

# LNG Switch will fuel a cleaner future for all

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Fremantle Ports made history last year by granting the first Liquefied Natural Gas bunkering license in Australia, allowing ships with gas-powered engines to load up on fuel.

The Port Authority should be applauded for taking this step, which is in sync with global developments and will deliver local benefits by supporting the uptake of a cleaner fuel that can lead to improved air quality.

A quiet revolution is occurring in international shipping in the lead-up to 2020, when all ships will need to comply with a 0.5 per cent limit on the sulphur content of fuel, down from the current 3.5 per cent.

As the leading Australian gas producer, Woodside is preparing for the switch to LNG as a shipping fuel while also working towards delivering LNG as a fuel for mine-haul trucks and locomotives in the Pilbara. Western Australia is the ideal place to drive this transition, with world-class LNG supplies in close proximity to fuel-intensive export industries.

The global switch to cleaner marine fuels has been driven in part by community concerns in Europe and Asia that sulphur dioxide emissions from shipping are contributing to an increased incidence of heart and lung disease.

LNG is cleaner than diesel and much cleaner than the heavy fuel oil that has powered the commercial marine industry for decades. Since last October, when the International Maritime Organisation brought forward the start-date for the new low-sulphur rules, the switch to LNG marine fueling has gained momentum globally.

As a shipping fuel, LNG easily meets the new sulphur caps and would also comply with any future tightening of the rules that could relate to emissions of nitrogen, particulates or carbon dioxide.

Western Australia should be at the centre of this shipping revolution, as both a major LNG producer and a region that ships thousands of cargoes of commodities to the world each year.

Work is underway to make this happen and to build a local supply chain to support the switch to cleaner fuel. The major miners are collaborating with Woodside, as an LNG supplier, and with ship designers and owners to achieve LNG fueling of iron ore carriers on the busy trade routes between WA and China. We want to turn these shipping routes into a "Green Corridor".

So, it is pleasing that both Fremantle Ports and the Pilbara Ports Authority have recently allowed LNG bunkering. It's a good first step, but more can be done if Western Australia wants to make the

most of its natural advantages and send a signal about its commitment to preserving coastal air quality.

It's time to consider introducing emissions controls in all major ports in WA – the technology and fuel is increasingly available to facilitate this and the shipping industry is preparing for it. Fremantle residents would surely welcome anything that cleans up the air they breathe.

In Sydney, a community campaign led the NSW Government to push for tighter controls on cruise ships berthing in the Harbour. The public concern about air quality and the health impacts for residents of high sulphur emissions resulted in a directive that cruise ships berthing in the Harbour use fuel with less than 0.1 per cent sulphur.

The cruise ship industry has recognised change is necessary. Indeed, the world's largest leisure travel company, Carnival Corporation, is building new "green cruising" ships, fueled by LNG. It is a wise move for Carnival. They can see times are changing – and not just in Sydney.

Even tougher restrictions on sulphur emissions from shipping than those adopted by the International Maritime Organisation now apply along most of the coast of the USA, Canada, in key ports in Europe and China and will soon be enforced in Arctic waters.

Earlier this year, Woodside launched the Siem Thiima, the first LNG-fueled marine support vessel in the southern hemisphere. Since then, staff on our offshore platforms have reported that when the Thiima pulls alongside, exhaust is much less noticeable than from diesel-fueled vessels. The air seafarers breathe is free of particulates and they no longer get black soot on their hands and clothes. In short, it's a breath of fresh air.

We've recently called for Emissions Control Areas to be established in all major Australian ports. WA is the perfect place to start.