UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

(Mark One)

☑ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended November 30, 2022 or

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from ______________ to ________________

Commission file number: 001-9610

Carnival Corporation		Carnival plc
(Exact name of registrant as specified in its charter)		(Exact name of registrant as specified in its charter)
Republic of Panama		England and Wales
(State or other jurisdiction of incorporation or organization)		(State or other jurisdiction of incorporation or organization)
59-1562976		98-0357772
(I.R.S. Employer Identification No.)		(I.R.S. Employer Identification No.)
3655 N.W. 87th Avenue Miami, Florida 33178-2428		Carnival House, 100 Harbour Parade, Southampton SO15 1ST, United Kingdom
(Address of principal executive offices and zip code)		(Address of principal executive offices and zip code)
	Commission file number: 001-15136	
(305) 599-2600		011 44 23 8065 5000
(Registrant's telephone number, including area code)		(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock ($0.01 par value)	CCL	New York Stock Exchange, Inc.
Ordinary Shares each represented by American Depositary Shares ($1.66 par value), Special Voting Share, GBP 1.00 par value and Trust Shares of beneficial interest in the P&O Princess Special Voting Trust	CUK	New York Stock Exchange, Inc.
1.000% Senior Notes due 2029	CUK29	New York Stock Exchange LLC

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrants are well-known seasoned issuers, as defined in Rule 405 of the Securities Act.
Yes ☑ No ☐

Indicate by check mark if the registrants are not required to file reports pursuant to Section 13 or Section 15(d) of the Act.
Yes ☐ No ☑

Indicate by check mark whether the registrants (1) have filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrants were required to file such reports), and (2) have been subject to such filing requirements for the past 90 days. Yes ☑ No ☐

Indicate by check mark whether the registrants have submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrants were required to submit such files). Yes ☑ No ☐

Indicate by check mark whether the registrants are large accelerated filers, accelerated filers, non-accelerated filers, smaller reporting companies, or emerging growth companies. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filers	☑	Accelerated filers	☐	Non-accelerated filers	☐	Smaller reporting companies	☐	Emerging growth companies	☐

If emerging growth companies, indicate by check mark if the registrants have elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C 7262(b)) by the registered public accounting firm that prepared or issued its audit report. Yes ☑ No ☐

Indicate by check mark whether the registrants are shell companies (as defined in Rule 12b-2 of the Act). Yes ☐ No ☑

The aggregate market value of the voting and non-voting common equity held by non-affiliates computed by reference to the price at which the common equity was last sold was $12.1 billion as of the last business day of the registrant's most recently completed second fiscal quarter.

At January 12, 2023, Carnival Corporation had outstanding 1,113,479,515 shares of its Common Stock, $0.01 par value.
The aggregate market value of the voting and non-voting common equity held by non-affiliates computed by reference to the price at which the common equity was last sold was $2.3 billion as of the last business day of the registrant’s most recently completed second fiscal quarter.

At January 12, 2023, Carnival plc had outstanding 186,136,095 Ordinary Shares $1.66 par value, one Special Voting Share GBP 1.00 par value and 1,113,479,515 Trust Shares of beneficial interest in the P&O Princess Special Voting Trust.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the 2022 Annual Report and 2023 joint definitive Proxy Statement are incorporated by reference into Part II and Part III of this report.

CARNIVAL CORPORATION & PLC
FORM 10-K
FOR THE FISCAL YEAR ENDED NOVEMBER 30, 2022

TABLE OF CONTENTS

DOCUMENTS INCORPORATED BY REFERENCE

The information described below and contained in the Registrants' 2022 Annual Report to shareholders to be furnished to the U.S. Securities and Exchange Commission pursuant to Rule 14a-3(b) of the Securities Exchange Act of 1934 is shown in Exhibit 13 and is incorporated by reference into this joint 2022 Annual Report on Form 10-K ("Form 10-K").

Part and Item of the Form 10-K

Part II

Item 5. Market for Registrants' Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities - Market Information, Holders and Performance Graph.

Item 6. Reserved.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk.

Item 8. Financial Statements and Supplementary Data.

Portions of the Registrants' 2023 joint definitive Proxy Statement, to be filed with the U.S. Securities and Exchange Commission, are incorporated by reference into this Form 10-K under the items described below.

Part and Item of the Form 10-K

Part III

Item 10. Directors, Executive Officers and Corporate Governance.

Item 11. Executive Compensation.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.

Item 13. Certain Relationships and Related Transactions, and Director Independence.

Item 14. Principal Accountant Fees and Services.

PART I

Item 1. Business.

A. Overview

I. Summary

Carnival Corporation was incorporated in Panama in 1974 and Carnival plc was incorporated in England and Wales in 2000. Carnival Corporation and Carnival plc operate a dual listed company ("DLC"), whereby the businesses of Carnival Corporation and Carnival plc are combined through a number of contracts and through provisions in Carnival Corporation's Articles of Incorporation and By-Laws and Carnival plc's Articles of Association. The two companies operate as if they are a single economic enterprise with a single executive management team and identical Boards of Directors, but each has retained its separate legal identity. Carnival Corporation and Carnival plc are both public companies with separate stock exchange listings and their own shareholders. Together with their consolidated subsidiaries, Carnival Corporation and Carnival plc are referred to collectively in this Form 10-K as "Carnival Corporation & plc," "company," "our," "us" and "we." We are the largest global cruise company and among the largest leisure travel companies with a portfolio of world-class cruise lines. With operations in North America, Australia, Europe and Asia, our portfolio features - AIDA Cruises, Carnival Cruise Line, Costa Cruises, Cunard, Holland America Line, Princess Cruises, P&O Cruises (Australia), P&O Cruises (UK) and Seabourn.

II. Mission (Purpose), Vision, Values and Priorities

Mission (Purpose)

To deliver unforgettable happiness to our guests by providing extraordinary cruise vacations, while honoring the integrity of every ocean we sail, place we visit and life we touch.

Vision

As the global leader in the cruise industry, we will lead the way in innovative and sustainable cruising to deliver memorable vacations and build borderless connections.

Culture Essentials (our Core Values)

- **Speak Up** - Our voice is our strength. Every one of us, regardless of level or role, speaks up when we have questions, comments, concerns, or new ideas. If we see something wrong or that doesn't seem right, we say something and trust our voices will be heard without fear of retaliation.
- **Respect & Protect** - The health, safety and well-being of our people and the planet are vital. We choose to take decisive actions to respect and protect every life we touch, the places we sail and the laws that govern us.
- **Empower** - We and our team members have the time, tools and support we need to do our best work. We're empowered to take personal ownership and accountability to succeed, and we take pride in our work.
- **Improve** - Our business is built on forward motion. We have the courage to dream big, driving innovation and continuous improvement in guest and team member experiences, operations, compliance, sustainability and beyond.
- **Listen & Learn** - We listen actively and seek to understand before responding, because the more perspectives we have, the better decisions we make. We value and respect the words and ideas of others, keeping an open mind, and learning from our successes and failures.
- **Communicate** - We openly share our knowledge, skills and information across brands, functions and the entire company to further our collective success. Together we champion our mission, vision, values and company priorities.

Priorities

Ensure each of our world-class brands owns its space in the vacation market by delivering extraordinary experiences tailored to its guests.
We understand vacation expectations and preferences vary widely among our diverse audience of potential guests. To fulfill our mission, and in the process achieve outstanding guest satisfaction levels, industry-leading demand and greatly improved pricing, each of our brands must carve out a distinct identity for delivering cruise experiences. Our brands must effectively market their uniqueness to existing and potential guests and deliver on their promise across the entire guest journey.

Become travel and leisure's employer of choice.
We celebrate our diverse team of over 160,000 team members representing approximately 150 countries and are committed to providing a welcoming and inclusive environment where people from different backgrounds, experiences and walks of life can succeed. We care deeply for our team members and must always cultivate an atmosphere of openness, respect and trust. We know our team members are at the heart of inspiring unforgettable happiness, so we strive to be the world's number-one choice for hospitality, travel and leisure careers.

Maintain our commitment to seek excellence in compliance, environmental protection and in looking after the safety, health and well-being of every life we touch.
Achieving our mission depends on being good corporate citizens and stewards of the environment. Safeguarding the planet we call home, our guests, the communities we serve, and our Carnival family, and complying with the laws and regulations that govern our business, is vital to our success.

Set the pace with the industry's smartest solutions that deliver on our sustainability roadmap to 2030.
Our earth, ecosystem and environment mean everything to us. Without the incredible communities and scenic spaces we operate in, our mission of inspiring unforgettable happiness would be impossible. We're determined to lead the way in sustainable cruising by promoting positive climate action, contributing to a circular economy, partnering with the communities we sail to and from and reducing our carbon footprint. To do this, we are investing in technology upgrades and fleet improvements, piloting alternative fuel types, optimizing itineraries and cultivating a workforce that mirrors the diversity of the communities we encounter along the way.

Strengthen our balance sheet and deliver long-term shareholder value.
In recent years, travel and leisure has endured volatility unlike anything seen in modern history, including unique obstacles that disproportionally affected the cruise industry. With our operations now approaching full strength and the continued support of our guests, team members, investors and other stakeholders, we are focused on our financial fitness. We're determined to drive revenue, operate effectively and efficiently at scale, generate record levels of cash from operations and invest our capital wisely. We believe this will allow us to responsibly reduce our debt over time and return to strong profitability and investment-grade credit ratings.

B. Global Cruise Industry

I. Overview

In the face of the global impact of COVID-19, we paused our guest cruise operations in March 2020 and began resuming guest cruise operations in 2021. As of November 30, 2022, 97% of our capacity is currently serving guests.

We believe cruising offers a broad range of products and services to suit vacationing guests of many ages, backgrounds and interests. Each brand in our portfolio meets the needs of a unique set of consumer psychographics and vacation needs which allows us to penetrate large addressable customer segments. The mobility of cruise ships enables us to move our vessels between regions in order to meet changing demand across different geographic areas.

Cruise brands can be broadly classified as offering contemporary, premium and luxury cruise experiences. The contemporary experience has a more casual ambiance and historically includes cruises that last seven days or less. The premium experience emphasizes quality, comfort, style and more destination-focused itineraries and appeals to those who are more affluent. The premium experience generally includes cruises that last from seven to 14 days. The luxury experience is usually characterized by very high standards of accommodation and service, smaller vessel size and exotic itineraries to ports that are inaccessible by larger ships. We have product and service offerings in each of these three broad classifications.

II. Passenger Capacity by Ocean Going Vessels

Calendar Year	Passenger Capacity as of December 31 (a) (b) Global Cruise Industry (c)	Passenger Capacity as of December 31 (a) (b) Carnival Corporation & plc
2019	589,820	254,010
2020	607,500	246,450
2021	636,270	253,950
2022	663,970	259,060
2023	701,490	263,730
2024	729,820	268,050
2025	764,440	272,360

(a) Includes ships which have resumed guest cruise operations and ships expected to resume guest cruise operations. 2023 - 2025 excludes four ships which will be removed from our fleet. 2023-2025 data is estimated based on announced newbuilds and ship retirements and does not include an estimate for unannounced ship retirements.

(b) In accordance with cruise industry practice, passenger capacity is calculated based on the assumption of two passengers per cabin even though some cabins can accommodate three or more passengers.

(c) Global cruise industry data was obtained from Cruise Industry News.

C. Our Global Cruise Business

I. Segment Information

	Ships in Service or Expected to Return to Service as of November 30, 2022 (a)		
	Passenger Capacity	Percentage of Total Capacity	Number of Cruise Ships
North America and Australia (“NAA”) Segment			
Carnival Cruise Line	75,530 (b)	30 %	24
Princess Cruises	46,280	18	15
Holland America Line	22,920	9	11
P&O Cruises (Australia)	7,230	3	3
Seabourn	2,840	1	6
	154,800	61	59
Europe and Asia (“EA”) Segment			
Costa Cruises (“Costa”)	39,580 (b) (c)	16	11
AIDA Cruises (“AIDA”)	33,540 (d)	13	12
P&O Cruises (UK)	19,020	7	6
Cunard	6,820	3	3
	98,960	39	32
	253,760	100 %	91

(a) As of January 12, 2023, includes three Costa ships, with a passenger capacity of 10,880, which are not in guest cruise operations and are expected to return to service.

(b) *Costa Venezia* with a passenger capacity of 4,200 and *Costa Firenze* with a passenger capacity of 4,240 will be transferred to Carnival Cruise Line in 2023 and 2024, respectively.

(c) Excludes *Costa Magica,* with a passenger capacity of 2,700, which will not resume guest cruise operations. Includes *Costa Fortuna*, with a passenger capacity of 2,700, which is expected to stop guest cruise operations in April 2023.

(d) Excludes *AIDAvita*, with a passenger capacity of 1,270, which will not resume guest cruise operations. Includes *AIDAaura*, with a passenger capacity of 1,270, which is expected to stop guest cruise operations in September 2023.

We also have a Cruise Support segment that includes our portfolio of leading port destinations and other services, all of which are operated for the benefit of our cruise brands.

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 which comprise our Tour and Other segment.

II. Passengers Carried

In 2022, we carried 7.7 million passengers, consisting of 5.6 million carried by our NAA segment and 2.1 million carried by our EA segment, which was lower than our historical levels as a result of the pause and subsequent resumption of our guest cruise operations. In 2019, our most recent full year of guest cruise operations, our brands carried 12.9 million passengers, 8.6 million carried by our NAA segment and 4.2 million carried by our EA segment.

III. Ships Under Contract for Construction

As of November 30, 2022, we have a total of 6 cruise ships expected to be delivered through 2025. Our ship construction contracts are with Fincantieri and MARIOTTI in Italy and Meyer Werft in Germany.

	Expected Delivery Date	Passenger Capacity Lower Berth
Carnival Cruise Line		
Carnival Jubilee (a)	December 2023	5,370
Princess Cruises		
Sun Princess (a)	January 2024	4,320
Newbuild (a)	July 2025	4,320
Seabourn		
Seabourn Pursuit	July 2023	260
P&O Cruises (UK)		
Arvia (a)	December 2022	5,290
Cunard		
Queen Anne	April 2024	3,000

(a) Powered by LNG

IV. Cruise Brands

Carnival

Carnival Cruise Line is "The World's Most Popular Cruise Line®" and has provided multi-generational family entertainment at exceptional value to its guests for 50 years. Carnival Cruise Line creates an environment where guests can be their most playful selves on ships that are designed to inspire the experience of bringing people together, with limitless opportunities for guests to create their own fun. Carnival Cruise Line is teaming up with Costa Cruises to create a new concept for Carnival's North American guests when Carnival Fun Italian Style™ debuts in the spring of 2023. Carnival Fun Italian Style™ will marry the great service, food and entertainment that Carnival's guests enjoy with Costa's Italian design features.

For over 55 years, Princess has sailed the world connecting guests to what matters most – the people they love, the people they meet and the destinations they visit. Princess delivers effortless, personalized cruising thanks to the Princess Medallion, a revolutionary wearable that anticipates guests' needs, wants and desires so guests can enjoy more of what they love.

Holland America Line has been exploring the world for 150 years and was the first cruise line to offer adventures in Alaska and Yukon. Its fleet offers an ideal mid-sized ship experience. Holland America Line's ships feature a diverse range of enriching experiences focused on destination exploration and personalized travel. Live music at sea fills each evening at Music Walk, and dining venues feature exclusive selections from a Culinary Council of world-famous chefs.

For 90 years, P&O Cruises (Australia) has taken Australians & New Zealanders on dream holidays to the most incredible destinations along the Australian coast as well as the idyllic South Pacific. The home-grown cruise line delivers a holiday with great entertainment, world-class dining and unforgettable onboard experiences. Delivered in the Aussie way, guests can choose to do everything, or nothing at all, with P&O Cruises (Australia).

Seabourn, the most modern luxury fleet at sea, sails to legendary cities and less-traveled ports. Its smaller, more intimate ships allow guests to discover the unexpected—about the world and about themselves. Guests enjoy ocean-front suites and epicurean dining is theirs on demand. With nearly one team member for every guest, its guests make meaningful connections. With Seabourn, they go further, deeper and experience luxury in action. On a voyage so seamless, so all-inclusive and so far beyond compare, guests never want it to end.

For more than 70 years, Costa's ships have sailed the seas of the world, offering a diverse choice of cruise holidays. Costa primarily serves guests from Continental Europe, enriching them through the exploration of the most beautiful destinations on five continents. Costa brings a modern Italian lifestyle to its ships and provides guests with a true European experience that embodies a uniquely Italian passion for life through warm hospitality, entertainment and gastronomy, that makes Costa different from any other cruise experience.

AIDA is the leading and most recognized brand in the German cruise market. AIDA delivers unique travel experiences with modern comfort, where guests of all ages feel at home and enjoy consistently excellent service accompanied by the AIDA smile. Guests across generations enjoy the German-inspired modern premium lifestyle cruise experience with a wide variety of culinary delights, first-class entertainment, unforgettable shore excursions, numerous sports activities, and spacious wellness areas to relax.

P&O Cruises (UK) is Britain's biggest cruise line, welcoming guests to extraordinary travel experiences designed in a distinctively British way - through a blend of discovery, relaxation and exceptional service catered towards British tastes. P&O Cruises (UK)'s fleet of premium ships deliver authentic travel experiences around the globe, combining style, quality and innovation with a sense of occasion and attention to detail, to create a truly memorable holiday.

For over 180 years, the iconic Cunard fleet has perfected the timeless art of luxury ocean travel. While onboard, Cunard guests experience unique signature moments, from Cunard's white gloved afternoon tea service to spectacular gala evening balls to its renowned Insights Speaker program. Guest expectations are exceeded through Cunard's exemplary White Star Service®. From the moment a guest steps onboard, every detail of their voyage is curated to ensure they feel special and are inspired by unique events. Onboard Cunard, guests are free to do as much or as little as they please.

V. Principal Source Geographic Areas

	Carnival Corporation & plc Cruise Guests Carried			
(in thousands)	**2022**	**2021**	**2019**	**Brands Mainly Serving**
United States and Canada	5,140	660	7,170	Carnival Cruise Line, Princess Cruises, Holland America Line, Seabourn and Cunard
Continental Europe	1,610	390	2,590	Costa and AIDA
United Kingdom	660	170	780	P&O Cruises (UK) and Cunard
Australia and New Zealand	230	0	920	Carnival Cruise Line, Princess Cruises and P&O Cruises (Australia)
Asia	10	—	1,110	Princess Cruises and Costa
Other	80	10	300	
Total	7,730	1,220	12,870	

As a result of the resumption of guest cruise operations, data for 2022 and 2021 is not representative of a full year of operations. Due to the pause of our guest cruise operations, data for 2020 is not meaningful and is not included in the table. We have provided 2019 data as it is our most recent full year of guest cruise operations.

VI. Cruise Programs

	Carnival Corporation & plc Percentage of Passenger Capacity by Itinerary		
	2022	2021	2019
Caribbean	34 %	32 %	32 %
Europe without Mediterranean	20	23	14
Mediterranean	18	29	13
Alaska	8	4	6
Australia and New Zealand	3	—	7
China	—	—	4
Other	18	12	25
	100 %	100 %	100 %

Due to the resumption of guest cruise operations, data for 2022 and 2021 is not representative of a full year of operations. Due to the pause of our guest cruise operations, data for 2020 is not meaningful and is not included in the table. We have provided 2019 data as it is our most recent full year of guest cruise operations.

VII. Cruise Pricing and Payment Terms

Each of our cruise brands publishes prices for the upcoming seasons primarily through the internet, although published materials such as direct mailings are also used. Our brands have multiple pricing levels that vary by source market, category of guest accommodation, ship, season, duration and itinerary. Cruise prices frequently change in a dynamic pricing environment and are impacted by a number of factors, including the number of available cabins for sale in the marketplace and the level of guest demand. We offer a variety of special promotions, including early booking, past guest recognition and travel agent programs.

Our bookings are generally taken several months in advance of the cruise departure date. Generally, the longer the cruise itinerary the further in advance the bookings are made. This lead time allows us to manage our prices in relation to demand for available cabins through the use of advanced revenue management capabilities and other initiatives.

The cruise ticket price typically includes the following:

- Accommodations
- Most meals, including snacks at numerous venues
- Access to amenities such as swimming pools, water slides, water parks, whirlpools, a health club, and sun decks
- Child care and supervised youth programs
- Entertainment, such as theatrical and comedy shows, live music and nightclubs
- Visits to multiple destinations

We offer value added packages to induce ticket sales to guests and groups and to encourage advance purchase of certain onboard items. These packages are bundled with cruise tickets and sold to guests for a single price rather than as a separate package and may include one or more of the following:

- Beverage packages
- Shore excursions
- Air packages
- Specialty restaurants
- Internet packages
- Photo packages
- Onboard spending credits
- Service charges

Our brands' payment terms generally require that a guest pay a deposit to confirm their reservation and then pay the balance due before the departure date.

VIII. Seasonality

Our passenger ticket revenues are seasonal. Historically, demand for cruises has been greatest during our third quarter, which includes the Northern Hemisphere summer months. This higher demand during the third quarter typically results in higher ticket prices and occupancy levels and, accordingly, the largest share of our operating income is typically earned during this period. This historical trend was disrupted in 2020 by the pause and in 2021 and 2022 by the subsequent resumption of our guest cruise operations. In addition, substantially all of Holland America Princess Alaska Tours' revenue and net income (loss) is generated from May through September in conjunction with Alaska's cruise season.

IX. Onboard and Other Revenues

Onboard and other activities are provided either directly by us or by independent concessionaires, from which we receive either a percentage of their revenues or a fee. Concession revenues do not have direct expenses because the costs and services incurred for concession revenues are borne by our concessionaires. In 2022, we earned 42% of our cruise revenues from onboard and other revenue goods and services including:

- Beverage sales
- Casino gaming
- Shore excursions
- Retail sales
- Photo sales
- Internet and communication services
- Full service spas
- Specialty restaurants
- Art sales
- Laundry and dry cleaning services

In 2019, our most recent full year of guest cruise operations, we earned 30% of our cruise revenues from onboard and other revenues.

X. Marketing Activities

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. Our goal has always been to increase consumer awareness for cruise vacations and further grow our share of their vacation spend. We measure and evaluate key drivers of guest loyalty and their satisfaction with our products and services that provide valuable insights about guests' cruise experiences. We closely monitor our net promoter scores, which reflect the likelihood that our guests will recommend our brands' cruise products and services to friends and family, including those new-to-cruise.

During 2022, in connection with the resumption of guest cruise operations, we increased our marketing and advertising programs after significantly reducing both during 2020 and 2021. Our brands have comprehensive marketing and advertising programs across diverse mediums to promote their products and services to vacationers and our travel agent partners. Each brand's marketing activities have generally been designed to reach a local region in the local language. We are focused on driving further brand differentiation and clarity around each of our brand's optimal target segments, ensuring that our creative marketing speaks to each brand's target audience and launching more effective digital performance marketing and lead generation approaches. Our marketing efforts historically have allowed us to attract new guests online by leveraging the reach and impact of digital marketing and social media. Over time, we have invested in new marketing technologies to deliver more engaging and personalized communications. This has helped us cultivate guests as advocates of our brands, ships, itineraries and onboard products and services.

Substantially all of our cruise brands offer past guest recognition programs that reward repeat guests with special incentives such as reduced fares, gifts, onboard activity discounts, complimentary laundry and internet services, expedited ship embarkation and disembarkation and special onboard activities.

XI. Sales Channels

We sell our cruises through travel agents, tour operators, company vacation planners and our websites. Our individual cruise brands' relationships with their travel agent partners are generally independent of each of our other brands. Our travel agents relationships are generally not exclusive and travel agents generally receive a base commission, plus the potential of additional commissions, including discounts or complimentary tour conductor cabins, based on the achievement of pre-defined sales volumes.

Travel agent partners are an integral part of our long-term cruise distribution network and are critical to our success. We utilize local sales teams to motivate travel agents to support our products and services with competitive pricing, promotional policies and joint marketing and advertising programs. During 2022, no group of travel agencies under common control accounted for 10% or more of our revenues. We also employ a wide variety of educational programs, including websites, seminars and videos, to train agents on our cruise brands and their products and services. In 2022, we held a variety of virtual and in-person trainings and educational programs to continue to support and develop our travel agent partners, including ship visits to familiarize our travel agent partners with our enhanced health and safety protocols.

All of our brands have internet booking engines to allow travel agents to book our cruises. Additionally, all of our cruise brands have their own consumer websites that provide access to information about their products and services to users and enable their guests to quickly and easily book cruises and other products and services online. These sites interface with our brands' social networks, blogs and other social media sites, which allow them to develop greater contact and interaction with their guests before, during and after their cruise. We also employ vacation planners who support our sales initiatives by offering our guests one-on-one cruise planning expertise and other services.

XII. Human Capital Management and Employees

Our shipboard and shoreside employees are sourced from approximately 150 countries. In connection with our resumption of guest cruise operations in 2022, we increased the number of employees onboard our ships from the reduced levels during 2021 and 2020. In 2022, we had an average of 75,000 employees onboard our ships, excluding employees on leave. Our shoreside operations had an annual average of 10,000 full-time and 2,000 part-time/seasonal employees. In 2019, our most recent full year of guest cruise operations, we had an average of 92,000 employees on our ships, excluding employees on leave and our shoreside operations had an annual average of 12,000 full-time and 2,000 part-time/seasonal employees. Holland America Princess Alaska Tours significantly increases its work force during the late spring and summer months in connection with Alaska's cruise season.

Gender Diversity:

	Approximate Average for 2022 (a)	
	Female	**Male**
Shoreside Employees	7,000	5,000
Shipboard Employees	13,000	62,000
Total Employees	20,000	67,000

	As of November 30, 2022	
	Female	**Male**
Boards of Directors	4	9
Non-Director Senior Management and Company Secretary	6	7
Non-Director Senior Management and Company Secretary Direct Reports	27	57

(a) These amounts are approximations and at times, fluctuate significantly due to the seasonality of our business.

We have entered into agreements with unions covering certain employees on our ships and in our shoreside hotel and transportation operations. The percentages of our shipboard and shoreside employees that are represented by collective bargaining agreements are 55% and 24%, respectively. We consider our employee and union relationships to be strong.

A team of highly motivated and engaged employees is key to providing extraordinary cruise vacations. To facilitate the recruitment, development and retention of our valuable employees, we strive to make Carnival Corporation & plc a diverse, inclusive and safe workplace, with opportunities for our employees to grow and develop in their careers.

a. Talent Development

We believe in the investment in our team members through the training and development of both shoreside and shipboard employees. We leverage a combination of virtual and in-person training to ensure that our teams are well-prepared to carry out their individual and collective responsibilities.

For our shipboard employees, our goal is to be a leader in delivering high quality professional maritime training, as evidenced by the Arison Maritime Center. The Center is home to the Center for Simulator Maritime Training ("CSMART"). The leading-edge CSMART Academy features the most advanced bridge and engine room simulator technology and equipment available, with the capacity to provide annual professional training for all our bridge, engineering and environmental officers. CSMART participants receive a maritime training experience that fosters advanced knowledge and skills development, critical thinking and problem solving; all in a professional learning environment where our corporate culture is reinforced. CSMART also offers training related to liquefied natural gas ("LNG") technology as well as an environmental officer training program and additional environmental courses for bridge and engineering officers to further enhance our training on environmental awareness and protection.

b. Succession Planning

Our Boards of Directors believe that planning for succession is an important function. Our multi-brand structure enhances our succession planning process. At the corporate level, a highly-skilled management team oversees a collection of cruise brands. We continually strive to foster the professional development of management and team members in other critical roles. As a result, we have developed a very experienced and strong group of leaders, with their performance subject to ongoing monitoring and evaluation, as potential successors to all of our executive positions, including our CEO.

In August 2022, Josh Weinstein, previously our Chief Operations Officer, was appointed President, CEO and Chief Climate Officer. Josh Weinstein has a long history of success in critical senior-level roles for our company. In his most recent assignment for the past two years as Chief Operations Officer he oversaw all major operational functions including global maritime, global ports and destinations, global sourcing, global IT and global auditing. During this time, he also oversaw Carnival UK, the operating company for P&O Cruises (UK) and Cunard, which he previously managed directly for three years as president. Prior to his role with Carnival UK, he was our company's treasurer for 10 years.

XIII. Port Destinations and Private Islands

We operate a portfolio of port destinations and private islands enabling us to offer exceptional guest experiences by creating a wide variety of high quality destinations around the world that are uniquely tailored to our guests' preferences. In addition, to secure preferential berth access to third-party ports, we enter into berthing agreements and commitments.

In May 2022, Carnival Cruise Line broke ground on its new Carnival Grand Bahama cruise port destination, expected to open in 2025 and located on the south side of Grand Bahama Island. The new cruise port development will include a pier able to accommodate up to two of our largest ships simultaneously, welcoming guests to a stunning beach and further expanding our experience offerings for our guests. Additionally, our investment in this cruise port destination will support our efforts to design more energy efficient itineraries based on its strategic location. Carnival Grand Bahama will be an important addition to our current portfolio of six corporate operated ports and destinations in the Caribbean:

- Puerta Maya in Cozumel, Mexico
- Grand Turk Cruise Center in Turks & Caicos
- Mahogany Bay in Isla Roatan, Honduras
- Amber Cove in the Dominican Republic
- Half Moon Cay, a private island in The Bahamas
- Princess Cay, a private island in The Bahamas

XIV. Ethics and Compliance

We believe a strong ethics and compliance culture is imperative for the success of any company. Our compliance framework includes a Global Ethics and Compliance ("GE&C") department, which is led by our Chief Risk and Compliance Officer who leads the effort to promote and monitor a strong ethics and compliance culture throughout the company. The main responsibilities of the GE&C department are to collaboratively:

- Identify, assess, monitor, prevent, detect and report on compliance risk
- Ensure compliance accountabilities and responsibilities are clear across the company
- Promote a strong culture of ethics and compliance
- Drive ethics and compliance continuous improvements

To further heighten the focus on ethics and compliance, our Boards of Directors have Compliance Committees, which oversee the GE&C department and maintain regular communications with our Chief Risk and Compliance Officer.

XV. Sustainability

We strive to be a company that people want to work for and to be an exemplary global corporate citizen. Our commitment and actions to keep our guests and crew members safe and well, protect the environment, develop and provide opportunities for our workforce, strengthen stakeholder relations and enhance both the communities where we work as well as the port communities that our ships visit, are reflective of our brands' core values and vital to our success.

In 2021, we established goals for 2030 which incorporate six key focus areas listed below that align with elements of the United Nation's Sustainable Development Goals and build on the momentum of our successful achievement of our 2020 sustainability goals.

Sustainability Goals Progress

The tables below represent our progress on each of our six key focus areas:

2030 Climate Action Goals	Status (a)	Our Progress
Achieve 20% carbon intensity reduction relative to our 2019 baseline measured in both grams of CO_2e per ALB-km and kilograms of CO_2e per ALBD	On Track	Achieved 2% carbon intensity reduction on an ALB-km basis and 4% on an ALBD basis. For ships in guest cruise operations, achieved 11% carbon intensity reduction on an ALB-km basis and 13% on an ALBD basis
Reduce absolute particulate matter air emissions by 50% relative to our 2015 baseline	Achieved	
Increase fleet shore power connection capability to 60% of the fleet	On Track	57% of the fleet has shore power connection capability
Expand our LNG program	On Track	Seven LNG ships across the fleet
Optimize the reach and performance of our Advanced Air Quality System program	On Track	93% of the fleet has Advanced Air Quality Systems installed (b)
Expand battery, fuel cell and biofuel capabilities	Ongoing	Piloted the use of biofuels as a replacement for fossil fuel on two ships
Reduce Scope 3 (indirect) emissions associated with food procurement and waste management	Ongoing	Completed an inventory of our Scope 3 emissions. Following the Greenhouse Gas Protocol, we estimate that our Scope 3 emissions represent approximately half of our total emissions
Identify carbon offset options only when energy efficiency options have been exhausted	Ongoing	Continuing to monitor the carbon offset market and options, as well as exploring carbon capture and storage opportunities

2030 Circular Economy Goals	Status (a)	Our Progress
Achieve 50% single-use plastic item reduction in 2021	Achieved	
Achieve 30% unit food waste reduction by 2022 and 50% unit food waste reduction by 2030	• 2022 goal achieved • 2030 goal on track	• Established interim goal to achieve 40% unit food waste reduction by 2025
Increase Advanced Waste Water Treatment System coverage to >75% of our fleet capacity	On Track	Achieved 64% coverage of fleet capacity
Send a larger percentage of waste to waste-to-energy facilities where practical	Ongoing	Completed a baseline of our waste programs in the U.S.
Partner with primary vendors to reduce upstream packaging volumes	Ongoing	Completed a packaging reduction pilot program with our primary engine supplier and achieved a reduction of approximately 44%

2030 Good Health and Well-Being Goals	Status (a)	Our Progress
Committed to continued job creation	Ongoing	• Increased the number of employees on board our ships from the reduced levels during the pause in guest cruise operations • Opened and filled a significant number of shoreside positions
Establish measurable Company Culture metrics and set annual improvement targets	Ongoing	Established Company Culture metrics with semi-annual Culture surveys and are in the process of establishing improvement targets
Implement global well-being standards by 2023	Ongoing	• Continued to work with authorities to arrange for COVID-19 vaccinations and boosters for our crew members, many of whom may not have had access to vaccines • Maintained and evolved onboard public health protocols to reflect the changing nature of the pandemic while protecting our guests and crew members responsibly
Reduce the number of guest and crew work-related injuries	Ongoing	Continued to implement initiatives to prevent guest and crew injuries

2030 Sustainable Tourism Goals	Status (a)	Our Progress
Animal Welfare – responsible sourcing • Achieve 100% cage free eggs by the end of 2025. • Achieve 100% responsible chicken sourcing by the end of 2025 • Achieve 100% gestation crate-free pork by the end of 2025	On Track	Continued to work with our supply chain and met our glidepath targets for FY2022 - achieved 58% cage free eggs, 25% responsible chicken and 29% gestation crate-free pork purchases
Establish partnerships with destinations focused on sustainable economic development, preservation of local traditions, and capacity management	Ongoing	• Broke ground on a new cruise port destination on Grand Bahama Island, which is expected to open in 2025. The new port will provide business opportunities for the residents of Grand Bahama with an estimated 1,000 local jobs • Working with ports of Miami, Galveston, Barcelona, Savona and Genoa to support their shore power development efforts • Joined the Alaska Green Corridor partnership to explore methods to accelerate the reduction of greenhouse gas emissions • Costa Cruises continued with the “Traditions in the Future” project which supports the preservation of traditional arts and crafts to a new generation of artisans
Continue to support disaster resilience, relief, and recovery efforts	Ongoing	• Provided temporary housing for 1,500 Ukrainian refugees on a Holland America Line ship for five months • Launched brand specific projects and provided overall support to our Ukrainian crew members and their families
Build stronger community relationships in our employment bases and destinations via employee volunteering programs	Ongoing	Conducted multiple costal cleanups involving shipboard- and shoreside employees and partners in various locations around the world

2030 Biodiversity and Conservation Goals	Status (a)	Our Progress
Support biodiversity and conservation initiatives through select NGO partnerships	Ongoing	Continued working with the Ocean 100 Dialogues to support ocean stewardship with a focus on climate change and biodiversity
Conduct audits and monitor animal encounter excursions regularly	Ongoing	Published Animal Welfare Statement for Excursions & Experiences on our website

2030 Diversity, Equity and Inclusion Goals	Status (a)	Our Progress
Ensure our overall shipboard and shoreside employee base reflects the diversity of the world	Ongoing	Continued to employ shipboard crew members from approximately 150 countries around the world
Expand shipboard and shoreside diversity, equity, and inclusion across all ranks and departments	Ongoing	• Half of the global direct reports to our CEO are women • Named as one of the World's Top Female-Friendly Companies by Forbes • Named as one of the World's Best Employers by Forbes • Recognized as one of America's Best Employers for Diversity by Forbes • Named among Best Companies for Latinos to Work by Latino Leaders Magazine • Earned a perfect score of 100 from the Human Rights Campaign (HRC) and designation as one of the Best Places to Work for LGBTQ+ equality

(a) On Track - Quantifiable/numerical goals that are showing a positive trend towards achieving the goal.
Ongoing - Qualitative/non-numerical goals which are currently in progress.
(b) Excluding LNG ships.

A key focus of our sustainability efforts is climate action, which includes our commitment to reduce carbon emissions and our aspiration to achieve net carbon-neutral operations. We have made significant progress towards our 2030 carbon intensity reduction goals of 40% from a 2008 baseline, measured in both grams of CO_2e per available lower berth kilometer ("ALB-km") and kilograms of CO_2e per available lower berth day ("ALBD"). During 2022, we updated the baseline year for both goals to 2019 from 2008. Both 2030 goals now require a 20% improvement from 2019. With the updated baseline year, we strengthened our 2030 goal measured in kilograms of CO_2e per ALBD since the initial 2030 goal would only have required a further 15% reduction from 2019 levels. Our goal measured in grams of CO_2e per ALB-km remains the same. In addition, this new baseline year helps us better communicate recent progress against our climate goals to our investors and stakeholders as well as modernize our disclosures in alignment with developing best practice and reporting standards.

We plan to achieve our 2030 carbon intensity goals based on the following planned actions:

- The delivery of larger-more efficient ships, as part of our ongoing newbuild program, some of which will replace existing ships in our fleet
- Designing more energy-efficient itineraries
- Investing in port and destination projects
- Continuing to invest in new technologies and energy efficiency projects for our existing fleet; since 2016, we have invested over $350 million

We have considered the above planned actions in connection with the preparation of our financial statements and any estimates used in the preparation of our financial statements, include projections (where applicable) consistent with the above planned actions.

In addition to our 2030 sustainability goals, we are committed to continuing our reduction of carbon emissions and have aspirations to achieve net carbon-neutral operations by 2050, well ahead of current International Maritime Organization ("IMO") targets. While fossil fuels are currently the only viable option for our industry, we are closely monitoring technology developments and partnering with key organizations to help identify and scale new technologies not yet ready for the cruise industry. For example, we are piloting maritime scale battery technology and methanol powered fuel cells and working with classification societies and other stakeholders to assess lower carbon fuel options for cruise ships, which includes methanol, bioLNG, eLNG, hydrogen, and biofuels. During 2022, we piloted the use of biofuel as a replacement for fossil fuel on two of our ships. *AIDAprima* became the first larger-scale cruise ship to be powered with a blend of marine biofuel, made from 100% sustainable raw materials, and marine gasoil ("MGO"). Additionally, Holland America Line completed two pilots on *Volendam*, one using a blend of marine biofuel and another using 100% biofuel, becoming the first larger-scale cruise ship to be powered 100% by biofuel. The certified biofuels used in these pilots offer environmental benefits compared to using fossil fuels alone through their lifecycle CO_2 reductions. These biofuels can be used in existing ship engines without modifications to the engine or fuel infrastructure, including on ships already in service. While alternative fuels may provide a path to decarbonization for the maritime industry, there are significant supply challenges that must be resolved before viability is reached. We are working with suppliers to encourage investment in a reliable supply infrastructure.

During 2022, we also announced the global rollout of Service Power Packages, a comprehensive set of technology upgrades, which will be implemented over the next several years across a portion of the fleet. These upgrades include the following elements designed to reduce both fuel usage and greenhouse gas ("GHG") emissions while also contributing to cost savings:

- Comprehensive upgrades to each ship's hotel HVAC systems
- Technical systems upgrades on each ship
- State-of-the-art LED lighting systems
- Remote monitoring and optimization of energy usage and performance

The Service Power Package upgrades are part of our ongoing energy efficiency investment program and are expected to further improve energy savings and reduce fuel consumption. Upon completion, these upgrades are expected to deliver an average of 5-10% fuel savings per ship.

In addition, we have five Air Lubrication Systems ("ALS") currently operating in our fleet, we are currently installing ALS on six ships and we are planning at least eight more installations. ALS cushion the flat bottom of a ship's hull with air bubbles, which reduces the ship's frictional resistance and the propulsive power required to drive the ship through the water, which is expected to generate approximately 5% savings in fuel consumption and reductions in carbon emissions on ALS equipped ships.

As part of our plan for carbon footprint reduction, we have 11 LNG powered cruise ships that are expected to join the fleet through 2025, including seven ships already in operation as of November 30, 2022. In total, these ships are expected to represent 20% of our total future capacity by summer 2025. All of our LNG ships also have the capability to run on conventional fuels. The price of LNG in certain markets has been unattractive compared to other alternatives, and as such, at times we use conventional fuels to power our LNG ships.

LNG is a fossil fuel and generates carbon emissions. Its direct CO_2 emissions are lower than those of conventional fuels and it emits effectively zero sulfur oxides (only the sulfur in the pilot fuel is present), reducing nitrogen oxides by 85% and particulate matter by 95%-100%. The types of engines that we use are subject to small amounts of methane slip (the passage of un-combusted methane through the engine). There are different views relating to the measurement of the environmental impact of LNG, including the methane slip. Our disclosures report our emissions, including methane slip, as part of our total carbon emissions (reported as CO_2e) using the 100-year global warming potential time frame and measured on a "tank to wake" basis. We are working closely with our engine manufacturers and other technology providers to further mitigate methane slip, and have recently joined the Methane Abatement in Maritime ("MAM") Innovation Initiative, where we will partner with other major maritime players to seek solutions for this challenge.

We pioneered the use of Advanced Air Quality Systems on board our ships to aid in the reduction of sulfur and lifecycle GHG emissions and are promoting the use of shore power. Shore power enables our ships to use shoreside electric power, where available, while in port rather than running their engines to power their onboard services, resulting in reduced ship air emissions. We have continued our work with several local port authorities to utilize cruise ship shore power connections.

As part of our sustainability strategy, we have voluntarily reported our carbon footprint via the CDP (formerly, the Carbon Disclosure Project) each year since 2006. The CDP rates companies on the depth and scope of their disclosures and the quality of their reporting. We developed a GHG inventory management plan in 2010 in accordance with the requirements of International Organization for Standardization ("ISO") 14064-1:2018(E) standard and The Greenhouse Gas Protocol. Our submission includes details of our most recently compiled emissions data and reduction efforts, along with the results of an independent, third-party verification of our GHG emissions inventory. We also disclose our water stewardship through the CDP water program.

Carnival Corporation & plc's environmental management system is certified in accordance with the ISO 14001:2015 Environmental Management System standard.

We voluntarily publish Sustainability Reports that address governance, stakeholder engagement, environmental, labor, human rights, society, product responsibility, economic and other sustainability-related issues and performance indicators. These reports, which are not incorporated in this document but can be viewed at www.carnivalcorp.com, www.carnivalplc.com and www.carnivalsustainability.com, were developed in accordance with the Global Reporting Initiative ("GRI") Standards, the global standard for sustainability reporting.

a. Climate-Related Financial Disclosures

Under the UK Listing Rule LR 9.8.6R, Carnival plc is required to report certain climate-related financial disclosures for the year ended November 30, 2022, and with a goal towards transparency and consistent disclosure amongst our filings and stakeholders, we are including the UK required disclosures in our Form 10-K filing. Accordingly, we set out below our climate-related financial disclosures fully consistent with 10 out of the 11 Task Force on Climate-Related Financial Disclosures ("TCFD") Recommendations and Recommended disclosures. For Metrics and Targets recommended disclosures b), we are partially consistent, as further work is underway to fully measure and disclose our Scope 3 GHG emissions, which we expect to disclose in our 2023 Strategic Report. Our consistency with the TCFD's four pillars, Governance, Strategy, Risk Management and Metrics and Targets, and the recommendations thereof, are represented in the table below.

TCFD Pillar	Recommended disclosures	Section Reference
Governance	a) Describe the Boards' oversight of climate-related risks and opportunities.	*Governance*
	b) Describe management's role in assessing and managing climate-related risks and opportunities.	
Strategy	a) Describe the climate-related risks and opportunities the organisation has identified over the short, medium, and long term.	*Strategy: Qualitative scenario analysis*
	b) Describe the impact of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning.	*Strategy: Quantitative Scenario Analysis*
	c) Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	
Risk Management	a) Describe the organisation's processes for identifying and assessing climate-related risks.	*Risk Management: Climate Risk and Opportunity Identification, Owner Assignment and Assessment*
	b) Describe the organisation's processes for managing climate-related risks.	*Risk Management: Climate Risk and Opportunity Monitoring, Management and Reporting*
	c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organisation's overall risk management.	*Risk Management: Integration into our overall risk management*
Metrics and Targets	a) Disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process.	*Metrics and Targets*
	b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 GHG emissions, and the related risks.	
	c) Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets.	

