



THE SHIP: A FLOATING SMART CITY



COSTA TECHNOLOGIES

A structured path to good, healthy and sustainable nutrition on board of Costa ships

LNG-Powered Next Generation Cruise Ships

The ship: a floating smart city

3M

Accenture

Autogrill

B&W SPIG

Cisco

Coca Cola

Costa Crociere

DHL

Dow

DuPont

Ecolab

Enel

ERP

ExxonMobil

General Electric

Intesa San Paolo

Pirelli

DESCRIPTION

Costa Cruises' ships are some sort of smart cities: they are little worlds moving throughout the world. The complex context and the reduced spaces impose a continuous process of optimization and containment, so as to minimize impacts and in a perspective of enabling programs of circular economy. It goes without saying that Company's commitment towards environment and climate change is strong. Costa Cruises is well aware of the strategic importance of sustainability for the business and the extent to which it can contribute to the long-term creation of value for the Company and its stakeholders. The integration of sustainability into Costa's corporate culture and operations is increasing together with the conviction that a cruise line does not just take tourists from place to place but has a far wider role forging links between people, economies and cultures and generating a positive impact on the communities with which it interacts. And this is possible, according to the Company, only by means of the involvement of all the relevant interested parties, such as ships guests and local organizations in and around ports of call: Costa stands at the center of a multi-stakeholder systemic approach, with the awareness that this is the way forward towards a sustainable future for the cruise industry. The main areas of intervention on board are energy efficiency, waste management and the production, use, recycling and disposal of water.

Energy Efficiency

Ship propulsion and operations account for almost all shipboard energy consumption and direct emissions of CO2. Efforts to reduce consumption of shipboard fuel concentrate mainly on optimization of vessel speed and course adjustment, as well as on implementation of technical solutions for reducing consumption and for managing ship efficiency performance. As regards to emission, a significant reduction of CO2 will be possible in the near future thanks to the incoming new LNG-fueled ships and a significant reduction of pollutants (SOx, NOx, PMs) is already possible thanks to the ECO



Exhaust Gas Cleaning (ECO-EGCTM), an industry-leading technology that permits to remove, through a filtering system that uses seawater, more than 90% of pollutants from exhaust gases. Regarding life on board, great importance is given to the lighting system. Indeed, all of the existing light globes have been replaced with low power consumption LED lamps, and an automatic lighting control system has been installed to adjust the external lighting of the ship in accordance with the current sunlight intensity. An interesting project, still ongoing, is the introduction of key-card holders, so that lighting can only be switched on when the cabin is occupied.



Waste management

When it comes to waste, great attention is paid to the whole management process. The approach is designed to minimize the amounts of the different types of waste generated, as far as possible, and to implement a process of recycling, reuse and recovery. 100% of separate collection is made on board and the different streams of waste are processed directly on board the ship, through procedures like grinding, crushing, compacting and incinerating. An example of the commitment of Costa in the recycling process regards aluminum, a metal that can be subject to a never-ending recycling, by means of a long-standing partnership with CiAl (Italy's National Consortium for the Recovery and Recycling of Aluminum) and the SV Port Service of Savona: the project for the collection of aluminum cans used on board involves the separate disposal and recycling of the aluminum collected. This includes the direct involvement of shipboard waste handlers, who receive nearly all the revenues from the sale of the metal collected. This project has been accelerated thanks to the presentation of the campaign "Message in a can", aimed at sensitize the citizens of Savona with the goal of +25% of separate collection of aluminum. This led to a donation of park benches made from recycled aluminum to the city of Savona by CiAl and Costa.

Water

The third key point in the politics of sustainability of Costa Cruises is water: recognizing its precious value, Costa has always been careful with its use. The Company's largest commitment in this area is the gradual increase in the amount of water produced directly on board. Indeed, nearly 70% of the water on the ships for human use is produced on board by means of special desalination plants. The fact that less water is bunkered in ports of call is very important, especially in areas where water resources are scarce. One of the goals of the Company is to become

completely water self-sufficient in the near future: a new hybrid water production system, operating on board the Costa Serena in 2017 and in a few years installed fleetwide, will make water bunkering a thing of the past. Costa Cruises has also focused on maximizing reuse of water and on raising awareness on the consumption of water both by guests and the crew members.

Privacy

© AmCham Italy | Powered by: Fotonica S.r.l.

American Chamber of Commerce in Italy

Via Cesare Cantù, 1 - 20123 Milano - Italia

Tel: +39 (02) 8690661 - Fax : +39 (02) 39296752 - sustainabletechnologies@amcham.it