



# Charting the Future of Sustainable Cruise Travel



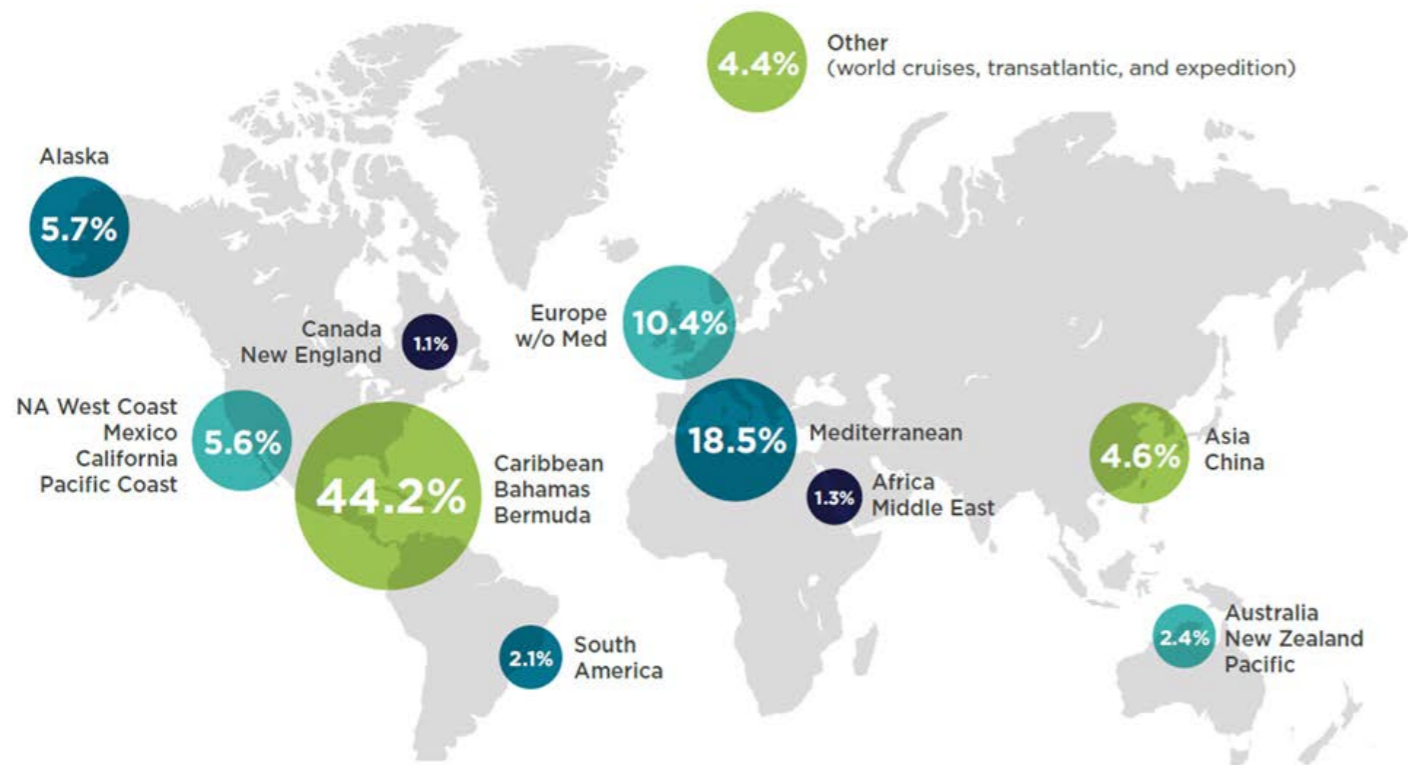
# Overview of the Cruise Industry

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.

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.

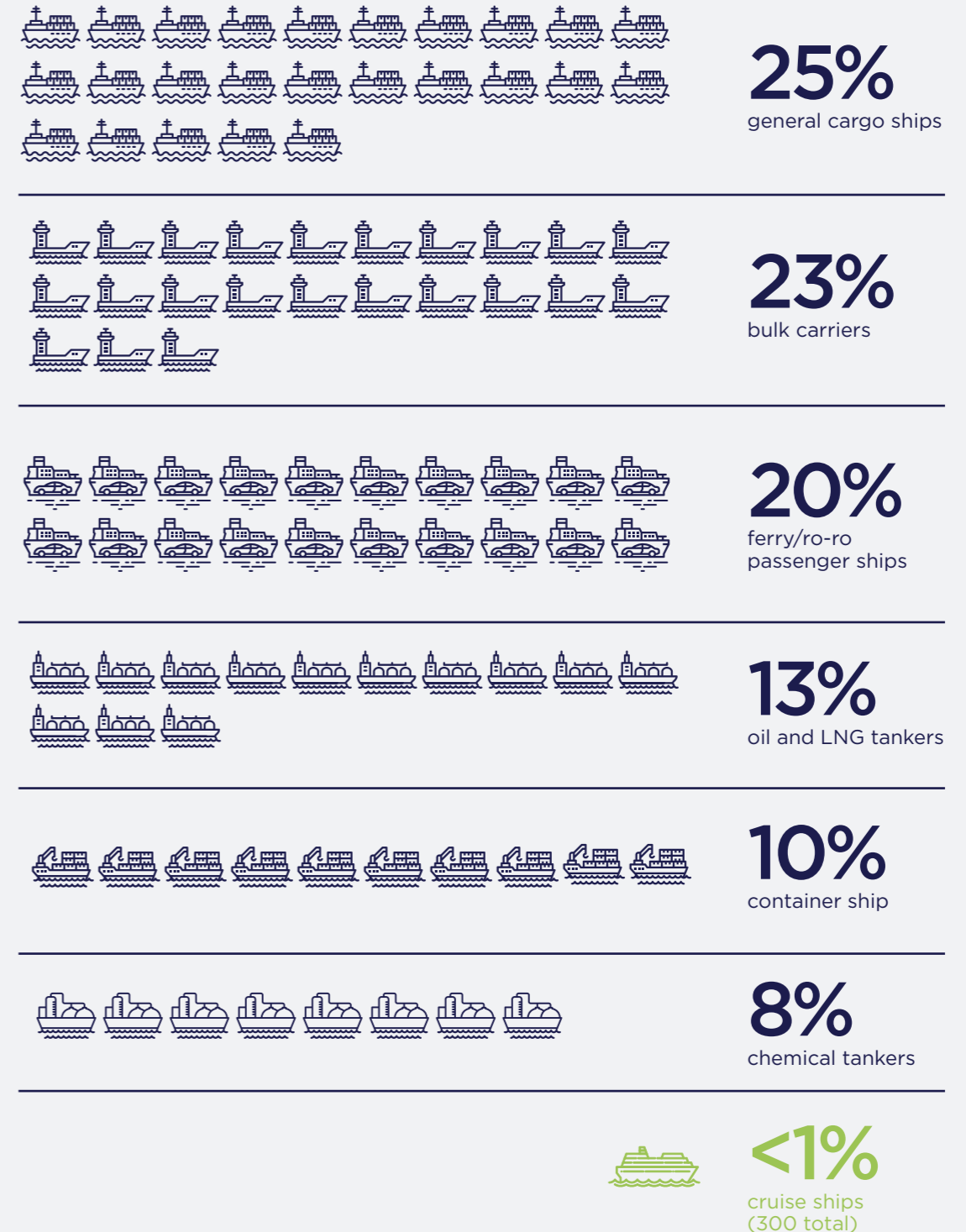
Together with its members and partners, CLIA supports policies and practices that foster safe, healthy and sustainable cruise operations; tourism strategies that maximise the socio-economic benefits of cruise travel; and technologies and innovations that both protect and preserve our planet.

## Global Cruise Industry



Source: CLIA data; percentage of cruise passengers traveling to major destinations (2022)

## Cruise ships account for less than 1% of the total ocean-going commercial fleet of vessels worldwide



Our global commitment to sailing to a better future extends well beyond minimising environmental impacts to also include harnessing the power of travel to support responsible tourism, connecting people and places, and inspiring lifelong cruisers and generations of new-to-cruise travelers to sail responsibly.

Our vision is for the cruise industry to be recognised as a leader in responsible travel and the best way to experience the world, sustainably.





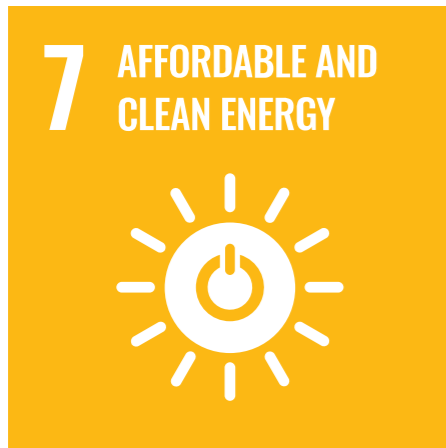
# SUSTAINABLE DEVELOPMENT GOALS

CLIA and its cruise line members have identified the SDGs to which the industry is contributing and can make a difference. These SDGs, referenced throughout this report, include Climate Action, Sustainable Cities and Communities, Good Health and Well-Being, Life Below Water, Life on Land and more.



**GOOD HEALTH AND WELL-BEING**  
Ensure healthy lives and promote well-being for all at all ages.

**GENDER EQUALITY**  
Achieve gender equality and empower all women and girls.



**AFFORDABLE AND CLEAN ENERGY**  
Ensure access to affordable, reliable, sustainable and modern energy for all.



**CLEAN WATER AND SANITATION**  
Ensure availability and sustainable management of water and sanitation for all.



**DECENT WORK AND ECONOMIC GROWTH**  
Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.

**RESPONSIBLE CONSUMPTION AND PRODUCTION**  
Ensure sustainable consumption and production patterns.



**SUSTAINABLE CITIES AND COMMUNITIES**  
Make cities and human settlements inclusive, safe, resilient and sustainable.

**LIFE ON LAND**  
Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.



**CLIMATE ACTION**  
Take urgent action to combat climate change and its impacts.



**LIFE BELOW WATER**  
Conserve and sustainably use the oceans, seas and marine resources for sustainable development.



### Equipping Ships to Connect to Shoreside Electricity (SSE)

All CLIA member ocean cruise lines have made a commitment that all ships calling at ports capable of providing shoreside power are anticipated to be equipped to either use SSE by 2035 or to be able to use alternative low-carbon technologies, as available, to reduce emissions in port.

As part of the EU's Fit for 55 program, by 2030, major ports in Europe will be required to have shoreside power, which will further

accelerate the available port infrastructure investment in that region.

Pioneered by Princess Cruises in Juneau, Alaska, plugging into shoreside electricity (SSE) allows ship engines to be switched off, reducing emissions while a ship is in port. In 2018, there were 55 ships with shoreside power capability. The number has grown to more than 120 ships and continues to grow. By 2028, there will be more than 210 ships with shoreside power capability, plus additional ships to be retrofitted with the capability.

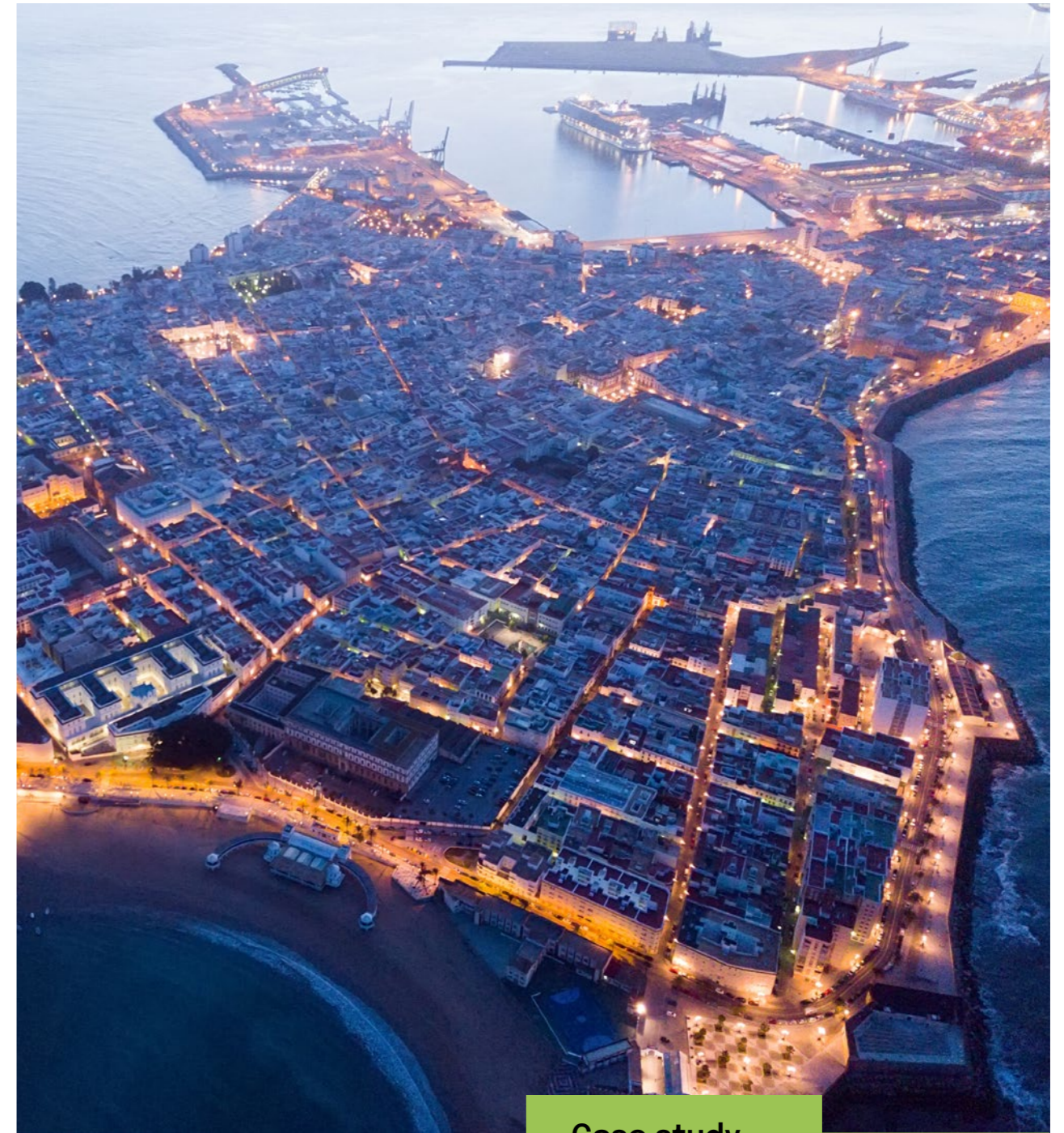


Across the CLIA cruise-line member fleet, **120 ships (46% of the total)** are equipped to connect to shoreside electricity, with **88% of CLIA member ships coming online between now and 2028** specified for shoreside electricity systems.<sup>4</sup>

<sup>4</sup> CLIA Environmental Technologies and Practices Report, 2023



© Hamburg Port Authority, Jens Erik Wegner



### Case study

#### Investing in the Development of Infrastructure

The deployment of shoreside electricity (SSE) infrastructure at a port is a multi-million dollar investment project. SSE is a core element of many local public policies to improve air quality and reduce noise levels for the wider benefit of mobility infrastructure, but also of some national decarbonisation strategies. As such, it is essential that SSE projects, like other public infrastructure development initiatives, benefit from the financial support of national and local authorities.

Working with renewable energy company Endesa X, the Port of Cadiz will be among the first ports in Spain where cruise ships will be able to connect to an onshore power supply. According to Spain's Puertos del Estado, replacing onboard electricity generation with a ship's own connection to 100% renewable onshore electrification is expected to reduce NOx emissions by 96%, SOx by 8%, particulates by 94% and CO<sub>2</sub> by 64% from ships.



