not only consistently below, but in most cases, significantly below the most stringent limits. The full study briefing can be found here.

EMISSIONS PROFILE

To further enhance our emissions profile, we have also started to install a catalytic reactor on the engine exhaust to reduce particulate matter (PM) even before the exhaust reaches the AAQS tower, which also is effective in reducing PM. Our standard AAQS removes 98% of sulfur (in the form of SO₂) and up to 60-90% of the particulate matter, including elemental and organic and black carbon, as well as PAHs. The combined effect of the AAQS, catalytic reactor and other systems is a further reduction of the particulate matter, including the very fine PM 10 and 2.5 particles. The use of AAQS with HFO fuel and other systems creates a reduction of between 5-15% compared to MGO fuel use.

All AAQS comply with international regulations and are certified by a classification society. In addition, all systems are equipped with continuous monitoring equipment to automatically record required parameters – specifically SO₂ in the exhaust gas and pH, PAH and turbidity in the wash water.

In 2018, Carnival Corporation & plc was a founding member of Clean Shipping Alliance 2020, a new industry association consisting of 39 leading shipping and maritime companies, and providing education and information on the benefits of AAQS, as well as a public voice. Collectively, these companies represent over 3,000 ships across the sectors of commercial shipping and cruising.
Pioneering Liquefied Natural Gas (LNG)

The introduction of liquefied natural gas (LNG) to power cruise ships is a major development that supports Carnival Corporation & plc’s decarbonization pathway. In the cruise industry, we have pioneered the use of LNG, and we are continuing to expand our investments in LNG as the marine industry’s most advanced fuel technology to date.

We began the implementation of our LNG vision by using LNG in port. In 2015, AIDA Cruises’ AIDAsol made history as the first cruise ship in the world to be supplied with power by an LNG hybrid barge while in port in Hamburg, Germany. Through a unique pilot project with Becker Marine Systems, the barge was designed, constructed and commissioned in three years. Since then, we have expanded our LNG capabilities to supply LNG directly to AIDAprima and AIDAperla, each with dual-fuel powered engines. The two ships can be powered by LNG while in select ports, drawing fuel directly from trucks alongside the ship.

In 2018, we made history with the launch of AIDAnova, the first cruise ship in the world that can be powered by LNG both at sea and in port. Most recently in 2019, we launched the second LNG-powered cruise ship for our global fleet, Costa Smeralda. We are leading the cruise industry’s use of LNG to power cruise ships and have nine additional next-generation LNG-powered vessels due for delivery between 2020 and 2025 for our Costa Cruises, AIDA Cruises, P&O Cruises UK, Carnival Cruise Line and Princess Cruises brands.

SECOND CRUISE SHIP POWERED BY LNG AT SEA AND IN PORT

Costa Smeralda was built at the Meyer Turku shipyard in Finland and delivered to our Costa Cruises brand in December 2019. Barcelona was the first port to welcome the new ship after the shipyard departure. During the first refueling operation, which was made possible through our partnership with Shell, the Coral Methane tanker ship filled Costa Smeralda’s three tanks with approximately 3,200 cubic meters of LNG. Two of these tanks have a capacity of 1,525 cubic meters, while the third tank has a capacity of approximately 520 cubic meters. With one complete LNG tank filling, which occurs while the ship is in Barcelona, Costa Smeralda can be powered for at least two weeks.

SWITCHING FROM MARINE DIESEL TO LNG

Click the video above to learn more about the first Costa cruise ship powered by LNG.
STRENGTHENING OUR LNG SUPPLY CHAIN

In 2017, we expanded our partnership with Shell to fuel North America’s first next-generation LNG powered cruise ships – the first of which, Carnival Cruise Line’s Mardi Gras, is scheduled to arrive in 2020. As part of the agreement, the two ships, built with our next-generation “green cruising” ship design, will be fueled through Shell’s Partner Quality LNG transport (Q-LNG) Bunker Barge (LBB) – a project that is part of Shell’s strategic plan to develop a global LNG bunkering network. The ongoing LBB, which is designed to support growing cruise line demand for LNG as a marine fuel, will be the first of its kind in the U.S. and will allow these ships to refuel with LNG at ports along the southeastern U.S. coast.

We are working with Shell as they are making the necessary Bio-LNG investments to scale the technology and build a reliable infrastructure. Bio-LNG, or liquefied Biomethane, is a biofuel made by processing organic waste flows. Biogas develops when anaerobic digestion occurs, biological matter breaks down and gas is emitted in the process. Bio-LNG is practically CO₂ neutral and has all the advantages of LNG, including reduced CO₂ emissions, lower engine sound, lower NOx and significantly less particulate matter emissions.

We are proud to be on the forefront of advancing LNG as a fuel source for the cruise industry – an innovation that supports our sustainability goals and significantly improves overall air emissions. One of the keys to establishing LNG as a standard for powering cruise ships is building out an extensive, safe and reliable infrastructure across the globe for this advanced fuel technology. We are looking forward to working closely with Shell as they help to bring LNG to North America in what we hope will be the first step in building a strong foundation for the future of LNG fuel supply for cruise ships in the region.
EXPANDING OUR LNG SHIP ORDERS TO 2025

Looking ahead to 2025, we have nine additional next-generation ships on order. The first of these will be the Iona for our P&O Cruises UK brand. The ship is being built in Meyer Werft shipyard in Germany and is scheduled to be delivered in the 2020. Iona will be the first LNG ship for P&O UK and the third within the Carnival Corporation & plc global fleet. Iona will also debut as the largest cruise ship ever built exclusively for the British cruise holiday market. The company’s second LNG ship scheduled for delivery in late 2020 is the Carnival Mardi Gras. Named after its very first ship TSS Mardi Gras, which launched in 1971, the new Carnival Cruise Line ship will be the brand’s first ship powered by LNG. Mardi Gras will also be the first LNG-powered cruise ship in North America. The ship is scheduled to operate from Port Canaveral, FL. To support LNG as an alternative fuel, Port Canaveral is investing in infrastructure and will soon welcome a new LNG bunkering barge, the Q-LNG 4000, which will refuel the Mardi Gras as part of our partnership with Shell. In 2021, the second LNG-powered ships for Costa Cruises and AIDA Cruises are scheduled to be delivered. P&O UK’s second LNG ship is scheduled for delivery in 2022 as well as the second ship for Carnival Cruise Line. Our AIDA Cruises brand has one additional LNG ship on order, expected to be delivered in 2023. In addition, our Princess Cruises brand also has two LNG ships on order with expected delivery dates in 2023 and 2025.
Climate change is a global problem. Making progress requires that progressive countries and companies lead the way by demonstrating practical, scalable ways to achieve decarbonization. Addressing climate change is one of our top priorities and we are committed to continue to lead the path within the cruise industry. Looking ahead, our business success, and our reputation, strongly depends upon ensuring our guests can continue to cruise in even cleaner, efficient and sustainable ways. This will allow us to maintain our economic success while also ensuring that our business model can thrive well into the future to serve many generations to come.

Our entire management team, including our Boards of Directors, is committed to addressing climate change. Our path to decarbonization involves multimillion-dollar investments and a multi-faceted strategy. Key components of this strategy include adopting international frameworks and working with industry regulatory bodies to: address upcoming regulatory requirements and conditions, implement initiatives to maximize efficiency opportunities/gains, identify and implement low carbon fuels, invest in carbon efficient technologies, support and accelerate industry-specific research and development projects, establish internal goals supporting the path, and partner with other companies, non-governmental organizations and relevant stakeholders to help us achieve our objectives.

In the coming years, we are likely to see an array of emerging technological innovations as there is not a single technology (nor a combination of technologies) that can move the maritime industry straight into a decarbonization path at this time. As we navigate this journey, we are committed to evaluating options, working with various stakeholders, and adjusting our path as needed.
2005
Started focusing on energy efficiency programs throughout the fleet.

2010
Announced our first carbon reduction goal of 20% by 2015.

2014
Achieved our 2015 goal of 20% carbon reduction ahead of time.
Announced our 2020 carbon reduction goal of 25%.

2015
Surpassed our 2015 carbon reduction goal by delivering a 23.4% reduction.
AIDA Sol supplied with power by LNG hybrid barge while in port.

2016
AIDAprima launched with LNG capabilities while in port.

2017
Achieved and surpassed our 2020 carbon reduction goal by delivering a 26.3% reduction.
AIDA Perla launched with LNG capabilities while in port.
**2018**
Achieved further progress on our 2020 carbon reduction goal by delivering a 27.6% carbon reduction.
CLIA announced industry-wide 2030 carbon reduction goal of 40%.
AIDAnova launched as first cruise ship in the world powered 100% by LNG.

**2019**
Achieved further progress on our 2020 carbon reduction goal by delivering a 29.1% reduction.
Committed to a new carbon reduction goal of 40% by 2030 & achieved a 24.8% reduction.
Costa Smeralda launched as second cruise ship in the world powered by LNG.
Announced commitment to support fuel cell technology.
Announced commitment to support lithium-ion battery storage system technology.

**2030**
CLIA and IMO commitment - reducing emissions by 40%.

**2050**
In accordance with the CLIA and IMO vision - reducing emissions rate by 70%.
Reduce absolute emissions by a minimum of 50%.

**2100**
IMO’s ultimate goal is to achieve zero-emission shipping.
**Regulatory Bodies and International Frameworks**

The International Maritime Organization (IMO) is the United Nations (UN) agency responsible for regulating maritime shipping. The IMO estimates that approximately 2.2% of global CO₂ emissions are generated by the shipping industry of which the cruise industry is a small part. We actively participate in IMO meetings and working groups through our trade association, Cruise Lines International Association (CLIA), to promote and develop initiatives that support a carbon-neutral shipping industry. We also recognize the role that international frameworks play in supporting carbon neutrality and we participate in those discussions as well. The following is a summary of the key recognized frameworks:

**Paris Agreement**

The Paris Agreement is an agreement within the United Nations Framework Convention on Climate Change (UNFCCC), to address Greenhouse Gas (GHG) emissions, mitigation, adaptation, and finance, signed in 2016. The agreement’s language was negotiated by representatives of 196 state parties. As of February 2020, all UNFCCC members have signed the agreement, 189 have become party to it, and the only significant emitters which are not parties are Iran and Turkey. The United States began the process to withdraw from the Paris Agreement in November 2019. Per the terms of the agreement, the withdrawal will take effect one year from delivery of the notification.

The Paris Agreement’s long-term goal is to keep the increase in global average temperature to well below 2 degrees Celsius above pre-industrial levels; and to pursue efforts to limit the increase to 1.5 degrees Celsius, recognizing that this would substantially reduce the risks and impacts of climate change. Additionally, the agreement aims to strengthen the ability of countries to deal with the impacts of climate change. To reach these ambitious goals, new frameworks will be put in place including developing appropriate financial flows, a new technology framework and an enhanced capacity building framework. This will further support action by developing countries and the most vulnerable countries, in-line with their own national objectives. In 2018, the IMO established an initial strategy on the reduction of GHG emissions from ships in line with the Paris Agreement and in support of the UN’s Sustainable Development Goals. The strategy includes reducing international shipping’s average CO₂ emissions intensity by at least 40% by 2030 and by 70% by 2050 (relative to 2008 baseline). The strategy also includes reducing absolute international shipping GHG emissions by at least 50% by 2050 compared to 2008 baseline and pursuing efforts toward phasing them out entirely by the end of this century.

Carnival Corporation & plc fully supports the IMO’s strategy which is in alignment with the Paris Agreement.

**Proposed International Maritime Industry Greenhouse Gas R&D Fund:**

Several leading global shipping associations have developed a submission to the IMO to be considered by the Marine Environment Protection Committee. Carnival Corporation & plc supports this proposal under CLIA, which is a signatory to the proposal. The submission proposes the concept of an International Maritime Industry GHG Research and Development Board (IMRB), funded by mandatory R&D contributions from shipping companies. The industry proposal would principally rely on contributions from shipping companies at an initially proposed level of $2 per ton of fuel purchased for consumption. We remain optimistic on the approval of the proposal as it demonstrates the industry’s leadership and commitment to work together to fund innovative technologies.
European Union Green Deal (EGD)
The incoming European Commission has been preparing a series of new climate and environmental laws (the EGD) which were published in December 2019. Some noteworthy aspects of the EGD framework include the following:

• An objective to deliver climate neutrality by 2050;
• A near-term plan on how to increase the EU’s GHG emission reduction target for 2030 to at least 50% compared to 1990 levels (this is not aligned with the IMO or CLIA targets);
• A likely proposal to end “fossil fuel subsidies” and review of tax exemptions for maritime fuels;
• Extending the EU cap-and-trade scheme for carbon emissions to the maritime sector; and a potential regulation requiring docked ships to use shore power when in port.

Goals and Commitments
In December 2018, the Cruise Lines International Association (CLIA) announced a historic global cruise industry commitment to reduce the rate of carbon emissions across the industry fleet by 40% by 2030. As CLIA members, we fully support this industry goal and have also adopted this target as our new carbon emission reduction goal for 2030. Our concentrated efforts to reduce the intensity of our CO₂ emissions began more than a decade ago and we have made significant progress ever since. To further support our disclosures, each year our GHG emissions are independently verified by Lloyd’s Register Quality Assurance, Inc.

2015 Carnival Corporation & plc Goal
Reduce the intensity of CO₂e (carbon dioxide equivalent) emissions from our operations by 20% by 2015 relative to our 2005 baseline, measured in grams of CO₂e per ALB-km.

• In 2014, we achieved our goal by delivering a 20% reduction.
• In 2015, we made further progress by delivering a cumulative 23.4% reduction.

2020 Carnival Corporation & plc Goal
Reduce the intensity of CO₂e (carbon dioxide equivalent) emissions from our operations by 25% by 2020 relative to our 2005 baseline, measured in grams of CO₂e per ALB-km.

• In 2017, we surpassed our goal by delivering a 26.3% reduction.
• In 2018, we made further progress by delivering a cumulative 27.6% reduction.
• In 2019, we made further progress by delivering a cumulative 29.1% reduction.

2030 Carbon Emission Reduction Goal
Reduce the intensity of CO₂e (carbon dioxide equivalent) emissions from our operations by 40% by 2030, relative to our 2008 baseline, measured in grams of CO₂e per ALB-km.

In 2019, we achieved a 24.8% reduction from our 2008 baseline.
Partnerships
We recognize that addressing climate change requires a global effort and commitment, and we have worked and partnered with others within the industry to reduce our emissions and develop alternative fuels and technologies. Our efforts to deliver cleaner emissions from our ships also rely on the support of and the collaboration with key partners.

NGO – Partnerships
We partnered with the Bellona Foundation in 2018 to help support our climate change initiatives. Bellona Foundation is an independent non-profit organization that aims to meet and tackle climate challenges by identifying and implementing sustainable environmental solutions. In 2019, we became the first cruise company to join the Getting to Zero Coalition. This coalition is an alliance of organizations across the maritime, energy, infrastructure, and finance sectors committed to accelerating the decarbonization of the international shipping industry. The alliance’s goal also includes scalable infrastructure for zero-carbon energy sources, including production, distribution, storage, and bunkering. Supported by key governments and intergovernmental organizations, the coalition represents a leading group of over 80 companies, including global stakeholders from a variety of shipping-related industries such as fuel suppliers, engine manufacturers, marine classification societies, shipping companies, major ports, and more.

Wärtsilä Partnership
In 2017, as part of our plans to address our impact on climate change we enhanced our long-term partnership with Wärtsilä, one of our main engine manufacturers. We signed a 12-year strategic agreement, worth approximately $1 billion in total, which includes all engine maintenance and monitoring for 78 vessels within our fleet of 100+ vessels. As part of the agreement, engine-level efficiency and fuel consumption will be measured on a regular basis, providing improved transparency into engine performance that will result in further improvements to engine operations. The data provided will also allow for tailored optimization of the combustion process, which will also improve the quality of our air emissions.

Alternative Low Carbon Fuels - Liquefied Natural Gas (LNG)
The introduction of Liquefied Natural Gas (LNG) to power cruise ships is a major development that supports Carnival Corporation & plc’s decarbonization pathway. In the cruise industry, we have pioneered the use of LNG, and we are continuing to expand our investments in LNG as the marine industry’s most advanced fuel technology to date. We began the implementation of our LNG vision by using LNG while in port in Hamburg, Germany, in 2015. Since then, we have expanded our LNG capabilities. In 2018, we made history with the launch of AIDAnova, the first cruise ship in the world powered by LNG both at sea and in port. In 2019, we launched the second LNG cruise ship for our global fleet, and in the world, Costa Smeralda.

Switching from marine diesel fuel to LNG provides many air emission benefits

- **Sulfur Dioxide Emissions**: 0%
- **Reduction in Particulate Matter**: 95-100%
- **Reduction in Nitrogen Oxides**: 85%
- **Reduction in Carbon Emissions**: 20%
On the supply side, one of the keys to establishing LNG as a standard for powering cruise ships is building out an extensive, safe, and reliable infrastructure across the globe for this advanced fuel technology. As part of our strategy, we signed a framework agreement with Shell Western LNG B.V. (Shell) to be our supplier for the fuel to power our first LNG-powered cruise ships, and recently expanded our partnership to fuel North America’s first next-generation LNG-powered cruise ships. As part of this agreement, some ships will be fueled through Shell’s Partner Quality LNG Transport (Q-LNG) LNG Bunker Barge (LBB), a project that is part of Shell’s strategic plan to develop a global LNG bunkering network. The ocean-going LBB, which is designed to support growing cruise line demand for LNG as a marine fuel, will be the first of its kind in the U.S. and will allow our ships to refuel with LNG at ports along the southeastern U.S. coast. We are proud to be on the forefront of advancing LNG as a fuel source for the cruise industry. We look forward to continuing to work closely with Shell as they help to bring LNG to North America in what we hope will be the first step in building a strong foundation for the future of LNG fuel supply for cruise ships in the region.
Germany’s Blue Angel Eco-Label Award
Carnival Corporation & plc’s AIDA Cruises was awarded the “Blue Angel” certification by Germany’s Federal Ministry for AIDAnova’s environmentally friendly ship design. The award recognizes AIDAnova’s design and technical innovations as the first cruise ship in the world powered by LNG both at sea and in port. In September 2019, the Blue Angel logo was painted onto AIDAnova’s side at the Port of Marseille. Click here for more information.

Bio-LNG
Bio-LNG or liquefied biomethane is a biofuel made by processing organic waste flows. Biogas develops when anaerobic digestion occurs, biological matter breaks down and gas is emitted in the process. Bio-LNG is practically CO₂ neutral and has all the advantages of LNG versus diesel, including reduced CO₂ emissions, quieter engine sound, lower NOx and significantly less pm (particulate matter) emissions. We are working with Shell as they are making the necessary investment to scale the technology and build a reliable supply infrastructure.

Investing in Carbon Efficient Technologies
We know that currently there is not a single technology (nor a combination of technologies) that can move the maritime industry straight into a decarbonization path. Therefore, we are committed to supporting industry-specific technologies as well as research and development projects.

Fuel Cell Technology
In 2019, we announced a joint venture between Carnival’s AIDA brand, Meyer Werft shipyard, Freudenberg Sealing Technologies and other partners funded by the German Federal Ministry of Transport and Digital Infrastructure. The objective of the joint venture is to find practical solutions for climate-neutral mobility across all shipping. The groundbreaking “Pa-X-ell2” project specifically aims to develop a decentralized energy network and a hybrid energy system with a new generation of fuel cells for use in oceangoing passenger vessels. As early as 2021, AIDA Cruises will be the world’s first cruise company to test the use of fuel cells on a large passenger ship. The fuel cells are powered by hydrogen derived from methanol. The cells will enable cruise ships to cut carbon emissions, reduce noise and lower vibrations.

Battery Systems
In 2019, our AIDA Cruises brand signed an agreement with Corvus Energy, the world’s leading marine battery supplier, to begin production and installation of a first-of-its-kind lithium-ion battery storage system on a cruise ship. The battery system is scheduled to be installed in 2020. The technology is currently set to become the world’s largest battery storage system ever installed on a passenger ship.

Cold Ironing / Shore Power Technology
Cruise ships equipped with “cold ironing” or shore power plug-in capabilities can plug into specific port connection facilities, allowing the ship to receive electricity from the electrical grid in the port instead of using the ship’s engines and fuel to generate power. Electricity generated by renewable sources such as hydro, solar, wind, and geothermal have a minimal climate change and air emission impact compared with non-renewable sources such as fossil fuels. In 2019, only 16 ports worldwide had the infrastructure able to provide shore power connections to our fleet, based on our itineraries and capabilities of ships frequenting those ports. These ports included: Hamburg, Germany; Seattle, Washington; Vancouver, Halifax and Montreal, Canada; Juneau, Alaska; San Diego, San Francisco and Los Angeles, California; Brooklyn, New York; and Shanghai, China.
Within the Carnival Corporation & plc fleet, by the end of FY2019, 47 ships were equipped with the ability to utilize cold ironing/shore power technology.

