

CRUISE LEADERSHIP IN RESPONSIBLE TOURISM

CLIA-member cruise ships and operations become more sustainable and efficient every year

Cruise ships are subject to multiple inspections each year –announced and unannounced – for compliance with strict environmental and safety regulations.

Source: CLIA Environmental Technologies and Practices Report (October 2022) and individual cruise line sustainability reports. Projections are for the CLIA-member cruise line fleet, inclusive of current ships in service plus new ships coming online from the date of this report through 2028, and do not account for vessel retirements during that period. Vessels most likely to be retired first are those without, or unable to be retrofitted with, advanced environmental technologies.

Using digital technology to be more energy efficient

- From tracking the energy use of appliances in a ship's galley to routing ships optimally, digital technologies offer a new energy-saving tool
- Each new class of ship that is launched is around **20% more** efficient than the last

Average age of ships in the CLIA-member fleet is 14.1 years

75% of the CLIA-member fleet capable of using sustainable fuels once available at scale

88% of non-LNG new-build ships specified for EGCS

Exhaust gas cleaning systems (EGCS)

- **98% reduction** in sulfur oxide levels
- **50% reduction** in typical total particulate matter (including elemental and organic carbon and black carbon)
- **12% reduction** in nitrogen oxides
- **79%** of global capacity utilizes EGCS

96% of ships have low-friction hull coatings

Air lubrication systems and special hull coatings increase fuel efficiency by nearly **10%**

100% of new ships specified for Advanced Wastewater Treatment Systems

- Advanced wastewater treatment systems (AWTS) rival land-based facilities
- **78%** of CLIA-member ships sailing fitted with AWTS

38 LNG-powered ships specified to be in service by 2028

- LNG reduces GHG **more than 20%**, SOx (**99%**), soot particles (**98%**), NOx (**85%**)
- LNG-fueled vessels can transition to bioLNG and renewable synthetic LNG once available at scale

Some ships repurpose 100% of waste

- Programs supporting land-free ship operations
- Surplus heat transferred from machinery to heat water for showers and pools
- Bio-digesters reduce food waste

Up to 90% of fresh water produced onboard

Through state-of-the-art systems and practices, cruise lines are able to conserve and repurpose onboard rather than drawing from areas where resources are limited

Every CLIA-member ship being built today, except expedition, is specified to have shoreside power capability

- **40%** of the CLIA cruise line member fleet is plug-in ready, **30%** to be retrofitted
- **Only 3%** of the world's ports have onshore power

Cruise lines have dedicated programs and systems designed to protect marine life

- Members agree to avoid or voluntarily reduce vessel speed in sensitive areas
- Underwater noise and vibration reduction systems
- Onboard scientists to support important ocean and marine life research

