Dry Bulk

Business Segment

Coal & Iron

Ore Carrier Business / Bulk **Carrier Business** We transport a large volume of dry bulk cargoes including iron ore, woodchip, grain, and coal. We are expanding our business internationally by actively engaging in transportation of cargoes bound for not only Japan but also China, India, and the Middle East, as well as trade between third countries within the

Atlantic region. We are taking on the challenge of decarbonization such as wind power, LNG fuel, and biofuel.

developed in-house in accordance with port restrictions of

Japan's thermal power plants, provides safe and reliable trans-portation of coal mainly to power utility companies in Japan

and Taiwan. In the offshore business, we participate in a drill-ship project off Brazil and a Floating Production, Storage and

In the LNG carrier business, we offer global transportation services of LNG, for which demand is increasing worldwide as

an alternative fuel source, and provide service to customers with diversifying needs across the LNG value chain. In the

carbon-neutral promotion business, we promote business

development related to renewable energy including offshore wind power generation; carbon capture, utilization, and stor-

Offloading system (FPSO) off Ghana.

age (CCUS); and alternative fuels.

and Kobe.

Business overview

Tanker Business / **Fuel Business**

Energy Electricity and Resource Offshore **Transport** Business

> **LNG** Carrier Business / Carbon-Neutral Promotion Business

Car Carrier

Business







Since introducing Japan's first pure car carrier (PCC) in 1970, we have continued to provide high-quality transportation service of passenger cars, trucks, and other vehicles. The business will further enhance its RORO cargo services (roll-on, roll-off cargo services using specialized handling equipment) based on knowledge honed over 50 years. An LNG-fueled car carrier was delivered in fiscal 2020 and we continue to perform optimal fleet management with special care for environmental

We provide comprehensive logistics services to meet various customer needs for ocean cargo transportation as well as air

cargo transportation, tugboats, land transportation, warehousing, and automotive logistics. In addition, we operate container

terminals at four ports in Japan—Tokyo, Yokohama, Osaka,

Logistics and **Port Business**

Product Logistics

Others

Short Sea and Coastal Business



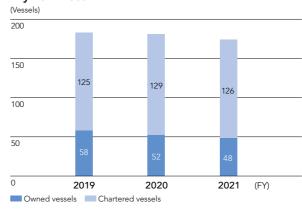


Kawasaki Kinkai Kisen Kaisha, Ltd., provides domestic marine transportation and ferry services. It operates passenger ferries, RORO vessels, dedicated limestone carriers for steel mills, dedicated thermal coal carriers for electric power utilities, and also general cargo carriers. It also operates general cargo and bulk carriers for cargo to and from Asia. Furthermore, it has entered the offshore support vessel operations around Japan to further enhance the business.

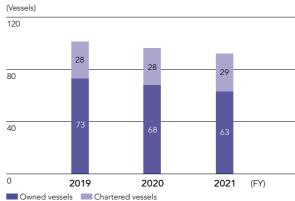
In April 2018, the containership businesses of three Japanese shipping companies were integrated to form a new company, ONE. Drawing on its enhanced service route network, it provides stable, reliable, high-quality, and competitive services and is capable of swiftly adapting to changes in the environment.

The "K" LINE Group also operates businesses engaging in ship management services, travel agency services, and real estate rental and administration services.

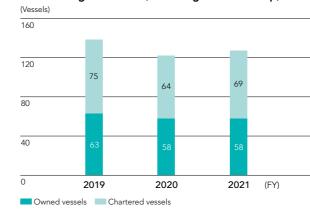
Dry Bulk Fleet



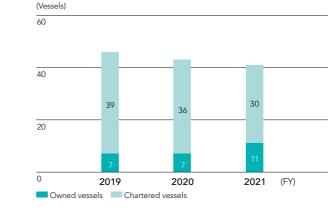
Energy Resource Transport Fleet



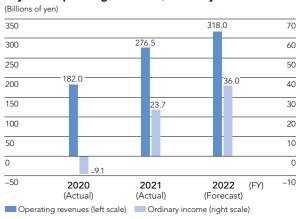
Product Logistics Fleet (Excluding Containership)



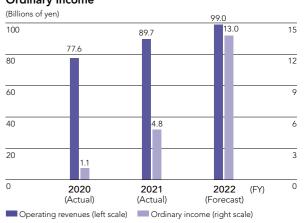
Product Logistics Fleet (Containership)



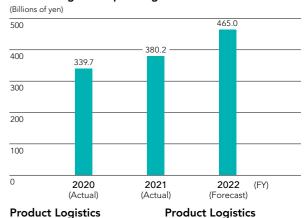
Dry Bulk Operating Revenues, Ordinary Income



Energy Resource Transport Operating Revenues, Ordinary Income



Product Logistics Operating Revenues



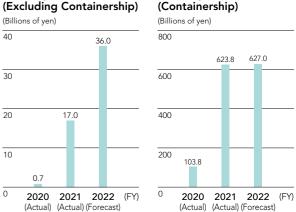
Product Logistics Ordinary Income (Excluding Containership)

40

30

20

10



Ordinary Income

Note: Fiscal 2022 forecasts for segment operating revenues and ordinary income reflect the forecast announced in August 2022.

