KAIJI PRESS Special Issue
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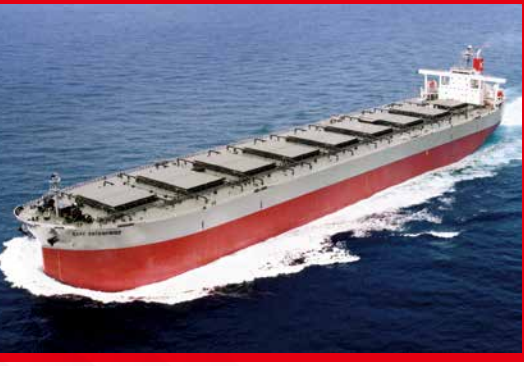
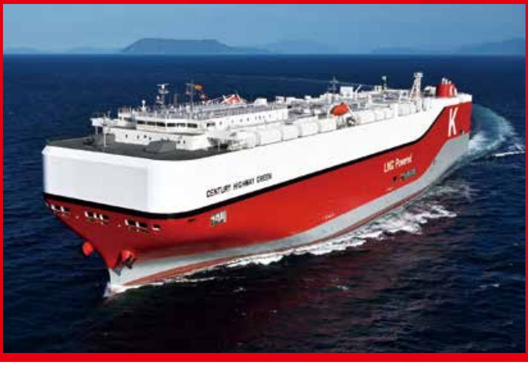
Coal and Iron Ore Carriers



Car Carriers



LNG Carriers

"K" LINE

Road to growth envisioned by three key businesses

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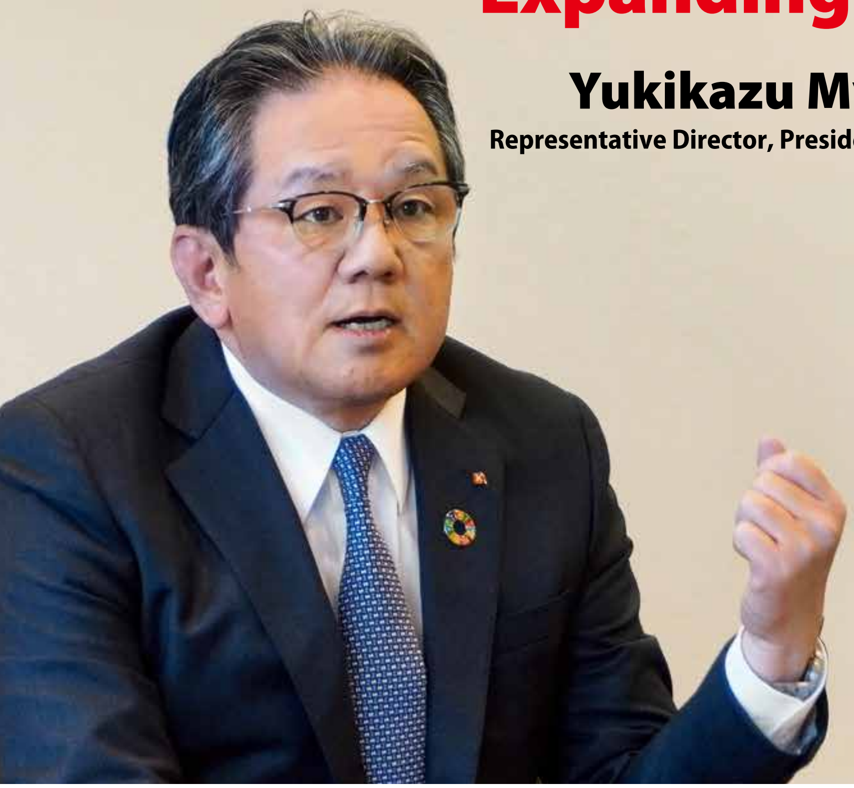
"K" Line's Growth-leading Businesses Expanding Solidly



Yukikazu Myochin

Representative Director, President & CEO of "K" Line

Kawasaki Kisen Kaisha ("K" Line) is redoubling its efforts to reinforce the revenue base of the businesses it operates itself. In its five-year management plan starting from FY2022, "K" Line positioned coal and iron ore carriers, car carriers and LNG carriers as "businesses that will drive growth" and adopted a policy to facilitate the Group's growth by concentrating its management resources on three priority areas and approaching environmental initiatives as business opportunities through the development of partnerships with its customers. The company swiftly came out with good results in the first year of the plan.

Great Improvement Made by Its Own Businesses

— "K" Line's good earnings performance is continuing in FY2022 as in the previous year. In light of this, do you have any thoughts on revising the ordinary income targets in the medium-term plan?

There is no change in our policy announced in the medium-term management plan in May 2022, namely that we will consistently generate annual ordinary income of around ¥140 billion, earning half from our own businesses and half from the containership business in a balanced manner. We can expect our containership business to achieve ¥70-80 billion per year in ordinary income if Ocean Network Express (ONE), the integrated containership company jointly owned by three major Japanese shipping operators, including "K" Line, continues to earn more than ¥200 billion per year. We look to constantly generate an annual income of about the same size from our own businesses.

Overheated containership freight rates have been normalizing since the second half of FY2022 and we expect our performance for the year to fall compared with FY2021. However, as our own businesses are greatly contributing to improving the balance sheet, we expect record-high income in FY2022, as in FY2021.

— The better performance is improving "K" Line's financial position.

Given that at one point we had experienced difficulties improving our balance sheet, we are in a different stage now. We need to continue to think about our optimal capital structure in this new stage. We will consider capital efficiency while retaining our financial soundness, make the investments necessary for our growth with earned business cash flows, and proactively deliver shareholder returns. Our 35millions share buyback is part of these efforts.

Down-to-Earth Initiatives Producing Results

—We want to ask you about the initiatives being pursued by the three growth businesses. First, what do you expect of your dry bulk business?

By FY2021, our dry bulk segment had optimized its fleet size in conformity with its business scale, enhanced the cost competitiveness of its fleet through the disposal of loss-making vessels, and tightened control of its exposure (proportions affected by market fluctuations). From here on, we will continue to acquire medium- and long-term service contracts mainly for our large-size vessels by deepening partnerships with customers taking action for the environment, and will look to generate stable revenues by steadily capturing business opportunities, not only in Japan but also in the growth markets in Asia, India and the Middle East. In the fall of 2023, we plan to start a commercial test of a large-size coal and iron ore carrier, equipped with the first model of our Seawing automated kite system harnessing wind power. We have concluded memorandums of understanding with our customers both in Japan and overseas and are conducting a joint study on specific initiatives to realize Scope 3 reductions in greenhouse gas emissions (business-related emissions by other companies).

— What about your car carrier business?

Car carriers made the biggest contribution to improving the performance of our own businesses in FY2022. This segment reviewed its fleet scale right after the outbreak of the COVID-19 pandemic and replaced many of its aging smaller vessels with larger vessels, especially chartered ones. As a result, it improved the cost competitiveness and flexibility of its fleet and bolstered its performance in step with the recovery of transportation demand. In the car carrier market, while the cargo volume has not fully recovered to the pre-pandemic level, the tonnage supply-demand balance has tightened significantly due to changes in the finished car trade, such as an upsurge of shipments from China, a new electric vehicle (EV) production hub. In response, we are realigning our service network and restoring freight rates by reviewing our revenue structure. Our capture of new demand such as high and heavy cargo items like construction machinery is progressing as planned. Each of these down-to-earth initiatives is leading to an improvement in our overall performance.

— In the energy transportation business, "K" Line is strengthening its LNG carrier business.

Yes, we are steadily building up medium- and long-term contracts for our LNG carriers. We plan to increase the number of LNG carriers from 44 (as of December 2022) to around 70 toward 2025. New contracts are increasing in number as planned. It is quite important for us to secure the necessary seafarers and strengthen the ship management system in preparation for the planned fleet expansion. As we will be building not only LNG carriers but also LNG-fueled vessels, we will employ and train more seafarers qualified to handle liquefied gases such as LNG.

— Besides your own businesses, what about the containership business you operate through ONE ?

As to the overheated containership rates (caused by supply chain disruptions stemming from the global pandemic), short-term rates have normalized since the second quarter of FY2022, as demand has entered into an adjustment phase following the end of global supply chain constraints and ship congestion. The global newbuilding supply will begin to increase in the second half of 2023, continuing until around 2025. I do not think that the test of strength we once experienced will emerge again at a time when the importance of supply chain is reacknowledged and the retention of a stable transportation means is also sought by our customers. Shipping companies are expected to firmly respond to cost-cutting measures such as reduced service frequency in response to changes in supply and demand. We will continue our personnel assistance to ONE, which was aimed to produce synergies such as the integration effect worth ¥110 billion, and will step up our support for its sustained growth and development.

Investing with Discipline

— Ship prices, dollar interest rates and ship operation expenses are expected to continue climbing. What is your investment policy in this situation?