**Operational Efficiencies**
Throughout the years, we have invested in various systems to significantly increase our energy efficiency, which has resulted in fuel reduction as well as direct energy emission reduction. Below is a list of some of the initiatives we are currently working on:

- Designing ships for greater efficiency
- Increasing efficiency through ship operations and maintenance
- Minimizing fuel use and engine emissions
- Implementing other energy-saving initiatives
- Minimizing engine emissions

**Carbon Offsets**
Our shipboard fuel consumption contributes to more than 97% of our direct and indirect carbon emissions. Therefore, our efforts are focused on actions that can directly reduce and ultimately eliminate the emissions generated by our fuel consumption. We understand that carbon offsets may play a role in our decarbonization pathway if technological innovations are not sufficient to eliminate our emissions. To address those potential gaps in the future, we may have to invest in climate protection projects to offset or counterbalance the impact of any remaining emissions. If any of our guests would like to offset the emissions generated by their cruise, we provide them with the number of CO₂ emissions from their trip. In turn, they can contact an offset provider and contribute to specific climate projects based on their preferences. We are evaluating potential providers to facilitate the process for our guests.
Energy & Greenhouse Gas Emissions

**SCOPE 1**

99.6% Direct GHG Emissions

- 2% Shore Direct GHG Emissions
- 2% Ship Refrigerant GHG Emissions
- 97.3% Ship Fuel GHG Emissions

**SCOPE 2**

.4% Indirect GHG Emissions

- .2% Location and Market-Based Ship Indirect GHG Emissions
- .1% Location and Market-Based Shore Indirect GHG Emissions

**SHIP INDIRECT GHG EMISSIONS**

Electricity purchased at the port of call for power while docked (cold ironing).

**SHORE INDIRECT GHG EMISSIONS**

Electricity purchased and used to power the corporate and brand headquarters buildings and the land-based hotels.

**SHORE DIRECT GHG EMISSIONS**

Fuel for company cars and building generators.

**SHIP REFRIGERANT DIRECT GHG EMISSIONS**

Refrigerants to cool appliances such as refrigerators and AC units on the ships.

**SHIP FUEL DIRECT GHG EMISSIONS**

Fuel to propel the ships and run the ships generators to provide electricity.
COMMUNITY

122 Guest Experience
132 Community Engagement
140 Supporting Our Communities
144 Human Capital
Guest Experience

We deliver exceptional experiences to our guests on all seven continents and in more than 700 ports. Our world’s leading cruise lines have a cruise that is right for almost everyone.
Newsweek (Most Responsible Companies – Environmental, Social and Governance)
Carnival Corporation & plc has been recognized in Newsweek’s first ranking of America’s Most Responsible Companies 2020. Companies were evaluated based on their environmental, social, and corporate governance performance. A total of 2000 American public companies were evaluated and the top 300 are included on the list. We are honored to be listed as the highest-ranking company in the cruise sector. The list of companies can be viewed here.

Neptune Award (Greenest Shipowner)
Carnival Corporation & plc has been honored by maritime industry peers with the Greenest Shipowner of the Year Neptune Award, which recognizes a company that has shown excellence in reducing environmental impact in the operation of its fleet in the past year. Winners were chosen by executives from ship owners, ports, and marine technology companies who gathered to share best practices and cutting-edge technologies to enable continued reductions in the environmental impacts of shipping. Click here for more information.

Germany’s Blue Angel Eco-Label Award (Environmentally Friendly Ship Design)
Carnival’s AIDA Cruises has been awarded the “Blue Angel,” Germany’s Federal Government eco-label, for AIDAnova’s environmentally-friendly ship design. Through the use of liquefied natural gas (LNG), the ship emissions of particulate matter and sulfur oxides are almost completely eliminated; nitrogen oxide and CO₂ emissions are sustainably reduced. In September 2019, the “Blue Angel” logo was painted onto AIDAnova’s side at the Port of Marseille. Click here for more information.
Carnival Corporation & plc continued its long history of achieving third-party recognition, earning nearly 600 awards and honors in 2019 across its nine global cruise line brands. Recognition for Carnival Corporation & plc and its brands in 2019 includes 152 Cruise Critic awards, 23 USA Today 10Best Readers’ Choice Awards, 23 CruiseLine.com awards and 10 awards from Conde Nast Traveler for being named best in the industry for cruise ships, value, service, shore excursions, itineraries, family friendliness, private islands, onboard entertainment and more.

A sample of our 2019 awards with a focus on hospitality and guest experiences are included below:

**OceanMedallion Awards & Recognitions**

The OceanMedallion is transforming the vacation experience and has set a high bar for how Internet of Things (IoT) is being delivered to mainstream society in coming years. Carnival Corporation & plc was the first non-traditional technology company to be recognized by the IoT Breakthrough Awards. This award was the fifth recognition Carnival Corporation & plc received for its OceanMedallion in 2019. Carnival Corporation & plc was recognized by CES – the global stage for innovation (formerly known as the Consumer Electronics Show) – as a CES 2019 Innovations Award Honoree, and was named a 2019 Edison Awards Finalist, which recognizes and honors the world’s best innovators and innovations. We were also selected as a Skift Design Award winner for Best Cruise Experience for OceanCompass™, an application within the MedallionClass Experience that also received a Stevie Award for Social Business Solution from the American Business Awards.

**Carnival Corporation & plc: Best Private Island**

In 2019, for the 19th consecutive year, Carnival Corporation & plc’s private island Half Moon Cay, located on the island of Little San Salvador in The Bahamas, was named Best Private Island Destination by Porthole Cruise Magazine. Half Moon Cay is visited by both Holland America Line and Carnival Cruise Line.

**AIDA Cruises**

The annual Trusted Brands consumer survey conducted by Reader’s Digest magazine named AIDA Cruises brand as Germany’s Most Trustworthy Cruise Company in 2019. The magazine asked consumers to name which brand they trust the most and would recommend to their family or friends.
**Carnival Cruise Line**
Carnival Cruise Line was named Best Domestic Cruise Line for the fourth year in a row at the annual Travel Weekly Readers’ Choice Awards, in addition to Best Family Experience and Best Travel Advisor Educational Program. Carnival Cruise Line also earned several USA Today 10 Best Readers’ Choice Awards, including Best Ocean Cruise and Best Cruise Ship for Families.

**Cunard**
In 2019, Cunard earned Porthole Cruise Magazine’s Editor-in-Chief Award for Best Trans-Atlantic Experience. Cunard was also named Favorite Luxury/Premium Cruise Line in the 2019 World of Cruising Wave Awards.

**Costa Cruises**
In 2019, Costa Cruise’s Costa App won the Mediastars Prize, the Italian advertising technical award, in the App category. This was the fifth prize Costa Cruises won within just a few months for the application. The Costa App is a new digital tool that is making the onboard experience increasingly user-friendly. As part of the Italian advertising awards, the Costa App also won the Special Star prize, which was awarded to Costa Cruises and Triplesense Reply for creative direction. In addition, the app received first place at the Interactive Key Awards in the Mobile Communication category and won the Silver award in both “UX, Interface and Navigation 2019” and “Apps 2019” at the Indigo Awards.

**Holland America Line**
In 2019, Rudi’s Sel de Mer, a French seafood brasserie on board Holland America Line’s Nieuw Statendam, and the cruise line’s Alaska itineraries were named among the best of the best in Porthole Cruise Magazine’s annual Editor-in-Chief Awards for 2019. Holland America Line’s Alaska itineraries were also honored at the 2019 AFAR Travelers’ Choice Awards and received Best Itineraries in the Cruise Critic Editors’ Picks Awards.

**P&O Cruises Australia**
In 2019, P&O Australia was named the winner of Trusted Cruise Operator by Reader’s Digest Trusted Brands Australia, and was honored with multiple Cruise Critic Australia Cruisers’ Choice Awards including Best Cruise for Families, Best Shore Excursions for Mid-Sized Ships, Best for Fitness & Recreation for Mid-Sized Ships and Best Nightlife.

**P&O Cruises UK**
In 2019, P&O Cruises UK earned several Travel Weekly Cool Cruises Awards, including Best for Value, Best for World Cruises, Best for Mediterranean and Best for Caribbean.
Princess Cruises
In 2019, Princess Cruises was named Best Cruise Line in Alaska in the Travel Weekly Readers’ Choice Awards for the 13th consecutive year. Additionally, Princess Cruises received the Wine Spectator 2019 Restaurant Award of Excellence. Princess Cruises also received its second consecutive SHAPE Magazine Healthy Travel Award, recognizing the brand’s fleetwide state-of-the-art Lotus Spa and Fitness Centers.

Seabourn
In 2019, Seabourn collected more than 45 top travel industry awards, ranging from reader polls, cruise press, and travel professionals. Accolades included the Best Luxury Cruise Line; Excellence in Luxury Leisure, Best Luxury Cruise Line for Couples; the Best Cruise Line for Solo Travelers; the Best Cruise Line for Spas; the Best Boutique Cruising Experience; and much more. Among others, Seabourn was named one of TIME magazine’s World’s Greatest Places to Stay, and Best Cruise Line for Luxury Small Ships in Luxury Travel Advisor’s Awards of Excellence. The brand also ranked at the top of U.S. News & World Report’s Best Cruise Lines list for Best Cruise Line in the Mediterranean. Additionally, Seabourn was recognized as Best Small-Ship Ocean Cruise Line in the Telegraph Travel Awards. Seabourn is also consistently ranked among the world’s top travel choices by professional critics and the discerning readers of prestigious travel publications such as Departures, Travel + Leisure and Condé Nast Traveler.
2019 New Ships

CARNIVAL PANORAMA: Carnival Panorama is the third ship in the line’s popular Vista-class series. Carnival Panorama sails from Long Beach, California, and is the line’s first ship homeported on the West Coast in more than 20 years.

COSTA VENEZIA: Costa Venezia is Costa’s first ship specifically built for the China market. Costa Venezia offers Costa’s authentic Italian experience tailored for its Chinese customers, introducing guests to Italian culture, lifestyle and excellence – starting with details in the ship’s interiors, which are inspired by the city of Venice. Guests can also savor Italian entertainment, including a masquerade ball that will recreate the magical atmosphere of the famous Carnival of Venice, while also enjoying familiar comforts such as a wide array of Chinese cuisine available, Chinese-style karaoke bars and more.

COSTA SMERALDA: Costa Smeralda launched as Costa’s first cruise ship to be powered at sea and in port by liquefied natural gas (LNG), the world’s cleanest fossil fuel. Costa Smeralda is the second of a new class of next-generation ‘green’ cruise ships and a significant product innovation. Costa Smeralda commenced operations in December 2019.

SKY PRINCESS: Sky Princess honors the women of the U.S. Space Program with special recognition to U.S. Navy Aviator and Captain, Kay Hire, and NASA engineer and civil rights attorney, Frances Northcutt, during the ship’s naming ceremony. Sky Princess also debuted the new luxurious Sky Suites, with expansive views from the largest balconies at sea, along with new exciting entertainment experiences and dining choices.

Cybersecurity

In 2019, we continued to enhance cybersecurity capabilities and data privacy initiatives to protect the fleet, employees and our guests from any threats that could impact operational technology systems and data privacy. We introduced data privacy and cybersecurity training for applicable shipboard staff and shoreside employees. Cybersecurity policies and procedures were introduced into our Global Health, Environment, Safety and Security (HESS) management system. We also have implemented procedures to ensure compliance with applicable data privacy laws in various jurisdictions.

Bamboo Bikes on AIDA’s World Cruise

AIDA Cruises offers guests bicycles for excursions in destinations around the world. Expanding on this program, in 2019 AIDA Cruises purchased around 300 “my Boo” bamboo bikes for select ships, with proceeds from the sale benefitting social projects in Ghana. Bamboo is a renewable material that is as strong as steel and as lightweight as aluminum.

AIDA Ticketless Shore Excursions

AIDA Cruises eliminated the need to dispense printed tickets for shore excursions. All information about the starting time and meeting point of the excursion is available to guests on the Board Portal or shown on the screens in the public areas of the ship. Guests’ boarding cards work as a ticket. Thanks to this effort, around 15 tons of paper will be saved per year across the AIDA fleet.
**Holland America Line: Oprah Magazine Partnership Update**


**Carnival Cruise Line “Sensory Inclusive” Certification**

Carnival Cruise Line has become the first cruise operator to be certified “sensory inclusive” by KultureCity, a leading nonprofit organization dedicated to accessibility and inclusion for individuals with sensory needs and invisible disabilities. The program started in October 2019 and all of Carnival Cruise Line’s South Florida-based ships are certified, with the balance of the fleet scheduled to be completed in 2020.

As part of a comprehensive fleetwide training program, hundreds of guest-facing team members, including guest services personnel and youth staff, have been trained to understand and help adults, youth, and children with sensory-related questions or needs relating to conditions such as Autism, ADHD, Down syndrome, PTSD, etc.

**Princess Cruises: OceanMedallion Program Update**

MedallionClass™ Vacations were unveiled in 2017 and since then have taken service to the next level, delivering a new level of personalized service. The OceanMedallion, a quarter-sized wearable device that enables a faster boarding process and on-demand services. Additionally, the OceanMedallion enables guests to locate friends and family on board the ship if they have opted to connect with each other. In 2019, the Princess MedallionClass™ experience expanded to three additional Princess ships – Royal Princess, Crown Princess, and Sky Princess.

All-American décor with logos of the five branches of the armed services of the U.S. military as well as patriotic and military memorabilia throughout the room. The walls are lined with photos and messages around three main themes: Welcome Home, Thank You for Your Service, and America’s Heroes.

The Heroes Tribute Bar also benefits Carnival Cruise Line’s partner Operation Homefront, a national nonprofit organization dedicated to building strong, stable, and secure military families. Specialty cocktails and beer will be offered and served in a custom pint glass with a portion of each sale benefiting Operation Homefront.

**Carnival Cruise Line’s Ongoing Support for Military Armed Forces**

Continuing its longstanding support of military personnel, Carnival Cruise Line debuted the “Heroes Tribute Bar,” a first-of-its-kind venue on the new Carnival Panorama. The venue features a distinctive...
Costa Cruises and AIDA Cruises: Supporting Sahara Forest Project

Costa Cruises Foundation – Costa Crociere joined forces with the Norwegian nonprofit Sahara Forest Project Foundation to enlarge the scope to revegetate the desert in Jordan with sustainable technologies and to promote social and environmental improvement within the region. Currently, the Sahara Forest Project operates three hectares of commercial facility, located 12 kilometers north of the port of Aqaba. The project focuses on combining saltwater-cooled greenhouses, solar energy panels, and different techniques for outdoor revegetation in dry areas. An important part of the agreement is represented by the involvement of Costa Cruises and AIDA Cruises guests: guests cruising on Costa and AIDA ships calling at Aqaba will have the unique chance to taste, for the very first time in the world, at least ten different environmentally-friendly vegetables produced by using solar power and saltwater in the Jordan desert, through special recipes created by the Executive Chefs of the two cruise companies to emphasize their taste and quality.

Seabourn: UNESCO Partnership

In 2019, Seabourn signed an agreement to extend its official partnership with the United Nations Educational, Scientific and Cultural Organization (UNESCO), a unique alliance to help protect World Heritage. Since the partnership’s inception in 2014, Seabourn and its guests have contributed more than $1 million to UNESCO, providing a significant level of support to the organization and its mission. The five-year extension will continue to foster wider support and understanding in the travel industry and among travelers for UNESCO’s mission of safeguarding and promoting the world’s unique cultural and natural heritage recognized for its outstanding universal value.

Princess Cruises: Discovery at SEA Partnership

The longstanding partnership between Princess Cruises and Discovery brings fun, educational activities to the onboard programming. Through Discovery at SEA, Princess Cruises puts a unique spin on cruise entertainment that is especially appealing to animal lovers as well as science and nature enthusiasts. In 2019, the brand announced its newest Discovery at SEA interactive attraction: a first-of-its-kind, digitally enhanced escape room. The experience is currently exclusively available on Sky Princess with plans to expand to the next Princess Cruises ship debuting in 2020.
At Carnival Corporation & plc, our highest responsibilities and our top priorities are to operate safely, to protect the environment, and to be in compliance everywhere we operate in the world. This past year, we had the privilege of taking 12.9 million guests on vacation across our 104 ships. Cruising appeals to a broad range of ages and income levels, and provides something for every generation, from kid clubs to an array of onboard entertainment provided for teens and adults. Cruising also offers transportation to a variety of destinations and a diverse range of ship types and sizes, as well as price points, to attract guests with varying tastes and from most income levels.

Exceeding our guests’ expectations while providing them with a wide variety of exceptional vacation experiences involves building new, innovative, purpose-built ships that are larger, more efficient, have an improved mix of guest accommodations and present a wider range of onboard amenities and features. We also offer high quality destinations around the world, including a portfolio of private destinations that are uniquely tailored to our guests’ preferences. Helping our guests choose the cruise brand that will best meet their unique needs and desires is also part of our strategy. Our brands have multiple pricing levels that vary by cruise brand, category of cabin, ship, season, duration and itinerary. Guest feedback and research support the development of our overall marketing and business strategies to drive demand for cruises and increase the number of first-time cruisers.

We are proud to offer a wide array of gaming opportunities for the enjoyment of our guests. We also support a Responsible Gaming program designed to assist our guests in making responsible choices through knowledge and empowerment. Our approach to Responsible Gaming forms an integral part of this commitment. Responsible Gaming occurs in an environment where management and staff have been suitably educated to assist guests so that the potential for harm associated with gambling is kept to a minimum and our guests are able to make informed decisions. Responsible Gaming information is posted in all our onboard casinos and guests can choose to self-exclude from participating in casino gaming activities by registering with the casino management.

Although the vast majority of our guests are highly satisfied with their vacation experience, there are occasional complaints. Resolving issues in an expedient manner during the cruise, rather than having guests wait until they return home to make contact, enables guests to more fully enjoy their vacations. This approach also provides us with a valuable on-the-spot learning tool that supports improvement of policies, procedures and the overall cruise product. Guests also have different means available to convey their opinions and their level of satisfaction to the company. A common tool is a survey provided to guests after their cruise, through which they may express their opinions about the various aspects of the service and assign a performance score to each aspect.
Taking care of our guests during a crisis is also part of our duty. We have a dedicated group of CareTeam members who are trained to respond to a variety of emergencies, primarily medical-related situations, and are dispatched to locations throughout our cruising regions to provide personalized support and assistance as needed to all of our brands. The CareTeam members are committed to assisting our guests, as well as their families, friends and loved ones, and providing them with compassionate assistance and support during challenging situations.

To further care for guests, we support the Passenger Bill of Rights, which details our commitment to the safety, comfort and care of our guests. It specifically addresses delays, cancellations and other unplanned events. The Passenger Bill of Rights codifies many long-standing practices of our organization and Cruise Lines International Association (CLIA) member lines, and it also goes beyond some practices to further inform cruise guests of our commitment to their comfort and care.

Protecting our guests’ privacy is also extremely important to our guests and business. We have dedicated privacy teams that oversee our data privacy programs. We have also implemented privacy standards, which require conducting reviews of the adequacy of the privacy program.
Community Engagement

We recognize the inextricable link between the health of our business and the vitality and sustainability of our communities, both in our home ports and in the destinations that our ships visit throughout the world.
OUR COMMUNITY

We continue to work on initiatives and partnerships that support and sponsor a broad range of organizations for the benefit of our local and global communities:

- Pledged up to $2 million for Hurricane Dorian relief efforts in The Bahamas.
- Partnered with Tropical Shipping to support disaster relief efforts in The Bahamas after Hurricane Dorian.
- Signed a memorandum of understanding with the government of The Bahamas to rebuild the main hospital impacted after Hurricane Dorian.
- Continued with the 2018 Caribbean Region Support Efforts program.
- Committed to build a new port destination in The Bahamas.
- Carnival Cruise Line expanded operations to Long Beach, California as a new home port.
- Costa Cruises donated more than €100,000 to the port of Venice Foundation after the 2019 flooding.
- Costa Cruises partnered with Ferrero/Kinder Joy of Moving which promotes motoric skills and the cognitive, emotional and relational development of children.

BUSINESS PARTNER CODE OF CONDUCT & ETHICS

- Committed to further our commitment to human rights by developing a human rights policy in 2020.
- Completed 100% of animal welfare audits for tour encounters offering dog sledding in Alaska.
- Completed more than 50% of animal welfare audits for tour encounters with dolphins in captivity between FY2018 and FY2019.
Costa Cruises Captain Pietro Sinisi
Recognized for Rescue at Sea

The Association for Rescue at Sea (AFRAS) recognized our Costa Cruises Captain, Pietro Sinisi, for saving the crew of a cargo ship which was on fire in the Aegean Sea. Captain Sinisi successfully completed the rescue operation by diverting the ship despite dense smoke coming from the cargo ship in adverse weather and sea conditions. The eleven-man crew was rescued with a tender boat sent by Costa Luminosa.