Business Overview

Dry Bulk



Coal & Iron Ore Carrier Business

Bulk Carrier Business

Atsuo Asano

Vice President Executive Officer Responsible for Dry Bulk Carriers Unit, In charge of Bulk Carrier and Drybulk Planning

Overview of Fiscal 2021 -

Coal & Iron Ore Carrier Business

Seaborne trade in coal & iron ore was robust at the outset of the fiscal year with high levels of crude steel production in China and other countries. Toward the middle of the fiscal year, freight rates in the cape-size bulker market rose as tonnage supply contracted due to an increase in ships forced to wait outside ports in Far East Asia amid stricter COVID-19 restrictions around the world. In the second half of the fiscal year, transportation demand settled down as a result of the Chinese government restricting output of crude steel, and around the end of the fiscal year, prices softened as shipments declined due to bad weather at major iron ore production sites. For the entire fiscal year, however, market conditions were brisk overall, despite these fluctuations in demand.

Bulk Carrier Business

For Panamax- and handymax-size bulker, freight rates remained at levels far higher than initially expected, owing to a recovery in bulk cargo volume for thermal coal, for example, as economic activity picked back up, in addition to a sharp increase in demand for grain transportation to China. At ports around the world, restrictions on entering and leaving ports due to stricter protocols for COVID-19 caused ship congestion and created favorable market conditions, including the overflow of some container cargo to bulkers for transport.

"K" LINE worked to optimize the structure of its fleet, disposing of and returning unprofitable ships, while striving to maximize its profitgenerating capabilities by maintaining and expanding its stable earnings base, and increasing the efficiency of vessel allocation.

Medium-Term Market Conditions (Risks and Opportunities)

Coal & Iron Ore Carrier Business

Growth in overall transportation demand slowed down, but the supply-demand balance for ship tonnage should improve in the near term, owing to the retirement of vessels with poor fuel economy or are economically unable to comply with new safety and environmental regulations, as well as restraints on the speculative placing of orders for new ships. Meanwhile, the movement toward low-carbon and carbon-free supply chains is likely to create demand for LNG fuel, biofuel, and other alternative fuels for zero-emission vessels. As existing ships are replaced, technologies that lower fuel costs for existing ships are also likely to advance and become more sophisticated.

Bulk Carrier Business

For Panamax- and handymax-size bulker, demand for the bulk transport of grain and coal, mainly in emerging countries, looks likely to increase and remain strong, but attention should be paid to changes in coal transportation demand, which depends on government policies for fossil fuels in each country.

The supply of new ships is likely to remain limited as attention turns to compatibility with next-generation fuels. The supply-demand balance for vessel tonnage will probably tighten. For Panamax- and handymax-size bulker, "K" LINE intends to adopt energy-conserving equipment and biofuels and improve fleet efficiency in order to reduce environmental load while ensuring safe and reliable fleet operations and transportation.

Dry Bulk (All Types) Fleet Ranking

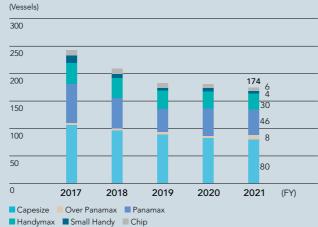
(As of July 2022)

Operator	100,000 DWT	Vessels
China COSCO Shipping	375.2	335
Fredriksen Group	142.5	104
Star Bulk Carriers	140.7	128
NYK	135.7	149
China Merchants	131.5	117
Berge Bulk	120.8	64
"K" LINE	119.4	99
Pan Ocean	115.1	82
CDB	103.9	117
ICBC	103.1	32
	China COSCO Shipping Fredriksen Group Star Bulk Carriers NYK China Merchants Berge Bulk "K" LINE Pan Ocean CDB	China COSCO Shipping 375.2 Fredriksen Group 142.5 Star Bulk Carriers 140.7 NYK 135.7 China Merchants 131.5 Berge Bulk 120.8 "K" LINE 119.4 Pan Ocean 115.1 CDB 103.9

Note: Owned vessels and a part of chartered vessels

Source: Clarksons

"K" LINE Dry Bulk Fleet







Masatoshi Taguchi

Executive Officer

In charge of Coal & Iron Ore Carrier Business, Coal & Iron Ore Carrier Planning & Operation