As ships are expensive assets to be used over a long period of 15 to 20 years, discipline Is obviously crucial when investing in them. Based on a reflection of our own historical precedent, in which investments we made in boom times, assuming that the economic growth would continue, weighed heavily on us in later years, we are making a full review of our investment guidelines. As the shipping industry itself is exposed to the massive waves of market fluctuations, we have sorted outrack records of freight rates and asset values and are working to quantify and visualize them so that we will be able to make an objective judgment, based on our risk scenario. We will also carefully control our exposure by better understanding market demand in accordance with the length of our service contracts, while looking to acquire long-term contracts by promoting low carbon/decarbonization in partnership with our customers.

We are making competitive investments based on actual market demand so that we will not repeat the difficult experiences of the past. We face many uncertainties, such as the division of the global economy resulting from the growing geopolitical risk, changes in the external environment created by surging energy prices, and the future of new ship fuels in response to environmental regulations. I think "K" Line should invest with restraint during boom times and act strategically during market downturns.

"K" Line Targets ¥140 Bil in Ordinary Income for FY2026

Investing ¥520 Bil in Priority Businesses, with Emphasis on Environmental Initiatives

"K" Line has been moving forward with its five-year medium-term management plan since FY2022. The plan sets the Group's target ordinary income for FY2026 at ¥140 billion. It aims to equalize the profitability from the group's own businesses and the containership business (run by its subsidiary) by expanding profits from its three priority businesses—coal and iron ore carriers, car carriers and LNG carriers—which are positioned to play a leading role in growth. The company will invest a total of ¥520 billion during the five-year period, concentrating about 80% of it on these three core businesses. It plans to allocate more than 60% of its investment budget to environmental initiatives, including the construction of vessels powered by alternative fuels.

"K" Line's ordinary income rose to ¥657.5 billion in FY2021, amid an upsurge in the global containership market. The Company estimated its ordinary income at ¥567.5 billion for the first half of FY2022 and ¥660 billion for the full fiscal year. As a result, as of the end of the third quarter of FY2022, its equity capital swelled to ¥1,477.4 billion, with the equity capital ratio rising to 71%.

The medium-term management plan was developed based on the dramatic improvement of the Company's financial position and the importance of its management approach toward low-carbon/decarbonization and environmental initiatives amid changes in the operating environment and the transformation of the energy mix. In preparing the plan, both officers and employees thoroughly discussed and reviewed our corporate principles, vision and values of the Group, to share an identical sense of purpose and reaffirmed the Group's should focus on the shipping business as its principal axis. The plan says in reference to the company's fundamental policy, "In order for the "K" Line group to maintain the trust of all stakeholders, we will focus our management resources on businesses that play a leading role in growth. The aim is to realize low-carbon/zero-carbon emissions for the Group and society through the construction and development of partnerships with customers who can share growth opportunities. We are looking to promote sustainable growth and improve our corporate value." To expedite these initiatives, the plan redefined the Group's business portfolio to achieve a balanced resource allocation according to the characteristics of each business, setting forth the role and strategic direction for each business.

Based on a functional strategy that supports the business strategy in the plan, "K" Line will promote functional enhancement in the fields of environment/technology, digital transformation, safety/ship quality management and human resources. In these areas, the Group will refine its technologies and expertise and reinforce community-based customer support. In addition, it will continue enhancing the sophistication of its management, maintain investment discipline, strategically allocate resources to growth investment, optimize capital efficiency, maintain and improve its financial base, and return profits to shareholders based on an optimal capital structure.

Of the ¥520 billion to be invested during the five-year period, ¥250 billion will be spent on the construction of alternative fuel vessels. "K" Line has already begun investing in 19 such vessels powered by LNG, LPG and ammonia, aiming to have them operational by 2026. It plans to expand its fleet of alternative fuel vessels to about 60 in the first half of 2030. It will invest ¥25 billion in environmentally friendly equipment such as Seawing automated kites, SOx scrubbers and ballast water treatment systems. Another ¥25 billion will be disbursed from its strategic investment framework, which covers environment technology and digital software. In addition,

Portfolio business classification based on the Medium-Term Management Plan and business strategy progress

Working on initiatives specific to each business and based on its role

	Role of driving growth	Role of supporting smooth energy source conversion and taking on new business opportunities	Role of contributing by enhancing profitability	Role of supporting the business as a shareholder and stabilizing the earnings base	Expansion of new business in fields where "K" LINE can utilize its strengths
Business	**Coal/Iron Ore** ▶ Enhancing business base and revenue sources by costumer-oriented sales/ investment with ascertaining fuel conversion needs **Car Carriers** ▶ Responding to environmental needs with alternative fuel vessels, and capturing new demand **LNG Carriers** ▶ While expanding existing businesses, capturing growing Asian demand	**Thermal Coal** ▶ Concrete efforts to support the energy mix conversion through sales proposals and by capturing new energy transport demand such as ammonia **VLGC•VLCC** ▶ Starting a study of the adoption of Dual Fuel VLCCs using LNG and heavy oil	**Bulk Carriers** ▶ Transforming the profit structure by enhancing market resilience and enhancing the customer base in the Asian region **Coastal and short sea / Port / Logistics** ▶ Maintaining efforts to create synergies among its subsidiary companies	**Containerships** ▶ As a Ocean Network Express (ONE) shareholder, "K" LINE will contribute to its development by providing ongoing human resource support and involvement in management governance	**Offshore support vessel for wind power generation installations etc.** ▶ In addition to progress on the establishment of "K" Line Wind Service, a study of the provision of ammonia fuel for ships is ongoing, together with demonstration projects involving CCS* as well as CO_2 transport
Role	●Achieving growth by taking on environmental challenges as opportunities and turning these business areas into mainstays of group-wide profitability ●Securing market share with existing and new customers ●Achieving growth that surpasses market growth	●Transforming its business structure while helping customers transform their energy mix	●Strengthening resistance to market fluctuations and securing stable income ●Business strategy seeking synergy	●Stabilization of group-wide earnings	●Expansion of business areas where "K" LINE's capabilities can be utilized and advanced
Strategic direction	●Concentrated allocation of management resources	●Business risk minimization ●Responding to demand for alternative fuels	●Asset-light strategy (Bulk Carriers)	●Maximizing corporate value through ongoing human resource support and involvement in management governance	●Pursuing synergies between "K"LINE and its subsidiary companies

*Carbon Capture and Storage

◀——▶ Ongoing investigation of options for strategic replacement of business assets

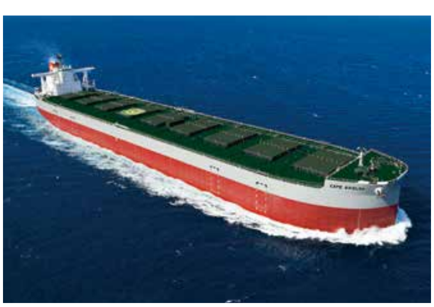
¥10 billion will be invested in new that which will contribute to the reduction of CO_2 emissions.

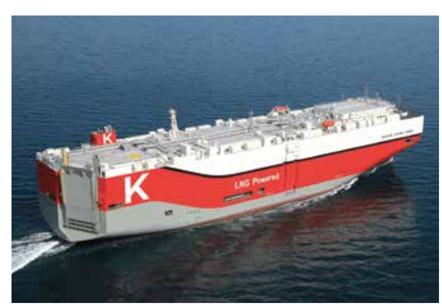
The business strategies for the three priority businesses that play a leading role in growth are addressed in detail separately. The coal and iron ore carrier business will bolster its business base and revenue sources through costumer-oriented sales/investment, by ascertaining fuel conversion needs for LNG-fueled and zero-emission vessels. To enlarge its stable revenue stream, it will actively seek business opportunities with major resource companies and other customers. The car carrier business will expand its service base for existing OEMs by upgrading its transportation capacity with larger vessels and capture environment-responsive demand with alternative fuel vessels. It will build stable earnings by improving the sales system for emerging BEV manufacturers and reinforcing its end-to-end automotive logistics services. The LNG carrier business will look to acquire opportunities in future growth markets such as Asia and the United States while focusing on expansion in Qatar, which boasts the largest business scale. It will move its ship management hub to Singapore and enhance the sales system there to capture demand in Asia.

The thermal coal carrier, VLGC and VLCC business, positioned to play a role of facilitating a smooth energy source conversion and taking on new business opportunities, will rebuild its stable earnings base and support energy conversion for existing customers while considering necessary risk hedging. It will also look to capture new energy transportation demand through proactive sales proposals while maintaining its ship management and operation systems to meet demand for the transportation of ammonia and other energy sources.

Both the bulk carrier business and the short sea and coastal ship/port/logistics business have been positioned to play a role of contributing by enhancing profitability. The bulk carrier segment will address two challenges of enhancing its resilience to market fluctuations and improving vessel deployment by strengthening its customer base in the Asian region where "K" Line's strengths lie. It will specifically enhance the role of Singapore as an asset management and business hub and improve access to future growth markets such as Southeast Asia, India and the Middle East. The short sea and coastal ship/port/logistics segment will pursue synergies with the businesses that can drive growth while promoting business with group companies, including Kawasaki Kinkai Kisen, which is now a wholly owned subsidiary.

"K" Line plans to pay a total of ¥400-500 billion in shareholder returns during the FY2022-2026 period. It will be paying ¥400 per share in annual dividends in FY2022, an increase of ¥300 per share from a year earlier. In addition, it announced in November 2022 that it will buy back 35 million shares, or shares with a value of up to ¥100 billion. The company will make the necessary investment and enhance its corporate value with an awareness of its optimal capital structure. It has been carrying out shareholder returns in conformity with its policy to pay any excess of its adequate equity capital to shareholders after ensuring its financial soundness.





