

Charting the
Future of
Sustainable
Cruise Travel

August 2024
Briefing | Update



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or

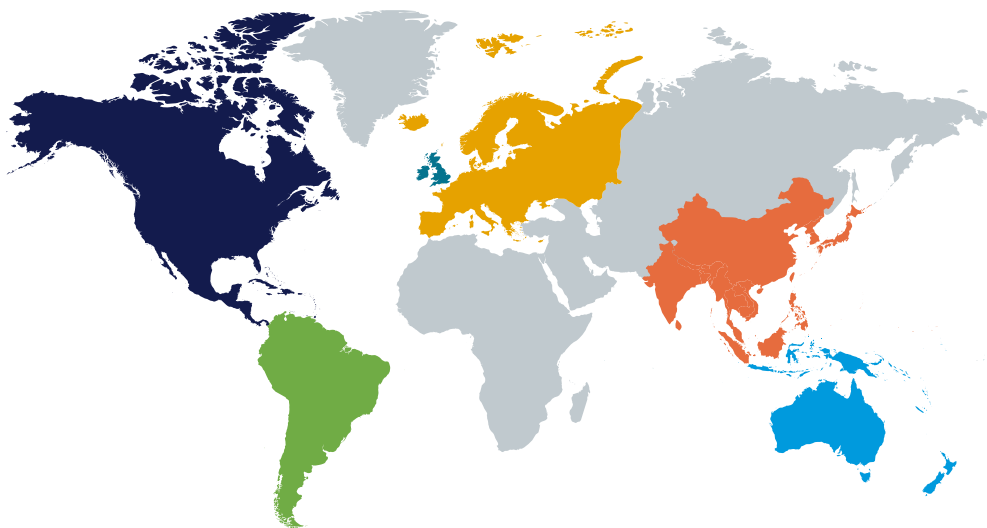
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About Cruise Lines International Association

Cruise Lines International Association (CLIA) is the preeminent cruise association, providing a unified voice for the industry as the leading authority of the global cruise community. The association has representation in North and South America, Europe, Asia and Australasia.



Region	CLIA Offices		
 North America	Washington, DC	Anchorage	Vancouver
 UK/Ireland	London		
 Europe	Brussels	Athens Hamburg	Madrid Rome
 Australasia	Sydney		
 South America	São Paulo		

CLIA represents oceangoing member lines which comprise 95% of global cruise passenger capacity, including the world's most prestigious ocean, river, and specialty cruise lines, as well as a business community of leading ports, destinations, shipyards and maritime business services providers and the largest network of travel professionals who specialise in cruise travel.

Together with its members and partners, CLIA supports policies and practices that foster safe, healthy and sustainable cruise operations; tourism strategies that maximise the socio-economic benefits of cruise travel; and technologies and innovations that both protect and preserve our planet.

Executive Summary

Over the past two decades the cruise industry has made significant progress in reducing emissions as it pursues its goal of achieving net-zero emissions by 2050, consistent with the International Maritime Organization's (IMO) 2023 Strategy on Reduction of Greenhouse Gas (GHG) Emissions from Ships.

Multiple reports demonstrate the step change taking place toward this target—with concrete progress being made across a fleet of ships that are diverse in their design and range of experiences available on board and on shore.

The vast majority of cruise ships sailing today—and scheduled to be in service well into the next decade as new ships come on line—are small- to mid-size ships. They are also part of a global fleet that is more energy efficient than ever with 16% lower emissions on average per ship compared to five years ago according to official data published each year as part of the [EU Monitoring, Reporting and Verification \(EU MRV\)](#) regulation.

This data is readily available to the public and is just one indication of the positive impact the industry is seeing from its deployment of a robust strategy to reduce emissions at berth and at sea.

By investing billions in ships with cutting-edge technology and increasing the use of sustainable marine fuels, the cruise industry is doing its part to achieve the shared goal of reaching net-zero emissions by 2050. Collaboration with governments, fuel suppliers and technology providers is critical to assure success, supported by valid and verified data to track progress.

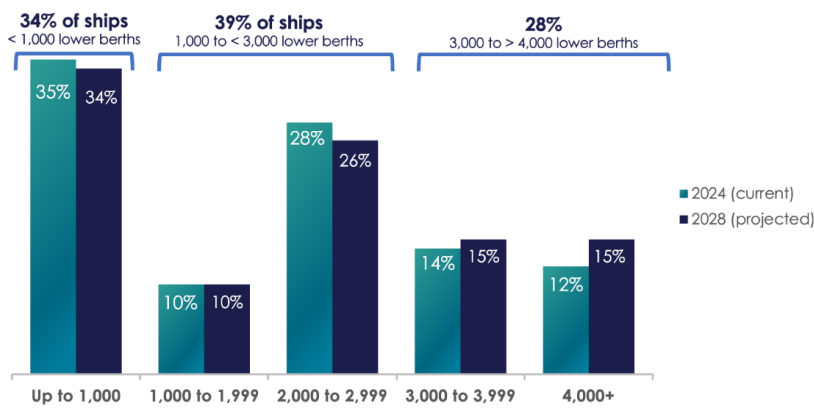
Additional information on the industry's environmental technologies and practices can be found at this [link](#).