**Ports with at least one berth for cruise ships, active, funded or planned.**



Source: CLIA port analysis (15 September 2023)

**ACTIVE 34**

- CANADA** Halifax, NS | Montreal, QC | Vancouver, BC
- CHINA** Guangzhou | Qingdao | Sanya | Shanghai  
Shenzhen | Tianjin | Xiamen
- DENMARK** Aarhus
- FINLAND** Turku
- GERMANY** Hamburg | Kiel | Rostock
- ICELAND** Hafnarfjörður
- LATVIA** Ventspils
- NORWAY** Ålesund | Bergen | Fredrikstad | Karlsund (Haugesund)  
Kristiansand | Lyngdal | Skjolden (Sognefjord)
- SOUTH KOREA** Incheon (Seoul)
- SWEDEN** Verkö
- UK** Southampton
- USA** Brooklyn, NY | Juneau, AK | Long Beach, CA  
Los Angeles (San Pedro), CA | San Diego, CA | San Francisco, CA  
Seattle, WA

**FUNDED 24**

- AUSTRALIA** Sydney
- CANADA** Victoria, BC
- FRANCE** Marseille | Toulon
- GREECE** Piraeus (Athens) | Heraklion
- ITALY** Genoa | La Spezia | Livorno | Civitavecchia (Rome)  
Savona
- MALTA** Valletta
- NETHERLANDS** Amsterdam | Rotterdam
- NORWAY** Flåm | Oslo | Stavanger | Tromsø
- SPAIN** Barcelona | Bilbao | Cádiz
- SWEDEN** Stockholm
- UK** Portsmouth
- USA** Miami, FL

**PLANNED 16**

- DENMARK** Copenhagen | Fredericia | Skagen
- ESTONIA** Tallinn
- FINLAND** Helsinki | Mariehamn
- FRANCE** Le Havre
- GERMANY** Bremen
- ICELAND** Reykjavik
- NORWAY** Arendal | Trondheim
- SWEDEN** Goteborg (Gothenburg) | Helsingborg (Scania)
- UK** Tyne
- USA** Fort Lauderdale, FL | Galveston, TX

Today, ships comply with low sulphur requirements by using low-sulphur fuels or with exhaust gas cleaning systems (EGCS).

These systems are a recognised alternative to the use of low-sulphur fuels because they are designed to remove the emission components that are deemed harmful. Even though heavy fuel oil can continue to be used in ships' engines, EGCS are capable of achieving emission reductions equivalent to low-sulfur fuels. In addition, a 2021 study prepared by CE Delft, Comparison of CO<sub>2</sub> emissions of MARPOL Annex VI compliance options in 2020, found that on a lifecycle basis, EGCS achieve significantly better CO<sub>2</sub> lifecycle emissions compared to marine gas oil (MGO) or very low sulphur fuel oil (VLSFO) due to the high-energy requirements associated with fuel quality improvements for distilled fuels.

Currently, 60% of ships operated by CLIA cruise line members, representing 77% of global capacity, utilise EGCS to comply with the IMO 2020 Global Sulphur Cap and the more stringent requirements of Emission Control Areas (ECAs).

EGCS technology installed on ships is designed to remove 98% of sulphur and well over 50% of particulate matter, with a 12% reduction in NOx. The vast majority additionally include washwater filters, and some include a catalytic filter on the engine exhaust prior to the EGCS as well as continuous monitoring equipment to automatically record all parameters. A variety of technologies further clean the EGCS washwater stream including fine-mesh filtration, purification, centrifugal separation and dissolved air with flocculant. EGCS washwater filter residue and process tank residue are disposed of ashore.

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### Emission Control Areas (ECA)

As Emission Control Areas (ECA) have been proposed and considered in many of the regions cruise ships operate, CLIA member cruise lines have supported following the IMO process for their adoption and implementation. ECAs are sea areas that limit sulphur oxides and, in some regions, particulate matter and nitrogen oxides emissions. CLIA fully supported designation of a Mediterranean ECA following the process for such designation at IMO.



Several studies supported by credible science have found that ships with EGCS have washwater discharge that is well within stringent water quality standards. Washwater discharges are governed by international guidelines promulgated by the IMO and are under ongoing review. As discussions continue at the IMO, CLIA has suggested a risk-analysis approach be utilised prior to consideration of any limitations on EGCS use in or near coastal areas. In its paper EGCS Washwater discharges and accumulation levels in port water and sediment, submitted to the IMO at PPR 7/INF.18, CLIA has recommended this be accomplished using the Marine Antifoulant Model to Predict Environmental Concentrations (MAMPEC) model, which has been reliably used for ballast water management.



### Liquefied Natural Gas (LNG), BioLNG, and Synthetic LNG

Anticipating the IMO emissions limits standard on SOx and NOx, cruise lines have invested significantly in vessels powered by Liquefied Natural Gas (LNG) for the last ten years. In 2018, AIDAnova became the first 100% LNG-powered cruise ship and 15 LNG ships are now in operation (eight in the Carnival Corporation fleet) with 13 more ships on order industrywide until 2028. Based on analyses by SeaLNG and others, LNG is currently the fossil fuel available at scale that has the best performance in reducing atmospheric emissions. LNG has virtually zero sulphur emissions and particulate emissions, reduces NOx emissions by approximately 85%, and achieves up to a 20% reduction in greenhouse gas emissions.

Yielding benefits now in eliminating PMs and SOx emissions, LNG technology offers a pathway to future fuels and propulsion technologies being developed for use at scale.

Ships designed with LNG engines and fuel supply systems will be able to switch to more sustainable alternative fuels such as bio or synthetic LNG in the future, with little or no modifications. The LNG engine technology and infrastructure of today offers a clear pathway to sustainable cruising in the future.





Cruise lines have invested in the development of innovative environmental technologies and practices aimed at reducing emissions and have contributed significantly to the development of sustainable marine fuels and environmental technologies.

The cruise industry is making significant investments to reduce its environmental footprint and become one of the most sustainable and responsible forms of holiday travel.

CLIA member lines actively collaborate with governments, fuel suppliers and technology companies around the world, and count on all to do their part to support a net zero carbon future. This includes faster access to funding for sustainable shipbuilding, maritime equipment manufacturing and for the development and supply of affordable sustainable fuels at scale.

Future development of environmentally friendly technologies, such as the transition to cleaner fuels, increased shoreside electricity (SSE) availability and energy efficient ship designs, are expected to further mitigate the impact of cruise ships.



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 the technology is more readily available.<sup>1</sup>

**New Engine and Propulsion Technologies Driving Ships of the Future**

The cruise sector is doing its part to adopt innovations and technologies in pursuit of its goals. The progress of CLIA member lines in pursuit of net zero carbon future reinforces the cruise industry’s credentials as an early adopter of environmental technologies.

Cruise lines are investing today in fuel flexibility and propulsion technologies with conversion capabilities for the future. Multiple pilot projects and collaborative initiatives with sustainable fuel producers and engine companies are underway or in the works.

As cruise lines identify future fuel pathways to move away from fossil fuel, a variety of new and more sustainable alternative energy sources are being pursued such as biofuels made from nonfood biomass (plant material and animal waste); synthetic e-fuels such as e-methane and e-methanol; electric batteries; bio-LNG and/or synthetic LNG, methanol and hydrogen fuel cells, wind, and solar.



Average age of fleet

**14.1 YEARS**



Number of ships on order

**44**



**\$40+ BILLION**  
investment



Average life span up to

**+30 YEARS**

<sup>1</sup> CLIA Environmental Technologies and Practices Report, 2023)

### Investing in the Development of Sustainable Alternative Fuels

Alternative sustainable fuels are a critical element in the maritime industry's decarbonisation strategy. The cruise industry is working with manufacturers, classification societies and other entities to study potential pathways for the deployment of these fuels.

The cruise sector is doing its part to adopt innovations and technologies in pursuit of its goals. As with other forms of travel, the maritime industry faces the challenge that, today, there currently are no sustainable alternative fuels available at scale to achieve its decarbonisation ambitions.

Availability of sustainable alternative fuels will impact how quickly the industry can progress towards a more sustainable future. This means that there is a critical need for governments to invest in the infrastructure necessary to increase availability of bunkering for new fuels at ports around the world.

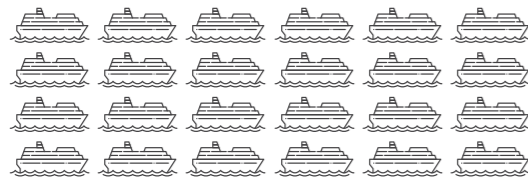
Choosing sustainable alternative fuel involves addressing multiple technical issues. For example, storage properties for fuels impact their viability for use in shipping. Some fuels require significantly more space than others, while providing the same amount of energy, and a wide range of safety aspects must be addressed with the introduction of any new fuels, systems, procedures and training.

#### Focus on Low-Carbon and Sustainable Fuels



**32 PILOT PROGRAMS**

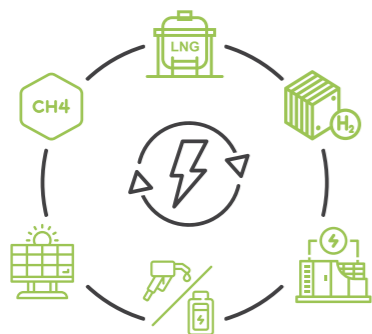
are currently underway testing sustainable fuels



Among the pilots, **24 SHIPS** are trialing biofuels



**2 SHIPS** are trialing synthetic carbon fuels



#### A range of alternative energy sources are active or on the order book

These include LNG fuel cells, dual fuel engines, hydrogen fuel cells, photovoltaic/solar, methane fuel cells, battery storage and wind (including solid sail technology)

### Need for Fuel Availability

CLIA is in dialogue with policymakers about the need for a regulatory environment that supports the production, distribution, and use of renewable fuels. Given the technology forecast, in the short term (up to 2030), the decarbonisation of cruise will rely on maximising energy efficiency improvements, supplemented by use of drop-in biofuels and biogas. In the mid term (2030-2040), newbuild ships will principally rely on gas as a marine fuel, including Methane (green CH<sub>4</sub>) or Methanol (Green MeOH). For the longer term (2040-2050 and beyond), green hydrogen and bio-based feedstocks derived from renewable energy and electrolysis will be needed to meet net zero ambitions.

The entire maritime sector, including cruise, will need sustainable alternative fuels in volumes to meet targets such as the European Union's Fit for 55, which mandates 2% use of alternative fuels in 2025 and 6% in 2030. The IMO Revised Strategy includes a target of 5% (striving for 10%) uptake of alternative fuels across the maritime industry by 2030. The global community of governments and broader stakeholders, including engine manufacturers and fuel suppliers, will play a critical role in providing necessary technologies and available fuels.

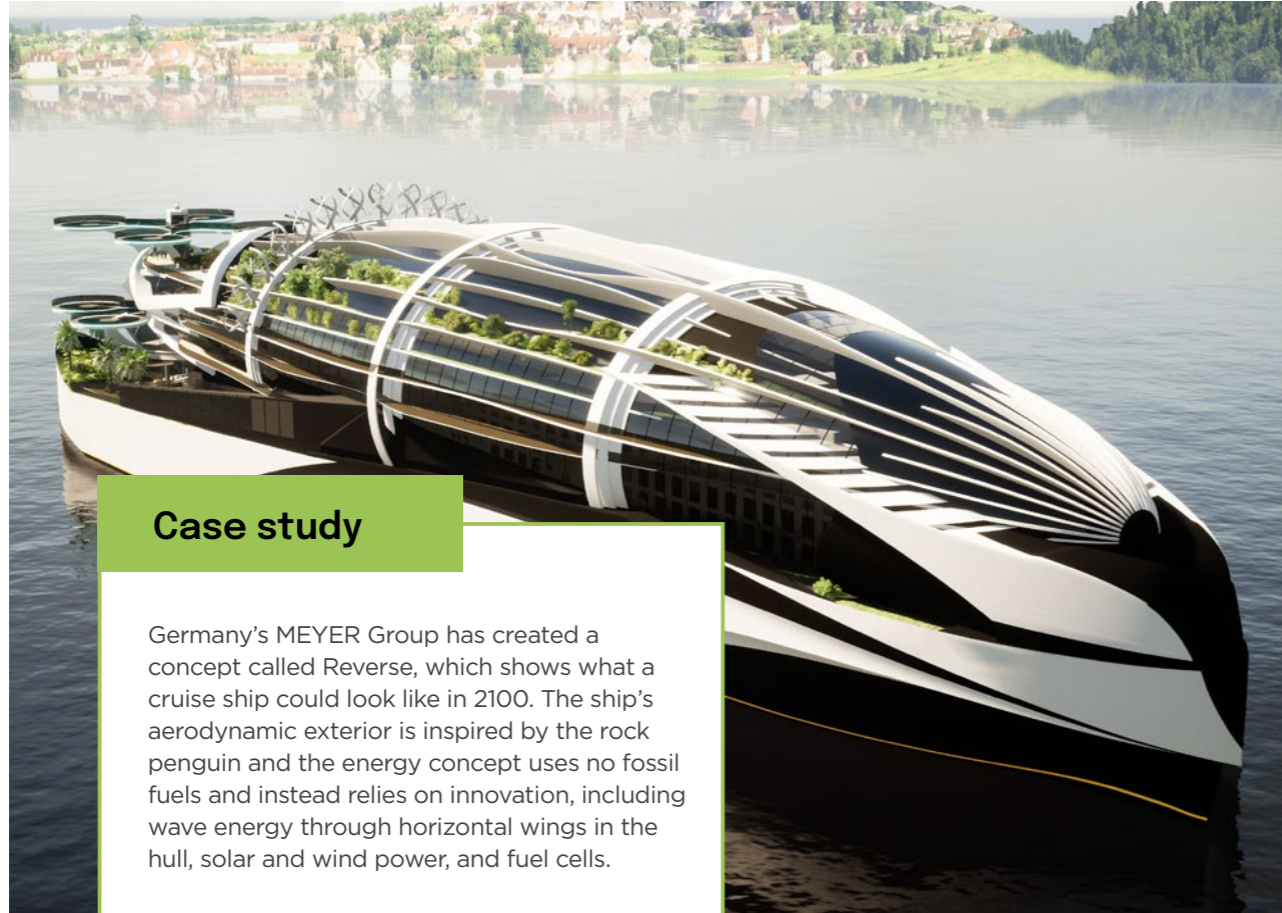
The Revised Strategy agreed at the IMO sends a strong signal to markets and fuel suppliers that should provide the advanced technologies and alternative fuels needed in order for the maritime sector to do its part in achieving the Revised Strategy's ambition for net zero GHG emissions by or around 2050.

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#### Case study



Small ship line PONANT has committed to a uniquely cutting-edge zero greenhouse gas emissions sailing ship to be ready by 2030. With about 100 staterooms, the 181m sailing ship will run on wind power and solar panels combined with low-carbon, non-fossil energy from hydrogen fuel cells and a bespoke energy management system. A sail power system and hull will provide an average of 50% of the propulsion energy using the force of the wind.