Interviews with Three Executive Officers on Their Key Initiatives

In its medium-term plan, "K" Line has positioned the coal and iron ore carrier, LNG carrier and car carrier businesses to play a role of driving growth. Kaiji Press interviewed the three executive officers in charge of each business, asking about some of the main initiatives they are pursuing.

Coal and Iron Ore Carriers

Atsuo Asano

Representative Director,
Vice President Executive Officer responsible for Dry Bulk Carriers Unit

LNG Carriers

Kazuhiko Harigai

Representative Director,
Senior Managing Executive Officer responsible for Energy Transportation Business Unit

Car Carriers

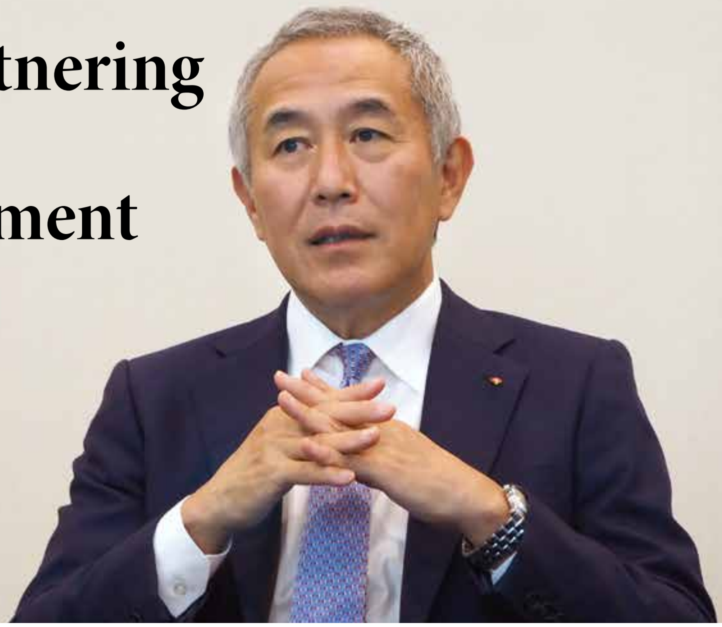
Yasunari Sonobe

Director,
Senior Managing Executive Officer responsible for Product Logistics Business Unit

(at the end of March 2023)

Coal and Iron Ore Carriers

Expanding Profit by Partnering with Key Customers and Investing in the Environment



Atsuo Asano
Representative Director,
Vice President Executive Officer responsible for Dry Bulk Carriers Unit

Quality Services Are "K" Line's Strength

— What role does the coal and iron ore carrier business play in the medium-term management plan?

Our role is to expand the Group's profit base by strengthening partnerships with customers through better responses to their needs and growing environmental requirements. Specifically, we need to build and strengthen ties with resource majors and other new customers, while retaining and expanding relations with existing customers. We seek to improve our corporate value by adding value with the expansion of our profit base, on the basis of our traditional quality service and increased assistance to decarbonization initiatives.

— What progress have you made in the first year of your medium-term management plan?

We faced a business environment where drastic changes made it hard for us to produce any concrete results. Given uncertainty in the direction of the fuel shift and the impact of the Russia-Ukraine crisis, with the resultant upsurge of energy prices, we were forced to mark time in our fuel shift initiatives. I doubt that anybody was thinking it was a good time to make long-term commitments. Even so, I think we had a year in which we could build on discussions on environmental issues, a major theme for us and for our customers. In fact, talks are underway on environmental initiatives such as the construction of vessels powered by alternative fuels and the introduction of the Seawing an automated kite system. To expedite discussions, we strengthened relations with leading Indian steelmaker JSW Steel and major UAE aluminum producer Emirates Global Aluminium (EGA), concluding memorandums of understanding on a joint study toward decarbonization. Our coal and iron ore carrier business operates in an area where it can expect to have longer-term service contracts, compared to those for small- and medium-size bulkers. I think longer-term contracts make it easier for both parties to kick-start their studies on eco-friendly vessels.

In this medium-term plan, we have identified Asia, India, the Middle East, and other regions outside Japan as growth areas, and we are determined to expand our business there. I think we were able to conclude a good number of contracts and strengthen our business relations in the first year of our medium-term plan.

— What are the strong points of your coal and iron ore carriers business and how do you utilize them in attaining the goals set out in your medium-term plan?

"K" Line is proud to be more competitive than its peers in offering safe, high-quality services and in managing its own vessels, the essential functions of a shipping operator. None of our Group companies have been involved in any serious incidents, even in the harsh business climate created by the three-year COVID-19 pandemic. We also had no serious accidents on our charter vessels. We see this as another strength. I think our good relationship with the owners and yards who provide quality vessels to us is a solid basis on which our business can proceed. Another strength lies in our long-standing partnerships with industry-leading customers in Japan and abroad. Outside Japan, the existence of major partners like JSW in India and EGA in the Middle East will be a good foothold for our Group's future growth. These relationships are built over a long period of time; they cannot be established overnight. Our medium-term plan identifies the coal and iron ore carrier business as one of our growth areas. Both JSW and

EGA started out trading small- and medium-sized bulkers, and we believe that our significance lies in our ability to provide services across the entire dry bulk shipping segment, including small- and medium-sized vessels. I believe this is what makes us the carrier of choice for our customers.

Strengthening Organizational Marketing Force

— Are there any areas or issues that you would like to improve?

One of the measures being taken in our medium-term plan is strengthening of our organizational marketing force. As we move forward with environmental and other initiatives, there are some areas that cannot be handled by vertical business divisions alone, as might have been the case in the past. For instance, vertical business divisions must work with horizontal organizations such as technical and environmental divisions vertically and horizontally. All our divisions have been working since April 2022 to strengthen our organizational marketing force. The coal and iron ore carrier business has built its own system to expedite horizontal collaboration with other divisions. To strengthen our overall capacity, we are bolstering our global collaboration system involving not only marketing hubs in Japan, but also those in Singapore and London. We are developing our global business by putting particular emphasis on Singapore, and we are working to build a system to expand into broader Asia, India and the Middle East with Singapore as a starting point. To make that possible, recruiting and training competent human resources are obviously crucial.

— Can you give some examples of your global collaboration?

We have been enhancing collaboration among our hubs both inside and outside Japan since April 2022. We use English for everything approaching official documents. Global bulk conferences used to involve mainly Japanese participants, but we are working on a system that allows both Japanese and foreign participation, for instance with online meetings, and we are delighted with the results.

— One of the key priorities of the Bulk Carriers Unit in "K" Line's mid-term plan is to expand the capabilities of Singapore as an asset management center and business base. Does this specifically mean that the local subsidiary will strengthen the possession, operation, marketing of bulkers?

Our Singapore office will basically possess only small- and medium-size bulkers. We assume that larger vessels will continue to be held by our Tokyo head office. Our London office used to have bulkers, but its role is now changing. Small- and medium-size bulkers that require greater mobility will be concentrated in Singapore. Since we have many customers in Singapore, including resource majors, we will strengthen our marketing function in the coal and iron ore carrier business.

Preparing for the Introduction of Alternative Fuel Vessels

—What is the medium-term outlook for the market on which your business is premised and how do you plan to respond to it?

We believe that the global dry bulk market will stay firm in the medium term. One of major factors for our optimistic view is that the supply of newbuildings will be limited since there is only a small number of vessels on order. Also, while a large number of vessels built around 2010 are going to be replaced, operators are hesitant to accelerate their orders, due in part to the problems posed by alternative fuels. We do not expect the pace of orders to accelerate for some time. On the other hand, demand for large-size vessels will be affected by the peaking of steel raw materials demand in China. However, as bauxite is said to be the next major cargo item for larger vessels, we think it may underpin future demand for these vessels. As for steelmaking raw materials, shipments to China may decline but demand is expected to grow in other Asian countries, such as India. Large volumes of these materials will continue to be moved. I assume that larger vessels will remain vulnerable to market volatility. We will need to properly control our exposure to such vessels to ensure our stable business operation. It is important to control exposure in terms of both volume and quality.

— With your environmental initiatives in mind, how will you carry out your future fleet buildup?

I think that we will see more advances in alternative fuels for large vessels, such as coal and iron ore carriers, than for small- and medium-size vessels, so we need to be prepared. However, we do not intend to make advance orders without concluding service contracts. We will order large vessels on the basis of contracts with our customers and with an eye on the operating environment. It is actually difficult to put advance orders for newbuildings at present, with ship prices still quite high. In reality, new heavy oil-fueled vessels are still being built. To reduce greenhouse gas (GHG) emissions,

we need to pursue a low-carbon economy by replacing our vessels with cutting-edge vessels.

There are also great expectations for our Seawing systems. One could argue that there is not much difference between the roughly 20% reduction in carbon dioxide (CO_2) emissions from Seawing and the approximately 25% reduction in CO_2 emissions from LNG fuel. When more vessels are powered by alternative fuels like LNG and ammonia, the prices of such fuels are expected to climb along with ship prices. We think that Seawing may become a factor that can help ease this cost pressure. We sense that our customers are increasingly interested in Seawing. We aim to expand our revenue base by simultaneously promoting close contact with customers and environmental responsiveness.