Cruise fleet and orderbook

Today, the global ocean cruise fleet is comprised of 445 ships¹.

The fleet profile of CLIA members (representing 95% of the world ocean-going capacity) is well balanced with about a third of all ships large-sized, a third are in our mid-sized range, and a third are smaller ships (expedition ships etc.).

Percentage of CLIA-member cruise line ships by ship size (2024 and 2028)
(based on passenger capacity; percentages shown in brackets are based on today's fleet)

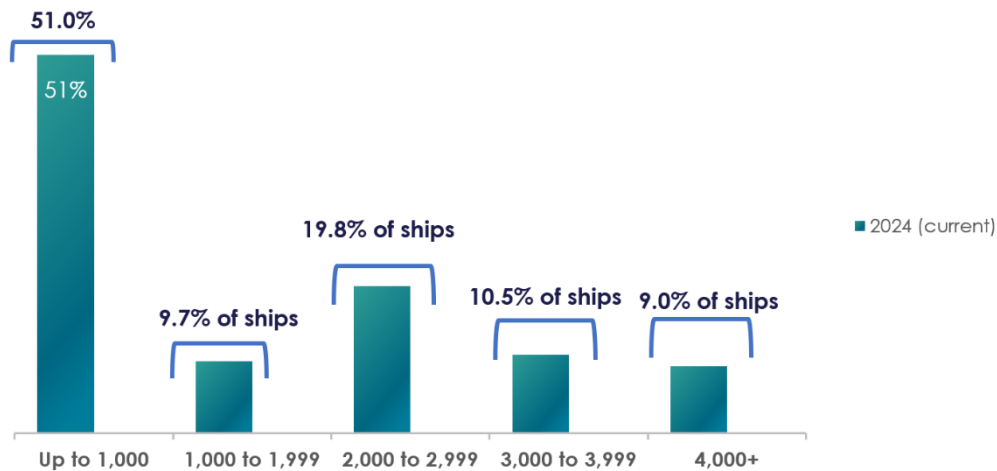


Source: CLIA analysis of cruise line member ocean-going ship fleet and 2028 projected fleet as of 31 May 2024.

If we include all cruise ships operating globally, regardless of their membership with CLIA, 60% of ships sailing today are small- to mid-scale ships with 2,000 or fewer lower berths (51% have fewer than 1,000 lower berths).

Cruise Ships Worldwide: Today's Fleet

(based on passenger capacity; percentages shown in brackets are based on today's fleet)

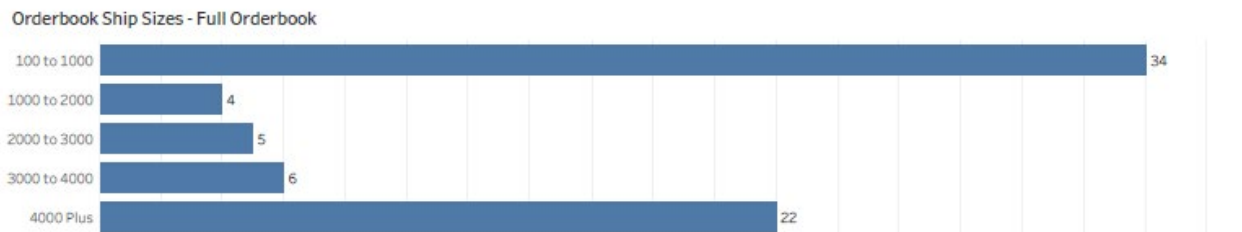


Source: CLIA analysis of the total worldwide ocean-going ship fleet as of 31 May 2024.

¹ Source: TravTech aggregated published itinerary information from cruise operators

The orderbook information collated by CLIA in July 2024 shows:

- 71 ships on order for delivery between 2024 and 2036 – representing more than 50bn EUR direct investment – 98% of this investment (49,4 bn EUR) is directly in European shipyards.
- Based on the future order book we see the average size of ships remain balanced during the next decade and beyond.



Source: CLIA July 2024 Orderbook Update; includes CLIA and Non-CLIA ocean-going vessels

Charting the Future

The future success of cruise will heavily depend on its ability to reduce emissions.

CLIA member lines are committed to achieving net zero emissions by 2050.