Forbes: America’s Best Large Employer and America’s Best Employer for Diversity

Carnival Corporation & plc was recognized for the second consecutive year by Forbes Magazine among America’s best employers. Carnival was also recognized among America’s best employer for diversity. Carnival Corporation & plc was ranked as the top overall cruise company on both lists. The list of companies can be viewed here.

Committed to Support the Caribbean Region Project
Update

In FY2018, Carnival Corporation & plc along with its cruise brands and charitable foundations started a partnership with Caribbean officials on sustainable, long-term projects to support community needs with a focus on youth, education, and emergency preparedness. Carnival Foundation, the philanthropic arm of Carnival Corporation & plc, along with the company’s brands, the Miami HEAT Charitable Fund, and the Micky and Madeleine Arison Family, committed to support Caribbean community projects with a $10 million pledge. This long-term commitment was carried over to FY2019 and included the realization of the following community projects:

- Carnival Cruise Line Funds Revitalization of Play Facilities at Griffith Park: Carnival Cruise Line partnered with the Community Foundation of the Virgin Islands (CFVI) to revitalize the playground and basketball court at Emile Griffith Park, a landmark community park on St. Thomas. The park suffered immense damage in the aftermath of Hurricanes Irma and Maria. As part of this collaborative partnership, Emile Griffith Park now has new playground surfacing, new equipment, a new gathering gazebo with picnic tables and benches, a resurfaced basketball court, and repainted walls and field dugouts.
- Grand Turk Engagement: As part of our Grand Turk outreach program and in partnership with the Grand Turk Cruise Center, we hosted the faculty and students from the local H.J. Robinson High School on board the Carnival Pride. We donated backpacks and school supplies to school children as well as laptops to students of the H.J. Robinson High School.
Global Disaster Relief Efforts
The health and growth of our business is inextricably linked to the vitality and sustainability of our communities, both in our home ports and in the destinations we visit around the world. Every year the world experiences a series of natural disasters and crises that impact the wellbeing of millions of people. As part of our global disaster relief commitment, we strive to make a difference in the affected areas by working with government officials, local and international relief organizations, and coordinating corporate and employee donations for emergencies such as hurricanes, earthquakes, and other natural disasters. In 2019, Hurricane Dorian became the most intense Category 5 Atlantic hurricane on record to strike The Bahamas and is regarded as the worst natural disaster in the country’s history. Carnival Corporation & plc, Carnival Corporation & plc’s Chairman and his wife (Micky and Madeleine Arison), Carnival Foundation, and the Carnival brands collectively pledged $2 million dollars for relief and rebuilding efforts. For more information see page 140.

Economic Impact
According to research by Cruise Lines International Association (CLIA), the cruise industry generated $134 billion in global economic impact in 2017. This economic activity generated over 1 million jobs around the world, paying $45.6 billion in global wages in 2017. For additional details please refer to CLIA, 2019 Cruise Industry Outlook.

Carnival Cruise Lines’ Ongoing Support for Military Armed Forces
Continuing its longstanding support of military personnel, Carnival Cruise Line debuted the “Heroes Tribute Bar,” a first-of-its-kind venue on the new Carnival Panorama. The venue features a distinctive All-American décor with logos of the five branches of the armed services of the U.S. military as well as patriotic and military memorabilia throughout the room. The walls are lined with photos and messages around three main themes: Welcome Home, Thank You for Your Service, and America’s Heroes.

The Heroes Tribute Bar also benefits Carnival Cruise Line’s partner Operation Homefront, a national nonprofit organization dedicated to building strong, stable, and secure military families. Specialty cocktails and beer will be offered and served in a custom pint glass with a portion of each sale benefiting Operation Homefront.

Carnival Cruise Line Reaffirms Commitment to St. Jude Children’s Research Hospital®
Carnival Cruise Line reaffirmed its longstanding commitment to St. Jude Children’s Research Hospital®, and announced that it will increase the pledge to a total of $33 million by 2024.

During Carnival’s seventh Day of Play that was held on the St. Jude campus in Memphis, Tennessee, Carnival announced an additional $15 million pledge to the hospital over the next five years after achieving its initial fundraising goal early. Since the partnership began in 2010, Carnival has raised more than $18 million in support of the lifesaving mission of St. Jude: Finding cures. Saving children.®
Carnival Cruise Line’s Partnerships with Clean the World and Soap Aid

Our Carnival Cruise Line brand partnered with Clean the World and Soap Aid, both organizations recycle hotel soap and hotel amenities. Discarded soap from Carnival’s guest and crew staterooms are gathered throughout the fleet and sent to a Clean the World or Soap Aid recycling center where the soap is sanitized, melted down, and reprocessed. Together, Carnival Cruise Line and their soap recycling partners will distribute more than 400,000 recycled, clean bars of soap to people in need across the globe each year. Through its partnership with Carnival Cruise Line, Clean the World was able to expand its existing recycling program to locations throughout the Bahamas, Puerto Rico, Mexico, Bermuda, and Central America providing life-saving hygiene services to residents in these areas.

AIDA Cruises School Building Projects

AIDA Cruises has united its charitable projects under the umbrella initiative AIDA Cruise & Help. Through various events and donations, AIDA has financed the construction of seven new schools. The first school opened in May 2019 in Cebu, Philippines in partnership with the Reiner Meutsch Foundation Fly & Help. The christening of the AIDAmira in 2019 was hosted as a special charity event and the proceeds of €78,500 went to a school building project in Namibia.

Costa Cruises Responds to Venice Flooding

In 2019, the lagoon city of Venice suffered heavy damage as floodwaters reached their highest peaks in more than 50 years. During the flooding, landmarks like the St. Mark’s square were flooded, while shops and businesses were forced to close. Following the unprecedented flooding, our brand Costa Cruises was among the first to respond to a fundraiser organized by the Venice Port Authorities. Costa Cruises donated €100,000 to support the recovery of the city.

Costa Cruises and AIDA - Sahara Forest Project

Costa Cruises Foundation – Costa Crociere joined forces with the Norwegian nonprofit Sahara Forest Project Foundation to enlarge the scope to revegetate the desert in Jordan with sustainable technologies and to promote social and environmental improvement within the region. Currently, the Sahara Forest Project operates three hectares of commercial facility, located 12 kilometers north of the port of Aqaba. The project focuses on combining saltwater cooled greenhouses, solar energy panels and different techniques for outdoor revegetation in dry areas. An important part of the agreement is represented by the involvement of Costa Cruises and AIDA Cruises guests: guests cruising on Costa and AIDA ships calling at Aqaba will have the unique chance to taste, for the very first time in the world, at least ten different environmentally-friendly vegetables produced by using solar power and saltwater in the Jordan desert, through special recipes created by the Executive Chefs of the two cruise companies to emphasize their taste and quality.
Seabourn: UNESCO Partnership Update
In 2019, Seabourn signed an agreement to extend its official partnership with the United Educational, Scientific and Cultural Organization (UNESCO), a unique alliance to help protect World Heritage. The partnership was incepted in 2014 and over the course of the partnership, Seabourn and its guests have contributed more than $1 million, providing a significant level of support to the organization and its mission. The five-year extension will continue to foster wider support and understanding in the travel industry and among travelers for UNESCO’s mission of safeguarding and promoting the world’s unique cultural and natural heritage recognized for its outstanding universal value.

Kinder and Costa Cruises Partnership - Together for a Social Responsibility Project
In 2019, Kinder and Costa Cruises partnered to bring the “Kinder+Sport Joy of Moving” project and the right to play into the life of children, on board and on land, all over the world.

The international social responsibility project launched by the Ferrero Group and supported by Costa Cruises currently involves 4 million children in 30 countries around the world. The project aims to develop specific forms of exercise for children and families that are engaging and joyful, in the belief that a positive attitude relative to movement and sport can make the children of today better adults tomorrow.

Carnival UK Partnership with Oasis Down to Earth Farm
Carnival UK partners with a local charity every two years to jointly work on volunteering programs and organizing fundraisers. In FY2019, Carnival UK started their partnership with Oasis Down to Earth Farm, a community farm in urban Southampton. Oasis aims to educate, empower and engage with their local community.
Our COMMITMENT

We embrace the culture of the communities in which we operate, including our headquarters locations, homeports, private islands and ports of call. We want our ships and crew to always be welcomed, bringing hope, prosperity and goodwill wherever we sail.

We continually strive to promote sustainable tourism by contributing to our communities in a positive social, environmental and economic manner, working in conjunction with local governments, trade associations, tourism organizations, and other community stakeholders.

Our STRATEGY

It is important for us to invest in the communities we visit and support their sustainable development, which is also essential for our operations. Within our supply chain, we work with our tour operators to support responsible excursions. Our port development group works with port communities for developing leading destinations and ports as well as securing preferred ports. This enables us to grow demand and deliver unique experiences that benefit both our destinations and our organization.

The Carnival Foundation, our cruise brand foundations, our cruise brands and our employees support a wide and far reaching variety of local and global organizations through monetary and in-kind donations, philanthropic programs, employee fundraisers and hands-on volunteer initiatives. We also provide our guests with the opportunity to contribute to the causes we support. Many of our cruise brands have donation programs where reusable goods from our ships are provided to people in need throughout the communities we visit. Local nonprofit groups, government agencies, and various stakeholder groups work with our cruise brands to collect toiletries, dishes, cookware, mattresses, tableware, furniture, and other items from the ships and distribute them to shelters, hospitals, orphanages, and homeless programs. We also collaborate with many organizations that focus on the areas of the arts, human rights, education, health, and environmental conservation.

As part of our commitment to supporting our communities, during times of crisis, we provide emergency aid and relief through financial donations which we coordinate with various national and international relief organizations. We also use our ships to deliver emergency supplies to the affected areas. Through our cruise brands and corporate foundation as well as through the extraordinary efforts of our employees worldwide, we support a variety of relief programs providing aid, donations, and services to an array of charitable organizations that touch many thousands of lives globally.

We also continue to increase the number of partnerships we have around the world to create even more opportunities for our guests and crew to positively experience the places they visit, and also participate in various community and social impact experiences.
Supporting Our Communities

PARTNERING WITH THE BAHAMAS
The health and growth of our business is inextricably linked to the vitality and sustainability of our communities, both in our home ports and in the destinations we visit around the world. Every year, the world experiences a series of natural disasters and crises that impact the wellbeing of millions of people. As part of our global disaster relief commitment, we strive to make a difference in the affected areas by working with government officials, local and international relief organizations, and coordinating corporate and employee donations for emergencies such as hurricanes, earthquakes, and other natural disasters.

In 2019, Hurricane Dorian became the most intense Category 5 Atlantic hurricane on record to strike The Bahamas and is regarded as the worst natural disaster in the country’s history. The Bahamas is among the world’s most popular destinations for cruise vacations, and supporting the country’s health and vitality after the devastating effects of Hurricane Dorian, while also working to ensure disaster preparedness in the future, is important to not only their own long-term success but also to ours.

Carnival Corporation & plc, its brands and Carnival Foundation together with Carnival Corporation & plc Chairman Micky Arison and his wife Madeleine’s Family Foundation collectively pledged $2 million dollars for relief and recovery efforts. In addition, we worked with local and international organizations including Tropical Shipping, Grand Bahama Shipyard, Direct Relief and World Central Kitchen to partner with businesses across The Bahamas on projects providing both immediate relief and focusing on long-term impacts wherever possible.

Our company has always been closely tied to The Bahamas.

Partnering in their recovery efforts after the devastating impact of Hurricane Dorian, is an important component of our long standing relationship.

Marie McKenzie, Vice President of Global Ports and Caribbean Government Relations for Carnival Corporation & plc

PARTNERSHIP WITH TROPICAL SHIPPING AND THE BAHAMAS NATIONAL EMERGENCY AGENCY
We partnered with Tropical Shipping and The Bahamas National Emergency Agency (NEMA) to collect and distribute food and supplies donated by nonprofit organizations, schools, businesses, and individuals throughout South Florida and North America. Tropical Shipping stocked, shipped, and directly delivered the containers to NEMA in The Bahamas.

Pledged $2 million dollars for relief and recovery efforts
The shipments included medical supplies, water, food, cots, tents, wheelbarrows, shovels, chainsaws, generators, and other emergency relief supplies. Carnival Corporation & plc, along with its brands, covered shipping costs as well as provided food and supplies as part of the effort. The initiative provided immediate assistance to Bahamians where it was most needed.

Through our partnership with Tropical Shipping, we were able to collect and donate an estimated 10 million pounds of food and supplies filling over 250 shipping containers that were delivered to NEMA and The Bahamas.

Cruise Ships Return to the Bahamas
Carnival Cruise Line organized and delivered shipments of supplies on board two of its ships, Carnival Liberty and Carnival Pride. The ships made stops in Freeport to deliver relief supplies to assist residents, including dozens of pallets of water, generators, chain saws, prepared meals and medical supplies.

One month and a half after Hurricane Dorian struck Grand Bahama, Carnival Cruise Line was the first major cruise company to return to Freeport, the island’s capital, marking the return of regular cruise calls to Grand Bahama.

Supporting World Central Kitchen
World Central Kitchen was founded by celebrity chef José Andrés and is devoted to providing meals to those in need after natural disasters.

Carnival Corporation & plc and Carnival Foundation provided support to World Central Kitchen, which served more than 25,000 meals per day to people in Abaco and Grand Bahama following Hurricane Dorian. World Central Kitchen has provided over one million meals throughout The Bahamas.

Collaboration with Direct Relief
Carnival Corporation & plc worked with Direct Relief to provide medical equipment and supplies in the wake of Hurricane Dorian. Direct Relief is a humanitarian aid organization with the mission to improve the health and lives of people affected by poverty or emergency situations by mobilizing and providing essential medical resources needed for their care. With support from Carnival Corporation & plc, Carnival Foundation and the Micky and Madeleine Arison Family Foundation, Direct Relief has delivered more than $2.9 million in life-saving medical aid to health facilities across The Bahamas, including Rand Hospital.

We want to publicly thank everyone who has made donations for their efforts, support, and genuine concern for our friends and neighbors in The Bahamas.

Roger Frizzell, Chief Communications Officer for Carnival Corporation & plc
RESTORING RAND MEMORIAL HOSPITAL
Following Hurricane Dorian, Carnival Corporation & plc signed an agreement with The Bahamas to fund and support flood damage repairs and restoration efforts at Rand Memorial Hospital, the primary hospital in Freeport, Grand Bahama Island. The project comprised two critical restoration initiatives: remediation and basic repairs for the facility, and replacing damaged medical equipment.

SUPPORT EFFORTS WITH GRAND BAHAMA SHIPYARD
As a result of Hurricane Dorian, Grand Bahama Utility Company suffered damage to its critical systems impacting crucial fresh water supply to businesses and residents on Grand Bahama Island. Understanding the importance of a consistent water supply for the community, Grand Bahama Shipyard – with the commitment of shareholders Carnival Corporation & plc, Royal Caribbean Cruises Ltd. and Grand Bahama Port Authority – assisted in providing power generation restoration to the utility, sending shipyard technicians to help recharge the water plant and pipes, and repairing and replacing electric motors and pumps, which is accelerating the return of water services.

DEVELOPING TWO NEW CRUISE PORT DESTINATIONS IN THE BAHAMAS
In 2019, Carnival Corporation & plc and two of its cruise brands, Carnival Cruise Line and Holland America Line, signed an agreement with The Bahamas to build two major port developments. Under the agreement, Carnival Corporation & plc will develop a new cruise port destination primarily for Carnival Cruise Line on Grand Bahama and construct a new addition, including a pier, on the Bahamian island of Little San Salvador, home to Holland America Line’s award-winning Half Moon Cay port. The Grand Bahama project will represent an investment of over $100 million and the development on Little San Salvador will be an estimated $80 million investment over time.

The projects are expected to play an important role in the country’s recovery from the impacts of Hurricane Dorian. As part of the development, Carnival Corporation & plc plans include construction parameters that are designed to meet or exceed guidelines for being able to mostly withstand the impact of a Category 5 hurricane. Due to the COVID-19 outbreak in the first quarter of 2020 and the pandemic impact on our industry, the permitting and startup of construction for both projects are expected to be delayed.

We are extremely pleased to immediately begin remediation efforts at Rand Memorial, which serves as Grand Bahama Island’s primary medical facility and represents a critical step in our ability to recover and once again serve our community.

Sharon Williams, Administrator for Grand Bahama Health Services

Grand Bahama Shipyard repair work

Dr. The Most Honorable Hubert A. Minnis, prime minister of The Commonwealth of The Bahamas, and Giora Israel, senior vice president of global port and destination development for Carnival Corporation & plc
Human Capital

Our success depends on the talent, passion and dedication of our employees, both on board our ships and shoreside, who consistently deliver joyful and memorable vacation experiences for our guests. We strive to reflect the diverse and global marketplace and communities we serve.
DIVERSITY & ETHICS

We continue to build a diverse and inclusive workforce and provide all employees with a positive work environment and opportunities to build a rewarding career to further drive employee engagement.

- Continued to build a diverse and inclusive workforce.
- Recognized by Newsweek’s first ranking of America’s Most Responsible Companies.
- Recognized as one of America’s best larger employer and America’s best employer for diversity by Forbes media.
- Recognized by Corporate Responsibility Magazine 100 Best Corporate Citizen.
- Earned a perfect score of 100 for the 3rd consecutive year from the Human Rights Campaign (HRC), the leading LGBTQ civil rights organization in the U.S.
- Continued to work with Catalyst, the leading U.S. nonprofit with a mission to expand opportunities for women.
- Carnival UK became a Value 500 member, an organization committed to putting disability and inclusion on business leadership agenda.
America's 100 Best Corporate Citizens (Governance & Transparency)
Carnival Corporation & plc has been recognized among Corporate Responsibility Magazine’s (CR Magazine) 100 Best Corporate Citizens for 2019. The recognition marks the fourth consecutive year and eighth time in the past nine years that Carnival Corporation & plc has received the distinction in CR Magazine’s annual survey, which recognizes transparency and corporate governance among the 1,000 largest U.S. public companies. More information can be found here.

Newsweek (Most Responsible Companies – Environmental, Social and Governance)
Carnival Corporation & plc has been recognized in Newsweek’s first ranking of America’s Most Responsible Companies 2020. Companies were evaluated based on their environmental, social, and corporate governance performance. A total of 2000 American public companies were evaluated and the top 300 are included on the list. We are honored to be listed as the highest-ranking company in the cruise sector. The list of companies can be viewed here.

Forbes: America’s Best Large Employer and America’s Best Employer for Diversity
Carnival Corporation & plc was recognized for the second consecutive year by Forbes Magazine among America’s best employers. Carnival was also recognized among America’s best employer for diversity. Carnival Corporation & plc was ranked as the top overall cruise company on both lists. The full list of companies can be found here.

Corporate Equality Index (Best Place to Work for LGBTQ Equality)
Carnival Corporation & plc earned a perfect score of 100 in the Corporate Equality Index for the third consecutive year from the Human Rights campaign, the leading LGBTQ civil rights organization in the United States. More information can be found here.

CSMART: Safety4Sea Award (Training Services)
Carnival Corporation & plc’s CSMART Training Center received the 2019 SAFETY4SEA EUROPORT Training Award, for providing high-quality maritime training services for industry-wide safety, sustainability and operational excellence. More information can be found here.
Ethics & Compliance
In 2019, we focused on enhancing our compliance framework by developing a dedicated ethics and compliance program and corresponding strategic plan. Through this, we were able to significantly increase the resources devoted to our compliance function. Our new Chief Ethics and Compliance Officer (CECO), a member of the executive leadership team, leads the effort to further develop our ethics and compliance program across the entire corporation. The CECO is assisted by other leaders who focus on key areas (including environmental, health, safety and various general compliance issues), as well as important processes (investigations, compliance training, risks, and communications). It is important to note that the Ethics & Compliance is not just a single department within All Brands Group – but rather a corporate-wide program – with key Ethics & Compliance Officers (also known as “ECO’s”) who help shape and implement the program initiatives in each of the operating companies.

Through the collective efforts of these leaders, this corporate-wide program involves compliance risk management, improved compliance training programs for our employees, thorough investigations and remedial actions relating to health, environmental and safety incidents, and efforts to strengthen our corporate culture. To further heighten the focus on ethics and compliance, the Boards of Directors established the Compliance Committees to oversee the ethics and compliance program, maintain regular communications with the CECO, and ensure implementation of the ethics and compliance program’s strategic plan across the corporation.