TOPICS

Maintain and Expand Profit Based on the Customer Base and Decarbonization Needs

1 Expansion of Coastal Service Contracts in India, Joint Study with JSW Steel

In 2022, "K" Line signed multiple consecutive voyage contracts (CVCs) with major Indian steelmaker JSW Steel Ltd., a unit of the country's leading conglomerate, and began operating Capesize bulkers owned by the Group in the coastal trade. This is the first time in India that such large-size vessels have been operated to move coastal cargo. "K" Line has also renewed its CVCs for coastal operation of Handymax bulkers, which it had first concluded with JSW Steel in 2014. The Japanese operator has signed a number of Capesize and Panamax bulker contracts, mainly for international cargo transportation for the JSW group. The new CVCs are expected to increase the group's annual cargo transportation volume to about 10 million tons.

"K" Line and JSW Steel launched a joint study on decarbonization in August 2022. They have agreed to cooperate on achieving net-zero greenhouse gas (GHG) emissions in marine transportation by 2050 and signed a memorandum of understanding (MOU) to set up a joint working committee for collaborative research on decarbonization.

The JSW group has JSW Steel and power producer JSW Energy under its wing. "K" Line began transporting raw materials for the JSW group in 2006 and has since been deepening relations by concluding numerous long-term Capesize/Panamax contracts. Masatoshi Taguchi, Managing Executive Officer at "K" Line, commented on the company's new deals, saying, "The latest MOU and CVCs is concluded in accordance with our medium-term management plan. Our dry bulk carrier division is looking to further strengthen our Group's profit base by responding to various customer needs, including environmental initiatives, in collaboration with our customers in Japan and in other countries.”

In 2008, “K” Line’s dry bulk carrier division transferred part of its operation functions to a local subsidiary established with a partner in India, and also entered the local coastal operator business. In 2014, “K” Line established its subsidiary “K” Line (India) Shipping Private Limited (KLISP) to bolster its business in India by stepping up the possession of Indian-flagged vessels.

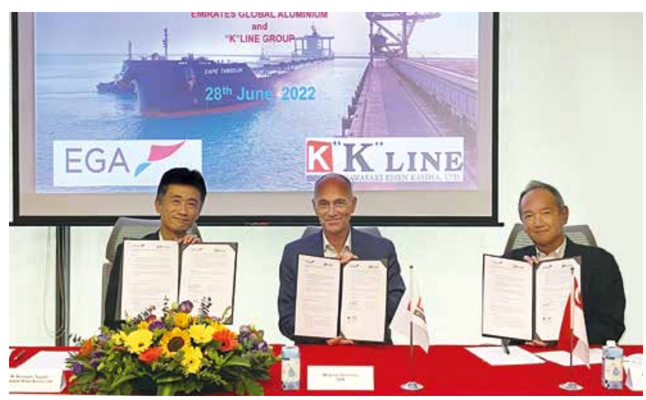
The online signing ceremony for “K” Line's MOU with JSW Steel for a joint study on decarbonization

2 Starts Joint Study on Decarbonization with EGA

”K” Line signed a memorandum of understanding (MOU) with major UAE aluminum producer Emirates Global Aluminium (EGA) in July 2022 to set up a working committee for a joint study on decarbonization. Both companies are committed to work towards the achievement of net-zero greenhouse gas (GHG) emissions by 2050. They will cooperate with each other in reducing GHG emissions from international shipping by leveraging their knowledge of and expertise in new marine technologies and alternative ship fuels.

Since signing their MOU, the two companies have been holding regular meetings and advancing their study of a shift to alternative fuels to be used by their vessels, as well as the possible utilization of energy-saving equipment such as the Seawing automated kite system.

Since Dubai Aluminium, the predecessor of EGA, was founded in 1979, “K” Line has been engaged in transporting raw materials for the company. It has initiated a long-term bauxite transportation contract with Capesize bulker for hauling 5 million tons of bauxite per year starting in 2019.



The signing ceremony for the MOU with EGA for a joint study on decarbonization

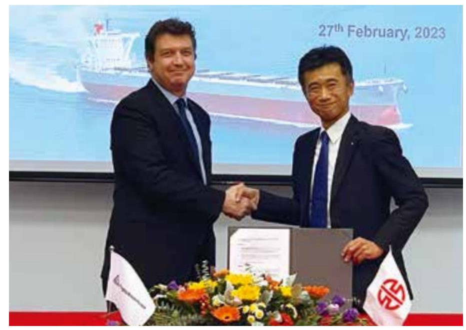
The company aims to expand its revenue base and increase its corporate value through stronger partnerships, aiming to reduce its environmental impact and contribute to society as it expands its business.

3 Setting up Collaborative Decarbonization Comittee with Anglo American

In February 2023, “K” Line signed a memorandum of agreement with Anglo American, a leading mining company from the U.K., to establish a collaborative comittee to promote decarbonization.

“K” Line has since expanded this relationship through a series of contracts for the shipping of steel raw materials out of South Africa and Brazil. Meanwhile, Anglo American decided in 2020 to build a new LNG-fueled Capesize bulker, and undertook a biofuel test voyage, making the company one of the global dry bulk shippers particularly committed to reducing GHG emissions during transportation.

The collaboration is part of "K" Line's efforts to expand stable earnings while meeting new demand triggered by low carbon and decarbonization. It will continue to strengthen the partnership between the two companies to contribute to reducing GHG emissions and decarbonizing society.



The signing ceremony with Anglo American

4 "K" Line to Develop Ammonia-Fueled Capesize Bulker with Partners

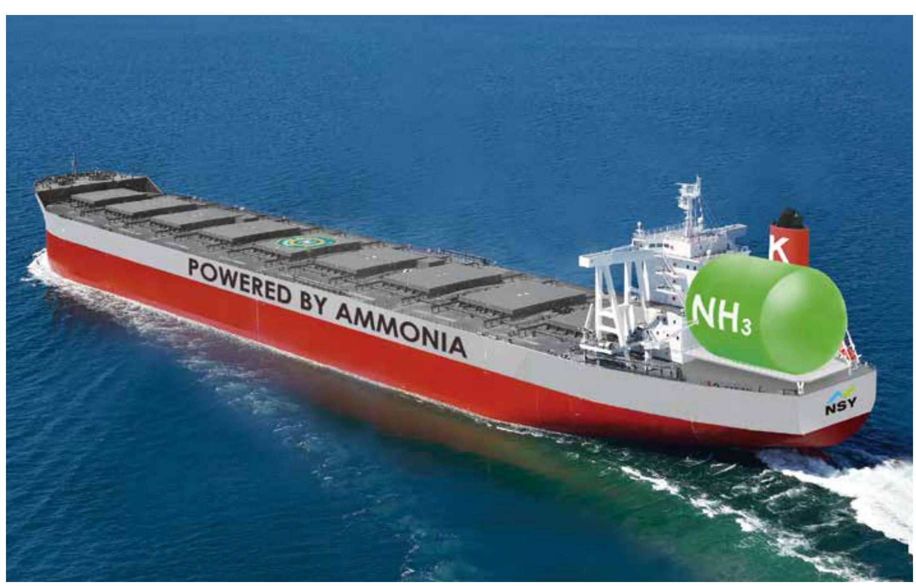
In November 2022, "K" Line, together with Itochu Corp., Nihon Shipyard Co. (NSY), NS United Kaiun Kaisha and Mitsui E&S Co., obtained a joint approval in principle (AiP) from Nippon Kaiji Kyokai (ClassNK) for their new concept design of an ammonia-fueled 200,000-dwt class bulk carrier which they plan to launch in 2026.

The five-partner consortium is pressing ahead with an integrated project for the development and implementation of the ammonia-fueled Capesize bulker, part of the Green Innovation Fund Project sponsored by the New Energy and Industrial Technology Development Organization (NEDO). As part of its joint scheme, NSY has separately designed another ammonia-fueled large-size bulk carrier Newcastlemax (loading capacity of 200,000-ton class).

ClassNK has conducted a hazard identification study (HAZID) on the safety of ammonia used as an alternative fuel, along with an examination of the concept design based on its Part C guidelines for the safety of ships using ammonia as fuel. It issued its AiP after concluding that the new concept design can ensure the ship's safety equivalent to that of vessels which run on conventional fuels such as heavy oil.

At present, there are no international rules covering the use of ammonia as ship fuel. This requires the consortium to obtain an alternative design approval before starting to build its ammonia-fueled vessel. It plans to obtain the approval in time.

In the project, Mitsui E&S will supply the world's first model of the ME-LGIA ammonia-fueled engine developed by German engine builder MAN Energy Solutions, along with ammonia fuel tanks and the propulsion systems, including the fuel supply system.



An image of the ammonia-fueled bulk carrier

The consortium is aiming to complete the ammonia-fueled bulker together with its implementation in 2026. Its members will not only develop the ship's hull form and engine but also build, own and operate it. NSY and Mitsui E&S are mainly charged with the construction of the vessel. Itochu, "K" Line and NS United Kaiun Kaisha will conclude a construction contract with NSY, own and operate it, and assign it in long-term service contracts with shippers. The acquisition of the AiP is an important step in their new project.