Governance

The Chief Climate Officer ("CCO") and the Boards of Directors are responsible for the oversight of climate-related matters and are directly supported by members of executive management. In addition, the CCO and the Boards of Directors set the tone at the top with regards to embedding a climate risk culture through fulfilling their responsibilities as outlined in the climate risk management framework.

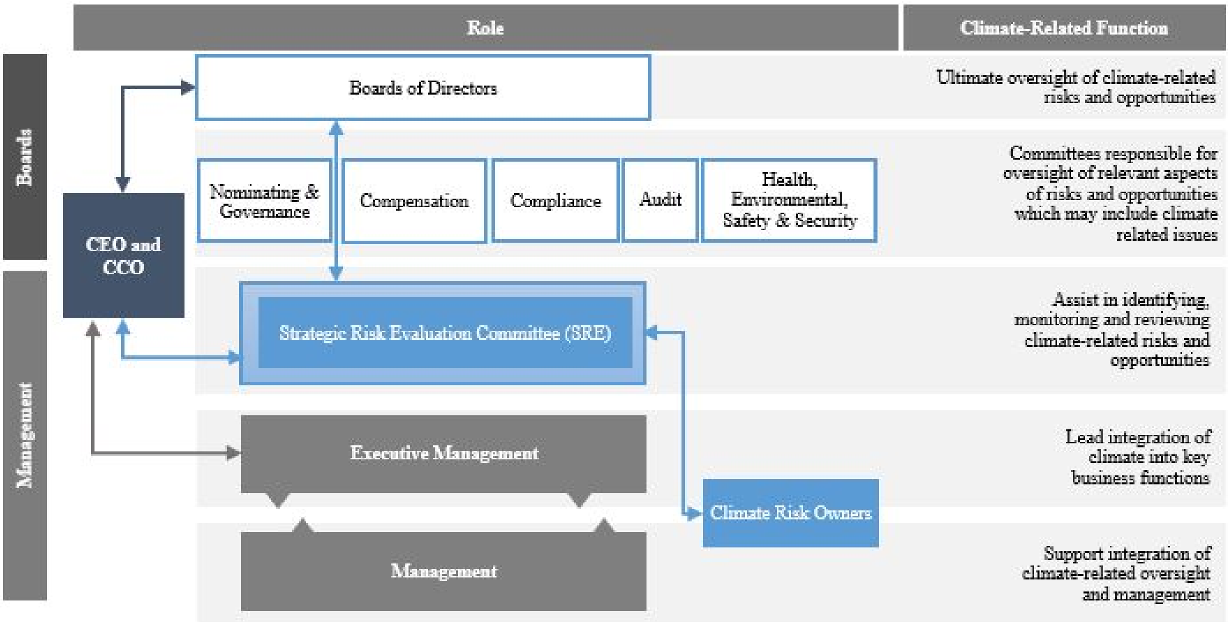
In January 2022, the Boards of Directors appointed Arnold Donald, President and CEO at the time, to the additional role of CCO. In August 2022, Josh Weinstein, our Chief Operations Officer assumed the roles of President, CEO and CCO. The CCO leads the identification of climate-related risks and opportunities and oversees how these are embedded in our strategic decision-making and risk management processes.

To further support our climate-related efforts, we created a Strategic Risk Evaluation ("SRE") Committee. The SRE Committee consists of members of executive management and an advisor and reports to the CEO, who in turn, reports to the Boards of Directors. At its establishment in January 2022, the SRE Committee was comprised of David Bernstein (Chief Financial Officer), Josh Weinstein (then Chief Operations Officer), William Burke (Chief Maritime Officer), and Stein Kruse (Advisor to the CEO & Chair of the Boards). Following the August 2022 changes in leadership, Richard Brilliant (Chief Risk and Compliance Officer) was added to the SRE Committee, David Bernstein was appointed as Chair of the SRE Committee, and Josh Weinstein, who remained on the SRE Committee, assumed the role of CCO. The primary responsibility of the SRE Committee is to assist the CCO in fulfilling his responsibility to identify, monitor and review the management of climate-related risks and opportunities. Common recurring activities of the SRE Committee include:

- Discussing climate considerations in the planning processes to further support its focus on decarbonization, such as the recently adopted Corporate Itinerary Decarbonization Reviews.
- Considering if any new climate risks or opportunities should be included in the list of identified climate risks and opportunities.
- Ensuring appropriate assignment of identified climate risks and opportunities to risk owners, who are responsible for their day-to-day evaluation and management.
- Obtaining at least annual reporting from the risk owners on the monitoring and management of identified risks and opportunities and reviewing, scrutinizing and challenging management of climate risks and opportunities.
- Reviewing and approving the climate risk management framework.

An SRE Committee Charter was adopted and 12 SRE Committee meetings have taken place between its creation in January 2022 and November 2022. From these discussions, the SRE Committee has provided a quarterly update to the Boards of Directors on climate-related matters such as:

- Resetting our GHG baseline year to 2019 from 2008 and a strengthening of our 2030 goals relative to the new baseline.
- Establishment of a climate risk framework.
- Completion of the qualitative and quantitative scenario analysis assessments.
- Commissioning of the port analysis study.



Board Education Program

To enable the CCO and Boards of Directors to fulfil their responsibility to oversee climate-related risks and opportunities, a Board Environmental, Social and Governance ("ESG") and TCFD education program has been established, with core education components and optional self-study courses. This ESG and TCFD education program has been developed with support from external advisors and the Senior Independent Director. The core education components of the program were completed in November 2022. An annual refresher education program, including updates to ESG and TCFD considerations, has been established.

Strategy

During 2022, we performed a qualitative and quantitative scenario analysis to assess our climate-related risks and opportunities over the short, medium and long term.

Qualitative scenario analysis

We qualitatively applied two (and quantitatively applied three) distinct plausible climate scenarios, global warming limited to below 1.5ºC above pre-industrial levels by 2100 "Steady Path to Sustainability" and global warming of 2.8ºC above pre-industrial levels by 2100 "Regional Rivalry." The scenarios were used to generate the climate-related risks and opportunities listed in the table below.

As part of our qualitative scenario analysis, a series of workshops with the SRE Committee and a cross-section of management was conducted to identify material climate-related risks and opportunities, based on likelihood and degree of potential financial impact, over the following time horizons:

- Present – 2025 (short-term) - consistent with the period we use for our short-term planning
- 2025 – 2035 (medium-term) - aligns with our existing sustainability goals
- 2035 – 2050 (long-term) - consistent with the useful life of our ships

Following the workshops, the SRE Committee selected certain risks and opportunities for further assessment and quantification. The process of selecting these risks and opportunities included an in-depth assessment by each participant of the proposed risks and opportunities. The process incorporated the use of a feasibility matrix and subsequent group discussion to arrive at consensus on which risks and opportunities were most appropriate for quantification. Feasibility was evaluated on the availability of internal and external climate-related data, the estimated number of assumptions required and the magnitude of impact and likelihood of occurrence.

Climate-related risks identified through qualitative scenario analysis

Our initial selected risks and opportunities for quantification are in **bold**:

TCFD risk categories	Risk summary	Impact time horizon
Markets and Products / Shifting Markets (1)	**Cruising no longer aligns to consumers' climate values**	Medium Term
	Reduced availability and access to fuel*	Long Term
	Unable to meet climate-related requirements reduces access to capital / insurance	Medium Term
Policy and Legal (1)	**Increased costs driven by climate-related regulations***	Short-Medium Term
	Risk is that cruising (as a carbon-intensive industry) is severely restricted or subject to bans	Medium Term
Reputation (1)	Failure to attract and retain talent due to climate credentials	Medium Term
	Increased demand for reducing carbon-intensive practices	Short Term
Technology (1)	Lack of viable low carbon technology to replace fossil fuels	Medium Term
Physical	**Chronic climate change impacting supply chain availability and price**	Medium Term with expected increases in the Long Term
	Itineraries are not viable due to extreme weather and/or sea level rise	Medium Term with expected increases in the Long Term

(1) Transition Risks

***Due to the similar nature of these risks, we have combined them for the quantitative analysis into a combined risk: "How does a low-carbon transition impact the price of the fuels needed to power our ship engines?"**

Climate-related opportunities identified through qualitative scenario analysis

TCFD opportunity categories	Opportunity summary	Realisation time horizon
Energy Source	Support the adaptation of sustainable technological advances for the cruise industry	Medium Term
Market Access	Access to new financing options available for organisations working on decarbonisation	Short-Medium Term
	Access to private destinations or islands with infrastructure built by us	Short-Medium Term
	Attract and retain new customers and improve reputation through sustainable itineraries and activities for changing climate-induced preferences	Short-Medium Term
	Positioning as a sustainability leader	Short-Medium Term
Products & Services	Opportunities for the ship to be the destination	Long Term
Resilience	Engage with more sustainable and economically favourable alternative suppliers	Short Term
	Improve resilience to physical climate risk through adaptation of itinerary routes and investment in port infrastructure	Short Term
Resource Efficiency	Improved operational efficiencies arising from technological advancements	Medium Term
	Increased fuel efficiency through alternative itinerary planning and reduced energy use	Short - Medium Term
	Increased resource efficiency through reduced on-board energy demand and consumption	Medium Term

We presently consider transition risks to be the most significant in terms of likelihood and impact. The risks with the highest impact and likelihood of occurrence are associated with the transition to a low-carbon emission future, in a scenario where low-carbon technologies do not exist, or where we have not been able to access these technologies and where we have reduced availability and access to fuel.

The climate-related opportunities with the highest impact are a mix of mitigation and adaptation opportunities. These include the positive impacts of supporting the adaptation of sustainable technological advances for our business, improved operational efficiencies from technological advancements, and more energy efficient itineraries from investing in port and destination projects.

Quantitative Scenario Analysis

We quantitatively applied three distinct plausible climate scenarios to determine the potential impacts of the risks and opportunities assessed. Using transition scenario assumptions from the International Energy Agency (“IEA”) and climate and transition scenarios from the Intergovernmental Panel on Climate Change (“IPCC”), we utilised two interlocking types of pathways, the Representative Concentration Pathways (“RCPs”) and Shared Socioeconomic Pathways (“SSPs”) to create three sets of scenarios to understand the relative materiality and possible range of impacts to the business from the selected climate-related risks and opportunities under different potential futures.

Scenario 1: Steady Path to Sustainability (average temperature increase limited to 1.5°C above pre-industrial levels by 2100) SSP1 / RCP1.9

Under this scenario, the world takes the rapid and strong policy measures required to meet the ambition of the 2015 Paris Agreement (keep mean annual temperature rise well below 2°C warming above pre-industrial levels by 2100). Under this scenario, low carbon technologies take over from fossil-fuels, and reduced economic growth is also important for reaching net zero emissions by 2050

We selected this scenario, as it provides us insight into a low-carbon world that would benefit us and our Climate Action Goals. Under this scenario, transition risks identified are material and our resilience is dependent on our ability to effectively adopt low carbon technologies. This would help us adhere to increasing decarbonization requirements, including existing and emerging regulations, consumer preferences, and talent market expectations. Our most impactful opportunity is the enhancement of our reputation and competitiveness, by supporting the adaptation of sustainable technological advances for the cruise industry. This would also further help us to mitigate our transition risks.

Scenario 2: Regional Rivalry (average temperature increase limited to below 2.8°C above pre-industrial levels by 2100) SSP3 / RCP7.0

This scenario explores a possible route in which the world is seeing an emergence of tribalism and nationalism. Low international priority for addressing environmental concerns leads to strong environmental degradation in some regions. The combination of impeded development and limited environmental concern results in poor progress toward climate sustainability. Growing resource intensity and fossil fuel dependency along with difficulty in achieving international cooperation and slow technological change imply high challenges to mitigation.

We selected this scenario, as it provides an indication of the world we would operate in if we do not achieve the Paris Agreement target. This scenario presents a higher emissions future where physical risks are material. Business resilience under this scenario is dependent on our ability to adapt to extreme weather events and chronic physical risks. Under this scenario we can remain resilient by taking advantage of the mobility of our cruise ships, which enables us to move our vessels between regions and adapt itineraries in cases of extreme weather events. Additionally, based on a study performed, we are well placed to respond to increased physical risks at our new port development projects, see *Investment in Port and Destination Projects*.

Scenario 3: Fossil-fueled growth (average temperature increase limited to below 4°C above pre-industrial levels by 2100) SSP5 / RCP8.5

The 4°C scenario explores a possible route in which as countries emerge from the coronavirus pandemic, governments around the world focus on restoring growth through direct support to fossil fuels and reverting to the tried and tested methods of the past.

This scenario presents the highest emissions future where physical risks have the potential to be most significant and would therefore allow us to model the impact of these extreme climate risks. Akin to Scenario 2, business resilience under Scenario 3 will be dependent on our ability to adapt to extreme weather events and chronic physical risks as well as the impacts to our supply chain across different geographical areas. Our experience with the current supply chain crisis suggests that under this scenario, we would be resilient to these supply chain risks given our ability to adapt to supply chain disruptions.

Key assumptions and limitations

The results of our quantitative scenario analysis have a high degree of uncertainty as there are assumptions made for all modelling inputs. This means that results should be taken as an indicative "order of risk". Furthermore, the analysis assumes that the future conditions from climate change are shifted to today to contextualize impacts in relation to the current business size. The analysis does not include:

- Forward-looking forecasting of our business operations; or
- Potential mitigation or adaptation measures that could be taken either by us, or by other parties over the period considered (e.g., sustainable ship fuel development, governments building flood defenses).

Estimations and projections

We completed several scenario analyses over three time horizons (2025, 2030, and 2050). Any assumption made about fuel prices acknowledges the current energy crisis and assumes that by 2025, oil prices will stabilize in line with IEA price projections. We have also projected physical and transition risks at a global level due to the high mobility of our assets.

The degree of potential impact was determined on a linear scale range of "Low", having no material impact or "High" having a material impact on Carnival Corporation & plc's financial statements.

Results of the Quantitative Scenario Analysis: Potential Impact on Operating Income

Key

Transition Risk (**TR**); Physical Risk (**PR**); Opportunity (**O**)

Risk Financial Impact: Low ↓ Medium → High ↑

Opportunity Financial Impact: Low ↓ Medium → High ↑

		2025	2030	2050
Scenario 1	(**TR**) How does a low-carbon transition impact the price of the fuels needed to power our ship engines?	→	↑	↑
	(**TR**) How would changing consumer sentiment drive changes in demand for our offering?	↑	↑	↑
	(**PR**) How are our profits affected by an increase in food commodity prices?	↓	↓	↓
	(O) What are the future savings associated with operational efficiency improvements?	→	↑	↑
	(O) How could providing a service geared towards changing consumer sentiment drive long-term growth for us?	↑	↑	↑
Scenario 2	(**TR**) How does a low-carbon transition impact the price of the fuels needed to power our ship engines?	↑	↑	↓
	(**TR**) How would changing consumer sentiment drive changes in demand for our offering?	↓	↓	↓
	(**PR**) How are our profits affected by an increase in food commodity prices?	↓	↓	↓
	(O) What are the future savings associated with operational efficiency improvements?	↑	↑	↑
	(O) How could providing a service geared towards changing consumer sentiment drive long-term growth for us?	↓	↓	↓
Scenario 3	(**TR**) How does a low-carbon transition impact the price of the fuels needed to power our ship engines?	↓	↓	↓
	(**TR**) How would changing consumer sentiment drive changes in demand for our offering?	↓	↓	↓
	(**PR**) How are our profits affected by an increase in food commodity prices?	↓	→	↑
	(O) What are the future savings associated with operational efficiency improvements?	→	↑	↑
	(O) How could providing a service geared towards changing consumer sentiment drive long-term growth for us?	↓	↓	↓

How does a low-carbon transition impact the price of the fuels needed to power our ship engines?
While fossil fuels are currently the only viable option for our industry at present, we are closely monitoring technology developments and partnering with key organizations to help identify and scale new technologies not yet ready for the cruise industry. Refer to XV. Sustainability.

How would changing consumer sentiments drive changes in demand for our offering?
To mitigate the impact of this risk, our short and medium-term decarbonization goals focus on reducing carbon emissions per ALBD and carbon emissions per ALB-km. In addition, we are committed to our reduction of carbon emissions and have aspirations to be net carbon-neutral ship operations by 2050. Refer to XV. Sustainability.

How are our profits affected by an increase in commodity prices?
Under Scenarios 1 and 2, the impacts on food prices are indistinguishable from the historical commodity market volatility. Under Scenario 3, we could face higher food costs which may impact our value chain and operating profit. Our existing supply chain management strategies have remained resilient through the more recent supply chain issues experienced globally, demonstrating our ability to mitigate global-scale disruptions. In addition, our Circular Economy 2030 Goals include achieving a 30% food waste reduction per person by 2022 and 50% by 2030. Refer to XV. Sustainability and XVII. Supply Chain.

What are the future savings associated with operational efficiency improvements?
Under each scenario, the estimated total price of the fuel is the same, but the amount of fuel demanded differs based on assumptions about operational efficiency improvements. To capture this potential upside, we are investing in projects that improve the energy efficiency of our fleet. An Internal Decarbonization Premium is being added to the cost of fuel during the itinerary, strategic and capital planning processes and is used to evaluate the payback period and return on investment for capital projects. We are also ensuring that our brands design more energy efficient itineraries through our Corporate Itinerary Decarbonization Reviews. For further details of our strategies in place to capture this opportunity, refer to XV. Sustainability.

How could providing a service geared towards changing consumer sentiment drive long-term growth for us?
Under scenarios 2 and 3, an immaterial number of consumers would align to low-carbon services. Under Scenario 1, from 2025 to 2050 across all countries, there is an increase in the expected price per Passenger Cruise Days that we will be able to charge. By continuing to reduce our carbon emissions through our strategies such as investing in energy efficiency projects, fleet changes, itinerary changes, and port developments, we can remain resilient under Scenario 1. For further details of our strategies in place to capture this opportunity, refer to XV. Sustainability.

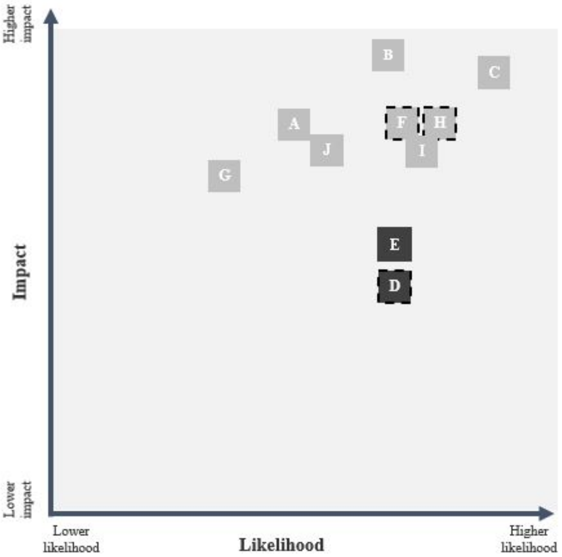
Investment in Port and Destination Projects
Utilizing the latest IPCC 6 report, a climate study was undertaken, by a third party, for two of our port development projects at Grand Port (Grand Bahama Island) and Half Moon Cay Pier Project (The Bahamas), to enhance climate resilience. Based on the results of this study, we are well placed to respond to the physical risks of climate change at the two planned port locations and that we will have a number of measures in place to address physical climate impacts. These results were reviewed by the SRE Committee and presented to the Boards of Directors for an investment decision. Furthermore, our investments in these ports and destinations will support our efforts to design more energy efficient itineraries based on their strategic locations.

Risk Management

We utilize a process for managing our climate risks and opportunities which begins with climate risk and opportunity identification then follows with owner assignment, assessment, monitoring, management and reporting. This process is ongoing and iterative.

Climate Risk and Opportunity Identification, Owner Assignment and Assessment
The qualitative scenario analysis is the foundation of our climate risk and opportunities identification and assessment process and began with the evaluation of a long list of climate-related risks and opportunities we may face, to generate an initial list of possible risks and opportunities. As discussed above, we considered a high-carbon and a low-carbon scenario. Input from key stakeholders in the business was obtained through facilitated workshops to identify additional climate risks and opportunities and refine the list before prioritizing those identified. Assessment of these risks and opportunities was performed by the SRE Committee and a cross section of management, who qualitatively evaluated the impact and likelihood of these risks and opportunities. Certain financial, regulatory, reputational and physical risks and opportunities were then selected for more detailed quantitative scenario analysis.

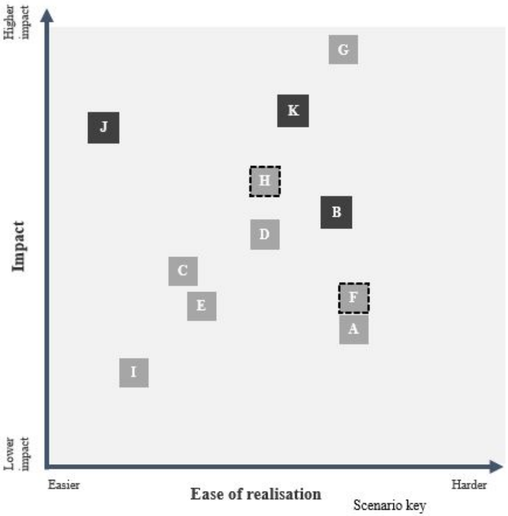
The SRE Committee reviews the selected risks and opportunities from our qualitative scenario analysis quarterly and considers if any risks or opportunities no longer need monitoring, and if any new climate risks or opportunities should be identified. Each climate risk has been assigned an owner who has responsibility for the day-to-day evaluation and management of the risk. Following the climate risk identification process, climate risks are assessed based on expected impact, likelihood, time horizon and speed of onset.



#	Risk summary (Ordered alphabetically)
A	Lack of viable low carbon technology to replace fossil fuels
B	Risk is that cruising (as a carbon-intensive industry) is severely restricted or subject to bans
C	Increased demand for reducing carbon-intensive practices
D	Chronic climate change impacting supply chain availability and price
E	Itineraries are not viable due to extreme weather and/or sea level rise
F	Cruising no longer aligns to consumers climate values
G	Unable to meet climate-related requirements reduces access to capital / insurance
H	Reduced availability and access to fuel
I	Increased demand for reducing carbon-intensive practices
J	Failure to attract and retain talent due to climate credentials

Scenario key
S1 – Steady Path to Sustainability
S2 – Regional Rivalry

Key *Risks or opportunities that were selected for quantification*



#	Opportunity summary (Ordered alphabetically)
A	Positioning as a sustainability leader
B	Opportunities for the ship to be the destination
C	Improved operational efficiencies arising from technological advancements
D	Increased fuel efficiency through alternative itinerary planning and reduced energy use
E	Access to new financing options available for organisations working on decarbonisation
F	Attract and retain new customers and improve reputation through sustainable itineraries and activities for changing climate-induced preferences
G	Support the adaptation of sustainable technological advances for the cruise industry
H	Increased resource efficiency through reduced on-board energy demand and consumption
I	Engage with more sustainable and economically favourable alternative suppliers
J	Improve resilience to physical climate risk through adaptation of itinerary routes and investment in port infrastructure
K	Access to private destinations or islands with infrastructure built by us

Scenario key
S1 – Steady Path to Sustainability
S2 – Regional Rivalry

Key *Risks or opportunities that were selected for quantification*

Climate Risk and Opportunity Monitoring, Management and Reporting

The primary method for review, scrutiny, and challenge of climate risks, involves the risk owners monitoring, assessing and reporting how each risk and opportunity is changing over time based on climate risk indicators and discussing options with the SRE Committee to reduce, accept, avoid or transfer risk.

Integration into our overall risk management

Overall, the Boards of Directors are responsible for determining the strategic direction of the company and the nature and extent of the risk assumed by it. Within our risk management framework, the Boards of Directors have ultimate oversight of climate-related risks, which have been identified as a principal risk. Refer to the Governance pillar for a description of how climate-related risks are overseen.

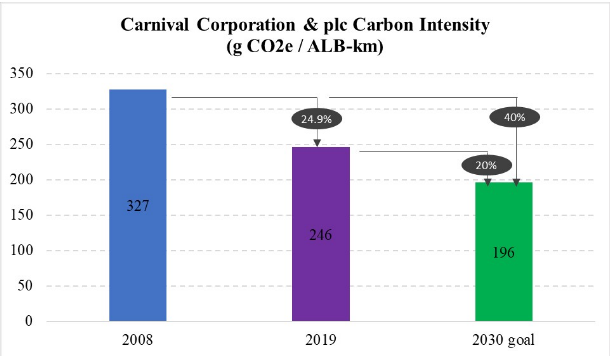
Metrics and Targets

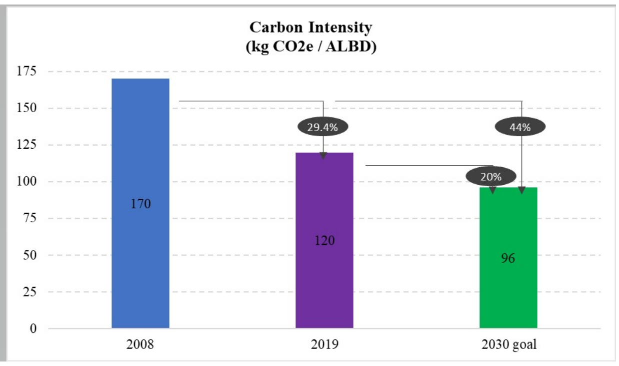
Our most material risks quantified, are the transition risks. To mitigate the impact of these risks, we have identified four strategic actions, including energy efficiency projects, fleet changes, itinerary changes, and port developments, to reduce our reliance on fossil fuels. The metrics and Climate Action Goals associated with these risks and opportunities, are outlined above within XV. Sustainability. To demonstrate our commitment to achieving our Climate Action Goals, we will be updating our executive compensation target linked to our progress toward achieving certain of our 2030 Sustainability Goals.

Our Scope 1 and 2 emissions are disclosed in our Carnival plc Annual Report but are not incorporated by reference into this Form 10-K. We quantify and report, using the GHG Protocol and obtain third-party assurance (under ISO-14064-3:2006) of our GHG emissions, including our direct (Scope 1) and indirect (Scope 2) emissions. During 2022, we performed an inventory of our Scope 3 GHG emissions using a baseline year of 2019 (our last full year of guest cruise operations) and determined that Scope 3 emissions were estimated to be approximately one half of our total emissions. We expect to disclose our Scope 3 emissions in our 2023 Carnival plc Annual Report. We plan to review the cross-industry metrics recommended by TCFD's 2021 Implementation Guidance and will consider additional relevant metrics in 2023.

We have made progress over the past 15 years reducing our carbon emission intensity and achieved our 2020 goal three years early (in 2017). We have also made progress towards our 2030 carbon intensity reduction goals of 40% from a 2008 baseline, measured in both grams of CO_2e per ALB-km and kilograms of CO_2e per ALBD. Through 2019, we reduced our carbon emission intensity on a lower berth distance basis by 25% relative to 2008 all while growing our capacity by 48%. Furthermore, because of our efforts, we peaked our absolute Scope 1 and 2 emissions in 2011.

During 2022, we updated the baseline year for both goals to 2019 from 2008. This new baseline year will help us better communicate recent progress against our Climate Action Goals to our investors and stakeholders and modernizes our disclosures in alignment with developing best practice and reporting standards. Both 2030 goals require a 20% decrease from 2019. With the updated baseline year, we have strengthened our goal measured in kilograms of CO_2e per ALBD since the initial 2030 goal would only have required a further 15% reduction from 2019 levels. Our goal measured in grams of CO_2e per ALB-km remains the same.





To support the mitigation of the climate-related risks identified relating to the restriction of carbon-intensive industries and fossil fuels, we have set 2030 Climate Action Goals.

XVI. Information Technology

With the increasing size and sophistication of cruise ships, the technologies employed to enhance guest experiences and operate ships have grown ever more complex and integrated. We have a Chief Information Officer ("CIO") who is responsible for leading three critical global functions across our brands: information technology, innovation, and cybersecurity/compliance. Our Boards of Directors have Audit Committees whose responsibility includes oversight of risk management relating to information technology, cybersecurity and data privacy. The CIO briefs the Audit Committees on these matters on a regular basis and generally at least quarterly.

Our global information technology model is designed to contribute to exceeding expectations of our guests, crew, shoreside team members and other stakeholders. All of our brands are actively collaborating to maximize the business value of our information technology solutions, standards and processes to eliminate redundancies and drive process efficiencies, while increasingly leveraging our scale and common technologies. In order to achieve our goals, we are focusing on several key factors including applications, compliance, connectivity, cybersecurity, data privacy, infrastructure, modernization and innovation.

In response to the increasing threat of continuously evolving cybersecurity risks, we have continued to invest in our information technology and operational technology cybersecurity programs, managing risk and protecting our company's business operations through targeted people, process and technology-focused improvements. This includes the implementation of routine data privacy and security focused training for our shoreside and certain shipboard team members. We have a Chief Information Security Officer who reports to the CIO and is responsible for leading global cybersecurity risk reduction efforts and compliance.

In light of numerous jurisdictional data privacy and security laws/regulations, we have data privacy and security standards across the corporation. We have a Chief Privacy Officer and Data Protection Officers who oversee our focus on the proper processing of personal information in alignment with our Privacy Policy.

XVII. Supply Chain

We incur expenses for goods and services to deliver exceptional cruise experiences to our guests. In addition, we incur significant capital expenditures for materials to support the refurbishment and enhancements of our vessels as well as to build new ships. We approach our spend strategically and look for suppliers who demonstrate the ability to help us leverage our scale in terms of cost, quality, service, innovation and sustainability. We are focused on the creation of strategic partnerships and will streamline our supplier base where it is prudent and on a risk-based basis. Our largest capital investments are for the construction of new ships.

Global supply markets and supply chains have been impacted by certain events, resulting in shortages, extended lead times and increased inflation impacting our operations and profitability. We continue to apply a number of different strategies to mitigate the impact of these challenges on our operations, including extending our demand planning, placing purchase orders earlier, leveraging corporate contracts, utilizing short-term or long-term contracts as needed, seeking alternative sources, utilizing substitute products and leveraging our supplier relationships.

XVIII. Insurance

a. General

We maintain insurance to cover a number of risks associated with owning and operating our vessels and other non-ship related risks. All such insurance policies are subject to coverage limits, exclusions and deductible levels. Insurance premiums are dependent on our own loss experience and the general premium requirements of our insurers. We maintain certain levels of deductibles for substantially all the below-mentioned coverages. We may increase our deductibles to mitigate future premium increases. We do not carry coverage related to loss of earnings or revenues from our ships or other operations.

b. Protection and Indemnity ("P&I") Coverages

Liabilities, costs and expenses for illness and injury to crew, guest injury, pollution and other third-party claims in connection with our cruise activities are covered by our P&I clubs, which are mutual indemnity associations owned by ship owners.

We are members of three P&I clubs, Gard, Steamship Mutual and UK Club, which are part of a worldwide group of 13 P&I clubs, known as the International Group of P&I Clubs (the "IG"). The IG insures directly, and through broad and established reinsurance markets, a large portion of the world's shipping fleets. Coverage is subject to the P&I clubs' rules and the limits of coverage are determined by the IG.

c. Hull and Machinery Insurance

We maintain insurance on the hull and machinery of each of our ships for reasonable amounts as determined by management. The coverage for hull and machinery is provided by large and well-established international marine insurers. Insurers make it a condition for insurance coverage that a ship be certified as “in class” by a classification society that is a member of the International Association of Classification Societies (“IACS”). All of our ships are routinely inspected and certified to be in class by an IACS member.

d. War Risk Insurance

We use a combination of insurance and self-insurance to cover war risk for legal liability to crew, guests and other third parties as well as loss or damage to our vessels arising from war or war-like actions. Our primary war risk insurance coverage is provided by international marine insurers and our excess war risk insurance is provided by our three P&I clubs. Under the terms of our war risk insurance coverage, which are typical for war risk policies in the marine industry, insurers can give us no less than three days’ notice that the insurance policies will be canceled. However, the policies may be reinstated at different premium rates.

e. Other Insurance

We maintain property insurance covering our shoreside assets and casualty insurance covering liabilities to third parties arising from our hotel and transportation business, shore excursion operations and shoreside operations, including our port and related commercial facilities. We also maintain worker’s compensation, director’s and officer’s liability and other insurance coverages.

XIX. Governmental Regulations

a. Maritime Regulations

1. General

Our ships are regulated by numerous international, national, state and local laws, regulations, treaties and other legal requirements, as well as voluntary agreements, which govern health, environmental, safety and security matters in relation to our guests, crew and ships. These requirements change regularly, sometimes on a daily basis, depending on the itineraries of our ships and the ports and countries visited. If we violate or fail to comply with any of these laws, regulations, treaties and other requirements, we could be fined or otherwise sanctioned by regulators. We are committed to complying with, or exceeding, all relevant requirements.

The primary regulatory bodies that establish maritime laws and requirements applicable to our ships include:

The IMO: All of our ships, and the maritime industry as a whole, are subject to the maritime safety, security and environmental regulations established by the IMO, a specialized agency of the United Nations. The IMO’s principal sets of requirements are mandated through its International Convention for the Safety of Life at Sea (“SOLAS”) and its International Convention for the Prevention of Pollution from Ships (“MARPOL”).

Flag States: Our ships are registered, or flagged, in The Bahamas, Bermuda, Italy, the Netherlands, Panama and the UK, which are also referred to as Flag States. Our ships are regulated by these Flag States through international conventions that govern, among other things, health, environmental, safety and security matters in relation to our guests, crew and ships. Representatives of each Flag State conduct periodic inspections, surveys and audits to verify compliance with these requirements.

Ship classification societies: Class certification is one of the necessary documents required for our cruise ships to be flagged in a specific country, obtain liability insurance and legally operate as passenger cruise ships. Our ships are subject to periodic class surveys, including dry-dock inspections, by ship classification societies to verify that our ships have been maintained in accordance with the rules of the classification societies and that recommended repairs have been satisfactorily completed. Dry-dock frequency is a statutory requirement mandated by SOLAS. Our ships dry-dock once or twice every five years, depending on the age of the ship.

National, regional and other authorities: We are subject to the decrees, directives, regulations and requirements of the European Union ("EU"), the UK, the U.S., other countries and hundreds of other authorities, including international ports that our ships visit every year.

Port regulatory authorities (Port State Control): Our ships are also subject to inspection by the port regulatory authorities, which are also referred to as Port State Control, in the various countries that they visit. Such inspections include verification of compliance with the maritime safety, security, environmental, customs, immigration, health and labor requirements applicable to each port, as well as with regional, national and international requirements. Many countries have joined together to form regional Port State Control authorities.

As members of the Cruise Lines International Association ("CLIA"), we helped to develop and have implemented policies that are intended to enhance shipboard safety and environmental protection throughout the cruise industry. In some cases, this calls for implementing best practices, which exceed existing legal requirements. Further details on these and other policies, which are not incorporated into this document, can be found on www.cruising.org.

Our Boards of Directors have Health, Environment, Safety and Security ("HESS") Committees, which were comprised of six independent directors as of November 30, 2022. The principal function of the HESS Committees is to assist the boards in fulfilling their responsibility to supervise and monitor our health, environment, safety, security and sustainability related policies, programs and initiatives at sea and ashore and compliance with related legal and regulatory requirements. The HESS Committees and our management team review significant HESS relevant risks or exposures and associated mitigating actions.

We are committed to implementing appropriate measures to manage identified risks effectively. We have a Chief Maritime Officer to oversee our global maritime operations, including maritime policy, maritime affairs, maritime standards, training, shipbuilding, asset management, health operations, and research and development. In addition, we have a Chief Risk and Compliance Officer who leads the effort to promote and monitor a strong ethics and compliance culture throughout the company, including all areas of HESS.

To help ensure that we are compliant with legal and regulatory requirements and that these areas of our business operate in an efficient and effective manner, we:

- Provide regular health, environmental, safety and security support, training, guidance and information to guests, team members and others working on our behalf
- Develop and implement effective and verifiable management systems to fulfill our health, environmental, safety, security and sustainability commitments
- Perform regular shoreside and shipboard audits and take appropriate action when deficiencies are identified
- Report and investigate health, environmental, safety and security incidents and strive to take appropriate action to prevent recurrence
- Identify those team members responsible for managing health, environment, safety, security and sustainability programs and aim to establish clear lines of accountability
- Identify the aspects of our business with potential to impact the environment and continue to take appropriate action to minimize that impact
- Monitor an anonymous hotline for any reported allegations or concerns and the related responses
- Review and work to improve policies and procedures designed to prevent, detect, respond and correct various regulatory violations and other misconduct

2. Maritime Safety Regulations

The IMO has adopted safety standards as part of SOLAS. To help ensure guest and crew safety, SOLAS establishes requirements for the following:

- Vessel design and structural features
- Construction and materials
- Refurbishment standards
- Radio communications
- Life-saving and other equipment
- Fire protection and detection
- Safe management and operation
- Musters

All of our crew undergo regular safety training that meets or exceeds all international maritime regulations, including SOLAS requirements, which are periodically revised.

SOLAS requires implementation of the International Safety Management Code ("ISM Code"), which provides an international standard for the safe management and operation of ships and for pollution prevention. The ISM Code is mandatory for passenger vessel operators. Under the ISM Code, vessel operators are required to:

- Develop and implement a Safety Management System ("SMS") that includes, among other things, the adoption of safety and environmental protection policies setting forth instructions and procedures for operating vessels safely and describing procedures for responding to emergencies and protecting the environment. In addition, our SMS includes health and security procedures
- Obtain a Document of Compliance ("DOC") for the vessel operator, as well as a Safety Management Certificate ("SMC") for each vessel they operate. These documents are issued by the vessel's Flag State and evidence compliance with the ISM Code and the SMS
- Verify or renew DOCs and SMCs periodically in accordance with the ISM Code

We have implemented and continue to develop policies and procedures that we believe enhance our commitment to the safety of our guests and crew. These initiatives include the following:

- Training of our bridge, engineering and environmental officers in maritime related best practices facilitated by our CSMART Academy, the Center for Simulator Maritime Training located within our Arison Maritime Center in Almere, Netherlands
- Further standardization of our detailed bridge and engine resource management procedures on our ships
- Expansion of our existing oversight function to monitor and assist operations through our state-of-the-art fleet operations centers in Miami and Hamburg
- Identifying and promoting the use of international standards and best-practice policies and procedures in health, environmental, safety and security disciplines across the organization including on all our ships
- Further enhancement of our processes for auditing our HESS performance throughout our operations

3. Maritime Security Regulations

Our ships are subject to numerous security requirements. These requirements include the International Ship and Port Facility Security Code, which is part of SOLAS, the U.S. Maritime Transportation Security Act of 2002, which addresses U.S. port and waterway security and the U.S. Cruise Vessel Security and Safety Act of 2010, which applies to all of our ships that embark or disembark passengers in the U.S. These regulations include requirements as to the following:

- Implementation of specific security measures, including onboard installation of a ship security alert system
- Assessment of vessel security
- Efforts to identify and deter security threats
- Training, drills and exercises
- Security plans that may include guest, vehicle and baggage screening procedures, security patrols, establishment of restricted areas, personnel identification procedures, access control measures and installation of surveillance equipment
- Establishment of procedures and policies for reporting and managing allegations of crimes

4. Maritime Environmental Regulations

We are subject to numerous international, multi-national, national, state and local environmental laws, regulations and treaties that govern air emissions, waste management, and the storage, handling, use and disposal of hazardous substances such as chemicals, solvents and paints.

As a means of managing and improving our environmental performance and compliance, we adhere to standards set by the International Organization for Standardization ("ISO"), an international standard-setting body, which produces worldwide industrial and commercial standards. The environmental management system of our company and ships is certified in accordance with ISO 14001, the environmental management standard that was developed to help organizations manage the environmental impacts of their processes, products and services. ISO 14001 defines an approach to setting and achieving environmental objectives and targets, within a structured management framework.

i. International Regulations

The principal international convention governing marine pollution prevention and response is MARPOL.

a. **Preventing and Minimizing Pollution**

MARPOL includes six annexes, four of which are applicable to our cruise ships, containing requirements designed to prevent and minimize both accidental and operational pollution by oil, sewage, garbage and air emissions and sets forth specific requirements related to vessel operations, equipment, recordkeeping and reporting that are designed to prevent and minimize pollution. All of our ships must carry an International Oil Pollution Prevention Certificate, an International Sewage Pollution Prevention Certificate, an International Air Pollution Prevention Certificate and a Garbage Management Plan. The ship's Flag State issues these certificates, which evidence their compliance with the MARPOL regulations regarding prevention of pollution by oil, sewage, garbage and air emissions. Certain jurisdictions have not adopted all of these MARPOL annexes but have established various national, regional or local laws and regulations that apply to these areas.

As noted above, MARPOL governs the prevention of pollution by oil from operational measures, as well as from accidental discharges. MARPOL requires that discharges of machinery space bilge water pass through pollution prevention equipment that separates oil from the water and monitors the discharged water to ensure that the effluent does not exceed 15 parts per million oil content. During 2019, we voluntarily completed the upgrade of oily water separation equipment to the latest MARPOL standards as set forth by the IMO onboard all of our ships. Our ships have oily water separators with oil content monitors installed and maintain a record of certain engine room operations in an Oil Record Book. In addition, we have voluntarily installed redundant systems on all of our ships that monitor processed bilge water a second time prior to discharge to help ensure that it contains no more than 15 parts per million oil content. This system also provides additional controls to prevent improper bilge water discharges. MARPOL also requires that our ships have Shipboard Oil Pollution Emergency Plans.

MARPOL also governs the discharge of sewage from ships and contains regulations regarding the ships' equipment and systems for the control of sewage discharge, the provision of facilities at ports and terminals for the reception of sewage and requirements for survey and certification.

MARPOL also governs the discharge of garbage from ships and requires the implementation of Garbage Management Plan and the maintenance of a Garbage Record Book.

Furthermore, MARPOL addresses air emissions from vessels, establishes requirements for the prevention of air pollution from ships to reduce emissions of sulfur oxides ("SOx"), nitrogen oxides ("NOx"), particulate matter and GHG emissions. It also contains restrictions on the use of ozone depleting substances ("ODS") and requires the recording of ODS use, equipment containing ODS and the emission of ODS.

b. **Sulfur Emissions**

The IMO has adopted a global 0.5% sulfur cap for marine fuel which began in January 2020. The EU Parliament and Council has also adopted 0.5% sulfur content fuel requirement (the "EU Sulfur Directive"). The options to comply with both the global 0.5% sulfur cap and the EU Sulfur Directive include the installation of Advanced Air Quality Systems, or the use of low sulfur or alternative fuels.

MARPOL addresses air emissions from both auxiliary and main propulsion diesel engines on ships and further specifies requirements for Emission Control Areas ("ECAs") with stricter limitations on sulfur emissions content in these areas, requiring ships to use fuel with a sulfur content of no more than 0.1%, or to use alternative emission reduction methods, such as Advanced Air Quality Systems.

We have Advanced Air Quality Systems on most of our ships, which are aiding in partially mitigating the financial impact from the ECAs and global 0.5% sulfur requirements. We use Advanced Air Quality Systems wherever possible subject to local laws and regulations. Additionally, Advanced Air Quality Systems used with heavy fuel oil ("HFO") results in as good or better SOx, NOx, and particulate emissions compared to MGO while also resulting in a marginal reduction of well-to-wake carbon emissions. These refer to the emissions generated throughout the entire process of fuel production, delivery and use onboard ships.

c. Greenhouse Gas Emissions

In 2013, the IMO approved measures to improve energy efficiency and reduce emissions of GHGs from international shipping by adopting technical and operational measures for all ships. The technical measures apply to the design of new vessels, and the operational reduction measures apply to all vessels. Operational reduction measures have been implemented through a variety of means, including a Ship Energy Efficiency Management Plan, improved voyage planning and more frequent propeller and hull cleanings. We have established objectives within the ISO 14001 environmental management system for each of our brands to further reduce fuel consumption rates and the resulting GHG emissions.