Fiscal 2022 Medium-Term Management Plan

	Category	Strategic direction	Major initiatives and investment plans
Coal & Iron Ore Carrier Business	Role of driving growth	Maintain strong relationships with existing customers in Japan and across Asia, aim to maintain and expand earnings base while stably operating businesses Aim to expand stable earnings by proactively tapping into environment-related demand at resource majors	Maintain and expand stable earnings base while proactively responding to environmental needs of customers, invest in growth to meet demand for alternative-fuel vessels, such as LNG and ammonia fuels, and upgrade the quality of fleets Increase and train key personnel in sales and ship operations in order to advance and develop the customer-centric sales structure, and strengthen environment-related marketing through assignment of maritime technical personnel Maintain proper fleet size and crew compositions, control market exposure to maintain responsiveness to price fluctuations, and continue to strengthen resilience
Bulk Carrier Business	Role of contributing by enhancing profitability	 Aim to transition to and strengthen a sustainable earnings business model resilient to fluctuations in market prices by improving resilience to market forces Aim to further improve fleet allocation efficiency and reinforce the customer base in the Middle East, India, and Southeast Asia regions where the Company is strong 	Shift to an asset-light structure by aligning freight contracts with ship ownership (charter) contract timelines Improve access to markets across Asia by expanding and augmenting functions at the Company's asset management and business operations center in Singapore

Topics =

Automated Kite System "Seawing" to Be Installed on Coal & Iron Ore Carrier

Five years have passed since we began examining the Seawing automated kite system, and about three and a half years have passed since we decided to implement the system. At last, the Seawing system will be installed on cape-size bulkers. Plans call for installing the system in December 2022, and after trial runs are completed, operations will start on the open seas in 2023.

Seawing is a propulsion assist system for ships that uses an automatic kite that unfolds from and flies in front of a ship, based on technologies developed by AIRSEAS, a company spun off from AIRBUS, a major aircraft manufacturer. This system is projected to cut CO_2 emissions by 20% when sailing. We also plan to install this system on an LNG-fueled cape-size bulker, which will complete construction in 2024.

In the dry bulk business, we aim to reduce greenhouse gases through research into alternative fuels for ships and energy-saving systems, such as harnessing the power of the wind.

Energy Resource Transport



Tanker Business

'20 '22 (CY)

Source: Clarksons

Fuel Strategy & Procurement Business

Hisashi Nakayama

Executive Officer In charge of Tankers, Fuel Strategy & Procurement

➤ Overview of Fiscal 2021

Tanker Busines

Tanker Freight Index

(Worldscale)

Very large crude carriers (VLCCs) and very large liquefied petroleum gas carriers (VLGCs) contributed to our earnings, particularly through medium- and long-term charter contracts. We placed an order for one VLGC to fulfill a new charter contract.

Fuel Strategy & Procurement Business

In the LNG fuel supply business, we performed ship-to-ship bunkering of LNG fuel to LNG-fueled car carriers in the Chubu region. In Singapore, we commenced ship management of the LNG bunkering vessel FUELNG BELLINA, which is owned by FueLNG Pte Ltd, and performed ship-to-ship supply of LNG fuel. In the hydrogen business, we continued to conduct experiments with the CO₂-free Hydrogen Energy Supply-chain Technology Research Association (HySTRA), and participated in various associations to create a hydrogen supply chain as well.

► Medium-Term Market Conditions (Risks and Opportunities)

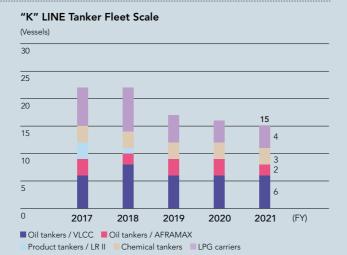
Tanker Business

The transition from fuel oil to alternative fuels in VLCCs and VLGCs presents new earnings opportunities. At the same time, changes in demand for energy amid the movement toward low-carbon and carbon-free operations will have an impact on demand for marine transportation of crude oil and LPG. With that said, we expect demand for crude oil and LPG to recover in a post-pandemic world.

Fuel Strategy & Procurement Business

In the maritime industry, ships are gradually being transitioned from fuel oil to alternative fuels for the purpose of decarbonizing, leading to the greater use of LNG, biofuels, methanol, ammonia, and batteries to power vessels. At the same time, the bunkering business for these next-generation fuels has been expanded.