### Case study

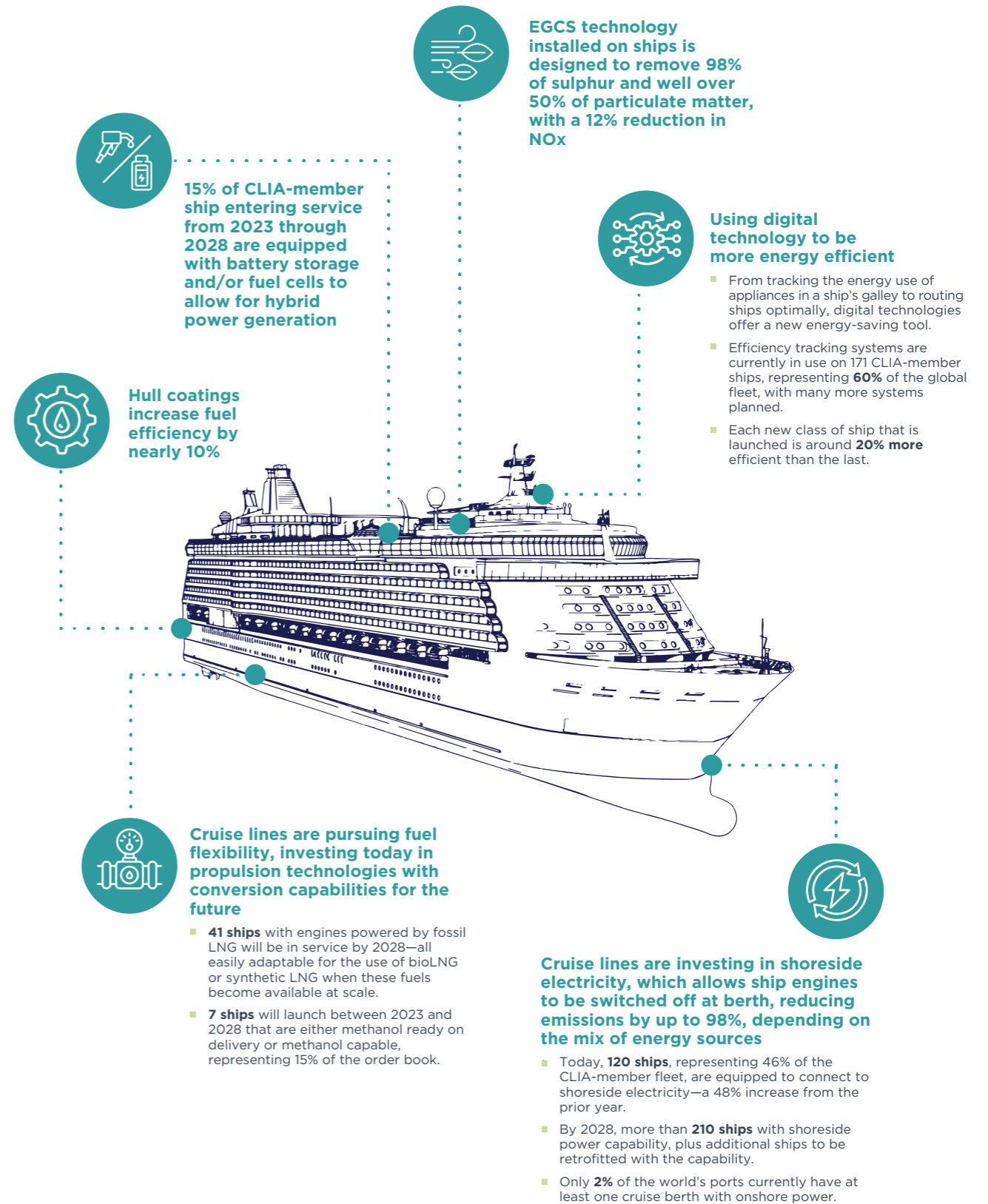
Germany's MEYER Group has created a concept called Reverse, which shows what a cruise ship could look like in 2100. The ship's aerodynamic exterior is inspired by the rock penguin and the energy concept uses no fossil fuels and instead relies on innovation, including wave energy through horizontal wings in the hull, solar and wind power, and fuel cells.

### Did you know?

With a typical lifespan of around 30 years, cruise ships being launched today will be sailing in 2050 and beyond. To meet sustainability goals, the focus is on developing new ships that are future-focused with the latest innovations, state-of-the-art equipment and adaptability to work with new sustainable fuels once available to meet the challenges of the future.

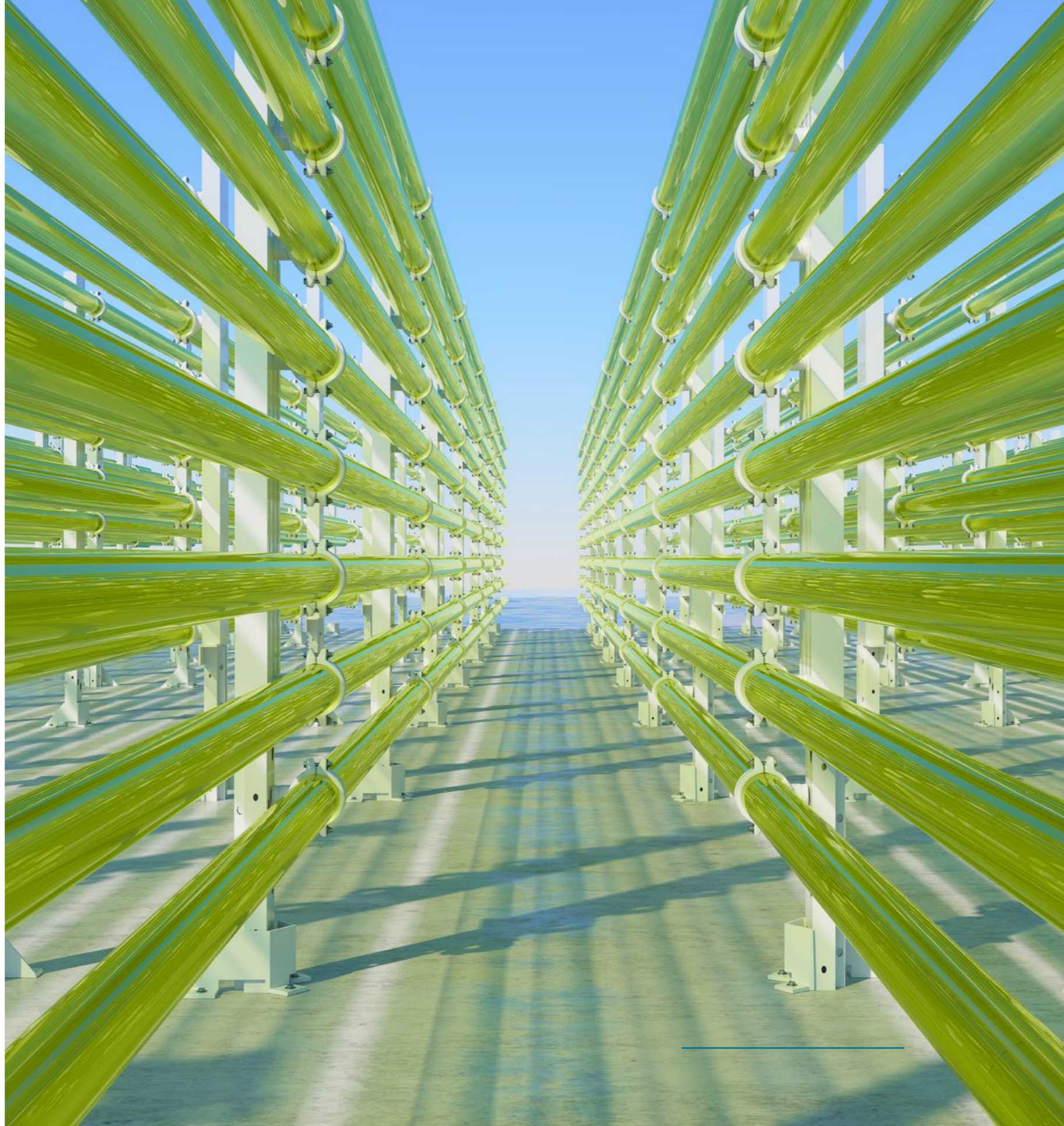
The cruise industry is one of the pioneers in maritime environmental protection, as shown in its leadership role in the adoption of innovative maritime technologies. These innovations represent significant investments that have resulted in substantial reductions in air emissions:

- + Testing and use of sustainable fuels and battery/hybrid power.
- + Advanced wastewater treatment systems which are often better than shoreside treatment plants.
- + Air lubrication systems for ship hulls that reduce drag and fuel consumption.
- + Energy efficient engines that consume less fuel and reduce emissions.
- + The use of shoreside power capability for emission reduction at ports of call.
- + Special hull paint coatings that reduce fuel consumption by up to 5%.



## Methanol

As CLIA member lines work towards a future free of fossil-fuel, they are developing the first ships incorporating engines than can run on methanol. Methanol has the potential to be a long-term solution for decarbonisation. Many of the safety considerations for bunkering and operations with methanol are already known, and once available at scale, green methanol – such as bio-methanol and e-methanol – will make operations almost climate neutral. Construction on the first methanol-ready cruise ship began in 2022. Seven ships, either methanol ready on delivery or methanol capable, and representing 15% of the current order book through 2028, will make their debut from TUI Cruises, Celebrity Cruises and Disney Cruise Line and Norwegian Cruise Line. These ships represent a significant investment in new engine technologies that will accelerate the maritime transition towards a future of low to zero carbon fuels.



### Did you know?

Seven ships, either methanol ready on delivery or methanol capable, will make their debut over the next five years through 2028.

In addition, by 2028 there will be 41 ships with engines designed for fossil LNG, all easily adaptable for use of bioLNG or synthetic LNG when these fuels become more widely available.<sup>2</sup>

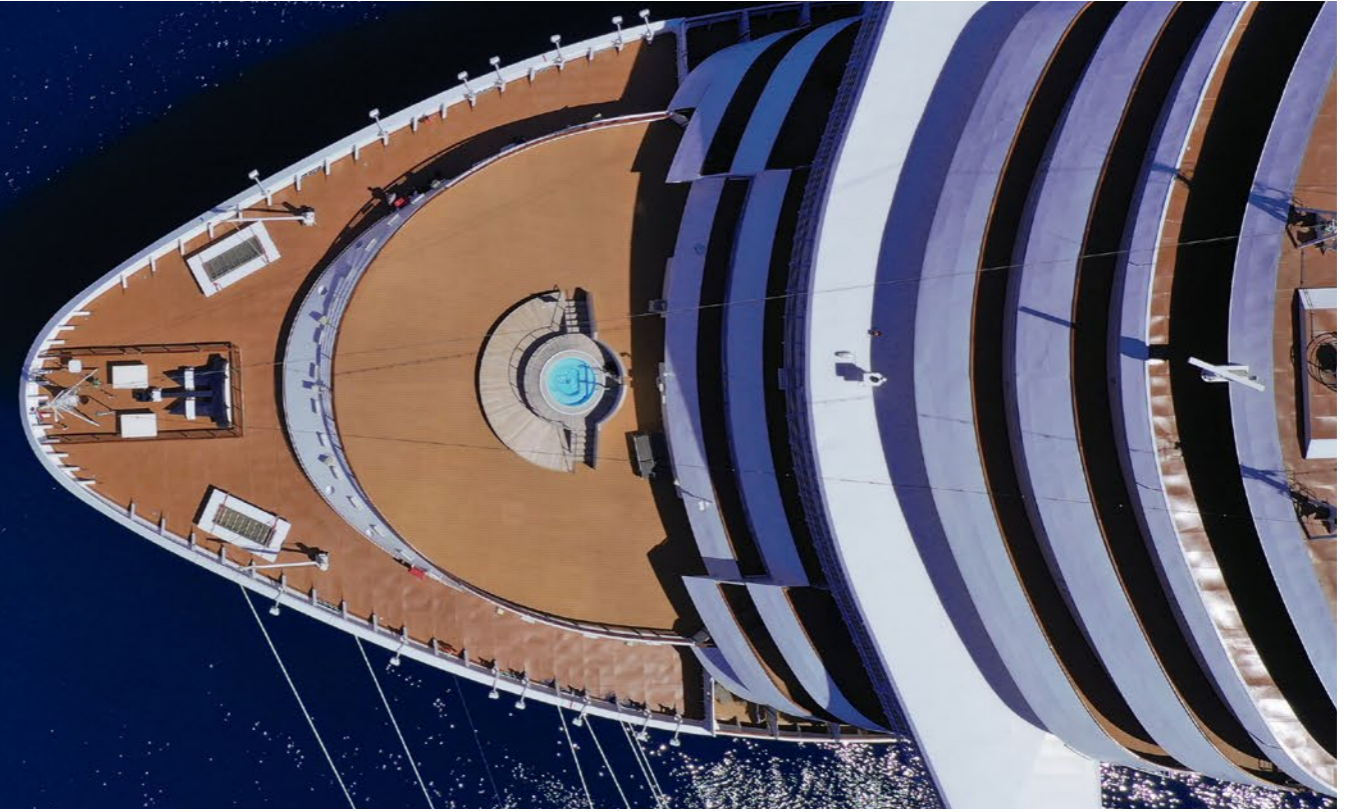
<sup>2</sup> CLIA Environmental Technologies and Practices Report, 2023)

## Driving Energy Efficiencies in Ship Operations

CLIA members are focused on investment in solutions to increase efficiencies in ship operations to reduce energy consumption. Energy efficiency is a focus of CLIA member lines as they work to achieve a 40% carbon emissions reduction by 2030 (compared to a baseline of 2008). Between now and 2030, the industry will need to maximise energy efficiency improvements alongside the uptake of sustainable drop-in biofuels and biogas.

Today's global cruise fleet is the most efficient in history, with each new class of ship approximately 20% more energy efficient than the one it replaces. This represents around 4% to 5% energy efficiency gains year-on-year to date.

Examples of innovation that increase energy efficiencies can be seen throughout a cruise ship, including:



### Hull coatings.

Use of nontoxic anti-fouling paints helps a ship move more efficiently through water, reducing energy consumption. CLIA cruise line members have long been committed to using advanced green paints and varnishes and silicon-based anti-fouling coatings.



### Air-lubrication systems.

Many cruise ships now use a built-in air lubrication system which channels air to the bottom of the hull, creating millions of microscopic air bubbles, which reduces drag and conserves fuel and energy.



### Hull design.

An optimised hull design can reduce drag and improve fuel efficiency by generating a bow wave which can result in up to 15% energy savings.



### Optimised speed.

Software to optimise fuel efficiency and energy management has become a significant factor in achieving efficiency gains – in addition to adjusting speed and sailing with currents.



### Waste heat recovery.

Even the most efficient engine will produce some waste energy. CLIA cruise line members have invested in technologies that put this waste energy into use on ships. One way to recover lost heat energy is to install heat exchangers to turn water into steam. Steam generated from the engines is used to create fresh water for showers, pools, galleys and heating cabins.



### Energy efficient lighting.

Intelligent lighting systems significantly reduce energy use. Some ships are built with keycards that allow lights and other devices to be activated only when a cabin is occupied. Motion-sensitive lighting in passages allows lights to be automatically dimmed when not in use. A move to LED lighting also has reduced power consumption. LED lighting uses 80% less energy than traditional lighting.



### HVAC systems.

Heating, ventilation and air conditioning systems are among the largest consumers of energy on board ships. As cruise ships operate in temperature extremes, demands on systems vary significantly. Many CLIA member cruise lines have upgraded their HVAC systems to more efficient technology that reduces power consumption.

Hull coatings increase fuel efficiency by nearly 10%.



## Digitalisation and Data Use

Cruise lines are rolling out technology upgrades to save both energy and fuel. A large majority of the CLIA member fleet are using efficiency tracking systems and software to cut fuel consumption. From tracking the energy use in a ship's galley to routing ships to use less fuel, digital technologies offer a new energy-saving tool. Many cruise lines now continuously monitor fleet operations remotely from their land-based offices. The aim is to support decision-making by collecting and analysing data on various components of ship operations such as routes, speed, engine performance and emissions data and then transmitting it back to the operational crew.

### Case study

In June 2023, the LNG-powered MSC Euribia completed a net-zero GHG voyage. This was made possible by using bio-LNG as a fuel, on a mass-balance approach - the most cost-effective and environmentally efficient method of delivering the benefits of renewable LNG, recognised under the EU Renewable Energy Directive (RED II). This achievement proved that net-zero emissions cruising is possible if renewable fuels can be made available and supportive accounting approaches are allowed. The data harvested during this voyage will be used to optimise further ships across the MSC Cruises fleet, further driving down emissions intensity and expediting the company's decarbonisation goals.