In 2016, the IMO approved the implementation of a mandatory data collection system ("DCS") for fuel oil consumption. The DCS requires ships of 5,000 gross tons and above to provide fuel consumption data to their respective Flag State at the end of each calendar year, beginning in 2019. Flag States validate the data and transfer it to an IMO database. The IMO will produce a summary annual report with anonymous data. In 2018, the IMO also set aspirations to achieve several shipping industry GHG emission reduction goals with 2030 and 2050 target dates. In November 2020, the IMO's Marine Environment Protection Committee approved further MARPOL changes in support of its GHG emission reduction goals, which have entered into force on January 1, 2023 and include the Carbon Intensity Indicator ("CII"), an annual ship-level CO_2 intensity emissions performance measure, and the Energy Efficiency Existing Ship Index ("EEXI"), a one-off measure similar to the Energy Efficiency Design Index ("EEDI") for newbuilds, that confirms for a specific condition that a ship meets a target CO_2 emission intensity. The EEXI is not expected to have a material impact and the impact for CII is uncertain as the enforcement mechanism of the regulation is still to be defined. In addition, the IMO is currently considering various other proposals which aim to reduce GHG emissions within the global shipping industry. These proposals include a range of measures including possible fuel standards and market-based measures, such as a carbon levy, that, if enacted, could result in changes to itineraries or increased compliance related costs which may individually and collectively have a material impact on our profitability.

d. Ballast Water

Ballast water is water used to stabilize ships at sea and maintain safe operating conditions throughout a voyage. Ballast water can carry a multitude of marine species. In 2017, the IMO's Ballast Water Management Convention entered into force, which governs the discharge of ballast water from ships. Subsequent amendments effectively extended the implementation date for installation of ballast water management systems for existing ships by about two years, though other requirements went into effect immediately, including requirements for ballast water exchange, record keeping, and maintaining an approved Ballast Water Management Plan. The Convention is designed to regulate the treatment of ballast water prior to discharging overboard in order to avoid the transfer of marine species to new environments, as well as establishing other ballast water management practices for monitoring and environmental protection.

ii. U.S. Federal and State Regulations

The Act to Prevent Pollution from Ships implements several MARPOL Annexes in the U.S. and imposes numerous requirements on our ships, as discussed above. Administrative, civil and criminal penalties may be assessed for violations.

The Oil Pollution Act of 1990 ("OPA 90") established a comprehensive federal liability regime, as well as prevention and response requirements, relating to discharges of oil in U.S. waters. The major requirements include demonstrating financial responsibility up to the liability limits set by OPA 90 and having oil spill response plans in place. We have Certificates of Financial Responsibility ("COFR") that demonstrate our ability to meet the liability limits of OPA 90 based on the gross tonnage of our ships for removal costs and damages, such as from an oil spill. The COFR also covers releases of hazardous substances. It is possible, however, for our liability limits to be broken, which could expose us to unlimited liability. Under OPA 90, owners or operators of vessels operating in U.S. waters must file Vessel Response Plans with the U.S. Coast Guard ("USCG") and must operate and conduct any response action in compliance with these plans. As OPA 90 expressly allows coastal states to impose liabilities and requirements beyond those imposed under federal law, many U.S. states have enacted laws more stringent than OPA 90. Some of these state laws impose unlimited liability for oil spills and contain more stringent financial responsibility and contingency planning requirements. Most coastal states have also enacted environmental regulations that impose strict liability for removal costs and damages resulting from a discharge of oil or a release of a hazardous substance, similar to OPA 90.

The Clean Water Act ("CWA") provides the U.S. Environmental Protection Agency ("EPA") with the authority to regulate incidental discharges from commercial vessels, including discharges of ballast water, bilge water, gray water, anti-fouling paints and other substances during normal operations within the U.S. three mile territorial sea and inland waters. Pursuant to the CWA authority, the U.S. National Pollutant Discharge Elimination System was designed to minimize pollution within U.S. territorial waters. For our affected ships, the incidental discharge requirements are set forth in EPA's Vessel General Permit

(“VGP”) for discharges incidental to the normal operations of vessels. The VGP establishes effluent limits for specific discharges incidental to the normal operation of a vessel, many of which apply to our cruise ships. In addition to the requirements associated with these discharges and more stringent vessel-specific requirements, the VGP includes requirements for inspections, monitoring, reporting and record-keeping. In 2018, the Vessel Incidental Discharge Act (“VIDA”) was signed into law and was intended to clarify and streamline discharge requirements for the incidental discharges covered by the VGP and certain USCG regulations for ballast water. More specifically, a new section was added to the CWA called “Uniform National Standards for Discharges Incidental to Normal Operation of Vessels.” Once fully implemented, VIDA will replace the VGP; however, while the standards and regulations are being developed the 2013 VGP has been administratively extended and will remain in effect. VIDA requires the standards and regulations to be at least as stringent as the existing requirements in the 2013 VGP and USCG regulations, unless information becomes available that was not reasonably available when the initial standard of performance was issued, and that information would have justified a less stringent standard. In October 2020, the EPA posted its notice of proposed rulemaking to set standards for 20 types of vessel discharges incidental to normal operations. The discharge standards are organized into three categories: (1) general operation and maintenance; (2) biofouling management; and (3) oil management. These standards mandate overall minimization of discharges and prescribe associated best management practices. No training or education requirements are included, as these will be set by the USCG in its rulemaking once EPA’s standards are finalized. Notably, EPA incorporated discharge standards applicable to exhaust gas cleaning system discharges based substantially on applicable IMO guidelines, which better harmonizes the VGP and IMO requirements. While the proposed rule provides clarity into the likely structure of VIDA, there is uncertainty over the mechanism through which state-specific standards may be implemented.

We are subject to the requirements of the U.S. Resource Conservation and Recovery Act for the disposal of both hazardous and non-hazardous solid wastes that are generated by our ships. In general, vessel owners are required to determine if their wastes are hazardous and, when landing waste ashore, comply with certain standards for the proper management of hazardous wastes, including the use of hazardous waste manifests for shipments to approved disposal facilities.

The U.S. National Invasive Species Act (“NISA”) was enacted in 1996 in response to growing reports of harmful organisms being released into U.S. waters through ballast water taken on by vessels in foreign waters. The USCG adopted regulations under NISA that impose mandatory ballast water management practices for all vessels equipped with ballast water tanks entering U.S. waters. Depending on a vessel’s compliance date for installation of a USCG type-approved ballast water management system, these requirements may now be met by performing mid-ocean ballast exchange, by retaining ballast water onboard the vessel or by using a ballast water management system authorized or approved by the USCG. In the near future, ballast exchange will no longer be permissible. These USCG regulations, however, will ultimately be replaced with the new regulatory regime being developed under VIDA, which is expected to contain similar requirements.

The state of Alaska has enacted legislation that prohibits certain discharges in designated Alaskan waters and sets effluent limits on others, which are applicable to cruise ships. Further, the state of Alaska requires that certain discharges be reported and monitored to verify compliance with the standards established by the legislation. Environmental regimes in Alaska are more stringent than the U.S. federal requirements with regard to discharges from vessels. The legislation also provides that repeat violators of the regulations could be prohibited from operating in Alaskan waters. The state of California also has environmental requirements significantly more stringent than federal requirements for water discharges and air emissions.

iii. EU Regulations

The EU has adopted a broad range of substantial environmental measures aimed at improving the quality of the environment for European citizens. To support the implementation and enforcement of European environmental legislation, the EU has adopted directives on environmental liability and enforcement and a recommendation providing for minimum criteria for environmental inspections.

The European Commission’s (“EC”) strategy is to reduce emissions from ships. The EC strategy seeks to implement SOx Emission Control Areas set out in MARPOL, as discussed above via their own Sulphur Directive.

The EC has also implemented regulations aimed at reducing GHG emissions from maritime shipping through a Monitoring, Reporting and Verification regulation, which involves collecting emissions data from ships over 5,000 gross tons to monitor and report carbon emissions on all voyages to, from and between European Union ports.

The EU is in the process of adopting a series of significant carbon reforms as a part of its Fit for 55 package to meet its 2030 emissions reduction goal. The main instruments for reducing emissions are the Emissions Trading System (“ETS”), Energy Taxation Directive (“ETD”) and the newly proposed FuelEU Maritime initiative as well as amendments to the alternative fuels infrastructure and renewable energy directives.

The ETS regulates carbon emissions through a “cap and trade” principle, where a cap is set on the total amount of certain GHGs that can be emitted. The recently agreed inclusion of the maritime shipping sector within the scope of ETS will become effective from January 2024 and introduces a mechanism whereby we will be required to procure carbon emission allowances covering 40% of emissions inside EU waters, to be surrendered in 2025, 70% of 2025 emissions to be surrendered in 2026 and 100% of annual emissions thereafter, to be surrendered in the following year.

The ETD is a framework for the taxation of energy products and sets minimum rates of excise duty to encourage a low-carbon economy. Proposed amendments to the ETD will introduce new tax rates based on the energy content and environmental impact rather than volume. If adopted, these amendments will also widen the directive to include maritime fuels, which were previously exempt.

The recently proposed FuelEU Maritime initiative is a long-term framework to reduce maritime emissions by increasing the use of sustainable alternative fuels, and for the cruise industry, the use of shore power. The proposal also requires compliance with the maximum limits of GHG intensity of energy used on board. The stringency of these limits increases over time and there are financial penalties for non-compliance. The initiative also includes requirements for ships to connect to shore power when at EU ports.

The Fit for 55 regulations may individually and collectively result in increased costs and have an impact on our profitability beginning in 2024, and increasing to have a material impact on our profitability beginning in 2025. The exact impact is uncertain as elements of the proposals have not yet been finalized and enacted and the costs of ETS allowances will depend on future markets.

5. Maritime Health Regulations

We are committed to providing a healthy environment for all of our guests and crew. We collaborate with public health inspection programs throughout the world, such as the Centers for Disease Control and Prevention (“CDC”) in the U.S. and the SHIPSAN Project in the EU, to ensure that development of these programs leads to enhanced health and hygiene onboard our ships. Through our collaborative efforts, we work with the authorities to develop and revise guidelines, review plans and conduct on-site inspections for all newbuilds and significant ship renovations. We work closely with governments and health authorities around the world to ensure that our health and safety protocols comply with the requirements of each location. In addition, we continue to maintain our ships by meeting, and often exceeding, applicable public health guidelines and requirements, complying with inspections, reporting communicable illnesses and conducting regular crew training and guest education programs.

6. Maritime Labor Regulations

The International Labor Organization develops and oversees international labor standards and includes a broad range of requirements, such as the definition of a seafarer, minimum age of seafarers, medical certificates, recruitment practices, training, repatriation, food, recreational facilities, health and welfare, hours of work and rest, accommodations, wages and entitlements.

The International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, as amended, establishes additional minimum standards relating to training, including security training, certification and watchkeeping for our seafarers.

b. Other Governmental Regulations

Compliance with GHG regulations and the associated potential cost is complicated by the fact that various countries and regions are following different approaches to climate-related regulations.

In most countries where we source the majority of our guests, we are required to establish financial responsibility, such as obtaining a guarantee from stable financial institutions and insurance companies, to satisfy liability in cases of our non-performance of obligations to our guests. The amount of financial responsibility varies by jurisdiction based on the amount mandated by the applicable local legislation, regulatory agency or association.

In Australia and most of Europe, we may be obligated to honor our guests’ cruise payments made by them to their travel agents and tour operators regardless of whether we receive these payments.

We are, or may in the future become, subject to other laws and regulations which require our compliance, including those addressing antitrust, anti-money laundering, bribery, corruption, data privacy, human rights, securities and sanctions, reporting on sustainability matters, as well as human resources related matters.

XX. Taxation

A summary of our principal taxes and exemptions in the jurisdictions where our significant operations are located is as follows:

a. U.S. Income Tax

We are primarily foreign corporations engaged in the business of operating cruise ships in international transportation. We also own and operate, among other businesses, the U.S. hotel and transportation business of Holland America Princess Alaska Tours through U.S. corporations.

Our North American cruise ship businesses and certain ship-owning subsidiaries are engaged in a trade or business within the U.S. Depending on its itinerary, any particular ship may generate income from sources within the U.S. We believe that our U.S. source income and the income of our ship-owning subsidiaries, to the extent derived from, or incidental to, the international operation of a ship or ships, is currently exempt from U.S. federal income and branch profit taxes.

Our domestic U.S. operations, principally the hotel and transportation business of Holland America Princess Alaska Tours, are subject to federal and state income taxation in the U.S.

We do not believe we were a passive foreign investment company ("PFIC"), within the meaning of Section 1297 of the Internal Revenue Code, for the 2022 taxable year and do not currently expect to be a PFIC in the 2023 taxable year.

1. Application of Section 883 of the Internal Revenue Code

In general, under Section 883 of the Internal Revenue Code, certain non-U.S. corporations (such as our North American cruise ship businesses) are not subject to U.S. federal income tax or branch profits tax on U.S. source income derived from, or incidental to, the international operation of a ship or ships. Applicable U.S. Treasury regulations provide in general that a foreign corporation will qualify for the benefits of Section 883 if, in relevant part, (i) the foreign country in which the foreign corporation is organized grants an equivalent exemption to corporations organized in the U.S. in respect of each category of shipping income for which an exemption is being claimed under Section 883 (an "equivalent exemption jurisdiction") and (ii) the foreign corporation meets a defined publicly-traded corporation stock ownership test (the "publicly-traded test"). Subsidiaries of foreign corporations that are organized in an equivalent exemption jurisdiction and meet the publicly-traded test also benefit from Section 883. We believe that Panama is an equivalent exemption jurisdiction and that Carnival Corporation currently satisfies the publicly-traded test under the regulations. Accordingly, substantially all of Carnival Corporation's income is exempt from U.S. federal income and branch profit taxes.

Regulations under Section 883 list certain activities that the Internal Revenue Service ("IRS") does not consider to be incidental to the international operation of ships and, therefore, the income attributable to such activities, to the extent such income is U.S. source, does not qualify for the Section 883 exemption. Among the activities identified as not incidental are income from the sale of air transportation, transfers, shore excursions and pre- and post-cruise land packages to the extent earned from sources within the U.S.

2. Exemption Under Applicable Income Tax Treaties

We believe that the U.S. source transportation income earned by Carnival plc and its subsidiaries currently qualifies for exemption from U.S. federal income tax under applicable bilateral U.S. income tax treaties.

3. U.S. State Income Tax

Carnival Corporation, Carnival plc and certain subsidiaries are subject to various U.S. state income taxes generally imposed on each state's portion of the U.S. source income subject to U.S. federal income taxes. However, the state of Alaska imposes an income tax on its allocated portion of the total income of our companies doing business in Alaska and certain of their subsidiaries.

b. UK and Australian Income Tax

Cunard, P&O Cruises (UK) and P&O Cruises (Australia) are divisions of Carnival plc and have elected to enter UK tonnage tax under a rolling ten-year term and, accordingly, reapply every year. Companies to which the tonnage tax regime applies pay corporation taxes on profits calculated by reference to the net tonnage of qualifying ships. UK corporation tax is not chargeable under the normal UK tax rules on these brands' relevant shipping income. Relevant shipping income includes income from the operation of qualifying ships and from shipping related activities.

For a company to be eligible for the regime, it must be subject to UK corporation tax and, among other matters, operate qualifying ships that are strategically and commercially managed in the UK. Companies within UK tonnage tax are also subject to a seafarer training requirement.

Our UK non-shipping activities that do not qualify under the UK tonnage tax regime remain subject to normal UK corporation tax.

P&O Cruises (Australia) and all of the other cruise ships operated internationally by Carnival plc for the cruise segment of the Australian vacation region are exempt from Australian corporation tax by virtue of the UK/Australian income tax treaty.

c. Italian and German Income Tax

In 2015, Costa and AIDA re-elected to enter the Italian tonnage tax regime through 2024 and can reapply for an additional ten-year period beginning in early 2025. Companies to which the tonnage tax regime applies pay corporation taxes on shipping profits calculated by reference to the net tonnage of qualifying ships.

Most of Costa's and AIDA's earnings that are not eligible for taxation under the Italian tonnage tax regime will be taxed at an effective tax rate of 4.8% in 2022 and 2021.

Substantially all of AIDA's earnings are exempt from German income taxes by virtue of the Germany/Italy income tax treaty.

d. Other

In addition to or in place of income taxes, virtually all jurisdictions where our ships call impose taxes, fees and other charges based on guest counts, ship tonnage, passenger capacity or some other measure.

XXI. Trademarks and Other Intellectual Property

We own, use and/or have registered or licensed numerous trademarks, patents and patent pending designs and technology, copyrights and domain names, which have considerable value and some of which are widely recognized throughout the world. These intangible assets enable us to distinguish our cruise products and services, ships and programs from those of our competitors. We own or license the trademarks for the trade names of our cruise brands, each of which we believe is a widely-recognized brand in the cruise industry, as well as our ship names and a wide variety of cruise products and services.

XXII. Competition

We compete with land-based vacation alternatives throughout the world, such as hotels, resorts (including all-inclusive resorts), theme parks, organized tours, casinos, vacation ownership properties, and other internet-based alternative lodging sites. Based on 2022 Cruise Industry News statistics, as of December 31, 2022, we, along with our principal cruise competitors Royal Caribbean Group, Norwegian Cruise Line Holdings, Ltd. and MSC Cruises, represented approximately 80% of the cruise industry capacity, including ships operating with guests onboard and ships in pause status expected to return to guest cruise operations.

D. Website Access to Carnival Corporation & plc SEC Reports

We use our websites as channels of distribution of company information. Our Form 10-K, joint Quarterly Reports on Form 10-Q, joint Current Reports on Form 8-K, joint Proxy Statement related to our annual shareholders meeting, Section 16 filings and all amendments to those reports are available free of charge at www.carnivalcorp.com and www.carnivalplc.com and on the SEC's website at www.sec.gov as soon as reasonably practicable after we have electronically filed or furnished these reports with the SEC. In addition, you may automatically receive email alerts and other information when you enroll your email address by visiting the Investor Services section of our websites. The content of any website referred to in this document is not incorporated by reference into this document.

E. Industry and Market Data

This document includes market share and industry data and forecasts that we obtained from industry publications, third-party surveys and internal company surveys. Industry publications, including those from Cruise Industry News, and surveys and forecasts, generally state that the information contained therein has been obtained from sources believed to be reliable. Cruise Industry News is a for profit magazine company that covers all aspects of cruise operations. Their magazines and annual report cover all cruise lines and shipyards and report on all aspects of cruise operations including relevant issues, financial results, ship building, ship reviews, etc. All other references to third party information are publicly available at nominal or no cost. We use the most currently available industry and market data to support statements as to our market positions. Although we believe that the industry publications and third-party sources are reliable, we have not independently verified any of the data. Similarly, while we believe our internal estimates with respect to our industry are reliable, they have not been verified by any independent sources. While we are not aware of any misstatements regarding any industry data presented herein, our estimates, in particular as they relate to market share and our general expectations, involve risks and uncertainties and are subject to change based on various factors, including those discussed under Part I, Item 1A. Risk Factors and Exhibit 13, Management's Discussion and Analysis of Financial Condition and Results of Operations, in this Form 10-K.

Item 1A. Risk Factors.

You should carefully consider the following discussion of material factors, events and uncertainties that make an investment in the company's securities risky and provide important information for the understanding of the "forward-looking" statements discussed in this Form 10-K and elsewhere. These risk factors should be read in conjunction with other information in this Form 10-K.

The events and consequences discussed in these risk factors could have a material adverse effect on the company's business, financial condition, operating results and stock price. These risk factors do not identify all risks that the company faces; operations could also be affected by factors, events, or uncertainties that are not presently known to the company or that the company currently does not consider to present material risks to its operations. In addition to the effects of the COVID-19 pandemic and resulting global disruptions on our business and operations discussed in Item 7 of this Form 10-K and in the risk factors below, additional or unforeseen effects from our substantial debt balance as a result of the pause of our guest cruise operations could give rise to or amplify many of the risks discussed below. Some of the statements in this item and elsewhere in this document are "forward-looking statements." For a discussion of those statements and of other factors to consider see the "Cautionary Note Concerning Factors That May Affect Future Results" section.

The ordering and lettering of the risk factors set forth below is not intended to reflect any company indication of priority or likelihood.

Operating Risk Factors

a. *Events and conditions around the world, including war and other military actions, such as the invasion of Ukraine, inflation, higher fuel prices, higher interest rates and other general concerns impacting the ability or desire of people to travel have led, and may in the future lead, to a decline in demand for cruises, impacting our operating costs and profitability.*

We have been, and may continue to be, impacted by the public's concerns regarding the health, safety and security of travel, including government travel advisories and travel restrictions, political instability and civil unrest, terrorist attacks, war and military action, most recently the invasion of Ukraine, and other general concerns. The invasion of Ukraine and its resulting impacts, including supply chain disruptions, increased fuel prices, impact on demand for cruises to neighboring regions and international sanctions and other measures that have been imposed, have adversely affected, and may continue to adversely affect, our business. These factors may also have the effect of heightening many other risks to our business, any of which could materially and adversely affect our business and results of operations. Additionally, we have been, and may continue to be, impacted by heightened regulations around customs and border control, travel bans to and from certain geographical areas, voluntary changes to our itineraries in light of geopolitical events, government policies increasing the difficulty of travel and limitations on issuing international travel visas. We may be impacted by adverse changes in the perceived or actual economic climate, such as inflation, global or regional recessions, higher unemployment and underemployment rates and declines in income levels.

b. Pandemics have in the past and may in the future have a significant negative impact on our financial condition and operations.

Pandemics have in the past and may in the future have a significant negative impact on our financial condition and operations. We could:

- be forced to re-implement a pause of our guest cruise operations
- be negatively impacted by travel advisories, restrictions, recommendations and regulations set by various governmental authorities, which could impact our occupancy levels
- be subject to enhanced health and hygiene requirements in attempts to counteract future outbreaks, and these requirements may be costly, take a significant amount of time to implement across our global cruise operations and may result in disruptions in guest cruise operations, incremental costs and loss of revenue
- be subject to negative publicity, along with the cruise industry, which could have a long-term impact on the appeal of our cruises
- be subject to lawsuits, other governmental investigations and other actions
- reassess our ship deployment options and our fleet, which could lead to the removal of additional ships from our fleet and may result in incremental ship impairment charges and losses on ship sales
- be negatively impacted as a result of the adverse impact on our partners, counterparties and joint ventures
- be negatively impacted by the inability to attract and retain the loyalty of our guests and hire and retain our crew

c. Incidents concerning our ships, guests or the cruise industry have in the past and may, in the future, negatively impact the satisfaction of our guests and crew and lead to reputational damage.

Our operations involve the risk of incidents and media coverage thereof. Such incidents include, but are not limited to, the improper operation or maintenance of ships, motorcoaches and trains; guest and crew illnesses; mechanical failures, fires and collisions; repair delays, groundings and navigational errors; oil spills and other maritime and environmental issues as well as other incidents at sea, while in port or on land which may generate negative publicity or cause guest and crew discomfort, injury, or death. Although our commitment to the safety and comfort of our guests and crew is paramount to the success of our business, our ships have been involved in outbreaks, accidents and other incidents in the past and we may experience similar or other incidents in the future. Our ability to attract and retain the loyalty of our guests, our ability to hire and the amounts we must pay our crew depend, in part, upon the perception and reputation of our company and our brands and the public's concerns regarding the health and safety of travel generally, as well as the cruising industry and our ships specifically. In addition, these and any other events which impact the travel industry more generally may negatively impact our guests' and/or crew's ability or desire to travel to or from our ships and/or interrupt the supply of critical goods and services.

d. Changes in and non-compliance with laws and regulations under which we operate, such as those relating to health, environment, safety and security, data privacy and protection, anti-corruption, economic sanctions, trade protection, labor and employment, and tax have in the past and may, in the future, lead to litigation, enforcement actions, fines, penalties and reputational damage.

We are subject to numerous international, national, state and local laws, regulations, treaties and other legal requirements that govern health, environmental, safety and security matters in relation to our guests, crew and ships. These requirements change regularly, depending on the itineraries of our ships and the ports and countries visited. Implementing these and any subsequent requirements may be costly and take time to implement across our global cruise operations. In addition, the accelerating pace of regulatory changes may affect our ability to comply in the future. If we violate or fail to comply with any of these laws, regulations, treaties and other requirements we could be, and have previously been, fined, placed on probation or otherwise sanctioned by regulators. In addition, there is increased global focus on climate change, which may lead to additional regulatory requirements. Refer to Operating Risk Factor "e." below for additional discussion on climate change regulation risks. We were subject to a court-ordered environmental compliance plan supervised by the U.S. District Court for the Southern District of Florida, which was operative until April 2022 and subjected our operations to additional review and other obligations.

We are subject to laws and requirements related to the treatment and protection of personal, sensitive and/or other regulated data in the jurisdictions where we operate. Various governments, agencies and regulatory organizations have enacted or are considering new rules and regulations and we expect to continue to incur costs to comply with these rules and regulations. In the course of doing business, we collect guest, team member, company and other third-party data, including personally identifiable information and other sensitive data. We have incurred legal and other costs in connection with cyber incidents relating to such sensitive data. Refer to Operating Risk Factor "g." below for additional discussion of data security risks.

Our operations subject us to potential liability under anti-corruption laws and regulations. We may also be affected by economic sanctions, trade protection laws, policies and other regulatory requirements affecting trade and investment.

We are subject to compliance with tax laws, regulations and treaties in the jurisdictions in which we are incorporated or operate. These tax laws, regulations and treaties are subject to change at any time, which may result in substantially higher tax expense. For example, the Organization for Economic Co-operation and Development ("OECD") has proposed a multi-jurisdictional inclusive framework to address base erosion and profit sharing that, if enacted by relevant jurisdictions, may result in increased tax expense.

e. Factors associated with climate change, including evolving and increasing regulations, increasing global concern about climate change and the shift in climate conscious consumerism and stakeholder scrutiny, and increasing frequency and/or severity of adverse weather conditions could adversely affect our business.

Growing concerns regarding climate change have resulted in increased global regulatory focus on GHG and other emissions which may have material impacts on our business. For example, the EU's Fit for 55 package, which includes recently agreed updates to the ETS relating to the need to acquire carbon emission allowances for maritime shipping related emissions inside EU waters, proposed reforms to the EU's ETD, which imposes taxes on fuel purchased in the EU, as well as a new regulatory proposal, the FuelEU Maritime initiative, which sets out a long-term framework to reduce emissions by increasing the use of sustainable alternative fuels and shore power. In addition, the IMO is currently considering various other proposals which aim to reduce emissions within the global shipping industry. If finalized and enacted, these regulations and reforms may individually or collectively have a material impact on our operating costs and profitability. Regulatory efforts, both internationally and in the U.S., are evolving, including the international alignment of such efforts, and we cannot determine what final regulations will be enacted or their ultimate impact on our business. Climate change-related regulatory activity and developments that require us to reduce our emissions, which includes both the EU and IMO proposals discussed above, may adversely affect our business and financial results by requiring us to make capital investments in new equipment or technologies, pay for carbon emissions, purchase carbon offset credits, or otherwise incur additional costs or take additional actions related to our emissions. Such activity may also impact us indirectly by increasing our operating costs, including fuel costs. Regulatory developments may also result in the inability to operate ships that do not meet certain standards, the acceleration of the removal of less fuel-efficient ships from our fleet and impact the resale value of our ships in the future. In addition, regulatory developments may restrict or limit our access to certain destinations and/or countries or curtail our freedom to operate.

Growing recognition among consumers globally of the negative effects of climate change and the impact of GHG and other emissions may lead to material changes in consumer preferences. For instance, our guests may choose a vacation option that they perceive as operating in a manner that is more sustainable for the climate, seek alternative methods of travel, or reduce the amount and frequency of their travel. In addition, some environmental focused groups have and may continue to generate negative publicity regarding the environmental impact of the cruise industry and are advocating for more stringent regulation of ship emissions while the ship is docked and at sea. Growing environmental scrutiny of our operations and the industry from the investment community, other stakeholders, and the media have impacted and may continue to impact how we are perceived, which may have a material impact on our operations and financial results. Certain climate-related actions and investments we make today may not lead us to our intended future emissions related goals or may not be favorably perceived in future years based on continuing evolving regulations and perceptions around effective emissions mitigation strategies and technologies.

Our cruise ships, hotels, land tours, port and related commercial facilities and shore excursions have been and may continue to be impacted by adverse weather patterns or other natural disasters, such as hurricanes, earthquakes, floods, fires, tornadoes, tsunamis, typhoons and volcanic eruptions. Climate change is expected to increase the frequency and intensity of certain adverse weather patterns, possibly making certain destinations less desirable or impacting our business in other ways. We have been forced to, and in the future may be forced to, alter itineraries or cancel a cruise or a series of cruises or tours due to these or other types of disruptions. The physical climate-related risks to our business include increased hurricane/typhoon intensity and frequency, increases in global temperatures and rising sea levels which may adversely impact our shoreside facilities, our investments in ports or the availability or desirability of ports and destinations in which we operate. These effects may also disrupt the supply of critical goods and services to our facilities and ships. Any of these events could have a material impact on our business and profitability.

f. Inability to meet or achieve our sustainability related goals, aspirations, initiatives, and our public statements and disclosures regarding them, may expose us to risks that may adversely impact our business.

We have developed and will continue to establish goals, targets, aspirations, and other objectives ("sustainability objectives") related to sustainability matters. These statements reflect our current plans and do not constitute a guarantee that they will be achieved. Our efforts to research, establish, accomplish, and accurately report on these sustainability objectives expose us to numerous operational, reputational, financial, legal, and other risks, any of which could have a negative impact on our business. Our ability to achieve any of our stated sustainability objectives, particularly with respect to environmental emissions, is subject to numerous factors and conditions, many of which are outside of our control. Examples of such factors include the availability and costs of low- or non-carbon-based energy sources, evolving regulatory requirements affecting sustainability standards or disclosures, the availability of future financing and the availability of suppliers that can meet our sustainability standards.

Our business may face increased scrutiny from our guests, our team members, the investment community, governments, regulators, destinations and other stakeholders that we serve related to our sustainability activities, including the sustainability objectives that we adopt, our methodologies and timelines for pursuing them and our ability to document and support the achievement of those objectives. If our sustainability practices do not meet, or are perceived to fall short of, the expectations of our guests, team members, investors or other stakeholders, demand for cruising, our reputation, our ability to attract or retain team members, and our attractiveness as an investment could be negatively impacted. Similarly, our failure or perceived failure to pursue or fulfill our sustainability objectives within the timelines we announce, or at all, could have the same negative impacts as well as expose us to government enforcement actions and private litigation.

g. Breaches in data security and lapses in data privacy as well as disruptions and other damages to our principal offices, information technology operations and system networks and failure to keep pace with developments in technology may adversely impact our business operations, the satisfaction of our guests and crew and may lead to reputational damage.

We have been and may continue to be impacted by breaches in data security and lapses in data privacy, which occur from time to time. These can vary in scope and intent from motivated driven attacks to malicious attacks intended to disrupt or compromise our shoreside and shipboard operations by targeting our key operating systems. Breach or circumvention of our systems or the systems of third parties, including by ransomware or malware, through vulnerabilities in licensed software or hardware, or as a result of other attacks, results in disruptions to our business operations; unauthorized access to (or the loss of company access to) competitively sensitive, confidential or other critical data (including sensitive financial, medical or other personal or business information) or systems; loss of customers; financial losses; regulatory investigations, enforcement actions and fines; litigation and misuse or corruption of critical data and proprietary information, any of which could be material.

We have been subject to past attacks which resulted in unauthorized access to systems and/or data and regulatory investigations regarding such incidents. We have incurred legal, settlement and other costs in connection with cyber incidents that have impacted us. While these incidents did not have a material adverse effect on our business, operations or financial results, no assurances can be given about future incidents, attacks and related litigation or regulatory investigations that could have such a material adverse effect.

Our principal offices, information technology operations, system networks and various remote work locations may be impacted by actual or threatened natural disasters (for example, hurricanes, earthquakes, floods, fires, tornadoes, tsunamis and typhoons) or other disruptive events. Our maritime and/or shoreside operations, including our ability to manage our inventory of cabins held for sale and set pricing, control costs and serve our guests, depends on the reliability of our information technology operations and system networks, as well as our ability to refine and update to more advanced systems and technologies. In addition, we may be unable to obtain appropriate technology in a timely manner or at all or we may incur significant costs in doing so. A failure to adopt the appropriate technology, or a failure or obsolescence in the technology that we do adopt, could have adverse effects on our business.

h. The loss of key team members, our inability to recruit or retain qualified shoreside and shipboard team members and increased labor costs could have an adverse effect on our business and results of operations.

Our success depends, in large part, on the skills and contributions of our team members, and on our ability to recruit, develop and retain high quality, diverse team members. We may not be successful in recruiting, developing or retaining key or other highly qualified team members. In addition, carbon-intensive industries may become a less attractive employment opportunity. As a result of the reduction in our workforce during our pause in guest cruise operations, general macroeconomic factors and an increasingly competitive labor market, at times we may experience difficulty in hiring sufficient qualified team members. For example, there is particularly high competition for recruiting and retaining qualified team members needed to support our information technology systems and infrastructure which is critical to our successful operations.

In addition, we hire a significant number of qualified shipboard team members each year and, thus, our ability to adequately recruit, develop and retain these individuals is critical to our success. Incidents involving cruise ships, including disease outbreaks on our ships and increasing demand as a result of the industry’s projected growth could negatively impact our ability to recruit, develop and retain sufficient qualified shipboard team members.

A prolonged shortage of qualified shoreside and shipboard team members and/or increased turnover rates has in the past inhibited, and in the future could inhibit, our ability to operate our business in an optimal manner. The competitive labor market is resulting in increased costs from the need to hire temporary personnel and we are often required to increase wages and/or benefits in order to attract and retain team members, all of which may negatively impact our results of operations. In connection with our resumption of guest cruise operations, we have hired and intend to continue hiring a significant number of qualified team members for the foreseeable future, and we expect to continue to face these challenges.

i. Increases in fuel prices, changes in the types of fuel consumed and availability of fuel supply may adversely impact our scheduled itineraries and costs.

We have been and may continue to be impacted, by economic, market and political conditions around the world, such as fuel demand, regulatory requirements including climate-induced regulations, supply disruptions and related infrastructure needs, which make it difficult to predict the future price and availability of fuel. The supply and availability of different fuel types in various markets in which we operate have experienced increased volatility and have led to increased fuel prices and reduced profitability. Future increases in the global price of fuel would increase the cost of our cruise ship operations as well as some of our other expenses, such as crew travel, freight and commodity prices. Increases in airfares, such as those resulting from increases in the price of fuel, would increase our guests' overall vacation costs and could reduce demand for cruises, as many of our guests depend on airlines to transport them to or from the airports near the ports where our cruises embark and disembark.

Many of our vessels have exhaust gas cleaning systems that allow them to operate on high sulfur fuel oil that is less expensive than low sulfur fuel; however, the significant drop in demand for higher sulfur fuel directly related to the pause in guest cruise operations has made it more difficult to source going forward which may result in higher operating costs. Additionally, certain of our ships are designed to use LNG as their primary fuel source. The price of LNG in certain markets has been and may continue to be unattractive compared to other alternatives, and as such, at times we have used and may continue to use conventional fuels to power our LNG ships. Refer to Operating Risk Factor "e." for additional discussion on the impact of climate change and regulation changes on fuel costs.

j. We rely on supply chain vendors who are integral to the operations of our businesses. These vendors and service providers are also affected by COVID-19 and may be unable to deliver on their commitments which could negatively impact our business.

We rely on supply chain vendors to deliver key products to the operations of our businesses around the world. Any event impacting a vendor's ability to deliver quality goods at the location and time needed could negatively impact our ability to operate our business. Events impacting our supply chain could be caused by factors beyond the control of our suppliers or us, including labor actions, increased demand, problems in production or distribution and/or disruptions in third-party logistics, information technology or transportation systems. In addition, the effects from COVID-19 and other global events have resulted in widespread global supply chain disruptions to vendors including critical supply chain shortages, labor shortages, significant material cost inflation and extended lead times for items that are required for our operations. Any such interruptions to our supply chain could increase our costs and could limit the availability of products critical to our operations.

k. Fluctuations in foreign currency exchange rates may adversely impact our financial results.

We earn revenues, pay expenses, purchase and own assets and incur liabilities in currencies other than the U.S. dollar. Additionally, our shipbuilding contracts are typically denominated in euros. Movements in foreign currency exchange rates, which have recently been more volatile, will affect our financial results.

l. Overcapacity and competition in the cruise and land-based vacation industry may negatively impact our cruise sales, pricing and destination options.

We may be impacted by increases in capacity in the cruise and land-based vacation industry, which may result in capacity growth beyond demand, either globally or for a region, or for a particular itinerary. For example, Asia, specifically China, remains closed to the cruise industry and it is uncertain when or if we will resume operations in the region. As a result, we along with other cruise operators, have had to find itineraries in alternative regions for the ships that were previously serving the Asia market, which could lead to overcapacity in other regions. We face competition from other cruise brands on the basis of overall experience, destinations, types and sizes of ships and cabins, travel agent partner preferences and value. We also compete with land-based vacation alternatives throughout the world on the basis of overall experience, destinations and value. In addition, certain ports and destinations have faced a surge of both cruise and non-cruise tourism and in certain destinations, countermeasures to limit the number of tourists have been contemplated and/or put into effect, including proposed limits on cruise ships and cruise passengers. Potential restrictions in ports and destinations could limit the itinerary and destination options we can offer our passengers going forward.

m. Inability to implement our shipbuilding programs and ship repairs, maintenance and refurbishments may adversely impact our business operations and the satisfaction of our guests.

We may be impacted by unforeseen events, such as work stoppages, supply chain issues, insolvencies, "force majeure" events or other financial difficulties experienced by shipyards, their subcontractors and our suppliers. This may result in less shipyard availability resulting in delays or preventing the delivery of our ships under construction and/or the completion of the repair, maintenance or refurbishment of our existing ships. This may lead to potential delays or cancellations of cruises. In addition, the prices of various commodities that are used in the construction of ships and for repair, maintenance and refurbishment of existing ships, such as steel, are subject to volatility which may increase our costs.

Debt Related Risk Factors

a. Failure to successfully implement our business strategy following our resumption of guest cruise operations would negatively impact the occupancy levels and pricing of our cruises and could have a material adverse effect on our business. We require a significant amount of cash to service our debt and sustain our operations. Our ability to generate cash depends on many factors, including those beyond our control, and we may not be able to generate cash required to service our debt and sustain our operations.

Our ability to meet our debt service obligations, refinance our debt or sustain our business needs and operations depends on our future operating and financial performance and our ability to generate cash. This will be affected by our ability to successfully implement our business strategy, which if unsuccessful, would negatively impact the occupancy levels and pricing of our cruises, as well as general macroeconomic, financial, geopolitical, competitive, regulatory and other factors beyond our control, such as the disruption caused by the COVID-19 pandemic, the invasion of Ukraine, inflation, higher fuel prices and higher interest rates. If we cannot generate sufficient cash to meet our debt service obligations or fund our other business needs, we may, among other things, need to refinance all or a portion of our debt, obtain additional financing, delay planned capital expenditures or sell assets. We cannot make assurances that we will be able to generate sufficient cash through any of the foregoing. If we are not able to refinance any of our debt, obtain additional financing or sell assets on commercially reasonable terms or at all, we may not be able to satisfy our obligations with respect to our debt. Refer to "Liquidity, Financial Condition and Capital Resources".

b. Our substantial debt could adversely affect our financial health and operating flexibility.

We have a substantial amount of debt and significant debt service obligations. Our substantial debt has had and could continue to have important negative consequences for us. Our substantial debt could:

- require us to dedicate a large portion of our cash flow from operations to service debt and fund repayments on our debt, thereby reducing the availability of our cash flow to fund working capital, capital expenditures and other general corporate purposes;
- increase our vulnerability to adverse general economic or industry conditions;
- limit our flexibility in planning for, or reacting to, changes in our business or the industry in which we operate;
- place us at a disadvantage compared to others that have less debt;
- make us more vulnerable to downturns in our business, the economy or the industry in which we operate;
- limit our ability to raise additional debt or equity capital in the future to satisfy our requirements relating to working capital, capital expenditures, development projects, strategic initiatives or other purposes;
- restrict us from making strategic acquisitions, introducing new technologies or exploiting business opportunities;
- make it difficult for us to satisfy our obligations with respect to our debt; and
- expose us to the risk of increased interest rates as certain of our borrowings are (and may be in the future) at a variable rate of interest.

c. Despite our leverage, we may incur more debt, subject to certain restrictions, which could adversely affect our business and prevent us from fulfilling our obligations with respect to our debt.

We may incur additional debt in the future. Although the instruments governing our existing indebtedness contain restrictions on the incurrence of additional debt, including certain additional restrictions which went into effect in 2023, these restrictions are subject to a number of significant qualifications and exceptions, and under certain circumstances, the amount of debt that could be incurred in compliance with these restrictions could be substantial and a portion of such debt currently is, and may in the future be, secured. The instruments governing our existing indebtedness do not prevent us from incurring liabilities that do not constitute "Indebtedness" as defined therein. If new debt is added to our existing debt levels, our business could be adversely affected, which may prevent us from fulfilling our obligations with respect to our debt.

d. We are subject to maintenance covenants, as well as restrictive debt covenants, that may limit our ability to finance future operations and capital needs and pursue business opportunities and activities. We are also subject to financial covenants that could lead to an acceleration of the indebtedness of our debt facilities if we fail to comply. If we fail to comply with any of these covenants, it could have a material adverse effect on our business.

Certain of our debt instruments limit our flexibility in operating our business. For example, some of our debt instruments limit the ability of Carnival Corporation, Carnival plc and certain of their respective subsidiaries to, among other things:

- incur or guarantee additional indebtedness;
- pay dividends or distributions on or redeem or repurchase capital stock and make other restricted payments;
- make certain investments;
- consummate certain asset sales;
- engage in certain transactions with affiliates;
- grant or assume certain liens; and
- consolidate, merge or transfer all or substantially all of our assets.

All of these limitations are subject to significant exceptions and qualifications. Despite these exceptions and qualifications, we cannot provide assurance that the operating and financial restrictions and covenants in certain of our debt instruments will not adversely affect our ability to finance our future operations or capital needs or engage in other business activities that may be in our interest. Any future indebtedness may include similar or other restrictive terms.

In addition, many of our debt agreements contain one or more financial covenants that require us to maintain a minimum liquidity, interest coverage, and shareholders' equity and/or limit our debt to capital percentage. Our ability to comply with our debt covenants, including the financial maintenance covenants described above, and restrictions may be affected by events beyond our control, including global macroeconomic, financial and industry conditions, such as the continued resumption of our guest cruise operations and our ability to issue additional equity. If we breach any of these covenants or restrictions and are not able to receive waivers for these covenants, we could be in default under the terms of certain of our debt facilities and the relevant lenders would have the right to declare the debt, together with accrued and unpaid interest and other fees, if any, immediately due and payable (or cancel any unfunded commitments, if applicable) and proceed against any collateral, if any, securing that debt. If the debt under certain of our debt instruments that we enter into were to be accelerated, our assets may be insufficient to repay our debt in full. Borrowings under other debt instruments that contain cross-default provisions may also be accelerated or become payable on demand. In these circumstances, our assets may not be sufficient to repay our indebtedness then outstanding in full.

At November 30, 2022, we were in compliance with the applicable covenants under our debt agreements. However, we cannot provide assurance that we will be able to maintain compliance with such debt facilities as of future testing dates. Failure to comply with the financial covenants of our debt facilities would have a material adverse effect as described above. Refer to Note 5 - Debt for additional information.

e. Our variable rate indebtedness exposes us to interest rate volatility, which could cause our debt service obligations to increase significantly.

Borrowings under certain of our facilities are at variable rates of interest and expose us to interest rate volatility. As interest rates increase, our debt service obligations on certain of our variable rate indebtedness will increase even though the amount borrowed remains the same, and our net income and cash flows, including cash available for servicing our indebtedness, will correspondingly decrease.

At the end of 2021, the ICE Benchmark Administration, the administrator for London Interbank Offered Rate ("LIBOR"), ceased publishing one-week and two-month U.S. dollar LIBOR and will cease publishing all remaining U.S. dollar LIBOR tenors in mid-2023. Concurrently, the United Kingdom's Financial Conduct Authority announced the cessation or loss of representativeness of the U.S. dollar LIBOR tenors from those dates. The U.S. Federal Reserve, in conjunction with the Alternative Reference Rates Committee, a steering committee comprised of, among other entities, large U.S. financial institutions, has recommended replacing U.S. dollar LIBOR with a new index that measures the cost of borrowing cash overnight, backed by U.S. Treasury securities ("SOFR"). SOFR is observed and backward-looking, which stands in contrast with LIBOR, which is an estimated forward-looking rate and relies, to some degree, on the expert judgment of submitting panel members. While we continue to monitor market developments to assess replacement rate options, the consequences of these developments with respect to LIBOR cannot be entirely predicted and may result in the level of interest payments on the portion of our indebtedness that bears interest at variable rates to be affected, which may adversely impact the amount of our interest payments under such debt.

f. The covenants in certain of our export credit facilities may require us to secure those facilities in the future.

