CRUISING INTO THE FUTURE
IMO 2020 AND BEYOND

Cruise lines are at the forefront of the shipping industry in using new technologies that **meet and exceed** the new requirements set forth by IMO 2020, which went into effect 1 January 2020.

The industry is looking well beyond IMO 2020, committing significant resources and funding to sail into a cleaner future.

OLD REQUIREMENTS	NEW REQUIREMENTS
3.5% SULFUR CONTENT	**0.5%** SULFUR CONTENT

THERE ARE THREE PRIMARY MEANS OF MEETING THE IMO'S NEW REQUIREMENTS, THE CHOICE OF WHICH TO TAKE IS DETERMINED BY INDIVIDUAL COMPANIES.

COMPLIANT FUEL

Fuel oil with a sulfur content at or below 0.5% is used in order to curtail pollutants in engine exhaust emissions. In designated Emission Control Areas, the sulfur content is further limited to no more than 0.1%. Ships must use compliant fuel, or an approved alternative that achieves the same beneficial results.

EXHAUST GAS CLEANING SYSTEMS (EGCS)

EGCS technologies process emissions from ships to reduce sulfur levels by as much as 98% and have been found by numerous studies to have minimal effect on water quality when operated in "open loop" mode. 68% of global cruise capacity currently utilizes EGCS technology.

LIQUIFIED NATURAL GAS (LNG)

LNG offers virtually zero sulfur emissions, a 95% to 100% reduction in particulate emissions, an 85% reduction in nitrogen oxide emissions and up to 20% reduction in greenhouse gas emissions. Two ships currently use LNG for primary propulsion, with another 25 on the order books.

Looking beyond IMO 2020, the industry recognizes that additional challenges remain and that a robust research and development effort is necessary to achieve the ultimate goal of decarbonization across the maritime fleet.

Proposed R&D Board to the IMO, along with other maritime associations, to fund the development of new, environmentally-friendly fuels and technologies. Funding from the industry would generate roughly $5B over 10 years.

Shoreside Power, enabling ships to "plug-in" while in port; 30% of global capacity is equipped with this technology with another 88% of new-build capacity committed to be fitted with this techology.

Exploring New Ideas, such as using wind power, fuel-cells technology, battery and other reusable energy sources to power cruise ships.

Sources:
2020 State of the Cruise Industry; CLIA 2019 Environmental Technologies and Practices Report; CE Delft study on the impacts of EGCS washwater discharges

CLIA