

ROYAL CARIBBEAN GROUP TRANSFORMS WASTE MANAGEMENT IN THE CRUISE INDUSTRY, HELPING PROTECT THE OCEANS

The cruise company's newest ships will convert waste to energy on board, expand on its Green Hubs program and use technology to take a bite out of food waste

MIAMI – July 10, 2023 – Royal Caribbean Group (NYSE: RCL) is building on its industry-leading waste management practices by introducing the next generation of technology to make its way to the high seas. These tools, from waste-to-energy systems, food waste applications and an expanded network of green hubs are a result of the cruise company's relentless drive to deliver the best vacation experiences responsibly.

Debuting this year, on two of the cruise company's newest ships, will be the cruise industry's first systems to turn solid waste directly into energy onboard.

"I am proud of Royal Caribbean Group's drive to [SEA the Future](#) and be better tomorrow than we are today," said Jason Liberty, president and CEO, Royal Caribbean Group. "Pioneering the first waste to energy system on a cruise ship builds on our track-record of waste management and furthers our commitment to remove waste from local landfills and deliver great vacation experiences, responsibly."

Solid Waste to Energy at Sea

The systems, Microwave-Assisted Pyrolysis (MAP) and Micro Auto Gasification (MAG), debuting respectively on Royal Caribbean International's [Icon of the Seas](#) and Silversea Cruises' [Silver Nova](#), will take waste on board and convert it into synthesis gas (syngas) that the ship can directly use as energy. Much like land-based waste-to-energy facilities, the result is repurposing waste in an efficient and sustainable way. An additional bioproduct of the system, biochar, can also be used as a soil nutrient.

Reducing Food Waste

Royal Caribbean Group is also looking at waste management from start to finish. Including its plans to reduce food waste across the fleet by 50% by 2025. To do so, the cruise company is implementing initiatives across its brands including:

- Developing a proprietary platform to monitor food supply and accurately estimate how much food should be produced, prepped and ordered on a given day.
- Using artificial intelligence (AI) to adjust food production in real time.
- Introducing a dedicated onboard food waste role to monitor and train crew members.
- Tracking guest demand for specific menu items and adjusting menu preparation and ordering accordingly.
- Introducing a food waste awareness campaign in the crew dining areas fleet wide.

To date, Royal Caribbean Group has achieved a 24% reduction in food waste by focusing on the front end of the food system, which prevents and addresses many of the main causes of food waste, including inventory management and over-preparing.

Expanding Green Hubs

Since the company's first environmental initiative, Save the Waves, aimed at ensuring no solid waste goes overboard, Royal Caribbean Group has worked diligently to increase accountability and strengthen responsible waste management practices. To do so, it developed Green Hub, a capacity-building program to identify waste vendors in strategic destinations that has helped divert 92% of its waste from landfills. Since its start in 2014, the program has grown to 33 ports worldwide.

Now joining the Green Hub program is the Galapagos Islands, where Silversea became the first operator to gain certification in environmental management by diverting all waste from landfill. Initiatives like this allow Royal Caribbean Group to continue to safeguard the delicate ecosystem of the Galapagos for future generations.

Championing the Environment

With a sustainability journey that began over 30 years ago, Royal Caribbean Group has remained steadfast in its commitment to innovate, and advance, the solutions necessary for a better future. Building on a robust portfolio of technologies that improve energy efficiency, water treatment and waste management, incorporating waste-to-energy systems is an extension of the company's commitment to reach beyond the expected and SEA the Future to sustain the planet, energize the communities in which it operates and accelerate innovation.

To learn more about how Royal Caribbean Group connects people to the world's most beautiful destinations while respecting and protecting ocean communities and ecosystems visit www.royalcaribbeangroup.com/SEAtheFuture.

Media Contact:

corporatecommunications@rccl.com

###

About Royal Caribbean Group

Royal Caribbean Group (NYSE: RCL) is one of the leading cruise companies in the world with a global fleet of 64 ships traveling to approximately 1,000 destinations around the world. Royal Caribbean Group is the owner and operator of three award winning cruise brands: Royal Caribbean International, Celebrity Cruises, and Silversea Cruises and it is also a 50% owner of a joint venture that operates TUI Cruises and Hapag-Lloyd Cruises. Together, the brands have an additional 10 ships on order as of March, 31, 2023. Learn more at www.royalcaribbeangroup.com or www.rclinvestor.com.