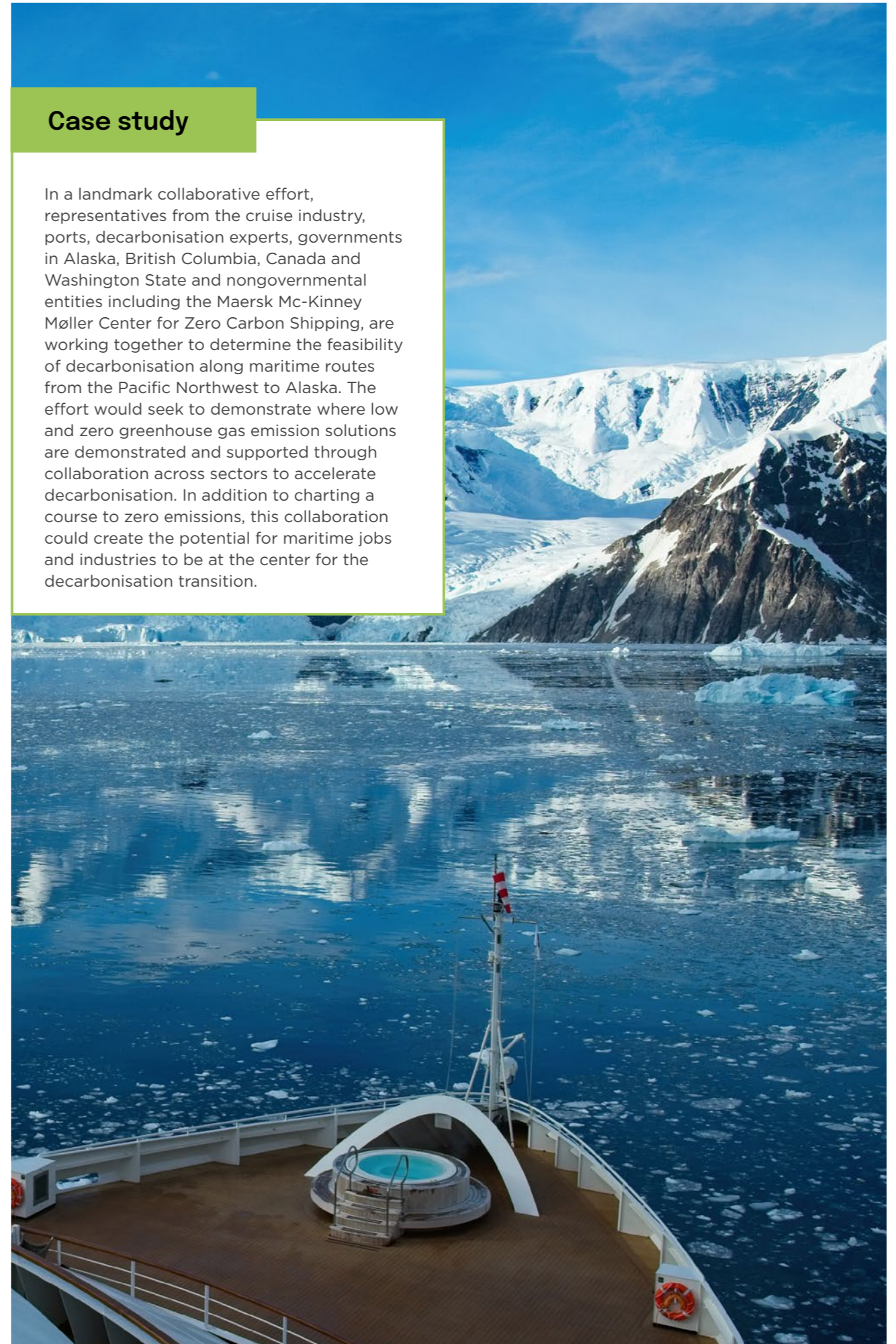


Efficiency tracking systems **are now in use on 171 CLIA-member ships**, with many more systems planned<sup>3</sup>.

<sup>3</sup> CLIA Industry Alternative Fuels and Energy Sources Survey, May 2023

### Case study

In a landmark collaborative effort, representatives from the cruise industry, ports, decarbonisation experts, governments in Alaska, British Columbia, Canada and Washington State and nongovernmental entities including the Maersk Mc-Kinney Møller Center for Zero Carbon Shipping, are working together to determine the feasibility of decarbonisation along maritime routes from the Pacific Northwest to Alaska. The effort would seek to demonstrate where low and zero greenhouse gas emission solutions are demonstrated and supported through collaboration across sectors to accelerate decarbonisation. In addition to charting a course to zero emissions, this collaboration could create the potential for maritime jobs and industries to be at the center for the decarbonisation transition.



Every cruise ship receives multiple inspections each year – announced and unannounced – to support implementation of strict environmental and safety regulations. CLIA member ships operate with a circular economy philosophy to reduce, reuse and recycle as well as convert waste to energy.

03

# Ocean Protection

On some ships, 100% of waste generated on board is repurposed.



11 SUSTAINABLE CITIES AND COMMUNITIES



12 RESPONSIBLE CONSUMPTION AND PRODUCTION



13 CLIMATE ACTION

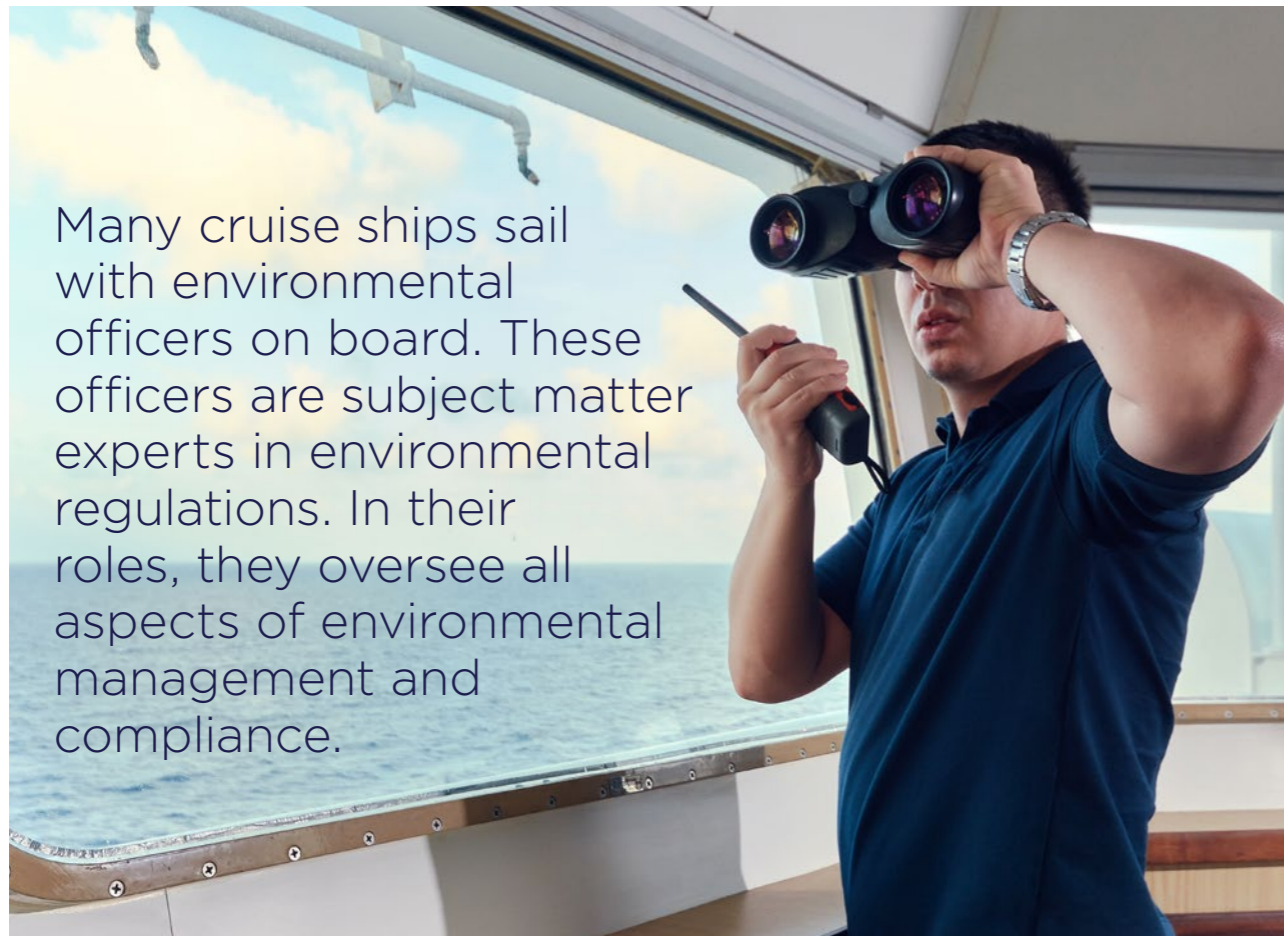


14 LIFE BELOW WATER



15 LIFE ON LAND





Many cruise ships sail with environmental officers on board. These officers are subject matter experts in environmental regulations. In their roles, they oversee all aspects of environmental management and compliance.

### Waste management

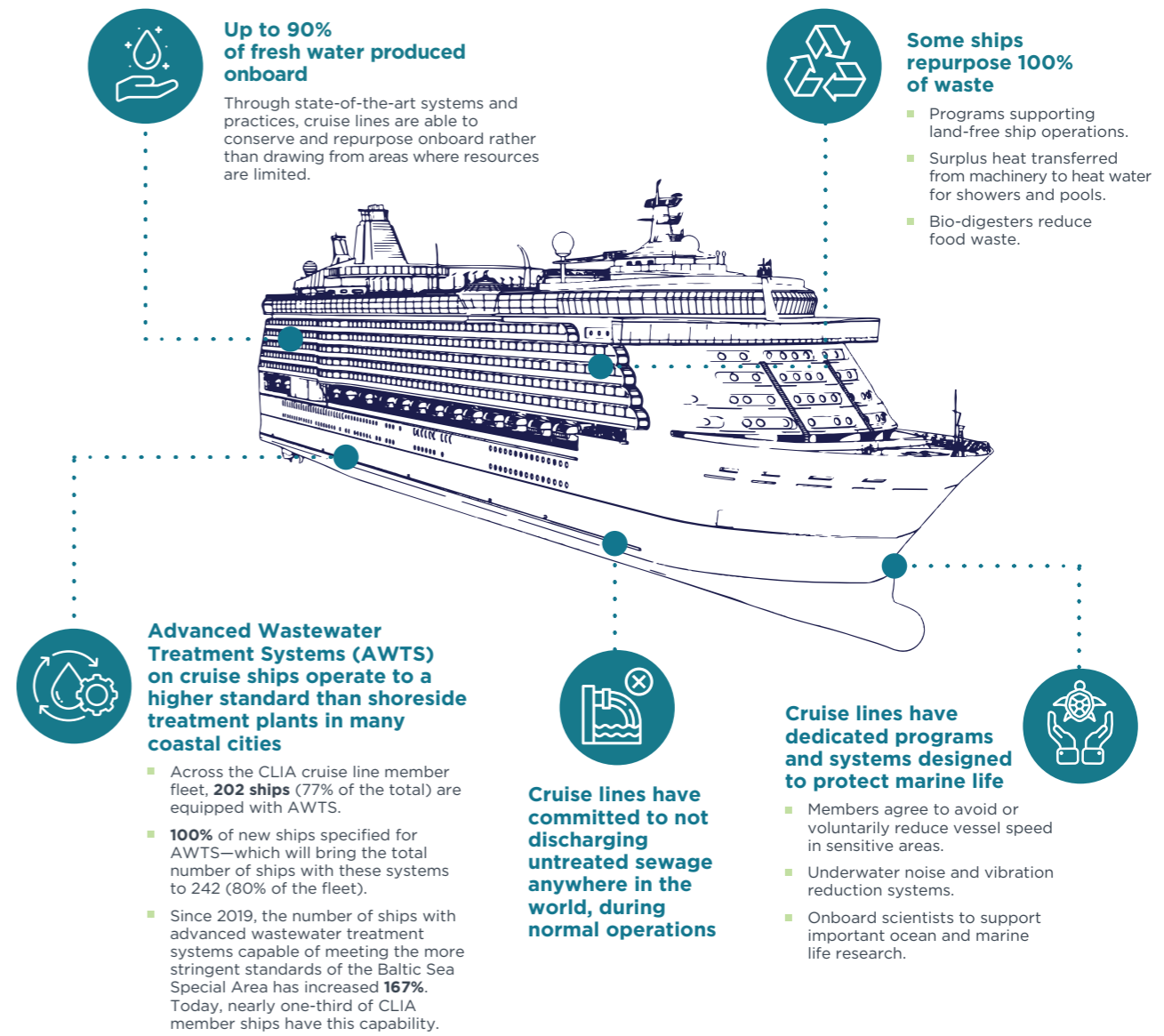
The agreement to implement the CLIA Waste Management Policy is a condition of membership in CLIA. The policy outlines advanced practices and covers waste disposal, including of cooking oil, incinerator ash, photo processing, dry-cleaning fluid waste, electronic equipment, pharmaceuticals, batteries, sewage, graywater, trash, bilge and oily water residues and plastics.

Waste management considers the entire lifecycle from planning to onboard consumption, and more. The cruise industry is deploying technologically advanced systems to reduce waste - with some cruise operators able to repurpose up to 100% of waste generated on board by removing, reusing, recycling, and converting waste to energy.

In addition to being adept at waste management, cruise lines participate in the development of international standards that apply to all ships traveling internationally, with MARPOL and its annexes setting the international standard for prevention of pollution related to oil and oily waste, hazardous substances, garbage and sewage, among others.

### Did you know?

Exhaust Gas Cleaning Systems (EGCS) are a highly regulated equivalent technology. EGCS must achieve an equivalent or better emission reduction than compliant fuel and the IMO has established discharge parameters for EGCS washwater. Other countries and regions have additional standards. In the U.S., these are further strengthened by Environmental Protection Agency (EPA) requirements through the Vessel General Permit and the Vessel Incidental Discharge Act. When EGCS are operating in ports, the washwater monitoring takes place continuously.



**Plastic**  
(reduce, recycle, eliminate)

CLIA members are constantly researching ways in which plastic can be reduced, recycled, or eliminated through sourcing and product selection. Plastic is a product that exists in every aspect of our lives, both ashore and aboard. The cruise industry is committed to reducing plastics disposed of in landfills and increasing recycling volumes. Plastics are separated and recycled whenever possible.



**Recycling on Board**

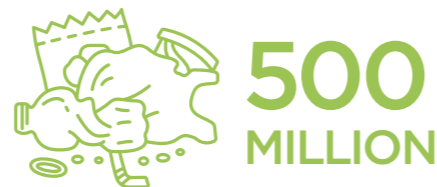
Recycling is a critical component of efforts by CLIA member cruise lines to effectively manage shipboard waste.

Onboard measures utilised by cruise lines to minimise waste include separating recyclable materials, compacting aluminum cans into bricks with below-deck equipment, compacting plastics and crushing glass by onboard crushing machines, flattening or shredding of paper and cardboard, and partnering with suppliers to reduce packaging.

Recyclable materials are offloaded when a ship arrives at port and sent to a suitable recycling facility. Cruise lines inspect these facilities regularly to confirm recycling takes place as contracted.

**Case study**

As of 2022, Carnival Corporation, with nine brands, has eliminated more than 500 million single-use items and is focused on eliminating and reducing additional items – both by working with supply chain partners to purchase products in bulk and replacing items with sustainable products, such as paper, wood and bamboo. The impact is significant. Among items eliminated by the end of 2022 were 50 million individual sauce packets that, if lined up end-to-end, would stretch approximately the distance between New York and Los Angeles.



**Case study**

In addition to recycling materials, cruise lines are creatively using recycled products. On Disney Cruise Line's ship Disney Wish, more than 60% of all fabrics used in the theatrical adaptation of Disney's "The Little Mermaid" were made from recycled plastic debris. The fabrics were melted into threads that were woven into material emulating fine silk, chiffon and cotton. The process used a waterless printing method, which saved tens of thousands of gallons of water compared to traditional dyeing processes.



## Food Waste Management

While it is widely known that food and beverage are vital components of the cruise experience, food sourcing and food management are equally important and are integral components of sustainability and a major focus for the cruise industry. Several cruise lines contributed to the United Nations World Tourism Organization (UNWTO) Global Roadmap for Food Waste Reduction in the Tourism Sector, a roadmap for sustainable and circular management of food, with an emphasis on preventing food waste in the tourism sector.

