



FOCUSING ON DECARBONIZATION →

Our pursuit of net zero emissions is multi-faceted and involves taking proactive steps to continuously improve the energy efficiency of our operations, leveraging the tools and technologies available today, while monitoring activities and investments in the development of low-carbon fuels at scale.

To support our pursuit, we have established and regularly update performance goals and milestones along our decarbonization journey. Our near-term focus on improving energy efficiency is delivering significant reductions in both greenhouse gas intensity and absolute emissions. In fact, we expect to achieve our 2030 greenhouse gas intensity goal four years early, which we expect will also put us ahead of the International Maritime Organization's short-term emissions intensity goal. However, our ultimate objective to reduce and eliminate our absolute emissions is more challenging. To that end, we are producing less absolute greenhouse gas emissions than in 2011. In fact, we are >10% below our 2011 peak despite a >30% increase in capacity since that time. This has been achieved through our relentless work over the last decade to improve the energy efficiency of our ships.

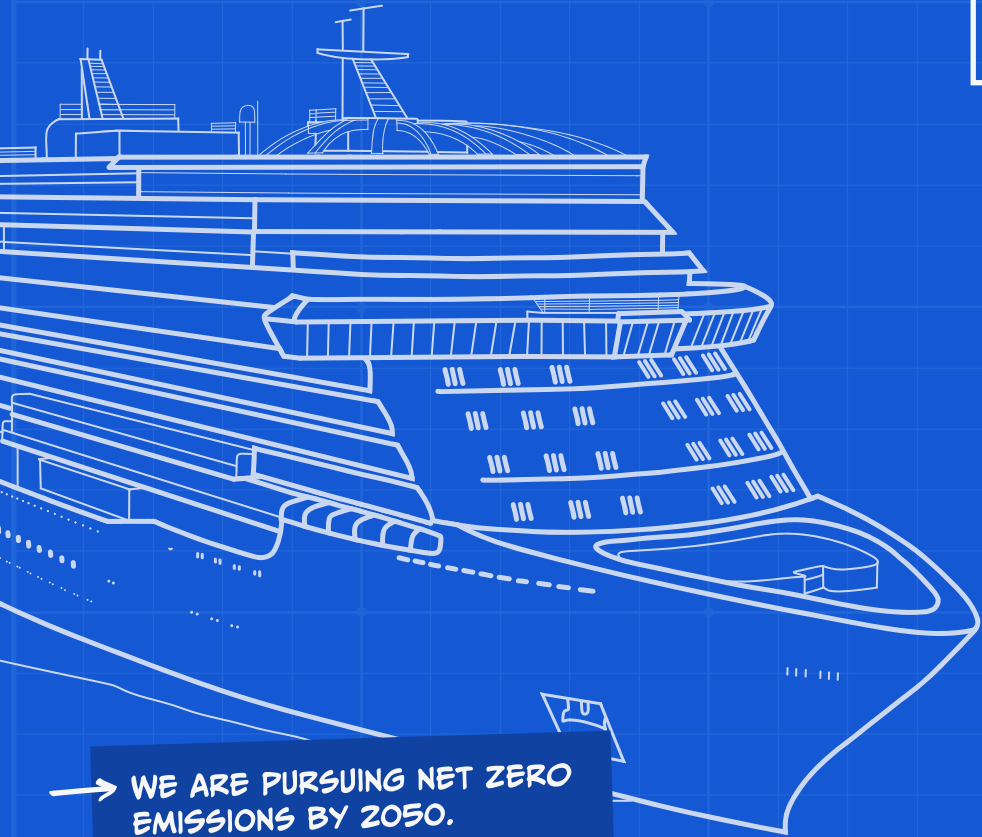
However, energy efficiency improvements alone will not get us to net zero. Our pursuit of net zero requires technologies and energy sources that do not yet exist at scale for our industry. To help inform our potential decarbonization pathways, we have leveraged independent third party studies and our ongoing direct involvement with multiple consortia, including the Getting to Zero Coalition, and the Maersk Mc-Kinney Moller Center of Zero Carbon Shipping, among others. These efforts are also informing our near-term strategic decisions. The current lack of clarity on the timing and availability of zero carbon energy sources at scale and/or greenhouse gas emission capture technologies applicable to our operations does not make it prudent for us to definitively commit to a particular pathway or timeline. We fully support the International Maritime Organization's (IMO) Revised Greenhouse Gas Strategy ambitions and will continue to contribute to the IMO's Maritime Environmental Protection Committee (MEPC) and other