Carnival Corporation Environmental Excellence Awards
We continue to honor excellence in environmental performance throughout our fleet. The Carnival Corporation & plc environmental excellence award honors the accomplishments of the ship’s management and crew that best represents our commitment to protecting and preserving the environment. Their example promotes continuous improvement throughout our fleet. Every year, one ship from each cruise brand is selected, and from those nine total ships, one is recognized as the best in environmental excellence. For FY2019 performance, Carnival Cruise Line’s ship Carnival Horizon was the recipient of the Environmental Excellence Award.

The individual best in brand Environmental Excellence Award winners are:
- AIDA Cruises: AIDAVita
- Carnival Cruise Line: Carnival Vista
- Costa Cruises: Costa Fascinosa / Costa Asia: Costa Serena
- Cunard: Queen Victoria
- Holland America Line: Koningsdam
- P&O Australia: Pacific Dawn
- P&O Cruises: Ventura
- Princess Cruises: Ruby Princess
- Seabourn: Seabourn Sojourn

Human Rights Policy
As part of our ongoing efforts and support for human rights, we are committed to develop a human rights policy that will be in alignment with the Universal Declaration of Human Rights in 2020.
We employed an average of 92,000 crew members on board our 104 ships at any given time (which excludes employees on leave) and 14,000 shoreside employees (full and part time/seasonal). This includes seasonal employees of Holland America Princess Alaska Tours, which significantly increases its workforce during the late spring and summer months in connection with the Alaskan cruise season.

Labor Union Relationships
We consider our employee and union relationships to be strong. The percentages of our shipboard and shoreside employees that are represented by collective bargaining agreements are 58.0% and 25.0%, respectively.

Diversity & Inclusion
We continued our diversity and inclusion campaign in 2019:

- Together with Catalyst (the leading U.S. nonprofit with a mission to expand opportunities for women), we made a pledge to support the advancement of women’s leadership and diversity in the workplace.
- Carnival UK became a Value 500 member and committed to putting disability and inclusion on their business leadership agenda.
- Carnival Cruise Line has become the first cruise line to be certified “sensory inclusive” by KultureCity, a leading nonprofit dedicated to accessibility and inclusion for individuals with sensory and invisible disabilities.

Global Learning & Development Information System (GLADIS)
The Global Learning & Development Information System was launched in 2018 and implementation was completed in 2019. The system allows our 92,000 shipboard employees to access content remotely without the need for internet while on a ship and with internet when they are off the ships. GLADIS was developed to ensure shipboard employees have centralized, convenient access to corporation information such as messages and podcasts, all required training and workplace resources, as well as support for ongoing learning and development while on board or at home. The implementation of GLADIS drives a more consistent delivery and learning experience and streamlines training tracking and reporting process while promoting greater efficiency of record management and reporting.

Ethisphere Partnership
The Ethisphere® Institute is a global leader in defining and advancing standards of ethical business practices that fuel corporate character, marketplace trust, and business success. We are honored to be a member of The Business Ethics Leadership Alliance (BELA) within the Ethisphere organization. BELA supports the sharing of experiences and best practices within its members to improve ethics and compliance programs globally.
Learning Apps
Carnival Corporation & plc is using applications as learning tools to facilitate the training experience through enhanced learning and material retention.

Crew Tube: This self-contained app offers users a “YouTube-like” experience, covering a variety of tutorials and content including health, environment, safety, and security (HESS) topics. In 2019, we added new tutorials.

CSMART app: This is a companion app designed to familiarize officers with the Carnival Corporation & plc’s Arison Maritime Center, located in the Nederland’s –CSMART, before they arrive for their in-person training. The app also pulls together key information and commonly asked questions, and showcases the facilities at CSMART. The app is divided into the four main sections including Travel and Contact Information, the CSMART hotel, the CSMART training centre, and CSMART training courses and pre-course requisites.

Oily Water Separator Augmented Reality: This is a standalone iPad app that allows officers at CSMART to gain a better understanding of the purpose, function, and features of an oily water separator. Within the app, users are able to view augmented reality animations showing interior workings and flow as well as explore a model showing how it fits into the ship system.

Psychometric Evaluation Program
We continue to evaluate our Deck, Technical, and Environmental Officers through a Psychometric Evaluation Program. The program is utilized across all brands for the selection and promotion of officers through the evaluation of specific psychological attributes at certain career stages. To ensure that all officers possess the attributes required for each of their roles, a variety of psychometric evaluations, both online and in-person with psychologists are utilized. The program includes a series of online and proctored evaluations as part of the new hire process, a comprehensive in-person evaluation as part of the senior officer promotion process and ongoing “check in” evaluations of our senior officers.

Guest & Crew Care Team
Our Care Team continues to provide compassionate care for guests and crew in the event of an emergency while on board. Care Team employees have received specialized training on how to sensitively and appropriately support guests, crew and their families during an emergency. They are available 24 hours a day, seven days a week and respond to a variety of guest and crew emergencies, primarily medical related situations, and are dispatched to locations throughout our cruising regions to provide personalized support and assistance as needed to all of our brands.

SoundWaves Podcast
To strengthen internal communications across all nine brands we created an in-house podcast in 2019. SoundWaves is a twice monthly podcast produced for all shipboard and shoreside team members hosted by Carnival Corporation & plc President and CEO, Arnold Donald. Each 10-minute episode features people and stories across all nine brands within the corporation.
Seatrade Cruise Global - Agent Essentials: Navigating the Complex Waters of Compliance

In 2019, we co-sponsored a seminar during the Seatrade cruise industry annual meeting on corporate governance, which focused on the topics of ethics and compliance.

Arison Maritime Center - CSMART

Carnival Corporation & plc partnered with University of West Florida Innovation Institute to launch a new Environmental Excellence course designed to foster a culture of learning, ownership and greater understanding of environmental compliance. The course uses the Innovation Institute’s challenge-based learning concepts to provide interactive instruction and continuous professional development for environmental officers across the Carnival Corporation & plc fleet.

HESS Reporting System

In 2019, we completed the fleetwide rollout of a new health, environment, safety and security (HESS) event reporting system. This platform has allowed us to standardize our HESS event reporting and analysis capabilities across the entire fleet.
As a global company, we are a diverse organization and employ more than 150,000 employees from very diverse backgrounds. We value and support our talented and diverse employee base and have a wide variety of career options and positions in place for both shipboard and shoreside employees. We are committed to being an equal opportunity employer, employing people from around the world and hiring people based on the quality of their experience, skills, education, and character, without regard for their identification with any group or classification of people.

We use various staffing agencies in many countries and regions to source our shipboard employees. We hire both men and women for every department on board our ships and in our shoreside offices. We have female captains and officers at various ranks; however, the majority of our shipboard employees are men, which reflect a gender imbalance in the applicant pool for officer and crew positions.

We recognize that a key to our success is providing our employees with the learning tools to perform their jobs well and grow their career within our company.

Maintaining a diverse workforce that promotes an open, tolerant and positive work environment where everyone’s talents and strengths can be utilized is crucial to our success. We work to recruit, motivate, develop and retain the best talent while taking on the responsibility to provide the appropriate tools and opportunities for continuous learning and development of all employees. As such we are committed to offering opportunities for career development, rewarding performance, and providing a safe and healthy work environment. We provide ongoing in-person and computer-based professional and leadership development programs for our employees. Our ships have onboard trainers and computer training centers for our employees to use for training and career development purposes. We conduct performance reviews of all employees using both informal and formal processes. Performance reviews help us to determine how effectively we monitor, maintain and improve employee competencies. We have entered into agreements with unions covering certain employees on our ships and in certain of our shoreside operations. We monitor and measure employee turnover rates to assess the levels of job satisfaction among our employees. One of our strategies to raise satisfaction rates among our employees is by promoting from within.

Reorganizations are carried out with low displacement rates. It is our practice to ensure timely discussion of such changes and to engage with our employees to implement these changes. This engagement helps to minimize any adverse impacts of the changes on employees and helps to maintain employee satisfaction and motivation during the change process.

Minimum notice periods regarding operational changes are set according to local rules and regulations and according to standard Collective Bargaining Agreements (CBA) for seafarers, where applicable. To support the integrity of our work environment, we have established ethics and compliance policies and systems to facilitate conduct...
that conforms with our expectations that apply equally to all employees, irrespective of geographic locations and boundaries. Our Code of Business Conduct and Ethics provides us with the tools to navigate challenging situations and respond with integrity when dealing with fellow employees, guests, global communities, government agencies, consultants, vendors, distributors and other business partners.

In addition, all of our staff undergoes extensive safety, ethics and environmental training. As part of our ethics training program, every employee is responsible for adhering to business practices that are in accordance with the letter and spirit of the law and with ethical principles that reflect the highest standards of corporate and individual behavior. This training includes topics related to human rights, labor relations, customer and customer data privacy, and social issues such as fraud and corruption, among others.

As part of our ethics policy program, we established an infrastructure for employees to feel comfortable and safe to report any non-compliance matters to their direct supervisor or upper management without fear or concern of retaliation for making a report in good faith. We investigate these reports and take appropriate corrective actions.

Our environmental training programs emphasize that all employees at every level of our organization will take responsibility for ensuring that environmental concerns are a key part of our planning and decision-making process and for ensuring that environmentally conscious practices are executed fleetwide. Training programs in this area are customized based on the level of each individual’s environmental responsibilities.

Our training centers located in a number of geographical locations worldwide are an essential component of our training strategy. These training centers offer various learning opportunities to shoreside and shipboard personnel. Our training centers are located in Brazil, China, India, Indonesia, Italy, Germany, and the Philippines. We also run the Center for Simulator Maritime Training (CSMART), a maritime training facility located in Almere, Netherlands with advanced safety and environmental training for our Deck, Technical and Environmental Officers. For more information, please visit our CSMART website.

To help our business partners within our supply chain more fully understand and comply with our expectations for legal compliance and ethical behavior, we developed our Business Partner Code of Conduct and Ethics, which goes a step above and beyond our Business Code of Conduct and Ethics, by formally integrating ethics into our supply chain. As described in our Business Partner Code of Conduct and Ethics, our suppliers are required to know and comply with applicable employment laws and support human rights for all people. They must comply with the legal employment age in each country where they operate and abstain from using any form of forced, bonded, indentured or prison labor.

We work to ensure that our workplace is free from harassment, which would include any form of unwelcome conduct by one person toward another that has the purpose or effect of creating an intimidating, hostile or offensive work environment.
## Performance Summary: Environmental Data

### Greenhouse Gas Emissions (GHGs)

<table>
<thead>
<tr>
<th>Description</th>
<th>Units</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total GHG Emissions - Location Based</td>
<td>Metric Tonnes CO$_2$e</td>
<td>10,687,646</td>
<td>10,697,602</td>
<td>10,769,826</td>
</tr>
<tr>
<td>Total GHG Emissions - Market Based</td>
<td>Metric Tonnes CO$_2$e</td>
<td>10,685,798</td>
<td>10,695,342</td>
<td>10,768,544</td>
</tr>
<tr>
<td>Direct GHG Emissions</td>
<td>Metric Tonnes CO$_2$e</td>
<td>10,642,209</td>
<td>10,647,189</td>
<td>10,722,894</td>
</tr>
<tr>
<td>&gt; Ship Direct GHG Emissions</td>
<td>Metric Tonnes CO$_2$e</td>
<td>10,616,662</td>
<td>10,618,166</td>
<td>10,695,459</td>
</tr>
<tr>
<td>&gt;&gt; Ship Fuel GHG Emissions</td>
<td>Metric Tonnes CO$_2$e</td>
<td>10,395,499</td>
<td>10,423,242</td>
<td>10,476,233</td>
</tr>
<tr>
<td>&gt;&gt; Ship Refrigerant GHG Emissions$^2$</td>
<td>Metric Tonnes CO$_2$e</td>
<td>221,164</td>
<td>194,924</td>
<td>219,266</td>
</tr>
<tr>
<td>&gt; Shore Direct GHG Emissions</td>
<td>Metric Tonnes CO$_2$e</td>
<td>25,547</td>
<td>29,023</td>
<td>27,435</td>
</tr>
<tr>
<td>Indirect GHG Emissions - Location Based</td>
<td>Metric Tonnes CO$_2$e</td>
<td>45,437</td>
<td>50,143</td>
<td>46,932</td>
</tr>
<tr>
<td>&gt; Shore Indirect GHG Emissions - Location Based</td>
<td>Metric Tonnes CO$_2$e</td>
<td>35,649</td>
<td>39,385</td>
<td>34,987</td>
</tr>
<tr>
<td>&gt; Ship Indirect GHG Emissions - Location Based</td>
<td>Metric Tonnes CO$_2$e</td>
<td>9,789</td>
<td>11,028</td>
<td>11,945</td>
</tr>
<tr>
<td>Indirect GHG Emissions - Market Based</td>
<td>Metric Tonnes CO$_2$e</td>
<td>43,589</td>
<td>48,153</td>
<td>45,650</td>
</tr>
<tr>
<td>&gt; Shore Indirect GHG Emissions - Market Based</td>
<td>Metric Tonnes CO$_2$e</td>
<td>32,331</td>
<td>35,505</td>
<td>31,835</td>
</tr>
<tr>
<td>&gt; Ship Indirect GHG Emissions - Market Based</td>
<td>Metric Tonnes CO$_2$e</td>
<td>11,258</td>
<td>12,648</td>
<td>13,815</td>
</tr>
<tr>
<td>Ship Fuel Greenhouse Gas Emissions Rate</td>
<td>Grams CO$_2$e / ALB-Km</td>
<td>256</td>
<td>251</td>
<td>246</td>
</tr>
</tbody>
</table>

### Air Emissions

<table>
<thead>
<tr>
<th>Description</th>
<th>Units</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ship Fugitive Refrigerant Releases$^1$</td>
<td>Kilograms</td>
<td>107,153</td>
<td>97,628</td>
<td>107,972</td>
</tr>
<tr>
<td>Ship Ozone Depleting Substances (ODS) Emissions$^{1,3}$</td>
<td>Kg CFC-11e</td>
<td>318</td>
<td>1,331</td>
<td>1,208</td>
</tr>
<tr>
<td>Total Sulfur Oxides (SOx) Emissions$^4$</td>
<td>Metric Tonnes</td>
<td>99,622</td>
<td>98,543</td>
<td>91,953</td>
</tr>
<tr>
<td>Sulfur Oxides (SOx) Emissions Rate</td>
<td>Kg SOx/NM</td>
<td>10.3</td>
<td>10.2</td>
<td>9.5</td>
</tr>
<tr>
<td>Total Nitrogen Oxides (NOx) Emissions$^5$</td>
<td>Metric Tonnes</td>
<td>257,665</td>
<td>258,410</td>
<td>258,102</td>
</tr>
<tr>
<td>Nitrogen Oxides (NOx) Emissions Rate</td>
<td>Kg NOx/NM</td>
<td>26.8</td>
<td>26.8</td>
<td>26.7</td>
</tr>
<tr>
<td>Total Particulate Matter (PM$_{2.5}$) Emissions$^6$</td>
<td>Metric Tonnes</td>
<td>2.099</td>
<td>2.086</td>
<td>2.021</td>
</tr>
<tr>
<td>Particulate Matter (PM$_{2.5}$) Emission Rate</td>
<td>Kg PM/NM</td>
<td>0.22</td>
<td>0.22</td>
<td>0.21</td>
</tr>
</tbody>
</table>

### Energy & Electricity

<table>
<thead>
<tr>
<th>Description</th>
<th>Units</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Direct Energy Consumption$^7$</td>
<td>Gigajoules</td>
<td>136,462,998</td>
<td>136,877,903</td>
<td>137,872,164</td>
</tr>
<tr>
<td>&gt; Ship Direct Energy Consumption</td>
<td>Gigajoules</td>
<td>136,128,687</td>
<td>136,486,695</td>
<td>137,513,786</td>
</tr>
<tr>
<td>&gt; Shore Direct Energy Consumption</td>
<td>Gigajoules</td>
<td>334,311</td>
<td>391,208</td>
<td>358,378</td>
</tr>
<tr>
<td>Total Direct Energy Consumption Rate</td>
<td>Kilojoules / ALB-Km</td>
<td>3,361</td>
<td>3,303</td>
<td>3,235</td>
</tr>
<tr>
<td>Total Ship Fuel Consumption$^7$</td>
<td>Metric Tonnes</td>
<td>3,287,125</td>
<td>3,295,821</td>
<td>3,311,914</td>
</tr>
<tr>
<td>Ship Fuel Consumption Rate$^7$</td>
<td>Grams Fuel / ALB-Km</td>
<td>81</td>
<td>80</td>
<td>78</td>
</tr>
<tr>
<td>Total Purchased Electricity</td>
<td>MWh</td>
<td>106,446</td>
<td>116,129</td>
<td>113,688</td>
</tr>
<tr>
<td>&gt; Shore Purchased Electricity</td>
<td>MWh</td>
<td>77,404</td>
<td>83,305</td>
<td>78,273</td>
</tr>
<tr>
<td>&gt; Ship Purchased Electricity</td>
<td>MWh</td>
<td>29,042</td>
<td>32,823</td>
<td>35,415</td>
</tr>
</tbody>
</table>
### Performance Summary: Environmental Data

#### Ship Fuel

<table>
<thead>
<tr>
<th>Fuel Type</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Sulfur Fuel Oil (HSFO)</td>
<td>Percent</td>
<td>74.0</td>
<td>73.3</td>
</tr>
<tr>
<td>Low Sulfur Fuel Oil (LSFO)</td>
<td>Percent</td>
<td>5.4</td>
<td>6.1</td>
</tr>
<tr>
<td>Marine Diesel Oil/Marine Gas Oil (MDO/MGO)</td>
<td>Percent</td>
<td>20.5</td>
<td>20.6</td>
</tr>
<tr>
<td>Liquefied Natural Gas (LNG)</td>
<td>Percent</td>
<td>0.03</td>
<td>0.01</td>
</tr>
</tbody>
</table>

#### Potable Water

<table>
<thead>
<tr>
<th>Metric</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Water Consumption</td>
<td>Metric Tonnes</td>
<td>26,816,008</td>
<td>27,315,010</td>
</tr>
<tr>
<td>&gt; Water Purchased (From Shore)</td>
<td>Metric Tonnes</td>
<td>5,591,610</td>
<td>5,639,972</td>
</tr>
<tr>
<td>&gt; Water Produced (From Sea)</td>
<td>Metric Tonnes</td>
<td>21,224,398</td>
<td>21,675,038</td>
</tr>
<tr>
<td>Water Consumption Rate</td>
<td>Liters/Person-Day</td>
<td>227</td>
<td>226</td>
</tr>
</tbody>
</table>

#### Wastewater

<table>
<thead>
<tr>
<th>Metric</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bilge Water Discharged to Sea</td>
<td>Metric Tonnes</td>
<td>178,152</td>
<td>165,133</td>
</tr>
<tr>
<td>Bilge Water to Sea Discharge Rate</td>
<td>Liters/NM</td>
<td>18.5</td>
<td>17.1</td>
</tr>
<tr>
<td>Gray Water Discharged to Sea</td>
<td>Metric Tonnes</td>
<td>18,432,386</td>
<td>19,031,011</td>
</tr>
<tr>
<td>Gray Water to Sea Discharge Rate</td>
<td>Liters/Person-Day</td>
<td>156.3</td>
<td>157.2</td>
</tr>
<tr>
<td>Black Water Discharged to Sea</td>
<td>Metric Tonnes</td>
<td>8,066,062</td>
<td>8,002,300</td>
</tr>
<tr>
<td>Black Water to Sea Discharge Rate</td>
<td>Liters/Person-Day</td>
<td>68.4</td>
<td>66.1</td>
</tr>
</tbody>
</table>

#### Waste Disposal

<table>
<thead>
<tr>
<th>Metric</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Waste</td>
<td>Metric Tonnes</td>
<td>357,767</td>
<td>378,142</td>
</tr>
<tr>
<td>&gt; Hazardous Waste</td>
<td>Metric Tonnes</td>
<td>137,957</td>
<td>144,236</td>
</tr>
<tr>
<td>&gt; Non-Hazardous Waste</td>
<td>Metric Tonnes</td>
<td>219,810</td>
<td>233,906</td>
</tr>
<tr>
<td>Waste Rate (Excluding Recycling)</td>
<td>Kilograms/Person-Day</td>
<td>2.2</td>
<td>2.2</td>
</tr>
<tr>
<td>Waste Recycled</td>
<td>Percent</td>
<td>28.0</td>
<td>30.1</td>
</tr>
</tbody>
</table>