5 First Seawing Kite System Installed on Its Ship

"K" Line has been working on introducing Seawing, the automated kite system, harnessing wind power developed by Airseas, a subsidiary of leading French aircraft builder Airbus, since announcing that it would install the system on five bulkers (two Capesizes and three Postpanamex) after 2019. It completed installation of the first Seawing on its Capesize bulker in December 2022 and will now conduct repeated sea demonstration tests to pave the way for commercial use. "K" Line aims to reduce its CO_2 emissions by more than 20% with this project.

Seawing is installed on the bow expands through operation from the bridge and assists the ship's propulsion by harnessing the power of wind. The size of the kite is about 1,000-sqm and is capable of use in moderately rainy weather, and also at night.

"K" Line had conducted a detailed, two-year study of Seawing's performance and the new technologies adopted for it, confirming that it effectively reduces CO_2 emissions. It found that the larger the ship's relative wind power (a large ship running at slower speed), the bigger the reduction in fuel costs.

"K" Line has agreed with Airseas to jointly develop the technologies needed to enhance Seawing's performance, using operational data obtained from its own K-IMS (Kawasaki Integrated Maritime Solutions) system.

Airseas possesses flight control and modeling technologies based on its flight technologies. Seawing has been developed through a combination of its flight knowhow and marine technologies. The kite can be automatically expanded and stored with a simple switch operation, placing little burden on the crew. Airseas also offers a system for real-time analysis of weather data to recommend whether Seawing can be used. The captain determines whether the ship should use the Seawing, based on the recommended data and safety conditions on the route it is sailing.

"K" Line has posted a video introducing Seawing on its YouTube channel (https//youtu.be/oGCwhuiz71s).

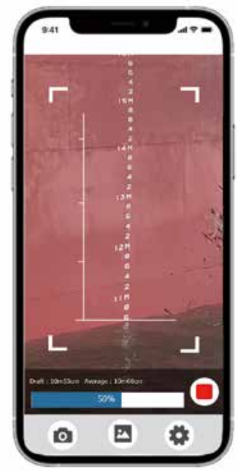
An image of a ship with Seawing

6 Bolstering the Business Base with DX

"K" Line is pursuing a digital transformation (DX) initiative featuring cutting-edge AI technologies as a means to bolster its business base with the aim of achieving the business strategies set forth in its medium-term management plan. Its efforts are not limited to the shipping company side; they will also lead to workload reduction and improved services for customers.

An automatic iron ore and coal loading plan creation and sharing system developed using the latest mathematical optimization technology quickly and automatically creates loading plans, achieving the "craftsmanship" of skilled marine engineers. It is used to maximize the loaded cargo volume, optimize loading operations and save onboard work after meeting the requests of shippers (such as loading ports, unloading ports, item-by-item cargo volumes and designation of cargo holds) and various conditions (such as drafts, trims and hull strength). "K" Line has already obtained good results from demonstration tests on the system. It will be continuing its study to put the system into practical use.

The company is also developing another system using AI-OCR technologies (which optically read both printed and handwritten text) specialized in dealing with port arrival and departure statements. It will be designed to read the formats prepared by major shipping agents across the world and calculate demurrage and despatch fees automatically in accordance with the contract terms from the obtained loading time and other relevant information. It is expected to improve the business process, which previously required manual transcription from statements to calculate and prepare laytime, and will save customer workload and improve service with a rapid calculation of demurrage and despatch fees. "K" Line plans to start trial operation of the system in April 2023.



The apps will display the draft values

The Company is also developing apps that can help a ship's crew accurately read ship's draft. The crew take videos of the ship's draft line with their smartphones, while AI will judge the sea surface and the ship's side shell plating and the AI-OCR technologies will read the draft marks. The apps will display the draft values, excluding the impact of waves, on their smartphone screen in real time.

LNG Carriers

Sales and Ship Management Sector to Develop Long-Term Contracts in Unison

Kazuhiko Harigai
Representative Director,
Senior Managing Executive Officer responsible for Energy Transportation Business Unit

Back to Tradition

— What role does the LNG carrier business play in "K" Line's medium-term management plan?

"K" Line had maintained the tradition of procuring vessels by concluding long-term service contracts with specific customers. As we have deviated somewhat from that tradition in the past 10 years, we all reaffirmed our policy of going back to the traditional methods at which we exceled. The unit for which I am responsible consists of the LNG carrier, LPG carrier, oil tanker, coal carrier and offshore business divisions. Among the four divisions, with the exception of the offshore business, which is effectively engaged in pure investment, LNG shipping is a business with extensive opportunities for long-term, constant returns. LNG carriers can be considered a profitable core business. Both oil tankers and coal carriers primarily have medium-term contracts and can be operated in a manner complementing LNG carriers. We believe that the role assigned to LNG carriers in this medium-term business plan is to provide a base business that can be expected to generate consistent, long-term returns.

— Are you saying that "K" Line has returned to its traditional LNG carrier business of working with good customers for the long term?

Yes, that is right. At one time, our Group did favor accepting medium- and short-term contracts for LNG carriers. However, our LNG carrier division has adhered to the traditional approach of long-term business through good ship management since its first vessel Bishu Maru was commissioned in 1983. If we step away from that practice and undertake short-term business through market bargaining, we will only get burned given the absence of this corporate culture in our Group. Moreover, LNG carriers are expensive and doing speculative business with them is far from easy. Though our return may be lower, positioning LNG carrier operation as a base business to accumulate consistent, long-term profits is more befitting to "K" Line, which is strongly committed to maintaining ship quality and ensuring safer operations. In principle, we are not considering short- and medium-term business. When our long-term contracts end, we may operate some of our aging vessels under short-term contracts, depending on circumstances. However, we will not be specifically targeting this business.

— "K" Line is planning to expand, its LNG fleet to about 70 ships by 2025, up from 44 at present. You seem to be making good progress in concluding contracts to ship LNG from Qatar. How do you evaluate the outcome in the first year of your medium-term plan?

We were able to conclude time charter contracts for 12 LNG carriers from QatarEnergy. We are pinning our hopes on additional deals with this shipper. More significant to us is our contract with Malaysia's PETRONAS, which rates our commercial practices and ship management highly. Our first deal with this company involved the LNG carriers we ordered through our joint venture with other operators. We were able to win a contract with PETRONAS when we had no cargo to move and were looking for spot deals. Our services earned a strong reputation at the Malaysian company, which helped to subsequently expand the relationship. When PETRONAS had to replace some of its aging LNG carriers, it asked us to offer proposals and ultimately adopted our proposal for the construction of its medium-size LNG carriers. Our business with

PETRONAS is broadening as we cooperate in the construction of its three medium-size LNG carriers and undertake projects on larger vessels and a joint study of carbon capture storage (CCS) in Malaysia.

— Where is your marketing strategy targeted as you prepare to expand the number of your LNG carriers to 70 ?

Our vessels will be primarily targeted for Asia. We will step up our marketing activities, especially in Southeast Asia. To deepen our presence in this region, we are looking at Indonesia and India where domestic demand for LNG is expected to grow rapidly. We are planning to increase our marketing staff at our Singapore office. We also cannot forget China when we look to expand our LNG transportation volume. Therefore, we will naturally place a greater emphasis on China-bound LNG transportation. We will be doing that in cooperation with our partners.

Ship Management is "K" Line's Strength

— What are "K" Line's strengths in the LNG carriers business.

We managed Japan's first LNG carrier, commissioned in 1983. The high quality of our ship management services is one of our strengths. Our management system will become even stronger, as the functions of our in-house management firm "K" Line Energy Ship Management Co., Ltd. have been transferred to Singapore-based K Marine Ship Management Pte. Ltd. Our LNG carriers operating in the Atlantic are managed by "K" Line LNG Shipping (UK) Ltd. The marketing and ship management functions are integrated at this company in an organizational format rarely seen at major shipping operators. This enables us to respond quickly. The company's one-stop marketing and ship management services are highly rated by its customers. We are also planning to combine the marketing and ship management functions of our Singapore subsidiary. What we are aiming for is to have all our marketing and management staff work from the same perspective.

— "K" Line's strong financial performance over the past two years has increased its financial strength. That would be an advantage, especially compared to overseas LNG shipping companies, wouldn't it ?

Yes, that is correct. The increase in our financial strength is quite significant. The operation of LNG carriers is primarily funded by project finance as it is based on long-term contracts which involve a large amount of money. Our greater financial muscle gives us more funding options. We have more elbowroom to venture into geopolitical risks, although that may have its own limit.

— Do you have any plans to appoint a shipowner in procuring the LNG carriers ?

As we sell our own high quality services to customers, we are not considering engaging owners in our time charter business. We may opt for bareboat chartering as a means of fund procurement. Given our current financial situation, however, we would be able to borrow money on conditions better than those available to owners. Nonetheless, when we need to charter secondhand vessels under short- and medium-term contracts, we may possibly appoint owners. At present, LNG carriers can be built only at Korean and Chinese yards. Their building slipways are almost fully occupied up to 2025 through 2026. They will be further booked with additional orders coming from Qatar. The new project will start in 2027-28, but until a new vessel is built, it is conceivable that in some cases used vessels will be chartered from a shipowner as a stopgap measure for a project.