350 300 250 200 150







Fiscal 2022 Medium-Term Management Plan

	Category	Strategic direction	Major initiatives and investment plans
Tanker Business	Role of supporting smooth energy source conversion and taking on new business opportunities	Continue to maintain and improve transportation quality and technologies for VLCCs and VLGCs Maintain ship management system for managing alternative fuel ships and ships to meet new transportation demand such as ammonia	• Respond to demand for alternative fuels on VLCCs and VLGCs
Fuel Strategy & Procurement Business	Expansion of new businesses in fields where "K" IINE can utilize its strengths	Continue initiatives in next-generation fuel procurement and bunkering operations	Expand LNG fuel and biofuel procurement and supply network Participate in bunkering business and build an ammonia bunkering base

Topics

Participation in Joint Study of Ammonia Fuel Bunkering for Ships in Singapore

In April 2022, "K" LINE joined a consortium working toward the realization of ammonia fuel bunkering operations for ships in Singapore, the world's largest ship fuel bunkering base, and signed an agreement to accelerate joint research.

Ammonia is a promising alternative fuel for next-generation ships that has the potential to greatly reduce greenhouse gas emissions in the maritime industry, because ammonia does not emit CO_2 when incinerated. On May 6, 2022, the consortium received from the American Bureau of Shipping (ABS) an Approval in Principle (AIP) for the design of an ammonia bunkering vessel.



© Keppel Offshore & Marine

With the objective of realizing ammonia fuel bunkering for ships in the late 2020s, "K" LINE is jointly researching to contribute to this goal through specific knowledge gained from ship-to-ship LNG bunkering vessel management and its experience owning and managing ammonia carriers.





Offshore Business

Michitomo Iwashita

Executive Office

Supervising Ship Technical, GHG Reduction Strategy In charge of Power & Marine Sector, Advanced Technology

➤ Overview of Fiscal 2021

Electricity Business

As economic activity picks back up in Japan, the operating rates of coal-fired power plants have increased to meet growing demand for electricity, resulting in an increase in the volume of coal used by these power plants. While a reliable source of earnings, the "K" LINE Group's fleet of ships have contributed to the safe and reliable transportation of coal, mainly based on medium- and long-term contracts, thanks to the flexible and efficient allocation of fleets in accordance with changes in demand at power stations.

Offshore Business

The floating production storage and offloading system (FPSO) business produced stable earnings through continuously high utilization rates based on a long-term contract in the project off Ghana. Our drillship business contributed to earnings from the smooth operation of a project off Brazil conducted under a long-term contract.

In the offshore support vessel business, where earnings have been struggling for a long time due to a slump in market conditions, "K" LINE decided to sell all vessels owned by consolidated subsidiaries and liquidate the business.

▶ Medium-Term Market Conditions (Risks and Opportunities)

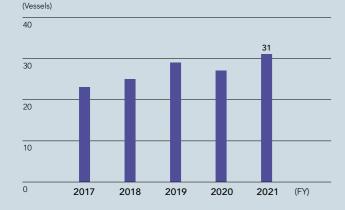
Electricity Business

Amid concerns about shortages in electric power supply capacity due to the decommissioning of aging thermal power plants and delays restarting nuclear power plants, relatively new coal-fired power plants are likely to continue operating for some time while aiming to reduce CO₂ emissions. With the ultimate aim of becoming carbon neutral by 2050, demand is likely to emerge for the transportation of alternative fuels, such as ammonia and hydrogen, and liquified CO₂, which is considered as the mode of transport for CCUS.

Offshore Business

Over the past five years, the amount of investment in the development of fossil fuels has halved in tandem with the global movement toward decarbonization. Energy prices have risen sharply after Russia invaded Ukraine and as economies have recovered from the pandemic, increasing the likelihood of a temporary rise in investment in the development of muchneeded oil and gas reserves. However, the cost of developing and operating gas and oil fields in the ocean is higher than on land, so investment might stall if there are no clear prospects for a return on such investments over the long term.

"K" LINE Thermal Coal Carrier Fleet



Progress in FPSO Business

For Ghana

• Steady operations

For Braz

- Announced equity participation agreement in FPSO owning and chartering business for Marlim II project offshore Brazil (July 2020)
- FPSO Anna Nery naming ceremony held on June 8 (June 2022)
- Plan to officially participate in this project in 2023



FPSO John Agyekum Kufuor (Photograph provided by Yinson)



Fiscal 2022 Medium-Term Management Plan

	Category	Strategic direction	Major initiatives and investment plans
Electricity Business	Role of supporting smooth energy source conversion and taking on new business opportunities	 Provide customers with a high-quality coal transportation service fleet, even during transition period in energy mix Reduce CO₂ emissions from our own coal carriers by installing environmentally friendly equipment, centered on the Seawing system Solve technical issues in order to meet new transportation demand for ammonia, hydrogen, and liquefied CO₂ 	Switch to new ship designs that reduce CO ₂ emissions and excel in energy conservation Reduce lifecycle CO ₂ emissions by installing Seawing system on existing ships Conduct R&D into hydrogen and liquefied CO ₂ carriers, and upgrade fleet of ammonia carriers
Offshore Business	Role of supporting smooth energy source conversion and taking on new business opportunities	Create a stable earnings base while hedging against risks as necessary during transition phase in energy mix	Ensure stable earnings by maintaining high operating rates in existing businesses

