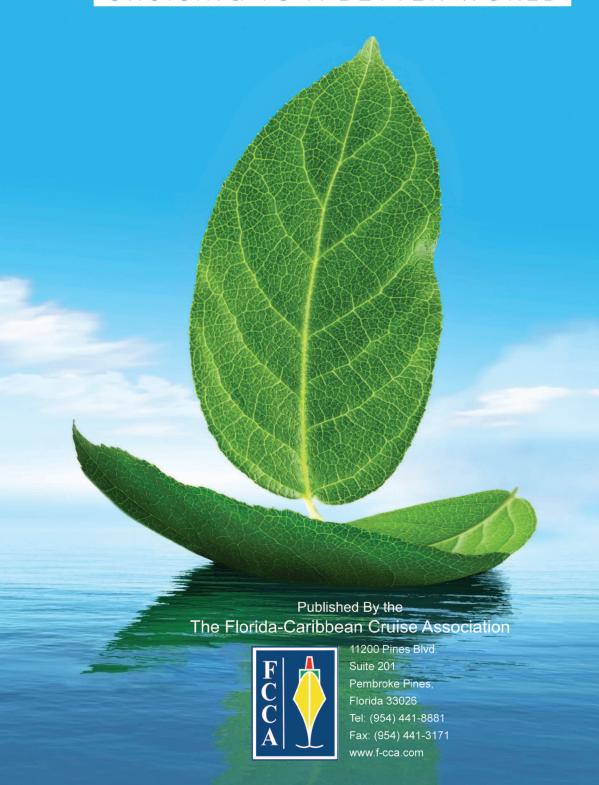
# CRUISE INDUSTRY ENVIRONMENTAL OVERVIEW "CRUISING TO A BETTER WORLD"



## What Is the FCCA?

The Florida-Caribbean Cruise Association (FCCA) is a not-for-profit trade organization composed of 19 Member Lines operating more than 100 vessels in Floridian, Caribbean and Latin American waters. Created in 1972, the FCCA's mandate is to provide a forum for discussion on cruise operations, tourism and infrastructure development, security and other cruise industry issues, including environmental. By fostering an understanding of the cruise industry and its operating practices, the FCCA seeks to build cooperative relationships with its partner destinations and to develop productive bilateral partnerships with every sector, maximize cruise passenger, cruise line and cruise line employee spending, and enhance the destination experience and the amount of cruise passengers returning as stay-over visitors.

## **FCCA Member Lines**

AIDA Cruises, Azamara Club Cruises, Carnival Cruise Line, Celebrity Cruises, Costa Cruise Lines, Croisieres de France, Cunard Line, Disney Cruise Line, Holland America Line, MSC Cruises (USA) Inc., Norwegian Cruise Line, Oceania Cruises, P&O Cruises, Princess Cruises, Pullmantur Cruises, Regent Seven Seas Cruises, Royal Caribbean International, Seabourn, TUI Cruises

## The FCCA's, Member Lines' and Cruise Industry's Commitment to the Environment

The cruise industry constantly demonstrates its dedication to protecting the environment, with policies and best practices that regularly exceed regulations and demonstrate social responsibilities. Here are some ways the industry and FCCA/CLIA Member Lines raise the bar on environmental stewardship:

## Waste Management

Recognizing that waste management is fundamental to protecting the environment, FCCA/CLIA Member Lines enacted the Waste Management Policy—adopted by the CLIA Board of Directors and reviewed annually by Member Line CEOs and periodically by environmental committee meetings consisting of officers and crew to assess practices and discuss improvements—to meet or exceed legal requirements.

All sewage must be treated to international, regional, national and local standards prior to any discharge, and the industry's waste management policies exceed legal requirements. FCCA/CLIA Member Lines may not discharge untreated sewage anytime or anywhere.