While percentages vary between cruise lines, the cruise industry goes to great lengths to minimise waste to levels lower than other consumer-facing businesses and even the level of waste that occurs in homes. To achieve reduction goals, cruise lines use technology such as digitisation to monitor consumption, determine trends, and order only what is needed.

CLIA cruise line members work with a broad network of diverse organisations to advance food waste sustainability efforts throughout the supply chain.

### Did you know?

CLIA member cruise lines have a track record of leadership in food waste reduction. This includes:

- + Carefully ordering based on consumption trends.
- + Prioritising local sourcing of food, reducing the carbon footprint of the supply chain.
- + Working with small businesses as part of overall cruise line food and beverage strategies.
- + Supporting local businesses and communities and, as a result, helping improve lives and quality of life in the destinations ships visit.
- + Continually working to reduce food loss further.



### Case study

Across its business, Royal Caribbean Group is using cutting-edge technologies to help create best-in-class experiences responsibly. They leverage artificial intelligence to adjust food production in real time. Their food production management system uses data points like guest demographics, itinerary and weather to estimate how much food should be produced, prepared, thawed and ordered on a given day. This allows them to make better decisions about both how much food to order and prepare.

As part of their overarching sustainability focus and their investment in innovative environmental technologies, cruise lines have committed to not discharging untreated sewage anywhere in the world, during normal operations. Most CLIA member cruise ships have advanced wastewater treatment systems for treating sewage and large amounts of grey water that exceed not only international and maritime standards but operate to a higher standard than shoreside treatment plants in many coastal cities.

04

# Clean Water



of new ships are being built with state-of-the-art Advanced Wastewater Treatment facilities.

6 CLEAN WATER AND SANITATION



11 SUSTAINABLE CITIES AND COMMUNITIES



12 RESPONSIBLE CONSUMPTION AND PRODUCTION



13 CLIMATE ACTION



14 LIFE BELOW WATER



15 LIFE ON LAND



All new ships across the CLIA cruise line member fleet are specified to be built with state-of-the-art Advanced Wastewater Treatment facilities that rival many land-based systems.

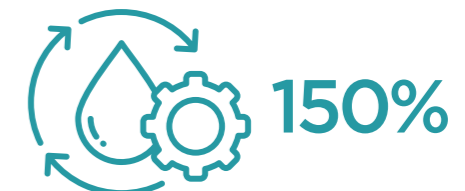


CLIA members recognise the sensitivity of discharging wastewater and cooperate fully with national and local requirements in planning wastewater discharges where permitted. As an organisation, CLIA encourages the provision of adequate shoreside reception facilities for wastewater where discharge is a concern.

Oil/water mixtures from machinery and engines, or bilge water, are held in storage tanks. These mixtures can only be discharged after meeting strict environmental regulations to clean and purify the water, and discharges are always monitored and logged. Bilge water that cannot be discharged is collected and offloaded on shore by approved vendors.

**Did you know?**

Since 2019 the percentage of ships with advanced wastewater treatment systems capable of meeting the more stringent standards of the Baltic Sea Special Area has increased 150%. Today, nearly one-third of CLIA member ships sailing meet this standard. The Baltic standards are the strictest in the world and apply only to newly built ships



**Conserving Water**

CLIA member lines recognise water as a precious resource and through state-of-the-art systems and practices, work to conserve and repurpose water rather than drawing from areas where resources are limited.

Management of water use on cruise ships includes reclamation and reuse of water for non-potable purposes. CLIA members use various techniques to minimise onboard water use, such as repurposing condensation produced by air-conditioning for use in systems that do not require potable water, including flushing toilets, doing laundry, and washing the open deck.

Active water conservation efforts also include reduced-flow shower heads and vacuum systems for toilets, and upgrading dishwashers and laundry equipment for water efficiency, as people do in their homes. Crew are continually trained to conserve water, and guests are encouraged to save water by, for instance, reusing towels and linens.



### Fresh Water Production

CLIA member lines produce up to 90% of fresh water onboard. To avoid having to take on freshwater in ports, especially in areas where there are water shortages, many ships are equipped with their own onboard reverse osmosis desalination systems which transform sea water to potable water. These systems are similar to desalination plants on land. Desalination plants are also in place at islands reserved for and used primarily by cruise line passengers.

Cruise ships produce **up to 90% of the freshwater used on board through state-of-the-art systems**—and conserve and repurpose water rather than draw from areas where resources are limited.

#### Did you know?

Ships fill ballast tanks with seawater for a more stabilised and comfortable cruise. Because tiny microorganisms from the sea may be drawn in with the water - and may travel to areas of the world where they are non-native or invasive - cruise ships treat ballast water before release to safeguard local ecosystems consistent with the Ballast Water Management Convention and National regulations.

### Safeguarding Ocean Habitats

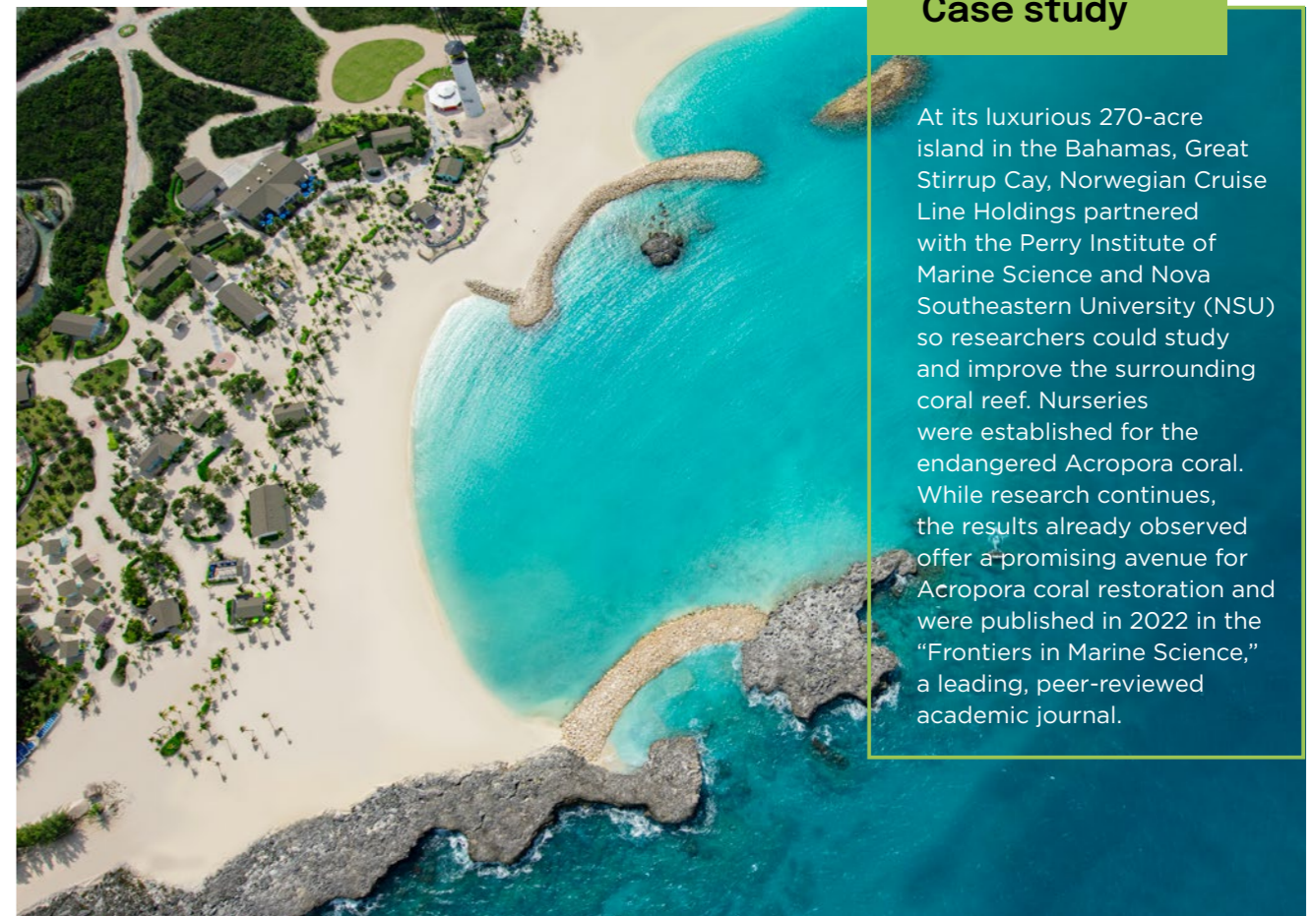
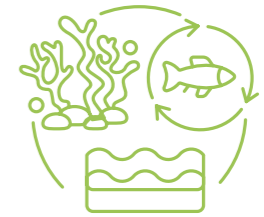
CLIA member cruise lines make every effort to avoid sensitive areas where marine life is observed or voluntarily reduce vessel speed while sailing in these areas. Underwater noise and vibration mitigation measures in cruise ship design include specially designed hulls, propellers and noise suppression devices as well as, on some ships, dynamic positioning systems that allow ships to hover in sensitive areas rather than dropping anchor.

A range of dedicated programs are focused on ocean and marine life protection, such as coral reef restoration, partnerships with a variety of ocean and marine life protection organisations.

Some ships host onboard scientists, with cruise lines supporting important ocean and marine life research in addition to educating passengers and crew. These efforts include research on climate change in places such as Antarctica, the Arctic and the Galapagos.

### Case study

MSC Cruises and the MSC Foundation are partnering with Nature Metrics to gather biodiversity data from marine species by using innovative e-DNA technology to analyse the genetic material from sea water samples. The data collected and analysed will be made available to third parties including the 'eBioAtlas' programme, a joint IUCN and Nature Metrics initiative to support global conservation. Four MSC Cruises' vessels are collecting seawater samples over 11 cruises and 114 sampling days during 2023. The data will be made freely available to third parties, fostering conservation and restoration efforts throughout the North Atlantic.



### Case study

At its luxurious 270-acre island in the Bahamas, Great Stirrup Cay, Norwegian Cruise Line Holdings partnered with the Perry Institute of Marine Science and Nova Southeastern University (NSU) so researchers could study and improve the surrounding coral reef. Nurseries were established for the endangered Acropora coral. While research continues, the results already observed offer a promising avenue for Acropora coral restoration and were published in 2022 in the "Frontiers in Marine Science," a leading, peer-reviewed academic journal.



At the heart of the cruise industry are tens of thousands of people who are passionate about their careers, whether working on board ships or in onshore offices. The people working for CLIA member cruise lines provide quality services to guests and take immense pride in doing so. Cruise guests have access to a form of travel that is accessible, appealing to a variety of travelers from toddlers to seniors and providing a myriad of travel experiences. A cruise is also a unique form of travel accessible to those who would otherwise not be able to travel due to mobility or other challenges.

05

# People

Job satisfaction levels among crew are reflected by strong employee retention rates at upwards of



- 3** GOOD HEALTH AND WELL-BEING  

- 5** GENDER EQUALITY  

- 8** DECENT WORK AND ECONOMIC GROWTH  

- 10** REDUCED INEQUALITIES  




**Life on Board**

The cruise industry is committed to supporting the well-being of its global seafarer community and providing fair and equitable wages and conditions. Several UN organisations participate in the development and implementation of international maritime law, including the IMO and International Labour Organization (ILO) a United Nations agency, and all ships engaged in international voyages are subject to these international governance regimes.

For instance, the Maritime Labor Convention, an instrument of the ILO, covers requirements for seafarers related to work on board, conditions of employment, accommodation and recreational facilities, food and catering, health protection, medical care, and social security protection.

As a service sector, well-motivated workforces are essential to the cruise industry's success. Ship crew deliver high standards of service and safety necessary to host cruise guests at sea. Cruise lines offer an equitable work environment with competitive wages, and training for crew to perform jobs skillfully and advance on a rewarding career path.

The cruise industry understands the importance of social interaction, whether at sea with colleagues or back home. On board ships, recreational areas such as gyms, basketball courts, lounges and bars, as well as social activities, such as concerts, holiday events and movie nights are offered to the crew. Crew have access to high-speed internet, so they can communicate with their families and catch up on the news back home.

© Steve Dunlop courtesy of Celebrity Cruises

**Case study**

In Switzerland, CLIA has partnered with the United Nations World Tourism Organization's Bella Vista Institute of Higher Education (BVIS) to support education and skills for people considering a career in travel and tourism, specifically the cruise industry. The program includes maritime disciplines, a wide range of onboard roles from hospitality to retail and entertainment as well as medical careers.

**94% of women seafarers** across the world are working in the cruise industry.

**Case study**

Windstar Cruises this year hosted Family Days in Semarang, Indonesia and Manila, where many crew members who live near the ports were able to invite their families on board the yacht where they work to learn about what they do and life on board, ask questions and meet other crew members, and explore the ship. The families had an opportunity to relax on board, swim in the pool, enjoy a meal together, and take in views from the ship's bridge. Crew can share their experiences and highlight the important work they do.

### Diversity

CLIA member cruise lines employ a multinational workforce. Often more than 60 nationalities may be working together onboard a ship at any time. For cruise companies, it is a source of pride to employ so many people from different nationalities, cultures and backgrounds. Multinational crews work together to deliver a guest experience unique to a cruise holiday.

As well as offering an inclusive, multi-cultural work environment, the industry is also leading the way in supporting female leadership roles - from the navigation bridge to the boardroom. Cruise provides the most advanced opportunities for women in maritime - 94% of women seafarers across the world are working in the cruise industry.

CLIA member cruise lines have also focused on programs that remove barriers for entry and offer independence for workers with disabilities.

### Case study

In the UK, students from St John Bosco College participated in a program aimed at increasing awareness of cruise career opportunities including on-site visits to ships in Southampton.



© Steve Dunlop courtesy of Celebrity Cruises



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### Case study

CLIA, jointly with TUI Cruises, hosted an opportunity for Tourism Management students from the Business College of Athens to visit a ship and learn about careers in cruise. Building skills for the next generation of seafarers is part of CLIA's proposed action plan for Greece.



Women comprise only 2% of seafarers across maritime. **Within the cruise industry, 57% of seafarers are women.** In addition, 50% of women in maritime who achieved mid-level or higher positions work in the cruise industry, according to a 2021 IMO seafarer workforce survey.

