

October 21, 2020 Kawasaki Kisen Kaisha, Ltd.

First Ship-to-Ship LNG bunkering business to commence in Japan ~Supply eco-friendly fuel by first LNG bunkering vessel in Japan~

Kawasaki Kisen Kaisha, Ltd. ("K" Line), hereby announce commencement of LNG bunkering business in the Chubu region through its joint venture company (Note 1) with JERA Co. Inc. (JERA), Toyota Tsusho Corporation and Nippon Yusen Kabushiki Kaisha (NYK).

On October 20, First LNG bunkering vessel in Japan, "Kaguya" (Note 2), owned by the joint venture company made historic first Ship-to-Ship (Note 3) LNG fuel supply in Japan to a car carrier "Sakura Leader" which will be operated by NYK at the construction yard of Shin Kurushima Toyohashi Shipbuilding Co., Ltd.

"Kaguya", based at JERA's Kawagoe Thermal Power Station, will supply LNG fuel to "K" Line's first LNG-fueled car carrier that is scheduled to be delivered by the end of FY2020.

In the global shipping industry, the International Maritime Organization (IMO) has set a goal of halving greenhouse gas (GHG) emissions from international shipping by at least 50% by 2050 compared to 2008. With increasing the delivery of LNG fueled vessels that are capable of reducing GHG emissions, "*Kaguya*" will be having an important role for stable LNG fuel supply.

"K" Line Group sets safety, environment and quality as key management issues and is working towards reducing GHG emissions based on its long-term environmental policy "Environmental Vision 2050" (Note 4). By expanding LNG-fueled vessels with LNG fuel bunkering business, we will contribute to the reduction of environmental burdens.



"Kaguya" supplying LNG fuel



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(Note 1) Joint Venture Company

Central LNG Shipping Japan Corporation and Central LNG Marine Fuel Japan Corporation https://central-lng.com/en/

(Note 2) Principal Particulars of "Kaguya"



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LNG cargo tank capacity: 3,500 m3
Gross tonnage: 4,044 tons
Length overall: 81.7 m
Breadth: 18.0 m

Shipyard : Kawasaki Heavy Industries, Ltd., Sakaide Works

(Note 3) Ship-to-Ship Bunkering

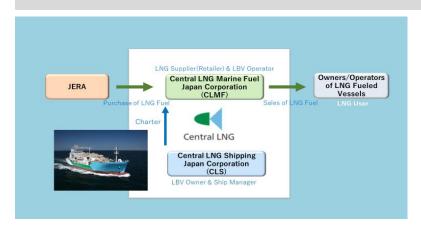
A method of bunkering where an LNG bunkering vessel comes alongside an LNG-fueled vessel to supply LNG at different locations such as along the quay or pier or at anchor.

(Note 4) "K" Line Environmental Vision 2050

"K" Line group formulated the "K" Line Environmental Vision 2050 in March 2015. Revised June 2020 edition sets CO2 reduction milestones for 2030 that exceed the IMO's targets which includes plans to "introduce LNG-fueled ships" and "commercialization of LNG fuel supply".

<Supply Chain>





<Reference>

Sept 18, 2020 release:

Naming Ceremony Held for Japan's First LNG Bunkering Vessel

https://www.kline.co.jp/en/news/Liquefied_gas/Liquefied_gas4277645741990550738/main/0/link/200918EN.pdf

Aug 24, 2020 release:

Construction of Next-Generation Environmentally-Friendly Car Carrier Fueled by LNG (3rd report) – Launched

https://www.kline.co.jp/en/news/car/car-4368809981721312033/main/0/link/200824%20EN.pdf

May 20, 2020 release:

Construction of Next-Generation Environmental-Friendly Car Carrier Fueled by LNG (2nd report) – Installed LNG fuel tank

https://www.kline.co.jp/en/news/car/car-7992098554579834972/main/0/link/200520EN%20.pdf

May 13, 2020 release:

Japan's First LNG Bunkering Vessel Launched -- Operations to Begin in Autumn 2020 https://www.kline.co.jp/en/news/Liquefied gas/Liquefied gas6214911825952529530/main/0/link/200513EN.pdf

November 28, 2019 release:

Construction of Next-Generation Environmental-Friendly Car Carrier Fueled by LNG https://www.kline.co.jp/en/news/car/car-8039923832625292775/main/0/link/20191128 en2%20.pdf

July 6, 2018 release:

Japan's First LNG Bunkering Vessel to Start Operation in 2020

https://www.kline.co.jp/en/news/Liquefied_gas/liquefied_gas2110830164254962877/main/0/link/20180706ENFINAL.pdf

May 10, 2018 release:

"K" Line, Chubu Electric, Toyota Tsusho, and NYK Line Establish LNG Bunkering Joint Ventures and Launch LNG Bunkering Business in Japan

https://www.kline.co.jp/en/news/Liquefied_gas/liquefied_gas7175154730257498310/main/0/link/20189510_E.pdf

January 26, 2018 release:



"K" Line, Chubu Electric, Toyota Tsusho, and NYK Line Begin Joint Discussions on LNG Bunkering Business in Japan

https://www.kline.co.jp/en/news/other/other-6032850503267450371.html