Our export credit facilities contain provisions which may require that we provide a security interest in certain assets and in particular the relevant vessels that are the subject matter of those financings (or a comparable vessel). In certain of our export credit facilities, there is a requirement that if the credit rating of our senior indebtedness falls below investment grade (which occurred on June 24, 2020 and remained the case as of November 30, 2022) and at such time we have granted liens or security interests in respect of indebtedness exceeding 25% of our total assets (excluding for these purposes the value of any intangible assets) as shown in our most recent Consolidated Balance Sheet, we will be required to provide a first-priority security interest in the relevant vessel that is the subject matter of that export credit facility (or a comparable vessel). In addition, under all our export credit facilities, there is also a requirement that if a security interest or lien is granted in respect of a vessel to secure borrowed money under any other export credit facility, then a first-priority security interest may be required to be provided over the relevant vessel which is the subject matter of that export credit facility (or a comparable vessel).

If the events described above were to occur, we may be unable to comply with this requirement and would expect to seek covenant amendments from the lenders under the relevant facilities. Any such amendment may lead to increased costs, increased interest rates, additional restrictive covenants and other available lender protections that would be applicable to us under these debt facilities, and such increased costs, restrictions and modifications may vary among debt facilities. Our ability to give additional lender protections under these facilities, including the granting of security interests in collateral, will be limited by the restrictions in our indebtedness and security interest we have already granted. If we were not able to obtain amendments, the occurrence of such events may result in an event of default under these facilities and other debt facilities that contain cross default provisions that would be triggered.

Cautionary Note Concerning Factors That May Affect Future Results

Some of the statements, estimates or projections contained in this document are “forward-looking statements” that involve risks, uncertainties and assumptions with respect to us, including some statements concerning future results, operations, outlooks, plans, goals, reputation, cash flows, liquidity and other events which have not yet occurred. These statements are intended to qualify for the safe harbors from liability provided by Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934, as amended. All statements other than statements of historical facts are statements that could be deemed forward-looking. 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,” “aspiration,” “anticipate,” “forecast,” “project,” “future,” “intend,” “plan,” “estimate,” “target,” “indicate,” “outlook,” and similar expressions of future intent or the negative of such terms.

Forward-looking statements include those statements that relate to our outlook and financial position including, but not limited to, statements regarding:

- Pricing
- Booking levels
- Occupancy
- Interest, tax and fuel expenses
- Currency exchange rates
- Goodwill, ship and trademark fair values
- Liquidity and credit ratings
- Adjusted earnings per share
- Adjusted EBITDA
- Adjusted Net Income (Loss)
- Estimates of ship depreciable lives and residual values

Certain of the risks we are exposed to are identified in this Item 1A. “Risk Factors.” This item contains important cautionary statements and a discussion of the known factors that we consider could materially affect the accuracy of our forward-looking statements and adversely affect our business, results of operations and financial position. Additionally, many of these risks and uncertainties are currently, and in the future may continue to be, amplified by our substantial debt balance as a result of the pause of our guest cruise operations. It is not possible to predict or identify all such risks. There may be additional risks that we consider immaterial or which are unknown.

Forward-looking statements should not be relied upon as a prediction of actual results. Subject to any continuing obligations under applicable law or any relevant stock exchange rules, we expressly disclaim any obligation to disseminate, after the date of this document, 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.

Forward-looking and other statements in this document may also address our sustainability progress, plans, and goals (including climate change- and environmental-related matters). In addition, historical, current, and forward-looking sustainability- and climate-related statements may be based on standards and tools for measuring progress that are still developing, internal controls and processes that continue to evolve, and assumptions and predictions that are subject to change in the future and may not be generally shared.

Item 1B. Unresolved Staff Comments.

None.

Item 2. Properties.

As of November 30, 2022, the Carnival Corporation and Carnival plc headquarters and our larger shoreside locations are as follows:

Location	Square Footage (in thousands)	Own/Lease	Principal Operations
Miami, FL, U.S.A.	463/18	Own/Lease	Carnival Corporation & plc and Carnival Cruise Line
Genoa, Italy	229/46	Own/Lease	Costa and AIDA
Almere, Netherlands	253	Own	Arison Maritime Center
Rostock, Germany	224	Own	Costa and AIDA
Seattle, WA, U.S.A.	175	Lease	Princess Cruises, Holland America Line and Seabourn
Southampton, England	150	Lease	Carnival plc, P&O Cruises (UK) and Cunard
Santa Clarita, CA, U.S.A.	134	Lease	Princess Cruises, Holland America Line and Seabourn
Hamburg, Germany	108	Lease	Costa and AIDA
Fort Lauderdale, FL, U.S.A.	61	Lease	Princess Cruises
Sydney, NSW, Australia	37	Lease	Princess Cruises and P&O Cruises (Australia)

Information about our cruise ships, including the number each of our cruise brands operate, as well as information regarding our cruise ships under construction may be found under Part I. Item 1. Business. C. "Our Global Cruise Business." In addition, we own, lease or have controlling interests in port destinations, private islands, hotels, and lodges.

Item 3. Legal Proceedings.

The legal proceedings described in Note 7 – "Contingencies", including those described under "COVID-19 Actions," are shown in Exhibit 13 and are incorporated by reference into this Form 10-K. Additionally, SEC rules require disclosure of certain environmental matters when a governmental authority is a party to the proceedings and such proceedings involve potential monetary sanctions that we believe will exceed $1 million for such proceedings.

On June 20, 2022, Princess Cruises notified the Australian Maritime Safety Authorization ("AMSA") and the flag state, Bermuda, regarding approximately six cubic meters of comminuted food waste (liquid biodigester effluent) inadvertently discharged by *Coral Princess* inside the Great Barrier Reef Marine Park. On June 23, 2022, the UK P&I Club N.V. provided a letter of undertaking for approximately $1.9 million (being the estimated maximum combined penalty). We believe the ultimate outcome will not have a material impact on our consolidated financial statements.

Item 4. Mine Safety Disclosures.

None.

PART II

Item 5. Market for Registrants' Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.

A. Market Information

The information required by Item 201(a) of Regulation S-K, Market Information, is shown in Exhibit 13 and is incorporated by reference into this Form 10-K.

B. Holders

The information required by Item 201(b) of Regulation S-K, Holders, is shown in Exhibit 13 and is incorporated by reference into this Form 10-K.

C. Dividends

On March 30, 2020, we suspended the payment of dividends on Carnival Corporation common stock and Carnival plc ordinary shares.

D. Securities Authorized for Issuance under Equity Compensation Plans

The information required by Item 201(d) of Regulation S-K is incorporated by reference to Part III. Item 12 of this Form 10-K.

E. Performance Graph

The information required by Item 201(e) of Regulation S-K, Performance Graph, is shown in Exhibit 13 and is incorporated by reference into this Form 10-K.

F. Issuer Purchases of Equity Securities; Use of Proceeds from Registered Securities

I. Stock Swap Program

We have a program that allows us to realize a net cash benefit when Carnival Corporation common stock is trading at a premium to the price of Carnival plc ordinary shares. Under the Stock Swap Program, we may elect to offer and sell shares of Carnival Corporation common stock at prevailing market prices in ordinary brokers' transactions and repurchase an equivalent number of Carnival plc ordinary shares in the UK market.

Under the Stock Swap Program effective June 2021, the Boards of Directors authorized the sale of up to $500 million of shares of Carnival Corporation common stock in the U.S. market and the repurchase of an equivalent number of Carnival plc ordinary shares.

We may in the future implement a program to allow us to realize a net cash benefit when Carnival plc ordinary shares are trading at a premium to the price of Carnival Corporation common stock.

Any sales of Carnival Corporation common stock and Carnival plc ordinary shares have been or will be registered under the Securities Act of 1933, as amended. During the three months ended November 30, 2022, under the Stock Swap Program, we sold 0.8 million shares of Carnival Corporation common stock and repurchased the same amount of Carnival plc ordinary shares, resulting in net proceeds of $0.4 million which were used for general corporate purposes. Since the beginning of the Stock Swap Program, first authorized in June 2021, we have sold 14.9 million shares of Carnival Corporation common stock and repurchased the same amount of Carnival plc ordinary shares, resulting in net proceeds of $27 million.

Period	Total Number of Shares of Carnival plc Ordinary Shares Purchased (a) (in millions)	Average Price Paid per Share of Carnival plc Ordinary Share	Maximum Number of Carnival plc Ordinary Shares That May Yet Be Purchased (in millions)
September 1, 2022 through September 30, 2022	—	$ —	4.4
October 1, 2022 through October 31, 2022	0.8	$ 6.42	3.6
November 1, 2022 through November 30, 2022	—	$ —	3.6
	0.8	$ 6.42	

(a) No ordinary shares of Carnival plc were purchased outside of publicly announced plans or programs.

II. Carnival plc Shareholder Approvals

Carnival plc ordinary share repurchases under the Stock Swap Program require annual shareholder approval. The existing shareholder approval was limited to a maximum of 18.5 million ordinary shares and is valid until the earlier of the conclusion of the Carnival plc 2023 annual general meeting or October 7, 2023.

Item 6. Reserved.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

The information required by Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, is shown in Exhibit 13 and is incorporated by reference into this Form 10-K.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk.

The information required by Item 7A. Quantitative and Qualitative Disclosures About Market Risk, is shown in Management's Discussion and Analysis of Financial Condition and Results of Operations in Exhibit 13 and is incorporated by reference into this Form 10-K.

Item 8. Financial Statements and Supplementary Data.

The financial statements, together with the report thereon of PricewaterhouseCoopers LLP (PCAOB ID 238), dated January 27, 2023, are shown in Exhibit 13 and are incorporated by reference into this Form 10-K.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure.

None.

Item 9A. Controls and Procedures.

A. Evaluation of Disclosure Controls and Procedures

Disclosure controls and procedures are designed to provide reasonable assurance that information required to be disclosed by us in the reports that we file or submit under the Securities Exchange Act of 1934, is recorded, processed, summarized and reported within the time periods specified in the U.S. Securities and Exchange Commission's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by us in our reports that we file or submit under the Securities Exchange Act of 1934 is accumulated and communicated to our management, including our principal executive and principal financial officers, or persons performing similar functions, as appropriate, to allow timely decisions regarding required disclosure.

Our President, Chief Executive Officer and Chief Climate Officer and our Chief Financial Officer and Chief Accounting Officer have evaluated our disclosure controls and procedures and have concluded, as of November 30, 2022, that they are effective as described above.

B. Management's Annual Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in the Securities Exchange Act of 1934 Rule 13a-15(f). Our management, with the participation of our President, Chief Executive Officer and Chief Climate Officer and our Chief Financial Officer and Chief Accounting Officer, conducted an evaluation of the effectiveness of our internal control over financial reporting based on the 2013 Internal Control – Integrated Framework (the "COSO Framework"). Based on this evaluation under the COSO Framework, our management concluded that our internal control over financial reporting was effective as of November 30, 2022.

PricewaterhouseCoopers LLP, the independent registered public accounting firm that audited our consolidated financial statements incorporated in this Form 10-K, has also audited the effectiveness of our internal control over financial reporting as of November 30, 2022 as stated in their report, which is shown in Exhibit 13 and is incorporated by reference into this Form 10-K.

C. Changes in Internal Control over Financial Reporting

There have been no changes in our internal control over financial reporting during the quarter ended November 30, 2022 that have materially affected or are reasonably likely to materially affect our internal control over financial reporting.

Item 9B. Other Information.

None.

Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections.

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance.

Directors

Information regarding our directors, as required by Item 10, is incorporated herein by reference from the Carnival Corporation and Carnival plc joint definitive Proxy Statement to be filed with the U.S. Securities and Exchange Commission not later than 120 days after the close of the 2022 fiscal year.

Information About Our Executive Officers

The table below sets forth the name, age, years of service and title of each of our executive officers as of January 27, 2023. Titles listed relate to positions within Carnival Corporation and Carnival plc unless otherwise noted.

	Age	Years of Service (a)	Title
Micky Arison	73	51	Chair of the Boards of Directors
David Bernstein	65	24	Chief Financial Officer and Chief Accounting Officer
Vice Admiral William R. Burke (Ret.)	66	9	Chief Maritime Officer
Enrique Miguez	58	25	General Counsel
Michael Thamm	59	29	Group Chief Executive Officer of Costa Group and Carnival Asia
Josh Weinstein	48	20	President, Chief Executive Officer and Chief Climate Officer

(a) Years of service with us or Carnival plc predecessor companies.

Business Experience of Executive Officers

Micky Arison has been Chair of the Boards of Directors since 1990 and a Director since 1987. He was Chief Executive Officer from 1979 to 2013.

David Bernstein has been Chief Financial Officer since 2007 and Chief Accounting Officer since 2016.

William R. Burke, retired Vice Admiral, has been Chief Maritime Officer since 2013.

Enrique Miguez has been General Counsel since 2021. He was Vice President and Deputy General Counsel from 2003 to 2021.

Michael Thamm has been Group Chief Executive Officer of Costa Group since 2012 and of Carnival Asia since 2017.

Josh Weinstein has been President, Chief Executive Officer and Chief Climate Officer since August 2022. He was Chief Operations Officer from 2020 to July 2022, President of Carnival UK from 2017 to 2022 and Treasurer from 2007 to 2017.

Corporate Governance

Our Code of Business Conduct and Ethics applies to all our team members and our Boards of Directors and states our commitment to conduct business ethically, without the influence of bribes or acts of corruption. We are committed to complying with the laws prohibiting bribery and other corrupt practices that apply everywhere we operate. Additionally, we provide trainings on anti-corruption laws and regulations and how to identify bribery to our team members. This Code of Business Conduct and Ethics is posted on our website, which is located at www.carnivalcorp.com and www.carnivalplc.com. We intend to satisfy the disclosure requirement under Item 5.05 of the Form 8-K regarding any amendments to, or waivers from, provisions of this Code of Business Conduct and Ethics by posting such information on our website, at the addresses specified above.

The additional information required by Item 10 is incorporated herein by reference from the Carnival Corporation and Carnival plc joint definitive Proxy Statement to be filed with the U.S. Securities and Exchange Commission not later than 120 days after the close of the 2022 fiscal year.

Item 11. Executive Compensation.

The information required by Item 11 is incorporated herein by reference from the Carnival Corporation and Carnival plc joint definitive Proxy Statement to be filed with the U.S. Securities and Exchange Commission not later than 120 days after the close of the 2022 fiscal year.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.

A. Securities Authorized for Issuance under Equity Compensation Plans

I. Carnival Corporation

Set forth below is a table that summarizes compensation plans (including individual compensation arrangements) under which Carnival Corporation equity securities are authorized for issuance as of November 30, 2022.

Plan category	Number of securities to be issued upon exercise of warrants and rights (in millions) (1)	Weighted-average exercise price of outstanding warrants and rights	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (1)) (in millions)
Equity compensation plans approved by security holders	4.9 (a)	—	13.7 (b)
Equity compensation plans not approved by security holders	—	—	—
	4.9	—	13.7

(a) Represents 4.9 million of restricted share units outstanding under the Carnival Corporation 2011 Stock Plan and Carnival Corporation 2020 Stock Plan.

(b) Includes Carnival Corporation common stock available for issuance as of November 30, 2022 as follows: 1.3 million under the Carnival Corporation Employee Stock Purchase Plan, which includes 255,546 subject to purchase during the current purchase period and 12.4 million under the Carnival Corporation 2020 Stock Plan.

II. Carnival plc

Set forth below is a table that summarizes compensation plans (including individual compensation arrangements) under which Carnival plc equity securities are authorized for issuance as of November 30, 2022.

Plan category	Number of securities to be issued upon exercise of warrants and rights (in millions) (1)	Weighted-average exercise price of outstanding warrants and rights	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (1)) (in millions)
Equity compensation plans approved by security holders	1.3 (a)	—	4.3
Equity compensation plans not approved by security holders	—	—	—
	1.3	—	4.3

(a) Represents 1.3 million restricted share units outstanding under the Carnival plc 2014 Employee Share Plan.

The additional information required by Item 12 is incorporated herein by reference to the Carnival Corporation and Carnival plc joint definitive Proxy Statement to be filed with the U.S. Securities and Exchange Commission not later than 120 days after the close of the 2022 fiscal year.

Items 13 and 14. Certain Relationships and Related Transactions, and Director Independence and Principal Accountant Fees and Services.

The information required by Items 13 and 14 is incorporated herein by reference from the Carnival Corporation and Carnival plc joint definitive Proxy Statement to be filed with the U.S. Securities and Exchange Commission not later than 120 days after the close of the 2022 fiscal year.

PART IV

Item 15. Exhibits and Financial Statement Schedules.

(a) (1) Financial Statements

The financial statements shown in Exhibit 13 are incorporated herein by reference into this Form 10-K.

(2) Financial Statement Schedules

All schedules for which provision is made in the applicable accounting regulations of the SEC are not required under the related instruction or are inapplicable and, therefore, have been omitted.

(3) Exhibits

The exhibits listed below on the Index to Exhibits are filed or incorporated by reference as part of this Form 10-K.

INDEX TO EXHIBITS

Exhibit Number	Exhibit Description	Incorporated by Reference Form	Exhibit	Filing Date	Filed Herewith
Articles of incorporation and by-laws					
3.1	Third Amended and Restated Articles of Incorporation of Carnival Corporation.	8-K	3.1	4/17/03	
3.2	Third Amended and Restated By-Laws of Carnival Corporation.	8-K	3.1	4/20/09	
3.3	Articles of Association of Carnival plc.	8-K	3.3	4/20/09	
Instruments defining the rights of security holders, including indenture					
4.1	Agreement of Carnival Corporation and Carnival plc, dated December 6, 2022 to furnish certain debt instruments to the Securities and Exchange Commission.				X
4.2	Carnival Corporation Deed, dated April 17, 2003, between Carnival Corporation and P&O Princess Cruises plc for the benefit of the P&O Princess Cruises Shareholders.	10-Q	4.1	10/15/03	
4.3	Equalization and Governance Agreement, dated April 17, 2003, between Carnival Corporation and P&O Princess Cruises plc.	10-Q	4.2	10/15/03	
4.4	Carnival Corporation Deed of Guarantee, dated as of April 17, 2003, between Carnival Corporation and Carnival plc.	S-4	4.3	5/30/03	
4.5	Carnival plc Deed of Guarantee, dated as of April 17, 2003, between Carnival Corporation and Carnival plc.	S-3 & F-3	4.10	6/19/03	
4.6	Specimen Carnival Corporation Common Stock Certificate.	S-3 & F-3	4.16	6/19/03	
4.7	Pairing Agreement, dated as of April 17, 2003, between Carnival Corporation, The Law Debenture Trust Corporation (Cayman) Limited, as trustee, and Computershare Investor Services (formerly SunTrust Bank), as transfer agent.	8-K	4.1	4/17/03	
4.8	Voting Trust Deed, dated as of April 17, 2003, between Carnival Corporation and The Law Debenture Trust Corporation (Cayman) Limited, as trustee.	8-K	4.2	4/17/03	
4.9	SVE Special Voting Deed, dated as of April 17, 2003, between Carnival Corporation, DLS SVC Limited, P&O Princess Cruises plc, The Law Debenture Trust Corporation (Cayman) Limited, as trustee, and The Law Debenture Trust Corporation, P.L.C.	8-K	4.3	4/17/03	

INDEX TO EXHIBITS

Exhibit Number	Exhibit Description	Incorporated by Reference Form	Exhibit	Filing Date	Filed Herewith
4.10	Form of Amended and Restated Deposit Agreement and holders from time to time of receipts issued thereunder.	Post Amend-ment to Form F-6	99-a	4/15/03	
4.11	Specimen Carnival plc Ordinary Share Certificate.	S-3	4.1	7/2/09	
4.12	Description of Equity Securities Registered under Section 12 of the Exchange Act.	10-K	4.12	1/28/20	
4.13	Description of 1.000% Senior Notes Due 2029.	10-K	4.15	1/28/20	
Material contracts					
10.1*	Carnival Corporation Nonqualified Retirement Plan for Highly Compensated Employees.	10-Q	10.1	9/28/07	
10.2*	Form of Appointment Letter for Non-Executive Directors.	10-Q	10.1	6/27/08	
10.3*	Form of Appointment Letter for Executive Directors.	10-Q	10.2	6/27/08	
10.4	Succession Agreement, dated as of May 28, 2002, to Registration Rights Agreement, dated June 14, 1991, between Carnival Corporation and Ted Arison (incorporated by reference to Exhibit 10.2 of Carnival Corporation's Quarterly Report on Form 10-Q for the period ended May 31, 2002).	10-Q	10.2	7/12/02	
10.5*	Employment Agreement dated as of October 14, 2013 between Carnival Corporation, Carnival plc and Arnold W. Donald.	10-Q	10.2	10/3/14	
10.6*	Carnival Corporation & plc Management Incentive Plan (adopted in 2015).	10-Q	10.3	7/1/15	
10.7*	Amendment dated October 18, 2016 to Employment Agreement dated October 14, 2016 between Carnival Corporation, Carnival plc and Arnold W. Donald.	8-K	99.1	10/21/16	
10.8*	Employment Contract dated April 21, 2017 between Carnival plc and Michael Olaf Thamm.	8-K	10.1	4/27/17	
10.9*	Form of Performance-Based Restricted Stock Unit Agreement for the Carnival Corporation 2011 Stock Plan.	10-Q	10.3	4/9/19	
10.10*	Form of Performance-Based Restricted Share Unit Agreement for the Carnival plc 2014 Employee Share Plan.	10-Q	10.4	4/9/19	

INDEX TO EXHIBITS

Exhibit Number	Exhibit Description	Incorporated by Reference			Filed Herewith
		Form	Exhibit	Filing Date	
10.11*	Form of Shareholder Equity Alignment Restricted Stock Unit Agreement for the Carnival Corporation 2011 Stock Plan.	10-Q	10.5	4/9/19	
10.12*	Amended and Restated Carnival Corporation 2011 Stock Plan.	10-Q	10.1	6/24/19	
10.13*	Amended and Restated Carnival plc 2014 Employee Share Plan.	10-Q	10.2	6/24/19	
10.14*	Form of Non-Employee Director Restricted Stock Award Agreement for the Carnival Corporation 2011 Stock Plan.	10-Q	10.3	6/24/19	
10.15*	Amendment and Restatement Agreement dated August 6, 2019 in respect of the Multicurrency Revolving Facilities Agreement dated May 18, 2011, among Carnival Corporation, Carnival plc and certain of Carnival Corporation and Carnival plc subsidiaries, Bank of America Merrill Lynch International Designated Activity Company as facilities agent and a syndicate of financial institutions.	10-Q	10.1	9/26/19	
10.16*	Form of Management Incentive Tied Restricted Stock Unit Agreement for the Carnival Corporation 2011 Stock Plan.	10-Q	10.1	4/1/20	
10.17*	Form of Management Incentive Tied Restricted Share Unit Agreement for the Carnival plc 2014 Employee Share Plan.	10-Q	10.2	4/1/20	
10.18*	Form of Shareholder Equity Alignment Restricted Stock Unit Agreement for the Carnival Corporation 2011 Stock Plan.	10-Q	10.3	4/1/20	
10.19*	Form of Non-Employee Director Annual Restricted Stock Award Agreement for the for the Carnival Corporation 2020 Stock Plan.	10-Q	10.3	7/10/20	
10.20*	Carnival Corporation 2020 Stock Plan.	10-Q	10.5	7/10/20	
10.21***	Term Loan Agreement dated as of June 30, 2020 among Carnival Finance, LLC and Carnival Corporation, as borrowers, Carnival plc and the other Guarantors party hereto, the various financial institutions as are or shall become parties hereto, JPMorgan Chase Bank, N.A., as administrative agent for the lenders, and U.S. Bank National Association, as security agent.	10-Q	10.6	7/10/20	

INDEX TO EXHIBITS

Exhibit Number	Exhibit Description	Incorporated by Reference Form	Exhibit	Filing Date	Filed Herewith
10.22	Amendment No. 1, dated as of December 3, 2020 to Term Loan Agreement dated as of June 30, 2020 among Carnival Finance, LLC and Carnival Corporation, as borrowers, Carnival plc and the other Guarantors party hereto, the various financial institutions as are or shall become parties hereto, JPMorgan Chase Bank, N.A., as administrative agent for the lenders, and U.S. Bank.	10-K	10.42	1/26/21	
10.23	Indenture, dated as of April 6, 2020, among Carnival Corporation, as issuer, Carnival plc, the other Guarantors party thereto and U.S. Bank National Association, as trustee, relating to the 5.75% Convertible Senior Notes due 2023.	10-Q	10.7	7/10/20	
10.24	First Supplemental Indenture dated as of June 30, 2020 among Carnival Corporation as issuer, Carnival plc, the other Guarantors party thereto and U.S. Bank, National Association, as trustee, relating to the 5.75% Convertible Senior Notes due 2023.	10-Q	10.9	7/10/20	
10.25	Second Supplemental Indenture dated as of July 8, 2020 among Carnival Corporation as issuer, Carnival plc, the other Guarantors party thereto and U.S. Bank, National Association, as trustee, relating to the 5.75% Convertible Senior Notes due 2023.	10-Q	10.1	10/8/20	
10.26***	Indenture dated as of July 20, 2020 among Carnival Corporation as issuer, Carnival plc, the other Guarantors party thereto and U.S. Bank, National Association, as trustee, security agent, principal paying agent, transfer agent and registrar, relating to the U.S. dollar-denominated 10.500% Second-Priority Senior Secured Notes due 2026 and the Euro-denominated 10.125% Second-Priority Senior Secured Notes due 2026.	10-Q	10.2	10/8/20	
10.27	First Supplemental Indenture dated as of November 18, 2020 among Carnival Corporation as issuer, Carnival plc, the other Guarantors party thereto and U.S. Bank, National Association, as trustee and security agent, relating to the U.S. dollar-denominated 10.500% Second-Priority Senior Secured Notes due 2026 and the Euro-denominated 10.125% Second-Priority Senior Secured Notes due 2026.	10-K	10.49	1/26/21	
10.28***	Indenture dated as of August 18, 2020 among Carnival Corporation as issuer, Carnival plc, the other Guarantors party thereto and U.S. Bank, National Association, as trustee, security agent, principal paying agent, transfer agent and registrar, relating to the 9.875% Second-Priority Senior Secured Notes due 2027.	10-Q	10.3	10/8/20	
10.29	First Supplemental Indenture dated as of November 18, 2020 among Carnival Corporation as issuer, Carnival plc, the other Guarantors party thereto and U.S. Bank, National Association, as trustee and security agent, relating to the 9.875% Second-Priority Senior Secured Notes due 2027.	10-K	10.51	1/26/21	

INDEX TO EXHIBITS

Exhibit Number	Exhibit Description	Incorporated by Reference Form	Exhibit	Filing Date	Filed Herewith
10.30	Indenture dated as of November 25, 2020 among Carnival Corporation as issuer, Carnival plc, the other Guarantors party thereto and U.S. Bank, National Association, as trustee, principal paying agent, transfer agent and registrar, relating to the U.S. dollar-denominated 7.625% Senior Unsecured Notes due 2026 and the Euro-denominated 7.625% Senior Unsecured Notes due 2026.	10-K	10.52	1/26/21	
10.31*	Form of Special Performance-Based Restricted Stock Unit Agreement for the Carnival Corporation 2020 Stock Plan.	10-Q	10.4	10/8/20	
10.32*	Form of Special Performance-Based Restricted Share Unit Agreement for the Carnival plc 2014 Employee Share Plan.	10-Q	10.5	10/8/20	
10.33*	Form of Retention Time-Based Restricted Stock Unit Agreement for the Carnival Corporation 2020 Stock Plan.	10-Q	10.6	10/8/20	
10.34*	Form of Retention Time-Based Restricted Share Unit Agreement for the Carnival plc 2014 Employee Share Plan.	10-Q	10.7	10/8/20	
10.35	Amendment Agreement dated December 31, 2020 to the Multicurrency Revolving Facilities Agreement originally dated May 18, 2011, as amended and restated on August 6, 2019, among Carnival Corporation, Carnival plc and certain of Carnival Corporation and Carnival plc subsidiaries, Bank of America Europe Designated Activity Company as facilities agent and a syndicate of financial institutions.	8-K	10.1	1/6/21	
10.36	Indenture dated as of February 16, 2021 among Carnival Corporation as issuer, Carnival plc, the other Guarantors party thereto and U.S. Bank, National Association, as trustee, principal paying agent, transfer agent and registrar, relating to the 5.75% Senior Unsecured Notes due 2027.	10-Q	10.1	4/7/21	
10.37	Form of Executive Time-Based Restricted Share Unit Agreement for the Carnival plc 2014 Employee Share Plan.	10-Q	10.2	4/7/21	
10.38	Form of Executive Time-Based Restricted Stock Unit Agreement for the Carnival Corporation 2020 Stock Plan.	10-Q	10.3	4/7/21	
10.39	Amendment of the Carnival Corporation 2020 Stock Plan.	10-Q	10.1	6/28/21	

INDEX TO EXHIBITS

Exhibit Number	Exhibit Description	Incorporated by Reference Form	Exhibit	Filing Date	Filed Herewith
10.40	Amendment Agreement dated May 11, 2021 to the Multicurrency Revolving Facilities Agreement originally dated May 18, 2011, as amended and restated on August 6, 2019 and further amended on December 31, 2020, among Carnival Corporation, Carnival plc and certain of Carnival Corporation and Carnival plc subsidiaries, Bank of America Europe Designated Activity Company as facilities agent and a syndicate of financial institutions.	10-Q	10.2	6/28/21	
10.41	Amendment No. 2 to Term Loan Agreement, dated as of June 30, 2021, among Carnival Corporation and Carnival Finance, LLC, as borrowers, Carnival plc, as a guarantor, certain other subsidiary guarantors party thereto and JPMorgan Chase Bank, N.A., as administrative agent for the lenders.	8-K	10.1	6/30/21	
10.42	Indenture dated as of July 26, 2021, among Carnival Corporation, as issuer, Carnival plc, the other Guarantors party hereto and U.S. Bank National Association, as trustee, principal paying agent, transfer agent, registrar and security agent, relating to the 4.00% First-Priority Senior Secured Notes due 2028.	10-Q	10.3	9/30/21	
10.43	Indenture dated as of November 2, 2021, among Carnival Corporation, as issuer, Carnival plc, the other Guarantors party hereto and U.S. Bank National Association, as trustee, principal paying agent, transfer agent, registrar and security agent, relating to the 6.000% Senior Unsecured Notes due 2029.	8-K	10.1	11/2/21	
10.44	Amendment Agreement dated September 30, 2021 to the Multicurrency Revolving Facilities Agreement originally dated May 18, 2011, as amended and restated on August 6, 2019, as further amended on December 31, 2020 and May 11, 2021, among Carnival Corporation, Carnival plc and certain of Carnival Corporation and Carnival plc subsidiaries, Bank of America Europe Designated Activity Company as facilities agent and a syndicate of financial institutions.	10-K	10.41	1/27/22	
10.45	Amendment No. 3 to Term Loan Agreement, by and among Carnival Corporation and Carnival Finance, LLC, as borrowers, Carnival plc, as a guarantor, certain other subsidiary guarantors party thereto, JPMorgan Chase Bank, N.A., as administrative agent for the lenders and the lenders party thereto, dated as of October 5, 2021.	10-K	10.45	1/27/22	
10.46	Incremental Assumption Agreement and Amendment No. 4 to Term Loan Agreement, by and among Carnival Corporation Carnival Finance, LLC, as borrowers, Carnival plc, as a guarantor, certain other subsidiary guarantors party thereto, and JPMorgan Chase Bank, N.A., as administrative agent and as incremental term lender, dated as of October 18, 2021.	10-K	10.46	1/27/22	
10.47	Employment Agreement dates as of June 28, 2019 between Carnival Corporation and Peter C. Anderson.	10-Q	10.1	3/28/22	

INDEX TO EXHIBITS

Exhibit Number	Exhibit Description	Incorporated by Reference Form	Exhibit	Filing Date	Filed Herewith
10.48***	Amendment Agreement dated February 11, 2022 to the Multicurrency Revolving Facilities Agreement originally dated May 18, 2011, as amended and restated on August 6, 2019 and as further amended on December 31, 2020, May 11, 2021 and September 30, 2021, among Carnival Corporation, Carnival plc and certain of Carnival Corporation and Carnival plc subsidiaries, Bank of America Europe Designated Activity Company as facilities agent and a syndicate of financial institutions.	10-Q	10.2	3/28/22	
10.49	Form of Earnings Recovery Award Agreement for the Carnival Corporation 2020 Stock Plan for the CEO.	10-Q	10.3	3/28/22	
10.50	Form of Earnings Recovery Award Agreement for the Carnival Corporation 2020 Stock Plan for Certain Named Executive Officers.	10-Q	10.4	3/28/22	
10.51	Form of Time-Based Restricted Stock Unit Agreement for the Carnival Corporation 2020 Stock Plan for the Chief Ethics and Compliance Officer.	10-Q	10.5	3/28/22	
10.52	Indenture, dated as of May 25, 2022, among Carnival Corporation, as issuer, Carnival plc, the other Guarantors party hereto and U.S. Bank Trust Company, National Association, as trustee, principal paying agent, transfer agent, registrar and security agent, relating to the 10.500% Senior Unsecured Notes due 2030.	8-K	10.1	5/25/22	
10.53	Carnival Corporation Fun Ship Nonqualified Savings Plan restated effective January 1, 2022.	10-Q	10.1	6/29/22	
10.54	Indenture, dated as of August 22, 2022, by and between Carnival Corporation, Carnival plc, the subsidiary guarantors party thereto and U.S. Bank Trust Company, National Association, as Trustee, relating to the 5.75% Convertible Senior Notes due 2024.	8-K	4.1	8/22/22	
10.55	Special Performance-Based Restricted Stock Unit Agreement for Josh Weinstein under the Carnival Corporation 2020 Stock Plan.	10-Q	10.2	9/30/22	
10.56	Indenture dated as of October 25, 2022, among Carnival Holdings (Bermuda) Limited, as issuer, Carnival Corporation, Carnival plc, the other Guarantors party thereto and U.S. Bank Trust Company, National Association, as trustee, principal paying agent, transfer agent and registrar, relating to the 10.375% Senior Unsecured Notes due 2028.	8-K	10.1	10/25/22	

INDEX TO EXHIBITS

Exhibit Number	Exhibit Description	Incorporated by Reference			Filed Herewith
		Form	Exhibit	Filing Date	
10.57	First Supplemental Indenture, dated as of November 1, 2022, among Carnival Corporation, Carnival plc, the subsidiary guarantors party thereto and U.S. Bank Trust Company, National Association, as trustee, relating to the issuance of additional 5.75% Convertible Senior Notes due 2024.	8-K	4.1	11/1/22	
10.58	Consulting Agreement between Carnival Corporation, Carnival plc and Arnold W. Donald dated November 2, 2022.	8-K	10.1	11/3/22	
10.59	Indenture, dated as of November 18, 2022, among Carnival Corporation, Carnival plc, the subsidiary guarantors party thereto and U.S. Bank Trust Company, National Association, as trustee, relating to the issuance 5.75% Convertible Senior Notes due 2027.	8-K	10.1	11/18/22	
Annual report to security holders					
13	Portions of the 2022 Annual Report.				X
Subsidiaries of the registrants					
21	Subsidiaries of Carnival Corporation and Carnival plc.				X
Consents of experts and counsel					
23	Consent of Independent Registered Public Accounting Firm.				X
Power of attorney					
24	Power of Attorney given by certain Directors of Carnival Corporation and Carnival plc to Josh Weinstein, David Bernstein and Enrique Miguez authorizing such persons to sign this 2022 joint Annual Report on Form 10-K and any future amendments on their behalf.				X
Rule 13a-14(a)/15d-14(a) certifications					
31.1	Certification of President, Chief Executive Officer and Chief Climate Officer of Carnival Corporation pursuant to Rule 13a-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				X
31.2	Certification of Chief Financial Officer and Chief Accounting Officer of Carnival Corporation pursuant to Rule 13a-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				X

INDEX TO EXHIBITS

Exhibit Number	Exhibit Description	Incorporated by Reference Form	Exhibit	Filing Date	Filed Herewith
31.3	Certification of President, Chief Executive Officer and Chief Climate Officer of Carnival plc pursuant to Rule 13a-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				X
31.4	Certification of Chief Financial Officer and Chief Accounting Officer of Carnival plc pursuant to Rule 13a-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				X
Section 1350 certifications					
32.1**	Certification of President, Chief Executive Officer and Chief Climate Officer of Carnival Corporation pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.				X
32.2**	Certification of Chief Financial Officer and Chief Accounting Officer of Carnival Corporation pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.				X
32.3**	Certification of President, Chief Executive Officer and Chief Climate Officer of Carnival plc pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.				X
32.4**	Certification of Chief Financial Officer and Chief Accounting Officer of Carnival plc pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.				X
Interactive data file					
101	The consolidated financial statements from Carnival Corporation & plc's Form 10-K for the year ended November 30, 2022, as filed with the SEC on January 27, 2023 formatted in Inline XBRL, are as follows:				
	(i) the Consolidated Statements of Income for the years ended November 30, 2022, 2021 and 2020;				X
	(ii) the Consolidated Statements of Comprehensive Income for the years ended November 30, 2022, 2021 and 2020;				X
	(iii) the Consolidated Balance Sheets at November 30, 2022 and 2021;				X
	(iv) the Consolidated Statements of Cash Flows for the years ended November 30, 2022, 2021 and 2020;				X
	(v) the Consolidated Statements of Shareholders' Equity for the years ended November 30, 2022, 2021 and 2020 and				X
	(vi) the notes to the consolidated financial statements, tagged in summary and detail.				X

INDEX TO EXHIBITS

Exhibit Number	Exhibit Description	Incorporated by Reference			
		Form	Exhibit	Filing Date	Filed Herewith
104	The cover page from Carnival Corporation & plc's Form 10-K for the year ended November 30, 2022, as filed with the Securities and Exchange Commission on January 27, 2023, formatted in Inline XBRL (included as Exhibit 101)				

*Indicates a management contract or compensation plan or arrangement.
**These items are furnished and not filed.
***Certain portions of this exhibit have been omitted pursuant to Item 601(b)(10) of Regulation S-K.

Item 16. Form 10-K Summary.

None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, each of the registrants has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

CARNIVAL CORPORATION
/s/ Josh Weinstein
Josh Weinstein
President, Chief Executive Officer and
Chief Climate Officer and Director
January 27, 2023

CARNIVAL PLC
/s/ Josh Weinstein
Josh Weinstein
President, Chief Executive Officer and
Chief Climate Officer and Director
January 27, 2023

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of each of the registrants and in the capacities and on the dates indicated.

CARNIVAL CORPORATION
/s/ Josh Weinstein
Josh Weinstein
President, Chief Executive Officer and
Chief Climate Officer and Director
January 27, 2023

/s/ David Bernstein
David Bernstein
Chief Financial Officer and Chief Accounting Officer
January 27, 2023

/s/*Micky Arison
Micky Arison
Chair of the Board of
Directors
January 27, 2023

/s/*Sir Jonathon Band
Sir Jonathon Band
Director
January 27, 2023

/s/*Jason Glen Cahilly
Jason Glen Cahilly
Director
January 27, 2023

/s/*Helen Deeble
Helen Deeble
Director
January 27, 2023

CARNIVAL PLC
/s/ Josh Weinstein
Josh Weinstein
President, Chief Executive Officer and
Chief Climate Officer and Director
January 27, 2023

/s/ David Bernstein
David Bernstein
Chief Financial Officer and Chief Accounting Officer
January 27, 2023

/s/*Micky Arison
Micky Arison
Chair of the Board of
Directors
January 27, 2023

/s/*Sir Jonathon Band
Sir Jonathon Band
Director
January 27, 2023

/s/*Jason Glen Cahilly
Jason Glen Cahilly
Director
January 27, 2023

/s/*Helen Deeble
Helen Deeble
Director
January 27, 2023

/s/*Jeffrey J. Gearhart
Jeffrey J. Gearhart
Director
January 27, 2023

/s/*Richard J. Glasier
Richard J. Glasier
Director
January 27, 2023

/s/*Katie Lahey
Katie Lahey
Director
January 27, 2023

/s/*Sara Mathew
Sara Mathew
Director
January 27, 2023

/s/*Sir John Parker
Sir John Parker
Director
January 27, 2023

/s/*Stuart Subotnick
Stuart Subotnick
Director
January 27, 2023

/s/*Laura Weil
Laura Weil
Director
January 27, 2023

/s/*Randall Weisenburger
Randall Weisenburger
Director
January 27, 2023

*By: /s/ Enrique Miguez
Enrique Miguez
(Attorney-in-fact)
January 27, 2023

/s/*Jeffrey J. Gearhart
Jeffrey J. Gearhart
Director
January 27, 2023

/s/*Richard J. Glasier
Richard J. Glasier
Director
January 27, 2023

/s/*Katie Lahey
Katie Lahey
Director
January 27, 2023

/s/*Sara Mathew
Sara Mathew
Director
January 27, 2023

/s/*Sir John Parker
Sir John Parker
Director
January 27, 2023

/s/*Stuart Subotnick
Stuart Subotnick
Director
January 27, 2023

/s/*Laura Weil
Laura Weil
Director
January 27, 2023

/s/*Randall Weisenburger
Randall Weisenburger
Director
January 27, 2023

*By: /s/ Enrique Miguez
Enrique Miguez
(Attorney-in-fact)
January 27, 2023

Exhibit 4.1

December 6, 2023

Securities and Exchange Commission
100 F Street, NE
Washington, DC 20549

RE: Carnival Corporation, Commission File No. 001-9610, and
Carnival plc, Commission File No. 001-15136

Ladies and Gentlemen:

Pursuant to Item 601(b) (4) (iii) of Regulation S-K promulgated under the Securities Exchange Act of 1934, as amended, Carnival Corporation and Carnival plc (the “Companies”) hereby agree to furnish copies of certain long-term debt instruments to the Securities and Exchange Commission upon the request of the Commission and, in accordance with such regulation, such instruments are not being filed as part of the joint Annual Report on Form 10-K of the Companies for their year ended November 30, 2022.

Very truly yours,

CARNIVAL CORPORATION AND CARNIVAL PLC

/s/ Enrique Miguez
General Counsel

Exhibit 13

CARNIVAL CORPORATION & PLC
EXHIBIT 13 TO FORM 10-K
FOR THE YEAR ENDED NOVEMBER 30, 2022

TABLE OF CONTENTS

CARNIVAL CORPORATION & PLC
CONSOLIDATED STATEMENTS OF INCOME (LOSS)
(in millions, except per share data)

	Years Ended November 30,		
	2022	2021	2020
Revenues			
Passenger ticket	$ 7,022	$ 1,000	$ 3,684
Onboard and other	5,147	908	1,910
	12,168	1,908	5,595
Operating Costs and Expenses			
Commissions, transportation and other	1,630	269	1,139
Onboard and other	1,528	272	605
Payroll and related	2,181	1,309	1,780
Fuel	2,157	680	823
Food	863	187	413
Ship and other impairments	440	591	1,967
Other operating	2,958	1,346	1,518
	11,757	4,655	8,245
Selling and administrative	2,515	1,885	1,878
Depreciation and amortization	2,275	2,233	2,241
Goodwill impairments	—	226	2,096
	16,547	8,997	14,460
Operating Income (Loss)	(4,379)	(7,089)	(8,865)
Nonoperating Income (Expense)			
Interest income	74	12	18
Interest expense, net of capitalized interest	(1,609)	(1,601)	(895)
Gain (loss) on debt extinguishment, net	(1)	(670)	(459)
Other income (expense), net	(165)	(173)	(52)
	(1,701)	(2,433)	(1,388)
Income (Loss) Before Income Taxes	(6,080)	(9,522)	(10,253)
Income Tax Benefit (Expense), Net	(14)	21	17
Net Income (Loss)	$ (6,093)	$ (9,501)	$ (10,236)
Earnings Per Share			
Basic	$ (5.16)	$ (8.46)	$ (13.20)
Diluted	$ (5.16)	$ (8.46)	$ (13.20)

The accompanying notes are an integral part of these consolidated financial statements.