regulatory bodies' efforts to create incentives in support of scaling up zero carbon energy sources. However, without clarity on low and zero carbon fuel availability, we are not able to make absolute emissions reduction commitments along a prescribed timeline, such as those suggested by the Science-Based Targets Initiative (SBTi). While we appreciate the work being undertaken by SBTi, their view assumes broad, near-term availability of low and zero carbon fuels along with a distribution infrastructure that is able to support maritime demand. In our view, a commitment to achieve a certain greenhouse gas emission reduction pathway without a clear understanding of how this will be achieved would be unsubstantiated and counter to our approach to goal setting. Our goals and targets are set based on feasible, achievable and available pathways.

Again, this is why we are coordinating with internal and external experts to take a fact-based approach to defining the potential pathways for decarbonizing our operations based on regulatory, technical, supply chain and economic drivers. The outcome of this work will allow us to disclose to our stakeholders a more meaningful, assumption-based view of our potential pathways. We are pursuing net zero and will provide more details on our possible pathways as the low carbon fuel and carbon capture markets further develop.

Our Decarbonization Governance and Strategy

Our entire management team, including our Boards of Directors, is committed to our decarbonization governance and strategy. Our Boards and Chief Climate Officer review and approve our decarbonization initiatives and investments. Since 2015, we have made over \$500M in capital investments to upgrade our existing ships with energy efficient equipment and technologies. Our current investments focus on known technologies that will improve energy efficiency, such as the Service Power Package upgrades, air lubrication systems, and waste heat recovery projects. These investments are designed to directly reduce our footprint versus investing in carbon offset or inset programs,



WE ARE FOCUSED ON DECARBONIZATION

Our Decarbonization Strategy has **4** components:

FLEET OPTIMIZATION

delivering larger, more efficient ships as part of our ongoing newbuild program, some of which may replace existing ships in our fleet

ENERGY EFFICIENCY

continuing to improve our existing fleet's energy efficiency through investment in projects such as service power packages, air lubrication systems, and expanding shore power capabilities to leverage renewable energy sources while in port

ITINERARY EFFICIENCY

designing more energy-efficient itineraries, focusing on operational execution and investing in port and destination projects in strategic locations

NEW TECHNOLOGIES AND ALTERNATIVE FUELS

investing in a first-of-its-kind lithium-ion battery storage system and assessing carbon capture and storage. We also support the adaptation of alternative fuels including biofuels such as methanol, which we are assessing as a future low greenhouse gas emission fuel option for our ships

→ WE ARE PURSUING NET ZERO
EMISSIONS BY 2050.

and they are paying off. During 2023, our Boards of Directors and Chief Climate Officer approved the acceleration of our 2030 greenhouse gas emissions intensity reduction goal by four years to 2026.

As part of our governance, we also focus on being prepared for new regulations. This includes the latest developments on greenhouse gas regulations at the International Maritime Organization and the European Union. The European Union's Emissions Trading Scheme applies to our emissions beginning January 1, 2024. The International Maritime Organization's (IMO) Greenhouse Gas Revised Strategy, which was adopted in July 2023, includes the requirement to uptake zero or near zero emission technologies and fuels and has absolute emission reduction targets, including a net zero target by or around 2050. The revised strategy also considers "well to wake" (entire fuel life cycle) instead of only "tank to wake" (combustion) emissions.

Another aspect of our decarbonization governance includes aligning management remuneration with our strategic goals. Our 2022 and 2023 management bonus program designs include quantitative performance metrics directly linked to our decarbonization performance, namely greenhouse gas intensity reduction.

