

# LNG gaining momentum as fuel for cruiseships

But expedition operators face hurdles adopting the cleaner fuel choice due to a lack of remote bunkering ports

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Traditional cruise majors are looking towards LNG to reduce ship exhausts' sulphur content, but expedition operators say the fuel is out of reach for them for now.

Miami-based Carnival Corp has ordered 11 LNG-powered ships due by 2025 and has two vessels on the water that use LNG in port.

"LNG is an economic, clean and safe marine fuel with increasing global availability that also complies with existing and scheduled emission requirements," Tom Strang, Carnival senior vice president of maritime affairs, tells TradeWinds.

"The use of LNG meets and exceeds all current and proposed emissions regulations through 2025, and is an important mainstay of our commitment to sustainable cruise operations going forward."

By January 2020, the IMO will require the sulphur content in ship's exhaust fumes to drop to 0.5% from 3.5%.

TUI Group of Germany and Miami-based Royal Caribbean Cruises have ordered two LNG-powered cruiseships as part of their TUI Cruises venture. The 161,000-gt vessels are due in 2024 and 2026.

Last month, Geneva-based MSC Cruises ordered a fifth LNG-powered Meraviglia-class cruiseship, set for 2023 delivery, in a deal with STX France.

The €900m (\$1.03bn), 183,500-gt vessel will have dual-fuel engines and an advanced waste-water treatment system compliant with regulatory standards.

Norwegian Cruise Lines (NCL) has



**TOM STRANG:** Carnival Corp senior vice president maritime affairs  
Photo: Geoff Garfield

said it plans to rely heavily on scrubber technology to meet the IMO 2020 mandate.

Calls to Royal Caribbean, MSC and NCL were not returned.

Fuel availability should not be a problem for LNG-powered passenger ships because more bunkering terminals will be built as more of the vessels run off of the clean fuel, says Gerd-Michael Wursig, DNV GL Maritime business director for LNG-fuelled ships.

"It seems like the infrastructure will develop for cruise only," he says. "The sector is big enough to create its own market for LNG."

Wursig says cruiseships will have easy access to LNG bunkering ports worldwide because they typically travel the same routes for itineraries planned many months beforehand. "They can make

**CLEAN VISION:** MSC Cruises has ordered five LNG-fuelled cruiseship newbuildings for its World Class fleet  
Image: MSC Cruises



**GAS POWERED:** The 3,300-passenger AIDAprima (built 2017, pictured) is one of two Carnival ships that run on LNG  
Photo: Carnival Corp

their refuelling schedules very far in advance," he says.

There are 67 LNG supply locations across the globe today, with 26 more planned and another 38 under discussion, says DNV.

More than one-third of them — 26 — are up and running in Europe, while Norway has 15, Asia 13, the US has 5, and Oceania and the Middle East have four each.

Cruise companies have led the way on using LNG, but this is not yet possible for expedition cruise-

ships, says Niels-Erik Lund, founder of Miami-based Sunstone Ships.

"We cannot purchase LNG in the very remote areas we operate in," he says.

The relatively small expedition cruiseships are unable to carry enough LNG to operate for up to 30 days on some voyages, he adds.

"Furthermore, SunStone ships operate on marine gas oil only, to reduce pollution as much as possible," he says.

Lund says Sunstone Ships,

which owns 10 expedition vessels for charter, will install Tier III compliant engines on its four Infinity Class vessels to reduce pollution to the lowest levels.

Tier III is a 2016 IMO requirement for emission control areas that lowers the amount of NOx in ship's exhaust by 75%.

Miami-based Quark Expeditions says it also has no immediate plans for LNG-powered ships, due to lack of availability within its remote travel regions.

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Photo: SunStone Ships