Abundant Business Opportunities

— You are continuing to strengthen the ship management functions, which are already a strong point. What else do you plan to improve ?

One of the issues facing our LNG carriers division is that it does less business with power utilities and gas companies at home compared to its peers. We want to expand our business with this sector by capitalizing on the quality of our ship management services.

— As you expand your business, won't securing slipways be a challenge ?

Our immediate challenge is how to resolve the shortage of slipways, rather than addressing the rise of ship prices. Even while ship prices remain high, we can say there will be no problems if we can get long-term contracts based on charter fees commensurate with the ship prices from trustworthy charters. We also need to strengthen our relations with Korean and Chinese yards.

—The business environment is extremely favorable for expanding the LNG carriers business, partly due to the energy crisis caused by Russia's invasion of Ukraine.

Even before Russia's invasion of Ukraine, Europe was already experiencing an energy crisis due to the inability of wind farm and other sources to generate as much electricity as expected, causing prices to skyrocket. The physical problem that followed was that energy no longer went from Russia to Europe. The European energy policy has gone a bit too far, and there are moves to unwind it. LNG has come up in that review. LNG demand is not expected to be a problem until about 2040, with significant demand through 2050, according to one outlook. In this light, business from LNG carriers to be completed by 2030 or so are unlikely to be significantly affected from a demand standpoint. Given that scenario, there are great opportunities for the LNG carriers business.

TOPICS

Looking to Expand the LNG Carrier Fleet to 70

1 Long-Term Charter Contracts for 12 LNG Carriers with QatarEnergy

In 2022, "K" Line concluded long-term charter contracts for 12 LNG carriers with QatarEnergy. It has also been increasing the number of similar contracts with Malaysia's state-run PETRONAS group. The Company plans to expand its fleet of LNG carriers to approximately 70 vessels by around 2025, including those on order, and is steadily building up its fleet.

In 2019, QatarEnergy announced a policy of proceeding with the procurement of a large-scale LNG fleet of more than 100 ships in 10 years. It has adopted a method of selecting and combining shipyards and shipowners separately to organize shipping arrangements for transporting LNG from Qatar's North Field gas field and elsewhere, for which a final investment decision was made in February 2021. In 2022, contracts for the construction and chartering of a total of more than 60 newbuildings were signed as the first phase of the project. Of these, "K" Line, through joint ventures with NYK, China LNG Shipping (Holdings) of China, and Portovenere & Lerici (Labuan) Pte Ltd., a subsidiary of MISC of Malaysia, has secured long-term contracts of more than 10 years for a total of 12 vessels. Building orders for these newbuildings were placed with Hyundai Heavy Industries of South Korea and China Shipbuilding Group's Hudong-Zhonghua shipyard to be completed between 2025 and 2026. The vessels will be equipped with membrane tanks of about 174,000 cbm and gas-fueled , low-speed diesel X-DF 2.1 iCER engines to help reduce GHG emissions and reduce the burden on the environment through fuel-efficient operation across a wide speed range. "K" Line will be responsible for managing three of these vessels.

"K" Line's LNG carrier business has deep ties with Qatar. The project started since 1980s, "K" Line was part of a consortium of five Japanese shipping companies that won a bid for a large-scale LNG export project of Qatar. Also highly significant was the Company's bidding success in international negotiations that were conducted by Qatar, the seller, rather than by the Japanese shipper, the buyer of the LNG, under the LNG sales contract by Ex-ship. That laid a solid foundation for the subsequent expansion of the LNG carrier business for overseas projects. "K" Line has gained new opportunities with Qatar by leveraging the strengths it has cultivated through this business.

2 Firming Relations with Malaysian State-Run Company, Progressing in China Business Strategy

In the LNG carrier business, "K" Line is also firming up its relationship with PETRONAS Group, Malaysia's state-owned oil and gas company. In 2022, two 79,958-cbm medium-size LNG carriers, Lagenda Suria and Lagenda Serenity, were completed at Hudong-Zhonghua Shipbuilding in China, and the company has assigned them for a long-term contract with PETRONAS for up to 24 years (12 years plus a 12-year option).

This was the first long-term charter contract signed by PETRONAS Group with a shipping company outside Malaysia based on a new shipbuilding. Prior to this, in 2015, "K" Line concluded a two-year charter contract with PETRONAS for the LNG carrier Trinity Arrow. This was the first multi-year contract PETRONAS had signed with a shipping company other than its affiliate MISC Berhad. The quality of transport under that contract earned high marks at PETRONAS, leading to the subsequent awarding of the bid for the medium-size LNG carrier business. Another vessel of the same type is scheduled for delivery in 2023, for a total of three medium-sized LNG carriers to be deployed for PETRONAS.

These medium-size LNG carriers will transport LNG from the port of Bintulu, Malaysia, where PETRONAS has an LNG terminal, to the port of Shanghai, the location of the Wuhaogou LNG terminal of Shenergy, the Chinese buyer of the LNG. The carriers will be of the Wuhaogou-Max (W-Max) type, which is the maximum vessel size acceptable for the discharging operation at Shenergy's Wuhaogou LNG terminal. The W-Max type could become the standard hull form for medium-size LNG carriers.

This contract may enable "K" Line to expand its China business. Since PETRONAS will sell LNG to Chinese shippers and "K" Line's dedicated vessels will transport the LNG, it will also gain connections with Chinese shippers. "K" Line will looks to leverage the deal to expand its China business, given the increased presence of the country's LNG shippers.

The W-Max vessels are the first LNG carriers that "K" Line has constructed in a Chinese shipyard. The Company has since placed an order with Hudong-Zhonghua Shipbuilding for other large-size LNG carriers for Qatar.

In addition to strengthening its relationship with PETRONAS, "K" Line is also building further ties through environmental measures. The Company participated in a joint study on CO_2 capture and storage (CCS) in Malaysia being undertaken by PETRONAS and others. The project will explore suitable sites and technology for underground CO_2 storage in Malaysia, and will examine the possibility of collecting and transporting CO_2 from the LNG terminal in Bintulu, as well as the possibility of accepting CO_2 from outside Malaysia in the future. In this joint study, "K" Line will provide its experience and expertise in marine transportation of energy and offshore marine business to help customers and society decarbonize.

W-Max LNG carrier Lagenda Suria to be chartered to PETRONAS

3 Setting Up a Ship Management Hub in Singapore Strengthening Safety, Quality and the Community-Based Customer Support

In January 2022, "K" Line established K Marine Ship Management Pte. Ltd. (KMSM) in Singapore, transferring to the new company the ship management functions of LNG carriers and other energy resource carriers, which had previously

The opening ceremony of KMSM attended by Singaporean government officials

been conducted in Tokyo. KMSM is a functional strategic base to help strengthen business in Asia, which is positioned as a future growth market.

"K" Line's objective in establishing KMSM is to provide high-quality, safe and secure ship management services and to build a sustainable structure to meet new needs such as decarbonization and digital transformation. It is particularly aimed at securing qualified human resources. At present, 95% of the seafarers aboard "K" Line's ships are from countries outside Japan, primarily the Philippines and India. They work not only as crew members, but also as ship's superintendents (SI) and hold other positions ashore, where they utilize their maritime skills. One of the reasons for choosing Singapore as KMSM's base was to enhance ship management while maintaining continuity. A KMSM official says, "We will further strengthen the system and organization to maintain high-level quality control, including marine engineers and SIs who will pass on to the next generation the safe transportation know-how that "K" Line has accumulated over more than 100 years." KMSM will play a role in sustaining the safe operation and quality of transport that "K" Line has cultivated by training and securing multinational marine engineers and ship management SIs, while maintaining a core of Japanese marine engineers with expertise in safe transport.

There were a total of 24 vessels under KMSM's management as of December 2022. Of these ships, 11 are LNG carriers. As for LNG-related activities, one vessel is in operation in Singapore as an LNG bunkering ship (fuel supply vessel). KMSM is tasked with the management of this ship by FuelLNG, a joint venture between Keppel Offshore & Marine and Shell Eastern Petroleum, which develops LNG fuel supply business for ships. In addition to LNG carriers, KMSM also manages VLCCs, large LPG carriers (VLGCs) and so on.

Other than ship management, KMSM will also play a role in providing close support to low-carbon and decarbonization and DX initiatives, which are in increasing demand from customers.

With the expansion of its business in Qatar, one of the world's largest LNG exporters, "K" Line is also striving to capture demand from Malaysia and other Asian countries. KMSM's role in the future will increase along with that of London, which has long been the ship management base for LNG carriers.

Car Carriers

Making the Car Carrier Business a Growth Leader, Responding to Change

Yasunari Sonobe

Director,
Senior Managing Executive Officer responsible for Product Logistics Business Unit (at the end of March 2023)

Outcome Better than Planned

— What is the role of the car carriers division in your medium-term management plan?