We recognize that addressing climate change requires a global effort and commitment and we are working and partnering with others within and outside the industry to reduce our emissions and develop alternative fuels and technologies. With our governance structure in place, our decarbonization strategy has four components: (1) fleet optimization; (2) energy efficiency; (3) itinerary efficiency; and (4) new technologies and alternative fuels. In the coming pages, we share a summary of our efforts and achievements across each of these components during 2023.

Strategic Risk Evaluation Committee

To further support our climate-related efforts, we created a Strategic Risk Evaluation ("SRE") Committee in 2022. The SRE

Committee consists of members of executive management and an advisor and reports to the CEO and CCO, who in turn, reports to the Boards of Directors. As of November 30, 2023, the SRE Committee was comprised of the following:

- **Josh Weinstein**, President, Chief Executive Officer and Chief Climate Officer
- **David Bernstein**, Chief Financial Officer and Chief Accounting Officer (Chair of SRE Committee)
- **William Burke**, Chief Maritime Officer
- **Richard Brilliant**, Chief Risk and Compliance Officer
- **Jan Swartz**, Executive Vice President of Strategic Operations (appointed to the SRE Committee in October 2023)
- **Stein Kruse**, Advisor to the CEO & Chair of the Boards

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 reducing GHG emissions
- 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-related risks and opportunities
- Tracking of energy efficiency spend and progress on the installation of Service Power Packages
- Monitoring progress against our 2030 Climate Action Goals
- Reviewing and approving the climate risk management framework
- Reviewing and approving the SRE Committee charter

LOOKING AHEAD

→ 2023

Updated our greenhouse gas emissions baseline from 2008 to 2019

Completed Scope 3 greenhouse gas emissions 1st annual inventory

→ 2026

Our accelerated commitment to achieve 20% greenhouse gas intensity reduction relative to our 2019 baseline measured in kilograms of CO₂e per ALBD

→ 2050

Aspire to achieve net zero emissions from ship operations

ITINERARY PLANNING

That creates more energy-efficient itineraries to reduce emissions.

SHORE POWER CAPABILITY

For ships to “plug in” to shoreside electric power while in port rather than running engines.

IMPROVED HULLS

With optimized design and anti-fouling paint to minimize drag for greater efficiency.

OPERATIONAL IMPROVEMENTS

To optimize ship speed, distance and weather routing techniques to reduce fuel use and emissions.

BIOFUELS

Made from 100% sustainable raw materials and piloting as a replacement for fossil fuel to power ships.

PURSUING NET ZERO THROUGH NEW TECHNOLOGIES AND LOWER-EMISSION FUELS

BATTERY TECHNOLOGY

To power ships via a first-of-its-kind lithium-ion battery storage system.

LIQUEFIED NATURAL GAS

As a lower-carbon fuel option available today to power ships.

FUEL CELLS

Powered by green methanol as an alternative fuel source for cruise ships.