Topics

Build a Group Fleet with Environmental Systems That Lower Carbon Footprint

In Japan, the electrical power business environment has changed dramatically since the government proclaimed in 2020 the goal of becoming carbon neutral by 2050, and unveiling in 2021 targets for reducing greenhouse gas emissions by 46% by 2030 (compared with the fiscal 2013 level). However, due to a variety of factors, events occasionally occur that tighten the supply-demand balance for electricity in Japan. From July to September 2022, electric power companies asked customers to conserve electricity usage across the nation for the first time in seven years. With move toward realizing a carbon-free footprint, demand for the transportation of coal to coal-fired power plants is likely to decrease in the future. For the time being, however, coal-fired power plants will probably remain an important source of electricity from the standpoint of ensuring a reliable supply of electricity, while efforts are being made to reduce carbon emissions with biomass mixed-fuel incineration and improvement in power generation efficiency. While monitoring progress toward a carbon-free footprint, the "K" LINE Group intends to build a fleet of ships with environmental systems that reduce carbon emissions, in order to fulfill demand for the transportation of fuel for Japanese electric power companies and meet expectations for a lower carbon footprint.

Energy Resource Transport



LNG Carrier Business

Carbon-Neutral Promotion Business

Satoshi Kanamori

Executive Officer
In charge of LNG, Carbon-Neutral Promotion

➤ Overview of Fiscal 2021

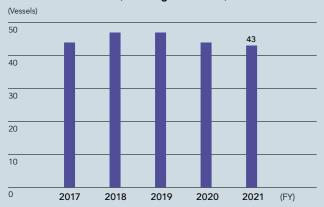
LNG Carrier Business

In the LNG carrier business, utilization of existing vessels were favorable, and its earnings contributed to stable-earnings via medium- to long-term chartering contracts. We are moving forward with the construction of new vessels scheduled to be delivered after fiscal 2022 for some new projects. Among new projects, an expansion project in Qatar is included, where procurement of several dozen new ships is expected. We are also tackling to increase demand over the long term for LNG, centered on gas-producing countries and emerging countries.

Carbon-Neutral Promotion Business

In addition to the LNG value chain, "K" LINE is proactively developing business related to support vessels for offshore wind power generation projects, and liquefied CO₂ carriers for CO₂ capture, use and storage (CCUS) projects. Regarding support vessels for offshore wind power generation projects, sales activities are performed by "K" Line Wind Service, Ltd. (KWS), a joint venture established with Kawasaki Kinkai Kisen Kaisha Ltd. Regarding liquefied CO₂ carriers, "K" LINE is engaging in R&D with partners while developing and building a demonstration vessel.

"K" LINE LNG Carrier (Including Co-Owned)



► Medium-Term Market Conditions (Risks and Opportunities)

LNG Carrier Business

LNG will play a major role in the energy transition toward decarbonization. Demand for LNG is expected to peak in the 2040s. We expect demand remains firm and strong in the medium to long term, given the European Union is switching its energy policy back to natural gas and nuclear power after investing in renewable energy, and long-term (20-year) LNG procurement contracts are being signed in Asia, especially in China.

However, there is also a risk of stagnation in cargo movement on concerns about an increase in COVID-19 cases and major changes in the global economy due to a prolonged war between Russia and Ukraine.

Carbon-Neutral Promotion Business

Regarding support vessels for offshore wind power generation projects, a variety of work vessels and transportation ships will be needed in Japan as the growth phase approaches for offshore wind power generation. Even more work vessels and transportation ships will be needed if floating-type wind power generation projects increase in offshore areas far away from land. CCUS is being considered by companies in various industries as one of the realistic solutions for becoming carbon neutral. There is considerable potential for marine transportation using liquefied CO₂ carriers, especially in Europe, Japan, and other parts of Asia. However, these projects also require the creation of rules and systems for implementing a series of environmental measures into society and efforts on schedule. It is therefore important to keep an eye on broader trends in society that affect this business environment.

Evolution of Wind Turbine Heights and Output





Fiscal 2022 Medium-Term Management Plan

	Category	Strategic direction	Major initiatives and investment plans
LNG Carrier Business	Role of driving growth	 With business expansion as the top priority, strengthening initiatives for existing businesses such as those in Qatar, which offers the largest business scale Strengthening customer bases in China, Malaysia, India, and Indonesia, markets with solid track records Acquiring opportunities in future growth markets, such as Asia and the United States 	Expanding investment frameworks while flexibly responding to customer needs by increasing the number of vessels Building even closer relationships with customers by moving ship management sites to Singapore and enhancing the local sales system there to capture demand in Asia
Carbon-Neutral Promotion Business	Expansion of new businesses in fields where "K" LINE can utilize its strengths	 Focus on support vessels for offshore wind power generation projects and liquefied CO₂ carriers as new business fields where "K" LINE can leverage its strengths Pursue "K" LINE Group synergies in the support vessel business for offshore wind power generation projects 	Provide services that leverage comprehensive Group capabilities at KWS (offshore support vessels, port services, tugboats, etc.) Develop business for liquefied CO ₂ carriers by leveraging our accumulated knowledge in experimental vessels for NEDO's CCUS experiments

