



Carnival Corporation Announces Significant 2022 Sustainability Advances

April 12, 2023

World's largest cruise company releases annual sustainability report highlighting continued strong environmental performance and decarbonization momentum

Report details far-reaching sustainability achievements, including new technologies and smart solutions to deliver on aggressive sustainability roadmap

MIAMI, April 12, 2023 /PRNewswire/ -- [Carnival Corporation & plc](https://www.carnival.com) (NYSE/LSE: CCL; NYSE: CUK), the world's largest cruise company, today released its 13th annual sustainability report, detailing industry-leading initiatives and momentum across environmental, social and governance focus areas. The report also describes significant progress made by the company toward its aspirations of carbon neutral operations by 2050 and a circular economy model focused on waste reduction, recycling and management. Titled "Sustainable from Ship to Shore," Carnival Corporation's full 2022 report is available on the company's sustainability website at www.CarnivalSustainability.com.

"As the global leader in the cruise industry, we are setting the pace with the industry's smartest solutions for sustainable cruising that will help deliver on our aggressive roadmap to reduce our carbon impact, maximize our use of resources and further enhance our operations to be even more efficient by 2030," said Josh Weinstein, CEO and chief climate officer for Carnival Corporation. "Our future depends on us being good corporate citizens and stewards of the environment, because without the incredible communities, healthy marine ecosystems, and scenic spaces we operate in, it would be impossible to deliver unforgettable happiness to our guests through extraordinary cruise vacations."

In 2022, as almost 100% of Carnival Corporation's full fleet returned to guest cruise operations, the company continued prioritizing sustainability, making major strides toward its 2030 goals and setting the pace with industrywide leadership in pursuing carbon-neutral operations by 2050 – well ahead of current International Maritime Organization targets. Throughout the year, the company achieved important milestones in environmental performance, including in the key areas of decarbonization, food waste and single-use plastic reduction, detailed below.

Advancements in Decarbonization Pathway

Carnival Corporation remains the only major cruise operator producing fewer greenhouse gas (GHG) emissions today than in 2011, despite adding substantial guest capacity to its fleet since that time. The company is on track to achieve a 40% reduction in carbon intensity by 2030 (vs. 2008), and a 20% reduction in carbon intensity by 2030 vs. 2019, resulting from strong momentum in its four-part decarbonization strategy: fleet optimization; energy efficiency; itinerary efficiency; and new technologies and alternative fuels. Collectively, these strategic initiatives are expected to drive a 15% reduction in fuel consumption per available lower berth day (ALBD) in 2023, along with a 15% reduction in emissions per ALBD, both relative to 2019.

Additionally, the company completed its first inventory of Scope 3 "value-chain" emissions associated with purchased goods and services, fuel and energy distribution/delivery, and waste management, among others. Using the GHG Protocol standard, in the future, the company will track these emissions annually vs. a full-year 2019 operations baseline.

Other 2022 decarbonization highlights include:

Investing in Energy-Efficient Solutions:

- **Service Power Packages:** Continued the fleetwide rollout of eco-friendly upgrades (LED lights, HVAC automation, variable speed drives on pumps and fans, etc.) for an average 5% fuel consumption savings per ship, and expected to generate over \$100 million in annual fuel cost savings upon completion).
- **Shore Power:** 57% of the global fleet is now able to "plug in" to reduce emissions and noise in port where connections to electric power are available.
- **Air Lubrication Systems (ALS):** Expanded this technology to more ships to help them glide on air bubbles with ~5% less friction, for fuel consumption savings and reduced emissions (five ships installed, six in progress and eight on order).

Pioneering New Technologies & Alternative Fuels:

- **Liquefied Natural Gas (LNG):** Leading the industry in new fuel propulsion with eight LNG-capable ships in service with three more on order to account for 20% of fleet capacity by 2025.
- **Batteries & Fuel Cells:** Piloting the world's largest ever battery installation on a passenger ship with a first-of-its-kind lithium-ion battery storage system on AIDAprima and pioneering a new generation of power in the industry with fuel cell technology using methanol-derived hydrogen on AIDAnova.
- **Biofuels:** Leading the industry in piloting biofuels as a replacement for fossil fuel with successful trials on AIDAprima and Holland America Line's Volendam.
- **Partnerships:** Driving decarbonization pathways for the industry as part of the Mærsk Mc-Kinney Møller Center for Zero Carbon Shipping, Getting to Zero Coalition and Methane Abatement in Maritime Innovation Initiative, among others.

