FOCUS ON **SUSTAINABILITY**

Holland America Line's sustainability efforts directly support Carnival Corporation's 2030 sustainability goals and 2050 aspirations in six focus areas, which were developed to align with the United Nations' Sustainable Development Goals:

CLIMATE ACTION

SUSTAINABLE TOURISM

CIRCULAR ECONOMY

GOOD HEALTH AND WELL-BEING

DIVERSITY, EQUITY AND INCLUSION (DEI) BIODIVERSITY AND CONSERVATION

Full details are available at www.CarnivalSustainability.com.

At Holland America Line, our legacy of onboard care extends to caring for the planet, and we are fully committed to these sustainability goals and aspirations. Our ships will increasingly become more efficient and our environmental impact will be less, because it is the right thing to do for our guests and for the planet.

OUR EFFORTS ENCOMPASS:



FOOD CONSUMPTION AND WASTE REDUCTION

We protect and preserve the oceans we sail upon through our commitment to sustainably sourced seafood, and by minimizing and responsibly managing our food waste



COMMUNITY INVOLVEMENT **AND SUPPORT**

We support the well-being of the people in the communities we touch and serve



EMBRACING CLEANER **ENERGY**

Our ships are governed by international treaties, as well as flag state, port state, and local laws and regulations regarding environmental protection and pollution prevention.



REDUCING AND RECYCLING

We strive to reduce as much solid waste as possible. Through thorough recycling and waste management practices and a focus on eliminating single-use plastics – we significantly reduce waste sent to landfills.



PRESERVING WATER RESOURCES

Protecting the health of the oceans is fundamental to our business model. Likewise. fresh water is critical to our shipboard operations, and preserving it is a priority.

Holland America Line acts on our duty to protect and preserve the oceans we sail upon through our commitment to sustainably sourced seafood, and by minimizing and responsibly managing our food waste.

SUSTAINABLE SEAFOOD



Holland America Line has been awarded Responsible Fisheries Management

(**RFM**) certification – making it the first cruise line to achieve this credential by serving only fresh, certified-sustainable and traceable wild Alaska seafood. RFM certified all six of our ships that sail to Alaska, following an independent audit.

• We partner with the Alaska Seafood Marketing Institute (**ASMI**) to highlight our leadership and commitment to sustainably sourced local seafood. The first formal partnership of its kind between ASMI, the state of Alaska, Alaska's fishing industry, and a major cruise line highlights our use of Alaska seafood exclusively on all ships serving the Great Land.

• We purchase more than **4,000 pounds** of locally sourced Alaska wild and sustainable seafood **per Alaska cruise**.

• All ships cruising in the Great Land exclusively serve certified-sustainable Alaska seafood.

BIODIGESTERS

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Holland America Line has 68 digesters installed across our fleet; more are planned by the end of 2022.
Biodigesters use oxygen, water and microorganisms to break down food waste, help reduce methane and carbon dioxide emissions, and reduce the demand on the ocean for food waste decomposition. Food waste biodigesters can be thought of as metal stomachs that reduce the volume of food waste prior to disposal:



CONSCIENTIOUS CONSUMPTION

With a goal to reduce food waste by **50%** per person by 2030, we encourage our shipboard employees to think about what they consume at mealtimes, using the slogan "feed your body, not the bin," and we measure food waste per ship against a baseline established in 2019.

DEHYDRATORS

4,000 LBS PER AK CRUISE

- Food waste dehydrators offer an alternate method of food waste processing that has the potential to reduce waste volume by 75%-95%.
- Food waste dehydrators are currently installed on four of our ships; the remaining seven ships are scheduled to have dehydrators installed in 2023.
- Dehydrators produce a stable, 90% dry inert biomass output, which is offloaded in port or consumed by onboard equipment.



We are committed to protecting the planet, and to supporting the well-being of the people in the communities we touch and serve.

Each year, Holland America Line ships visit more than **400** ports

with close to **I MILLION**guests and team members on board.

Our shipboard team members regularly participate in SERVICE PROJECTS

such as beach cleanups in the communities we visit.





We've been cruising to Alaska for 75 years:

 In order to access Glacier Bay National Park – a UNESCO World Heritage site

 every 10 years we complete a rigorous process that focuses on sustainability and safety.



We support LOCAL ECONOMIES and REDUCE OUR CARBON FOOTPRINT by buying locally.

• We require a **100% COMMITMENT**

to improving quality and accuracy from all vendors.

• We work with thousands of global suppliers every year, backed by reputational research and a thorough vetting process.

HALF MOON CAY



Our 1,700-acre private island in the Bahamas is also an international bird sanctuary.



Only **4%** of the island is developed.

To protect the natural environment, shore activities are designed to be low-impact.



ND SUPPOR

Holland America Line adheres to a stringent network of regulations. Our ships are governed by international treaties as well as flag state, port state, and local laws and regulations regarding environmental protection and pollution prevention.

We are committed to **DECARBONIZATION** and support the transition to **ALTERNATIVE FUELS AND TECHNOLOGIES**.



Our two newest ships – *Nieuw Statendam* and *Rotterdam* – are fitted with **LED LIGHTING** throughout. Our other nine ships have had their halogen lights replaced with LED lighting in all public areas.