Topics

Completion of Construction on LNG Carriers LAGENDA SURIA and LAGENDA SERENITY for PETRONAS Group in Malaysia

Hudong–Zhonghua Shipbuilding completed construction on two new LNG carriers for the PETRONAS Group, a national oil and gas company in Malaysia, in May and June 2022.

These two ships were commissioned based on a long-term fixed-period charter contract that the PETRONAS Group signed in January 2020, the first such agreement with a non-Malaysian shipping company. Named the *LAGENDA SURIA* and the *LAGENDA SERENITY*, the meaning of these names in Malaysian translates into "legend" (LAGENDA), "sun" (SURIA), and "stable" (SERENITY). Both ships will transport LNG from Bintulu Port, in Malaysia, for Shenergy Group, in China.

"K" LINE's growth strategy is to precisely respond to the changing needs of customers with the aim of tapping into expanding demand in Asia.

Product Logistics



Car Carrier Business

Takenori Igarashi

Managing Executive Officer
In charge of Car Carrier Business,
Car Carrier Planning & Development,
Car Carrier Quality and Operations

Overview of Fiscal 2021 -

On the global automobile market, production and shipments were adversely affected by shortages of semiconductors and auto parts, as well as Russia's invasion of Ukraine. With a recovery well underway in the wake of the pandemic, global sales volume increased 4% year on year, to 80.26 million vehicles, and the marine transportation of automobiles expanded 12%, to 15.08 million vehicles.

The "K" LINE Group transported 2.89 million vehicles, an increase of about 12%, from 2.58 million vehicles in the previous fiscal year. Meanwhile, we improved the efficiency of fleet allocation, including restructuring the service network and fleet optimization, while restoring freight rates and tapping into growth markets. As a result of these efforts and initiatives to improve our earnings capacity and cost competitiveness, both sales and profits increased year on year.

Medium-Term Market Conditions (Risks and Opportunities)

Although global sales volume has not returned to pre-pandemic levels, the passenger car market has been brisk, resulting in a stronger-than-expected recovery in marine transportation volume despite production cuts at automakers due to semiconductor shortages and Russia's invasion of Ukraine. In addition, export demand from China is on the rise. We therefore expect supply-demand conditions to remain tight for a while. Stricter environmental regulations are having an impact on transportation capacity, and in the movement to become carbon neutral, we believe it will be important to secure an adequate level of transportation capacity and to optimize fleet size, including new ships.

The global automobile industry is undergoing a tectonic shift with the proliferation of electric vehicles. The "K" LINE Group aims to outpace market growth by keeping tabs on customer demand and upgrading its car carriers and transportation structure.

Car Carrier Fleet Ranking

(As of April 2022)

Ranking	Operator	Vessels	Share of vessels	Capacity (units)	Share of capacity
1	WWL ASA	112	16.4%	762,686	18.9%
2	NYK	99	14.5%	606,706	15.0%
3	MOL	89	13.0%	534,909	13.2%
4	GLOVIS	84	12.3%	543,050	13.4%
5	"K" LINE	72	10.5%	439,100	10.9%
6	Grimaldi	59	8.6%	287,737	7.1%
7	HOEGH	40	5.9%	267,825	6.6%
8	TOYOFUJI	17	2.5%	74,900	1.9%
9	UECC (NYK+WWL)	11	1.6%	45,140	1.1%
10	Others	100	14.6%	480,495	11.9%
	Total	683	100.0%	4,042,548	100.0%

Source: Compiled by "K" LINE based on Hesnes Shipping "AS Year Report"

"K" LINE Car Carrier Fleet







Fiscal 2022 Medium-Term Management Plan -

	Category	Strategic direction	Major initiatives and investment plans
Car Carrier Business	Role of driving growth	 Expanding customer base of existing finished vehicle OEMs and meeting demand for environmentally friendly transport Expanding business with emerging-economy BEV shippers with the aim of capturing increasing demand for BEV transport Continuing to expand cargo portfolio and increase high and heavy transportation capacity 	 Expand fleet of LNG-fueled car carriers and introduce next-generation zero-emissions ships and new technologies in order to achieve low-carbon and carbon-free targets In EX/DX, enhance presence and establish partnerships through proposal-based marketing in tune with customer requirements Improve the sales structure to capture BEV customers in emerging economies and further boosting stable earnings by launching end-to-end automotive logistics services Diversify cargo handled, including expansion of high and heavy cargoes

Topics

Operational Launch of Cutting-Edge Environmentally Friendly Yokohama Daikoku C-4 Terminal

In fiscal 2022, the Yokohama Daikoku C-4 Terminal commenced operations as a completed automobile terminal for the "K" LINE Group, a first in Japan. This terminal features large-scale roofed facilities on the premises, and it can handle various kinds of cargo, such as oversized cargo and ultra-heavy cargo that does not fit inside containers.