Member Lines have a zero discharge policy for trash, with crew following strict waste management plans and comprehensive training programs that drive the safe and hygienic collection, minimization separation, and processing of wastes onboard and offloads to approved shoreside waste vendors.

Member Lines also promote recycling and waste minimization by passengers and crew through announcements and informational videos and pamphlets, leading to 800,000 tons recycled each year by cruise lines and the average cruise passenger producing upwards of 70 percent less garbage.

# Air Quality Protection

Over the last decade, the cruise industry has invested significantly in new technologies that help reduce air emissions, including:

- Exhaust gas scrubbers
- Diesel electric engines and more efficient engines
- Alternative fuel
- Shore-based power to shut off engines when docked
- Variable ship speeds

# Improving Fuel Efficiency and Lowering Energy Consumption

Better fuel efficiency represents a win-win for cruise lines, with lower costs and environmental impact. Member Lines have extensively invested in developments to improve fuel efficiency, along with retiring older ships from the fleet, meaning a reduction in air emissions. Lines have also lowered energy consumption by using heat exchangers that recycle hot water to heat passenger cabins, installing special window tinting to keep passageways cooler while using less air conditioning, and switching to low-energy LED lights, with lighting on newer ships accounting for only about 10 percent of power consumed—an improvement of nearly 20 percent. Other initiatives include:

- Ecological hull coatings, with new paints and varnishes estimated to reduce fuel consumption by as much as five percent
- Propulsion and hull design optimization
- Solar panels that provide emission-free energy available on some ships
- Testing of other alternative/renewable forms of energy (e.g. wind)
- Water used to cool engines also utilized in evaporators to distill fresh water for the air conditioning system
- Water desalination plants and water use minimization (low-flow showers and faucets and vacuum toilets)
- High-efficiency appliances and heating, ventilation and air conditioning systems
- Automatic lighting and air conditioning control systems

## Cleaner Water and Planet

The advanced wastewater treatment systems pioneered by cruise lines produce cleaner water than most wastewater treatment facilities in U.S. coastal cities. Many cruise lines employ practices and procedures substantially more protective of the environment than required by law.

### Team Effort

Recognizing that environmental stewardship's significance also applies to passenger and crew, the cruise industry actively encourages their assistance through videos and numerous onboard resource conservation programs and recycling options.

#### Checks and Balances

Vessels regularly independently monitor their daily water consumption and other environmental performance measures, and Member Lines have senior-level staff responsible for training crewmembers in environmental programs and implementing required environmental practices onboard.

Though Member Lines pride themselves in establishing best practices that exceed standards, they must at least comply with international standards set forth in the International Convention for the Prevention of Pollution from Ships (MARPOL), the main international convention covering prevention of pollution of the marine environment by all oceangoing ships, and the International Safety Management (ISM) Code, which monitors and audits practices for environmental standards.

Member Lines also work closely with the International Maritime Organization (IMO) to develop sound environmental practices; support the IMO's Energy Efficiency Design Index, which requires a 30 percent reduction in ships' CO2 emissions by 2025; and meet or exceed international and national standards for sulfur emissions within Emissions Control Areas (ECA) and worldwide. In U.S. Waters, the Environmental Protection Agency and U.S. Coast Guard regulate and enforce rigorous requirements on air, water, power, and waste, including provisions of the U.S. Clean Water Act and North America ECA.

For more information about environmental practices, policies or regulations, please visit <a href="www.cruising.org">www.cruising.org</a> or <a href="www.cruiseforward.org">www.cruiseforward.org</a>, contact Bud Darr, Senior Vice President, Technical and Regulatory Affairs, Cruise Lines International Association (bdarr@cruising.org) or Adam Ceserano, Senior Vice President, Florida-Caribbean Cruise Association (adam@f-cca.com or 954-441-8881).



Sustainable Services.
Global Compliance.
One Company.



+1 (305)377-8425 maritimeops@stericycle.com fmelo@stericycle.com

www.stericycle.com