CARNIVAL CORPORATION & PLC
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)
(in millions)

	Years Ended November 30,		
	2022	**2021**	**2020**
Net Income (Loss)	$ (6,093)	$ (9,501)	$ (10,236)
Items Included in Other Comprehensive Income (Loss)			
Change in foreign currency translation adjustment	(503)	(118)	578
Other	22	53	51
Other Comprehensive Income (Loss)	(481)	(65)	630
Total Comprehensive Income (Loss)	$ (6,574)	$ (9,567)	$ (9,606)

The accompanying notes are an integral part of these consolidated financial statements.

CARNIVAL CORPORATION & PLC
CONSOLIDATED BALANCE SHEETS
(in millions, except par values)

	November 30, 2022	November 30, 2021
ASSETS		
Current Assets		
Cash and cash equivalents	$ 4,029	$ 8,939
Restricted cash	1,988	14
Short-term investments	—	200
Trade and other receivables, net	395	246
Inventories	428	356
Prepaid expenses and other	652	379
Total current assets	7,492	10,133
Property and Equipment, Net	38,687	38,107
Operating Lease Right-of-Use Assets	1,274	1,333
Goodwill	579	579
Other Intangibles	1,156	1,181
Other Assets	2,515	2,011
	$ 51,703	$ 53,344
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current Liabilities		
Short-term borrowings	$ 200	$ 2,790
Current portion of long-term debt	2,393	1,927
Current portion of operating lease liabilities	146	142
Accounts payable	1,050	797
Accrued liabilities and other	1,942	1,641
Customer deposits	4,874	3,112
Total current liabilities	10,605	10,408
Long-Term Debt	31,953	28,509
Long-Term Operating Lease Liabilities	1,189	1,239
Other Long-Term Liabilities	891	1,043
Commitments and Contingencies		
Shareholders' Equity		
Carnival Corporation common stock, $0.01 par value; 1,960 shares authorized; 1,244 shares at 2022 and 1,116 shares at 2021 issued	12	11
Carnival plc ordinary shares, $1.66 par value; 217 shares at 2022 and 2021 issued	361	361
Additional paid-in capital	16,872	15,292
Retained earnings	269	6,448
Accumulated other comprehensive income (loss) ("AOCI")	(1,982)	(1,501)
Treasury stock, 130 shares at 2022 and 2021 of Carnival Corporation and 72 shares at 2022 and 67 shares at 2021 of Carnival plc, at cost	(8,468)	(8,466)
Total shareholders' equity	7,065	12,144
	$ 51,703	$ 53,344

The accompanying notes are an integral part of these consolidated financial statements.

CARNIVAL CORPORATION & PLC
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in millions)

	Years Ended November 30,		
	2022	2021	2020
OPERATING ACTIVITIES			
Net income (loss)	$ (6,093)	$ (9,501)	$ (10,236)
Adjustments to reconcile net income (loss) to net cash provided by (used in) operating activities			
Depreciation and amortization	2,275	2,233	2,241
Impairments	470	834	4,063
(Gain) loss on debt extinguishment	1	668	459
(Income) loss from equity-method investments	38	129	20
Share-based compensation	101	121	105
Amortization of discounts and debt issue costs	171	172	119
Noncash lease expense	148	140	172
Other, net	57	137	(56)
	(2,832)	(5,067)	(3,114)
Changes in operating assets and liabilities			
Receivables	(171)	(7)	125
Inventories	(95)	(63)	77
Prepaid expenses and other	(874)	(1,070)	(209)
Accounts payable	283	206	(165)
Accrued liabilities and other	341	601	(311)
Customer deposits	1,679	1,291	(2,703)
Net cash provided by (used in) operating activities	(1,670)	(4,109)	(6,301)
INVESTING ACTIVITIES			
Purchases of property and equipment	(4,940)	(3,607)	(3,620)
Proceeds from sales of ships and other	70	351	334
Purchase of minority interest	(1)	(90)	(81)
Purchase of short-term investments	(315)	(2,873)	—
Proceeds from maturity of short-term investments	515	2,673	—
Other, net	(96)	3	127
Net cash provided by (used in) investing activities	(4,767)	(3,543)	(3,240)
FINANCING ACTIVITIES			
Proceeds from (repayments of) short-term borrowings, net	(2,590)	(293)	2,852
Principal repayments of long-term debt	(2,075)	(5,956)	(1,621)
Premium paid on extinguishment of debt	(1)	(545)	—
Proceeds from issuance of long-term debt	7,209	13,042	15,020
Dividends paid	—	—	(689)
Purchases of common stock	—	—	(12)
Issuance of common stock, net	1,180	1,009	3,249
Issuance of common stock under the Stock Swap Program	95	206	—
Purchase of treasury stock under the Stock Swap Program	(87)	(188)	—
Debt issue costs and other, net	(154)	(327)	(150)
Net cash provided by (used in) financing activities	3,577	6,949	18,650
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(79)	(13)	53
Net increase (decrease) in cash, cash equivalents and restricted cash	(2,940)	(715)	9,161
Cash, cash equivalents and restricted cash at beginning of year	8,976	9,692	530
Cash, cash equivalents and restricted cash at end of year	$ 6,037	$ 8,976	$ 9,692

The accompanying notes are an integral part of these consolidated financial statements.

CARNIVAL CORPORATION & PLC
CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY
(in millions)

	Common stock	Ordinary shares	Additional paid-in capital	Retained earnings	AOCI	Treasury stock	Total shareholders' equity
At November 30, 2019	$ 7	$ 358	$ 8,807	$ 26,653	$ (2,066)	$ (8,394)	$ 25,365
Net income (loss)	—	—	—	(10,236)	—	—	(10,236)
Other comprehensive income (loss)	—	—	—	—	630	—	630
Cash dividends declared	—	—	—	(342)	—	—	(342)
Issuances of common stock, net	2	—	3,247	—	—	—	3,249
Issuance and repurchase of Convertible Notes (net settled through a registered direct offering)	2	—	1,798	—	—	—	1,799
Purchases of treasury stock under the Repurchase Program and other	—	2	97	—	—	(10)	89
At November 30, 2020	11	361	13,948	16,075	(1,436)	(8,404)	20,555
Net income (loss)	—	—	—	(9,501)	—	—	(9,501)
Other comprehensive income (loss)	—	—	—	—	(65)	—	(65)
Issuance of common stock, net	—	—	1,009	—	—	—	1,009
Conversion of Convertible Notes	—	—	15	—	—	—	15
Purchases and issuances under the Stock Swap program	—	—	206	—	—	(188)	19
Issuance of treasury shares for vested share-based awards	—	—	—	(126)	—	126	—
Share-based compensation and other	—	—	113	—	—	—	113
At November 30, 2021	11	361	15,292	6,448	(1,501)	(8,466)	12,144
Net income (loss)	—	—	—	(6,093)	—	—	(6,093)
Other comprehensive income (loss)	—	—	—	—	(481)	—	(481)
Issuances of common stock, net	1	—	1,178	—	—	—	1,180
Issuance of Convertible Notes	—	—	229	—	—	—	229
Purchases and issuances under the Stock Swap program, net	—	—	95	—	—	(87)	8
Issuance of treasury shares for vested share-based awards	—	—	—	(85)	—	85	—
Share-based compensation and other	—	—	79	(1)	—	—	78
At November 30, 2022	$ 12	$ 361	$ 16,872	$ 269	$ (1,982)	$ (8,468)	$ 7,065

The accompanying notes are an integral part of these consolidated financial statements.

CARNIVAL CORPORATION & PLC
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1 – General

Description of Business

Carnival Corporation was incorporated in Panama in 1974 and Carnival plc was incorporated in England and Wales in 2000. Together with their consolidated subsidiaries, they are referred to collectively in these consolidated financial statements and elsewhere in this 2022 Annual Report as “Carnival Corporation & plc,” “our,” “us” and “we.” The consolidated financial statements include the accounts of Carnival Corporation and Carnival plc and their respective subsidiaries.

We are the largest global cruise company and among the largest leisure travel companies with a portfolio of world-class cruise lines. With operations in North America, Australia, Europe and Asia, our portfolio features – AIDA Cruises, Carnival Cruise Line, Costa Cruises, Cunard, Holland America Line, Princess Cruises, P&O Cruises (Australia), P&O Cruises (UK) and Seabourn.

DLC Arrangement

Carnival Corporation and Carnival plc operate a dual listed company (“DLC”) arrangement, whereby the businesses of Carnival Corporation and Carnival plc are combined through a number of contracts and provisions in Carnival Corporation’s Articles of Incorporation and By-Laws and Carnival plc’s Articles of Association. The two companies operate as a single economic enterprise with a single senior management team and identical Boards of Directors, but each has retained its separate legal identity. Each company’s shares are publicly traded on the New York Stock Exchange (“NYSE”) for Carnival Corporation and the London Stock Exchange for Carnival plc. The Carnival plc American Depositary Shares are traded on the NYSE.

The constitutional documents of each company provide that, on most matters, the holders of the common equity of both companies effectively vote as a single body. The Equalization and Governance Agreement between Carnival Corporation and Carnival plc provides for the equalization of dividends and liquidation distributions based on an equalization ratio and contains provisions relating to the governance of the DLC arrangement. Because the equalization ratio is 1 to 1, one share of Carnival Corporation common stock and one Carnival plc ordinary share are generally entitled to the same distributions.

Under deeds of guarantee executed in connection with the DLC arrangement, as well as stand-alone guarantees executed since that time, each of Carnival Corporation and Carnival plc have effectively cross guaranteed all indebtedness and certain other monetary obligations of each other. Once the written demand is made, the holders of indebtedness or other obligations may immediately commence an action against the relevant guarantor.

Under the terms of the DLC arrangement, Carnival Corporation and Carnival plc are permitted to transfer assets between the companies, make loans to or investments in each other and otherwise enter into intercompany transactions. In addition, the cash flows and assets of one company are required to be used to pay the obligations of the other company, if necessary.

Given the DLC arrangement, we believe that providing separate financial statements for each of Carnival Corporation and Carnival plc would not present a true and fair view of the economic realities of their operations. Accordingly, separate financial statements for Carnival Corporation and Carnival plc have not been presented.

Liquidity and Management’s Plans

In the face of the global impact of COVID-19, we paused our guest cruise operations in March 2020 and began resuming guest cruise operations in 2021.

Based on the evolving nature of COVID-19 and our ongoing collaboration with local and national public health authorities, we have responsibly relaxed our related protocols, including greatly reducing or eliminating testing requirements and vaccination protocols to more closely align with the broader travel industry and strengthening our competitiveness.

As part of our liquidity management, we rely on estimates of our future liquidity, which includes numerous assumptions that are subject to various risks and uncertainties. The principal assumptions used to estimate our future liquidity consist of:

- Our continued cruise operations and expected timing of cash collections for cruise bookings

- Expected increases in revenue in 2023 on a per passenger basis compared to 2019, particularly with the responsible relaxation of COVID-19 related protocols aligning towards land-based vacation alternatives and strengthening our competitiveness
- Expected improvement in occupancy on a year-over-year basis returning to historical levels in the summer of 2023
- Stabilization of fuel prices around November 2022 year-end prices
- Continued stabilization of inflationary pressures on costs, moderated by a larger-more efficient fleet as compared to 2019

In addition, we make certain assumptions about new ship deliveries, improvements and removals, and consider the future export credit financings that are associated with the new ship deliveries.

We have a substantial debt balance as a result of the pause in guest cruise operations and require a significant amount of liquidity or cash provided by operating activities to service our debt. In addition, the continued effects of the pandemic, inflation, higher fuel prices, higher interest rates and fluctuations in foreign currency rates are collectively having a material negative impact on our financial results. The full extent of the collective impact of these items is uncertain and may be amplified by our substantial debt balance. We believe we have made reasonable estimates and judgments of the impact of these events within our consolidated financial statements and there may be changes to those estimates in future periods.

For almost three years, we have taken appropriate actions to manage our liquidity, including completing various capital market transactions, obtaining relevant financial covenant amendments or waivers (see Note 5 - “Debt”), accelerating the removal of certain ships from the fleet, and during the pause, reducing capital expenditures and operating expenses. As of November 30, 2022, 97% of our capacity has resumed guest cruise operations and is serving guests.

Based on these actions and our assumptions, and considering our $8.6 billion of liquidity including cash, restricted cash from the 2028 Senior Priority Notes which became unrestricted in December 2022 and borrowings available under our $1.7 billion, €1.0 billion and £0.2 billion multi-currency revolving credit facility (the “Revolving Facility”) at November 30, 2022, we believe that we have sufficient liquidity to fund our obligations and expect to remain in compliance with our financial covenants for at least the next twelve months from the issuance of these financial statements.

We will continue to pursue various opportunities to raise additional capital to fund obligations associated with future debt maturities and/or to extend the maturity dates associated with our existing indebtedness including our Revolving Facility and obtain relevant financial covenant amendments or waivers, if needed. Actions to raise capital may include issuances of debt, convertible debt or equity in private or public transactions or entering into new and extended credit facilities.

NOTE 2 – Summary of Significant Accounting Policies

Basis of Presentation

We consolidate entities over which we have control, as typically evidenced by a voting control of greater than 50% or for which we are the primary beneficiary, whereby we have the power to direct the most significant activities and the obligation to absorb significant losses or receive significant benefits from the entity. We do not separately present our noncontrolling interests in the consolidated financial statements since the amounts are immaterial. For affiliates we do not control but where significant influence over financial and operating policies exists, as typically evidenced by a voting control of 20% to 50%, the investment is accounted for using the equity method.

For 2021, we reclassified $14 million from prepaid expenses and other to restricted cash to conform to the current year presentation.

Preparation of Financial Statements

The preparation of our consolidated financial statements in conformity with accounting principles generally accepted in the United States of America (“U.S. GAAP”) requires management to make estimates and assumptions that affect the amounts reported and disclosed in our consolidated financial statements. The full extent to which the effects of the pandemic, inflation, higher fuel prices, higher interest rates and fluctuations in foreign currency rates will directly or indirectly impact our business, operations, results of operations and financial condition, including our valuation of goodwill and trademarks, impairment of ships and collectability of trade and notes receivables, will depend on future developments that are uncertain. We have made reasonable estimates and judgments of such items within our financial statements and there may be changes to those estimates in future periods. Actual results may differ from the estimates used in preparing our consolidated financial statements. All material intercompany balances and transactions are eliminated in consolidation.

Cash and Cash Equivalents

Cash and cash equivalents include investments with maturities of three months or less at acquisition which are stated at cost and present insignificant risk of changes in value.

Restricted Cash

Restricted cash is classified as short-term or long-term based on the expected timing of our ability to access or use the amounts. The long-term portion is included within other assets. Substantially all restricted cash as of November 30, 2022 relates to the net proceeds from the issuance of our 2028 Senior Priority Notes, which became unrestricted in December 2022.

Short-term Investments

Short-term investments include investments with maturities of three to 12 months which are stated at cost and present insignificant risk of changes in value.

Trade and Other Receivables

Although we generally require full payment from our customers prior to or concurrently with their cruise, we grant credit terms to a relatively small portion of our revenue source. We have receivables from credit card merchants and travel agents for cruise ticket purchases and onboard revenue. These receivables are included within trade and other receivables, net. We have agreements with a number of credit card processors that transact customer deposits related to our cruise vacations. Certain of these agreements allow the credit card processors to request, under certain circumstances, that we provide a reserve fund in cash. These reserve funds are included in other assets.

Inventories

Inventories consist substantially of food, beverages, hotel supplies, fuel and retail merchandise, which are all carried at the lower of cost or net realizable value. Cost is determined using the weighted-average or first-in, first-out methods.

Property and Equipment

Property and equipment are stated at cost less accumulated depreciation and any impairment charges. We capitalize interest as part of the cost of capital projects incurred during construction. Depreciation is computed using the straight-line method over our estimated useful lives of the assets to a residual value, as a percentage of original cost, as follows:

	Years	Residual Values
Ships	30	15%
Ship improvements	3-30	0%
Buildings and improvements	10-40	0%
Computer hardware and software	2-12	0%
Transportation equipment and other	3-20	0%
Leasehold improvements, including port facilities	Shorter of the remaining lease term or related asset life (3-30)	0%

The cost of ships under construction includes progress payments for the construction of new ships, as well as design and engineering fees, capitalized interest, construction oversight costs and various owner supplied items. Any liquidated damages received from shipyards are recorded as reductions to the cost basis of the ship.

We have a capital program for the improvement of our ships and for asset replacements to enhance the effectiveness and efficiency of our operations; to comply with, or exceed, all relevant legal and statutory requirements related to health, environment, safety, security and sustainability; and to gain strategic benefits or provide improved product innovations to our guests. We account for ship improvement costs, including replacements of certain significant components and parts, by capitalizing those costs we believe add value to our ships and have a useful life greater than one year and depreciating those improvements over their estimated remaining useful life. The costs of repairs and maintenance, including those incurred when a ship is taken out-of-service for scheduled maintenance, and minor improvement costs and expenses, are charged to expense as incurred.

In addition, specifically identified or estimated cost and accumulated depreciation of previously capitalized ship components are written-off upon retirement, which may result in a loss on disposal that is also included in other operating expenses.

We have estimated our ships' useful lives at 30 years and residual values at 15% of our original ship cost. Our ship useful life and residual value estimates take into consideration the estimated weighted-average useful lives of the ships' major component systems, such as hull, superstructure, main electric, engines and cabins. We also take into consideration the impact of technological changes, historical useful lives of similarly-built ships, long-term cruise and vacation market conditions and regulatory changes, including those related to the environment and climate change. We determine the residual value of our ships based on our long-term estimates of their resale value at the end of their useful life to us but before the end of their physical and economic lives to others, historical resale values of our and other cruise ships as well as our expectations of the long-term viability of the secondary cruise ship market. We review estimated useful lives and residual values for reasonableness whenever events or circumstances significantly change.

We evaluate ship asset impairments at the individual ship level which is the lowest level for which identifiable cash flows are largely independent of the cash flows of other assets and liabilities. We review our ships for impairment whenever events or circumstances indicate that the carrying value of a ship may not be recoverable. If estimated future cash flows are less than the carrying value of a ship, an impairment charge is recognized to the extent its carrying value exceeds its estimated fair value.

Leases

Substantially all of our leases for which we are the lessee are operating leases of port facilities and real estate and are included within operating lease right-of-use assets, long-term operating lease liabilities and current portion of operating lease liabilities in our Consolidated Balance Sheets.

We have port facilities and real estate lease agreements with lease and non-lease components, and in such cases, we account for the components as a single lease component.

We do not recognize lease assets and lease liabilities for any leases with an original term of less than one year. For some of our port facilities and real estate lease agreements, we have the option to extend our current lease term by 1 to 10 years. Generally, we do not include renewal options as a component of our present value calculation as we are not reasonably certain that we will exercise the options.

As most of our leases do not have a readily determinable implicit rate, we estimate the incremental borrowing rate ("IBR") to determine the present value of lease payments. We apply judgment in estimating the IBR including considering the term of the lease, the currency in which the lease is denominated, and the impact of collateral and our credit risk on the rate.

We amortize our lease assets on a straight-line basis over the lease term.

Goodwill and Other Intangibles

Goodwill represents the excess of the purchase price over the fair value of identifiable net assets acquired in a business acquisition. We review our goodwill for impairment as of July 31 every year, or more frequently if events or circumstances dictate. All of our goodwill has been allocated to our reporting units. The impairment review for goodwill allows us to first assess qualitative factors to determine whether it is necessary to perform the more detailed quantitative goodwill impairment test. We would perform the quantitative test if our qualitative assessment determined it is more-likely-than-not that a reporting unit's estimated fair value is less than its carrying amount. We may also elect to bypass the qualitative assessment and proceed directly to the quantitative test for any reporting unit. When performing the quantitative test, if the estimated fair value of the reporting unit exceeds its carrying value, no further analysis is required. However, if the estimated fair value of the reporting unit is less than the carrying value, goodwill is written down based on the difference between the reporting unit's carrying amount and its fair value, limited to the amount of goodwill allocated to the reporting unit. Judgment is required in estimating the fair value of our reporting unit.

Trademarks represent substantially all of our other intangibles. Trademarks are estimated to have an indefinite useful life and are not amortizable but are reviewed for impairment at least annually and as events or circumstances dictate. The impairment review for trademarks also allows us to first assess qualitative factors to determine whether it is necessary to perform a more detailed quantitative trademark impairment test. We would perform the quantitative test if our qualitative assessment determined it was more-likely-than-not that the trademarks are impaired. We may also elect to bypass the qualitative assessment and proceed directly to the quantitative test. Our trademarks would be considered impaired if their carrying value exceeds their estimated fair value.

Equity Method Investments

Equity method investments are initially recognized at cost and are included in other assets in the Consolidated Balance Sheets. Our proportionate interest in their results is included in other income (expense), net in the Consolidated Statements of Income.

Debt and Debt Issuance Costs

Debt is recorded at initial fair value, which normally reflects the proceeds received by us, net of debt issuance costs. Debt is subsequently stated at amortized cost. Debt issuance costs are generally amortized to interest expense using the straight-line method, which approximates the effective interest method, over the term of the debt. Debt issue discounts and premiums are generally amortized to interest expense using the effective interest rate method over the term of the debt.

Derivatives and Other Financial Instruments

We have in the past and may in the future utilize derivative and non-derivative financial instruments, such as foreign currency forwards, options and swaps, foreign currency debt obligations and foreign currency cash balances, to manage our exposure to fluctuations in certain foreign currency exchange rates. We use interest rate swaps primarily to manage our interest rate exposure to achieve a desired proportion of fixed and floating rate debt. Our policy is to not use financial instruments for trading or other speculative purposes.

All derivatives are recorded at fair value. If a derivative is designated as a cash flow hedge, then the change in the fair value of the derivative is recognized as a component of AOCI until the underlying hedged item is recognized in earnings or the forecasted transaction is no longer probable. If a derivative or a non-derivative financial instrument is designated as a hedge of our net investment in a foreign operation, then changes in the effective portion of the fair value of the financial instrument are recognized as a component of AOCI to offset the change in the translated value of the designated portion of net investment being hedged until the investment is sold or substantially liquidated, while the impact attributable to components excluded from the assessment of hedge effectiveness is recorded in interest expense, net of capitalized interest, on a systematic and rational basis. For derivatives that do not qualify for hedge accounting treatment, the change in fair value is recognized in earnings.

We classify the fair value of all our derivative contracts as either current or long-term, depending on the maturity date of the derivative contract. The cash flows from derivatives treated as cash flow hedges are classified in our Consolidated Statements of Cash Flows in the same category as the item being hedged.

Derivative valuations are based on observable inputs such as interest rates and commodity price curves, forward currency exchange rates, credit spreads, maturity dates, volatilities, and cross currency basis spreads. We use the income approach to value derivatives for foreign currency options and forwards, interest rate swaps and cross currency swaps using observable market data for all significant inputs and standard valuation techniques to convert future amounts to a single present value amount, assuming that participants are motivated but not compelled to transact.

Foreign Currency Translation and Transactions

These financial statements are presented in U.S. dollars. Each foreign entity determines its functional currency by reference to its primary economic environment. Our most significant foreign entities utilize the U.S. dollar, Euro, Sterling or the Australian dollar as their functional currencies. We translate the assets and liabilities of our foreign entities that have functional currencies other than the U.S. dollar at exchange rates in effect at the balance sheet date. Revenues and expenses of these foreign entities are translated at the average rate for the period. Equity is translated at historical rates and the resulting foreign currency translation adjustments are included as a component of AOCI, which is a separate component of shareholders' equity. Therefore, the U.S. dollar value of the non-equity translated items in our consolidated financial statements will fluctuate from period to period, depending on the changing value of the U.S. dollar versus these currencies.

We execute transactions in a number of different currencies. At the date that the transaction is recognized, each asset, liability, revenue, expense, gain or loss arising from the transaction is measured and recorded in the functional currency of the recording entity using the exchange rate in effect at that date. At each balance sheet date, recorded monetary balances denominated in a currency other than the functional currency are adjusted using the exchange rate at the balance sheet date, with gains or losses recorded in other income or other expense, unless such monetary balances have been designated as hedges of net investments in our foreign entities. The net gains or losses resulting from foreign currency transactions were not material in 2022, 2021 and

2020. In addition, the unrealized gains or losses on our long-term intercompany receivables and payables which are denominated in a non-functional currency and which are not expected to be repaid in the foreseeable future are recorded as foreign currency translation adjustments included as a component of AOCI.

Revenue and Expense Recognition

Guest cruise deposits and advance onboard purchases are initially included in customer deposits when received. Customer deposits are subsequently recognized as cruise revenues, together with revenues from onboard and other activities, and all associated direct costs and expenses of a voyage are recognized as cruise costs and expenses, upon completion of voyages with durations of ten nights or less and on a pro rata basis for voyages in excess of ten nights. The impact of recognizing these shorter duration cruise revenues and costs and expenses on a completed voyage basis versus on a pro rata basis is not material. Certain of our product offerings are bundled and we allocate the value of the bundled services and goods between passenger ticket revenues and onboard and other revenues based upon the estimated standalone selling prices of those goods and services. Guest cancellation fees, when applicable, are recognized in passenger ticket revenues at the time of cancellation.

Our sales to guests of air and other transportation to and from airports near the home ports of our ships are included in passenger ticket revenues, and the related costs of purchasing these services are included in transportation costs. The proceeds that we collect from the sales of third-party shore excursions are included in onboard and other revenues and the related costs are included in onboard and other costs. The amounts collected on behalf of our onboard concessionaires, net of the amounts remitted to them, are included in onboard and other revenues as concession revenues. All of these amounts are recognized on a completed voyage or pro rata basis as discussed above.

Passenger ticket revenues include fees, taxes and charges collected by us from our guests. The fees, taxes and charges that vary with guest head counts and are directly imposed on a revenue-producing arrangement are expensed in commissions, transportation and other costs when the corresponding revenues are recognized. These fees, taxes and charges included in commissions, transportation and other costs were $438 million in 2022, $73 million in 2021 and $215 million in 2020. The remaining portion of fees, taxes and charges are expensed in other operating expenses when the corresponding revenues are recognized.

Revenues and expenses from our hotel and transportation operations, which are included in our Tour and Other segment, are recognized at the time the services are performed.

Customer Deposits

Our payment terms generally require an initial deposit to confirm a reservation, with the balance due prior to the voyage. Cash received from guests in advance of the cruise is recorded in customer deposits and in other long-term liabilities on our Consolidated Balance Sheets. These amounts include refundable deposits. In certain situations, we have provided flexibility to guests by allowing guests to rebook at a future date, receive future cruise credits ("FCCs") or elect to receive refunds in cash. We have at times issued enhanced FCCs. Enhanced FCCs provide the guest with an additional credit value above the original cash deposit received, and the enhanced value is recognized as a discount applied to the future cruise in the period used. We record a liability for unexpired FCCs to the extent we have received and not refunded cash from guests for cancelled bookings. We had total customer deposits of $5.1 billion and $3.5 billion as of November 30, 2022 and 2021, which includes approximately $210 million of unredeemed FCCs as of November 30, 2022. Given the uncertainty of travel demand caused by COVID-19 and lack of comparable historical experience of FCC redemptions, we are unable to estimate the number of FCCs that will not be used in future periods. Refunds payable to guests who have elected cash refunds are recorded in accounts payable. During 2022 and 2021, we recognized revenues of $1.9 billion and $0.1 billion related to our customer deposits as of November 30, 2021 and 2020. Historically, our customer deposits balance changes due to the seasonal nature of cash collections, the recognition of revenue, refunds of customer deposits and foreign currency changes.

Contract Costs

We recognize incremental travel agent commissions and credit and debit card fees incurred as a result of obtaining the ticket contract as assets when paid prior to the start of a voyage. We record these amounts within prepaid expenses and other and subsequently recognize these amounts as commissions, transportation and other at the time of revenue recognition or at the time of voyage cancellation. We had incremental costs of obtaining contracts with customers recognized as assets of $218 million and $55 million as of November 30, 2022 and 2021.

Insurance

We use a combination of insurance and self-insurance to cover a number of risks including illness and injury to crew, guest injuries, pollution, other third-party claims in connection with our cruise activities, damage to hull and machinery for each of our ships, war risks, workers' compensation, directors' and officers' liability, property damage and general liability for shoreside third-party claims. We recognize insurance recoverables from third-party insurers up to the amount of recorded losses at the time the recovery is probable and upon settlement for amounts in excess of the recorded losses. All of our insurance policies are subject to coverage limits, exclusions and deductible levels. The liabilities associated with crew illnesses and crew and guest injury claims, including all legal costs, are estimated based on the specific merits of the individual claims or actuarially estimated based on historical claims experience, loss development factors and other assumptions.

Selling and Administrative Expenses

Selling expenses include a broad range of advertising, marketing and promotional expenses. Advertising is charged to expense as incurred, except for media production costs, which are expensed upon the first airing of the advertisement. Selling expenses totaled $744 million in 2022, $340 million in 2021 and $348 million in 2020. Administrative expenses represent the costs of our shoreside support, reservations and other administrative functions, and include salaries and related benefits, professional fees and building occupancy costs, which are typically expensed as incurred.

Share-Based Compensation

We recognize compensation expense for all share-based compensation awards using the fair value method. For time-based share awards, we recognize compensation cost ratably using the straight-line attribution method over the expected vesting period or to the retirement eligibility date, if earlier than the vesting period. For performance-based share awards, we estimate compensation cost based on the probability of the performance condition being achieved and recognize expense ratably using the straight-line attribution method over the expected vesting period. If all or a portion of the performance condition is not expected to be met, the appropriate amount of previously recognized compensation expense is reversed and future compensation expense is adjusted accordingly. For market-based share awards, we recognize compensation cost ratably using the straight-line attribution method over the expected vesting period. If the target market conditions are not expected to be met, compensation expense will still be recognized. We account for forfeitures as they occur.

Earnings Per Share

Basic earnings per share is computed by dividing net income (loss) by the weighted-average number of shares outstanding during each period. Diluted earnings per share is computed by dividing net income (loss) by the weighted-average number of shares and common stock equivalents outstanding during each period. For earnings per share purposes, Carnival Corporation common stock and Carnival plc ordinary shares are considered a single class of shares since they have equivalent rights.

Accounting Pronouncements

In March 2020, the Financial Accounting Standards Board ("FASB") issued Accounting Standard Update ("ASU") No. 2020-04, Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting ("ASU No. 2020-04"), which provides temporary optional expedients and exceptions to accounting guidance on contract modifications and hedge accounting to ease entities' financial reporting burdens as the market transitions from the London Interbank Offered Rate ("LIBOR") and other interbank offered rates to alternative reference rates. ASU 2020-04 is effective upon issuance. In December 2022, the FASB deferred the date for which this guidance can be applied from December 31, 2022 to December 31, 2024. The use of LIBOR was phased out at the end of 2021, although the phase-out of U.S. dollar LIBOR for existing agreements has been delayed until June 2023. We continue to monitor developments related to the LIBOR transition and identification of an alternative, market-accepted rate.

In December 2021, we amended our £350 million long-term debt agreement which referenced the British Pound sterling ("GBP") LIBOR to the Sterling Overnight Index Average ("SONIA") and applied the practical expedient. This amendment did not have a material impact on our consolidated financial statements. As of November 30, 2022, approximately $5.8 billion of our outstanding indebtedness bears interest at floating rates referenced to U.S. dollar LIBOR with maturity dates extending beyond June 30, 2023. We are currently evaluating our contracts referenced to U.S. dollar LIBOR and working with our creditors on updating credit agreements as necessary to include language regarding the successor or alternate rate to LIBOR. We do not expect the adoption of this standard to have a material impact on our consolidated financial statements during the LIBOR transition period.

The FASB issued guidance, Debt - Debt with Conversion and Other Options and Derivative and Hedging - Contracts in Entity's Own Equity, which simplifies the accounting for convertible instruments. This guidance eliminates certain models that require separate accounting for embedded conversion features, in certain cases. Additionally, among other changes, the guidance eliminates certain of the conditions for equity classification for contracts in an entity's own equity. The guidance also requires entities to use the if-converted method for all convertible instruments in the diluted earnings per share calculation and include the effect of share settlement for instruments that may be settled in cash or shares, except for certain liability-classified share-based payment awards. We will adopt this guidance in the first quarter of 2023 using the modified retrospective approach. We do not expect the adoption of this guidance to have a material impact on our consolidated financial statements.

In September 2022, the FASB issued ASU No. 2022-04, Liabilities-Supplier Finance Programs (Subtopic 405-50) - Disclosure of Supplier Finance Program Obligations. This ASU requires that a buyer in a supplier finance program disclose sufficient information about the program to allow a user of financial statements to understand the program's nature, activity during the period, changes from period to period, and potential magnitude. This ASU is expected to improve financial reporting by requiring new disclosures about the programs, thereby allowing financial statement users to better consider the effect of the programs on an entity's working capital, liquidity, and cash flows. This ASU is effective for fiscal years beginning after December 15, 2022, except for the amendment on roll forward information which is effective for fiscal years beginning after December 15, 2023. We are currently evaluating the impact of the new guidance on the disclosures to our consolidated financial statements.

NOTE 3 – Property and Equipment

	November 30,	
(in millions)	**2022**	**2021**
Ships and ship improvements	$ 52,908	$ 50,501
Ships under construction	785	1,536
Other property and equipment	3,970	3,928
Total property and equipment	57,663	55,965
Less accumulated depreciation	(18,976)	(17,858)
	$ 38,687	$ 38,107

Capitalized interest amounted to $48 million in 2022, $83 million in 2021 and $66 million in 2020.

Sales of Ships

During 2022, we entered into an agreement to sell one EA segment ship and completed the sales of two NAA segment ships and one EA segment ship, all of which collectively represents a passenger-capacity reduction of 4,110 berths for our EA segment and 4,110 berths for our NAA segment. Additionally, in December 2022, we entered into an agreement to sell one EA segment ship, which represents a passenger-capacity reduction of 1,270 berths.

Refer to Note 10 - "Fair Value Measurements, Derivative Instruments and Hedging Activities and Financial Risks, Nonfinancial Instruments that are Measured at Fair Value on a Nonrecurring Basis, Impairment of Ships" for additional discussion.

NOTE 4 – Equity Method Investments

We have a minority interest in Grand Bahama Shipyard Ltd. ("Grand Bahama"), a ship repair and maintenance facility. Grand Bahama provided services to us of $12 million in 2022, $11 million in 2021 and $38 million in 2020. As of November 30, 2022, our investment in Grand Bahama was $43 million, consisting of $10 million in equity and a loan of $33 million. As of November 30, 2021, our investment in Grand Bahama was $47 million, consisting of $14 million in equity and a loan of $33 million.

We have a minority interest in the White Pass & Yukon Route ("White Pass") that includes port, railroad and retail operations in Skagway, Alaska. White Pass provided an immaterial amount of services to us in 2022, 2021 and 2020. As a result of the effects of the pause and subsequent resumption of our guest cruise operations on the 2022 and 2021 Alaska seasons, we evaluated whether our investment in White Pass was other than temporarily impaired and performed impairment assessments. As a result of our assessments, we recognized impairment charges for 2022 and 2021 of $30 million and $17 million in other income (expense), net. As of November 30, 2022, our investment in White Pass was $50 million, consisting of $18 million in equity and a loan of $32 million. As of November 30, 2021, our investment in White Pass was $76 million, consisting of $49 million in equity and a loan of $27 million.

We have a minority interest in CSSC Carnival Cruise Shipping Limited ("CSSC-Carnival"), a China-based cruise company which will operate its own fleet designed to serve the Chinese market. We provided an immaterial amount of services to CSSC-Carnival during both 2022 and 2021 and we paid CSSC-Carnival a total of $55 million for the lease of ships during 2021. As of November 30, 2022 and 2021, our investment in CSSC-Carnival was $70 million and $119 million. During 2020, we sold to CSSC-Carnival a controlling interest in an entity with full ownership of two EA segment ships and recognized a related gain of $107 million, included in other operating expenses in our Consolidated Statements of Income (Loss). During 2021, we sold to CSSC-Carnival our remaining $283 million investment in the minority interest of the same entity. During 2022 we did not make any capital contributions to CSSC-Carnival. During 2021 we made capital contributions to CSSC-Carnival in the amount of $90 million.

NOTE 5 – Debt

(in millions)	Maturity	Rate (a) (b)	November 30, 2022	November 30, 2021
Secured Debt				
Notes				
Notes	Feb 2026	10.5%	$ 775	$ 775
EUR Notes	Feb 2026	10.1%	439	481
Notes	Jun 2027	7.9%	192	192
Notes	Aug 2027	9.9%	900	900
Notes	Aug 2028	4.0%	2,406	2,406
Loans				
EUR fixed rate	Nov 2022	5.5% - 6.2%	—	98
EUR floating rate	Nov 2022 - Jun 2025	EURIBOR + 3.8%	808	951
Floating rate	June 2025 - Oct 2028	LIBOR + 3.0 - 3.3%	4,101	4,137
Total Secured Debt			9,621	9,939
Unsecured Debt				
Revolver				
Facility	(c)	LIBOR + 0.7%	200	2,790
Notes				
EUR Notes	Nov 2022	1.9%	—	622
Convertible Notes	Apr 2023	5.8%	96	522
Notes	Oct 2023	7.2%	125	125
Convertible Notes	Oct 2024	5.8%	426	—
Notes	Mar 2026	7.6%	1,450	1,450
EUR Notes	Mar 2026	7.6%	517	566
Notes	Mar 2027	5.8%	3,500	3,500
Convertible Notes	Dec 2027	5.8%	1,131	—
Notes	Jan 2028	6.7%	200	200
Senior Priority Notes	May 2028	10.4%	2,030	—
Notes	May 2029	6.0%	2,000	2,000
EUR Notes	Oct 2029	1.0%	620	679
Notes	Jun 2030	10.5%	1,000	—
Loans				
Floating rate	Feb 2023 - Sep 2024	LIBOR + 3.8 - 4.5%	590	590
GBP floating rate	Feb 2025	SONIA + 0.9% (d)	419	467
EUR floating rate	Dec 2021 - Mar 2026	EURIBOR + 1.8 - 2.4%	827	1,375
Export Credit Facilities				
Floating rate	Feb 2022 - Dec 2031	LIBOR + 0.8 - 1.5%	1,246	1,363
Fixed rate	Aug 2027 - Dec 2032	2.4 - 3.4%	3,143	3,488
EUR fixed rate	Feb 2031 - Jan 2034	1.1 - 1.6%	2,592	1,551
EUR floating rate	Feb 2022 - Nov 2034	EURIBOR + 0.2 - 1.6%	3,882	2,742
Total Unsecured Debt			25,994	24,031
Total Debt			35,615	33,970
Less: unamortized debt issuance costs and discounts			(1,069)	(744)
Total Debt, net of unamortized debt issuance costs and discounts			34,546	33,226

Less: short-term borrowings	(200)	(2,790)
Less: current portion of long-term debt	(2,393)	(1,927)
Long-Term Debt	$ 31,953	$ 28,509

(a) The reference rates for substantially all of our LIBOR and EURIBOR based variable debt have 0.0% to 0.75% floors.

(b) The above debt tables do not include the impact of our interest rate swaps and as of November 30, 2021, it also excludes the impact of our foreign currency swaps. As of November 30, 2022, we had no foreign currency swaps. The interest rates on some of our debt, including our Revolving Facility, fluctuate based on the applicable rating of senior unsecured long-term securities of Carnival Corporation or Carnival plc.

(c) Amounts outstanding under our Revolving Facility were drawn in 2020 for an initial six-month term. We may continue to re-borrow or otherwise utilize available amounts under the Revolving Facility through August 2024, subject to satisfaction of the conditions in the facility. We had $2.6 billion available for borrowing under our Revolving Facility as of November 30, 2022. The Revolving Facility also includes an emissions linked margin adjustment whereby, after the initial applicable margin is set per the margin pricing grid, the margin may be adjusted based on performance in achieving certain agreed annual carbon emissions goals. We are required to pay a commitment fee on any unutilized portion.

(d) As of November 30, 2022 the interest rate for the GBP unsecured loan was linked to SONIA and subject to a credit adjustment spread ranging from 0.03% to 0.28%. The referenced SONIA rate with the credit adjustment spread is subject to a 0% floor. As of November 30, 2021, this loan was referenced to GBP LIBOR.

Carnival Corporation and/or Carnival plc is the primary obligor of all our outstanding debt excluding $0.5 billion under a term loan facility of Costa Crociere S.p.A. (“Costa”), a subsidiary of Carnival plc, and $2.0 billion of 2028 Senior Priority Notes (as defined below), issued by Carnival Holdings (Bermuda) Limited (“Carnival Holdings”), a subsidiary of Carnival Corporation. All our outstanding debt is issued or guaranteed by substantially the same entities with the exception of up to $250 million of the Costa term loan facility, which is guaranteed by certain subsidiaries of Carnival plc and Costa that do not guarantee our other outstanding debt, and our 2028 Senior Priority Notes, which are issued by Carnival Holdings, which does not guarantee our other outstanding debt.

The scheduled maturities of our debt are as follows:

(in millions)

Year	**Principal Payments**
2023	$ 2,396
2024 (a)	2,645
2025	4,385
2026	4,507
2027	5,662
Thereafter	16,020
Total	$ 35,615

(a) Includes borrowings of $0.2 billion under our Revolving Facility. Amounts outstanding under our Revolving Facility were drawn in 2020 for an initial six-month term. We may continue to re-borrow or otherwise utilize available amounts under the Revolving Facility through August 2024, subject to satisfaction of the conditions in the facility. We had $2.6 billion available for borrowing under our Revolving Facility as of November 30, 2022.

Short-Term Borrowings

As of November 30, 2022 and November 30, 2021, our short-term borrowings consisted of $0.2 billion and $2.8 billion under our Revolving Facility.

Secured Debt

Repricing of 2025 Secured Term Loan

In June 2021, we entered into an amendment to reprice our $2.8 billion 2025 Secured Term Loan (the “2025 Secured Term Loan”). The amended U.S. dollar tranche bears interest at a rate per annum equal to LIBOR (with a 0.75% floor) plus 3.0%. The amended euro tranche bears interest at a rate per annum equal to EURIBOR (with a 0% floor) plus 3.75%.

2028 Senior Secured Notes

In July 2021, we issued $2.4 billion aggregate principal amount of 4.0% first-priority senior secured notes due in 2028 (the “2028 Senior Secured Notes”). We used the net proceeds from the issuance to purchase $2.0 billion aggregate principal amount of the 2023 Senior Secured Notes and to pay accrued interest on such notes and related fees and expenses. The 2028 Senior Secured Notes mature on August 1, 2028.

2028 Senior Secured Term Loan

In October 2021, we borrowed an aggregate principal amount of $2.3 billion under a new term loan. We used the net proceeds from this borrowing to redeem the $2.0 billion outstanding aggregate principal amount of the 2023 Senior Secured Notes and to pay accrued interest on such notes and related fees and expenses. Borrowings under the new term loan bear interest at a rate per annum equal to LIBOR (with a 0.75% floor) plus 3.25% and mature on October 18, 2028.

Unsecured Debt

2028 Senior Priority Notes

In October 2022, Carnival Holdings issued an aggregate principal amount of $2.0 billion senior priority notes that mature on May 1, 2028 (the “2028 Senior Priority Notes”). The 2028 Senior Priority Notes bear interest at a rate of 10.4% per year and are callable beginning May 1, 2025. In connection with the offering of the 2028 Senior Priority Notes, Carnival Corporation, Carnival plc and their respective subsidiaries contributed 12 unencumbered vessels (the “Subject Vessels”) to Carnival Holdings, with each of the Subject Vessels continuing to be operated under one of Carnival Corporation’s, Carnival plc’s or one of their respective subsidiaries’ brands. As of November 30, 2022, the Subject Vessels had an aggregate net book value of approximately $8.3 billion. As of November 30, 2022, there was no change in the identity of the Subject Vessels. See “Collateral and Priority Pool” below.

2027 Senior Unsecured Notes

In February 2021, we issued an aggregate principal amount of $3.5 billion senior unsecured notes that mature on March 1, 2027 (the “2027 Senior Unsecured Notes”). The 2027 Senior Unsecured Notes bear interest at a rate of 5.8% per year.

2029 Senior Unsecured Notes

In November 2021, we issued an aggregate principal amount of $2.0 billion senior unsecured notes that mature on May 1, 2029 (the “2029 Senior Unsecured Notes”), intended to refinance various 2022 and other debt maturities. The 2029 Senior Unsecured Notes bear interest at a rate of 6.0% per year and are callable beginning November 1, 2024.