AIR LUBRICATION SYSTEMS

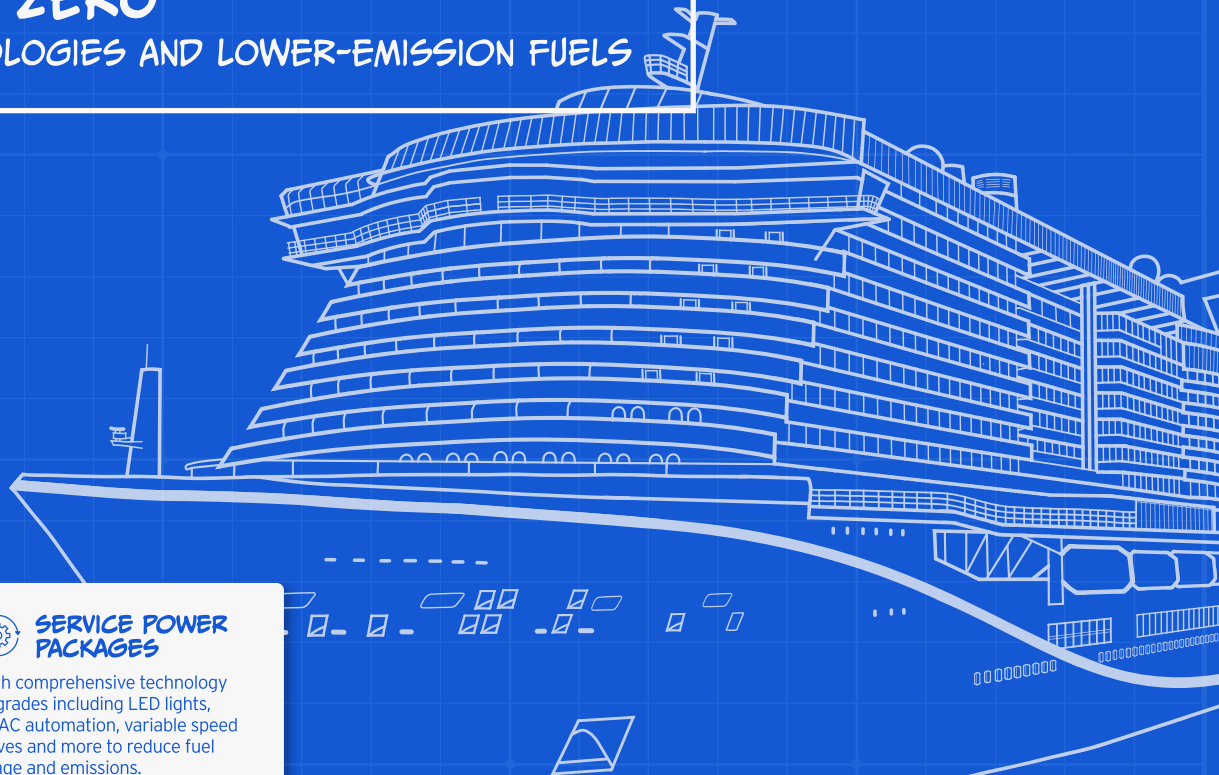
To help ships glide on air bubbles with less friction for fuel consumption savings and reduced emissions.

SERVICE POWER PACKAGES

With comprehensive technology upgrades including LED lights, HVAC automation, variable speed drives and more to reduce fuel usage and emissions.

ADVANCED AIR QUALITY SYSTEMS

To “scrub” particulate matter from exhaust and improve air quality.



← Reducing greenhouse gas emissions through fuel and energy-saving innovations, emission-reducing technologies and lower-emission fuels.

Fleet Optimization

With our focus on efficiency and new technologies, our new ships can be more than 20% more efficient per passenger than the previous ship class. As part of our newbuild program, we benefited from the introduction of three ships, *Carnival Celebration*, *P&O Arvia*, and *Seabourn Pursuit* to our fleet in fiscal year 2023. In addition, we took delivery of *Carnival Jubilee* in December 2023. These ships are fitted with the latest energy saving technologies and three are powered by LNG. Due to our fleet optimization efforts, our fleet is now one year younger than before pausing our guest cruise operations four years ago.

Energy Efficiency

We continue with our ongoing efforts to improve energy efficiency and reduce fuel consumption and emissions throughout our fleet. Our current energy efficiency investments are focused on the following programs:

Service Power Packages: We continue to implement Service Power Packages, a comprehensive set of technology upgrades, which will be completed over the next several years across a portion of the fleet. These upgrades include the following elements designed to reduce both fuel usage and GHG emissions while also contributing to cost savings:

- Comprehensive upgrades to each ship's hotel HVAC (heating, ventilation, and air conditioning) systems
- Technical systems upgrade on each ship
- State-of-the-art LED lighting systems
- Remote monitoring and optimization of energy usage and performance

Service Power Package upgrades are the main 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.

Air Lubrication Systems: Air Lubrication Systems (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 and generate approximately 5% savings in fuel consumption for propulsion and reductions in GHG emissions on ALS-equipped ships when operating in a specific speed range. As of December 2023, we had nine ALS currently operating across our fleet and have additional installations in progress and planned.