I think the role played by the car carriers division is to become a business that can drive our Group's growth in response to changes in society. At the same time, it has a mission of supporting the auto industry, which leads environmental protection initiatives such as the promotion of electric vehicle (EVs) amid the solid expansion of demand brought by global population growth and the economic recovery from the impact of the COVID-19 pandemic. In responding to changes in society, it is important for the division to lead the shipping industry by steadily investing in carbon neutral initiatives, including the development of vessels powered by new fuels other than LNG. I think it is imperative for the division to transform itself into a business that can contribute not only to customers but to all of society through forward-looking consultations with customers, based on a fundamental policy of strengthening and expanding its customer base as a prerequisite to any such contribution.

— How do you assess the outcome of the first year of your medium-term plan?

In FY2022, although some production restrictions on finished cars remain due to supply shortages of semiconductors and parts, overall cargo movements recovered steadily and we have done our best to provide stable transportation services in spite of the shortage of available vessels. In addition to capturing new demand for the transportation of EVs, which is on the rise, we also achieved better-than-expected results for high and heavy cargo such as construction machinery, agricultural machinery, and railway cars. Amid changes in the supply-demand environment, we have been improving our profitability with the restoration of freight rates. In our environmental protection initiatives, we have also been making good progress by stepping up preparations for the deployment of eight LNG-fueled vessels after FY2024.

Prior to the start of our medium-term plan, our car carriers division had experienced poor profitability due to the slump in the overall shipping market from FY2016 to FY2018. However, we have been advancing structural reforms for the division, aiming at a fundamental review of working styles and organizational structures since FY2019. Our medium-term plan is positioned as a culmination of these reform initiatives. All staff in the division have fully understood and adopted the ideas underlying the reform initiatives. I think their efforts have helped reinforce our Group's physical strength and greatly improved its performance in FY2022. There is no doubt that we have been able to benefit from the tailwind in the business environment. For one thing, the recovery in global cargo volumes from the impact of the pandemic was quicker than expected. While volumes have not yet returned to the level of 2019, they have picked up at a speed faster than we had envisaged. Following the reduction in cargo volumes associated with the pandemic, shipping operators adjusted their capacities through the disposal of aging vessels. As a result, the transportation supply-demand balance has improved more quickly than previously anticipated. Another major factor was a rapid increase in the volume of cargoes shipped out of China. I think Chinese car exports in 2022 probably exceeded 3 million units, far more than South Korea's annual export shipments. The emergence of new exports equal to Korea's annual volume in a matter of years

has a tremendous impact on global Pure Car Carrier (PCC) supply and demand. Supported in part by these changes in the business environment, our medium-term plan made significantly greater progress than envisaged in its initial year.

Focusing on Efficient Ship Deployment

— In the medium-term plan, your car carrier division is placing priority on retaining the existing transportation business , capturing more of the growing EV transportation demand and deploying environmentally friendly vessels. How much progress have you made in each of those initiatives ?

With respect to the existing transportation business , our efforts boil down to improving our transportation efficiency with the limited number of PCCs we have. We have been working to improve the efficiency of space management through a quicker rotation of our vessels. To begin with, car carriers have been a type of vessel with a very small number of free ships, and currently we have none. What proved fortunate for us was that we had been preparing to charter larger 7,000-unit PCCs with the aim of enhancing the efficiency and profitability of our fleet while doing away with our aged small- and medium-size vessels with a capacity of 4,000-5,000-units each amid the persistent impact of the pandemic. Even so, we have not yet secured an adequate transportation capacity. Until the newbuildings are delivered, we will basically have to be as efficient as possible with the vessels we have on hand.

— How do you see the new transportation demand ?

Our challenge is how to respond to the rapidly growing Chinese market. It will be a difficult effort with little additional space available. Still, we have no choice but to make adjustments to achieve the optimum while closely monitoring the situation on each route and the shipping trends of existing customers. We are in a situation where we will continue to offer steady services to our customers in Japan as a Japanese carrier and respond to the new transportation demand with the spaces we have managed to squeeze out.

— Your division has also been emphasizing the transportation of high and heavy cargo.

We have been doing better than expected in that area. Our main cargo item there is construction machinery. But we have also been making good progress in the transportation of other non-self-propelled cargo items. We were able to further expand our customer base due in part to the very tight space on the container ship. I think this will lead to a further expansion of our business in the future.

A Pioneer in the Car Carrier Business

— You have already decided to procure eight LNG-fueled PCCs. Tell us about your fleet buildup plan after that.

Considering future transportation demand and a review of our fleet procurement plan in response to environmental initiatives, we may need to build up our fleet through a periodical order placement even after the deployment of the eight PCCs. When the carbon intensity indicator comes into effect and slow steaming is increased, transportation capacity will decrease in relative terms. We may also need to replace our low-rated vessels. Taking these factors into account, we may not be able to keep our present capacity unless we procure the number of vessels we need in a timely manner. The question here will be what ship fuel we will be using for our future vessels. At this moment, we think ammonia will possibly be the main fuel after LNG. However, with regard to our fleet buildup plan for European short sea, we are conducting a study with some other ideas in mind, including methanol and batteries. In any case, the next generation of new fuels will require even larger fuel tanks, which will affect cargo loading space, and car carriers may be at a disadvantage compared to other ship types in terms of economics due to their hull structure. Therefore, in proceeding with the new construction and maintenance of ships, we must obtain the understanding of our customers in order to optimize the shipbuilding process. We are already working on the basic design of our future ammonia-fueled PCC. But I feel that we still have high hurdles to clear, including the supply of fuel.

We have another challenge to address. With the aim of strengthening our response to the growing high and heavy cargo transportation demand, we are working on developing a new ship model by adding the specs of a RORO ship to those of the existing PCCs. We think it is necessary to develop them to a certain scale as soon as possible.

— What are the car carriers division's strengths at "K" Line, and how do you plan to apply them to your future business development?

"K" Line is a pioneer in the PCC business. We evolve our business based on our long-standing relationships of trust with our customers. One of our great assets is that we can constantly talk with our customers about various matters by relying on these relationships. In the future, as we move forward with our response to environmental issues and EV support for the marine transportation of finished cars, the process of always listening carefully to our customers' requests and aiming for the optimal solution is extremely important. In particular, discussions on additional costs will be unavoidable as we look to increase the number of LNG-fueled vessels and next-generation PCCs. We will continue to grow our business through a constant dialogue with our customers to gain their full understanding.

— Tell us about your future outlook.

As for the global economic outlook, there is a mix of both bullish and bearish views at the moment. I think that the basic trend is somewhat downward as this situation lingers over the next year. Cargo movements of finished cars are expected to increase moderately, partly due to a recovery in production following improvements in the supply of semiconductors and parts. While many of PCC newbuildings are due for completion in 2024 and 2025, there will be no significant expansion of global transportation capacity because slow steaming will be emphasized and the retirement of aged heavy oil-fueled vessels will be brought forward to meet environmental requirements. Therefore, I think the supply-demand balance in the shipping industry will remain tight for some time to come. I am of the view that transportation demand for finished cars will continue growing in the medium term. We will steadily prepare various services through the procurement of our new PCCs and a better response to high and heavy cargo so that we will be able to meet the growing transportation demand.

Compared to the past, the scale of business has expanded considerably and become more complex, and we are now in an era that demands the ability to think and execute beyond conventional boundaries, including environmental protection initiatives. In order to meet the needs of our customers and contribute to society, I believe it is extremely important to continue developing the capabilities of individual employees and strengthening the competitiveness of the organization as a whole.

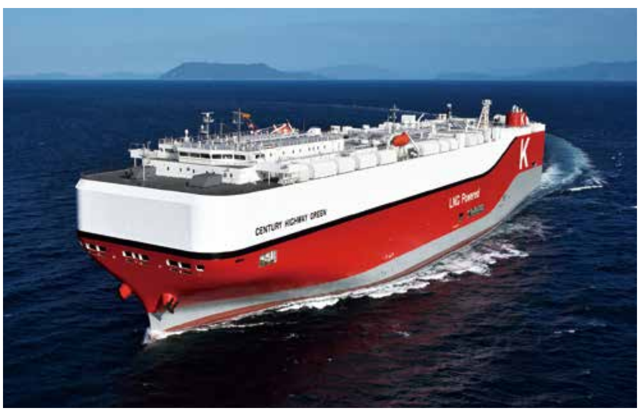
TOPICS

Enhancing the Transportation Base, Stepping Up Environmental Initiatives

1 Promoting R&D on Vessels Powered by Alternative Fuels

Century Highway Green, the first 7,000-unit LNG-fueled Pure Car Carrier (PCC) to be run by the "K" Line group, was launched at Imabari Shipbuilding Co. in March 2021. "K" Line later decided to procure eight more similar vessels between

FY2023 and FY2025 and agreed to have two each built at Nihon Shipyard Co. Shin Kurushima Dockyard Co. and China's Merchants Jinling Shipyard (Nanjing) Co. The six vessels have been ordered for the Company's own possession. Two of them, ordered from Nihon Shipyard, will be built at Imabari Shipbuilding. The remaining two vessels, to be chartered from third parties, are due to be completed in the second half of FY2023.