2030 Senior Unsecured Notes

In May 2022, we issued an aggregate principal amount of $1.0 billion senior unsecured notes that mature on June 1, 2030 (the “2030 Senior Unsecured Notes”). The 2030 Senior Unsecured Notes bear interest at a rate of 10.5% per year and are callable beginning June 1, 2025.

Export Credit Facility Borrowings

During the year ended November 30, 2022, we borrowed $3.1 billion under export credit facilities due in semi-annual installments through 2034. As of November 30, 2022, the net book value of the vessels subject to negative pledges was $14.2 billion.

Debt Holidays

In 2021, we amended substantially all of our export credit facilities to defer approximately $1.0 billion of principal payments that would otherwise have been due over a period commencing April 1, 2021 until May 31, 2022, with repayments to be made over the following five years. The cumulative deferred principal amount of the debt holiday amendments, inclusive of the amendments entered into in 2020, is approximately $1.2 billion as of November 30, 2022. In addition, these amendments aligned the financial covenants of all our export credit facilities with our other facilities.

Convertible Notes

In 2020, we issued $2.0 billion aggregate principal amount of 5.8% convertible senior notes due 2023 (the "2023 Convertible Notes"). The 2023 Convertible Notes mature on April 1, 2023, unless earlier repurchased or redeemed by us or earlier converted in accordance with their terms prior to the maturity date. Since April 2020, we repurchased, exchanged and converted a portion of the 2023 Convertible Notes which resulted in a decrease of the principal amount of the 2023 Convertible Notes to $0.1 billion.

In August 2022, we issued $339 million aggregate principal amount of 5.8% convertible senior notes due 2024 (the "2024 Convertible Notes") pursuant to privately-negotiated non-cash exchange agreements with certain holders of the 2023 Convertible Notes, pursuant to which such holders agreed to exchange their 2023 Convertible Notes for an equal amount of 2024 Convertible Notes. In November 2022, we issued an additional $87 million aggregate principal amount of the 2024 Convertible Notes pursuant to privately-negotiated non-cash exchange agreements with certain holders of the 2023 Convertible Notes, pursuant to which such holders agreed to exchange their 2023 Convertible Notes for an equal amount of additional 2024 Convertible Notes. The 2024 Convertible Notes mature on October 1, 2024, unless earlier repurchased or redeemed by us or earlier converted in accordance with their terms prior to the maturity date.

In November 2022, we issued $1.1 billion aggregate principal amount of 5.8% convertible senior notes due 2027 (the "2027 Convertible Notes" and, together with the 2023 Convertible Notes and the 2024 Convertible Notes, the "Convertible Notes"). The 2027 Convertible Notes mature on December 1, 2027, unless earlier repurchased or redeemed by us or earlier converted in accordance with their terms prior to the maturity date.

The Convertible Notes are convertible by holders, subject to the conditions described within the respective indentures that govern the Convertible Notes, into cash, shares of Carnival Corporation common stock, or a combination thereof, at our election. The 2023 Convertible Notes and the 2024 Convertible Notes each have an initial conversion rate of 100 shares of Carnival Corporation common stock per $1,000 principal amount of notes, equivalent to an initial conversion price of $10 per share of common stock. The 2027 Convertible Notes have an initial conversion rate of approximately 75 shares of Carnival Corporation common stock per $1,000 principal amount of notes, equivalent to an initial conversion price of approximately $13.39 per share of common stock. The initial conversion price of the Convertible Notes is subject to certain anti-dilutive adjustments and may also increase if such Convertible Notes are converted in connection with a tax redemption or certain corporate events as described within the respective indentures that govern the Convertible Notes. The 2024 Convertible Notes were convertible from the date of issuance of the 2024 Convertible Notes until August 31, 2022, and thereafter may become convertible if certain conditions are met. As of November 30, 2022, there were no conditions satisfied which would allow the holders of the 2023 Convertible Notes, the 2024 Convertible Notes or the 2027 Convertible Notes to convert and therefore the Convertible Notes were not convertible as of such date. Refer to Note 15 - "Supplemental Cash Flow Information" for additional detail on transactions related to the Convertible Notes.

The 2023 Convertible Notes were redeemable, in whole but not in part, at any time on or prior to December 31, 2022 at a redemption price equal to 100% of the principal amount thereof, plus accrued and unpaid interest to the redemption date, if we or any guarantor would have to pay any additional amounts on the 2023 Convertible Notes due to a change in tax laws, regulations or rulings or a change in the official application, administration or interpretation thereof. We may redeem the 2024 Convertible Notes, in whole but not in part, at any time on or prior to June 30, 2024 at a redemption price equal to 100% of the principal amount thereof, plus accrued and unpaid interest to the redemption date, if we or any guarantor would have to pay any additional amounts on the 2024 Convertible Notes due to a change in tax laws, regulations or rulings or a change in the official application, administration or interpretation thereof. We may redeem the 2027 Convertible Notes, in whole but not in part, at any time on or prior to the 40th scheduled trading day immediately before the maturity date at a redemption price equal to 100% of the principal amount thereof, plus accrued and unpaid interest to the redemption date, if we or any guarantor would have to pay any additional amounts on the 2027 Convertible Notes due to a change in tax laws, regulations or rulings or a change in the official application, administration or interpretation thereof.

On or after December 5, 2025 and on or before the 40th scheduled trading day immediately before the maturity date, we may redeem for cash all or part of the 2027 Convertible Notes, at our option, if the last reported sale price of Carnival Corporation's common stock exceeds 130% of the conversion price then in effect for at least 20 trading days (whether or not consecutive), including the trading day immediately preceding the date on which we provide notice of redemption, during the 30 consecutive trading day period ending on, and including, the trading day immediately preceding the date on which we provide notice of redemption. The redemption price will equal 100% of the principal amount of the 2027 Convertible Notes being redeemed, plus accrued and unpaid interest to, but excluding, the redemption date.

We account for the Convertible Notes as separate liability and equity components. We determine the carrying amount of the liability component as the present value of its cash flows. The carrying amount of the equity component representing the conversion option is calculated by deducting the carrying value of the liability component from the initial proceeds of the Convertible Notes.

The carrying amount of the equity component was $229 million on the date of issuance of the 2027 Convertible Notes and $286 million on the date of issuance of the 2023 Convertible Notes. The carrying amount of the equity component for the 2023 Convertible Notes was reduced to zero in conjunction with the partial repurchase in August 2020 because at the time of repurchase, the fair value of the equity component for the portion of the 2023 Convertible Notes that was repurchased, exceeded the total amount of the equity component recorded at the time the 2023 Convertible Notes were issued. The fair value of the conversion option remained unchanged after the exchange of the portion of the 2023 Convertible Notes for the 2024 Convertible Notes and, as a result, there was no adjustment to the carrying amount of the equity component.

The debt discount, which represents the excess of the principal amount of the Convertible Notes over the carrying amount of the liability component on the date of issuance of the Convertible Notes, is capitalized and amortized to interest expense under the effective interest rate method over the term of the respective Convertible Notes. Following the exchange of the portion of the 2023 Convertible Notes for the 2024 Convertible Notes, the remaining unamortized discount was allocated between the 2023 Convertible Notes and the 2024 Convertible Notes and is amortized to interest expense over each respective term using the effective interest rate method.

The net carrying value of the liability component of the Convertible Notes was as follows:

	November 30,	
(in millions)	**2022**	**2021**
Principal	$ 1,653	$ 522
Less: Unamortized debt discount	(274)	(45)
	$ 1,380	$ 478

As of November 30, 2022, the if-converted value on available shares of 137 million for the Convertible Notes was below par.

Collateral and Priority Pool

As of November 30, 2022, the net book value of our ships and ship improvements, excluding ships under construction, is $36.2 billion. Our secured debt is secured on either a first or second-priority basis, depending on the instrument, by certain collateral, which includes vessels and certain assets related to those vessels and material intellectual property (combined net book value of approximately $23.6 billion, including $22.0 billion related to vessels and certain assets related to those vessels) as of November 30, 2022 and certain other assets.

In addition, as of December 9, 2022, $8.3 billion in net book value of our ships and ship improvements have been transferred to Carnival Holdings. These vessels are included in the Vessel Priority Pool of Subject Vessels for our 2028 Senior Priority Notes.

Covenant Compliance

As of November 30, 2022, our Revolving Facility, unsecured loans and export credit facilities contain certain covenants listed below.

- Maintain minimum interest coverage (adjusted EBITDA to consolidated net interest charges, as defined in the agreements) (the “Interest Coverage Covenant”) at the end of each fiscal quarter from August 31, 2023, at a ratio of not less than 2.0 to 1.0 for the August 31, 2023 testing date, 2.5 to 1.0 for the November 30, 2023 testing date, and 3.0 to 1.0 for the February 29, 2024 testing date onwards, or through their respective maturity dates.
- Maintain minimum issued capital and consolidated reserves (as defined in the agreements) of $5.0 billion
- Limit our debt to capital (as defined in the agreements) percentage from the November 30, 2021 testing date until the May 31, 2023 testing date, to a percentage not to exceed 75%, following which it will be tested at levels which decline ratably to 65% from the May 31, 2024 testing date onwards
- Maintain minimum liquidity of $1.5 billion through November 30, 2026

- Adhere to certain restrictive covenants through November 30, 2024
- Limit the amounts of our secured assets as well as secured and other indebtedness

During 2022, we entered into letter agreements to waive compliance with the Interest Coverage Covenant under our Revolving Facility and $11.8 billion of $12.1 billion of our unsecured loans and export credit facilities which contain this covenant through the February 29, 2024 testing date.

Subsequent to November 30, 2022 and as of January 12, 2023, we entered into further letter agreements to waive compliance with the Interest Coverage Covenant under the remaining $0.3 billion of our unsecured loans and export credit facilities which contain the covenant through the February 29, 2024 testing date and our Revolving Facility through the May 31, 2024 testing date. We will be required to comply beginning with the next testing date of May 31, 2024 or August 31, 2024, as applicable.

At November 30, 2022, we were in compliance with the applicable covenants under our debt agreements. Generally, if an event of default under any debt agreement occurs, then, pursuant to cross-default and/or cross-acceleration clauses therein, substantially all of our outstanding debt and derivative contract payables could become due, and our debt and derivative contracts could be terminated. Any financial covenant amendment may lead to increased costs, increased interest rates, additional restrictive covenants and other available lender protections that would be applicable.

Carnival Corporation or Carnival plc and certain of our subsidiaries have guaranteed substantially all of our indebtedness.

NOTE 6 – Commitments

As of November 30, 2022, we expect the timing of our new ship growth capital commitments to be as follows:

(in millions) **Year**			
2023	$	1,755	
2024		2,400	(a)
2025		895	(a)
Thereafter		—	
	$	5,050	

(a) As of November 30, 2022, includes a ship subject to financing. Subsequent to November 30, 2022, we obtained financing for the 2024 and 2025 ship deliveries, such that these commitments are no longer subject to financing.

NOTE 7 – Contingencies

Litigation

We are routinely involved in legal proceedings, claims, disputes, regulatory matters and governmental inspections or investigations arising in the ordinary course of or incidental to our business, including those noted below. Additionally, as a result of the impact of COVID-19, litigation claims, enforcement actions, regulatory actions and investigations, including, but not limited to, those arising from personal injury and loss of life, have been and may, in the future, be asserted against us. We expect many of these claims and actions, or any settlement of these claims and actions, to be covered by insurance and historically the maximum amount of our liability, net of any insurance recoverables, has been limited to our self-insurance retention levels.

We record provisions in the consolidated financial statements for pending litigation when we determine that an unfavorable outcome is probable and the amount of the loss can be reasonably estimated.

Legal proceedings and government investigations are subject to inherent uncertainties, and unfavorable rulings or other events could occur. Unfavorable resolutions could involve substantial monetary damages. In addition, in matters for which conduct remedies are sought, unfavorable resolutions could include an injunction or other order prohibiting us from selling one or more products at all or in particular ways, precluding particular business practices or requiring other remedies. An unfavorable outcome might result in a material adverse impact on our business, results of operations, financial position or liquidity.

As previously disclosed, on May 2, 2019, two lawsuits were filed against Carnival Corporation in the U.S. District Court for the Southern District of Florida under Title III of the Cuban Liberty and Democratic Solidarity Act, also known as the Helms-

Burton Act, alleging that Carnival Corporation “trafficked” in confiscated Cuban property when certain ships docked at certain ports in Cuba, and that this alleged “trafficking” entitles the plaintiffs to treble damages. In the matter filed by Havana Docks Corporation, the hearings on motions for summary judgment were concluded on January 18, 2022. On March 21, 2022, the court granted summary judgment in favor of Havana Docks Corporation as to liability. On August 31, 2022, the court determined that the trebling provision of the Helms-Burton statute applies to damages and interest and accordingly, we adjusted our estimated liability for this matter. The court held a status conference on September 22, 2022, at which time it was determined that a jury trial is no longer necessary. On December 30, 2022, the court entered judgment against Carnival in the amount of $110 million plus $4 million in fees and costs. We intend to appeal. In the matter filed by Javier Bengochea on December 20, 2021, the court issued an order inviting an amicus brief from the U.S. government on several issues involved in the appeal. The U.S. government filed its brief and the court ordered the parties to respond. On May 6, 2022 we filed our response brief. On November 23, 2022, the Eleventh Circuit entered an order affirming the dismissal of the case in our favor. We believe that any final liability which may arise as a result of these actions is unlikely to have a material impact on our consolidated financial statements.

As previously disclosed, on April 8, 2020, DeCurtis LLC (“DeCurtis”), a former vendor, filed an action against Carnival Corporation in the U.S. District Court for the Middle District of Florida seeking declaratory relief that DeCurtis is not infringing on several of Carnival Corporation’s patents in relation to its OCEAN Medallion systems and technology. The action also raises certain monopolization claims under The Sherman Antitrust Act of 1890, unfair competition and tortious interference, and seeks declaratory judgment that certain Carnival Corporation patents are unenforceable. DeCurtis seeks damages, including its fees and costs, and seeks declarations that it is not infringing and/or that Carnival Corporation’s patents are unenforceable. On April 10, 2020, Carnival Corporation filed an action against DeCurtis in the U.S. District Court for the Southern District of Florida for breach of contract, trade secrets violations and patent infringement. Carnival Corporation seeks damages, including its fees and costs, as well as an order permanently enjoining DeCurtis from engaging in such activities. These two cases have now been consolidated in the Southern District of Florida. On April 25, 2022, we moved for summary judgment on our breach of contract claims and on all of DeCurtis’s claims. DeCurtis also filed a motion for summary judgment on certain portions of our claims. Both motions for summary judgment were fully briefed. On July 28, 2022, the court adopted the Magistrate Judge’s report and recommendation granting our opening claim construction brief and denying DeCurtis’s motion for summary judgment regarding the invalidity of various patent claims. On November 11, 2022, the Magistrate Judge entered a Report and Recommendation which recommended that the Court enter an order denying our motion for summary judgment and granting in part and denying in part DeCurtis’s motion for summary judgment. Both parties have filed objections to the Report and Recommendation. The court has set the trial date for February 27, 2023. We believe the ultimate outcome will not have a material impact on our consolidated financial statements.

COVID-19 Actions

We have been named in a number of individual actions related to COVID-19. These actions include tort claims based on a variety of theories, including negligence and failure to warn. The plaintiffs in these actions allege a variety of injuries: some plaintiffs confined their claim to emotional distress, while others allege injuries arising from testing positive for COVID-19. A smaller number of actions include wrongful death claims. Substantially all of these individual actions have now been dismissed or settled for immaterial amounts.

As of November 30, 2022, 11 purported class actions have been brought by former guests in several U.S. federal courts, the Federal Court in Australia, and in Italy. These actions include tort claims based on a variety of theories, including negligence, gross negligence and failure to warn, physical injuries and severe emotional distress associated with being exposed to and/or contracting COVID-19 onboard. As of November 30, 2022, nine of these class actions have either been settled individually for immaterial amounts or had their class allegations dismissed by the courts and only the Australian and Italian matters remain.

All COVID-19 matters seek monetary damages and most seek additional punitive damages in unspecified amounts.

We continue to take actions to defend against the above claims.

Regulatory or Governmental Inquiries and Investigations

We have been, and may continue to be, impacted by breaches in data security and lapses in data privacy, which occur from time to time. These can vary in scope and intent from inadvertent events to malicious motivated attacks.

As previously disclosed, on June 24, 2022, we finalized a settlement with the New York Department of Financial Services (“NY DFS”) in connection with previously disclosed cybersecurity events, pursuant to which we have paid an amount that did not have a material impact on our consolidated financial statements. In addition, as previously disclosed, we finalized a settlement with the State Attorneys General from 46 states in connection with the same cybersecurity events, pursuant to which we have paid an amount that did not have a material impact on our consolidated financial statements. All previously disclosed cyber incidents have now been resolved.

We have incurred legal and other costs in connection with cyber incidents that have impacted us. The penalties and settlements paid in connection with cyber incidents over the last three years were not material. While these incidents did not have a material adverse effect on our business, results of operations, financial position or liquidity, no assurances can be given about the future and we may be subject to future litigation, attacks or incidents that could have such a material adverse effect.

On March 14, 2022, the U.S. Department of Justice and the U.S. Environmental Protection Agency notified us of potential civil penalties and injunctive relief for alleged Clean Water Act violations by owned and operated vessels covered by the 2013 Vessel General Permit. We are working with these agencies to reach a resolution of this matter. We believe the ultimate outcome will not have a material impact on our consolidated financial statements.

Other Contingent Obligations

Some of the debt contracts we enter into include indemnification provisions obligating us to make payments to the counterparty if certain events occur. These contingencies generally relate to changes in taxes or changes in laws which increase the lender’s costs. There are no stated or notional amounts included in the indemnification clauses, and we are not able to estimate the maximum potential amount of future payments, if any, under these indemnification clauses.

We have agreements with a number of credit card processors that transact customer deposits related to our cruise vacations. Certain of these agreements allow the credit card processors to request, under certain circumstances, that we provide a reserve fund in cash. Although the agreements vary, these requirements may generally be satisfied either through a withheld percentage of customer payments or providing cash funds directly to the credit card processor. As of November 30, 2022 and 2021, we had $1.7 billion and $1.1 billion in reserve funds related to our customer deposits provided to satisfy these requirements which are included within other assets. We continue to expect to provide reserve funds under these agreements. Additionally, as of November 30, 2022 and 2021, we had $30 million of cash collateral in escrow which is included within other assets.

NOTE 8 – Taxation

A summary of our principal taxes and exemptions in the jurisdictions where our significant operations are located is as follows:

U.S. Income Tax

We are primarily foreign corporations engaged in the business of operating cruise ships in international transportation. We also own and operate, among other businesses, the U.S. hotel and transportation business of Holland America Princess Alaska Tours through U.S. corporations.

Our North American cruise ship businesses and certain ship-owning subsidiaries are engaged in a trade or business within the U.S. Depending on its itinerary, any particular ship may generate income from sources within the U.S. We believe that our U.S. source income and the income of our ship-owning subsidiaries, to the extent derived from, or incidental to, the international operation of a ship or ships, is currently exempt from U.S. federal income and branch profit taxes.

Our domestic U.S. operations, principally the hotel and transportation business of Holland America Princess Alaska Tours, are subject to federal and state income taxation in the U.S.

In general, under Section 883 of the Internal Revenue Code, certain non-U.S. corporations (such as our North American cruise ship businesses) are not subject to U.S. federal income tax or branch profits tax on U.S. source income derived from, or incidental to, the international operation of a ship or ships. Applicable U.S. Treasury regulations provide in general that a foreign corporation will qualify for the benefits of Section 883 if, in relevant part, (i) the foreign country in which the foreign corporation is organized grants an equivalent exemption to corporations organized in the U.S. in respect of each category of shipping income for which an exemption is being claimed under Section 883 (an “equivalent exemption jurisdiction”) and (ii) the foreign corporation meets a defined publicly-traded corporation stock ownership test (the “publicly-traded test”). Subsidiaries of foreign corporations that are organized in an equivalent exemption jurisdiction and meet the publicly-traded test also benefit from Section 883. We believe that Panama is an equivalent exemption jurisdiction and that Carnival Corporation currently satisfies the publicly-traded test under the regulations. Accordingly, substantially all of Carnival Corporation’s income is exempt from U.S. federal income and branch profit taxes.

Regulations under Section 883 list certain activities that the IRS does not consider to be incidental to the international operation of ships and, therefore, the income attributable to such activities, to the extent such income is U.S. source, does not qualify for the Section 883 exemption. Among the activities identified as not incidental are income from the sale of air transportation, transfers, shore excursions and pre- and post-cruise land packages to the extent earned from sources within the U.S.

We believe that the U.S. source transportation income earned by Carnival plc and its subsidiaries currently qualifies for exemption from U.S. federal income tax under applicable bilateral U.S. income tax treaties.

Carnival Corporation, Carnival plc and certain subsidiaries are subject to various U.S. state income taxes generally imposed on each state's portion of the U.S. source income subject to U.S. federal income taxes. However, the state of Alaska imposes an income tax on its allocated portion of the total income of our companies doing business in Alaska and certain of their subsidiaries.

UK and Australian Income Tax

Cunard, P&O Cruises (UK) and P&O Cruises (Australia) are divisions of Carnival plc and have elected to enter UK tonnage tax under a rolling ten-year term and, accordingly, reapply every year. Companies to which the tonnage tax regime applies pay corporation taxes on profits calculated by reference to the net tonnage of qualifying ships. UK corporation tax is not chargeable under the normal UK tax rules on these brands' relevant shipping income. Relevant shipping income includes income from the operation of qualifying ships and from shipping related activities.

For a company to be eligible for the regime, it must be subject to UK corporation tax and, among other matters, operate qualifying ships that are strategically and commercially managed in the UK. Companies within UK tonnage tax are also subject to a seafarer training requirement.

Our UK non-shipping activities that do not qualify under the UK tonnage tax regime remain subject to normal UK corporation tax.

P&O Cruises (Australia) and all of the other cruise ships operated internationally by Carnival plc for the cruise segment of the Australian vacation region are exempt from Australian corporation tax by virtue of the UK/Australian income tax treaty.

Italian and German Income Tax

In 2015, Costa and AIDA re-elected to enter the Italian tonnage tax regime through 2024 and can reapply for an additional ten-year period beginning in early 2025. Companies to which the tonnage tax regime applies pay corporation taxes on shipping profits calculated by reference to the net tonnage of qualifying ships.

Most of Costa's and AIDA's earnings that are not eligible for taxation under the Italian tonnage tax regime will be taxed at an effective tax rate of 4.8% in 2022 and 2021.

Substantially all of AIDA's earnings are exempt from German income taxes by virtue of the Germany/Italy income tax treaty.

Other

We recognize income tax provisions for uncertain tax positions, based solely on their technical merits, when it is more likely than not to be sustained upon examination by the relevant tax authority. The tax benefit to be recognized is measured as the largest amount of benefit that is greater than 50% likely of being realized upon ultimate resolution. Based on all known facts and circumstances and current tax law, we believe that the total amount of our uncertain income tax position liabilities and related accrued interest are not material to our financial position. All interest expense related to income tax liabilities is included in income tax expense.

In addition to or in place of income taxes, virtually all jurisdictions where our ships call impose taxes, fees and other charges based on guest counts, ship tonnage, passenger capacity or some other measure, and these taxes, fees and other charges are included in commissions, transportation and other costs and other operating expenses.

NOTE 9 – Shareholders' Equity

Carnival Corporation's Articles of Incorporation authorize its Boards of Directors, at its discretion, to issue up to 40 million shares of preferred stock. At November 30, 2022 and 2021, no Carnival Corporation preferred stock or Carnival plc preference shares had been issued.

Share Repurchase Program

Under a share repurchase program effective 2004, we had been authorized to repurchase Carnival Corporation common stock and Carnival plc ordinary shares (the "Repurchase Program"). On June 15, 2020, to enhance our liquidity and comply with restrictions in our recent financing transactions, the Boards of Directors terminated the Repurchase Program.

	Carnival Corporation		Carnival plc	
(in millions)	Number of Shares Repurchased	Dollar Amount Paid for Shares Repurchased	Number of Shares Repurchased	Dollar Amount Paid for Shares Repurchased
2020	—	$ —	0.2	$ 10

Stock Swap Program

We have a program that allows us to realize a net cash benefit when Carnival Corporation common stock is trading at a premium to the price of Carnival plc ordinary shares (the "Stock Swap Program").

During 2022 and 2021 under the Stock Swap Program, we sold 6.0 million and 8.9 million shares of Carnival Corporation common stock and repurchased the same amount of Carnival plc ordinary shares resulting in net proceeds of $8 million and $19 million, which were used for general corporate purposes. During 2020, there were no sales or repurchases under the Stock Swap Program.

(in millions, except per share data)	Total Number of Shares of Carnival plc Ordinary Shares Purchased (a)	Average Price Paid per Share of Carnival plc Ordinary Share	Maximum Number of Carnival plc Ordinary Shares That May Yet Be Purchased Under the Carnival Corporation Stock Swap Program
2022	6.0	$ 14.52	3.6
2021	8.9	$ 20.99	9.5

(a) No ordinary shares of Carnival plc were purchased outside of publicly announced plans or programs.

Public Equity Offerings

In April 2020, we completed a public offering of 71.9 million shares of Carnival Corporation common stock at a price per share of $8.00, resulting in net proceeds of $556 million.

In October 2020, we completed our $1.0 billion "at-the-market" ("ATM") equity offering program that was announced on September 15, 2020, pursuant to which we sold 67.1 million shares of Carnival Corporation common stock.

In November 2020, we completed our $1.5 billion ATM equity offering program that was announced on November 10, 2020, pursuant to which we sold 94.5 million shares of Carnival Corporation common stock.

In February 2021, we completed a public offering of 40.5 million shares of Carnival Corporation common stock at a price per share of $25.10, resulting in net proceeds of $996 million.

In August 2022, we completed a public offering of 117.5 million shares of Carnival Corporation common stock at a price per share of $9.95, resulting in net proceeds of $1.2 billion.

Other

Outside of the Stock Swap Program and the public equity offerings described above, in 2022 and 2021 we sold 1.6 million and 0.6 million shares of Carnival Corporation common stock at an average price per share of $19.27 and $21.32, resulting in net proceeds of $30 million and $13 million.

Accumulated Other Comprehensive Income (Loss)

	AOCI		
	November 30,		
(in millions)	**2022**	**2021**	**2020**
Cumulative foreign currency translation adjustments, net	$ (2,004)	$ (1,501)	$ (1,382)
Unrecognized pension expenses	(31)	(45)	(95)
Net gains on cash flow derivative hedges and other	53	44	41
	$ (1,982)	$ (1,501)	$ (1,436)

During 2022, 2021 and 2020, there were $1 million, $7 million and $3 million of unrecognized pension expenses that were reclassified out of accumulated other comprehensive loss and were included within payroll and related expenses and selling and administrative expenses.

Dividends

To enhance our liquidity, as well as comply with the dividend restrictions contained in our debt agreements, in 2020 we suspended the payment of dividends on Carnival Corporation common stock and Carnival plc ordinary shares. We declared quarterly cash dividends on all of our common stock and ordinary shares as follows:

	Quarters Ended			
(in millions, except per share data)	**February 29**	**May 31**	**August 31**	**November 30**
2020				
Dividends declared per share	$ 0.50	$ —	$ —	$ —
Dividends declared	$ 342	$ —	$ —	$ —

NOTE 10 – Fair Value Measurements, Derivative Instruments and Hedging Activities and Financial Risks

Fair Value Measurements

Fair value is defined as the amount that would be received for selling an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date and is measured using inputs in one of the following three categories:

- Level 1 measurements are based on unadjusted quoted prices in active markets for identical assets or liabilities that we have the ability to access. Valuation of these items does not entail a significant amount of judgment.
- Level 2 measurements are based on quoted prices for similar assets or liabilities in active markets, quoted prices for identical or similar assets or liabilities in markets that are not active or market data other than quoted prices that are observable for the assets or liabilities.
- Level 3 measurements are based on unobservable data that are supported by little or no market activity and are significant to the fair value of the assets or liabilities.

Considerable judgment may be required in interpreting market data used to develop the estimates of fair value. Accordingly, certain estimates of fair value presented herein are not necessarily indicative of the amounts that could be realized in a current or future market exchange.

Financial Instruments that are not Measured at Fair Value on a Recurring Basis

	November 30, 2022				November 30, 2021			
	Carrying Value	Fair Value			Carrying Value	Fair Value		
(in millions)		Level 1	Level 2	Level 3		Level 1	Level 2	Level 3
Liabilities								
Fixed rate debt (a)	$ 23,542	$ —	$ 18,620	$ —	$ 19,555	$ —	$ 19,013	$ —
Floating rate debt (a)	12,074	—	10,036	—	14,415	—	13,451	—
Total	$ 35,615	$ —	$ 28,656	$ —	$ 33,970	$ —	$ 32,463	$ —

(a) The debt amounts above do not include the impact of interest rate swaps or debt issuance costs. The fair values of our publicly-traded notes were based on their unadjusted quoted market prices in markets that are not sufficiently active to be Level 1 and, accordingly, are considered Level 2. The fair values of our other debt were estimated based on current market interest rates being applied to this debt.

Financial Instruments that are Measured at Fair Value on a Recurring Basis

	November 30, 2022			November 30, 2021		
(in millions)	Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Assets						
Cash and cash equivalents	$ 4,029	$ —	$ —	$ 8,939	$ —	$ —
Restricted cash	1,988	—	—	38	—	—
Short-term investments (a)	—	—	—	200	—	—
Derivative financial instruments	—	1	—	—	1	—
Total	$ 6,016	$ 1	$ —	$ 9,177	$ 1	$ —
Liabilities						
Derivative financial instruments	$ —	$ —	$ —	$ —	$ 13	$ —
Total	$ —	$ —	$ —	$ —	$ 13	$ —

(a) Short-term investments consist of marketable securities with original maturities of between three and twelve months.

Nonfinancial Instruments that are Measured at Fair Value on a Nonrecurring Basis

Valuation of Goodwill and Trademarks

As of July 31, 2022, we performed our annual goodwill and trademark impairment reviews and determined there was no impairment for goodwill and trademarks at our annual test date.

During 2021 and as a result of the continued resumption of guest cruise operations, ongoing impacts of COVID-19 and its effect on our expected future operating cash flows, including changes in estimates related to the timing of our full return to guest cruise operations and improved profitability, we performed interim discounted cash flow analyses for our EA segment reporting units and determined their estimated fair values no longer exceeded their carrying values. As a result, we recognized goodwill impairment charges of $226 million and accordingly have no remaining goodwill for those reporting units.

During 2020, we performed interim discounted cash flow analyses for certain reporting units with goodwill as of February 29, 2020 and for all reporting units with goodwill or trademarks as of May 31, 2020 and recognized goodwill impairment charges of $2.1 billion.

As of July 31, 2020, we performed our annual goodwill and trademark impairment reviews and we determined there was no incremental impairment for goodwill or trademarks.

The determination of the fair value of our reporting units' goodwill and trademarks includes numerous estimates and underlying assumptions that are subject to various risks and uncertainties. The effect of the pause and subsequent resumption of guest cruise operations has created additional uncertainty in forecasting the operating results and future cash flows used in our impairment analyses. We believe that we have made reasonable estimates and judgments.

The assumptions, all of which are considered Level 3 inputs, used in our 2021 cash flow analyses and which resulted in goodwill impairments for all but one reporting unit consisted of:

- The timing and pace of our full return to guest cruise operations
- Weighted-average cost of capital of market participants, adjusted for the risk attributable to the geographic regions in which these cruise brands operate ("WACC")

The assumptions, all of which are considered Level 3 inputs, used in our 2020 cash flow analyses consisted of:

- The timing of our return to service, changes in market conditions and port or other restrictions
- Forecasted revenues net of our most significant variable costs, which are travel agent commissions, costs of air and other transportation, and certain other costs that are directly associated with onboard and other revenues including credit and debit card fees
- The allocation of new ships and the timing of the transfer or sale of ships amongst brands, as well as the estimated proceeds from ship sales
- WACC

The estimated fair value of the reporting unit with remaining goodwill and of our trademarks significantly exceeded their carrying value as of the date of the most recent impairment test. Refer to Note 2 - "Summary of Significant Accounting Policies, Preparation of Financial Statements" for additional discussion.

	Goodwill		
(in millions)	**NAA Segment**	**EA Segment**	**Total**
At November 30, 2020	$ 579	$ 228	$ 807
Impairment charges	—	(226)	(226)
Exchange movements	—	(2)	(2)
At November 30, 2021	579	—	579
Impairment charges	—	—	—
At November 30, 2022	$ 579	$ —	$ 579

	Trademarks		
(in millions)	**NAA Segment**	**EA Segment**	**Total**
At November 30, 2020	$ 927	$ 253	$ 1,180
Exchange movements	—	(5)	(5)
At November 30, 2021	927	248	1,175
Exchange movements	—	(24)	(24)
At November 30, 2022	$ 927	$ 224	$ 1,151

Impairment of Ships

We review our long-lived assets for impairment whenever events or circumstances indicate potential impairment. As a result of the continued effects of COVID-19 on our business and certain Asia markets which remain closed to cruising (particularly China), and our updated expectations for our deployment, we determined that two ships had net carrying values that exceeded their respective estimated undiscounted future cash flows. We then estimated the fair value of these ships, based on their estimated selling values, and recognized ship impairment charges as summarized in the table below.

We performed undiscounted cash flow analyses on certain ships throughout 2021 and 2020 and determined that certain ships had net carrying values that exceeded their estimated undiscounted future cash flows and fair values, and, as a result, we recognized ship impairment charges during 2021 and 2020.

We believe we have made reasonable estimates and judgments as part of our assessments. A change in the principal judgments or estimates may result in a need to perform additional impairment reviews.

In 2022, the principal assumption used in determining the fair value of these ships were the estimated sales proceeds, which are considered a Level 3 input. In 2021, the principal assumptions used in determining the fair value of these ships were the timing of the sale of ships and estimated proceeds, which are considered Level 3 inputs.

In 2020, the principal assumptions used in determining the fair value of these ships consisted of:

- Timing of the respective ship's return to service, changes in market conditions and port or other restrictions
- Forecasted ship revenues net of our most significant variable costs, which are travel agent commissions, costs of air and other transportation and certain other costs that are directly associated with onboard and other revenues, including credit and debit card fees
- Timing of the sale of ships and estimated proceeds

The impairment charges summarized in the table below are included in ship and other impairments in our Consolidated Statements of Income (Loss).

	November 30,		
(in millions)	**2022**	**2021**	**2020**
NAA Segment	$ 8	$ 273	$ 1,474
EA Segment	421	318	319
Total ship impairments	$ 428	$ 591	$ 1,794

Refer to Note 2 - "Summary of Significant Accounting Policies, Preparation of Financial Statements" for additional discussion.

Derivative Instruments and Hedging Activities

		November 30,	
(in millions)	**Balance Sheet Location**	**2022**	**2021**
Derivative assets			
Derivatives designated as hedging instruments			
Cross currency swaps (a)	Prepaid expenses and other	$ —	$ 1
Interest rate swaps (b)	Prepaid expenses and other	1	—
	Other assets	1	—
Total derivative assets		$ 1	$ 1
Derivative liabilities			
Derivatives designated as hedging instruments			
Cross currency swaps (a)	Other long-term liabilities	$ —	$ 8
Interest rate swaps (b)	Accrued liabilities and other	—	3
	Other long-term liabilities	—	2
Total derivative liabilities		$ —	$ 13

(a) At November 30, 2022, we had no cross-currency swaps. At November 30, 2021, we had a cross currency swap totaling $201 million that was designated as a hedge of our net investment in foreign operations with a euro-denominated functional currency.

(b) We have interest rate swaps designated as cash flow hedges whereby we receive floating interest rate payments in exchange for making fixed interest rate payments. These interest rate swap agreements effectively changed $89 million at November 30, 2022 and $160 million at November 30, 2021 of EURIBOR-based floating rate euro debt to fixed rate euro debt. At November 30, 2022, these interest rate swaps settle through 2025.

Our derivative contracts include rights of offset with our counterparties. We have elected to net certain of our derivative assets and liabilities within counterparties, when applicable.

	November 30, 2022				
(in millions)	**Gross Amounts**	**Gross Amounts Offset in the Balance Sheet**	**Total Net Amounts Presented in the Balance Sheet**	**Gross Amounts not Offset in the Balance Sheet**	**Net Amounts**
Assets	$ 1	$ —	$ 1	$ —	$ 1
Liabilities	$ —	$ —	$ —	$ —	$ —

	November 30, 2021				
(in millions)	**Gross Amounts**	**Gross Amounts Offset in the Balance Sheet**	**Total Net Amounts Presented in the Balance Sheet**	**Gross Amounts not Offset in the Balance Sheet**	**Net Amounts**
Assets	$ 1	$ —	$ 1	$ —	$ 1
Liabilities	$ 13	$ —	$ 13	$ —	$ 13

The effect of our derivatives qualifying and designated as hedging instruments recognized in other comprehensive income (loss) and in net income (loss) was as follows:

	November 30,		
(in millions)	**2022**	**2021**	**2020**
Gains (losses) recognized in AOCI:			
Cross currency swaps – net investment hedges - included component	$ 72	$ (1)	$ 131
Cross currency swaps – net investment hedges - excluded component	$ (26)	$ (6)	$ (1)
Foreign currency zero cost collars – cash flow hedges	$ —	$ —	$ 1
Foreign currency forwards - cash flow hedges	$ —	$ —	$ 53
Interest rate swaps – cash flow hedges	$ 11	$ 5	$ 6
Gains (losses) reclassified from AOCI – cash flow hedges:			
Interest rate swaps – Interest expense, net of capitalized interest	$ (2)	$ (5)	$ (6)
Foreign currency zero cost collars - Depreciation and amortization	$ 2	$ 2	$ 1
Gains (losses) recognized on derivative instruments (amount excluded from effectiveness testing – net investment hedges)			
Cross currency swaps – Interest expense, net of capitalized interest	$ 5	$ —	$ 12

The amount of estimated cash flow hedges' unrealized gains and losses that are expected to be reclassified to earnings in the next twelve months is not material.

Financial Risks

Fuel Price Risks

We manage our exposure to fuel price risk by managing our consumption of fuel. Substantially all of our exposure to market risk for changes in fuel prices relates to the consumption of fuel on our ships. We manage fuel consumption through ship maintenance practices, modifying our itineraries and implementing innovative technologies.

Foreign Currency Exchange Rate Risks

Overall Strategy

We manage our exposure to fluctuations in foreign currency exchange rates through our normal operating and financing activities, including netting certain exposures to take advantage of any natural offsets and, when considered appropriate, through the use of derivative and non-derivative financial instruments. Our primary focus is to monitor our exposure to, and manage, the economic foreign currency exchange risks faced by our operations and realized if we exchange one currency for another. We consider hedging certain of our ship commitments and net investments in foreign operations. The financial impacts of our hedging instruments generally offset the changes in the underlying exposures being hedged.

Operational Currency Risks

Our operations primarily utilize the U.S. dollar, Euro, Sterling or the Australian dollar as their functional currencies. Our operations also have revenue and expenses denominated in non-functional currencies. Movements in foreign currency exchange rates affect our financial statements.

Investment Currency Risks

We consider our investments in foreign operations to be denominated in stable currencies and of a long-term nature. We partially mitigate the currency exposure of our investments in foreign operations by designating a portion of our foreign currency debt and derivatives as hedges of these investments. As of November 30, 2022, we have designated $419 million of our sterling-denominated debt as non-derivative hedges of our net investments in foreign operations. In 2022, we recognized $48 million of gains on these non-derivative net investment hedges in the cumulative translation adjustment section of other comprehensive income (loss). We also have euro-denominated debt which provides an economic offset for our operations with euro functional currency.

Newbuild Currency Risks

Our shipbuilding contracts are typically denominated in euros. Our decision to hedge a non-functional currency ship commitment for our cruise brands is made on a case-by-case basis, considering the amount and duration of the exposure, market volatility, economic trends, our overall expected net cash flows by currency and other offsetting risks.

At November 30, 2022, our remaining newbuild currency exchange rate risk primarily relates to euro-denominated newbuild contract payments for non-euro functional currency brands, which represent a total unhedged commitment of $4.4 billion for newbuilds scheduled to be delivered through 2025.

The cost of shipbuilding orders that we may place in the future that are denominated in a different currency than our cruise brands' will be affected by foreign currency exchange rate fluctuations. These foreign currency exchange rate fluctuations may affect our decision to order new cruise ships.

Interest Rate Risks

We manage our exposure to fluctuations in interest rates through our debt portfolio management and investment strategies. We evaluate our debt portfolio to determine whether to make periodic adjustments to the mix of fixed and floating rate debt through the use of interest rate swaps and the issuance of new debt.

Concentrations of Credit Risk

As part of our ongoing control procedures, we monitor concentrations of credit risk associated with financial and other institutions with which we conduct significant business. We seek to manage these credit risk exposures, including counterparty nonperformance primarily associated with our cash equivalents, investments, notes receivables, reserve funds related to customer deposits, future financing facilities, contingent obligations, derivative instruments, insurance contracts, long-term ship charters and new ship progress payment guarantees, by:

- Conducting business with well-established financial institutions, insurance companies and export credit agencies
- Diversifying our counterparties
- Having guidelines regarding credit ratings and investment maturities that we follow to help safeguard liquidity and minimize risk
- Generally requiring collateral and/or guarantees to support notes receivable on significant asset sales, long-term ship charters and new ship progress payments to shipyards

At November 30, 2022, our exposures under derivative instruments were not material. We also monitor the creditworthiness of travel agencies and tour operators in Australia and Europe and credit and debit card providers to which we extend credit in the normal course of our business. Concentrations of credit risk associated with trade receivables and other receivables, charter-hire agreements and contingent obligations are not considered to be material, principally due to the large number of unrelated accounts, the nature of these contingent obligations and their short maturities. Normally, we have not required collateral or other security to support normal credit sales. Historically, we have not experienced significant credit losses, including counterparty nonperformance; however, because of the continued effects the pandemic is having on economies, we have experienced, and may continue to experience, an increase in credit losses.

Our credit exposure also includes contingent obligations related to cash payments received directly by travel agents and tour operators for cash collected by them on cruise sales in Australia and most of Europe where we are obligated to honor our guests' cruise payments made by them to their travel agents and tour operators regardless of whether we have received these payments.

NOTE 11 – Leases

The components of expense were as follows:

	November 30,		
(in millions)	2022	2021	2020
Operating lease expense	$ 192	$ 203	$ 203
Variable lease expense (a) (b)	$ (39)	$ (100)	$ (61)

(a) Variable lease expense represents increases or reductions to costs associated with our multi-year preferential berthing agreements which vary based on the number of passengers. These costs are recorded within Commissions, transportation and other in our Consolidated Statements of Income (Loss). Variable and short-term lease costs related to operating leases, other than the port facilities, were not material to our consolidated financial statements.

(b) Several of our preferential berthing agreements have force majeure provisions which were in effect during the pause in guest cruise operations due to COVID-19.

The cash outflow for leases was materially consistent with the lease expense recognized during 2022.

During 2022, we obtained $111 million of right-of-use assets in exchange for new operating lease liabilities.

Weighted average of the remaining lease terms and weighted average discount rates are as follows:

	November 30, 2022	November 30, 2021
Weighted average remaining lease term - operating leases (in years)	13	12
Weighted average discount rate - operating leases	5.2 %	3.8 %

As of November 30, 2022, maturities of operating lease liabilities were as follows:

(in millions) **Year**	
2023	$ 198
2024	199
2025	180
2026	167
2027	144
Thereafter	965
Total lease payments	1,853
Less: Present value discount	(518)
Present value of lease liabilities	$ 1,335

For time charter arrangements where we are the lessor and for transactions with cruise guests related to the use of cabins, we do not separate lease and non-lease components. As the non-lease components are the predominant components in the agreements, we account for these transactions under the Revenue Recognition guidance.

NOTE 12 – Segment Information

Our operating segments are reported on the same basis as the internally reported information that is provided to our chief operating decision maker ("CODM"), who is the President, Chief Executive Officer and Chief Climate Officer of Carnival Corporation and Carnival plc. The CODM assesses performance and makes decisions to allocate resources for Carnival

Corporation & plc based upon review of the results across all of our segments. Our four reportable segments are comprised of (1) NAA cruise operations, (2) EA cruise operations, (3) Cruise Support and (4) Tour and Other.

