Five Game-changing LNG Bunkering Projects





Vessel owners and operators working across stringent emissions control areas (ECAs) are increasingly turning to liquefied natural gas (LNG) as a solution to reduce their airborne releases of SOx, NOx, ODS and VOC gases into the atmosphere.

Despite the high demand for LNG as a marine fuel, the infrastructure necessary for LNG-powered vessels to refuel is currently limited, but expanding.

In the following piece, we look at five of the world's most exciting emerging LNG bunkering projects in ports that handle a combined total of nearly 74 million twenty-foot equivalent units (TEU) a year.



The Port of Busan





Location: Busan, Yeongnam, South Korea Container traffic (TEU/annum): 2,161,000 Busiest port index: 65th Project: Construction of a four berth, two LNG tanks bunkering facility on an area of 185,700 m² area Timeline: 2020 Cost: KRW600 billion (\$500 million)

Port of Ningbo-Zhoushan





Location: Ningbo & Zhoushan, Zheijiang, People's Republic of China Container traffic (TEU/annum): 17,351,000 Busiest port index: 6th Project: Construction of China's first LNG bunkering station with a receiving capacity of three million tonnes per annum. Timeline: Q1 2016 Cost: RMB 4.75 billion (\$750 million)



Port of Singapore



Location: Singapore Container traffic (TEU/annum): 32,240,000 Busiest port index: 2nd Project: Embarking on a feasibility study in 2014, the Singapore Maritime Port Authority (MPA) recently announced that it would be assessing LNG delivery methods such as ship-to-ship and terminal-to-ship transfers. Timeline: Licenses to be granted in 2017 Cost: n/a

Port of Jebel Ali





Location: Dubai, United Arab Emirates Container traffic (TEU/annum): 13,641,000 Busiest port index: 9th

Project: The busiest port in the Middle East will be fitting a small-scale gas discharge facility onboard the floating storage and regasification unit (FSRU) currently acting as an LNG terminal in the port. **Timeline:** 2016 **Cost:** TBA

Port of Antwerp





Location: Antwerp, Flemish Region, Belgium Container traffic (TEU/annum): 8,578,000 Busiest port index: 16th Project: The third largest port in Europe will be designating a 7,300m² area for a fuelling concession able to bunker 45,000 cubic meters of fuel per year. Timeline: 2019 Cost: TBA LNG Bunkering Summit 2016 will draw on the expertise of LNG pioneers from ports, shipping companies, LNG operators and technology providers to discuss the value proposition for LNG as a marine fuel, best practice implementation of LNG infrastructure for ports and managing the operational challenges once the projects are completed.

These will be demonstrated through real life project case studies and presentations including:

- The challenges and opportunities for Port of Rotterdam in realising their supply chain
- DEME's decision making process, technical integration and compatibility for greener dredging vessels
- Regional overview and possible synergies in the Baltic Region with Baltic Ports Organization
- Port of Amsterdam anticipating and managing uncertainties in the developing LNG market
- Europe's first Break Bulk facility: Full project update and lessons learnt so far from Gate Terminal B.V.

To see the full speaker and session line up, <u>download the agenda here</u> or email us to receive a copy directly <u>enquire@oilandgasiq.com</u>.