© Steve Dunlop courtesy of Celebrity Cruises

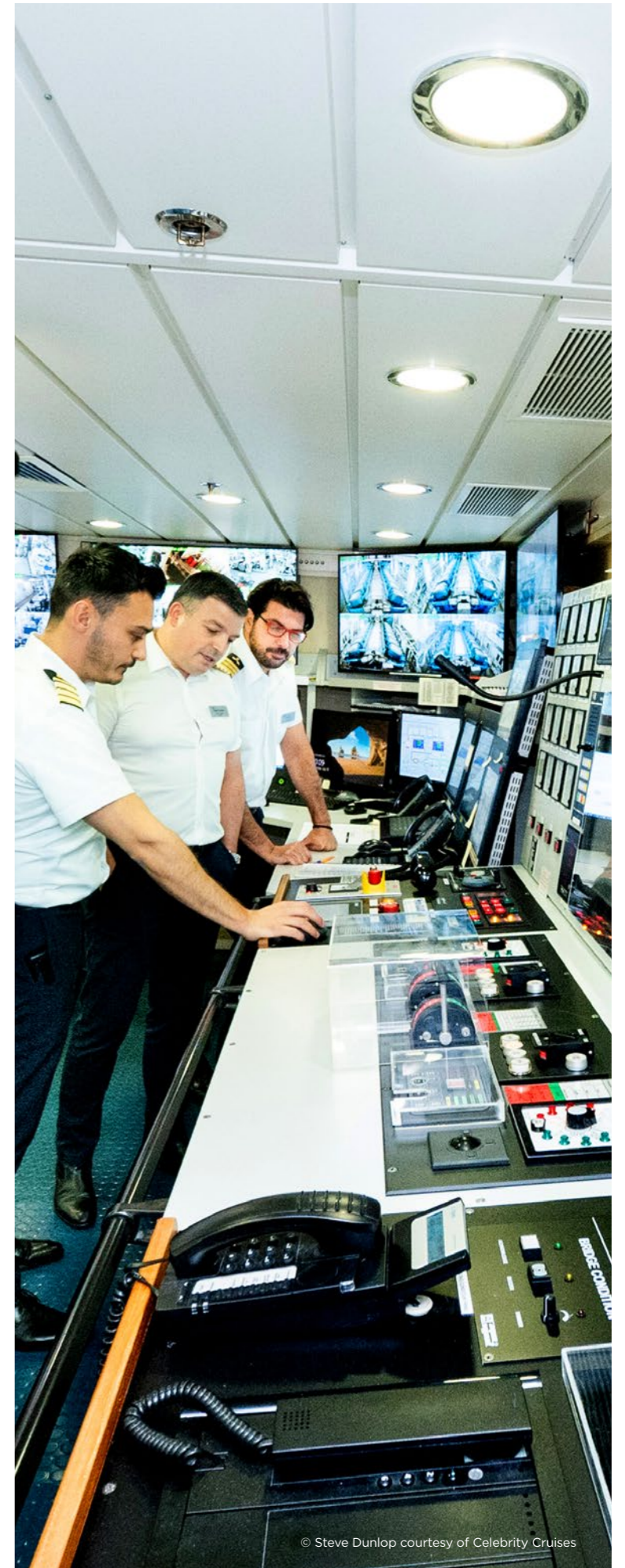


### Training and Development

Cruise lines provide training across marine education and nautical sciences, such as navigation, marine engineering and electrical engineering.

As the cruise industry continues its course towards net zero carbon cruising by 2050, a new and critical area to be managed is how seafarers obtain the skills needed for safely operating innovative technologies, including navigation systems and handling of alternative fuels and propulsion equipment. Further digitisation of the cruise industry requires the expertise of skilled engineers to manage the new technologies and practices being utilised on cruise ships across the world today.

CLIA is actively engaged with the International Chamber of Shipping's (ICS) Maritime Just Transition Taskforce, which seeks to strengthen and coordinate collaboration between governments, industry, and academia towards a safe, equitable and human-centered approach to the transition towards a decarbonised shipping industry.



© Steve Dunlop courtesy of Celebrity Cruises

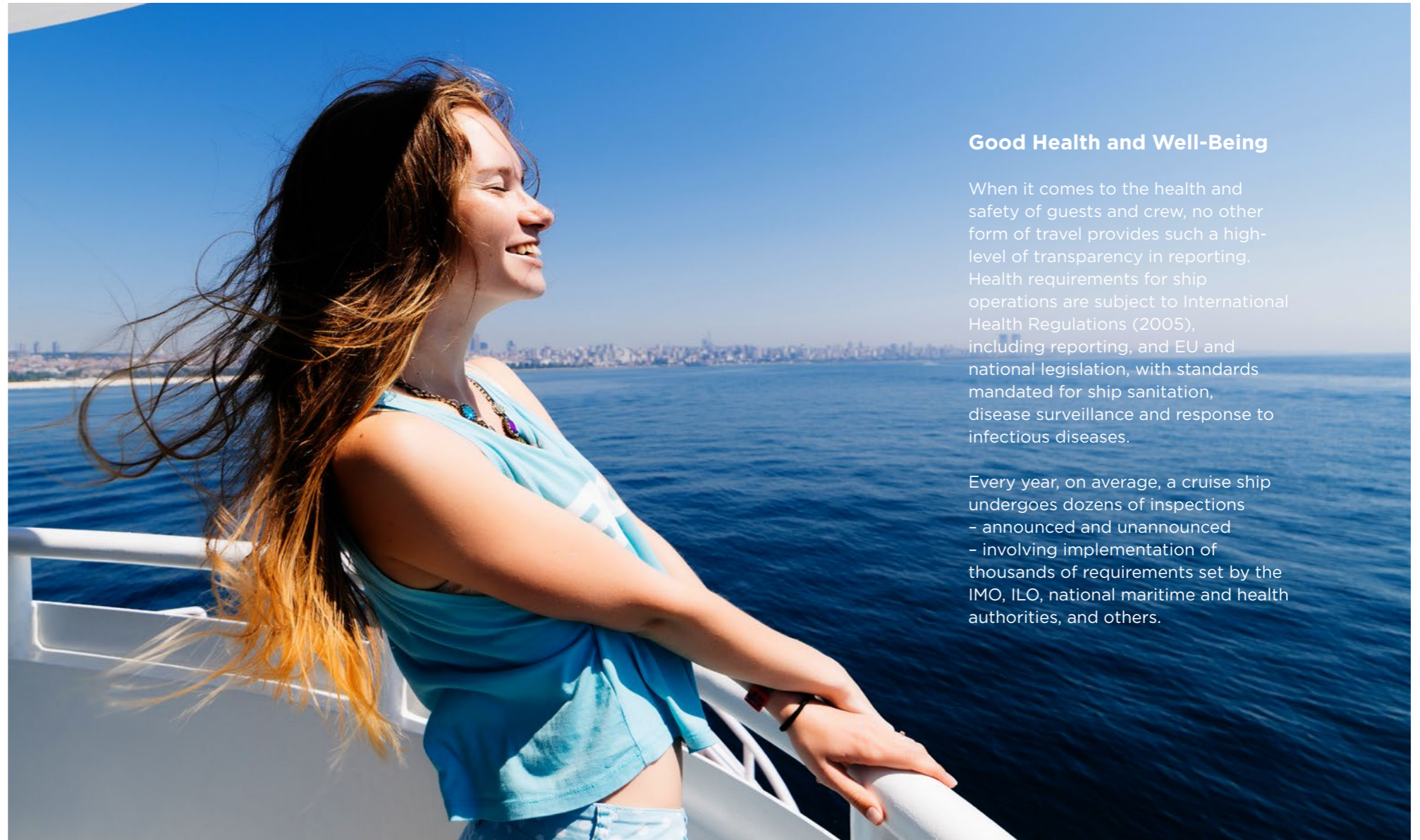
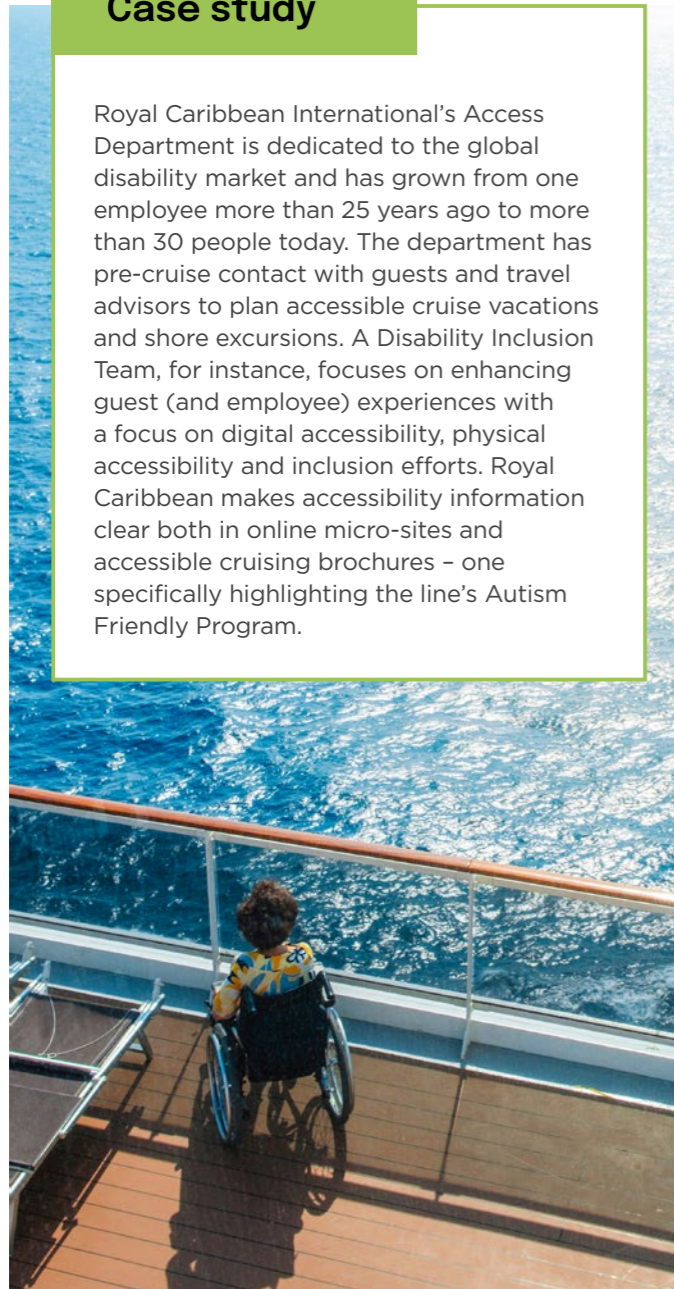
## Accessibility

The vast range of types of cruise experiences and variety of price points, even on the same ship and itinerary, appeal to a variety of travelers and make cruises available to a broad range of travelers. This is one reason that cruising appeals to group and multi-generational family travel; there is something for everyone on modern cruise ships.

Cruise is also one of the most accessible forms of travel for those with physical, neuro, sensory or other challenges. Accessibility is a growing need. In fact, 82% of travelers say that cruise is the only holiday option for people with limited mobility. In response, cruise lines are adding features such as more accessible cabins, automatic doors and wheelchair accessible shore excursions.

### Case study

Royal Caribbean International's Access Department is dedicated to the global disability market and has grown from one employee more than 25 years ago to more than 30 people today. The department has pre-cruise contact with guests and travel advisors to plan accessible cruise vacations and shore excursions. A Disability Inclusion Team, for instance, focuses on enhancing guest (and employee) experiences with a focus on digital accessibility, physical accessibility and inclusion efforts. Royal Caribbean makes accessibility information clear both in online micro-sites and accessible cruising brochures – one specifically highlighting the line's Autism Friendly Program.



## Good Health and Well-Being

When it comes to the health and safety of guests and crew, no other form of travel provides such a high-level of transparency in reporting. Health requirements for ship operations are subject to International Health Regulations (2005), including reporting, and EU and national legislation, with standards mandated for ship sanitation, disease surveillance and response to infectious diseases.

Every year, on average, a cruise ship undergoes dozens of inspections – announced and unannounced – involving implementation of thousands of requirements set by the IMO, ILO, national maritime and health authorities, and others.

In the United States, CLIA member cruise lines have a longstanding collaboration with the U.S. Centers for Disease Control and Prevention (CDC) through the Vessel Sanitation Program (VSP). The VSP conducts twice-a-year sanitation inspections on board any cruise ship sailing to or from a U.S. port. If a ship sails outside the U.S. for an extended period, it is reinspected when it returns to the U.S. Following each inspection, the VSP publishes a report on each individual cruise ship, with scores made public on the CDC website. There is no comparable federal program in the travel sector for hotels, planes or trains.



## Medical Facilities

CLIA members take a proactive role in addressing the quality of shipboard medical care for both guests and crew. Many cruise ship physicians are members of the American College of Emergency Physicians (ACEP). In addition, CLIA oceangoing cruise lines worldwide carrying 100 or more persons on board and traveling in international waters, agree by policy, as a condition of CLIA membership, to meet or exceed ACEP's guidelines for cruise ship medical facilities, staffing, equipment and procedures.

Medical facilities on ships provide emergency medical care. The medical team stabilises patients and/or initiates diagnostic and therapeutic intervention and facilitates the evacuation of seriously ill or injured patients, when deemed necessary by cruise ship physicians.

Cruise lines also operate with appropriate public health measures to mitigate the introduction and/or spread of infectious illnesses on board – with both prevention and response protocols.





Cruise ships travel to a variety of places around the world, and CLIA member cruise lines work closely with destinations and ports on sustainable tourism initiatives with the mutual objective of preserving for future generations the integrity, cultural heritage and beauty of the world's most treasured vacation spots.

Cruise benefits communities beyond what passengers spend on shore during a port visit. In fact, in addition to hotel stays in port communities before and after they cruise, more than 6 in 10 travelers (63%) who have taken a cruise say they have returned to a destination they first visited on a cruise ship.

06

# Destinations



11 SUSTAINABLE CITIES AND COMMUNITIES



15 LIFE ON LAND





Cruise travelers generate economic benefits before, during and after each sailing.

### Sustainable Communities

CLIA member cruise lines are dedicated to preserving the local culture heritage and way-of-life at the destinations they visit. Cruise tourism is different than other types of travel in that it is tourism that can be managed.

The industry cooperates with community organisations and stakeholders at ports and destinations around the world to carefully manage tourist volumes. Ship arrival and departure schedules are established with ports up to three years in advance and most passengers participate in shore excursions organised by the cruise lines with local providers.

CLIA and our cruise line members are helping to develop a methodology, in conjunction with many respected third parties and industry bodies, such as the United Nations World Travel Organization (UNWTO), World Travel & Tourism Council, and the Global Sustainable Tourism Council, that will help port cities analyse the causes of overcrowding and find solutions.