ADVANCED AIR QUALITY SYSTEMS (AAQS), also known

as Exhaust Gas Cleaning Systems (EGCS), significantly reduce sulfur compounds and particulate matter, including black carbon, from a ship's engine exhaust.

- AAQS improve air emissions, reduce greenhouse gas emissions when compared to using marine diesel fuel, meet or exceed environmental regulatory standards, and support sustainable operations in the global shipping industry.
- Environmental benefits include a reduction of sulfur dioxide in the atmosphere.

We've set a goal to **REDUCE OUR CARBON EMISSION INTENSITY**

20% by 2030, relative to our 2019 baseline.

Engine exhaust

nas in

Sea water



Wash water

filtration unit

reated

/ash

We utilize SHORE POWER

to reduce CO₂ emissions in port. Shore power works by plugging the ship into a dockside power source.

• The power source delivers energy to the ship to run all electrical equipment on board without using the ship's engines.



CLEANER

ENERGY

- Nine of our 11 ships are equipped to utilize shore power, and the remaining ships will be equipped by summer 2023.
- We can connect in more than 20 ports worldwide, with an additional 17 ports actively constructing shore power facilities or investigating the option to do so.

By 2050, we aspire to achieve **NET-CARBON-NEUTRAL**

ship operations.



Holland America Line[®] **FOCUS ON SUSTAINABILITY**

Holland America Line strives to reduce as much solid waste as possible. Crew members separate waste types at the source, and each ship has a dedicated Recycling Center staffed by trained crew to separate waste even further prior to offload. Through thorough sorting and waste management practices - and a focus on eliminating singleuse plastics - we significantly reduce waste sent to landfills.

· Plastic cold-beverage cups have been replaced by cups produced from plant-based, compostable materials.

Plastic hot-beverage cups have been replaced by paper-

Despite the pandemic and the need to continue to use some single-use items for health and sanitation reasons, we remain focused on **ELIMINATING**

AND REDUCING SINGLE-USE PLASTIC ITEMS and

replacing them with more sustainable alternatives throughout the fleet.



- We use only paper bags in our retail shops.
- We have eliminated plastic garbage bags in all guest areas, including waste-can liners in staterooms and crew cabins. We do not use plastic bags to line garbage cans in kitchens, either. Rather, all refuse is collected in paper bags or bins for transfer to disposal areas. This model was developed by Holland America Line, and it has been so successful that our sister brands within Carnival Corporation are studying it for their own implementation.

Our WASTE MANAGEMENT

approach focuses on reducing the volume of waste we generate.

We offload recyclables in ports with recycling facilities

Where we are able, we donate items such as furniture, gym

Our assessment program for waste vendors helps ensure that items are being properly managed once they leave our ships

> This same program helps us identify ports where there are certified recycling opportunities, allowing us to strategically plan the offloading of recyclables









- We have eliminated single-use amenity bottles (shampoo, conditioner, body wash, etc.) and installed refillable dispensers.
- · We have eliminated single-use food containers and instead provide items in bulk dispensers for things such as ketchup, mustard, mayonnaise, salt and pepper, yogurt, and more.

REDUCING

REC

CLING

usable goods to the communities we visit - this routinely includes equipment, and electronics, and can even include safety materials such as life preservers, fire extinguishers, or flares

Fresh water is critical to our shipboard operations, and preserving it is a priority for Holland America Line. Likewise, protecting the health of the oceans we sail upon is fundamental to our business model.

WATER PRODUCTION

We obtain fresh water from two sources:

PRODUCED WATER



Seawater we either evaporate and re-condense, or seawater that

undergoes reverse osmosis, which we treat with minerals and chlorine (this makes up the vast majority of water [generally greater than 85%] used on our ships.

BUNKERED WATER

Water that is purchased from port communities and stored in designated potable-water

holding tanks. We only bunker water from ports where we know water is plentiful and high in quality.

WASTEWATER HANDLING

Holland America Line's rules regarding wastewater discharge often exceed local, national, and international laws and regulations.



Wastewater is classified into three broad categories:

GREY WATER is wastewater from stateroom sinks and showers, galleys, salons, and laundry facilities. It represents the largest volume of wastewater our ships generate.

BLACK WATER is wastewater from toilets and medical facility sinks.

To treat **BILGE WATER**, we use a cascade treatment

system that circulates and recirculates fluid through

BILGE WATER is wastewater that collects in the ship's bilge, and it can contain oil from engine equipment.

ONBOARD ADVANCED WASTEWATER TREATMENT SYSTEMS (AWWTS) remove contaminants from black

increasingly efficient oil-water separators, which utilize and grey water and convert centrifugal force and the natural separation properties of oil N Water that is returned to the sea it into an effluent that can be and water to remove the oil passes through several stages safely returned to the water cycle prior to discharge, in from the liquid. Once the oil order to be compliant with minimum impact on the content is reduced to with multiple requirements environment. below 15 parts per million, we measure the oil A final filtration content one final time and disinfection before discharging the Large particles stage often uses UV are filtered out light to deactivate any A liquid per local regulations. The discharged remaining bacteria liquid is at least and pathogens equal in quality to the effluent discharged 1.5 by most municipal WATER drops per wastewater treatment plants gallon Bioreactors 15 further reduce parts per organic matter and million suspended solids