The operating segments within each of our NAA and EA reportable segments have been aggregated based on the similarity of their economic and other characteristics, including geographic guest sourcing. Our Cruise Support segment includes our portfolio of leading port destinations and other services, all of which are operated for the benefit of our cruise brands. Our Tour and Other segment represents the hotel and transportation operations of Holland America Princess Alaska Tours and other operations.

	As of and for the years ended November 30,						
(in millions)	Revenues	Operating costs and expenses	Selling and administrative	Depreciation and amortization	Operating income (loss)	Capital expenditures	Total assets
2022							
NAA	$ 8,281	$ 7,526	$ 1,517	$ 1,408	$ (2,170)	$ 2,568	$ 27,413
EA	3,531	3,925	745	692	(1,830)	2,213	15,317
Cruise Support	171	120	225	140	(315)	155	8,461
Tour and Other	185	187	27	36	(64)	4	512
	$ 12,168	$ 11,757	$ 2,515	$ 2,275	$ (4,379)	$ 4,940	$ 51,703
2021							
NAA	$ 1,108	$ 2,730	$ 953	$ 1,352	$ (3,928)	$ 2,397	$ 25,606
EA	712	1,807	568	728	(2,617) (a)	515	16,088
Cruise Support	42	55	335	129	(477)	660	11,014
Tour and Other	46	63	27	23	(67)	35	637
	$ 1,908	$ 4,655	$ 1,885	$ 2,233	$ (7,089)	$ 3,607	$ 53,344
2020							
NAA	$ 3,627	$ 5,623	$ 1,066	$ 1,413	$ (5,794) (b)	$ 1,430	$ 25,257
EA	1,790	2,548	523	672	(2,729) (c)	2,036	16,505
Cruise Support	68	(10)	262	128	(313)	144	11,135
Tour and Other	110	84	27	28	(29)	11	696
	$ 5,595	$ 8,245	$ 1,878	$ 2,241	$ (8,865)	$ 3,620	$ 53,593

(a) Includes $226 million of goodwill impairment charges.
(b) Includes $1.3 billion of goodwill impairment charges.
(c) Includes $777 million of goodwill impairment charges.

Revenue by geographic areas, which are based on where our guests are sourced, were as follows:

	Years Ended November 30,		
(in millions)	2022	2021	2020
North America	$ 7,866	$ 1,066	$ 3,084
Europe	3,918	811	1,643
Australia and Asia	312	18	687
Other	72	14	180
	$ 12,168	$ 1,908	$ 5,595

Substantially all of our long-lived assets consist of our ships and move between geographic areas.

NOTE 13 – Compensation Plans and Post-Employment Benefits

Equity Plans

We issue our share-based compensation awards, which at November 30, 2022 included time-based share awards (restricted stock awards and restricted stock units), performance-based share awards and market-based share awards (collectively "equity awards"), under the Carnival Corporation and Carnival plc stock plans. Equity awards are principally granted to management level employees and members of our Boards of Directors. The plans are administered by the Compensation Committees which are made up of independent directors who determine which employees are eligible to participate, the monetary value or number of shares for which equity awards are to be granted and the amounts that may be exercised or sold within a specified term. We had an aggregate of 16.7 million shares available for future grant at November 30, 2022. We fulfill our equity award obligations using shares purchased in the open market or with unissued or treasury shares. Our equity awards generally vest over a three-year period, subject to earlier vesting under certain conditions.

	Shares	Weighted-Average Grant Date Fair Value
Outstanding at November 30, 2019	2,491,376	$ 59.97
Granted	9,971,331	$ 20.72
Vested	(1,641,570)	$ 30.68
Forfeited	(480,361)	$ 50.96
Outstanding at November 30, 2020	10,340,776	$ 26.61
Granted	4,453,572	$ 20.65
Vested	(6,618,083)	$ 21.31
Forfeited	(729,073)	$ 35.81
Outstanding at November 30, 2021	7,447,192	$ 26.85
Granted	3,117,638	$ 17.53
Vested	(3,503,118)	$ 24.36
Forfeited	(681,197)	$ 36.20
Outstanding at November 30, 2022	6,380,515	$ 22.67

As of November 30, 2022, there was $52 million of total unrecognized compensation cost related to equity awards, which is expected to be recognized over a weighted-average period of 1.5 years.

Single-employer Defined Benefit Pension Plans

We maintain several single-employer defined benefit pension plans, which cover certain of our shipboard and shoreside employees. The U.S. and UK shoreside employee plans are closed to new membership and are funded at or above the level required by U.S. or UK regulations. The remaining defined benefit plans are primarily unfunded. These plans provide pension benefits primarily based on employee compensation and years of service.

	UK Plan (a)		All Other Plans	
(in millions)	2022	2021	2022	2021
Change in projected benefit obligation:				
Projected benefit obligation as of December 1	$ 298	$ 303	$ 263	$ 280
Past service cost	—	—	18	10
Interest cost	5	4	5	4
Benefits paid	(12)	(10)	(15)	(5)
Actuarial (gain) loss on plans' liabilities	(88)	(7)	(49)	(8)
Plan curtailments, settlements and other	(6)	7	1	(19)
Projected benefit obligation as of November 30	198	298	223	263
Change in plan assets:				
Fair value of plan assets as of December 1	355	325	12	17
Return (loss) on plans' assets	(116)	31	(1)	—
Employer contributions	2	1	12	17
Benefits paid	(12)	(10)	(12)	(5)
Plan settlements	(5)	—	(1)	(17)
Administrative expenses	(2)	8	—	—
Fair value of plan assets as of November 30	222	355	10	12
Funded status as of November 30	$ 24	$ 56	$ (213)	$ (250)

(a) The P&O Princess Cruises (UK) Pension Scheme ("UK Plan")

The amounts recognized in the Consolidated Balance Sheets for these plans were as follows:

	UK Plan		All Other Plans	
	November 30,		November 30,	
(in millions)	2022	2021	2022	2021
Other assets	$ 24	$ 56	$ —	$ —
Accrued liabilities and other	$ —	$ —	$ 25	$ 23
Other long-term liabilities	$ —	$ —	$ 188	$ 227

The accumulated benefit obligation for all defined benefit pension plans was $386 million and $553 million at November 30, 2022 and 2021, respectively.

Amounts for pension plans with accumulated benefit obligations in excess of fair value of plan assets are as follows:

	November 30,	
(in millions)	2022	2021
Projected benefit obligation	$ 223	$ 263
Accumulated benefit obligation	$ 218	$ 254
Fair value of plan assets	$ 10	$ 12

Table of Contents

The net benefit cost recognized in the Consolidated Statements of Income (Loss) were as follows:

	UK Plan			All Other Plans		
	November 30,			November 30,		
(in millions)	2022	2021	2020	2022	2021	2020
Service cost	$ —	$ —	$ —	$ 18	$ 10	$ 20
Interest cost	5	4	5	5	4	6
Expected return on plan assets	(6)	(6)	(8)	—	—	(1)
Amortization of prior service cost	—	—	—	—	—	—
Amortization of net loss (gain)	—	—	—	3	4	4
Settlement loss recognized	—	—	—	1	5	1
Net periodic benefit cost	$ (1)	$ (1)	$ (3)	$ 26	$ 22	$ 32

The components of net periodic benefit cost other than the service cost component are included in other income (expense), net in the Consolidated Statements of Income (Loss).

Weighted average assumptions used to determine the projected benefit obligation are as follows:

	UK Plan		All Other Plans	
	2022	2021	2022	2021
Discount rate	4.3 %	1.6 %	5.4 %	2.6 %
Rate of compensation increase	2.9 %	2.7 %	3.0 %	3.0 %

Weighted average assumptions used to determine net pension income are as follows:

	UK Plan			All Other Plans		
	2022	2021	2020	2022	2021	2020
Discount rate	1.6 %	1.6 %	1.9 %	3.2 %	2.3 %	2.9 %
Expected return on assets	— %	1.9 %	3.0 %	2.3 %	2.3 %	3.0 %
Rate of compensation increase	2.7 %	2.3 %	2.9 %	3.0 %	3.0 %	2.7 %

The discount rate used to determine the UK Plan's projected benefit obligation was determined as the single equivalent rate based on applying a yield curve determined from AA credit rated bonds at the balance sheet date to the cash flows making up the pension plan's obligations. The discount rate used to determine the UK Plan's future net periodic benefit cost was determined as the equivalent rate based on applying each individual spot rate from a yield curve determined from AA credit rated bonds at the balance sheet date for each year's cash flow. The UK Plan's expected long-term return on plan assets is consistent with the long-term investment return target provided to the UK Plan's fiduciary manager (U.K. government fixed interest bonds (gilts) plus 1.0% and was 4.3% per annum as of November 30, 2022.

Amounts recognized in AOCI are as follows:

	UK Plan		All Other Plans	
	November 30,		November 30,	
	2022	2021	2022	2021
Actuarial losses (gains) recognized in the current year	$ 35	$ —	$ (48)	$ (7)
Amortization and settlements included in net periodic benefit cost	$ —	$ —	$ (1)	$ (12)

We anticipate making contributions of $26 million to the plans during 2023. Estimated future benefit payments to be made during each of the next five fiscal years and in the aggregate during the succeeding five fiscal years are as follows:

(in millions)	UK Plan	All Other Plans
2023	$ 6	$ 26
2024	6	25
2025	7	26
2026	7	26
2027	7	27
2028-2032	43	151
	$ 76	$ 280

Our investment strategy for our pension plan assets is to maintain a diversified portfolio of asset classes to produce a sufficient level of diversification and investment return over the long term. The investment policy for each plan specifies the type of investment vehicles appropriate for the plan, asset allocation guidelines, criteria for selection of investment managers and procedures to monitor overall investment performance, as well as investment manager performance. As of November 30, 2022 and 2021, respectively, the All Other Plans were unfunded.

The fair values of the plan assets of the UK Plan by investment class are as follows:

	November 30,	
	2022	**2021**
Equities	$ 53	$ 62
U.K. government fixed interest bonds (gilts)	$ 169	$ 283

Multiemployer Defined Benefit Pension Plans

We participate in two multiemployer defined benefit pension plans in the UK, the British Merchant Navy Officers Pension Fund (registration number 10005645) ("MNOPF"), which is divided into two sections, the "New Section" and the "Old Section," and the British Merchant Navy Ratings Pension Fund (registration number 10005646) ("MNRPF"). Collectively, we refer to these as "the multiemployer plans." The multiemployer plans are maintained for the benefit of the employees of the participating employers who make contributions to the plans. The risks of participating in these multiemployer plans are different from single-employer plans, including:

- Contributions made by employers, including us, may be used to provide benefits to employees of other participating employers
- If any of the participating employers were to withdraw from the multiemployer plans or fail to make their required contributions, any unfunded obligations would be the responsibility of the remaining participating employers.

We are contractually obligated to make all required contributions as determined by the plans' trustees. All of our multiemployer plans are closed to new membership and future benefit accrual. The MNOPF Old Section is fully funded.

We expense our portion of the MNOPF New Section deficit as amounts are invoiced by, and become due and payable to, the trustees. We accrue and expense our portion of the MNRPF deficit based on our estimated probable obligation from the most recent actuarial review. Total expense for the multiemployer plans was $2 million in 2022, $28 million in 2021 and $2 million in 2020.

Based on the most recent valuation at March 31, 2021 of the MNOPF New Section, it was determined that this plan was 102% funded. In 2022, 2021 and 2020, our contributions to the MNOPF New Section did not exceed 5% of total contributions to the fund. Based on the most recent valuation at March 31, 2020 of the MNRPF, it was determined that this plan was 93% funded. In 2022, 2021 and 2020, our contributions to the MNRPF did not exceed 5% of total contributions to the fund. It is possible that we will be required to fund and expense additional amounts for the multiemployer plans in the future; however, such amounts are not expected to be material to our consolidated financial statements.

Defined Contribution Plans

We have several defined contribution plans available to most of our employees. We contribute to these plans based on employee contributions, salary levels and length of service. Total expense for these plans was $40 million in 2022, $35 million in 2021 and $24 million in 2020.

NOTE 14 – Earnings Per Share

	Years Ended November 30,		
(in millions, except per share data)	2022	2021	2020
Net income (loss) for basic and diluted earnings per share	$ (6,093)	$ (9,501)	$ (10,236)
Weighted-average shares outstanding	1,180	1,123	775
Dilutive effect of equity plans	—	—	—
Diluted weighted-average shares outstanding	1,180	1,123	775
Basic earnings per share	$ (5.16)	$ (8.46)	$ (13.20)
Diluted earnings per share	$ (5.16)	$ (8.46)	$ (13.20)

Antidilutive shares excluded from diluted earnings per share computations were as follows:

	November 30,		
(in millions)	2022	2021	2020
Equity awards	1	3	1
Convertible Notes	55	53	103
Total antidilutive securities	56	56	104

NOTE 15 – Supplemental Cash Flow Information

	November 30,	
(in millions)	2022	2021
Cash and cash equivalents (Consolidated Balance Sheets)	$ 4,029	$ 8,939
Restricted cash (Consolidated Balance Sheets)	1,988	14
Restricted cash (included in other assets)	20	24
Total cash, cash equivalents and restricted cash (Consolidated Statements of Cash Flows)	$ 6,037	$ 8,976

Cash paid for interest, net of capitalized interest, was $1.4 billion in 2022, $1.3 billion in 2021 and $0.6 billion in 2020. Cash benefit received (paid) for income taxes, net was not material in 2022, 2021 and 2020. In addition, non-cash purchases of property and equipment included in accrued liabilities and other was $100 million in 2022, $127 million in 2021 and $114 million in 2020.

Substantially all restricted cash as of November 30, 2022 relates to the net proceeds from the issuance of our 2028 Senior Priority Notes. Under the indenture governing these notes, the net proceeds are contractually restricted subject to the satisfaction of certain conditions. These conditions were satisfied in December 2022 when we completed the transfer of the Subject Vessels to Carnival Holdings, at which time these amounts became unrestricted.

In August 2022, we issued $339 million aggregate principal amount of 2024 Convertible Notes pursuant to privately-negotiated non-cash exchange agreements with certain holders of the 2023 Convertible Notes, pursuant to which such holders agreed to exchange their 2023 Convertible Notes for an equal amount of 2024 Convertible Notes. In November 2022, we issued an additional $87 million aggregate principal amount of the 2024 Convertible Notes pursuant to privately-negotiated non-cash exchange agreements with certain holders of the 2023 Convertible Notes, pursuant to which such holders agreed to exchange their 2023 Convertible Notes for an equal amount of additional 2024 Convertible Notes. In addition, in August and November 2020, in connection with the repurchase of the 2023 Convertible Notes, as part of registered direct offerings of Carnival Corporation common stock used to repurchase a portion of the 2023 Convertible Notes, as an administrative convenience, we permitted the purchasers of 151.2 million shares of Carnival Corporation common stock to offset the purchase price payable to us against our obligation to pay the purchase price for $1.3 billion aggregate principal amount of the 2023 Convertible Notes held by them, which is reflected as a non-cash transaction for the year ended November 30, 2020.

Refer to Note 5 - “Debt” for additional detail relating to our 2028 Senior Priority Notes and the 2024 Convertible Notes.

For the years ended November 30, 2022 and 2021, we did not have borrowings or repayments of commercial paper with original maturities greater than three months. For the year ended November 30, 2020, we had borrowings of $525 million and repayments of $526 million of commercial paper with original maturities greater than three months.

Report of Independent Registered Public Accounting Firm

To the Boards of Directors and Shareholders of Carnival Corporation and Carnival plc

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of Carnival Corporation & plc (comprising Carnival Corporation and Carnival plc and their respective subsidiaries, the "Company") as of November 30, 2022 and 2021, and the related consolidated statements of income (loss), of comprehensive income (loss), of shareholders' equity and of cash flows for each of the three years in the period ended November 30, 2022, including the related notes (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of November 30, 2022, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of November 30, 2022 and 2021, and the results of its operations and its cash flows for each of the three years in the period ended November 30, 2022 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of November 30, 2022, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Annual Report on Internal Control over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Emphasis of Matter

As discussed in Note 1 to the consolidated financial statements, the continued effects of the pandemic, certain economic conditions and Company's substantial debt balance are having a material negative impact on the Company's financial results and have resulted in the Company obtaining relevant financial covenant amendments and waivers. Management's evaluation of these events and conditions and management's plan to mitigate these matters are also described in Note 1.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Critical Audit Matters

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated financial statements that was communicated or required to be communicated to the audit committee and that (i) relates to accounts or disclosures that are material to the consolidated financial statements and (ii) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Liquidity

As described in Note 1 to the consolidated financial statements, the continued effects of the pandemic, inflation, higher fuel prices, higher interest rates, fluctuations in foreign currency rates and the Company's substantial debt balance are collectively having a material negative impact on the Company's financial results. Management has taken actions to manage the Company's liquidity, including completing various capital market transactions, obtaining relevant financial covenant amendments or waivers, and accelerating the removal of certain ships from its fleet. The principal assumptions used in management's estimate of future liquidity consisted of (i) continued cruise operations and expected timing of cash collections for cruise bookings; (ii) expected increases in revenue on a per passenger basis with the relaxation of COVID-19 related protocols aligning towards land-based vacation alternatives; (iii) expected improvement in occupancy returning to historical levels; (iv) stabilization of fuel prices; (v) continued stabilization of inflationary pressures on costs; (vi) new ship deliveries, improvements and removals; and (vii) future export credit financings that are associated with the new ship deliveries. Based on these actions and assumptions, and considering the liquidity including cash, restricted cash and borrowings available under the multi-currency revolving credit facility at November 30, 2022, management believes that they have sufficient liquidity to fund obligations and expects to remain in compliance with the Company's financial covenants for at least the next twelve months from the issuance of the financial statements.

The principal considerations for our determination that performing procedures relating to the Company's liquidity is a critical audit matter are the significant judgment by management when developing the estimate of future liquidity; this in turn led to a high degree of auditor judgment, subjectivity, and effort in performing procedures and evaluating management's estimate of future liquidity and assumptions related to (i) expected increases in revenue on a per passenger basis with the relaxation of COVID-19 related protocols aligning towards land-based vacation alternatives and (ii) expected improvement in occupancy returning to historical levels.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to management's estimate of future liquidity. These procedures also included, among others, (i) understanding and evaluating the appropriateness of management's liquidity model; (ii) understanding the Company's debt agreements and evaluating the related financial covenant amendments and waivers; (iii) testing management's process for estimating future liquidity for the twelve months after the date the financial statements are issued; (iv) testing the completeness and accuracy of underlying data used in the estimate; (v) evaluating the reasonableness of the significant assumptions used by management related to expected increases in revenue on a per passenger basis with the relaxation of COVID-19 related protocols aligning towards land-based vacation alternatives and expected improvement in occupancy returning to historical levels; and (vi) evaluating management's estimate of future liquidity and their disclosure in the consolidated financial statements regarding having sufficient liquidity to satisfy the Company's obligations for at least the next twelve months from the issuance of the financial statements. Evaluating management's assumptions related to expected increases in revenue on a per passenger basis with the relaxation of COVID-19 related protocols aligning towards land-based vacation alternatives and expected improvement in occupancy returning to historical levels involved evaluating whether the assumptions used by management were reasonable considering (i) the current and past performance of the Company; (ii) the consistency with external market and industry data; and (iii) whether these assumptions were consistent with evidence obtained in other areas of the audit.

/s/PricewaterhouseCoopers LLP
Hallandale Beach, Florida
January 27, 2023

We have served as the Company's auditors since 2003. Prior to that, we served as Carnival Corporation's auditors since at least 1986. We have not been able to determine the specific year we began serving as auditor of Carnival Corporation.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Cautionary Note Concerning Factors That May Affect Future Results

Some of the statements, estimates or projections contained in this document are "forward-looking statements" that involve risks, uncertainties and assumptions with respect to us, including some statements concerning future results, operations, outlooks, plans, goals, reputation, cash flows, liquidity and other events which have not yet occurred. These statements are intended to qualify for the safe harbors from liability provided by Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934, as amended. All statements other than statements of historical facts are statements that could be deemed forward-looking. 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," "aspiration," "anticipate," "forecast," "project," "future," "intend," "plan," "estimate," "target," "indicate," "outlook," and similar expressions of future intent or the negative of such terms.

Forward-looking statements include those statements that relate to our outlook and financial position including, but not limited to, statements regarding:

- Pricing
- Booking levels
- Occupancy
- Interest, tax and fuel expenses
- Currency exchange rates
- Goodwill, ship and trademark fair values
- Liquidity and credit ratings
- Adjusted earnings per share
- Adjusted EBITDA
- Adjusted Net Income (Loss)
- Estimates of ship depreciable lives and residual values

Because forward-looking statements involve risks and uncertainties, there are many factors that could cause our actual results, performance or achievements to differ materially from those expressed or implied by our forward-looking statements. This note contains important cautionary statements of the known factors that we consider could materially affect the accuracy of our forward-looking statements and adversely affect our business, results of operations and financial position. Additionally, many of these risks and uncertainties are currently, and in the future may continue to be, amplified by our substantial debt balance as a result of the pause of our guest cruise operations. There may be additional risks that we consider immaterial or which are unknown. These factors include, but are not limited to, the following:

- *Events and conditions around the world, including war and other military actions, such as the invasion of Ukraine, inflation, higher fuel prices, higher interest rates and other general concerns impacting the ability or desire of people to travel have led, and may in the future lead, to a decline in demand for cruises, impacting our operating costs and profitability.*
- *Pandemics have in the past and may in the future have a significant negative impact on our financial condition and operations.*
- *Incidents concerning our ships, guests or the cruise industry have in the past and may, in the future, negatively impact the satisfaction of our guests and crew and lead to reputational damage.*
- *Changes in and non-compliance with laws and regulations under which we operate, such as those relating to health, environment, safety and security, data privacy and protection, anti-corruption, economic sanctions, trade protection, labor and employment, and tax have in the past and may, in the future, lead to litigation, enforcement actions, fines, penalties and reputational damage.*
- *Factors associated with climate change, including evolving and increasing regulations, increasing global concern about climate change and the shift in climate conscious consumerism and stakeholder scrutiny, and increasing frequency and/or severity of adverse weather conditions could adversely affect our business.*
- *Inability to meet or achieve our sustainability related goals, aspirations, initiatives, and our public statements and disclosures regarding them, may expose us to risks that may adversely impact our business.*
- *Breaches in data security and lapses in data privacy as well as disruptions and other damages to our principal offices, information technology operations and system networks and failure to keep pace with developments in technology may adversely impact our business operations, the satisfaction of our guests and crew and may lead to reputational damage.*
- *The loss of key team members, our inability to recruit or retain qualified shoreside and shipboard team members and increased labor costs could have an adverse effect on our business and results of operations.*
- *Increases in fuel prices, changes in the types of fuel consumed and availability of fuel supply may adversely impact our scheduled itineraries and costs.*
- *We rely on supply chain vendors who are integral to the operations of our businesses. These vendors and service providers*

are also affected by COVID-19 and may be unable to deliver on their commitments which could negatively impact our business.
- *Fluctuations in foreign currency exchange rates may adversely impact our financial results.*
- *Overcapacity and competition in the cruise and land-based vacation industry may negatively impact our cruise sales, pricing and destination options.*
- *Inability to implement our shipbuilding programs and ship repairs, maintenance and refurbishments may adversely impact our business operations and the satisfaction of our guests.*
- *Failure to successfully implement our business strategy following our resumption of guest cruise operations would negatively impact the occupancy levels and pricing of our cruises and could have a material adverse effect on our business. We require a significant amount of cash to service our debt and sustain our operations. Our ability to generate cash depends on many factors, including those beyond our control, and we may not be able to generate cash required to service our debt and sustain our operations.*

The ordering of the risk factors set forth above is not intended to reflect our indication of priority or likelihood.

Forward-looking statements should not be relied upon as a prediction of actual results. Subject to any continuing obligations under applicable law or any relevant stock exchange rules, we expressly disclaim any obligation to disseminate, after the date of this document, 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. Forward-looking and other statements in this document may also address our sustainability progress, plans, and goals (including climate change- and environmental-related matters). In addition, historical, current, and forward-looking sustainability- and climate-related statements may be based on standards and tools for measuring progress that are still developing, internal controls and processes that continue to evolve, and assumptions and predictions that are subject to change in the future and may not be generally shared.

2022 Executive Overview

During 2022, we completed a monumental 18-month journey marking our full return to guest cruise operations. Over the past 18 months we have:

- Returned 90 ships to service
- Re-boarded over 100,000 team members to our ships
- Restarted our unmatched portfolio of eight private island and port destinations
- Restarted our unrivaled land-based footprint in Alaska and the Yukon
- Welcomed back nearly nine million guests

Throughout 2022, we progressed on an upward trajectory as we continued to close the gap to 2019, our most recent full year of guest cruise operations, and believe we are gaining momentum on our return to profitability.

- For our cruise segments, revenue per passenger cruise day ("PCD") for the fourth quarter of 2022 increased 0.5% compared to a strong 2019, overcoming the dilutive impact of future cruise credits ("FCCs") and fluctuations in foreign currency. This was better than the third quarter of 2022 which decreased 4.1% compared to 2019.
- Occupancy in the fourth quarter of 2022 was 19 percentage points below 2019 levels, this was better than the first quarter of 2022 which was 50 percentage points below 2019 levels. We achieved this on growing capacity as we returned another 35% of our fleet to service in 2022, reaching 99% of our 2019 capacity levels during the fourth quarter.
- Revenue in the fourth quarter of 2022 was $3.8 billion, which was 80% of 2019 levels. This was better than the third quarter of 2022 which was 66% of 2019 levels, an improvement of 14 percentage points.

The uneven reopening of cruise travel around the world following the effects of COVID-19 and the impact the invasion of Ukraine has had on European countries have had a material impact on our results of operations. While all of our brands are on an upward trajectory, the pace of the recovery has trailed for those brands most heavily exposed to these factors as the impacts have weighed on consumer confidence in those regions resulting in greater uncertainty and closer-in booking patterns. To mitigate these impacts, we have made strategic deployment decisions to increase our closer-to-home and shorter duration itineraries to help reduce the friction of air travel, lower the overall cost of our vacations and facilitate a closer-in booking environment. We believe these decisions have positioned us well to attract more new-to-cruise guests and make us even more of a value proposition compared to land-based alternatives. Additionally, based on the evolving nature of COVID-19 and our ongoing collaboration with local and national public health authorities, our brands responsibly relaxed their COVID-19 related protocols aligning towards land-based vacation alternatives and strengthening our competitiveness.

To help support our growth, drive overall revenue generation, elevate awareness and consideration and enhance demand for both the near- and long-term, we have significantly increased our advertising activities, including a nearly 20% increase in our investment during the fourth quarter of 2022 compared to the fourth quarter of 2019. Our brands are utilizing pricing philosophies to maximize revenue and are sharing best practices across brands. Having been in pause status for nearly two years, we are also rebuilding demand by providing our guests with extraordinary cruise vacations, which we believe will increase the likelihood of our guests recommending our cruise vacations. In addition, we have a renewed focus on our travel agent partner relationships and a growing sales force. While building back demand and enhancing our revenue management tools and strategies, we are working to optimize the combination of occupancy levels with ticket and onboard prices to deliver revenue growth in the near-term while maintaining price integrity for the long-term. We are also not losing sight of our expense base as we have worked through our restart and continue to absorb and mitigate the impacts of the high inflationary environment we have all been living in.

During 2022, we continued to focus on minimizing our environmental impact and achieved a 2% reduction in carbon intensity compared to 2019 (11% reduction for ships in guest cruise operations), a 30% reduction in food waste compared to 2019 and used 290 million fewer single use items compared to 2018. We announced the rollout of Service Power Packages, global fleet upgrades which will improve energy and fuel efficiency and support our sustainability goals and announced the expansion of Air Lubrication Systems, which are expected to generate savings in fuel consumption and reductions in carbon emissions. Additionally, AIDA Cruises and Holland America Line achieved milestones in their decarbonization strategies piloting the use of a blend of marine biofuel. These investments, along with the company's fleet optimization and itinerary reviews, are expected to drive a 15% reduction in fuel consumption per ALBD in 2023, along with a 15% reduction in carbon emissions per ALBD on an annualized basis, both as compared to 2019.

Our fleet optimization efforts included welcoming stunning new flagships for six of our brands including *Carnival Celebration*, *AIDAcosma*, *Costa Toscana*, *Discovery Princess* and *Arvia*, as well as our first luxury expedition ship, *Seabourn Venture*. All of these ships were purpose-built to generate higher returns. In addition, we announced the removal of additional ships from our fleet, bringing the cumulative number of smaller-less efficient ships to be removed from our fleet since the pause to 26. Once completed, these efforts will result in nearly a quarter of our fleet consisting of newly delivered, larger-more efficient ships. We also announced Carnival Fun Italian Style™, a new concept for Carnival Cruise Line's North American guests which will debut in the spring of 2023 with *Costa Venezia* followed by *Costa Firenze* in the spring of 2024. Additionally during 2022, *Costa Luminosa* was transferred to Carnival Cruise Line and began guest operations as *Carnival Luminosa*.

During 2022, we reduced our capital expenditures by over $500 million as compared to our previous guidance. We have re-prioritized our expected spend to reflect the current environment, while maintaining our commitment to seek excellence in compliance, environmental protection, and in looking after the safety, health and well-being of every life we touch. In addition, we broke ground on a new exclusive destination in Grand Bahama Port for our Carnival Cruise Line brand, which will be an important addition to our current existing private islands and unique port destinations which had 6 million visits from our guests in 2022.

Going forward, we are committed to using our expected cash provided by operating activities to strengthen the balance sheet over time and expect to be disciplined and rigorous in making newbuild decisions. We have just four larger ships on order through 2025, plus our second Seabourn luxury expedition ship to be delivered in 2023. This is our lowest order book in decades.

Overall, we remain focused on driving revenue growth and accelerating our return to strong profitability. We believe that over time, this revenue generation and our more focused capital expenditure profile will support significant free cash flow, and propel us on the path to deleveraging, investment grade credit ratings and higher return on invested capital. This has been a truly remarkable year and we have come a long way in an incredibly short amount of time. We look forward to continuing to deliver unforgettable happiness to our guests by providing extraordinary cruise vacations in 2023, while honoring the integrity of every ocean we sail, place we visit and life we touch.

New Accounting Pronouncements

Refer to our consolidated financial statements for further information on *Accounting Pronouncements*.

Critical Accounting Estimates

Our critical accounting estimates are those we believe require our most significant judgments about the effect of matters that are inherently uncertain. A discussion of our critical accounting estimates, the underlying judgments and uncertainties used to make them and the likelihood that materially different estimates would be reported under different conditions or using different assumptions is as follows:

Liquidity and Other Uncertainties

We make several critical accounting estimates with respect to our liquidity.

Based on the evolving nature of COVID-19 and our ongoing collaboration with local and national public health authorities, we have responsibly relaxed our related protocols, including greatly reducing or eliminating testing requirements and vaccination protocols to more closely align with the broader travel industry and strengthening our competitiveness.

As part of our liquidity management, we rely on estimates of our future liquidity, which includes numerous assumptions that are subject to various risks and uncertainties. The principal assumptions used to estimate our future liquidity consist of:

- Our continued cruise operations and expected timing of cash collections for cruise bookings
- Expected increases in revenue in 2023 on a per passenger basis compared to 2019, particularly with the responsible relaxation of COVID-19 related protocols aligning towards land-based vacation alternatives and strengthening our competitiveness
- Expected improvement in occupancy on a year-over-year basis returning to historical levels in the summer of 2023
- Stabilization of fuel prices around November 2022 year-end prices
- Continued stabilization of inflationary pressures on costs, moderated by a larger-more efficient fleet as compared to 2019

In addition, we make certain assumptions about new ship deliveries, improvements and removals, and consider the future export credit financings that are associated with the new ship deliveries.

We have a substantial debt balance as a result of the pause in guest cruise operations and require a significant amount of liquidity or cash from operating activities to service our debt. In addition, the continued effects of the pandemic, inflation, higher fuel prices, higher interest rates and fluctuations in foreign currency rates are collectively having a material negative impact on our business. The full extent of the collective impact of these items is uncertain and may be amplified by our substantial debt balance. We believe we have made reasonable estimates and judgments of the impact of these events within our consolidated financial statements and there may be changes to those estimates in future periods.

For almost three years, we have taken appropriate actions to manage our liquidity, including completing various capital market transactions, obtaining relevant financial covenant amendments or waivers, accelerating the removal of certain ships from the fleet, and during the pause reducing capital expenditures and operating expenses. As of November 30, 2022, 97% of our capacity has resumed guest cruise operations and is serving guests.

We will continue to pursue various opportunities to raise additional capital to fund obligations associated with future debt maturities and/or to extend the maturity dates associated with our existing indebtedness including our Revolving Facility and obtain relevant financial covenant amendments or waivers, if needed. Actions to raise capital may include issuances of debt, convertible debt or equity in private or public transactions or entering into new and extended credit facilities.

Ship Accounting

We make several critical accounting estimates with respect to our ship accounting including ship improvement costs, estimated useful lives and residual values.

We account for ship improvement costs, including replacements of certain significant components and parts, by capitalizing those costs we believe add value to our ships and have a useful life greater than one year and depreciating those improvements over their estimated remaining useful life. The costs of repairs and maintenance, including those incurred when a ship is taken out-of-service for scheduled maintenance, and minor improvement costs and expenses, are charged to expense as incurred. If we change our assumptions in making our determinations as to whether improvements to a ship add value, the amounts we expense each year as repair and maintenance expense could increase, which would be partially offset by a decrease in depreciation expense, resulting from a reduction in capitalized costs.

In addition, the specifically identified or estimated cost and accumulated depreciation of previously capitalized ship components are written-off upon retirement, which may result in a loss on disposal that is also included in other operating expenses. We do not have cost segregation studies performed to specifically componentize our ships. In addition, since we do not separately componentize our ships, we do not identify and track depreciation of original ship components. Therefore, we typically have to estimate the net book value of components that are retired, based primarily upon their replacement cost, their age and their original estimated useful lives. Given the large size and complexity of our ships, ship accounting estimates require considerable judgment and are inherently uncertain.

In order to compute our ships’ depreciation expense, we apply judgment to determine their useful lives as well as their residual values. We have estimated our ships’ useful lives at 30 years and residual values at 15% of our original ship cost. Our ship useful life and residual value estimates take into consideration the estimated weighted-average useful lives of the ships' major component systems, such as hull, superstructure, main electric, engines and cabins. We also take into consideration the impact of technological changes, historical useful lives of similarly-built ships, long-term cruise and vacation market conditions and regulatory changes, including those related to the environment and climate change. We determine the residual value of our ships based on our long-term estimates of their resale value at the end of their useful life to us but before the end of their physical and economic lives to others, historical resale values of our and other cruise ships as well as our expectations of the long-term viability of the secondary cruise ship market. We review estimated useful lives and residual values for reasonableness whenever events or circumstances significantly change. Since the pause of our guest cruise operations, we have disposed of ships for amounts significantly below their book value. Management has estimated that this trend will normalize in the coming years.

The IMO is currently considering various proposals which build on existing regulations and aim to further reduce GHG emissions within the global shipping industry. In addition, the EU has proposed several regulations that will likely impact the cost of fossil fuels, including the recently agreed inclusion of maritime shipping in the EU's Emission Trading System which is in the process of being adopted. We have established Climate Action Goals, which include a carbon intensity reduction goal of 20% by 2030 from the 2019 baseline and aspire to achieve net carbon-neutral ship operations by 2050. Given a 30-year estimated useful life for our ships, our most recently delivered vessels' lives will extend beyond this 2050 date. Fossil fuels are currently the only viable option for our industry and it is not clear when alternative fuels or other technologies will be commercially viable. While alternative fuels may provide a path to decarbonization for the maritime industry, there are significant supply challenges that must be resolved before viability is reached. We are closely monitoring technology developments and partnering with key organizations on research and development to support our sustainability goals and aspirations. Our fleet's engines are capable of being modified for use with certain alternative fuels and we have begun to test the use of marine biofuel blends on certain ships in our fleet. In addition, and in support of our Climate Action Goals, we invest in technologies, including the use of LNG powered cruise ships, the installation of Advanced Air Quality Systems on board our ships to aid in the reduction of sulfur emissions, the use of shore power, enabling ships to use shoreside electric power where available while in port and various other efficiency related upgrades intended to reduce our emissions. It is uncertain how proposed and possible regulatory changes related to the environment and climate change and our 2050 aspirations, may impact our ships' useful lives and residual values and the impact is dependent on future regulatory actions and technological advances. As of November 30, 2022, management concluded that there were no changes in our ship useful lives and residual value estimates.

If materially different conditions existed, or if we materially changed our assumptions of ship useful lives and residual values, then our depreciation expense, loss on retirement of ship components and net book value of our ships would be materially different. Our 2022 ship depreciation expense would have increased by approximately:

- $47 million assuming we had reduced our estimated 30-year ship useful life estimate by one year at the time we took delivery or acquired each of our ships
- $237 million assuming we had estimated our ships to have no residual value

We believe that the estimates we made for ship accounting purposes are reasonable and our methods are consistently applied in all material respects and result in depreciation expense that is based on a rational and systematic method to equitably allocate the costs of our ships to the periods during which we use them.

Valuation of Ships

Impairment reviews of our ships require us to make significant estimates. We evaluate ship asset impairments at the individual ship level which is the lowest level for which identifiable cash flows are largely independent of the cash flows of other assets and liabilities. We review our ships for impairment whenever events or circumstances indicate that the carrying value of a ship may not be recoverable. If estimated future cash flows are less than the carrying value of a ship, an impairment charge is recognized to the extent its carrying value exceeds its estimated fair value. Where estimated future cash flows are used to estimate the recoverable value of a ship, the cash flows include estimated capital expenditures, including those expected to meet our 2030 Climate Action Goals.

The estimation of a ship's fair value includes numerous assumptions that are subject to various risks and uncertainties. The principal assumption used in determining the fair value of these ships was the estimated sales proceeds.

We determined the fair value of these ships based on their respective estimated selling values, for those ships expected to be disposed of, or estimated discounted future cash flows and comparable market transactions. Refer to our consolidated financial statements for additional discussion of our property and equipment policy, ship impairment reviews and ship impairment charges recognized during 2022.

We believe that we have made reasonable estimates.

Valuation of Goodwill

Impairment reviews of our goodwill require us to make significant estimates.

We review our goodwill for impairment at the reporting unit level as of July 31 every year, or more frequently if events or circumstances dictate. If the estimated fair value of any of our reporting units is less than the reporting unit's carrying value, goodwill is written down based on the difference between the reporting unit's carrying amount and its estimated fair value, limited to the amount of goodwill allocated to the reporting unit.

The estimation of our reporting unit fair value includes numerous assumptions that are subject to various risks and uncertainties. COVID-19 and its ongoing effects, inflation, higher fuel prices and higher interest rates have created additional uncertainty in our impairment analyses. The estimated fair value of our reporting unit with goodwill significantly exceeded its carrying value as of the date of its most recent quantitative test. Refer to our consolidated financial statements for additional discussion of our goodwill accounting policy and impairment reviews.

We believe that we have made reasonable estimates.

Contingencies

We periodically assess the potential liabilities related to any lawsuits or claims brought against us, as well as for other known unasserted claims, including environmental, legal, regulatory and guest and crew matters. While it is typically very difficult to determine the timing and ultimate outcome of these matters, we use our best judgment to determine the appropriate amounts to record in our consolidated financial statements.

We accrue a liability and establish a reserve when we believe a loss is probable and the amount of the loss can be reasonably estimated. In assessing probable losses, we make estimates of the amount of probable insurance recoveries, if any, which are recorded as assets where appropriate. Such accruals and reserves are typically based on developments to date, management’s estimates of the outcomes of these matters, our experience in contesting, litigating and settling other similar matters, historical claims experience, actuarially determined estimates of liabilities and any related insurance coverage.

Given the inherent uncertainty related to the eventual outcome of these matters and potential insurance recoveries, it is possible that all or some of these matters may be resolved for amounts materially different from any provisions or disclosures that we may have made. In addition, as new information becomes available, we may need to reassess the amount of asset or liability that needs to be accrued related to our contingencies. All such changes in our estimates could materially impact our results of operations and financial position.

Refer to our consolidated financial statements for additional discussion of contingencies.

Known Trends and Uncertainties

- We believe the increased cost of fuel and other related costs are reasonably likely to continue to impact our profitability in both the short and long-term.
- We believe inflation and higher interest rates are reasonably likely to continue to impact our profitability.
- We believe the increasing global focus on climate change, including the reduction of carbon emissions and new and evolving regulatory requirements, is reasonably likely to have a material negative impact on our future financial results. The full impact of climate change to our business is not yet known.

Results of Operations

We have historically earned substantially all of our cruise revenues from the following:

- Sales of passenger cruise tickets and, in some cases, the sale of air and other transportation to and from airports near our ships’ home ports and cancellation fees. We also collect fees, taxes and other charges from our guests. The cruise ticket price typically includes the following:
    - Accommodations
    - Most meals, including snacks at numerous venues
    - Access to amenities such as swimming pools, water slides, water parks, whirlpools, a health club and sun decks
    - Child care and supervised youth programs
    - Entertainment, such as theatrical and comedy shows, live music and nightclubs
    - Visits to multiple destinations
- Sales of onboard goods and services not included in the cruise ticket price. This generally includes the following:

- Beverage sales
- Casino gaming
- Shore excursions
- Retail sales
- Photo sales
- Internet and communication services
- Full service spas
- Specialty restaurants
- Art sales
- Laundry and dry cleaning services

These goods and services are provided either directly by us or by independent concessionaires, from which we receive either a percentage of their revenues or a fee. Concession revenues do not have direct expenses because the costs and services incurred for concession revenues are borne by our concessionaires. In 2022, we earned 42% of our cruise revenues from onboard and other revenue goods and services. In 2019, our most recent full year of guest cruise operations, we earned 30% of our cruise revenues from onboard and other revenues.

We earn our tour and other revenues from our hotel and transportation operations and other revenues.

We incur cruise operating costs and expenses for the following:

- The costs of passenger cruise bookings, which include travel agent commissions, cost of air and other transportation, port fees, taxes, and charges that directly vary with guest head counts and credit and debit card fees
- Onboard and other cruise costs, which include the costs of beverage sales, costs of shore excursions, costs of retail sales, internet and communication costs, credit and debit card fees, other onboard costs, costs of cruise vacation protection programs and pre- and post-cruise land packages
- Payroll and related costs, which include the costs of officers and crew in bridge, engineering and hotel operations. Substantially all costs associated with our shoreside personnel are included in selling and administrative expenses
- Fuel costs, which include fuel delivery costs
- Food costs, which include both our guest and crew food costs
- Other ship operating expenses, which include port costs that do not vary with guest head counts; repairs and maintenance, including minor improvements and dry-dock expenses; hotel costs; entertainment; gains and losses on ship sales; ship impairments; freight and logistics; insurance premiums and all other ship operating expenses

We incur tour and other costs and expenses for our hotel and transportation operations and other expenses.

Statistical Information

	Years Ended November 30,		
	2022	**2021**	**2020**
PCDs *(in millions)* (a)	54.6	8.2	26.5
ALBDs *(in millions)* (b)	72.5	14.6	26.1
Occupancy percentage (c)	75 %	56 %	101 %
Passengers carried *(in millions)*	7.7	1.2	3.5
Fuel consumption in metric tons *(in millions)*	2.6	1.3	1.9
Fuel consumption in metric tons per thousand ALBDs	36.1	(d)	(d)
Fuel cost per metric ton consumed	$ 830	$ 515	$ 430
Currencies (USD to 1)			
AUD	$ 0.70	$ 0.75	$ 0.68
CAD	$ 0.77	$ 0.80	$ 0.74
EUR	$ 1.06	$ 1.19	$ 1.13
GBP	$ 1.25	$ 1.38	$ 1.28

The resumption of guest cruise operations has impacted the comparability of all aspects of our business.

Notes to Statistical Information

(a) PCD represents the number of cruise passengers on a voyage multiplied by the number of revenue-producing ship operating days for that voyage.

(b) ALBD is a standard measure of passenger capacity for the period that we use to approximate rate and capacity variances, based on consistently applied formulas that we use to perform analyses to determine the main non-capacity driven factors that cause our cruise revenues and expenses to vary. ALBDs assume that each cabin we offer for sale accommodates two passengers and is computed by multiplying passenger capacity by revenue-producing ship operating days in the period.