Century Highway Green, the first LNG-fueled PCC to be operated by the "K" Line group

In 2011, "K" Line announced ahead of its peers a project to have a 2,000-unit LNG-fueled PCC built for its subsidiary, "K" Line European Sea Highway Services GmbH (KEES). Century Highway Green was commissioned ten years after that announcement. The ship is equipped with main and auxiliary engines that emit little methane slip and an exhaust gas recirculation (EGR) system that reduces NOx emissions. These give it a superior environmental performance compared to the average LNG-fueled vessel. Also equipped with high-speed onboard communication infrastructure, Century Highway Green is positioned as the Group's digital flagship, fit for remote activities.

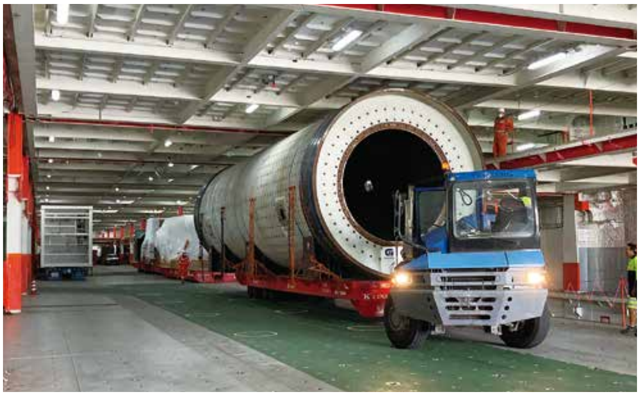
Based on a policy of accelerating the shift to LNG fuel with an eye to a future of zero emissions, in December 2021 "K" Line joined with Shin Kurushima Dockyard to acquire joint approval in principle (AiP) for their new concept design of an ammonia-fueled PCC from Nippon Kaiji Kyokai (ClassNK). This is known to be the world's first AiP for an ammonia-fueled Pure Car Carrier. "K" Line, which is conducting R&D with shipbuilders on environmentally friendly vessels, is holding talks with its partners on the use of a broad range of green energy sources such as ammonia, hydrogen, biofuel and fuel cells. Its prime aim is to build vessels powered by next-generation fuels.

2 Establishing a Sales Promotion Structure to Capture New Demand

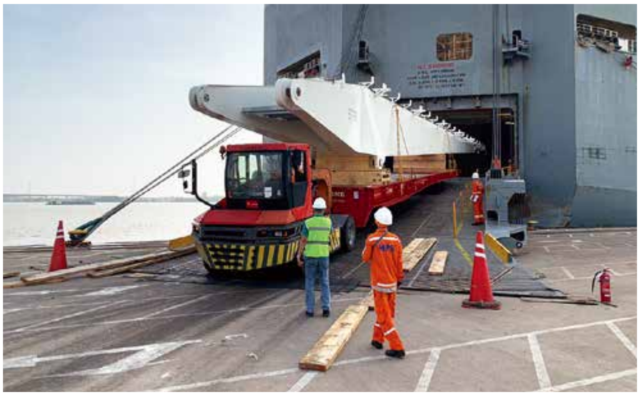
"K" Line organized a special team at its PCC Business Group in August 2022 with the aim of uncovering customer demand and stepping up collaboration between the Group and in-house environment-related divisions. The team focuses on environmental initiatives, one of the top priorities for the car industry. It is tasked with oversight of the sales activities at each division and acts as a liaison with companies both inside and outside the Group.

The management sees the team as a pilot model for organizational sales. With backup from customer manufacturers, members of the team have been directly participating in business negotiations together with in-house salespersons and environmental specialists. With the momentum for decarbonization accelerating in the car and shipping industries, as it has already been doing in front-running Europe, those who do business in these sectors need to have technical and specialist knowledge through dialogue with their customers. This requires "K" Line to ensure that all related divisions function more organically and flexibly. Starting in April 2023, the Company will be moving ahead with organizational reforms for the dual purposes of linking its environmental initiatives to more profit opportunities and making a greater contribution to society's low carbon/decarbonization initiatives.

"K" Line has already been making good progress on attempts to capture more high and heavy cargo, one of the top priorities in its medium-term management plan. At present, transportation demand for construction machinery, agricultural machinery and mining machinery is growing rapidly amid an upsurge in resource and commodity prices and strong demand for infrastructure construction. Maritime traffic involving these cargo remains upbeat. Usually, car carriers have limited space to transport large machinery vehicles. However, "K" Line can readily respond to this demand as it owns and operates 16 7,500-unit Postpanamax PCCs whose deck and ramp structure are designed to cater to high and heavy cargo. It has been building up its haul of such cargo by



A loading operation for an ultra-large mill drum



Loading scene of a crane jib

holding in-depth talks with customers and providing them with detailed service proposals.

"K" Line caters to transportation demand for not only construction machinery but also other non-self-propelled cargo items such as railway cars, machine tools, power transformer/generator equipment, oil well pipes, belt conveyors and cable drums. Some of its customers bring out-of-gauge (breakbulk) cargo items, which are not sufficiently large in terms of either size or volume to be put on general cargo ships but which are also not suitable for containerships. The Company can offer competitive solutions for these cargo in terms of schedule punctuality and stability, service quality and cost. It accepts these items and puts them in its PCCs with roll-on/roll-off handling. This operation requires a trolley called murphy trailer and dedicated cargo-handling equipment such as a tugmaster. The Company has these in place at ports around the world. It has steadily built a track record in projects requiring advanced transport technology, such as heavy cargo of over 100 tons and long cargo of dozens of meters, and its ability to handle both the tangible and intangible aspects has been increasing with each year. Today it can meet diverse transportation demand from a broad range of customer shippers, and will continue to beef up its capacity and capabilities. Under its fleet buildup programs, "K" Line is working on new ship designs better suited for high and heavy cargo.

3 The First Dedicated Finished-Vehicle Terminal Comes Onstream

"K" Line began operating the Group's first dedicated finished-vehicle terminal at Yokohama Port Daikoku C-4 Terminal in April 2022.

Yokohama, one of Japan's biggest ports handling finished vehicles, is called by many PCCs including those of "K" Line. It also caters to high and heavy cargo and other non-self-propelled breakbulk cargo, in addition to new and finished cars. By acquiring its own terminal at Yokohama, which it positions as a key port for its PCC business, "K" Line will be providing its customers with more flexible schedules, better services and abundant storage space.

The Company uses Yokohama Port not only to deal with cargo to/from Japan but also to tranship cross-trade cargo mainly to/from Southeast Asian and Latin American countries. Historically, it has transshipped 30,000-40,000 vehicles annually at Yokohama Port. That volume is expected to increase since the new terminal makes it easier to control quality and secure the necessary storage space at the time of transshipment. Equipped with a roofed maintenance shop, the terminal can take better care of a wide range of goods, including machinery that is vulnerable to rain.

Cargo handling operations at Daikoku C-4 Terminal are undertaken by Daito Corp., a subsidiary of "K" Line, which calls on its extensive experience to offer quality services including damage prevention and precautions during bad weather such as typhoons. The terminal accepts ships run by operators other than "K" Line. The Company is planning to optimize its operation in cooperation with Yokohama City's Port and

Daikoku C-4 Terminal at Yokohama Port

Solar carport/EV is introduced to Daikoku C4 Terminal

Harbor Bureau.

With its own terminal facilities, "K" Line is now taking further steps to upgrade its environmental initiatives and introduce new technologies. It is preparing to procure electricity 100% generated from wind power by utilizing power specification services based on blockchain technologies offered by UPDATER, a Tokyo-based power venture. It is increasing the number of energy-saving offices and switching the lighting at its yards for night work to LED. "K" Line is introducing more EVs to move staff between the terminal offices to the ships and as power supply sources to be used in emergencies. It plans to use the power from them in combination with the electricity generated at solar carports located in the terminal premises.

As an initial step in utilizing digital technology, "K" Line began operating its proprietary Yard Management System in November 2022. This system manages the status of loading/unloading, vehicle information and storage locations at the terminal. Its mapping function enables the automatic creation of storage maps, making it possible to visualize the status of vehicles more accurately and clearly at a glance. The company is aiming for efficient yard operations by utilizing the system for purposes such as forecasting the number of vehicles to be stored by accumulating and analyzing past data. The system manages the export of secondhand vehicles using QR codes. It can improve the accuracy and efficiency of operations using handheld equipment, which enable terminal staff to ascertain the status of vehicles quickly and accurately from any location. The updated information can be shared by all parties through the system.

"K" Line plans to make full use of the terminal to verify the utilization of digital technologies and apply the results obtained to business operations at its dedicated terminals outside Japan.

“K” Line With — Management Plan Video

Up-and-coming members of the General Planning Team of the Corporate Planning Group who support the operation of *“K” Line With*

“K” Line has launched a video website *“K” Line With* for Group companies with the aim of disseminating its medium-term management plan internally. In addition to providing easy-to-understand videos explaining management plans and financial results, the site also explains projects being carried out by each department, introduces new employees, and provides information on ship construction and conditions onboard ships. It has evolved into a tool for deepening a sense of unity within the group.

After holding a series of discussions, the General Planning Team of the Corporate Planning Group came to the conclusion that communicating the management plan through video in a straightforward, informal way will help make it better understood within the Company. The goal of “Let’s achieve our medium-term management plan with a sense of unity throughout the entire company!” is expressed in the name *“K” Line With*.

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