---

2. Emission factors are in accordance with The Climate Registry Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report (AR4).
3. The conversion factors to obtain the amount of CFC-equivalent from the various types of refrigerant gasses are those given in the Montreal Technical Papers.
4. The SOx weight calculations take into account the weighted-average sulfur content of the fuel consumed and the default emission factors. The default emission factor used for calculating SOx value is \( S \times 0.96 \), where \( S \) is the fuel sulfur content. This calculation has been adjusted to account for Advanced Air Quality Systems (AAQS). This adjustment was made based on the near-zero sulfur emissions resulting from planned HFO fuel consumption during AAQS operations.
5. The NOx weight is calculated based on default emission factors. The default emission factor used for calculating NOx value for HFO/LFO is 78 kg, MGO is 80 kg, and LNG is 7 kg of NOx per tonne of fuel consumed.
6. PM2.5 refers to particles with diameters between 2.5 and 10 micrometers. The PM2.5 weight is calculated based on default emission factors. The default emission factor used for calculating PM2.5 value for HFO is 0.82 kg, LFO is 0.75 kg, MGO is 0.15 kg, and LNG negligible kilograms of PM2.5 per tonne of fuel consumed. This calculation has been adjusted to account for AAQS. This adjustment was made based on PM2.5 emissions reduction resulting from planned HFO fuel consumption during AAQS operations.
7. Performance Summary: Environmental Data
## Workforce

<table>
<thead>
<tr>
<th></th>
<th>Units</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Crew</td>
<td>Number</td>
<td>86,000</td>
<td>88,000</td>
<td>92,000</td>
</tr>
</tbody>
</table>

## Diversity

<table>
<thead>
<tr>
<th>Labor Sourcing Region:</th>
<th></th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; Africa</td>
<td>Percent</td>
<td>1.6</td>
<td>1.6</td>
<td>1.7</td>
</tr>
<tr>
<td>&gt; Asia</td>
<td>Percent</td>
<td>72.2</td>
<td>72.0</td>
<td>71.7</td>
</tr>
<tr>
<td>&gt; Australia</td>
<td>Percent</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>&gt; Europe</td>
<td>Percent</td>
<td>17.8</td>
<td>18.2</td>
<td>17.7</td>
</tr>
<tr>
<td>&gt; North &amp; Central America</td>
<td>Percent</td>
<td>4.6</td>
<td>4.4</td>
<td>4.2</td>
</tr>
<tr>
<td>&gt; South America</td>
<td>Percent</td>
<td>3.3</td>
<td>3.2</td>
<td>3.2</td>
</tr>
</tbody>
</table>

| Gender Distribution - Female | Percent | 2017   | 2018   | 2019   |
|                             |         | 17.0   | 17.4   | 17.8   |

| Gender Distribution - Male | Percent | 2017   | 2018   | 2019   |
|                           |         | 83.0   | 82.6   | 82.2   |

## Injuries & Fatalities

<table>
<thead>
<tr>
<th></th>
<th>Units</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Injuries</td>
<td>Number</td>
<td>2,911</td>
<td>3,365</td>
<td>3,839</td>
</tr>
<tr>
<td>&gt; Minor Injuries</td>
<td>Number</td>
<td>1,719</td>
<td>2,223</td>
<td>2,669</td>
</tr>
<tr>
<td>&gt; Serious Injuries</td>
<td>Number</td>
<td>637</td>
<td>583</td>
<td>587</td>
</tr>
<tr>
<td>&gt; Major Injuries</td>
<td>Number</td>
<td>555</td>
<td>559</td>
<td>583</td>
</tr>
<tr>
<td>Accidental Deaths</td>
<td>Number</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

## Health & Safety

<table>
<thead>
<tr>
<th></th>
<th>Units</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total CDC VSP Inspections</td>
<td>Number</td>
<td>120</td>
<td>94</td>
<td>70</td>
</tr>
<tr>
<td>&gt; CDC VSP Inspections - Ships Scoring 100%</td>
<td>Number</td>
<td>18</td>
<td>14</td>
<td>2</td>
</tr>
<tr>
<td>&gt; CDC VSP Inspections - Ships Scoring 86-99%</td>
<td>Number</td>
<td>97</td>
<td>77</td>
<td>67</td>
</tr>
<tr>
<td>&gt; CDC VSP Inspections - Ships Scoring &lt;86%</td>
<td>Number</td>
<td>5</td>
<td>3</td>
<td>1</td>
</tr>
</tbody>
</table>

## Other Statistics

<table>
<thead>
<tr>
<th></th>
<th>Units</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee Turnover</td>
<td>Percent</td>
<td>16.9</td>
<td>18.9</td>
<td>16</td>
</tr>
<tr>
<td>Employees Covered by</td>
<td>Percent</td>
<td>58.0</td>
<td>58.0</td>
<td>58</td>
</tr>
<tr>
<td>Collective Bargaining Agreements (CBA)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employees Represented by Health and Safety (H&amp;S) Committees</td>
<td>Percent</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>
## Workforce

<table>
<thead>
<tr>
<th></th>
<th>Units</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Number of Full Time Employees</td>
<td>Number</td>
<td>11,000</td>
<td>12,000</td>
<td>12,000</td>
</tr>
<tr>
<td>Average Number of Part Time/Seasonal Employees</td>
<td>Number</td>
<td>2,200</td>
<td>2,000</td>
<td>2,000</td>
</tr>
<tr>
<td>Shoreside Employee Status - Full Time</td>
<td>Percent</td>
<td>83.0</td>
<td>85.7</td>
<td>85.7</td>
</tr>
<tr>
<td>Shoreside Employee Status - Part Time</td>
<td>Percent</td>
<td>17.0</td>
<td>14.3</td>
<td>14.3</td>
</tr>
</tbody>
</table>

## Diversity

<table>
<thead>
<tr>
<th></th>
<th>Percent</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender Distribution - Female</td>
<td>58.9</td>
<td>57.5</td>
<td>57.9</td>
<td></td>
</tr>
<tr>
<td>Gender Distribution - Male</td>
<td>41.1</td>
<td>42.5</td>
<td>42.1</td>
<td></td>
</tr>
</tbody>
</table>

## Employees by Brand Headquarter Region

<table>
<thead>
<tr>
<th>Region</th>
<th>Percent</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>2.9</td>
<td>62.9</td>
<td>2.7</td>
<td></td>
</tr>
<tr>
<td>Europe</td>
<td>31.5</td>
<td>31.6</td>
<td>32.5</td>
<td></td>
</tr>
<tr>
<td>North America</td>
<td>65.6</td>
<td>65.6</td>
<td>64.8</td>
<td></td>
</tr>
</tbody>
</table>

## Other Statistics

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Percent</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee Turnover(^3)</td>
<td>14.0</td>
<td>15.1</td>
<td>13.0</td>
<td></td>
</tr>
<tr>
<td>Employees Covered by Collective Bargaining Agreements (CBA)</td>
<td>20.6</td>
<td>21.0</td>
<td>25.0</td>
<td></td>
</tr>
<tr>
<td>Employees Represented by Health &amp; Safety (H&amp;S) Committees</td>
<td>72.8</td>
<td>70.2</td>
<td>70.0</td>
<td></td>
</tr>
</tbody>
</table>

\(^1\) Independently verified by Lloyd's Register Quality Assurance (LRQA).
\(^2\) In addition to our headquarters locations, other offices are located worldwide. Due to varying legal requirements worldwide, further detail on employee base is limited.
\(^3\) This number does not include shoreside employees on unpaid leave.
Our Approach to Sustainability

We are committed to sustainability and this commitment is embedded in our business - from ship to shore. In this report we describe our approach to sustainability. We outline our positions, strategies, and programs around key sustainability topics of relevance to our company, the cruise industry, and our stakeholders.

Our Sustainability Report provides another platform to expand our level of communication regarding additional material indicators related to our performance beyond those disclosed in our Annual Financial Reports, Proxy Statement, other regulatory disclosures, and our brand specific Sustainability Reports. We produce this report for the benefit of our stakeholders.

STAKEHOLDER ENGAGEMENT

We hope that the information and perspectives in this report are useful and you see them as an invitation for further dialogue with us. We regularly and pro-actively engage and collaborate with a broad range of stakeholder groups that have interests in our sustainability policies, practices, and performance through formal and informal channels. We also engage with and expertise on issues of importance to the company.

In general, we develop a common understanding of the issues relevant to the challenges we face, through active and ongoing stakeholder communications. We engage with our stakeholders in various ways. We have one-on-one meetings, group meetings, town halls, email communication and social media interaction, among others. These engagement processes help to ensure that all stakeholders have an equal opportunity to ask questions and voice their concerns.

Guests
Measuring our guest satisfaction and addressing their feedback provides a powerful indicator about our sensitivity to their needs.

Travel Professionals
We work with responsible business partners. We host travel professionals on our ships to provide them with opportunities to better experience our products and services.

Suppliers
We are part of a complex network of interdependent companies. Our active dialogue with our business partners ensures sustainability is part of the relationship.

Non-Government Organizations
We collaborate with and belong to organizations that work to address issues of concern to our industry and stakeholder groups.
Investors
We engage on our environment, social, and governance (ESG) performance.

Employees
We listen to and act upon our employees’ perspectives and ideas.

Port Communities
We meet with community leaders to discuss business and community planning and ways to interact sustainably.

Government Agencies & Policy Makers
We strive to positively impact public policy and regulation by contributing cruise industry expertise.

Media
We communicate with media regularly on a variety of subjects related to our business and impact.

Business Organizations & Industry Associations
We work with key stakeholders to address a broad range of sustainability issues in the cruise industry, the broader maritime industry and companies representing other industries.

These include:

- Quantitative data collected, aggregated and analyzed, utilizing our sustainability data collection and reporting systems;
- Quantitative data for specific indicators assured to limited level of assurance by a third party; and
- Qualitative data collected from each of Carnival Corporation & plc’s brands and from other in-house and industry sources.

The scope of this Sustainability Report encompasses the direct operation of the ships, as well as the support facilities and personnel charged with managing the brands and the corporate headquarters. As greenhouse gas (GHG) emissions represent one of our main operational direct impacts, we include purchases of shipboard and shoreside energy (fuel and electricity). We consider our shoreside water consumption and waste generation immaterial relative to our ship operations. We have continued to expand our report boundary, as we have continued to include some of our indirect impacts. As we continue our sustainability journey, we expect to incorporate more indirect impacts of our operations related to our diverse supply chain.

We adjust data if data collection methods change or data errors are identified. Any significant changes in the measurement methods and/or data values applied to key metrics from previous years are documented within this report. Significant changes are defined as changes within major categories greater than 5% of the original reported data. We normalize the majority of our indicators to account for changes in the size of our fleet, as well as changes in itineraries and guest capacity.

The information in this Sustainability Report includes significant actions or events in the reporting period. This report does not intentionally exclude relevant information that would influence or inform stakeholder assessments or decisions, or that would reflect significant economic, environmental or social impacts.
MATERIALITY

Every two years we perform a materiality analysis and a benchmarking review of publicly available information for major hospitality, travel and marine industry companies. This process help us determine how important specific environmental, social and governance (ESG) issues are to tour organization and stakeholders.

As part of our materiality assessment process we:
• Reevaluated the significant issues presented in our prior sustainability materiality assessments.
• Reviewed the ESG aspects and indicators, as they apply to our business.
• Analyzed the results of stakeholder sustainability engagements, including investor and customer inquiries, questionnaires and surveys from rating organizations, industry reports and analyses, and policies and regulatory guidance among others.
• Benchmarked our sustainability strategy using publicly available information.
• Held internal meetings to discuss company perspectives on sustainability aspects and impacts.
• Evaluated 2020 sustainability goals progress.
• Mapped the universe of stakeholder and company aspects on a materiality matrix, identifying the mid and high-scoring issues as priorities for our operations. This mapping enabled us to: Prioritize information on the basis of materiality, analysis of environmental aspects and impacts (ISO 14001), sustainability context, and stakeholder inclusiveness; Agree on the desired content for each metric and the approach to reporting (qualitative vs. quantitative detailed performance tracking, etc.)

EVALUATION PROCESS

The materiality matrix summarizes the results of our materiality assessment and shows, for each aspect, its relative concern to our stakeholders and its current or potential impact on the company. Materiality is about identifying the issues that matter most to our business and to our stakeholders. “High” and “Medium” issues help us to set the agenda for our sustainability strategy and for what we included in our current and future sustainability reports. “Low” issues, while important and managed by the company, are not currently covered in detail in our sustainability reporting as they are of lesser concern to our stakeholders.

We plan to perform this materiality analysis and a benchmarking overview every two years, to make sure we continue to address our stakeholder needs, operational impacts, regulatory landscape and technological developments.

DISCLAIMER IN RESPECT TO FORWARD-LOOKING STATEMENTS

The data included in this report has been collected and processed with the utmost care. Nevertheless, errors in transmission cannot be ruled out entirely. Some of the statements, estimates or projections contained in this report are forward-looking statements that involve risks, uncertainties and assumptions with respect to our company, including some statements concerning future results, outlooks, plans, goals and other events which have not yet occurred. All statements other than statements of historical facts are statements that could be deemed forward-looking statements. Forward-looking statements should not be relied upon as a prediction of actual results. These statements are based on current expectations, estimates, forecasts and projections about our business and the industry in which we operate and the beliefs and assumptions of our management.

We have tried, whenever possible, to identify these statements by using words like will, may, could, should, would, believe, depends, expect, goal, anticipate, forecast, project, future, intend, plan, estimate, target, indicate and similar expressions of future intent or the negative of such terms. We go to great lengths to check and update the information we publish. However, we expressly disclaim any obligation to disseminate, after the date of this report, any updates or revisions to any such forward-looking statements to reflect any change in expectations or events, conditions or circumstances on which any such statements are based.
Our brands offer distinct cruising options along with a truly unique and memorable experience for our guests. As different as our brands are, they all share a commitment to preserving the beautiful and often pristine environments in which we cruise. Because of this shared sense of responsibility, the company carefully manages environmental activities and addresses environmental stewardship at every level of our organization.

In collaboration with our brand environmental teams, our Maritime Policy & Analysis Department develops policies and procedures, and raises the bar on our environmental leadership and performance by oftentimes exceeding regulatory requirements and implementing best practices.

Our management teams identify and manage environmental aspects and impacts, supervise the environmental performance of the ships, and ensure implementation of environmental regulatory requirements, best management practices and company environmental procedures. Most importantly, our dedicated onboard officers and crew carry out company policies and procedures every day.

Each ship in our fleet has a full-time Environmental Officer (EO), who monitors environmental compliance and the implementation of environmental procedures. Each EO reports directly to the ship’s Captain, and has a direct line of communication with their Operating Line Compliance Manager (OLCM).

Our brands also encourage our guests to be aware of their own impacts on the environment. We provide, for example, environmental awareness information to passengers across a range of media. Our EOs are glad to answer any environmental questions our guests may have and provide insight into maritime environmental management for interested guests.

**Scope of Environmental Officer Responsibilities**

- Monitoring the ship’s environmental compliance activities, including waste operations.
- Performing environmental rounds and inspections to assess the ship’s environmental performance.
- Assisting the crew in addressing environmental concerns and questions related to Carnival’s Environmental Management System and applicable environmental requirements.
- Providing some environmental shipboard training of crew who have environmental responsibilities.
- Assessing the environmental proficiency of the ship’s crew, identifying gaps and providing additional training if necessary.
- Aiding the Captain, Chief Engineer and government officials, in the event of accidental releases or spills.
- Participating in shipboard management meetings and ensuring that environmental matters are addressed.
- Evaluating new methods to minimize the ship’s environmental impact (waste minimization, water and energy conservation, and other measures).
- Review environmental restrictions in support of voyage planning.
- Providing assistance to internal and external auditors during environmental audits.
- Testing the Carnival Compliance and Ethics Hotline and ensuring that Carnival Compliance and Ethics Hotline information is posted in crew areas.
- Ensuring proper notification of all environmental incidents, as required.
The Boards have six committees, each of which has a specific charter (except for the Executive Committees), defined responsibilities and composition. The charter for each of these committees can be found on the Corporate Governance section on our corporate website. Further discussion of the HESS Committees can be found in the Risk Management section of this report. The committees include the following:

<table>
<thead>
<tr>
<th>Committees</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audit Committees</td>
<td>The purpose of the Audit Committees shall be to (1) assist the Boards’ oversight of the (a) integrity of the Companies’ financial statements, (b) Companies’ compliance with legal and regulatory requirements (other than health, environmental, safety and security matters), (c) independent auditors’ qualifications and independence, (d) performance of the Companies’ internal audit functions and independent auditors, and (e) relevant elements of the Companies’ risk management programs; and (2) prepare the report that the U.S. Securities and Exchange Commission rules require be included in the Companies’ annual proxy statement.</td>
</tr>
<tr>
<td>Compensation</td>
<td>The purpose of the Compensation Committees is to discharge the Boards’ responsibilities relating to compensation of the Companies’ directors, executive officers and such other member of senior management of the Companies as they may determine.</td>
</tr>
<tr>
<td>Compliance</td>
<td>The purpose of the Compliance Committees is to oversee the Companies’ Ethics and Compliance Program (“E&amp;C Program”), including by (1) receiving regular reports from, and providing direction to the Companies’ Chief Ethics and Compliance Officer (the “CECO”) with respect to the implementation of the Ethics and Compliance Strategic Plan, including the adequacy of staffing and resources; (2) monitoring, in coordination with the Boards’ Health, Environmental, Safety and Security (HESS) Committees, implementation of the Environmental Compliance Plan (“ECP”); (3) taking steps, in coordination with the Boards’ Audit and HESS Committees, reasonably designed to ensure that all significant allegations of misconduct by management, employees, or agents receive appropriate attention and remediation; (4) promoting accountability of senior management with respect to compliance matters; (5) making recommendations to the Boards for the framework, structure, and design of the Boards’ permanent, steady-state oversight of the Companies’ E&amp;C Program; and (6) handling any other duties as directed by the Boards, consistent with their Charter, the Companies’ by-laws, articles of association and governing law.</td>
</tr>
</tbody>
</table>

INTRODUCTION CRUISING COMMITMENT COMMUNITY APPENDIX
The purpose of the Executive Committees is to exercise the authority of the full Boards between Board meetings, except to the extent that the Boards have delegated authority to another committee or to other persons, and except as limited by applicable law.

The purpose of the Health, Environmental, Safety & Security (“HESS”) Committees is to assist the Boards in fulfilling their responsibility to supervise and monitor health, environmental, safety and security policies, programs, initiatives at sea and onshore, and compliance with health, environmental, safety and security legal and regulatory requirements.

The purpose of the Nominating & Governance Committees is to: (1) develop and recommend to the Boards a set of Corporate Governance Guidelines applicable to the Companies; (2) engage in succession planning for the Boards, assist the Boards by identifying individuals qualified to become Board members, and recommend to the Boards the director nominees to serve on the Boards; (3) recommend to the Boards director nominees for each committee; and (4) assist the Boards with such other matters as may be set forth in their Charter from time to time.

More information on links between compensation for members of the Boards of Directors, Executives and Senior Management, and the company’s financial, environmental, social and governance performance can be found in the Compensation Discussion and Analysis section of our annual Proxy Statement here.
Statement Pursuant to Modern Slavery Act 2015

Carnival Corporation & plc is the world’s largest leisure travel company and provides travelers around the globe with extraordinary vacations at an exceptional value. The company’s portfolio of global cruise line brands includes brands in the United States, Europe, Asia, and Australia; our ships visit more than 700 ports around the world. The United Kingdom’s Modern Slavery Act 2015 requires companies like ours to disclose information regarding their efforts to combat slavery and human trafficking in their supply chain and within their business. We take this responsibility very seriously and are proud of the measures we have taken in this regard. This statement has been approved by our Boards of Directors and sets out the steps that we have taken during the previous fiscal year to combat slavery and human trafficking within the internal operations of our company or the suppliers, vendors and other companies we partner with around the world.

Our Policies

Our employees are subject to and are expected to follow our Code of Business Conduct and Ethics, which requires employees to act “with the utmost integrity when dealing with fellow employees, guests, global communities, government agencies, vendors, contractors, service providers, agents and other business partners.” Our Code explicitly condemns all forms of child exploitation and forced labor and states our intent to comply with and support laws and regulations relevant to slavery and human trafficking. All of our employees are required to complete ethics training courses to help them understand the company’s expectations and the importance of conducting business in an ethical and responsible manner. We plan to include education on modern slavery issues in the next revision of our Code of Conduct Training.

Similarly, we continue to expect our business partners to respect and follow applicable laws and regulations and to promote ethical decisions in all aspects of their business. These requirements are documented in our Business Partner Code of Conduct and Ethics, which specifically prohibits the use of slavery and human trafficking in our direct supply chain. This requirement is communicated to business partners through online supplier portals, in contracts, in our standard terms and conditions and as part of our standard due diligence procedures. Our Code of Business Conduct and Ethics and Business Partner Code of Conduct and Ethics are available online.

