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**CELEBRITY CRUISES' SUSTAINABILITY PRACTICES NET TOP HONORS**

***Annual awards designate leading premium cruise line "best in green"***

**MIAMI – October 27, 2010** – Top-rated premium cruise line Celebrity Cruises continued its winning streak last week, taking top honors in The Greater Miami Chamber of Commerce's "Sustainable South Florida Awards." Designed to honor South Florida businesses making an impact in the community with the development of sustainable practices, products and services, Celebrity was honored as the best in the highly competitive "Green Practices" category.

Among the accomplishments and practices that led judges to honor Celebrity Cruises:

**First to implement solar technology**

The flagship of Celebrity Cruises' stylish, new Solstice Class fleet, the 2,850-guest *Celebrity Solstice*, which launched in November 2008, became the industry's first ship to use solar energy. Since then, every successive ship in the Solstice Class fleet also has incorporated the technology, through more than 200 solar panels divided into five areas on each ship.

**Breakthrough hull design**

The hull design of *Celebrity Solstice* marked the first time Celebrity built a ship from the hull up, versus designing the guest spaces and building a hull around those spaces, all in the interest of achieving the most energy-efficient hull. Each successive Solstice Class ship has been built in the same way.

More than 90 tests were conducted to continuously improve the hull design and optimize the center of buoyancy to reduce resistance and burn less fuel, resulting in fewer emissions.

The longitudinal center of buoyancy – the ship's fore and aft pivot point – was closely assessed to ensure optimal cruising speed, comfort and fuel consumption. It was moved forward in the final hull design to create smaller angles in the aft area of the ship, resulting in a smoother flow of water to the propeller.

Similarly, the fore-body of each ship was optimized to improve how it glides through the water and to minimize bow waves, again, reducing drag and improving fuel efficiency.

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### **Innovative hull coating**

Celebrity applied a special silicon coating to the entire underwater hull area to reduce frictional resistance and trim fuel consumption. This coating also inhibits marine growth such as barnacles and algae on the hull, and prevents a breakdown of paint or corresponding discharges of paint chips into the ocean. The silicon coating has been applied to every ship in the Solstice Class fleet, as well as all other Celebrity ships.

The line also analyzed all major openings on its flagship *Celebrity Solstice*, and followed suit with her sister ships, to further minimize drag, with welds ground down to be flush with the smooth surface.

The propeller blades represent an evolution in efficiency, too, achieving low levels of vibration and noise. Each blade on each Solstice Class ship's five-blade propeller is smaller, creating a slight gain in speed, since smaller blades result in less resistance when moving through the water.

### **Energy-efficient lighting**

Celebrity began transitioning from higher wattage halogen and incandescent bulbs to longer-lasting fluorescent and LED (light emitting diode) lights three years ago, since halogen and incandescent lights are hotter and consume more energy. Conversely, fluorescent and LED bulbs require less energy and generate less than 50 percent of the heat of the bulbs previously used, resulting in reduced energy consumption and more efficient air conditioning due to cooler bulbs.

### **Energy-efficient glass**

The high-glazed glass of each Solstice Class ship's windows reduces heat transfer into staterooms and public areas, reducing energy required for air-conditioning. The glazing still allows for natural light to enter the ship, but filters out 99.9 percent of UV rays. It also protects the ship's interiors and furnishings from sun damage, which helps cut back on future waste.

State-of-the-art window film has been installed on all other ships in the Celebrity fleet to achieve the same benefits.

### **Advanced Wastewater Purification (AWP)**

Celebrity has installed advanced wastewater purification (AWP) systems on all ships – and its Solstice Class ships have had it from their inception. These systems are capable of treating all wastewater streams onboard – including grey and black water – and restoring it to virtually drinking-water quality before discharging. It's a costly endeavor, with no real financial return, but it is inspired by Celebrity's commitment to going above and beyond compliance, and minimizing its environmental footprint.

### **Energy-efficient water consumption**

Celebrity also has installed a new type of showerhead that conserves water while providing similar flow characteristics, via air mixed with water.

Celebrity's Solstice Class ships house low-energy reverse osmosis plants (water makers) to produce fresh drinking water. The ships also have reduced-flow dishwashers and low-consumption laundry equipment.

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### **Propulsion system**

With propulsion utilizing about 50 percent of the ship's overall fuel consumption, Celebrity explored multiple methods for improving fuel efficiency. As a result, Celebrity's Solstice Class ships are equipped with common rail diesel engines, which optimize combustion and combine lower fuel consumption and lower emission levels at all engine loads.

On Celebrity ships preceding the Solstice Class fleet, innovations include recycling fuel from fuel-filter changes, and reducing the number of water pumps in operation, all without affecting the guest experience.

### **Gas turbines**

Celebrity's four Millennium-class ships were built with gas turbine engines, which remain state-of-the-art when it comes to low emissions; but, are not as fuel-efficient as diesels. So, to maximize fuel efficiency and minimize greenhouse gas emissions, Celebrity installed auxiliary diesel engines on its Millennium-class ships, yielding a significantly greater ability to increase propulsion efficiency and reducing energy waste at dockside.

### **Engaging guest education**

Celebrity has even taken its key sustainable practices center stage in its fleetwide onboard program, "Oceans Ahead." A series of presentations led by Celebrity's shipboard Environmental Officers, Oceans Ahead engagingly educates cruisers about the innovative approaches Celebrity has taken to minimize its carbon footprint, and its ongoing commitment to go above and beyond compliance.

Among the topics currently included in Celebrity's Oceans Ahead program are:

- **The Secrets of Ship Navigation:** How do Celebrity Cruises' Captains and bridge officers chart the ship's course each day, and maneuver around storms and sensitive marine areas? Guests attending this lecture gain insight into that and more.
- **How Our Ships Move:** Guests participating in this lecture learn about the forms of power generated onboard, such as Celebrity's industry-first application of solar technology and the many energy efficiencies implemented across the fleet.
- **Onboard Recycling: An Exclusive Look:** Guests attending this session get rare, behind-the-scenes insight into Celebrity's extensive recycling program, including aluminum, glass, and cardboard items.
- **Carbon Footprint 101:** What is a carbon footprint, and how do you measure it? This lecture also examines air emissions, Celebrity Cruises' footprint, and how to calculate an individual's impact on the environment, together with steps that can be taken to improve it.

Celebrity Cruises is designed for discerning cruisers, with modern, sophisticated environments, impeccable service, enriching and inspiring onboard programs, and award-winning cuisine. The ultimate in premium cruising, Celebrity sails in Alaska, Australia/New Zealand, Bermuda, California, Canada/New England, Europe, Hawaii, the Pacific Coast, Panama Canal, South America, and year-round in the Caribbean and the Galapagos Islands. Celebrity also offers immersive cruisetour experiences in Alaska, Australia/New Zealand, Canada, Europe and South America. Celebrity's mega-series of honors include being named the top mega-ship line in *Condé Nast Traveler's* annual Readers' Choice Awards (November 2009). Celebrity's fleet currently consists of 10 ships. Its \$3.7-billion investment in building five stylish Solstice Class ships between 2008-2012 represents the largest five-year investment in premium cruising. For more information, call your travel agent, dial 1-800-437-3111 or visit [www.celebritycruises.com](http://www.celebritycruises.com).