Shore Power Capabilities: Shore Power Capabilities As of December 2023, 64% of our ships were fully equipped to utilize shore power technology. 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 engine emissions and noise in port. We now lead the industry in ships capable of plugging into shore power with twice as many ships ready to plug in as there are ports able to provide shore power. Approximately half of these ports have confirmed they are providing electricity from renewable sources such as hydro, wind and solar. We continue to work with several local port authorities to utilize cruise ship shore power connections as they become available.

Itinerary Efficiency

We continue to act on opportunities to reduce our emissions by creating more energy-efficient itineraries. Our investment in our new port destination Celebration Key on Grand Bahama Island, for example, will result in more energy efficient itineraries based on its strategic location close to several key home ports. In addition, operational improvements and techniques such as weather routing, using ports with shore power, speed reduction where possible and shorter distances traveled, directly contribute to reducing our absolute greenhouse gas emissions.

PARTNERING TO SUPPORT INDUSTRY DECARBONIZATION

We recognize that addressing climate change requires a global effort and commitment and we are working and partnering with others within and outside the industry to reduce our emissions and develop alternative fuels and technologies.

Our key partnerships include:

Mærsk Mc-Kinney Møller Center
for Zero Carbon Shipping

**Methane Abatement
in Maritime
Innovation Initiative
(MAMII)**

**Getting to Zero
Coalition**



New Technologies and Alternative Fuels

While fossil fuels are currently the only scalable and commercially viable option for our industry, we are closely monitoring technology developments and pioneering important sustainability initiatives in the cruise industry. We have partnered with companies, universities, research bodies, non-governmental organizations, and other key organizations to help identify and scale new technologies not yet ready for the cruise industry. For example, we have piloted maritime scale battery technology, a fuel cell and biofuels. We anticipate that fuel cell and battery storage systems may help supplement some of the main energy supply needed to run our ships and that biofuels, if available to our sector at scale, will also contribute to our pathway. However, these alone will not be sufficient to help us achieve our ultimate aspiration.

To provide a path to net zero emissions, alternative low GHG emission fuels will be necessary for the maritime industry; however, 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. Our ship engines can be adapted for sustainable alternative fuels such as biofuels, green methanol and synthetic fuels. We are working with classification societies and other stakeholders to assess lower GHG emission fuel options for cruise ships. However, cleaner renewable fuels are not available or used in large quantities.

Liquefied Natural Gas (LNG): LNG is currently the best readily available fuel to help reduce GHG emissions. The ships built to use LNG can also use bio or synthetic forms of the energy source in the future. We have nine LNG powered cruise ships in operation as of January 1, 2024, and four that are expected to join the fleet through 2028. All our LNG ships also have the capability to run on MGO.

LNG is a fossil fuel and generates GHG emissions - however, it is also a fuel in transition as it can be produced as a low carbon fuel as biomethane and ultimately e-methane. LNG's direct CO₂ 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%. Both on a tank-to-wake and well-to-wake basis when measured using the scientifically accepted 100-year GWP, LNG has lower overall GHG emissions than conventional fuels. 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 GHG emissions (reported as CO₂e) using the 100-year global warming potential ("GWP") 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 we are part of the Methane Abatement in Maritime Innovation Initiative, where we are partnering with other major maritime players to seek solutions for this challenge. We are also evaluating options to remove unburnt methane from exhaust streams. Our nine LNG ships in service represent 17% of our fleet capacity.

Biofuels: During 2023, we piloted the use of biofuel as a replacement for fossil fuel on a third ship (after two successful trials in 2022). After *AIDAprima* became the first large-scale cruise ship to be powered with a blend of marine biofuel, made from 100% sustainable raw materials, and marine gasoil ("MGO"), Holland America Line completed two pilots on *Volendam*, one using a blend of marine biofuel and another using 100% biofuel, becoming the first large-scale cruise ship to be powered 100% by biofuel. In 2023, *Carnival Magic* completed a similar trial as *Volendam*, using 100% biofuel. The certified biofuels used in these pilots offer environmental benefits compared to using fossil fuels alone through their lifecycle CO₂ reductions. These biofuels can be used in existing ship engines without modifications to the engine or fuel infrastructure, including on ships already in service. We are working with companies making biofuels however, supply is limited, and biofuels are more expensive than their fossil fuel counterparts. We have tested various feedstocks, and we are pleased with the results. We intend to test other feed stocks over the next few years.