Regarding environmental considerations, this facility has cutting-edge functions ranging from LED lighting at the port and electric work vehicles on the grounds, to the use of 100% renewable energy from wind power, for effectively zero CO₂ emissions. Moreover, the facility has automated entrance and exit gates that use digital technology and an advanced terminal management system. It is an embodiment of digital transformation (DX) using Internet of Things (IoT) technologies. "K" LINE will operate the terminal with the intention of providing customers with high-value-added services.

Product Logistics



Logistics and Port Business

Keiji Kubo

Managing Executive Officer
In charge of Logistics, Port and Affiliated Business

➤ Overview of Fiscal 2021

In the domestic logistics and port business, container marine transportation demand and overall cargo handling volume at the Company's five largest domestic container terminals increased compared with the previous fiscal year. In the tugboat business, work volume recovered on stronger demand. The warehouse business also performed well, thanks to stronger container demand. In the international logistics business, our forwarding operations saw an increase in air cargo volume throughout the year amid continued strong demand for marine and air cargo transportation, as customers turned to air transportation in response to sea container unit shortages and a lack of space on sea vessels. In automobile logistics services, volumes handled decreased in tandem with a global decline in automobile production volume due to shortages of semiconductors. Overall demand for automobiles has plateaued and as production volume recovered in stages, volume handled in the automobile logistics services business has also increased.

Medium-Term Market Conditions (Risks and Opportunities)

In the international logistics business, starting with our forwarding operations, demand has remained brisk lately in both marine and air transportation. However, the possibility of an economic recession in the U.S. has raised concerns about its impact on transportation demand. It is also necessary to monitor the impact on market prices from changes in supply-demand balance caused by the construction of many new containerships from

Although port congestion has been lessening on the West Coast of North America, labor union negotiations are still ongoing to reach a deal between management and labor unions at ports on the West Coast of North America, which originally had a deadline of end-June 2022. If the negotiations continue be drawn out, it could lead to supply chain disruptions again, which might have an impact on the Company's domestic logistics and port operations. "K" LINE will monitor future developments.

Fiscal 2022 Medium-Term Management Plan -

	Category	Strategic direction	Major initiatives and investment plans
Logistics and Port Business	Role of contributing by enhancing profitability	 Aim to improve profitability by strengthening revenue management with business revenue KPIs in collaboration with operating companies Optimize the business portfolio by clarifying Group synergies and cash generation while evaluating and assessing each business in more detail Aim to expand Group earnings by optimizing the management of each port and putting into place a system for receiving large vessels at domestic ports 	 Decide to construct hybrid-electric tugboat at Group company Seagate Corporation in order to contribute to a low-carbon society Advance initiatives in line with the "K" LINE Environmental Vision 2050, such as installing zero-emissions cargo handling equipment and using net-zero CO₂ emissions electricity derived from renewable energy sources at domestic terminals within the Group, in accordance with environmental measures for domestic ports being promoted by the Ministry of Land, Infrastructure and Transport to achieve decarbonization





Topics

Kawasaki Kinkai Kisen, Ltd., Becomes a Wholly Owned Subsidiary

Since its founding in 1966, Kawasaki Kinkai Kisen, Ltd. has engaged in the three businesses of short sea, coastal, and ferry services, and in recent years, it has expanded the scope of its operations to include offshore support vessels. Although "K" LINE has focused on international shipping while Kawasaki Kinkai Kisen has concentrated on domestic shipping, turning Kawasaki Kinkai Kisen into a wholly owned subsidiary will allow the "K" LINE Group to consolidate its limited management resources and improve safety, environmental practices, and quality, while aiming to sustain growth together.

Both companies have united their futures in the same direction, aligning their management policies and medium-to long-term strategies in light of the rapidly increasing importance of introducing technologies for DX and the environment, with the expectation that the business environment will change, hastening modal shift and optimization in the management of crews of ships.

We will strengthen our sales capabilities by using the networks of both companies for customers who support electric power, steel, and energy infrastructure. Management at both companies will work closely together to expeditiously make decisions with the objective of increasing the corporate value of the "K" LINE Group through the development of technologies that support the environment, safety, and economical fleet operations, as well as deploy digital technologies and adopt next-generation fuels.