Contributing to Circular Economy

Carnival Corporation has continued optimizing its circular economy model to use fewer resources, produce less waste, and maximize recycling. 2022 highlights include:

Shrinking the Company's Food Print:

- **Surplus Food:** Achieving per-passenger food waste reduction of more than 30% in 2022 (vs. 2019) and establishing a new goal to reduce food waste by 40% per person by 2025.
- **Biodigesters:** Leading the industry with over 600 food biodigesters installed on ships to break down and liquify uneaten food and sustainably return it to nature.
- **Dehydrators:** Installing 25-plus food dehydrators across the fleet to remove excess water from leftover food, reducing waste volume by upwards of 90%.

Removing & Replacing Items with Sustainable Alternatives:

- **Single Use Items:** Reduced single-use plastic by more than 50%, removing over 500 million single-use items since 2018 and replaced items with sustainable alternatives.
- **Supply Chain Partners:** Continued collaborating with supply chain partners on sustainable product strategies, such as purchasing products in bulk instead of buying single-use containers and reducing packaging volumes.

In addition to achievements in environmental performance, Carnival Corporation continued cultivating a workforce mirroring the diversity of the 700 ports and destinations it visits worldwide. Of the 800 top-performing global employers listed as the World's Best Employers for talent development, gender equality and social responsibility, Carnival Corporation was the only cruise company. It was also named one of the World's Top Female-Friendly Companies.

"Our approach to sustainability is backed by science and driven by data, which allows us to take decisive actions that make a truly meaningful impact and inspire real change," said Weinstein. "It is a monumental undertaking that requires collective focus and tireless dedication of our entire organization. We are fortunate to have a global team of 160,000 talented people who are passionately committed to honoring the integrity of every ocean we sail, place we visit, and life we touch. We are incredibly proud of the considerable progress we have made so far and look forward to continuing our collective work together toward a sustainable future for cruising and tourism."

Carnival Corporation's 2022 sustainability report is based on the widely recognized Global Reporting Initiative (GRI) standard, incorporates the company's third annual disclosure in line with the Sustainability Accounting Standards Board (SASB), and highlights the company's disclosure in accordance with the Task Force on Climate-Related Financial Disclosures (TCFD). For more information on the company's long-term sustainability vision and progress under its six focus areas: climate action; circular economy; sustainable tourism; good health and well-being; diversity, equity and inclusion; and biodiversity and conservation – visit Carnival Corporation's dedicated sustainability website ([CarnivalSustainability.com](https://www.carnivalsustainability.com)).

About Carnival Corporation & plc

Carnival Corporation & plc is the largest global cruise company, and among the largest leisure travel companies, with a portfolio of world-class cruise lines – AIDA Cruises, Carnival Cruise Line, Costa Cruises, Cunard, Holland America Line, P&O Cruises (Australia), P&O Cruises (UK), Princess Cruises, and Seabourn.

Additional information can be found on www.carnivalcorp.com, www.aida.de, www.carnival.com, www.costacruise.com, www.cunard.com, www.hollandamerica.com, www.pocruises.com.au, www.pocruises.com, www.princess.com, and www.seabourn.com.

For information on Carnival Corporation's industry-leading sustainability initiatives, visit www.carnivalsustainability.com.

 View original content: <https://www.prnewswire.com/news-releases/carnival-corporation-announces-significant-2022-sustainability-advances-301795230.html>

SOURCE Carnival Corporation & plc

Carnival Corporation Media Contacts: Jody Venturoni, Carnival Corporation, jventuroni@carnival.com; Ellie Beuerman, LDWW, ellie@ldww.co