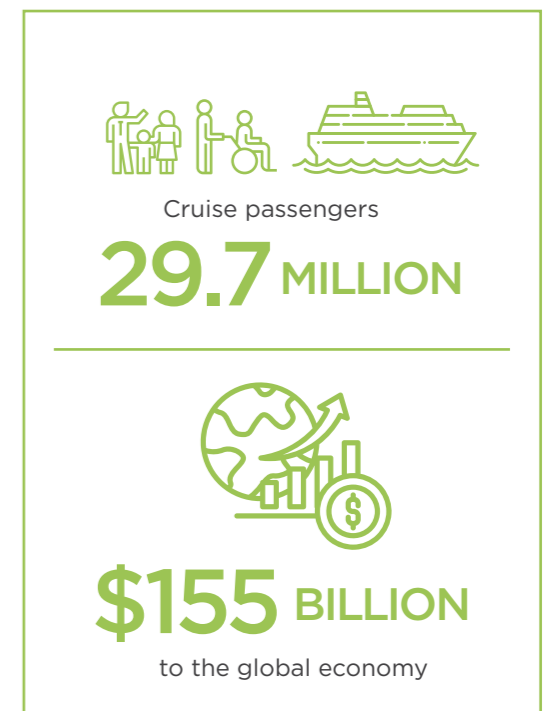


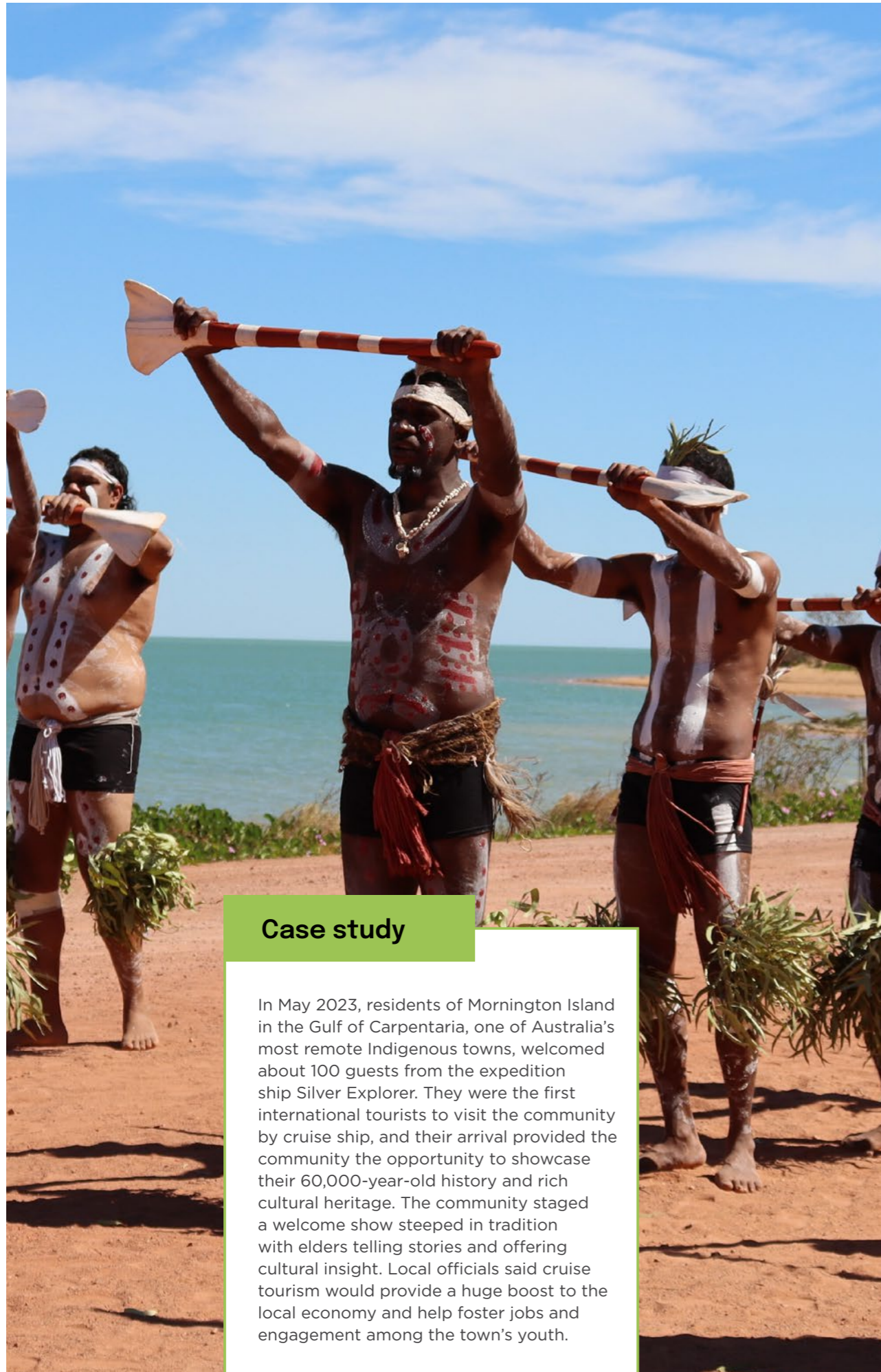
### Economic and Social Impact

The cruise industry has a significant positive economic impact on the places ships visit. Small coastal communities around the world benefit from the cruise industry bringing in visitors to support local travel enterprises and provide jobs. Cruise travelers generate economic benefits before, during and after each sailing.

In 2019, with passenger volumes of 29.7 million cruise passengers, the cruise industry contributed \$155 billion to the global economy, 1.2 million jobs worldwide, and \$50 billion in wages. In 2023, the cruise sector is expected to move closer to 2019 levels, with passenger volume forecast to reach 27 million to 33 million cruisers globally.

In Europe, cruise contributes significant economic impact, in large part attributable to the fact that 98% of cruise ships are built in Europe.





### Case study

In May 2023, residents of Mornington Island in the Gulf of Carpentaria, one of Australia's most remote Indigenous towns, welcomed about 100 guests from the expedition ship Silver Explorer. They were the first international tourists to visit the community by cruise ship, and their arrival provided the community the opportunity to showcase their 60,000-year-old history and rich cultural heritage. The community staged a welcome show steeped in tradition with elders telling stories and offering cultural insight. Local officials said cruise tourism would provide a huge boost to the local economy and help foster jobs and engagement among the town's youth.



Every **24** CRUISERS

worldwide supports one full-time equivalent job



Cruisers spend an average of

**\$750** USD

per passenger in port cities over the course of a typical seven-day cruise



More than

**6 IN 10**

who have taken a cruise say that they have returned to a destination that they first visited via cruise ship

### Community Engagement

CLIA member cruise lines are committed to being good partners with the communities that member ships visit.

Collaborative and sustainable tourism initiatives led by the cruise industry, destinations, ports and other organisations are in place to achieve mutual objectives, such as preserving the integrity, cultural heritage and beauty of cherished places for travelers in future generations.

### The Cruise Industry's Economic Impact is far-reaching



#1 Services and Government



#2 Transportation



#3 Wholesale & Retail Sales



#4 Manufacturing



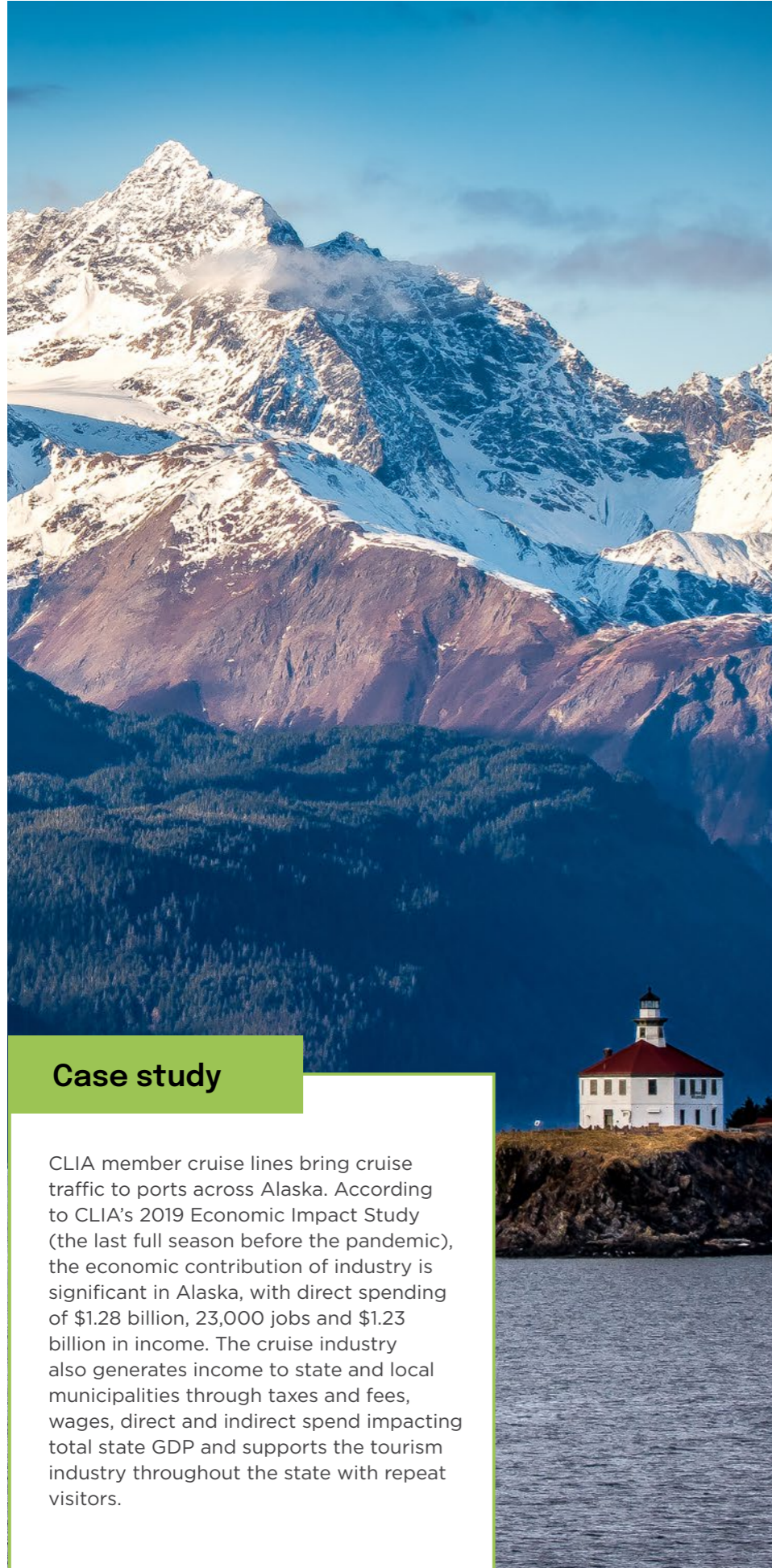
#5 Finance, Insurance & Real Estate (FIRE)



#6 Agriculture, Utilities & Construction

This includes pioneering work on sustainable managed tourism initiatives in Juneau, North America; Dubrovnik, Croatia; Santorini, Greece and Palma de Mallorca, Spain.





### Case study

CLIA member cruise lines bring cruise traffic to ports across Alaska. According to CLIA's 2019 Economic Impact Study (the last full season before the pandemic), the economic contribution of industry is significant in Alaska, with direct spending of \$1.28 billion, 23,000 jobs and \$1.23 billion in income. The cruise industry also generates income to state and local municipalities through taxes and fees, wages, direct and indirect spend impacting total state GDP and supports the tourism industry throughout the state with repeat visitors.

### Case study

In Rio de Janeiro, cruise passengers may join a walking tour to explore the history of the area known as "Little Africa," and learn about the legacy of the African diaspora in Brazil. The four-hour tour explores the tragic history of the port zone and what was the largest slave market in the world, recognised as a UNESCO World Heritage Site. At the same time, the tour celebrates participation of Black people in the Brazilian national identity highlighting, for instance, the cultural significance of Samba music and dance, and important Black public figures. It is an experience that connects the past and present.





**Case study**

CLIA and the city of Dubrovnik have partnered since 2019 when we signed a Memorandum of Understanding to work together towards sustainable tourism management. Given the high concentration of visitors in a relatively limited city area, such as the UNESCO World Heritage site of Dubrovnik's Old Town, it was important to improve communications with cruise companies and introduce more efficient organisation on the ground. Concrete measures have included careful planning of cruise arrivals and departures resulting in better tourism flows for the benefit of residents and visitors.

**Local Sourcing**

Cruise lines are working with organisations such as the Marine Stewardship Council, the Aquaculture Stewardship Council, and local organisations to source food responsibly, prioritising local sourcing of food and other supplies. A goal is reducing the carbon footprint of the supply chain by reducing the distance food and supplies travel to ships. We support local businesses and communities and, as a result, help improve the lives and quality of life in the destinations our cruise ships visit.



**Case study**

In 2022, Holland America Line was awarded Responsible Fisheries Management (RFM) certification, making it the first cruise line to achieve this distinguished credential by serving only fresh, certified sustainable and traceable wild Alaska seafood on its ships in Alaska. In September 2023, the cruise line announced it was going global with its fresh fish program and would engage a network of 60 ports to source and serve 80 types of fresh fish in its restaurants. The commitment is: port to plate in less than 48 hours. Guests will be offered fresh fish and other ingredients native to the regions where they are cruising.

# Because shore excursions are locally sourced, they create jobs that benefit local communities.

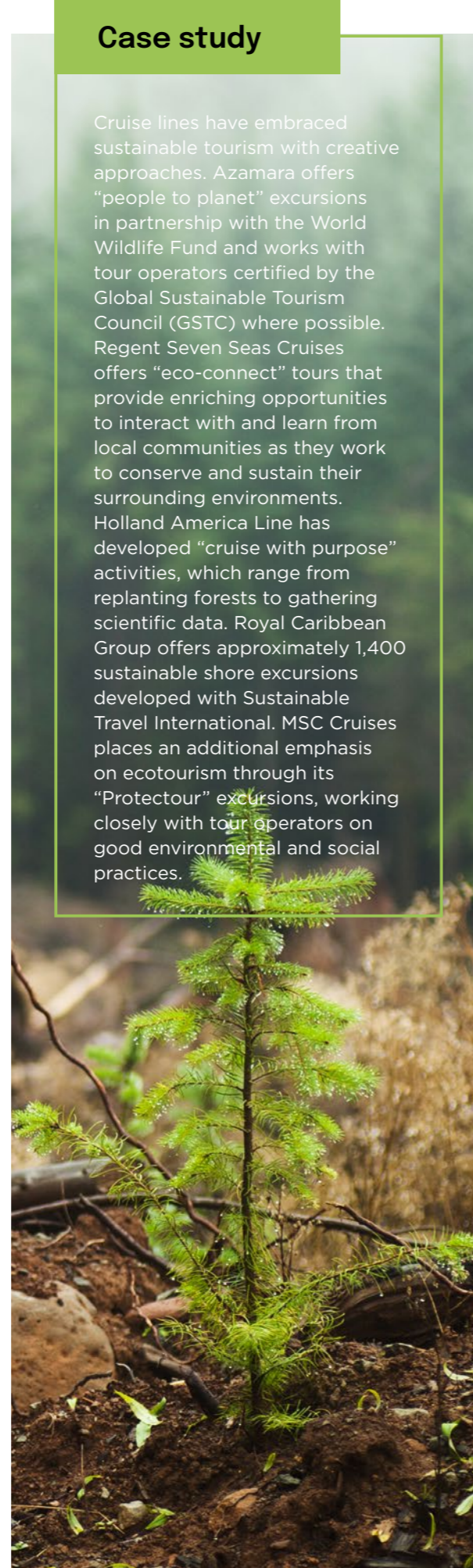
## Sustainable Shore Excursions

Many cruise lines offer a variety of sustainable and eco-friendly shore excursion programs and are pursuing sustainable tour excursion certification with respected conservation organisations based on the GSTC criteria. The GSTC criteria are organised around four main themes: effective sustainability management, maximising social and economic benefits for the local community, enhancing cultural heritage, and reducing negative impacts to the environment.

CLIA has partnered with GSTC and cruise destinations on sustainability assessments for popular destinations such as Corfu and Heraklion in Greece to fulfill the cruise industry's commitment to responsible travel.

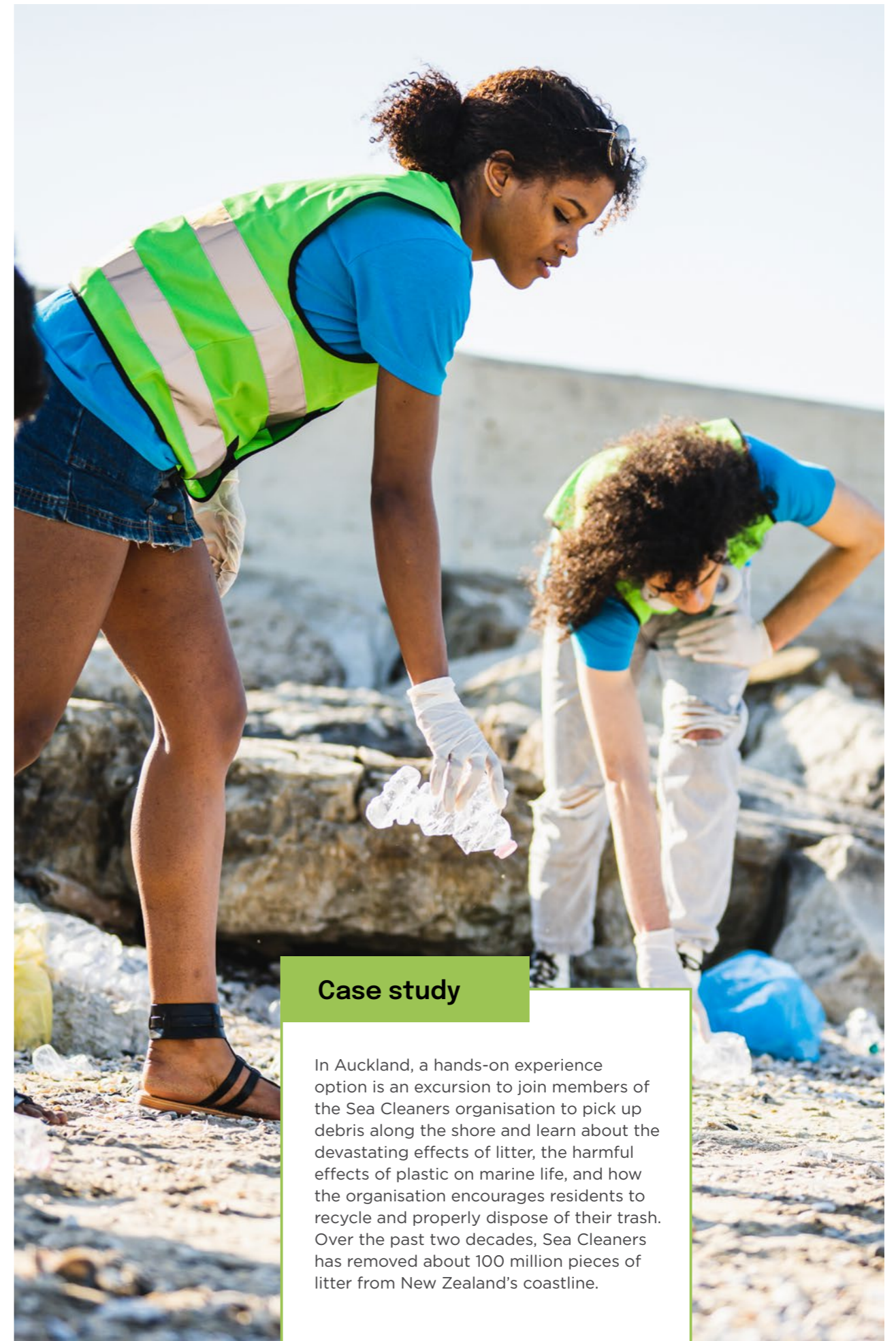
In addition, cruise lines have developed a variety of responsible, sustainable and eco-friendly shore excursion initiatives through partnerships with respected conservation organisations, such as the World Wildlife Fund and the UNESCO World Heritage Centre.