Overview of Fiscal 2021 -

There were unknown factors in play, such as the lingering impact from restrictions on people's movement due to the COVID-19 pandemic. In the short sea business, although cargo volume declined, both sales and profits increased because prices remained favorable and both freight income and charter fees expanded.

In the coastal business, Hachinohe–Muroran route service was suspended in February 2022 due to low numbers of customers during the pandemic. On other routes, cargo volume increased, resulting in growth in sales and profits. In the offshore support vessel (OSV) business, despite a decrease in ocean survey services, supply and salvage operations increased, resulting in higher operating rates and growth in sales, but profits declined due to an increase in depreciation from the completion of new ships.

➤ Medium-Term Market Conditions (Risks and Opportunities) -

In the short sea business, favorable market conditions continued from the previous fiscal year. Demand for fuel used in biomass power generation is also likely to remain strong. In the coastal business, cargo movement is poised to increase as a result of expansion in the e-commerce market. Modal shift is likely to progress further due to shortages of truck drivers resulting from stricter regulations on their working hours, while environmental regulations have also been tightened. In the OSV business, the market is likely to expand for the offshore wind power generation business, which is ready to take off.

In the short sea business, economic sanctions imposed on Russia for its invasion of Ukraine have made it practically impossible to allocate vessels for the transport of Russian coal, which had been a key cargo. "K" LINE is therefore adjusting its ship tonnage and redirecting ships to other routes.

Fiscal 2022 Medium-Term Management Plan -

	Category	Strategic direction	Major initiatives and investment plans
Short Sea and Coastal Business	Role of contributing by enhancing profitability	 In the short sea business, in addition to existing operations, aim to expand service areas while continuing to maintain the fleet optimization and monitor changes in demand as environmental regulations are tightened In the coastal business, accelerate modal shift in domestic coastal liners and ferries amid stronger environmental and labor regulations in Japan In the OSV business, in addition to existing operations, engage in vessel support operations for offshore wind power generation projects through "K" Line Wind Service, Ltd. 	Launch two 40-type bulkers for biomass projects Increase capital investment in "K" Line Wind Service, Ltd., to advance offshore support vessel operations

○ Product Logistics →



Containership Business

Daisuke Arai

Managing Executive Officer Responsible for Containerships Business Unit, Digitalization Strategy Unit, CIO (Chief Information Officer)

➤ Overview of Fiscal 2021

In the first half, earnings improved at equity-method affiliate Ocean Network Express Pte. Ltd. (ONE), thanks to freight rates remaining at lofty levels amid tighter supply-demand conditions, which owed to brisk demand for transportation as more people shopped online while at home during the pandemic, against a backdrop of supply chain disruptions on a global scale owing to the COVID-19 pandemic. In the third quarter, supply chains were still being disrupted by port congestion and driver shortages for inland transportation routes amid brisk demand for transportation, especially in North America. In the fourth quarter, supply-demand conditions remained tight while supply chains were being disrupted, and ONE performance remained solid due to strong freight market conditions, despite seasonal factors such as the Chinese Lunar Year, the Russia-Ukraine war, and lockdowns in China. ONE made concerted efforts to work around supply chain disruptions, such as by maximizing the use of transportation space by operating emergency vessels and placing orders for new container boxes.

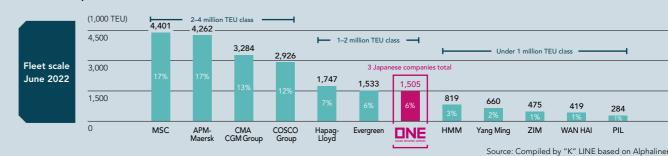
► Medium-Term Market Conditions (Risks and Opportunities) -

With congestion at some ports easing up, supply chain disruptions are gradually settling down. However, the outlook for the global economy has become increasingly uncertain, owing to the ongoing war between Russia and Ukraine, strong inflation around the world, and rising interest rates. Depending on future trends, the economic environment might continue to change and potentially have a major impact on demand for containership transportation. While it is extremely difficult to accurately forecast changes in the business environment, ONE will spare no effort in managing operations with a focus on safety in navigation and sustainability in order to reliably address demand for transportation at its customers.

Fiscal 2022 Medium-Term Management Plan

	Category	Strategic direction	Major initiatives and investment plans
Containership Business	Role of supporting the business as a share-holder and stabilizing the earning base	Management at ONE is focusing on capital efficiency and ROE to improve corporate value "K" LINE provides support by dispatching management and operations personnel in order to sustain growth and develop business at ONE	ONE continues to invest in ships with superior environmental performance in order to achieve decarbonization goals and maintain a scale of operations in tune with cargo growth Provide good-quality services to customers as an end-to-end logistics service provider by investing in terminals and other fields Strengthen customer services while aiming to expand e-commerce, such as with ONE QUOTE, with the objective of smoothly facilitating communications with customers

Containership Fleet Scale



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