Pacific Northwest to Alaska Green Corridor: In 2022, Carnival Corporation & plc agreed to become a "first mover" in the world's first and only Green Corridor focused on cruise shipping. The Pacific Northwest to Alaska Green Corridor project is an unprecedented collaboration of ports, industry, governments, and non-governmental organizations to explore the feasibility of decarbonizing the shipping routes between Alaska, British Columbia, and Washington, with an initial focus on cruise-ship operations. Participants commit to the following actions:

- Evaluate the necessary technological, economic, infrastructure, and regulatory/policy conditions to support a green corridor for cruise from the Pacific Northwest to Alaska.
- Explore near-term opportunities to accelerate decarbonization and/or to reduce emissions, leveraging this new, regional collaboration.
- Work collaboratively to develop and regularly update shared workplans and adhere to the governance structures, terms, and frameworks needed to guide this regional effort.

In 2023, the Pacific Northwest to Alaska Green Corridor participants engaged the Mærsk McKinney Møller Center for Decarbonization in a partnership to conduct a formal feasibility project exploring the viability of multiple future maritime fuel pathways in the region. Some of the fuels include green methanol and biofuels. This intensive work will continue through 2024.

Greenhouse Gas Emission Reporting (Scope 1,2 and 3): We have been proactively reporting our Scope 1 and 2 GHG emissions for over a decade and began disclosing Scope 3 emissions in 2022. In addition, we have voluntarily reported our GHG footprint via the CDP each year since 2006. Our GHG inventory management plan follows the guidance in The Greenhouse Gas Protocol and ISO 14064-1:2018 Greenhouse gases - Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals.

Our direct (Scope 1), indirect (Scope 2) and indirect value chain (Scope 3) GHG emissions are quantified and reported. Additionally, limited assurance is provided on our GHG emissions by an independent third party, see page 86. Our fiscal year 2023 direct GHG emissions, which are largely generated from our ships, represented over 99% of our total Scope 1 and 2 emissions. In 2022, we performed a baseline inventory of our 2019 Scope 3 GHG emissions following the Greenhouse Gas Protocol and ISO 14064-1:2018 guidance. In 2023, we performed an inventory of our Scope 3 GHG emissions for the 12-month period from June 1, 2022 to May 31, 2023. The period used for conducting our annual Scope 3 GHG emissions inventory provides sufficient time to collect and consolidate the large amount of activity-based data needed to complete the inventory and report the results in our annual financial reports.

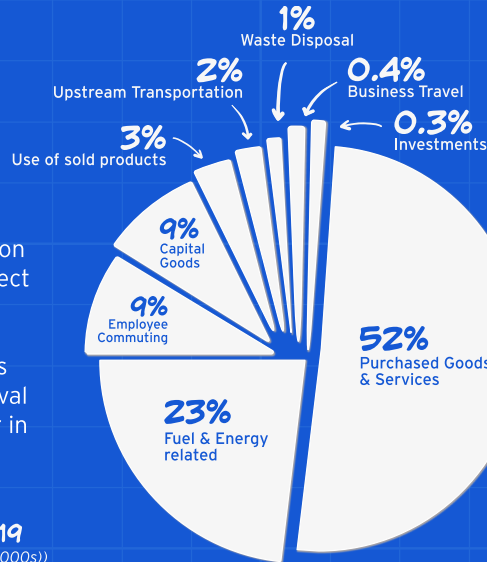
Due to the retirement of an emission factor database hosted by the Greenhouse Gas Protocol in August 2023 and our desire to compare our Scope 3 GHG emission inventories over time, we needed to recalculate our 2019 baseline inventory using a consistent set of emission factors. We replaced the Greenhouse Gas Protocol Scope 3 Evaluator emission factor database with the U.S. EPA Supply Chain Greenhouse Gas emission factors v1.2. We determined that our Scope 3 emissions were estimated to be around 40% of our total emissions. Our recalculated baseline Scope 3 emissions inventory was 8% lower than the initial baseline calculations. It is important to note that because Scope 3 emissions relate to other organizations' emissions and there are a wide range of emission factor databases to choose from, these estimates are subject to numerous uncertainties. We applied an activity-based approach to estimating Scope 3 emissions wherever possible. However, spend-based calculations still account for a material portion of our Scope 3 estimation. Therefore, given the lack of standards regarding Scope 3 emissions estimate calculations, the only comparative use it currently has is at the company-level over time.



