

## **ITOCHU group and Vopak Singapore to sign Memorandum of Understanding to study ammonia marine fuel supply chain in Singapore**

8 June 2020 - , ITOCHU ENEX Co. Ltd. ("ITOCHU ENEX"), ITOCHU Corporation ("ITOCHU") and Vopak Terminals Singapore Pte Ltd ("VOPAK") signed a non-binding memorandum of understanding to jointly study the feasibility of developing an infrastructure to support the use of ammonia as an additional source of marine fuel for vessels in Singapore.

With international momentum towards the transition to a decarbonized society on the increase since the Paris Agreement came into effect in 2016, the International Maritime Organization (IMO) adopted a strategy for the reduction of greenhouse gas (GHG) emissions within the shipping industry in 2018. This strategy sets targets to reduce CO<sub>2</sub> emissions per transport work – as an average across international shipping – by at least 40% by 2030 (compared to 2008 levels), by 50% by 2050, and to phase them out entirely (zero-emissions) during this century. In order to achieve these goals, the early adoption of ammonia as a suitable zero emission, alternative fuel for marine fuel in ships is one of the key elements.

The purpose of the joint agreement is not limited to the development of establishment of supply chain of ammonia marine fuel in Singapore but also key element of the integrated project with development of zero-emission ship by ITOCHU and ITOCHU ENEX with other partners. ITOCHU group intends to promote initiatives to reduce GHGs with the cooperation of domestic and overseas companies, as well as the relevant government agencies.

## Individual roles

Company	Individual roles
ITOCHU ENEX	ITOCHU ENEX will promote the development of ammonia fuel supply chain in Singapore by making use of their experience and know-how in the operation of distribution ships for fuel supply as well as the track record of ship fuel supply.
ITOCHU	ITOCHU will promote (i) the development of off-shore facility such as floating tank and/or fuel supply ship together with ITOCHU ENEX and other partners in Singapore and (ii) the integrated project, leading the formation of partnerships in Japan and overseas by making use of networks with various industries / companies such as shipper, shipping company, ammonia producer and/or any other parties related to ammonia fuel supply chain, owning and operate ammonia fueled ships, and jointly developing a facility for supplying ammonia fuel for ships with ITOCHU ENEX.
VOPAK	VOPAK will support ITOCHU in the feasibility study and promote the development of an independent, on-shore facility for the storage and handling of ammonia with loading / un-loading facilities in Singapore by tapping its ammonia storage & handling expertise in its Banyan Terminal in Singapore.

**【Inquiries】**

ITOCHU ENEX CO., LTD

Corporate Planning Department, Corporate Communications Office

Hiroyuki Kunisada TEL +81-3-4233-8003