Due Diligence

We apply risk-based due diligence to our relationships with business partners. We decline to enter or continue business with any business partners who fail to complete the required due diligence requirements or who fail to meet our standards.

Reporting

Employees and business partners are actively encouraged to raise and report any issues of concern to their local management team, our Compliance Department, or anonymously through our hotline. All reports are reviewed, and investigations and corrective (or other) action are applied when appropriate. In accordance with this commitment to continuously monitor and improve our policies, we plan on revising the Reporting of Improprieties Policy to specifically include slavery and human trafficking as areas to report.

The above processes are reviewed and updated on a regular basis to ensure that they are appropriate to our industry and business and that they remain effective.

Further Steps

As a result of its review in 2017, the Company identified the initial components of its 2030 strategy in alignment with the United Nations Sustainable Development Goals. These goals were adopted by world leaders, universally apply to all countries and are designed to mobilize efforts to end all forms of poverty, fight inequalities and promote responsible production and consumption, among other important social goals. We continue to define our sustainability strategy and our policies to address the risk of modern slavery as well as other social issues.

Arnold W. Donald
President and Chief Executive Officer
Health Procedures

We have continued to develop and introduce comprehensive health standards that go beyond regulatory requirements to help protect the health of our guests, crew and port employees. These standards are implemented and enforced by each of our brands and the port facilities that we own and operate (i.e. Puerta Maya, Cozumel, Mexico; Grand Turk Cruise Center, Turks & Caicos Islands; Amber Cove Cruise Center, Puerto Plata, Dominican Republic and Mahogany Bay Cruise Center, Roatán, Honduras).

The following is a summary of procedures adopted to protect health on board and ashore:

- Requesting ill guest and crew to report relevant symptoms immediately and asking them to recuperate in their cabins until these subside, to help reduce the spread of any illness of public health concern.
- Ensuring ready access to public health specialists and comprehensive medical and health services to deal with outbreaks and other health emergencies. This includes ensuring arrangements are in place to provide additional medical and public health personnel.
- Communicating well-established good hand hygiene practices and other infection control measures to guests, crew and port employees. This includes specific public health training for crew and port staff on implementing our procedures.
- Promoting of guest, crew, and port employees health by ensuring hand washing facilities and hand sanitizers are made readily available and encouraging their frequent use.
- Preventing the potential spread of illnesses via contaminated environmental surfaces by carefully managing all cleaning operations throughout the ship. For ship and port operations, we ensure the regular cleaning and sanitizing of frequently contacted hand touch surfaces such as door handles, hand rails, tables, and elevator buttons.
- Managing housekeeping and laundry operations to follow best practices including cleaning/disinfection and infection control in cabins, public areas, crew areas, and within laundry operations on our ships.
- Managing air handling systems and air conditioning to help ensure safe indoor air quality.
- Managing food safety and hygiene through comprehensive shore-based and onboard processes and systems. These include ensuring safe food sourcing and protecting food safety from delivery through storage, preparation, cooking, and final service. Managing of food safety is based on the principles of Hazard Analysis and Critical Control Point (HACCP) which is an internationally recognized best practice system.
- We similarly protect water safety throughout production, storage, and distribution to the final consumer.
- Managing onboard child activity centers and facilities to help prevent the spread of childhood illnesses.
- Managing recreational water facilities including the quality of water and safety of swimming pools, spa pools, and other leisure facilities.
- Managing the public health standards in onboard beauty spas, salons, gyms, and other guest and crew facilities.
- Managing the prevention and control of pests using an Integrated Pest Management (IPM) approach.
We are continually investing in a broad range of voluntary energy reduction initiatives that meet or surpass the requirements of current laws and regulations. Reducing fuel and driving energy efficiency requires multimillion-dollar investments and a multi-pronged strategy. Below is a list of some of the initiatives we are currently working on:

- Optimize hull design to minimize drag.
- Select fuel-efficient combustion equipment.
- Install equipment such as steam turbines to use waste heat.
- Install energy-efficient onboard equipment, including lighting.

- Optimize diesel generator use at sea and in port.
- Manage use of evaporators and reverse osmosis plants.
- Use LED lighting.
- Utilize sophisticated control systems for heating ventilation and air-conditioning (HVAC).
- Monitor and improve chiller performance.
- Apply highly efficient anti-fouling marine hull coatings.
- Use state-of-the-art underwater robots that help us to clean propellers and hulls regularly and collect the fouling removed.
- Introduce detailed energy monitoring systems to target improved energy consumption.
- Increase use of waste heat from engine exhaust for fresh water production, chilled water, and steam generation.
- Use on-demand methodology for galley ventilation control.

- Examine ways to increase engine efficiency through fuel treatment systems which improve combustion and reduce fuel consumption.
- Optimize the use of diesel generators on board to improve efficiency.
- Use waste heat generated by the ships’ engines to make steam instead of relying on the ships’ boilers.
- Reduce the power required by engine room ventilation fans through use of variable-frequency fan-drive motors and related pressure and temperature control systems.

- Design more fuel-efficient itineraries.
- Use voyage optimization tools.
- Increase energy use awareness through education and training of guests and crew.
- Develop our ability to use alternative fuels.
- Research and develop emissions-reduction technologies such as energy storage systems and fuel cells.
- Incorporate an innovative "Air Lubrication System" which creates bubbles between the ship’s hull and water to reduce friction.

- Use cold ironing or plug-in while in port.
- Install Advanced AirQuality Systems (AAQS).
- Use alternative fuels like Liquefied Natural Gas (LNG).
HEALTH, ENVIRONMENTAL, SAFETY, SECURITY AND SUSTAINABILITY CORPORATE POLICY

Carnival Corporation & plc and its Operating Lines are committed to:

• Protecting the health, safety and security of our passengers, guests, employees, and all others working on our behalf thereby promoting an organization that always strives to be free of injuries, illness, and loss.
• Protecting the environment, including the marine environment in which our vessels sail and the communities in which we operate, striving to prevent adverse environmental consequences, and using resources efficiently and sustainably.
• Complying with or exceeding all legal and statutory requirements related to health, environment, safety, security and sustainability throughout our business activities.
• Assigning health, environment, safety, security (HESS) and sustainability matters the same priority as other critical business matters.

To implement this Policy, the management of Carnival Corporation & plc and its Operating Lines will:

• Ensure compliance with this Policy within each of Carnival’s Corporate and Operating Line organizations.
• Identify managers who are responsible for HESS and sustainability performance and ensure that there are clear lines of accountability.
• Develop, implement and monitor effective and verifiable management systems to realize our HESS and sustainability commitments.
• Support a proactive framework of risk mitigation in the areas of HESS aimed at preventing, monitoring and responding to threats.
• Identify the aspects of our business that could negatively affect the environment and take appropriate action to minimize any adverse effects.
• Identify, document, assess and conduct periodic reviews of the principal HESS and sustainability risks affecting our business and implement practical measures to manage the identified risks effectively.
• Provide HESS and sustainability support, training, advice, and information, as appropriate, to passengers, guests, employees, and others working on behalf of the Company.
• Perform annual HESS audits and take prompt action on identified audit findings.
• Maintain an Ethics & Compliance reporting hotline to allow for anonymous reporting of HESS and compliance concerns.
• Promptly report and properly investigate all HESS incidents and take appropriate action to prevent recurrence.
• Establish and act upon goals and objectives to improve our HESS and sustainability performance. Promote industry best practices and publicly report to and maintain open dialogue and cooperation with key stakeholders on HESS and sustainability matters.
• Require business partners to know and comply with applicable legal and statutory requirements related to HESS, labor, and human rights.
• Require that employees who become aware of any vessel or crew’s inability to comply with Company, legal, or statutory requirements report same to management and specifically require that Environmental Compliance reports from shoreside employees be made in writing to their Operating Line Compliance Manager.
• Prohibit retaliation against anyone who reports a violation of Company, legal, or statutory requirements and establish that an employee’s failure to notify regarding any such violation is grounds for discipline or dismissal.
• Conduct a Corporate senior management review of this Policy at least annually.

Approved by:

William R. Burke
Chief Maritime Officer

Arnold W. Donald
President and CEO

Micky Arison
Chairman of the Board

Original Issue: 10/15/07 | Revised: 10/18/17
Certificate of Approval

This is to certify that the Management System of:

Carnival Corporation

Carnival Place 3655 NW 87th Avenue, Miami, FL, 33178, United States

has been approved by Lloyd's Register to the following standards:

ISO 14001:2015

Approval number(s): ISO 14001 – 0078093

This certificate is valid only in association with the certificate schedule bearing the same number on which the locations applicable to this approval are listed.

The scope of this approval is applicable to:

Cliff Muckleroy
Area Operations Manager Americas

Issued by: Lloyd's Register Quality Assurance, Inc.

for and on behalf of: Lloyd's Register Quality Assurance Limited

Lloyd's Register Group Limited, its affiliates and subsidiaries, including Lloyd's Register Quality Assurance Limited (LRQA), and their respective officers, employees or agents are, individually and collectively, referred to in this clause as 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.

Issued by: Lloyd's Register Quality Assurance, Inc., 1330 Enclave Parkway, Suite 200, Houston, Texas 77077, United States for and on behalf of: Lloyd's Register Quality Assurance Limited, 1 Trinity Park, Bickenhill Lane, Birmingham B37 7ES, United Kingdom
Assurance Statement related to
Greenhouse Gas Emissions Inventory and Sustainability Data for Fiscal Year 2019
prepared for Carnival Corporation & plc.

Terms of Engagement
This Assurance Statement has been prepared for Carnival Corporation & plc. (Carnival).

Lloyd’s Register Quality Assurance Inc. (LR), an affiliate of Lloyd’s Register North America, Inc., was commissioned by Carnival to assure its Greenhouse Gas (GHG) Emissions Inventory and Sustainability Data Assertion for the fiscal year (FY) 2019 (December 1, 2018 to November 30, 2019).

The GHG Emissions Inventory includes direct GHG emissions and energy indirect GHG emissions.

In addition to the 6 Kyoto gases and NF₃, the GHG Emissions Inventory includes direct emissions from the following refrigerants as used in pure form (not blends): R11, R12, R22, and Halon.

The following were excluded from the GHG Emissions Inventory on the basis of their de minimis contribution to the total direct and energy indirect GHG emissions and sense-checked during the engagement:

- Fuel combustion GHG emissions from emergency generators used in shore facilities;
- Combustion GHG emissions from burning waste in the shipboard incinerators;
- Fugitive release of Sulphur Hexafluoride (SF₆) gas from shipboard circuit breakers;
- Fugitive release of Methane (CH₄) gas or Carbon Dioxide (CO₂) from shipboard Marine Sanitation Devices or Advanced Waste Water Treatment plants;
- Fugitive release of refrigerant gas from shore hotels and offices;
- Electricity consumption from shore offices smaller than 8,000 square feet;
- Small water craft at Carnival owned islands; and
- Releases of CO₂ based fire suppression systems on board the ships.

The Sustainability Data Assertion includes the eighteen sustainability parameters included in Table 1 below.

Management Responsibility
The management of Carnival was responsible for preparing the GHG Emissions Inventory and Sustainability Data Assertion and for maintaining effective internal controls over the data and information disclosed. LR’s responsibility was to carry out an assurance engagement on the GHG Emissions Inventory and Sustainability Data Assertion in accordance with our contract with Carnival.

Ultimately, the GHG Emissions Inventory and Sustainability Data Assertion have been approved by, and remain the responsibility of Carnival.

LR’s Approach
Our verification has been conducted in accordance with ISO-14064-3:2006 Specification with guidance for validation and verification of greenhouse gas assertions for the GHG data and LR’s verification procedure for the Sustainability Data Assertion to provide limited assurance that the data as presented in the GHG Emissions Inventory and Sustainability Data Assertion for Carnival have been prepared in conformance with ISO 14064-1:2006 Specification with guidance at the organizational level for quantification and reporting of greenhouse gas emissions and removals and Carnival sustainability data management processes.
To form our conclusions the assurance engagement was undertaken as a sampling exercise and covered the following activities:

- Conducted remote meetings and interviews with representatives from Carnival Corporate Headquarters and two of the Carnival brands;
- Reviewed the processes for the management of data and information related to the GHG emissions and sustainability data used at the Carnival corporate level and by the two sampled brands;
- Interviewed relevant staff responsible for managing and maintaining data and information and for preparing and reporting the GHG Emissions Inventory and the Sustainability Data Assertion for Carnival;
- Verified the direct and energy indirect GHG emissions for FY 2019; and
- Verified the Sustainability Data Assertion for FY 2019, which is a subset of Carnival’s complete set of sustainability data parameters.

**Level of Assurance and Materiality**

The opinion expressed in this Assurance Statement has been formed on the basis of a limited level of assurance and at a materiality of the professional judgement of the Verifier.

**LR’s Opinion**

Based on LR’s approach, nothing has come to our attention that would cause us to believe that the total direct GHG emissions, energy indirect GHG emissions and sustainability data disclosed by Carnival in its GHG Emissions Inventory and Sustainability Data Assertion for FY 2019, as summarized in Table 1 below, are not materially correct and that the GHG Emissions Inventory and Sustainability Data Assertion have not been prepared in conformance with ISO 14064-1:2006 and Carnival sustainability data management processes.

Signed: [Signature]

Dated: May 14, 2020

Derek Markolf
LR Lead Verifier
On behalf of Lloyd’s Register North America, Inc., represented by Lloyd’s Register Quality Assurance, Inc.,
1330 Enclave Parkway, Suite 200,
Houston, TX 77077

LR Reference: UQA000001051
### Table 1. Summary of Carnival, GHG Emissions Inventory and Sustainability Data FY 2019

<table>
<thead>
<tr>
<th>Data Parameter &amp; Units</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct (Scope 1) GHG Emissions (Tonnes CO\textsubscript{2}e)</td>
<td>10,722,894</td>
</tr>
<tr>
<td>Energy Indirect (Scope 2) GHG Emissions – Location-Based (Tonnes CO\textsubscript{2}e)\textsuperscript{1}</td>
<td>46,932</td>
</tr>
<tr>
<td>Energy Indirect (Scope 2) GHG Emissions – Market-Based (Tonnes CO\textsubscript{2}e)\textsuperscript{1}</td>
<td>45,650</td>
</tr>
<tr>
<td>Ship Fuel GHG Emissions Rate (grams CO\textsubscript{2}e/Available Lower Berth-KM)</td>
<td>246</td>
</tr>
<tr>
<td>Total Ship Fugitive Refrigerant Releases (Kg)</td>
<td>107,972</td>
</tr>
<tr>
<td>Total Ship ODS Emissions (Kg CFC-11e)</td>
<td>1,208</td>
</tr>
<tr>
<td>Total Ship Energy Consumption (Gigajoules)</td>
<td>137,513,786</td>
</tr>
<tr>
<td>Total Ship Fuel Consumption (Tonnes)</td>
<td>3,311,914</td>
</tr>
<tr>
<td>Ship Fuel Consumption Rate (Grams Fuel/Available Lower Berth-Km)</td>
<td>77.7</td>
</tr>
<tr>
<td>High Sulfur Fuel Oil (Percent of total Ship fuel consumption)</td>
<td>71.00</td>
</tr>
<tr>
<td>Low Sulfur Fuel Oil (Percent of total Ship fuel consumption)</td>
<td>7.56</td>
</tr>
<tr>
<td>Marine Diesel Oil/Marine Gas Oil (Percent of total Ship fuel consumption)</td>
<td>20.75</td>
</tr>
<tr>
<td>Liquefied Natural Gas (Percent of total Ship fuel consumption)</td>
<td>0.68</td>
</tr>
<tr>
<td>Total Potable Water Purchased (Tonnes)</td>
<td>5,006,398</td>
</tr>
<tr>
<td>Total Potable Water Produced (Tonnes)</td>
<td>22,144,877</td>
</tr>
<tr>
<td>Bilge Water Discharged to Sea (Tonnes)</td>
<td>147,509</td>
</tr>
<tr>
<td>Bilge Water Sea Discharge Rate (Liters/Nautical Mile)</td>
<td>15.3</td>
</tr>
<tr>
<td>Total Number of CDC VSP Inspections</td>
<td>70</td>
</tr>
<tr>
<td>Total Number of CDC VSP Inspections - Ships scoring 100%</td>
<td>2</td>
</tr>
<tr>
<td>Total Number of CDC VSP Inspections - Ships scoring 80-99%</td>
<td>67</td>
</tr>
<tr>
<td>Total Number of CDC VSP Inspections - Ships scoring &lt;85%</td>
<td>1</td>
</tr>
</tbody>
</table>

\textsuperscript{1} Scope 2, Location-based and Scope 2, Market-based are defined in the GHG Protocol Scope 2 Guidance, 2015.

This Assurance Statement is subject to the provisions of this legal section:

This Assurance Statement is only valid when published with the Report to which it refers. It may only be reproduced in its entirety.

Lloyd’s Register Group Limited, its affiliates and subsidiaries, including Lloyd’s Register North America, Inc., Lloyd’s Register Quality Assurance, Inc. and their respective officers, employees or agents are, individually and collectively, referred to in this Legal Section as Lloyd’s Register. Lloyd’s Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd’s Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.

Due to inherent limitations in any internal control, it is possible that fraud, error, or non-compliance with laws and regulations may occur and not be detected. Further, the verification was not designed to detect all weaknesses or errors in internal controls so far as they relate to the requirements set out above as the verification has not been performed continuously throughout the period and the verification carried out on the relevant internal controls were on a test basis. Any projection of the evaluation of control to future periods is subject to the risk that the processes may become inadequate because of changes in conditions, or that the degree of compliance with them may deteriorate.

The English version of this Assurance Statement is the only valid version. Lloyd’s Register assumes no responsibility for versions translated into other languages.
Association of British Travel Agents (ABTA): ABTA is the UK’s largest travel association, representing around 1,200 travel agents and tour operators that sell £33 billion worth of holidays and other travel arrangements each year. It has been a trusted travel brand for more than 65 years, offering advice and guidance to the travelling public, as well as leading the travel industry in supporting high service standards, working with its members on health and safety, and promoting responsible tourism at home and abroad. Click here for more information.

Banco Alimentare: Italian Food Bank Foundation - Banco Alimentare Italian organization focused on minimizing food waste and recover food for people living in Italy. The food recovered and collected supports over 8,100 charitable organizations throughout Italy. Click here for more information.

Bellona Foundation: Founded in 1986, The Bellona Foundation is an independent nonprofit organization that aims to meet and fight climate challenges by identifying and implementing sustainable environmental solutions. They work toward reaching a greater ecological understanding, protection of nature, the environment and health. Bellona is engaged in a broad range of current national and international environmental questions and issues around the world. Click here for more information.

Catalyst: Catalyst is a global nonprofit working with some of the world’s most powerful CEOs and leading companies to help build workplaces that work for women. Founded in 1962, Catalyst drives change with pioneering research, practical tools, and proven solutions to accelerate and advance women into leadership—because progress for women is progress for everyone. Click here for more information.

Clean the World: Clean the World is a global health organization committed to improving the quality of life for vulnerable communities around the world. They provide sustainable resources, programing, and education focused on water, sanitation, and hygiene for all those affected by poverty, homelessness and humanitarian or natural crisis. Click here for more information.
Soap Aid: Soap Aid is a not-for-profit organization committed to saving children’s lives through improved hygiene while positively impacting the environment. They reprocess and deliver recycled hotel soap to disadvantaged communities. [Click here for more information.]

Cruise Lines International Association: CLIA exists to promote all measures that foster a safe, secure and healthy cruise ship environment; educate and train its travel agent members; and promote and explain the value, desirability and affordability of the cruise vacation experience. CLIA has Environmental and Safety Committees, composed of representatives from most cruise lines, who meet regularly with stakeholder groups such as the Port State Authorities and regulators to discuss issues related to compliance and best management practices. CLIA also works with non-governmental organizations (NGOs), universities, regulators, and scientists around the globe. [Click here for more information.]

Create Common Good: Create Common Good is a nonprofit social enterprise that uses innovative food-related job training programs to help at-risk people find, perform and retain work to attain self-sufficiency for them and their families. The two organizations explore opportunities to introduce custom-crafted Create Common Good food products into shipboard menus. [Click here for more information.]

Dress for Success: Dress for Success is an international not-for-profit organization that empowers women to achieve economic independence by providing a network of support, professional attire and the development tools to help women thrive in work and in life. [Click here for more information.]

Ethisphere: The Ethisphere Institute is a global leader in defining and advancing standards of ethical business practice. The Business Ethics Leadership Alliance is a globally recognized organization of leading companies collaborating together to share best practices in governance, risk management, compliance, and ethics. [Click here for more information.]