ON APRIL 16, 2023, AIDA CRUISES CELEBRATED THE DOUBLE CALL OF AIDASOL AND AIDAMAR IN ROSTOCK-WARNEMÜNDE WITH A CRUISE INDUSTRY FIRST IN GERMANY. TWO CRUISE SHIPS WERE CONNECTED SIMULTANEOUSLY TO A SHORE POWER FACILITY IN THE GERMAN PORT ON THE SAME DAY ENABLING THE SHIPS TO REDUCE EMISSIONS.

GREENHOUSE GAS EMISSIONS

Our Scope 1 emissions include direct emissions from the combustion of ship fuel, inadvertent release of ship refrigerants, and other direct emissions generated by sources owned or controlled by Carnival Corporation & plc. Our Scope 2 emissions include emissions from the consumption of electricity for our facilities and ships as well as heat or steam purchased by sources owned or controlled by Carnival Corporation & plc. Scope 3 emissions include emissions that occur in the value chain of Carnival Corporation & plc.



We built 2022/2023 Scope 3 inventory in accordance with both the GHG Protocol and the ISO 140641-1:2018 standard. Both standards are complementary in nature as well as internationally recognized.

GHG PROTOCOL: SCOPE 3 EMISSIONS OVERVIEW, t CO₂e¹

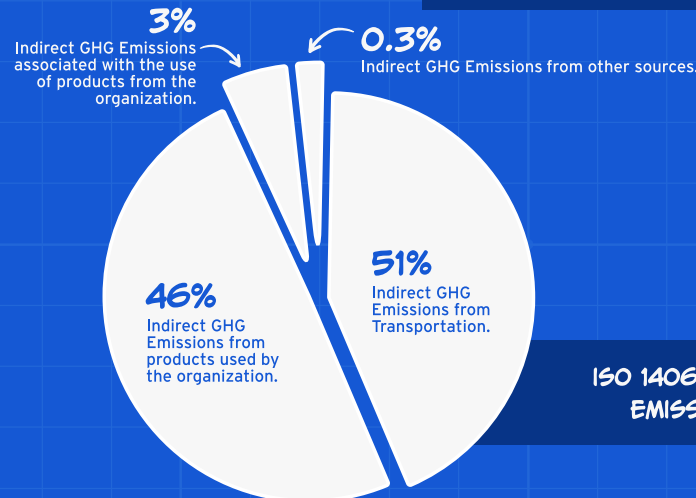
SCOPE 1, 2 & 3 EMISSIONS COMPARISON TO OUR 2019 BASELINE →

| | 2023 (t CO ₂ e (000s)) | 2019 (t CO ₂ e (000s)) |
|---------------------------|--------------------------------------|--------------------------------------|
| SCOPE 1 | 9,610 | 10,723 |
| SCOPE 2 location-based | 38 | 47 |
| SCOPE 3 | 7,562 ¹ | 9,738 |
| TOTAL | 17,210 | 20,508 |

Scope 3 emissions were estimated using activity and supplier-based data, where available (e.g., city-pair flight data, food and beverage physical units purchased, waste volumes and fuel consumption and shipbuilder-reported emissions). Several emission factor databases were used in the estimation, including DEFRA, Sphera Life Cycle Inventory (LCI) factors, and the U.S. EPA Supply chain GHG Emission Factors v1.2 (with margins). Spend-based emission factors were adjusted for inflation as needed.

¹Reflects the period June 1, 2022 through May 31, 2023.

GHG PROTOCOL: SCOPE 1, 2 AND 3 EMISSIONS OVERVIEW t CO₂e¹



ISO 14064-1:2018: INDIRECT GHG EMISSIONS OVERVIEW, t CO₂e¹

