## Introduction to the Special Feature on "Zero-Emissions Ships"

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I would like to take this opportunity to welcome our readers to this Special Feature of ClassNK Technical Journal No. 5 on "Zero-Emissions Ships."

Globally, moves toward decarbonization are gaining momentum. Japan also announced a policy targeting netzero emissions of greenhouse gases (GHG) by 2050, and at the United Nations Climate Change Summit in April 2021, the Prime Minister declared that Japan will accelerate its efforts by developing policies to achieve a 46% reduction in GHG in FY 2030 from the level in 2013.

In oceangoing shipping, study and introduction of regulations are underway based on the GHG reduction targets set under the leadership of the IMO, but since April 2021, various countries have proposed raising those targets.

In response to these circumstances, ClassNK carried out a reorganization in October 2021, and created the "Zero-Emissions Transition Center," which is responsible for overall management such as drafting business strategies for GHG-related work, and the "Marine GHG Certification Department," which responds to customer needs for GHG reduction in maritime shipping in an integrated manner, beginning with the response to international treaties.

By unifying the organization centering on these two new units, we intend to support carbon neutrality and contribute to expanding the businesses of all concerned.

On the other hand, we are also steadily promoting technical research and development, demonstration studies and related activities in order to expand and improve our technical services. During this fiscal year, we established a new R&D roadmap and proactively planned and implemented joint research with companies in maritime industries, specialized research organizations, universities and others, with society, the environment and safety as top priority research areas.

The ClassNK Technical Journal carries articles on the technical research activities of ClassNK, trends in international treaties, etc., beginning with the outcomes of technology research and development and the new knowledge developed through these kinds of partnerships.

In the previous issue, Class NK Technical Journal No. 4, we received contributions on risk evaluation of autonomous ship systems, the development of a comprehensive simulation system for autonomous ships, etc. from our joint research partners as a Special Feature on "Autonomous Operation."

For the present Technical Journal No. 5, we have received contributions on the initiatives of the Planning and Design Center for Greener Ships (GSC), joint technology development for achieving carbon neutrality, etc. as a Special Feature on "Zero-Emissions Ships."

In the future, ClassNK will continue its efforts to realize global social contributions through proactive efforts in technology development responding to the needs of society and maritime (shipping and shipbuilding) industries, the development of technical tools that support the solution of problems related to the environment and safety, and publication of the results of research and development.

We sincerely request the further guidance and support of all those concerned in the future, as in the past.