Executive Leadership Council (ELC): The Executive Leadership Council is the preeminent member organization for the development of global black leaders. Its mission is to increase the number of successful black executives — both domestically and internationally — by adding value to their development, leadership, and philanthropic endeavors throughout the life-cycle of their careers thereby strengthening their companies, organizations, and communities. [Click here for more information.]
Florida Caribbean Cruise Association (FCCA): The FCCA is a not-for-profit trade organization composed of 18 member cruise lines operating nearly 200 vessels in Floridian, Caribbean, and Latin American waters. By fostering an understanding of the cruise industry and its operating practices, the FCCA seeks to build cooperative relationships with its partner destinations and to develop productive bilateral partnerships with every sector. [Click here for more information.]

Getting to Zero Coalition: The Getting to Zero Coalition is an alliance of organizations across the maritime, energy, infrastructure, and finance sectors committed to accelerating the decarbonization of the international shipping industry. The alliance’s goal also includes scalable infrastructure for zero-carbon energy sources, including production, distribution, storage, and bunkering. [Click here for more information.]

International Chamber of Shipping (ICS)/International Shipping Federation (ISF): ICS is the principal international trade association for merchant ship owners and operators, representing all sectors and trades and over 80% of the world merchant fleet. It is concerned with all technical, legal and policy issues that may have an impact on international shipping. ISF is the principal international employers’ organization for the shipping industry, representing all sectors and trades. [Click here for more information.]

Jean-Michel Cousteau - Ocean Futures Societies: Jean-Michel Cousteau is an ocean explorer and life-long environmental advocate and founder of the Ocean Futures Society, a nonprofit marine conservation and education organization that serves as a “Voice for the Ocean” on the importance of effective environmental and sustainability policy. [Click here for more information.]

North American Marine Environment Protection Association (NAMEPA): The North American Marine Environment Protection Association (NAMEPA) is a marine industry-led organization of environmental stewards preserving the marine environment by promoting sustainable marine industry best practices and educating seafarers, students and the public about the need and strategies for protecting global ocean, lake and river resources. [Click here for more information.]

Ocean Plastic Leadership Network: The Ocean Plastic Leadership Network is a membership community that runs experiential summits in ocean plastic hotspots around the globe that drive to accelerated, collaborative action. [Click here for more information.]
**SEA LNG:** SEA LNG is a multi-sector industry coalition, created to accelerate the widespread adoption of liquefied natural gas (LNG) as a marine fuel. The initiative brings together key players in the value chain, including shipping companies, classification societies, ports, major LNG suppliers, LNG downstream companies, infrastructure providers, and OEMs (original equipment manufacturers), helping to break down the commercial obstacles to transform the localized use of LNG as a marine fuel into a global reality. [Click here for more information.](#)

**Society for Gas as a Marine Fuel (SGMF):** SGMF is a new NGO established to promote safety and industry best practice in the use of gas as a marine fuel. [Click here for more information.](#)

**TerraCycle:** TerraCycle is an eco-friendly recycling company that has become a global leader in recycling typically non-recyclable waste. TerraCycle offers a range of free programs that are funded by conscientious companies, as well as recycling solutions available for purchase for almost every form of waste. TerraCycle partners with many municipalities and private companies around the world to provide zero waste solutions and programs for recycling cigarette butts. [Click here for more information.](#)

**UK Chamber of Shipping:** The UK Chamber of Shipping is the trade association for the UK shipping industry, which works to promote and protect the interests of its members both nationally and internationally. With 144 members and associate members, the UK Chamber of Shipping represents more than 860 ships of about 23 million gross tons and is recognized as the voice of the UK shipping industry. [Click here for more information.](#)

**United States Wildlife Trafficking Alliance:** The United States Wildlife Trafficking Alliance is a coalition of corporate and nonprofit member organizations all working together to combat wildlife trafficking. [Click here for more information.](#)

**The United Way of Miami-Dade:** United Way of Miami-Dade is helping to build communities and to help people to care for one another. Their Mission United Initiative helps veterans to ease the transition to civilian life and address their unique needs by connecting them to a coordinated network of community partners. Services include job training and opportunities, affordable housing, legal resources among others. [Click here for more information.](#)

**World Travel & Tourism Council (WTTC):** WTTC promotes partnerships between the public and private sectors, delivering results that match the needs of economies, local and regional authorities, and local communities, with those of business, based on governments recognizing Travel & Tourism as a top priority, business balancing economics with people, culture and environment, and a shared pursuit of long-term growth and prosperity. [Click here for more information.](#)
Sustainability Management at Carnival Corporation & plc

- SVP Global Port Development Group
- Chief Audit Officer
- Chief Ethics & Compliance Officer
- Chief Communication Officer
- Global Impact Leader
- Corporate Compliance Manager - Environmental
- Corporate Compliance Manager - General Compliance
- SVP Maritime Affairs
- VP Fleet Asset Management
- Sr. Director Maritime IT

Health, Environmental, Safety, Security and Sustainability Working Groups
- Training
- Technical
- Health & Safety
- Sustainability/Global Impact
### Types of Waste

<table>
<thead>
<tr>
<th>Waste Stream</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bilge Water:</strong></td>
<td>Wastewater normally generated in the machinery spaces of the engine room during the ship’s operation.</td>
</tr>
<tr>
<td><strong>Gray Water:</strong></td>
<td>Wastewater from sinks, showers, galleys, laundry and some cleaning activities.</td>
</tr>
<tr>
<td><strong>Black Water:</strong></td>
<td>Wastewater from toilets, urinals and liquid waste from medical facilities.</td>
</tr>
</tbody>
</table>

### Treatments & Requirements

Bilge water is processed through approved oil filtering equipment so that the oil content of treated bilge water without dilution does not exceed 15 parts per million (ppm) as per international regulations.

On all of our ships, we have installed redundant systems that monitor treated bilge water a second time prior to discharge to ensure the treated bilge water contains less than 15ppm of oil before being discharged overboard. This voluntary and proprietary system provides additional control to prevent overboard discharges of processed bilge water that is greater than or equal to 15ppm of oil. If the system reading indicates 15ppm or greater of oil, it will sound an alarm and automatically stop the discharge, redirecting the flow to onboard storage tanks.

Our bilge water discharges are in strict compliance with applicable international and national laws and regulations, and often contain less than five ppm of oil. Bilge water from Carnival Corporation & plc ships is discharged only when the ships are underway at sea and proceeding at a speed greater than six knots and 12 nautical miles from shore.

Bilge water not meeting discharge criteria and oil residues/sludge are offloaded for shoreside disposal or recycling depending on available shoreside infrastructure.

Gray water on most ships is not typically treated unless an Advanced Wastewater Treatment System (AWWTS) is used.

Gray water from Carnival Corporation & plc ships is discharged only while the ships are underway and proceeding at a speed greater than six knots and 12 nautical miles from the baseline, unless a Company approved exceptions allows otherwise.

Sewage from our ships is treated by a sewage treatment plant called a Marine Sanitation Device (MSD) or by an Advanced Wastewater Treatment System (AWWTS).

Sewage is treated by an AWWTS for a certain percentage of our fleet that uses technologies designed to produce a higher effluent quality that meets or surpasses sewage standards for secondary and tertiary effluents, and reclaimed water.

Sewage discharges from Carnival Corporation & plc ships treated by an MSD take place only when the ship is at a distance of more than 12 nautical miles from baseline and when the ship is traveling at a speed greater than six knots. Treated sewage by AWWTS can be discharged more than 12 nautical miles from the baseline, and at a speed greater than six knots, unless a Company approved exception allows otherwise.
### Types of Waste

<table>
<thead>
<tr>
<th>Regulated Waste:</th>
<th>Includess cleaning solutions generated from operations of the ship, biomedical type waste, and chemical products or paints that are non-hazardous.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food Waste:</td>
<td>Any uneaten spoiled, or unspoiled, food substances including fruits, vegetables, dairy products, poultry, meat products and food scraps generated on board the ship.</td>
</tr>
<tr>
<td>Solid Waste:</td>
<td>Any refuse, and other discarded materials, not considered hazardous.</td>
</tr>
<tr>
<td>Hazardous Waste:</td>
<td>Waste that poses a risk to human health or to the environment and typically exhibit at least one of four characteristics (ignitibility, corrosivity, reactivity, or toxicity).</td>
</tr>
<tr>
<td>Recycled Waste:</td>
<td>Materials that can be diverted from landfill or incineration and are managed through recycling processes where the material can be used again.</td>
</tr>
</tbody>
</table>

#### Treatments & Requirements

Carnival Corporation & plc shipboard regulated waste is generally transferred to shoreside waste contractors for appropriate disposal. Some types of regulated waste is incinerated on board.

Food waste may be processed by being comminuted/ground so that it is able to pass through a screen with openings no greater than 25mm or left as is.

Comminuted and non-comminuted food waste from Carnival Corporation & plc ships can be discharged at greater than 12 nautical miles from baseline, and at a speed greater than six knots.

Solid waste generated on board can be incinerated on board or landed ashore to be landfilled or incinerated. Carnival Corporation & plc ships are equipped with incinerators, and compactors to manage solid waste.

Carnival Corporation & plc shipboard hazardous waste disposal is transferred to shoreside waste contractors for disposal in accordance with applicable regulations.

Recycling containers are placed throughout the ships to allow items to be segregated for recycling at the source. In addition, designated crew sorts trash to ensure recyclable items are not commingled with other waste streams.

After sorting, recyclable materials are crushed, baled, and readied for offload ashore. We strive to maximize the offload of recyclable items in ports of call where facilities exist with the infrastructure. However, there are locations where the infrastructure is not in place, which means that some recyclable items may not be recycled. Our standard recycled materials include plastic, glass, paper, cardboard, oily waste, used cooking oil, refrigerants, aluminum, electronic equipment, toner cartridges, batteries, fluorescent lamps, silver (recovered from photo and X-ray processing fluids), and scrap metal.
Advanced Air Quality Systems (AAQS)
Commonly referred to as exhaust gas cleaning systems or "scrubbers," are a significant technological innovation designed to improve air emissions, meet and exceed environmental regulatory standards and support sustainable operations in the global shipping industry.

Audit
Systematic, documented, periodic and objective assessment of an organization’s performance, management systems and processes.

Available Lower Berth (ALB)
Guest beds available on a cruise ship, assuming two people occupy each cabin.

Advanced Waste Water Treatment Systems (AWWTS)
Remove contaminants from black and gray water and convert it into an effluent that can be returned to the water cycle with minimum impact on the environment, or directly reused.

Ballast Water
Seawater that is taken on board a ship and stored in tanks to control draft, list, trim and stability.

Bilge Water
Water from equipment maintenance and minor leaks that collects in the lowest part of the ship.

Black Water
Wastewater from toilets, urinals and medical sinks.

Bunkered Water
Potable water that is purchased from a municipal or private system at a port and stored onboard in tanks.

CFC-11 Equivalent
A measure used to compare various substances based on their relative ozone depletion potential. The reference level of 1 is the potential of CFC-11 and CFC-12 to cause ozone depletion.

Chlorofluorocarbons (CFCs)
Commonly known by the trade name “freon,” used primarily as a refrigerant in air-conditioning and refrigeration systems and equipment. CFCs are known to have destructive effects on the ozone layer. For this reason their use has now been banned by legislation.

Circular Economy
The circular economy is an economic model that aims to avoid waste and to preserve the value of resources (raw materials, energy and water) and keep them in a 'closed loop' for as long as possible. Products and materials are continuously (re)circulated - as opposed to a linear model in which they are discarded as waste after use.

CO₂ (Carbon Dioxide)
A naturally-occurring chemical compound composed of two oxygen atoms covalently bonded to a single carbon atom. It is a gas at standard temperature and pressure; it exists in Earth’s atmosphere in this state, as a trace gas at a concentration of 0.39 percent by volume.

Cold Ironing
Cold ironing is the process of providing shoreside electrical power to a ship at berth while its main and auxiliary engines are turned off. The term came into existence during the time when ships were coal fired. Once the coal fired ship was in port and attached to a shore-based power source the engines no longer needed to be stoked by coal and the fires would die down until the large iron engines grew cold. Hence, cold iron became cold ironing.

CO₂e (Equivalent Carbon Dioxide)
A measure used to compare the emissions from various greenhouse gases based on their global warming potential (GWP). The CO₂ equivalent for a gas is derived by multiplying the tonnes of the gas by the associated GWP.

Direct Emissions (Scope 1 Emissions)
Emissions from sources that are owned or controlled by the reporting organization. For example, direct emissions related to combustion would arise from burning fuel for energy within the reporting organization’s boundaries.

Energy Saved
The reduced amount of energy needed to carry out the same processes or tasks. The term does not include overall reduction in energy consumption from reduced organizational activities.

Environmental Aspect
Element of Company activities that may have a significant impact on the environment directly and/or indirectly.
Glossary

Environmental Impact
How an environmental aspect may affect the environment.

Environmental Management System (EMS)
An EMS refers to the management of an organization’s environmental programs in a comprehensive, systematic, planned and documented manner. It includes the organizational structure, planning and resources for developing, implementing and maintaining policy for environmental protection.

Footprint
The amount of environmental impact related to a specific resource.

Global Reporting Initiative (GRI)
A network-based organization that produces a comprehensive sustainability reporting framework that is widely used around the world. GRI is committed to the framework’s continuous improvement and application worldwide. GRI’s core goals include the mainstreaming of disclosure on environmental, social and governance performance.

Global Warming Potential (GWP)
A relative measure of how much heat a greenhouse gas traps in the atmosphere. It compares the amount of heat trapped by a certain mass of the gas in question to the amount of heat trapped by a similar mass of carbon dioxide. A GWP is calculated over a specific time interval, commonly 20, 100 or 500 years.

Governance
The set of rules (laws and corporate regulations), organizational structures, processes and relationships that affect the way a company is directed and administered. The concept of governance also embraces the structure used to decide corporate objectives and the means to achieve and measure results.

Gray Water
Wastewater that is generated from activities such as laundry, bathing, cooking and dish washing.

Greenhouse Gas (GHG)
A gas in the atmosphere that absorbs and emits radiation within the thermal infrared range. This process is the fundamental cause of the greenhouse effect, which many believe is the cause of global warming. The primary greenhouse gases in the Earth’s atmosphere are water vapor, carbon dioxide, methane, nitrous oxide and ozone. Greenhouse gases greatly affect the temperature of the Earth; without them, Earth’s surface would be on average about 33 degrees C (59 degrees F) colder than at present. The greenhouse gases thought to be major contributors to global warming are carbon dioxide (CO₂), methane and biomethane emissions (CH₄), nitrogen oxide (N₂O) and chlorofluorocarbons (CFC).

Greenhouse Gas (GHG) Protocol Initiative
The Greenhouse Gas Protocol Initiative’s vision is to harmonize greenhouse gas emission accounting and reporting standards internationally. It aims to provide a multi-stakeholder framework ensuring that different trading schemes and other climate-related initiatives adopt consistent approaches to GHG accounting.

Heating, Ventilation and Air-Conditioning (HVAC) System
The technology used for indoor environmental climate control.

Heavy Fuel Oil (HFO)
A type of blended oil used in ship’s engines, made from the residues from various refinery distillation and cracking processes.

Indicator
A means used to measure the effects of sustainability management initiatives or the condition of environmental, social or governance issues.

Indirect Emissions (Scope 2 Emissions)
Emissions that result from the activities of the reporting organization, but that are generated at sources owned or controlled by another organization. In the context of this indicator, indirect emissions refer to greenhouse gas emissions from the generation of electricity, heat or steam that is imported and consumed by the reporting organization.

Indirect Energy
Energy produced outside the reporting organization’s boundary that is consumed to supply energy for the organization’s energy needs (e.g., electricity, or for heating and cooling). The most common example is fuel consumed outside the reporting organization’s boundary in order to generate electricity to be used inside the organization’s boundary.
Liquefied Natural Gas (LNG)
Liquefied natural gas or LNG is natural gas (predominantly methane, CH₄) that has been converted to liquid form for ease of storage or transport.

Marine Sanitation Devices (MSD)
A system that employs filtration, maceration and chlorination technologies to treat black water.

An international treaty that provides comprehensive rights and protection at work for the world’s seafarers. The convention sets out seafarers’ rights to decent conditions of work on a wide range of subjects and aims to be globally applicable, easily understandable, readily updatable and uniformly enforced.

MARPOL
The International Convention for the Prevention of Pollution from Ships. MARPOL is one of the most important marine environmental conventions, which was designed to minimize pollution of the seas.

Metric Tonne
1 metric tonne = 2,204.62 pounds (lbs.) = 1,000 kilograms.

NOₓ
Oxides of nitrogen that are a family of gases released from the combustion of fuel.

Ozone Depleting Potential (ODP)
The relative potential of various gases to deplete the ozone in the atmosphere.

Ozone-Depleting Substance (ODS)
Any substance with an ozone depletion potential greater than zero that can deplete the stratospheric ozone layer. Most ozone-depleting substances are regulated under the Montreal Protocol and its amendments, and include CFCs, HCFCs, halons and methyl bromide.

Primary Source
The initial form of energy consumed to satisfy the reporting organization’s energy demand. This energy is used either to provide final energy services (e.g., space heating, transport) or to produce intermediate forms of energy, such as electricity and heat.
**Glossary**

**Protected Area**
A geographically defined area that is designated, regulated, or managed to achieve specific conservation objectives.

**Refrigerants**
Gases that are used in HVAC systems on board.

**Renewable Energy**
Renewable energy is derived from natural processes that are replenished constantly. This includes electricity and heat generated from solar, wind, ocean currents, hydropower, biomass, geothermal resources or biofuels, as well as hydrogen derived from renewable resources.

**Safety Management System (SMS)**
ISM code-certified system that informs employees how to perform their duties in accordance with all safety and environmental laws.

**Safety of Life at Sea (SOLAS) Convention**
The most important and comprehensive international treaty governing the safety of merchant ships.

**Significant Air Emissions**
Air emissions that are regulated under international conventions and/or national laws or regulations, including those listed on environmental permits for the reporting organization’s operations.

**Solid Waste**
All used and discarded solid material produced on board during ship operations.

**SOx**
Oxides of sulfur are a family of gases produced by the combustion of fuel which contains sulfur. The quantity of oxides of sulfur is proportional to the quantity of sulfur in the fuel.

**Stakeholder**
Any individual or group, within or outside a company, that has an interest in or may be impacted by that company, and that accordingly has expectations, requires information or holds legitimate economic interests.

**STCW**
The International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, which sets qualification standards for masters, Officers and watch personnel on seagoing merchant ships.

**Sustainable Development Goals (SDG)**
The Sustainable Development Goals (SDGs) are a collection of 17 global goals set by the United Nations. The broad goals are interrelated though each has its own targets to achieve. The total number of targets is 169. The SDGs cover a broad range of social and economic development issues. These include poverty, hunger, health, education, climate change, gender equality, water, sanitation, energy, environment, and social justice.

**Total Water Withdrawal**
The sum of all water drawn into the boundaries of the reporting organization from all sources (including surface water, ground water, rainwater, and municipal water supply) for any use over the course of the reporting period.

**Turnover**
Turnover includes voluntary separation, retirement, terminations and layoffs in the reporting year and excludes seasonal employees at Holland America Princess Alaska Tours.