The wide range of sustainable shore excursions include those that take travelers to national parks, wildlife rehabilitation centers, biodynamic farms and sustainable businesses, as well as support species and habitat protection. Because shore excursions are locally sourced, they create jobs that benefit local communities.



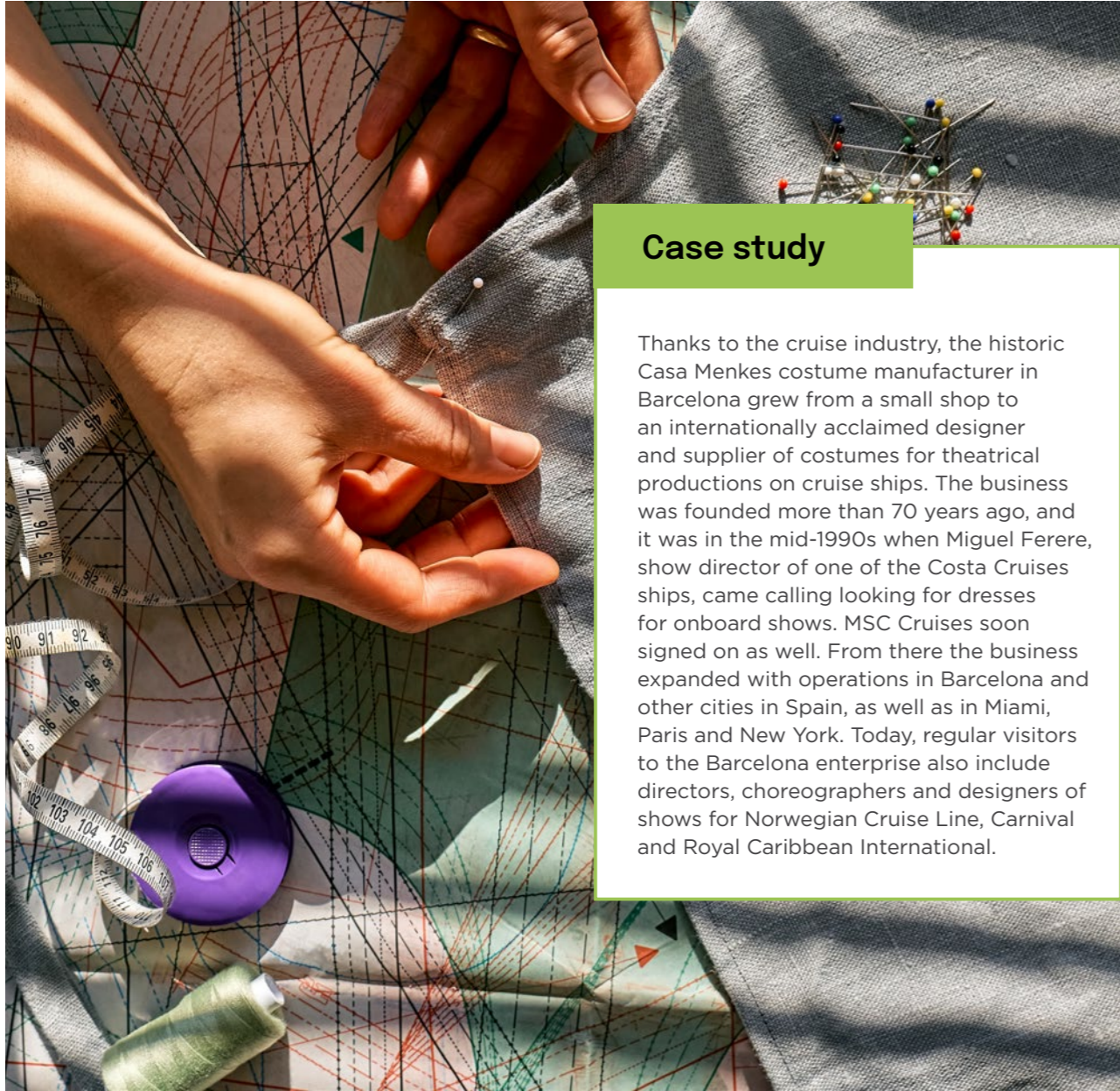
### Case study

Cruise lines have embraced sustainable tourism with creative approaches. Azamara offers “people to planet” excursions in partnership with the World Wildlife Fund and works with tour operators certified by the Global Sustainable Tourism Council (GSTC) where possible. Regent Seven Seas Cruises offers “eco-connect” tours that provide enriching opportunities to interact with and learn from local communities as they work to conserve and sustain their surrounding environments. Holland America Line has developed “cruise with purpose” activities, which range from replanting forests to gathering scientific data. Royal Caribbean Group offers approximately 1,400 sustainable shore excursions developed with Sustainable Travel International. MSC Cruises places an additional emphasis on ecotourism through its “Protectour” excursions, working closely with tour operators on good environmental and social practices.



### Case study

In Auckland, a hands-on experience option is an excursion to join members of the Sea Cleaners organisation to pick up debris along the shore and learn about the devastating effects of litter, the harmful effects of plastic on marine life, and how the organisation encourages residents to recycle and properly dispose of their trash. Over the past two decades, Sea Cleaners has removed about 100 million pieces of litter from New Zealand's coastline.



### Case study

Thanks to the cruise industry, the historic Casa Menkes costume manufacturer in Barcelona grew from a small shop to an internationally acclaimed designer and supplier of costumes for theatrical productions on cruise ships. The business was founded more than 70 years ago, and it was in the mid-1990s when Miguel Ferere, show director of one of the Costa Cruises ships, came calling looking for dresses for onboard shows. MSC Cruises soon signed on as well. From there the business expanded with operations in Barcelona and other cities in Spain, as well as in Miami, Paris and New York. Today, regular visitors to the Barcelona enterprise also include directors, choreographers and designers of shows for Norwegian Cruise Line, Carnival and Royal Caribbean International.



© EscalaBcn

### Online Sustainability Toolkit

CLIA has produced an online interactive resource showing how the cruise industry is advancing its sustainability agenda. The toolkit contains information that can be downloaded including reports, statistics, maps, posters and infographics. Launched in March 2023, the toolkit currently is available in English, French, German, Italian, Norwegian, Brazilian Portuguese and Spanish.

The cruise industry supports 1.2 million jobs worldwide. As well as featuring the various environmental innovations being introduced on board ships, the toolkit is a way to share stories and to raise awareness with local communities and the wider public about how cruising is an integral part of societies and economies. The site includes good practice examples of cooperation between cruise lines, business organisations, ports and local authorities.

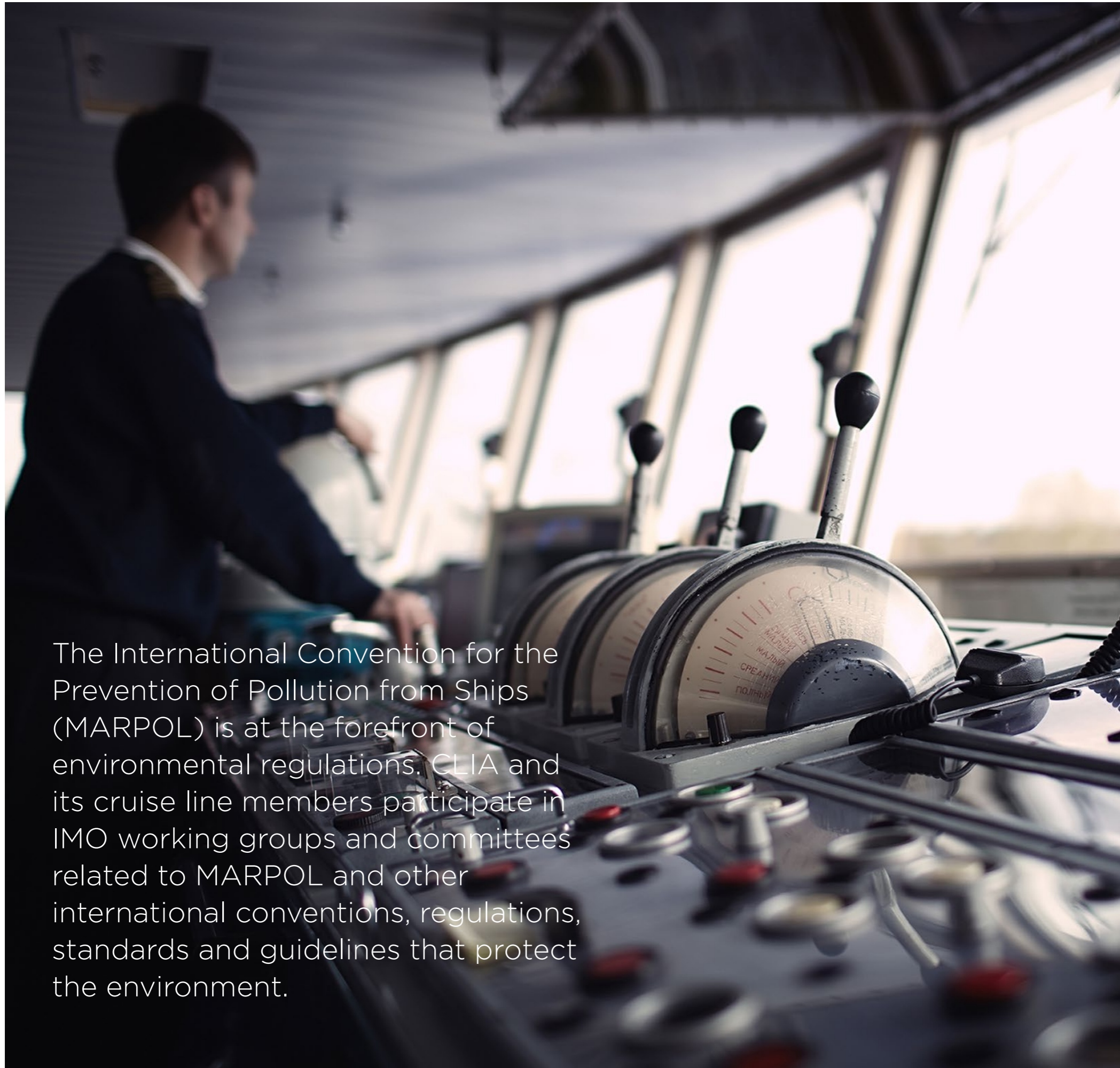


[www.cruiseinfohub.com](http://www.cruiseinfohub.com)



[www.cruising.org](http://www.cruising.org)





The International Convention for the Prevention of Pollution from Ships (MARPOL) is at the forefront of environmental regulations. CLIA and its cruise line members participate in IMO working groups and committees related to MARPOL and other international conventions, regulations, standards and guidelines that protect the environment.



**National Implementation of IMO Requirements by Flag and Port States**

While the maritime industry operates under a comprehensive set of regulations established by the IMO, international conventions must be implemented and enforced through national legislation on the part of member states. Accordingly, national laws are enforced by member state regulatory agencies for ships that fly their nation's flag (Flag State requirements). In addition, foreign vessels that call in a nation's ports are subject to Port State Control (PSC) which empowers the country being visited to verify compliance with international standards. Typically, this takes the form of announced and unannounced inspections.

National Port State Control authorities have long coordinated on a regional basis to share information on the performance of flag states, classification societies and ship types. For example, the Paris MOU consists of 27 maritime administrations which share information on ship compliance principally in the Atlantic and Mediterranean. Likewise, the Tokyo MOU consists of 21-member administrations primarily focused on the Pacific. Other PSC-MOUs are in place in various other regions of the world. In the U.S., the U.S. Coast Guard publishes annual performance data in its Port State Control Annual Reports. These types of reports support risk-based PSC regimes and form an important layer in ensuring compliance by global shipping.

Should a vessel fail to meet international or national standards during a port state control examination, it could be subject to detention in port until the deficiencies are remedied.

### Classification Societies

Classification societies are nongovernmental organisations that conduct inspections of cruise ships under construction and throughout their lifecycles, ensuring compliance with the many applicable rules and requirements. Most major classification societies are specifically recognised and accredited by individual IMO member states to perform flag state inspections on their behalf and to issue the required certifications. The verification regime comprises initial plan approval and onboard surveys, as well as surveys held at periodic intervals to confirm compliance is maintained.

There are multiple members of the maritime community contributing towards comprehensive standards, including safety, security, crewmember protections and environmental practices. These include flag states, port states, national coast guards, maritime administrations, national health authorities, national environmental organisations and customs and border protection.



### Partnerships

On behalf of its cruise line members, CLIA participates in and partners with global and regional organisations to advance sustainable cruise tourism and maritime operations including:

**Global:**

- + UN World Tourism Organization
- + UN International Maritime Organization
- + UN International Labor Organization
- + World Travel and Tourism Council
- + World Ocean Council
- + Destinations International
- + Global Sustainability Tourism Council
- + United for Wildlife Transport Taskforce
- + Women's International Shipping and Trading Association WISTA
- + International Chamber of Shipping, including development of a Shipping Energy Commission to facilitate collaboration on research and development and cross-sector information sharing.
- + Global Maritime Forum as a supporting organisation for the Getting to Zero Coalition Call to Action for Shipping Decarbonisation
- + Roundtable on Sustainable Biomaterials

**Regional:**

- + North America Marine Environmental Protection Association (NAMEPA)
- + Caribbean Marine Environment Protection Association (CARIBMEPA)
- + US Travel Association
- + Pacific Northwest to Alaska First Mover Initiative partners and stakeholders
- + European Tourism Manifesto Alliance
- + European Sustainable Shipping Forum
- + European Commission Renewable and Low Carbon Fuels Value Chain Industrial Alliance

CLIA members are also involved with numerous partnerships at global and local levels.



## Mercy Ships

CLIA is proud to support Mercy Ships as our charity of choice, as it continues to deliver its life-transforming legacy to those in need. Since 1978, Mercy Ships has performed more than 105,500 surgeries and provided specialised mentoring and training opportunities for more than 49,000 professionals.

More than 40% of the world's population lives within 100 miles of the coast. Mercy Ships delivers state-of-the-art hospitals to port cities, providing life-transforming surgery and medical care for thousands of people without access to the type of care that Mercy Ships can provide.

Mercy Ships is a two-ship fleet, continuing to serve in Africa, and able to do more in each area of specialty, as well as training local professionals.

See [mercyships.org](https://mercyships.org) for more information.



© Mercy Ships

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- + CLIA's interactive sustainability toolkit: [www.cruiseinfohub.com](http://www.cruiseinfohub.com)





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