(c) Occupancy, in accordance with cruise industry practice, is calculated using a numerator of PCDs and a denominator of ALBDs, which assumes two passengers per cabin even though some cabins can accommodate three or more passengers. Percentages in excess of 100% indicate that on average more than two passengers occupied some cabins.

(d) Fuel consumption in metric tons per thousand ALBDs for 2021 and 2020 are not meaningful.

2022 Compared to 2021

Results of Operations

Consolidated

	Years Ended November 30,		
(in millions)	**2022**	**2021**	**Change**
Revenues			
Passenger ticket	$ 7,022	$ 1,000	$ 6,022
Onboard and other	5,147	908	4,239
	12,168	1,908	10,260
Operating Costs and Expenses			
Commissions, transportation and other	1,630	269	1,360
Onboard and other	1,528	272	1,256
Payroll and related	2,181	1,309	871
Fuel	2,157	680	1,477
Food	863	187	676
Ship and other impairments	440	591	(151)
Other operating	2,958	1,346	1,612
	11,757	4,655	7,103
Selling and administrative	2,515	1,885	630
Depreciation and amortization	2,275	2,233	43
Goodwill impairment	—	226	(226)
	16,547	8,997	7,550
Operating Income (Loss)	(4,379)	(7,089)	2,710
Nonoperating Income (Expense)			
Interest income	74	12	62
Interest expense, net of capitalized interest	(1,609)	(1,601)	(8)
Gains (losses) on debt extinguishment, net	(1)	(670)	670
Other income (expense), net	(165)	(173)	8
	(1,701)	(2,433)	732
Income (Loss) Before Income Taxes	$ (6,080)	$ (9,522)	$ 3,443

NAA

(in millions)	Years Ended November 30, 2022	2021	Change
Revenues			
Passenger ticket	$ 4,692	$ 555	$ 4,137
Onboard and other	3,589	553	3,036
	8,281	1,108	7,173
Operating Costs and Expenses	7,526	2,730	4,796
Selling and administrative	1,517	953	564
Depreciation and amortization	1,408	1,352	55
	10,451	5,036	5,415
Operating Income (Loss)	$ (2,170)	$ (3,928)	$ 1,758

EA

(in millions)	Years Ended November 30, 2022	2021	Change
Revenues			
Passenger ticket	$ 2,660	$ 491	$ 2,169
Onboard and other	872	221	651
	3,531	712	2,820
Operating Costs and Expenses	3,925	1,807	2,118
Selling and administrative	745	568	177
Depreciation and amortization	692	728	(37)
Goodwill impairment	—	226	(226)
	5,361	3,329	2,032
Operating Income (Loss)	$ (1,830)	$ (2,617)	$ 787

In the face of the global impact of COVID-19, we paused our guest cruise operations in mid-March 2020 and began resuming guest cruise operations in 2021. As of November 30, 2022, 97% of our capacity was serving guests compared to 61% as of November 30, 2021. Our NAA segment's full fleet was serving guests as of November 30, 2022 compared to 60% of its capacity as of November 30, 2021. Our EA segment had 93% of its capacity serving guests as of November 30, 2022, compared to 63% as of November 30, 2021.

The effects of the pause and subsequent resumption of our guest cruise operations, inflation, higher fuel prices, higher interest rates and fluctuations in foreign currency rates are collectively having a material negative impact on all aspects of our business, including our results of operations, liquidity and financial position. We have a substantial debt balance and require a significant amount of cash to service our debt and sustain our operations, and our ability to generate cash will be affected by our ability to successfully implement our business strategy, which includes increasing our occupancy levels and pricing of our cruises, as well as general macroeconomic, financial, geopolitical, competitive, regulatory and other factors beyond our control. The full extent of these impacts is uncertain and may be amplified by our substantial debt balance.

Revenues

Consolidated

Cruise passenger ticket revenues made up 58% of our total revenues in 2022 while onboard and other revenues made up 42%. Revenues for the year ended November 30, 2022 increased by $10.3 billion to $12.2 billion from $1.9 billion in 2021 due to the ongoing resumption of guest cruise operations and the significant increase of ships in service. ALBDs increased to 72.5 million in 2022 as compared to 14.6 million in 2021. Occupancy for 2022 was 75%, compared to 56% in 2021.

NAA Segment

Cruise passenger ticket revenues made up 57% of our NAA segment's total revenues in 2022 while onboard and other cruise revenues made up 43%. NAA segment revenues for 2022 increased by $7.2 billion to $8.3 billion from $1.1 billion in 2021 due to the ongoing resumption of guest cruise operations and the significant increase of ships in service. ALBDs increased to 44.3 million in 2022 as compared to 7.2 million in 2021. Occupancy for 2022 was 82% compared to 63% in 2021.

EA Segment

Cruise passenger ticket revenues made up 75% of our EA segment's total revenues in 2022 while onboard and other cruise revenues made up 25%. EA segment revenues for 2022 increased by $2.8 billion to $3.5 billion from $0.7 billion in 2021 due to the ongoing resumption of guest cruise operations and the significant increase of ships in service. ALBDs increased to 28.2 million in 2022 as compared to 7.4 million in 2021. Occupancy for 2022 was 65% compared to 50% in 2021.

Operating Cost and Expenses

Consolidated

Operating costs and expenses increased by $7.1 billion to $11.8 billion in 2022 from $4.7 billion in 2021. These increases were driven by our resumption of guest cruise operations and restart related expenses, including the cost of returning ships to guest cruise operations and returning crew members to our ships, the cost of maintaining enhanced health and safety protocols and inflation.

Fuel costs increased by $1.5 billion to $2.2 billion in 2022 from $0.7 billion in 2021. $0.7 billion of this increase was driven by higher fuel consumption of 1.3 million metric tons, due to the resumption of guest cruise operations, and $0.8 billion was driven by an increase in fuel prices and changes in fuel mix of $315 per metric ton consumed in 2022 compared to 2021.

We recognized ship and other impairment charges of $440 million in 2022 compared to $591 million in 2021.

Selling and administrative expenses increased by $0.6 billion to $2.5 billion in 2022 from $1.9 billion in 2021. This increase was primarily driven by increased advertising and promotional spend to continue to build demand while the remainder was driven by higher administrative expenses incurred as part of our resumption of guest cruise operations.

There were no goodwill impairment charges recognized in 2022 and $226 million of goodwill impairment charges recognized in 2021.

The drivers in changes in costs and expenses for our NAA and EA segments are the same as those described for our consolidated results.

Nonoperating Income (Expense)

Interest expense, net of capitalized interest, was $1.6 billion in 2022 and 2021.

Losses on debt extinguishment, net decreased to $1 million in 2022 from $670 million in 2021.

2021 Compared to 2020

Results of Operations

Consolidated

(in millions)	Years Ended November 30, 2021	2020	Change	% increase (decrease)
Revenues				
Passenger ticket	$ 1,000	$ 3,684	$ (2,684)	(73)%
Onboard and other	908	1,910	(1,003)	(52)%
	1,908	5,595	(3,687)	(66)%
Operating Costs and Expenses				
Commissions, transportation and other	269	1,139	(870)	(76)%
Onboard and other	272	605	(334)	(55)%
Payroll and related	1,309	1,780	(471)	(26)%
Fuel	680	823	(142)	(17)%
Food	187	413	(226)	(55)%
Ship and other impairments	591	1,967	(1,376)	(70)%
Other operating	1,346	1,518	(172)	(11)%
	4,655	8,245	(3,590)	(44)%
Selling and administrative	1,885	1,878	6	— %
Depreciation and amortization	2,233	2,241	(8)	— %
Goodwill impairment	226	2,096	(1,870)	(89)%
	8,997	14,460	(5,462)	(38)%
Operating Income (Loss)	$ (7,089)	$ (8,865)	$ 1,776	(20)%

NAA

(in millions)	Years Ended November 30, 2021	2020	Change	% increase (decrease)
Revenues				
Passenger ticket	$ 555	$ 2,334	$ (1,779)	(76)%
Onboard and other	553	1,293	(740)	(57)%
	1,108	3,627	(2,519)	(69)%
Operating Costs and Expenses	2,730	5,623	(2,893)	(51)%
Selling and administrative	953	1,066	(113)	(11)%
Depreciation and amortization	1,352	1,413	(60)	(4)%
Goodwill impairment	—	1,319	(1,319)	100 %
	5,036	9,422	(4,386)	(47)%
Operating Income (Loss)	$ (3,928)	$ (5,794)	$ 1,867	(32)%

EA

(in millions)	Years Ended November 30, 2021	2020	Change	% increase (decrease)
Revenues				
Passenger ticket	$ 491	$ 1,388	$ (897)	(65)%
Onboard and other	221	402	(181)	(45)%
	712	1,790	(1,078)	(60)%
Operating Costs and Expenses	1,807	2,548	(741)	(29)%
Selling and administrative	568	523	46	9 %
Depreciation and amortization	728	672	56	8 %
Goodwill impairment	226	777	(551)	(71)%
	3,329	4,519	(1,190)	(26)%
Operating Income (Loss)	$ (2,617)	$ (2,729)	$ 112	(4)%

We paused our guest cruise operations in March 2020 with minimal cruise related revenue recognized during the remainder of 2020. In addition, we incurred incremental COVID-19 related costs associated with repatriating guests and crew members, enhancing health protocols and sanitizing our ships, restructuring costs and defending lawsuits. As of November 30, 2021, eight of our nine brands had resumed guest cruise operations as part of our gradual return to service. The gradual resumption of guest cruise operations continued to have a material impact on all aspects of our business, including our liquidity, financial position and results of operations. The full extent of the impact will be determined by our gradual return to service and the length of time COVID-19 influences travel decisions.

As of November 30, 2021, 61% of our capacity was operating with guests on board, which is an increase from November 30, 2020 where we had one ship in service. Revenues for the year ended November 30, 2021 decreased $3.7 billion, or 66%, to $1.9 billion from $5.6 billion in 2020 as a result of the pause in guest cruise operations beginning March 2020 and the gradual resumption in guest cruise operations in 2021. Occupancy for 2021 was 56%, compared to 101% in 2020, due to the gradual resumption of guest cruise operations.

During 2021 we incurred, incremental restart-related spend including the cost of returning ships to guest cruise operations and returning crew members to our ships as well as the incremental costs of maintaining enhanced health and safety protocols as we continue our gradual return to service. During 2020, while maintaining compliance, environmental protection and safety, we significantly reduced ship operating expenses, including cruise payroll and related expenses, food, fuel, insurance and port charges by transitioning ships into paused status, either at anchor or in port, and staffed at a safe manning level.

We recognized goodwill impairment charges of $0.2 billion and $2.1 billion for the years ended November 30, 2021 and 2020.

We recognized ship impairment charges of $0.6 billion and $1.8 billion as of November 30, 2021 and 2020.

Nonoperating Income (Expense)

Interest expense, net of capitalized interest, increased by $0.7 billion to $1.6 billion in 2021 from $0.9 billion in 2020. The increase was caused by our higher average debt balance in 2021 compared to 2020.

Loss on debt extinguishment increased by $212 million to $670 million in 2021 from $459 million in 2020. The increase was caused by the repurchase of $4.0 billion of the aggregate principal of the 2023 Senior Secured Notes.

Liquidity, Financial Condition and Capital Resources

As of November 30, 2022, we had $8.6 billion of liquidity including cash, restricted cash from the 2028 Senior Priority Notes which became unrestricted in December 2022 and borrowings available under our Revolving Facility. We will continue to pursue various opportunities to raise additional capital to fund obligations associated with future debt maturities and/or to extend the maturity dates associated with our existing indebtedness including our Revolving Facility and obtain relevant financial covenant amendments or waivers, if needed. Actions to raise capital may include issuances of debt, convertible debt or equity in private or public transactions or entering into new and extended credit facilities.

Since December 2021, we have completed the following:

- In December 2021, we borrowed $1.7 billion under export credit facilities due in semi-annual installments through 2034.
- In January 2022, we borrowed $637 million under an export credit facility due in semi-annual installments through 2034.
- In May 2022, we issued an aggregate principal amount of $1.0 billion senior unsecured notes that mature on June 1, 2030. The 2030 Senior Unsecured Notes bear interest at a rate of 10.5% per year.
- In August 2022, we completed a public offering of 117.5 million shares of Carnival Corporation common stock at a price per share of $9.95, resulting in net proceeds of $1.2 billion.
- In August 2022, we issued $339 million aggregate principal amount of the 2024 Convertible Notes in a privately negotiated non-cash exchange for existing convertible notes.
- In October 2022, we issued an aggregate principal amount of $2.0 billion senior priority notes that mature on May 1, 2028. The 2028 Senior Priority Notes bear interest at a rate of 10.4% per year.
- In November 2022, we issued an additional $87 million aggregate principal amount of the 2024 Convertible Notes in a privately negotiated non-cash exchange for existing convertible notes.
- In November 2022, we issued $1.1 billion aggregate principal amount of the 2027 Convertible Notes.
- In November 2022, we borrowed $799 million under an export credit facility due in semi-annual installments through 2034.

Refer to Note 5 - “Debt” of the consolidated financial statements and “Funding Sources” below for additional details.

Certain of our debt instruments contain provisions that may limit our ability to incur or guarantee additional indebtedness.

We had a working capital deficit of $3.1 billion as of November 30, 2022 compared to a working capital deficit of $0.3 billion as of November 30, 2021. The increase in working capital deficit was caused by a decrease in cash and cash equivalents, a decrease in short-term investments, an increase in customer deposits and an increase in current portion of long-term debt, and was partially offset by an increase in restricted cash and a decrease in short-term borrowings. We operate with a substantial working capital deficit. This deficit is mainly attributable to the fact that, under our business model, substantially all of our passenger ticket receipts are collected in advance of the applicable sailing date. These advance passenger receipts generally remain a current liability until the sailing date. The cash generated from these advance receipts is used interchangeably with cash on hand from other sources, such as our borrowings and other cash from operations. The cash received as advanced receipts can be used to fund operating expenses, pay down our debt, make long-term investments or any other use of cash. Included within our working capital are $4.9 billion and $3.1 billion of customer deposits as of November 30, 2022 and 2021, respectively. We have agreements with a number of credit card processors that transact customer deposits related to our cruise vacations. Certain of these agreements allow the credit card processors to request, under certain circumstances, that we provide a reserve fund in cash. In addition, we have a relatively low level of accounts receivable and limited investment in inventories.

Sources and Uses of Cash

Operating Activities

Our business used $1.7 billion of net cash flows in operating activities during 2022, a decrease of $2.4 billion, compared to $4.1 billion used in 2021. This was due to a decrease in the net loss compared to the same period in 2021 and other working capital changes. During 2021, our business used $4.1 billion of net cash from operations, a decrease of $2.2 billion, compared to $6.3 billion provided in 2020.

Investing Activities

During 2022, net cash used in investing activities was $4.8 billion. This was driven by:

- Capital expenditures of $3.9 billion for our ongoing new shipbuilding program
- Capital expenditures of $1.1 billion for ship improvements and replacements, information technology and buildings and improvements
- Proceeds from sales of ships and other of $70 million
- Purchases of short-term investments of $315 million

- Proceeds from maturity of short-term investments of $515 million

During 2021, net cash used in investing activities was $3.5 billion. This was caused by:

- Capital expenditures of $3.0 billion for our ongoing new shipbuilding program
- Capital expenditures of $602 million for ship improvements and replacements, information technology and buildings and improvements
- Proceeds from sales of ships and other of $351 million
- Purchases of short-term investments of $2.9 billion
- Proceeds from maturity of short-term investments of $2.7 billion

During 2020, net cash used in investing activities was $3.2 billion. This was caused by:

- Capital expenditures of $2.8 billion for our ongoing new shipbuilding program
- Capital expenditures of $868 million for ship improvements and replacements, information technology and buildings and improvements
- Proceeds from sales of ships of $334 million
- Proceeds of $220 million from the settlement of outstanding derivatives

Financing Activities

During 2022, net cash provided by financing activities of $3.6 billion was caused by:

- Issuances of $7.2 billion of long-term debt
- Repayments of $2.1 billion of long-term debt
- Payments of $153 million related to debt issuance costs
- Net repayments of short-term borrowings of $2.6 billion
- Net proceeds of $1.2 billion from the public offering of Carnival Corporation common stock
- Purchases of $87 million of Carnival plc ordinary shares and issuances of $95 million of Carnival Corporation common stock under our Stock Swap Program

During 2021, net cash provided by financing activities of $6.9 billion was caused by:

- Issuances of $13.0 billion of long-term debt
- Repayments of $6.0 billion of long-term debt
- Premium payments of $545 million related to the extinguishment of debt
- Net proceeds of $1.0 billion from Carnival Corporation common stock
- Purchases of $188 million of Carnival plc ordinary shares and issuances of $206 million of Carnival Corporation common stock under our Stock Swap Program
- Payments of $319 million related to debt issuance costs

During 2020, net cash provided in financing activities of $18.6 billion was caused by:

- Net proceeds of short-term borrowings of $2.9 billion in connection with our availability of, and needs for, cash at various times throughout the period, including proceeds of $3.1 billion from the Revolving Facility
- Repayments of $1.6 billion of long-term debt
- Issuances of $15.0 billion of long-term debt
- Payments of cash dividends of $689 million
- Net proceeds of $3.0 billion from our public offerings of Carnival Corporation common stock
- Net proceeds of $222 million from a registered direct offering of Carnival Corporation common stock used to repurchase a portion of the 2023 Convertible Notes

Material Cash Requirements

	Payments Due by					
(in millions)	2023	2024	2025	2026	2027	Total
Debt (a)	$ 4,344	$ 4,564 (c)	$ 6,082	$ 5,875	$ 6,755	$ 27,620
Newbuild capital expenditures (b)	1,755	2,400	895	—	—	5,050
Total	$ 6,099	$ 6,964	$ 6,977	$ 5,875	$ 6,755	$ 32,670

(a) Includes principal as well as estimated interest payments and does not include the impact of any future possible refinancings. Excludes undrawn export credits.
(b) As of November 30, 2022, we have committed undrawn export credit facilities of $2.2 billion which fund a portion of our Newbuild contractual commitments. Subsequent to November 30, 2022, we obtained additional committed undrawn export credit facilities related to ship deliveries scheduled in 2024 and 2025.
(c) Includes $0.2 billion of borrowings under the Revolving Facility as of November 30, 2022 which mature in 2024.

Funding Sources

As of November 30, 2022, we had $8.6 billion of liquidity including cash, restricted cash from the 2028 Senior Priority Notes which became unrestricted in December 2022 and borrowings available under our Revolving Facility. In addition, we had $2.2 billion of undrawn export credit facilities to fund ship deliveries planned through 2024. Refer to Note 1 - "General" for further details on our liquidity risk and how we plan to fund our cash requirements.

(in billions)	2023	2024
Future export credit facilities at November 30, 2022	$ 0.8	$ 1.4

Subsequent to November 30, 2022, we obtained additional undrawn export credit facilities related to ship deliveries scheduled in 2024 and 2025.

Our export credit facilities contain various financial covenants as described in Note 5 - "Debt". At November 30, 2022, we were in compliance with the applicable covenants under our debt agreements.

Stock Swap Program

We have a program that allows us to realize a net cash benefit when Carnival Corporation common stock is trading at a premium to the price of Carnival plc ordinary shares. Under the Stock Swap Program, we may elect to offer and sell shares of Carnival Corporation common stock at prevailing market prices in ordinary brokers' transactions and repurchase an equivalent number of Carnival plc ordinary shares in the UK market.

Any sales of Carnival Corporation common stock and Carnival plc ordinary shares have been or will be registered under the Securities Act of 1933, as amended. During 2022, under the Stock Swap Program, we sold 6.0 million shares of Carnival Corporation common stock and repurchased the same amount of Carnival plc ordinary shares, resulting in net proceeds of $8 million which were used for general corporate purposes. During 2021, we sold 8.9 million shares of Carnival Corporation's common stock and repurchased the same amount of Carnival plc ordinary shares, resulting in net proceeds of $19 million. During 2020, there were no sales or repurchases under the Stock Swap Program.

Quantitative and Qualitative Disclosures About Market Risk

For a discussion of our hedging strategies and market risks, see the discussion below and the consolidated financial statements.

Fuel Price Risks

Substantially all our exposure to market risk for changes in fuel prices relates to the consumption of fuel on our ships. We have installed Advanced Air Quality Systems on most of our ships, which has aided in the mitigation of the financial impact from the ECAs and global 0.5% sulfur requirements. The blended spot price included in our selected forecast information within our Business Update from December 2022 was $673 per metric ton, and we expect our total fuel consumption for 2023 to be 2.9 million metric tons. If fuel prices changed by 10%, our 2023 total expected fuel cost would change by $185 million.

Foreign Currency Exchange Rate Risks

Operational Currency Risks

Our operations primarily utilize the U.S. dollar, Euro, Sterling or the Australian dollar as their functional currencies. Our operations also have revenue and expenses denominated in non-functional currencies. Movements in foreign currency exchange rates will affect our financial statements.

Investment Currency Risks

The foreign currency exchange rates were as follows:

	November 30,	
USD to 1:	2022	2021
AUD	$ 0.66	$ 0.71
CAD	$ 0.74	$ 0.78
EUR	$ 1.03	$ 1.13
GBP	$ 1.20	$ 1.33

If the November 30, 2021 currency exchange rates had been used to translate our November 30, 2022 non-U.S. dollar functional currency operations' assets and liabilities (instead of the November 30, 2022 U.S. dollar exchange rates), our total assets would have been higher by $1.6 billion and our total liabilities would have been higher by $1.1 billion.

Newbuild Currency Risks

At November 30, 2022, our remaining newbuild currency exchange rate risk primarily relates to euro-denominated newbuild contract payments, which represent a total unhedged commitment of $4.4 billion and relate to newbuilds scheduled to be delivered through 2025 to non-euro functional currency brands. The functional currency cost of each of these ships will increase or decrease based on changes in the exchange rates until the unhedged payments are made under the shipbuilding contract. We may enter into additional foreign currency derivatives to mitigate some of this foreign currency exchange rate risk. Based on a 10% change in euro to U.S. dollar exchange rates as of November 30, 2022, the remaining unhedged cost of these ships would have a corresponding change of $445 million.

Interest Rate Risks

The composition of our debt and interest rate swaps was as follows:

	November 30, 2022
Fixed rate	54 %
EUR fixed rate	12 %
Floating rate	17 %
EUR floating rate	15 %
GBP floating rate	1 %

At November 30, 2022, we had interest rate swaps that have effectively changed $89 million of EURIBOR-based floating rate euro debt to fixed rate euro debt. Based on a 10% change in the November 30, 2022 market interest rates, our 2022 interest expense on floating rate debt, including the effect of our interest rate swaps, would have changed by $48 million.

COMMON STOCK AND ORDINARY SHARES

Carnival Corporation common stock, together with paired trust shares of beneficial interest in the P&O Princess Special Voting Trust, which holds a Special Voting Share of Carnival plc, is traded on the NYSE under the symbol "CCL." Carnival plc ordinary shares trade on the London Stock Exchange under the symbol "CCL." Carnival plc American Depositary Shares ("ADSs"), each one of which represents one Carnival plc ordinary share, are traded on the NYSE under the symbol "CUK." The depositary for the ADSs is JPMorgan Chase Bank, N.A.

As of January 12, 2023, there were 2,956 holders of record of Carnival Corporation common stock and 29,362 holders of record of Carnival plc ordinary shares and 46,628,217 holders of record of Carnival plc ADSs. The past performance of our share prices cannot be relied on as a guide to their future performance.

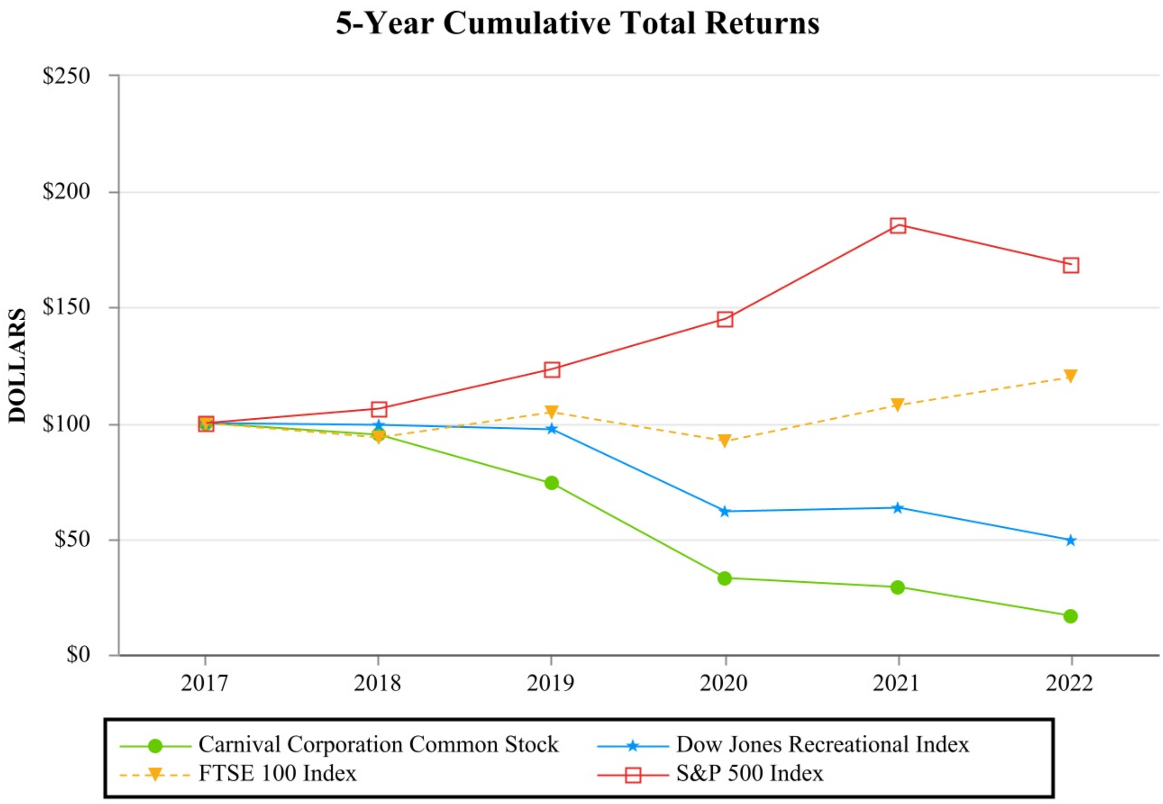
On March 30, 2020, we suspended the payment of dividends on Carnival Corporation common stock and Carnival plc ordinary shares.

Table of Contents

STOCK PERFORMANCE GRAPHS

Carnival Corporation

The following graph compares the Price Performance of $100 if invested in Carnival Corporation common stock with the Price Performance of $100 if invested in each of the Dow Jones U.S. Recreational Services Index (the "Dow Jones Recreational Index"), the FTSE 100 Index and the S&P 500 Index. The Price Performance, as used in the Performance Graph, is calculated by assuming $100 is invested at the beginning of the period in Carnival Corporation common stock at a price equal to the market value. At the end of each year, the total value of the investment is computed by taking the number of shares owned, assuming Carnival Corporation dividends are reinvested, multiplied by the market price of the shares.



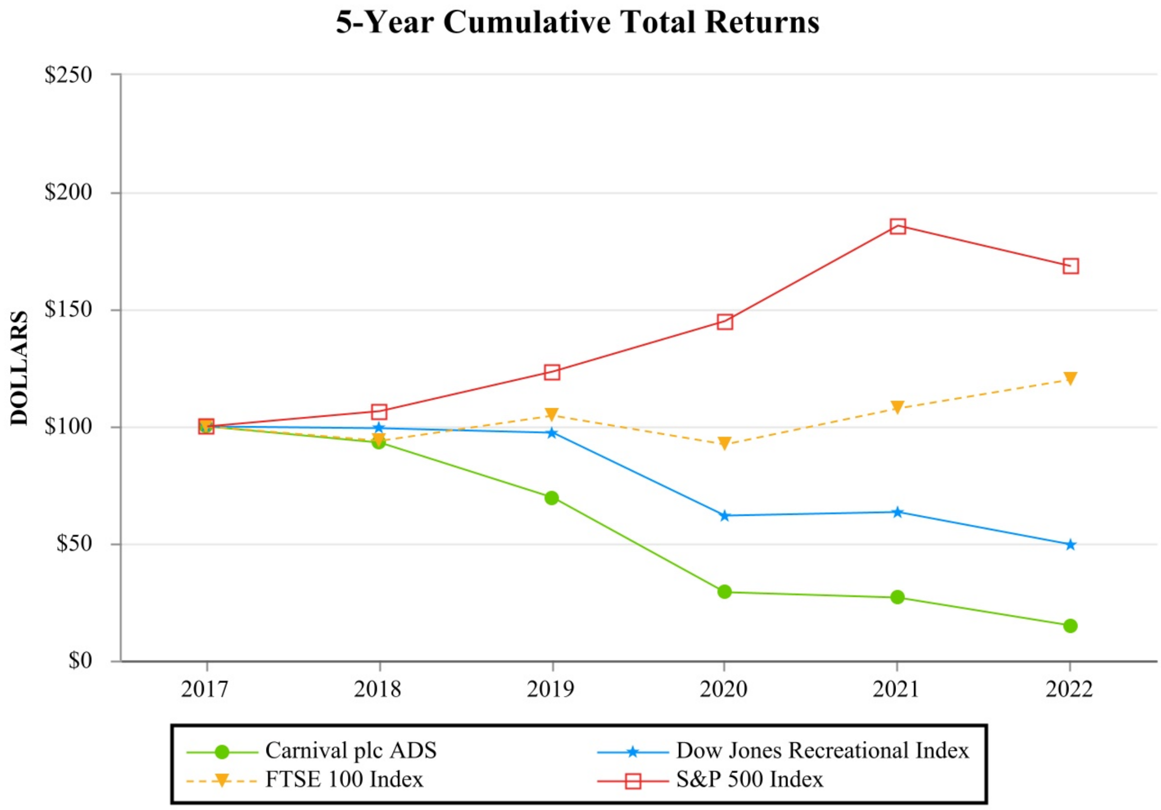
Assumes $100 Invested on November 30, 2017
Assumes Dividends Reinvested
Years Ended November 30,

	2017	2018	2019	2020	2021	2022
Carnival Corporation Common Stock	$ 100	$ 95	$ 74	$ 33	$ 29	$ 16
Dow Jones Recreational Index	$ 100	$ 99	$ 97	$ 62	$ 63	$ 49
FTSE 100 Index	$ 100	$ 94	$ 105	$ 92	$ 108	$ 120
S&P 500 Index	$ 100	$ 106	$ 123	$ 145	$ 185	$ 168

Table of Contents

Carnival plc

The following graph compares the Price Performance of $100 invested in Carnival plc ADSs, each representing one ordinary share of Carnival plc, with the Price Performance of $100 invested in each of the indexes noted below. The Price Performance is calculated in the same manner as previously discussed.



	Assumes $100 Invested on November 30, 2017 Assumes Dividends Reinvested Years Ended November 30,					
	2017	2018	2019	2020	2021	2022
Carnival plc ADS	$ 100	$ 93	$ 69	$ 29	$ 27	$ 15
Dow Jones Recreational Index	$ 100	$ 99	$ 97	$ 62	$ 63	$ 49
FTSE 100 Index	$ 100	$ 94	$ 105	$ 92	$ 108	$ 120
S&P 500 Index	$ 100	$ 106	$ 123	$ 145	$ 185	$ 168

SUBSIDIARIES OF CARNIVAL CORPORATION AND CARNIVAL PLC

The following is a list of all of our subsidiaries, their jurisdiction of incorporation and the names under which they do business.

Name of Subsidiary	Jurisdiction of Incorporation or Organization
1972 Productions, Inc.	Florida
A.C.N. 098 290 834 Pty. Ltd.	Australia
A.J. Juneau Dock, LLC	Alaska
Adventure Island Ltd.	Bahamas
AIDA Kundencenter GmbH	Germany
AIDAradio GmbH	Germany
Air-Sea Holiday GmbH	Switzerland
Alaska Hotel Properties LLC	Delaware
Barcelona Cruise Terminal SLU	Spain
Bay Island Cruise Port, S.A.	Honduras
Belize Cruise Terminal Limited	Belize
Carnival (UK) Limited	UK
Carnival Bahamas FC Limited	Bahamas
Carnival Bahamas Holdings Limited	Bahamas
Carnival Corporation & plc Asia Pte. Ltd.	Singapore
Carnival Corporation Hong Kong Limited	Hong Kong
Carnival Corporation Korea Ltd.	Korea
Carnival Corporation Ports Group Japan KK	Japan
Carnival Finance, LLC	Delaware
Carnival Grand Bahama Investment Limited	Bahamas
Carnival Holdings (Bermuda) Limited	Bermuda
Carnival Investments Limited	Bahamas
Carnival Japan, Inc.	Japan
Carnival License Holdings Limited	Bahamas
Carnival Maritime GmbH	Germany
Carnival North America LLC	Florida
Carnival Port Holdings Limited	UK
Carnival Ports Inc.	Florida
Carnival Support Services India Private Limited	India
Carnival Technical Services (UK) Limited	UK
Carnival Technical Services Finland Limited	Finland
Carnival Technical Services GmbH	Germany
Carnival Vanuatu Limited	Vanuatu
CC U.S. Ventures, Inc.	Delaware
CCL Gifts, LLC	Florida
Costa Crociere PTE Ltd.	Singapore
Costa Crociere S.p.A.	Italy
Costa Cruceros S.A.	Argentina

Exhibit 21

Name of Subsidiary	Jurisdiction of Incorporation or Organization
Costa Cruise Lines Inc.	Florida
Costa Cruise Lines UK Limited	UK
Costa Cruises Customer Center S.L.U.	Spain
Costa Cruises Shipping Services (Shanghai) Company Limited	China
Costa Cruises Travel Agency (Shanghai) Co., Ltd.	China
Costa Cruises Turkey Turizm Gelisim A.S.	Turkey
Costa Cruzeiros Agencia Maritima e Turismo Ltda.	Brazil
Costa International B.V.	Netherlands
Costa Kreuzfahrten GmbH	Switzerland
Cozumel Cruise Terminal S.A. de C.V.	Mexico
Cruise Administration Services, Inc.	Philippines
Cruise Ships Catering & Services International N.V.	Curacao
Cruise Terminal Services, S.A. de C.V.	Mexico
Cruiseport Curacao C.V.	Curacao
CSMART Real Estate B.V.	Netherlands
CSMART Real Estate C.V.	Netherlands
D.R. Cruise Port, Ltd.	Bahamas
F.P.M. SAS	French Polynesia
F.P.P. SAS	French Polynesia
Fleet Maritime Services (Bermuda) Limited	Bermuda
Fleet Maritime Services Holdings (Bermuda) Limited	Bermuda
Fleet Maritime Services International Limited	Bermuda
Gibs, Inc.	Delaware
Global Experience Innovators, Inc.	Florida
Global Fine Arts, Inc.	Florida
Global Shipping Service (Shanghai) Co., Ltd.	China
Grand Cruise Shipping Unipessoal LdA	Portugal (Madeira)
Grand Turk Cruise Center Ltd.	Turks & Caicos
GXI, LLC	Delaware
HAL Antillen N.V.	Curacao
HAL Beheer B.V.	Netherlands
HAL Maritime Ltd.	British Virgin Islands
HAL Nederland N.V.	Curacao
HAL Properties Limited	Bahamas
HAL Services B.V.	Netherlands
Holding Division Iberocruceros SLU	Spain
Holland America Line Inc.	Washington
Holland America Line N.V.	Curacao
Holland America Line U.S.A., Inc.	Delaware
HSE Hamburg School of Entertainment GmbH	Germany
Ibero Cruzeiros Ltda.	Brazil
Iberocruceros SLU	Spain
Information Assistance Corporation	Bermuda

Exhibit 21

Name of Subsidiary	Jurisdiction of Incorporation or Organization
International Cruise Services, S.A. de C.V.	Mexico
International Leisure Travel Inc.	Panama
International Maritime Recruitment Agency, S.A. de C.V.	Mexico
Milestone N.V.	Curacao
Navitrans S.R.L.	Italy
Ocean Bahamas Innovation Ltd.	Bahamas
Ocean Medallion Fulfillment, Ltd.	Bahamas
Odds On Gaming Corporation	Delaware
Operadora Catalina S.r.L.	Dominican Republic
P&O Princess American Holdings	UK
P&O Princess Cruises International Limited	UK
P&O Princess Cruises Pension Trustee Limited	UK
P&O Properties (California), Inc.	California
P&O Travel Limited	UK
Piccapietra Finance S.r.l.	Italy
Prestige Cruises Management S.A.M.	Monaco
Prestige Cruises N.V.	Curacao
Princess Bermuda Holdings, Ltd.	Bermuda
Princess Cays Ltd.	Bahamas
Princess Cruise Corporation Inc.	Panama
Princess Cruise Lines, Ltd.	Bermuda
Princess Cruises and Tours, Inc.	Delaware
Princess U.S. Holdings, Inc.	California
RCT Maintenance & Related Services S.A.	Honduras
RCT Pilots & Related Services, S.A.	Honduras
RCT Security & Related Services S.A.	Honduras
Roatan Cruise Terminal S.A. de C.V.	Honduras
Royal Hyway Tours, Inc.	Alaska
Santa Cruz Terminal, S.L.	Spain
Seabourn Cruise Line Limited	Bermuda
SeaVacations Limited	UK
SeaVacations UK Limited	UK
Shanghai Coast Cruise Consulting Co. Lda	China
Ship Care (Bahamas) Limited	Bahamas
Sitmar Cruises Inc.	Panama
Spanish Cruise Services N.V.	Curacao
Sunshine Shipping Corporation Ltd.	Bermuda
Sun Princess Limited	Bermuda
Sun Princess II Limited	Bermuda
T&T International, Inc.	Texas
Tour Alaska, LLC	Delaware
Transnational Services Corporation	Panama
Trident Insurance Company Ltd.	Bermuda

Exhibit 21

Name of Subsidiary	**Jurisdiction of Incorporation or Organization**
Westmark Hotels of Canada, Ltd.	Canada
Westmark Hotels, Inc.	Alaska
World Leading Cruise Management (Shanghai) Co., Ltd.	China

Exhibit 23

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the joint Registration Statements on Form S-3 (File Nos. 333-106553, 333-106553-01, 333-252433, and 333-252433-01) of Carnival Corporation and Carnival plc, the joint Registration Statements on Form S-8 (File Nos. 333-173465, 333-173465-01, 333-237616, 333-237616-01, 333-257471, and 333-257471-01) of Carnival Corporation and Carnival plc, the Registration Statement on Form S-3 (File No. 033-63563) of Carnival Corporation, the Registration Statements on Form S-8 (File Nos. 333-105672, 333-43885, and 33-51195) of Carnival Corporation and the Registration Statements on Form S-8 (File Nos. 333-124640 and 333-104609) of Carnival plc of our report dated January 27, 2023 relating to the financial statements and the effectiveness of internal control over financial reporting, which appears in the 2022 Annual Report to Shareholders, which is incorporated by reference in this joint Annual Report on Form 10-K.

/s/PricewaterhouseCoopers LLP
Hallandale Beach, Florida
January 27, 2023

Exhibit 24

POWER OF ATTORNEY

The undersigned directors of Carnival Corporation, a company incorporated under the laws of the Republic of Panama, and Carnival plc, a company organized and existing under the laws of England and Wales, do and each of them does, hereby constitute and appoint Josh Weinstein, David Bernstein and Enrique Miguez, his or her true and lawful attorneys-in-fact and agents, and each of them with full power to act without the others, for him or her and in his or her name, place and stead, to sign the Carnival Corporation and Carnival plc joint Annual Report on Form 10-K ("Form 10-K") for the year ended November 30, 2022 and any and all future amendments thereto; and to file said Form 10-K and any such amendments with all exhibits thereto, and any and all other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them, may lawfully do or cause to be done by virtue hereof.

IN WITNESS WHEREOF, the undersigned have hereunto set their hands and seals on this 18th day of January, 2023.

CARNIVAL CORPORATION	**CARNIVAL PLC**
/s/ Micky Arison Micky Arison Chair of the Board of Directors	/s/ Micky Arison Micky Arison Chair of the Board of Directors
/s/ Sir Jonathon Band Sir Jonathon Band Director	/s/ Sir Jonathon Band Sir Jonathon Band Director
/s/ Jason Glen Cahilly Jason Glen Cahilly Director	/s/ Jason Glen Cahilly Jason Glen Cahilly Director
/s/ Helen Deeble Helen Deeble Director	/s/ Helen Deeble Helen Deeble Director
/s/ Jeffrey J. Gearhart Jeffrey J. Gearhart Director	/s/ Jeffrey J. Gearhart Jeffrey J. Gearhart Director
/s/ Richard J. Glasier Richard J. Glasier Director	/s/ Richard J. Glasier Richard J. Glasier Director
/s/ Katie Lahey Katie Lahey Director	/s/ Katie Lahey Katie Lahey Director
/s/ Sara Mathew Sara Mathew Director	/s/ Sara Mathew Sara Mathew Director
/s/ Sir John Parker Sir John Parker Director	/s/ Sir John Parker Sir John Parker Director
/s/ Stuart Subotnick Stuart Subotnick	/s/ Stuart Subotnick Stuart Subotnick

Director

/s/ Laura Weil
Laura Weil
Director

/s/ Randall Weisenburger
Randall Weisenburger
Director

Director

/s/ Laura Weil
Laura Weil
Director

/s/ Randall Weisenburger
Randall Weisenburger
Director

Exhibit 31.1

I, Josh Weinstein, certify that:

1. I have reviewed this Annual Report on Form 10-K of Carnival Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d–15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: January 27, 2023

/s/ Josh Weinstein
Josh Weinstein
President, Chief Executive Officer and Chief Climate Officer

Exhibit 31.2

I, David Bernstein, certify that:

1. I have reviewed this Annual Report on Form 10-K of Carnival Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d–15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: January 27, 2023

/s/ David Bernstein
David Bernstein
Chief Financial Officer and Chief Accounting Officer

Exhibit 31.3

I, Josh Weinstein, certify that:

1. I have reviewed this Annual Report on Form 10-K of Carnival plc;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant’s other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant’s internal control over financial reporting that occurred during the registrant’s most recent fiscal quarter (the registrant’s fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant’s internal control over financial reporting; and

5. The registrant’s other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant’s auditors and the audit committee of the registrant’s board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant’s ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant’s internal control over financial reporting.

Date: January 27, 2023

/s/ Josh Weinstein
Josh Weinstein
President, Chief Executive Officer and Chief Climate Officer

Exhibit 31.4

I, David Bernstein, certify that:

1. I have reviewed this Annual Report on Form 10-K of Carnival plc;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant’s other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant’s internal control over financial reporting that occurred during the registrant’s most recent fiscal quarter (the registrant’s fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant’s internal control over financial reporting; and

5. The registrant’s other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant’s auditors and the audit committee of the registrant’s board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant’s ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant’s internal control over financial reporting.

Date: January 27, 2023

/s/ David Bernstein
David Bernstein
Chief Financial Officer and Chief Accounting Officer

Exhibit 32.1

In connection with the Annual Report on Form 10-K for the year ended November 30, 2022 as filed by Carnival Corporation with the Securities and Exchange Commission on the date hereof (the "Report"), I certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of Carnival Corporation.

Date: January 27, 2023

/s/ Josh Weinstein
Josh Weinstein
President, Chief Executive Officer and Chief Climate Officer

Exhibit 32.2

In connection with the Annual Report on Form 10-K for the year ended November 30, 2022 as filed by Carnival Corporation with the Securities and Exchange Commission on the date hereof (the “Report”), I certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of Carnival Corporation.

Date: January 27, 2023

/s/ David Bernstein
David Bernstein
Chief Financial Officer and Chief Accounting Officer

Exhibit 32.3

In connection with the Annual Report on Form 10-K for the year ended November 30, 2022 as filed by Carnival plc with the Securities and Exchange Commission on the date hereof (the “Report”), I certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of Carnival plc.

Date: January 27, 2023

/s/ Josh Weinstein
Josh Weinstein
President, Chief Executive Officer and Chief Climate Officer

Exhibit 32.4

In connection with the Annual Report on Form 10-K for the year ended November 30, 2022 as filed by Carnival plc with the Securities and Exchange Commission on the date hereof (the “Report”), I certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of Carnival plc.

Date: January 27, 2023

/s/ David Bernstein
David Bernstein
Chief Financial Officer and Chief Accounting Officer