**Protected Area**
A geographically defined area that is designated, regulated, or managed to achieve specific conservation objectives.
## GRI-102 General Disclosure

### ORGANIZATIONAL PROFILE

<table>
<thead>
<tr>
<th>GRI</th>
<th>Standard Disclosure</th>
<th>Page</th>
<th>Additional Details &amp; Omissions</th>
<th>SDG Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>102-1</td>
<td>Name of the Organization</td>
<td>15</td>
<td>Link: Form 10-K (Page 4) Link: 2020 Proxy Statement (Page 2)</td>
<td></td>
</tr>
<tr>
<td>102-3</td>
<td>Location of headquarters</td>
<td>28, 29</td>
<td>Link: Form 10-K (Cover Page) Link: 2020 Proxy Statement (Page 3)</td>
<td></td>
</tr>
<tr>
<td>102-4</td>
<td>Location of operations</td>
<td>16</td>
<td>Link: Form 10-K (Page 10-15)</td>
<td></td>
</tr>
<tr>
<td>102-6</td>
<td>Markets served</td>
<td>16</td>
<td>Link: Carnival Corporation &amp; PLC - Our Brands Link: Form 10-K (Page 10-15)</td>
<td></td>
</tr>
<tr>
<td>102-7</td>
<td>Scale of organization</td>
<td>15-18, 26-29</td>
<td>Link: Form 10-K (Page 4-15)</td>
<td></td>
</tr>
<tr>
<td>102-9</td>
<td>Supply chain</td>
<td>81, 133</td>
<td>Link: Carnival Corporation &amp; PLC - Business Partner Code of Conduct and Ethics SDG 16</td>
<td></td>
</tr>
<tr>
<td>102-10</td>
<td>Signification changes to the organization and its supply chain</td>
<td>16, 17</td>
<td>Link: Form 10-K (Page 33 &amp; F-30)</td>
<td></td>
</tr>
<tr>
<td>102-11</td>
<td>Precautionary principle or approach</td>
<td>49, 50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>102-12</td>
<td>External initiatives</td>
<td>10, 11, 133-137</td>
<td>Link: Carnival Corporation &amp; PLC - Community Relations SDG 3, SDG 6, SDG 10, SDG 11, SDG 12, SDG 13, SDG 16</td>
<td></td>
</tr>
<tr>
<td>102-13</td>
<td>Membership of associations</td>
<td>176-179</td>
<td>Link: Carnival Corporation &amp; PLC - Community Relations</td>
<td></td>
</tr>
</tbody>
</table>

### STRATEGY

<table>
<thead>
<tr>
<th>GRI</th>
<th>Standard Disclosure</th>
<th>Page</th>
<th>Additional Details &amp; Omissions</th>
<th>SDG Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>102-14</td>
<td>Statement from senior decision-maker</td>
<td>4-6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>102-15</td>
<td>Key impacts, risks, and opportunities</td>
<td>45-50</td>
<td>Link: Form 10-K (Page 31 - 33)</td>
<td></td>
</tr>
</tbody>
</table>

### ETHICS AND INTEGRITY

<table>
<thead>
<tr>
<th>GRI</th>
<th>Standard Disclosure</th>
<th>Page</th>
<th>Additional Details &amp; Omissions</th>
<th>SDG Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>102-16</td>
<td>Values, principles, standards, and norms of behavior</td>
<td>30-40</td>
<td>Link: Carnival Corporation &amp; PLC - Statement Pursuant to Modern Slavery Act 2015 Link: Carnival Corporation &amp; PLC - Governance - Executive Bios SDG 16</td>
<td></td>
</tr>
</tbody>
</table>
## GRI General Standard Disclosures (G102-419)

### GOVERNANCE

<table>
<thead>
<tr>
<th>GRI</th>
<th>Standard Disclosure</th>
<th>Page</th>
<th>Additional Details &amp; Omissions</th>
<th>SDG Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>102-18</td>
<td>Governance structure</td>
<td>30-40, 164-165</td>
<td>Link: [Form 10-K](Page 38)</td>
<td>SDG 16</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Link: Carnival Corporation &amp; plc 2020 Notice of Annual Meetings and Proxy Statement (Page 13 - 30)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Link: Carnival Corporation &amp; PLC - Governance - Executive Bios</td>
<td></td>
</tr>
<tr>
<td>102-21</td>
<td>Consulting stakeholders on economic, environmental, and social topics</td>
<td>38-40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>102-22</td>
<td>Composition of the highest governance body and its committees</td>
<td>164-165</td>
<td>Link: Carnival Corporation &amp; PLC - Governance - Committee Composition</td>
<td></td>
</tr>
<tr>
<td>102-23</td>
<td>Chair of the highest governance body</td>
<td>39, 40</td>
<td>Link: Carnival Corporation &amp; PLC - Governance - Committee Composition</td>
<td>SDG 16</td>
</tr>
<tr>
<td>102-24</td>
<td>Nominating and selecting the highest governance body</td>
<td>39, 40</td>
<td>Link: Carnival Corporation &amp; PLC - Nominating &amp; Governance Committees Charter</td>
<td></td>
</tr>
<tr>
<td>102-25</td>
<td>Conflicts of interest</td>
<td>39, 40</td>
<td>Link: Carnival Corporation &amp; PLC - Business Partner Code of Conduct and Ethics</td>
<td>SDG 16</td>
</tr>
<tr>
<td>102-28</td>
<td>Evaluating the highest governance body's performance</td>
<td>39, 40</td>
<td>Link: Carnival &amp; PLC - Corporate Governance Guidelines</td>
<td></td>
</tr>
<tr>
<td>102-29</td>
<td>Identifying and managing economic, environmental, and social impacts</td>
<td>49, 50</td>
<td>Link: [Form 10-K](Page 18-19)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Link: Carnival Corporation &amp; plc 2020 Notice of Annual Meetings and Proxy Statement (Annex A - A5)</td>
<td></td>
</tr>
<tr>
<td>102-31</td>
<td>Review of economic, environmental, and social topics</td>
<td>49, 50</td>
<td>Link: [Form 10-K](Page 18-19)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Link: Carnival Corporation &amp; plc 2020 Notice of Annual Meetings and Proxy Statement (Annex A - A5)</td>
<td></td>
</tr>
</tbody>
</table>

### STAKEHOLDER ENGAGEMENT

<table>
<thead>
<tr>
<th>GRI</th>
<th>Standard Disclosure</th>
<th>Page</th>
<th>Additional Details &amp; Omissions</th>
<th>SDG Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>102-40</td>
<td>List of stakeholder groups</td>
<td>158, 159</td>
<td></td>
<td></td>
</tr>
<tr>
<td>102-41</td>
<td>Collective bargaining agreements</td>
<td>148, 156, 157</td>
<td>Link: [Form 10-K](Page 19)</td>
<td></td>
</tr>
<tr>
<td>102-42</td>
<td>Identifying and selecting stakeholders</td>
<td>158, 159</td>
<td>Link: Carnival Corporation &amp; PLC - Stakeholder Engagement</td>
<td></td>
</tr>
<tr>
<td>102-43</td>
<td>Approach to stakeholder engagement</td>
<td>158, 159</td>
<td>Link: Carnival Corporation &amp; PLC - Stakeholder Engagement</td>
<td></td>
</tr>
<tr>
<td>102-44</td>
<td>Key topics and concerns raised</td>
<td>158, 159</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## GRI Index: General Standard Disclosures (G102-419)

### REPORTING PRACTICES

<table>
<thead>
<tr>
<th>GRI</th>
<th>Standard Disclosure</th>
<th>Page</th>
<th>Additional Details &amp; Omissions</th>
<th>SDG Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>102-45</td>
<td>Entities included in the consolidated financial statements</td>
<td></td>
<td></td>
<td>Link: Form 10-K (Page 10-15)</td>
</tr>
<tr>
<td>102-46</td>
<td>Defining report content and topic Boundaries</td>
<td>158, 160</td>
<td></td>
<td></td>
</tr>
<tr>
<td>102-47</td>
<td>List of material topics</td>
<td>161</td>
<td>Link: Form 10-K (Page 18-19)</td>
<td></td>
</tr>
<tr>
<td>102-48</td>
<td>Restatements of information</td>
<td>160</td>
<td></td>
<td></td>
</tr>
<tr>
<td>102-49</td>
<td>Changes in reporting</td>
<td>160</td>
<td></td>
<td></td>
</tr>
<tr>
<td>102-50</td>
<td>Reporting period</td>
<td>159</td>
<td></td>
<td></td>
</tr>
<tr>
<td>102-51</td>
<td>Date of most recent report</td>
<td>159</td>
<td>Link: Carnival Corporation &amp; PLC - Transparency &amp; Reporting</td>
<td></td>
</tr>
<tr>
<td>102-52</td>
<td>Reporting cycle</td>
<td>159</td>
<td>Annual reporting cycle: Link: Carnival Corporation &amp; PLC - Transparency &amp; Reporting</td>
<td></td>
</tr>
<tr>
<td>102-53</td>
<td>Contact point for questions regarding the report</td>
<td>26, 200</td>
<td>Link: Carnival Corporation &amp; PLC - Transparency &amp; Reporting</td>
<td></td>
</tr>
<tr>
<td>102-54</td>
<td>Claims of reporting in accordance with the GRI Standards</td>
<td>159</td>
<td>Email: <a href="mailto:Sustainability@carnival.com">Sustainability@carnival.com</a></td>
<td></td>
</tr>
<tr>
<td>102-55</td>
<td>GRI Content Index</td>
<td>190-197</td>
<td></td>
<td></td>
</tr>
<tr>
<td>102-53</td>
<td>External assurance</td>
<td>172-174</td>
<td>A selection of the data in this report has been independently assured by Lloyd’s Register</td>
<td></td>
</tr>
</tbody>
</table>

### GRI-103: Management Approach

<table>
<thead>
<tr>
<th>GRI</th>
<th>Explanation of the material topic and its boundary</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>103-1</td>
<td>Explanation of the material topic and its boundary</td>
<td>160, 161</td>
</tr>
<tr>
<td>103-2</td>
<td>The management approach and its components</td>
<td>162-165</td>
</tr>
<tr>
<td>103-3</td>
<td>Evaluation of the management approach</td>
<td>159-165</td>
</tr>
</tbody>
</table>

### GRI-201: Economic Performance

<table>
<thead>
<tr>
<th>GRI</th>
<th>Direct economic value generated and distributed</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>201-1</td>
<td>Direct economic value generated and distributed</td>
<td>24, 25</td>
</tr>
<tr>
<td>201-2</td>
<td>Financial implications and other risks and opportunities due to climate change</td>
<td>46-50</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SDG Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
</tr>
</tbody>
</table>

Link: Form 10-K

Link: Carnival Corporation & plc 2020 Notice of Annual Meetings and Proxy Statement (Annex A – A6)
## GRI-203: Indirect Economic Impacts

<table>
<thead>
<tr>
<th>GRI</th>
<th>Standard Disclosure</th>
<th>Page</th>
<th>SDG Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>203-1</td>
<td>Infrastructure investments and services supported</td>
<td>144-152</td>
<td>SDG 11</td>
</tr>
<tr>
<td>203-2</td>
<td>Significant indirect economic impacts</td>
<td>144-152</td>
<td>SDG 10</td>
</tr>
</tbody>
</table>

## GRI-205: Anti-Corruption

<table>
<thead>
<tr>
<th>GRI</th>
<th>Standard Disclosure</th>
<th>Page</th>
<th>SDG Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>205-1</td>
<td>Operations assessed for risks related to corruption</td>
<td>39, 40</td>
<td>Link: Carnival Corporation &amp; PLC - Business Partner Code of Conduct and Ethics</td>
</tr>
<tr>
<td>205-2</td>
<td>Communication and training about anti-corruption policies and procedures</td>
<td>152</td>
<td>Link: Carnival Corporation &amp; PLC - Business Partner Code of Conduct and Ethics</td>
</tr>
</tbody>
</table>

## GRI-302: Energy

<table>
<thead>
<tr>
<th>GRI</th>
<th>Standard Disclosure</th>
<th>Page</th>
<th>SDG Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>302-1</td>
<td>Energy consumption within the organization</td>
<td>94-103, 118, 154</td>
<td>Link: Carnival Corporation - CDP Climate Change 2019</td>
</tr>
<tr>
<td>302-2</td>
<td>Energy consumption outside of the organization</td>
<td>94-103, 154</td>
<td>SDG 12 SDG 13</td>
</tr>
<tr>
<td>302-3</td>
<td>Energy intensity</td>
<td>94-103</td>
<td>SDG 13</td>
</tr>
<tr>
<td>302-4</td>
<td>Reduction of energy consumption</td>
<td>94-103</td>
<td>SDG 12 SDG 13</td>
</tr>
<tr>
<td>302-5</td>
<td>Reductions in energy requirements of products and services</td>
<td>94-103</td>
<td>SDG 12 SDG 13</td>
</tr>
</tbody>
</table>

## GRI-303: Water

<table>
<thead>
<tr>
<th>GRI</th>
<th>Standard Disclosure</th>
<th>Page</th>
<th>SDG Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>303-1</td>
<td>Water withdrawal by source</td>
<td>79-81, 155</td>
<td>Link: Carnival Corporation - CDP Water 2019</td>
</tr>
<tr>
<td>303-2</td>
<td>Water sources significantly affected by withdrawal of water</td>
<td>79-81, 155</td>
<td>SDG 6</td>
</tr>
<tr>
<td>303-3</td>
<td>Water recycled and reused</td>
<td>79-81, 155</td>
<td>SDG 6</td>
</tr>
</tbody>
</table>

## GRI-304: Biodiversity

<table>
<thead>
<tr>
<th>GRI</th>
<th>Standard Disclosure</th>
<th>Page</th>
<th>SDG Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>304-3</td>
<td>Habitats protected or restored</td>
<td>79-81</td>
<td>SDG 6</td>
</tr>
<tr>
<td>304-4</td>
<td>IUCN Red List species and national conservation list species with habitats in areas affected by operations</td>
<td>79-81</td>
<td>SDG 6</td>
</tr>
</tbody>
</table>
## GRI-305: Emissions

<table>
<thead>
<tr>
<th>GRI</th>
<th>Standard Disclosure</th>
<th>Page</th>
<th>Additional Details &amp; Omissions</th>
<th>SDG Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>305-1</td>
<td>Direct (Scope 1) GHG emissions</td>
<td>94-103, 118, 154</td>
<td>Link <a href="#">Carnival Corporation - CDP Climate Change 2019</a></td>
<td>SDG 3, SDG 12, SDG 13</td>
</tr>
<tr>
<td>305-2</td>
<td>Energy indirect (Scope 2) GHG emissions</td>
<td>94-103, 118, 154</td>
<td>Link <a href="#">Carnival Corporation - CDP Climate Change 2019</a></td>
<td>SDG 3, SDG 12, SDG 13</td>
</tr>
<tr>
<td>305-3</td>
<td>Other indirect (Scope 3) GHG emissions</td>
<td>101</td>
<td>Link <a href="#">Carnival Corporation - CDP Climate Change 2019</a></td>
<td>SDG 3, SDG 12, SDG 13</td>
</tr>
<tr>
<td>305-4</td>
<td>GHG emissions intensity</td>
<td>94-103, 118, 154</td>
<td>SDG 13</td>
<td></td>
</tr>
<tr>
<td>305-5</td>
<td>Reduction of GHG emissions</td>
<td>94-103, 118, 154</td>
<td>Link <a href="#">Carnival Corporation - CDP Climate Change 2019</a></td>
<td>SDG 3, SDG 13</td>
</tr>
<tr>
<td>305-6</td>
<td>Emissions of ozone-depleting substances (ODS)</td>
<td>94-103, 118, 154</td>
<td>SDG 12</td>
<td></td>
</tr>
<tr>
<td>305-7</td>
<td>Nitrogen oxides (NOX), sulfur oxides (SOX),</td>
<td>94-103, 118, 154</td>
<td>Link <a href="#">Carnival Corporation - CDP Climate Change 2019</a></td>
<td>SDG 3, SDG 12, SDG 13</td>
</tr>
</tbody>
</table>

## GRI-306: Effluents and Waste

<table>
<thead>
<tr>
<th>GRI</th>
<th>Standard Disclosure</th>
<th>Page</th>
<th>Additional Details &amp; Omissions</th>
<th>SDG Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>306-1</td>
<td>Water discharge by quality and destination</td>
<td>79-81, 155</td>
<td></td>
<td>SDG 3, SDG 6, SDG 12, SDG 13</td>
</tr>
<tr>
<td>306-2</td>
<td>Waste by type and disposal method</td>
<td>70-93, 184, 185</td>
<td></td>
<td>SDG 3, SDG 6</td>
</tr>
<tr>
<td>306-3</td>
<td>Significant spills</td>
<td>37</td>
<td>Link <a href="#">Form 10-K Legal Proceedings (Page 35)</a></td>
<td>SDG 3</td>
</tr>
</tbody>
</table>

## GRI-307: Environmental Compliance

<table>
<thead>
<tr>
<th>GRI</th>
<th>Standard Disclosure</th>
<th>Page</th>
<th>Additional Details &amp; Omissions</th>
<th>SDG Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>307-1</td>
<td>Non-compliance with environmental laws and regulations</td>
<td>37</td>
<td>Link <a href="#">Form 10-K (Page 32)</a></td>
<td>SDG 16</td>
</tr>
</tbody>
</table>

## GRI-308: Supplier Environmental Assessment

<table>
<thead>
<tr>
<th>GRI</th>
<th>Standard Disclosure</th>
<th>Page</th>
<th>SDG Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>308-1</td>
<td>New suppliers that were screened using environmental criteria</td>
<td>30-40</td>
<td>SDG 12, SDG 13</td>
</tr>
</tbody>
</table>

## GRI-401: Employment

<table>
<thead>
<tr>
<th>GRI</th>
<th>Standard Disclosure</th>
<th>Page</th>
<th>SDG Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>401-1</td>
<td>New employee hires and employee turnover</td>
<td>156, 157</td>
<td></td>
</tr>
</tbody>
</table>

## GRI-402: Labor/Management Relations

<table>
<thead>
<tr>
<th>GRI</th>
<th>Standard Disclosure</th>
<th>Page</th>
<th>SDG Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>402-1</td>
<td>Minimum notice periods regarding operational changes</td>
<td>151, 152</td>
<td></td>
</tr>
</tbody>
</table>
### Diversity of governance bodies and employees

| GRI-405-1 | Diversity of governance bodies and employees | 144-152 | Link: Carnival Corporation & plc 2020 Notice of Annual Meetings and Proxy Statement (Page 15 - 23, A-8) | SDG 10 |

### Incidents of discrimination and corrective actions taken

| GRI-406-1 | Incidents of discrimination and corrective actions taken | 144-152 |

### Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk

| GRI-407-1 | Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk | 144-152, 156, 157 |
## GRI Index: General Standard Disclosures (G102-419)

<table>
<thead>
<tr>
<th>GRI</th>
<th>Standard Disclosure</th>
<th>Page</th>
<th>Additional Details &amp; Omissions</th>
<th>SDG Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRI-408:</td>
<td>Operations and suppliers at significant risk for incidents of child labor</td>
<td>30-40</td>
<td></td>
<td>SDG 16</td>
</tr>
<tr>
<td>GRI-409:</td>
<td>Operations and suppliers at significant risk for incidents of forced or compulsory</td>
<td>30-40</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>labor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GRI-410:</td>
<td>Security personnel trained in</td>
<td>58-62</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>human rights policies or procedures</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GRI-412:</td>
<td>Employee training on human rights policies or procedures</td>
<td>30-40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GRI-413:</td>
<td>Operations with local community engagement, impact assessments, and development</td>
<td>132-142</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>programs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Operations with significant actual and potential negative impacts on local</td>
<td>132-142</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>communities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GRI-416:</td>
<td>Assessment of the health and safety impacts of product and service categories</td>
<td>52-68, 167,170</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Incidents of non-compliance concerning the health and safety impacts of products and</td>
<td>44-50</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>services</td>
<td></td>
<td></td>
<td>SDG 3 SDG 16</td>
</tr>
</tbody>
</table>
### GRI-417: Marketing and Labeling Product and Service Labeling

<table>
<thead>
<tr>
<th>GRI</th>
<th>Standard Disclosure</th>
<th>Page</th>
<th>Additional Details &amp; Omissions</th>
<th>SDG Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>417-1</td>
<td>Requirements for product and service information and labeling</td>
<td>58-63, 122-130</td>
<td></td>
<td>SDG 12, SDG 16</td>
</tr>
<tr>
<td>417-2</td>
<td>Incidents of non-compliance concerning product and service information and labeling</td>
<td>44-50</td>
<td></td>
<td>SDG 16</td>
</tr>
</tbody>
</table>

### GRI-418: Customer Privacy

<table>
<thead>
<tr>
<th>GRI</th>
<th>Standard Disclosure</th>
<th>Page</th>
<th>Additional Details &amp; Omissions</th>
<th>SDG Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>418-1</td>
<td>Substantiated complaints concerning breaches of customer privacy and losses of customer data</td>
<td>44-50</td>
<td></td>
<td>SDG 16</td>
</tr>
</tbody>
</table>

### GRI-419: Socioeconomic Compliance

<table>
<thead>
<tr>
<th>GRI</th>
<th>Standard Disclosure</th>
<th>Page</th>
<th>Additional Details &amp; Omissions</th>
<th>SDG Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>418-1</td>
<td>Non-compliance with laws and regulations in the social and economic area</td>
<td>30-40</td>
<td>Link: [Form 10-K (Page 31)]</td>
<td>SDG 16</td>
</tr>
</tbody>
</table>
Follow Carnival Corporation & plc's continued sustainability efforts from Ship to Shore as we work to protect the oceans we sail, preserve economic growth in the lands we visit and promote quality of life for our crewmembers.
CONTACT US

For questions or to provide feedback regarding this Sustainability Report or its contents, please contact:

Elaine Heldewier
Director Sustainability Programs

Alana Enge
Manager Sustainability Programs

Maritime Policy & Analysis at Carnival Corporation & plc,

3655 N.W. 87th Avenue,
Miami, Florida 33178-2428 U.S.A.

Or email us at: sustainability@carnival.com

CORPORATE HEADQUARTERS

Carnival Corporation & plc
Carnival Place, 3655 NW 87th Avenue
Miami, Florida 33178-2428 U.S.A.
+1-305-599-2600

REGISTERED OFFICE

Carnival plc
Carnival House, 100 Harbour Parade
Southampton SO15 1ST, United Kingdom
+44(0) 23-8065-5000