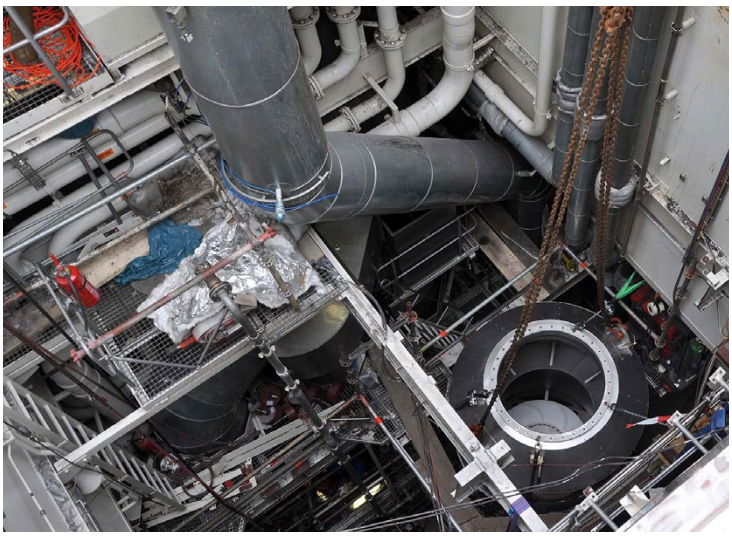
ECO EXHAUST GAS CLEANING TECHNOLOGY

Technological options are important factors that influence development of worldwide responses to air emissions and climate change. Although there are a number of technologies available to mitigate point source emissions from land-based applications, the maritime industry's options are more limited. The maritime industry has been working to adapt various land based technologies to optimize them for marine applications within the various maritime industry sectors.

We at Carnival Corporation & plc are constantly working to reduce our air emissions and to improve air quality by evaluating new and established technological solutions. Our R&D and technical management groups have focused on developing a technological strategy that combines established technologies that have been successfully used in shore-based applications, such as power plants, factories and vehicles, to clean the exhaust from engines burning high-sulfur fuel. However, this is the first time this combination is being applied within the restricted spaces on existing ships to perform in the marine environment. The system is called ECO Exhaust Gas Cleaning (ECO-EGC™) for its ability to remove major pollutants from the exhaust gases at any operating condition of a ship – at sea, during maneuvering and in port. Our pioneering approach incorporates a two-pronged system – one to use filters that reduce particulates from the ship's engine emissions, and another to use seawater to remove sulfur compounds from the exhaust gases.

The ECO-EGC™ system that we are applying on our ships uses a proprietary technology to remove the oxides of sulfur that come from combustion of fuel that contains sulfur. Due to the limited availability of shipboard exhaust gas cleaning systems, we decided to lead the way by developing the technology and by making the necessary investments. We are investing as much as $400 million to design, build and install ECO-EGC™ systems on our ships. Following successful initial trials, we announced plans to significantly increase installations to more than 70 vessels.



(ECO-EGC™) – A CRUISE INDUSTRY FIRST

This expansion, covering over 70 percent of our entire fleet, represents an increase from the 32 ships initially announced in September 2013. Working together with the with the U.S. Coast Gard, the U.S. Environmental Protection Agency and Transport Canada, we have developed a breakthrough solution for cleaner air that will allow us to more cost-effectively comply with the strict regulatory requirements in emission control areas (ECAs).

The International Maritime Organization's (IMO) MARPOL Annex VI places a cap on the sulfur content of fuel used within ECAs at 1.0 percent. In 2015, the fuel sulfur limit in the North American and other ECAs will be 0.1 percent. The IMO's global sulfur limit in non-ECA areas is currently 3.5 percent and is expected to drop to 0.5 percent by 2020. Our ECO-EGC™ systems have the added benefit of ensuring compliance with both North American ECA and global IMO standards.

We have developed an aggressive installation schedule to retrofit the ECO-EGC™ systems to selected existing vessels within our fleet, and to modify designs to accommodate the system into new ships that are being built. As depicted in these pictures, the ECO-EGC™ system installation process involves fabrication, transportation and rigging of large system components, delicate coordination of equipment removal, and precise fitting of new system parts into very tight shipboard machinery spaces.

We are extremely proud of all the work our R&D and technical personnel both onboard and ashore have accomplished in order to develop and implement the ECO-EGC™ systems technology in our fleet.