- As with the rest of the maritime sector, cruise lines publicly report their CO₂ emissions every year as part of EU obligations – published on the THETIS-MRV database.
<https://mrv.emsa.europa.eu/#public/emission-report>
- This data shows progress being made by the cruise sector to reduce its emissions and to decouple its growth from its CO₂ emissions.

As per 2023 reported data in EU MRV for the category “passenger ships” (defined as “Passenger ship means a ship that carries more than twelve passengers but not cargo” above 5000 GT which largely covers the cruise fleet), the data shows:

- In 2023, 206 passenger ships reported data, which represents 1.7% of all ships reporting into MRV (compared to 179 in 2019)
- In 2023, 7,150, 715 t (a little over 7 million tons) of CO₂ emissions were reported for passenger ships. This represents an increase of 2.16% of CO₂ emissions compared to 2019 – while the number of ships reporting has increased by 15%.
- This shows the improvement with regards to energy efficiency of the sector and the decorelation of the growth in number of ships and their emissions. This is confirmed by the average CO₂ emissions per ship reporting into MRV – which shows a reduction of 16% between 2019 and 2023.

Pursuing net-zero emissions by 2050

Cruise lines are actively pursuing net zero emissions by 2050, consistent with the International Maritime Organization's (IMO) 2023 Strategy on Reduction of Greenhouse Gas (GHG) Emissions from Ships.

- Reducing emissions at berth and at sea (technologies, infrastructure and operational efficiencies) □ Investing in new ships and engines that allow for fuel flexibility to use low- to zero-GHG fuels, once available at scale
- Conducting multiple trials and pilot programs to test sustainable fuels and technologies.
- Employing a range of environmental technologies and practices to advance sustainability initiatives.
- Each year the fleet becomes more efficient—as cruise lines embrace new technologies, innovations and, as available, the uptake of alternative fuels.

Alternative fuels and fuel flexibility

Cruise lines are pursuing a variety of new and more sustainable alternative energy sources and investing in propulsion technologies with conversion capabilities that are easily adaptable for the use of low- to zero-emissions fuels once they become available at scale.

- The cruise industry is investing billions in new ships and engines that allow for fuel flexibility to use low to zero-GHG fuels, once available at scale, with little to no engine modification. These fuels
- and energy sources include green methanol, bioLNG and synthetic LNG, hydrogen fuel cells, photovoltaic/solar (in use on five ships today), battery storage, wind.
- An increasing number of vessels sailing and launching over the next five years will either use alternative fuels or be able to incorporate zero-carbon fuels once available at scale.



Source: CLIA Environmental Technologies & Practices report (September 2023) and CLIA cruise line member fleet orderbook data as of May 2024

- Within the CLIA member fleet, four ships sailing today use renewable biofuel as an energy source and four new-build ships are expected to be configured for renewable biofuels.
- 24 ships currently have biofuel trials and two have synthetic carbon fuels trials.
- Seven new-build ships are anticipated to run on zero carbon fuels, including five ships envisioned to use green methanol and two envisioned to use green hydrogen.
- More than 15% of cruise ships entering service in the next five years will be equipped with battery storage to allow for hybrid power generation once available.
- between 2019 and 2023.

EU Emissions Trading Scheme (EU ETS)

As of 2024, the cruise industry is subject to the EU Emission Trading Scheme (EU ETS) obligations, whereby, along with the other maritime sectors, cruise lines will be obliged to pay for each ton of CO₂ emitted in Europe. As of 2026, this scheme will also cover other greenhouse gases (GHG) such as nitrous oxide (N₂O) and methane (CH₄).

- According to DNV, the estimated cost for the entire shipping sector: €3.1bn in 2024, €5.7bn in 2025 and €8.4bn in 2026. The potential impact for the cruise sector will be around €600 million/year when the EU ETS is fully in operation.
- An economic measure attaching a price to GHG emissions is also being discussed at global level in the International Maritime Organisation (IMO) and will be a focus of the IMO MEPC meeting in October 2024.
- While efficiency measures are enabling some reduction in intensity of emissions per ship, to reduce emissions, the sector will need access to renewable fuels, biofuels/e-fuels.
- CLIA has welcomed the EU regulation (FuelEU Maritime) to introduce targets for the use of these fuels – starting in 2025 with an objective of 2% - however today production is too limited. CLIA has estimated that the sector will need around 44,000 tonnes of sustainable marine fuels in 2025 to meet these objectives.
- Similarly, whereas almost 50% of the CLIA fleet is capable of connecting to shoreside electricity, only 15 ports within Europe offer the possibility for cruise ships to connect. We are calling on ports and authorities to prioritise the deployment of shoreside electricity at cruise berths to allow for the immediate reduction of emissions at berth.