CRUISE LEADERSHIP IN RESPONSIBLE TOURISM

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CRUISE LEADERSHIP IN RESPONSIBLE TOURISM

Cruise lines are following a path to decarbonisation with advancements in technology, infrastructure, and operations to reduce the carbon footprint at berth and at sea

INFRASTRUCTURE OPERATIONS TECHNOLOGY

CRUISE LEADERSHIP IN RESPONSIBLE TOURISM Cruise lines are utilizing LNG now as a transitional fuel while exploring sustainable marine fuels and propulsion technologies

- LNG is currently the cleanest fuel available at scale while exploring more sustainable marine fuels, including advanced biofuels and other renewable energy solutions, such as synthetic fuels, methanol, hydrogen, fuel cells and batteries.
- LNG-fueled vessels and infrastructure can use and deliver bioLNG and renewable synthetic LNG once these fuels become more broadly available

60%

of ships scheduled to debut between 2023 and 2028 will rely on LNG fuel for their primary propulsion of the CLIA-member cruise line fleet able to utilize sustainable marine fuels once available at scale

75%

NG 4000

CRUISE LINE LEADERSHIP IN RESPONSIBLE TOURISM The number of CLIA-member cruise ships with shoreside power capability will more than double by 2028^{*}

Every CLIA-member ship being built today through 2028, except expedition, is scheduled to be fitted with shoreside power capabilities

 Currently, 30% of ships, representing 40% of capacity, is plug-in ready; 30% to be retrofitted

29 cruise ports worldwide have at least one berth with onshore power; 20 additional ports funded or planned (by 2025)

 Less than 2% of the world's cruise ports have on-shore power; by 2025, 3% will have onshore power



*Based on scheduled orders as of the February 2022 order book

CRUISE LINE LEADERSHIP IN RESPONSIBLE TOURISM Cruise is a model for responsible and sustainable tourism

Managed Tourism

- Active collaboration with ports and destinations helps maximize the benefits of tourism for communities.
- Ship arrival and departure schedules are established with ports up to three years in advance providing destinations with advance information about tourism flows
- Collaborative, sustainable tourism are helping to achieve mutual objectives to preserve the integrity, cultural heritage, and beauty of the world's most treasured destinations
- Pioneering work has been accomplished in coastal communities such as:
 - Juneau, Alaska
 - Dubrovnik, Croatia
 - Santorini, Greece
 - Palma de Mallorca, Spain

We're seeing the cruise industry acting much more proactively in collaborating with port managers to better manage visitor flows."

Randy Durband, CEO Global Sustainable Tourism Council



CRUISE LINE LEADERSHIP IN RESPONSIBLE TOURISM Cruise is a model for responsible and sustainable tourism

Responsible sourcing for food and supplies

- Cruise lines are working with organizations to source food responsibly
- Prioritizing local sourcing of food and other supplies:
 - Reduces the carbon footprint of the supply chain.
 - Supports local businesses and communities and, as a result, helps improve lives and quality of life in the destinations our member-line ships visit.

Water production and conservation

 Cruise ships produce up to 90% of fresh water onboard rather than draw from areas where resources are limited.



CRUISE LINE LEADERSHIP IN RESPONSIBLE TOURISM Cruise is a model for responsible and sustainable tourism

Sustainable and locally sourced tour excursions

- Many cruise lines offer a variety of sustainable and eco-friendly shore excursion programs and are pursuing sustainable tour excursion certification with respected conservation organizations
- The wide range of sustainable shore excursions include those that take travelers to national parks, wildlife rehabilitation centers, biodynamic farms and sustainable businesses
- In addition, many excursions include carbon-free walk, cycle, paddle or sail
- And because shore excursions are locally sourced, they create jobs that benefit local communities.

Cruise travel also provides opportunities for personal growth and greater understanding of the world by connecting people to places in ways that create greater understanding and appreciation for each other's cultures, as well as better awareness of the environment.



CRUISE LINE LEADERSHIP IN RESPONSIBLE TOURISM Ocean and marine life protection

Cruise lines have a range of dedicated programs for ocean and marine life protection. Examples include:

- Coral reef restoration
- Advanced wastewater treatment systems that rival land-based systems
- Agreement by CLIA cruise line members to avoid or voluntarily reduce vessel speed in sensitive areas or when marine life is observed
- Underwater noise and vibration reduction systems, including specially designed hulls, propellers, and noise suppression devices
- Partnerships with a variety of research and ocean and marine life protection organizations
- On-board scientists to support important research for the benefit of the ocean and marine life





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.

THANK YOU FOR YOUR ATTENTION