Overview of MOL’s Sustainability Issues (Materiality)

The MOL Group aims to improve its corporate value over the long term by minimizing the negative social impact of its business activities while striving to maximize its social value through contributions to the SDGs and other efforts. For this purpose, we have newly identified Sustainability Issues (Materiality), which are deeply connected with “Rolling Plan 2019.”

Sustainability Issues (Materiality)

<table>
<thead>
<tr>
<th>Themes / Targets / Goals</th>
<th>Risks</th>
<th>Opportunities</th>
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</thead>
<tbody>
<tr>
<td>Value-Added Transport Services</td>
<td>• Safe and reliable transportation</td>
<td>• Slowdown in economic activities and logistics</td>
</tr>
<tr>
<td></td>
<td>• Large-volume, bulk transport services</td>
<td>• Contribution to active economic activity and creation of new transport demand</td>
</tr>
<tr>
<td></td>
<td>• High-quality transport services</td>
<td>• Contribution to establishment of energy infrastructure in emerging countries</td>
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<tr>
<td></td>
<td>• Establishment of off-bottom transport services</td>
<td>• Long-lifeization of vessels through appropriate ship maintenance, which leads to enhancement of competitiveness</td>
</tr>
<tr>
<td></td>
<td>• Elimination of marine accidents</td>
<td>• Cultivation of operational insight</td>
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<td></td>
<td>• Elimination of cargo accidents</td>
<td>• Improvement of human resource competitiveness</td>
</tr>
<tr>
<td></td>
<td>• Prevention of work-related injuries</td>
<td>• Enhanced ability to respond to environmental regulations</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Realization of autonomous sailing</td>
</tr>
<tr>
<td>Marine and Global Environmental Conservation</td>
<td>• Prevention of marine pollution</td>
<td>• Incorporation of new transport demand and establishment of new transport model that quickly captures changes in cargo movements</td>
</tr>
<tr>
<td></td>
<td>• Promotion of measures to mitigate climate change</td>
<td>• Development of new sailing routes (Arctic Ocean)</td>
</tr>
<tr>
<td></td>
<td>• Reduction of air pollution</td>
<td>• Incorporation of new transport demand and establishment of new transport model that quickly captures changes in cargo movements</td>
</tr>
<tr>
<td></td>
<td>• Response to environmental regulations</td>
<td>• Advancement in the Wind Challenger Project</td>
</tr>
<tr>
<td></td>
<td>• Realization of transport means with low environmental burden</td>
<td>• Contribution to active economic activity and creation of new transport demand</td>
</tr>
<tr>
<td></td>
<td>• Climate Change</td>
<td>• Contribution to establishment of energy infrastructure in emerging countries</td>
</tr>
<tr>
<td></td>
<td>• Disruption to vessel operation</td>
<td>• Long-lifeization of vessels through appropriate ship maintenance, which leads to enhancement of competitiveness</td>
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<tr>
<td></td>
<td>• Loss of trust in the Company from society</td>
<td>• Cultivation of operational insight</td>
</tr>
<tr>
<td></td>
<td>• Economic burdens such as fines and sanctions</td>
<td>• Improvement of human resource competitiveness</td>
</tr>
<tr>
<td>Innovation for Development in Maritime Technology</td>
<td>• Promotion of LNG fuel usage</td>
<td>• Reduction of environmental burden by the widespread use of LNG fuel and the application of natural energy</td>
</tr>
<tr>
<td></td>
<td>• Advancement in the Wind Challenger Project*</td>
<td>• Improved competitiveness of offshore businesses and marine transport</td>
</tr>
<tr>
<td></td>
<td>• Realization of autonomous sailing</td>
<td>• Enhanced ability to respond to environmental regulations</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Realization of autonomous sailing</td>
</tr>
<tr>
<td></td>
<td>• Obsolescence of existing technologies</td>
<td>• Improvement of human resource competitiveness through recruitment of outstanding talent and improved work productivity</td>
</tr>
<tr>
<td></td>
<td>• Unreliability to respond to shortage of seafarers in the future</td>
<td>• Promotion of innovation and response to business opportunities</td>
</tr>
<tr>
<td>Human Resource Cultivation and Community Development</td>
<td>• Employment of high-quality seafarers</td>
<td>• Incorporation of various ideas by attracting a diverse pool of talent from all over the world</td>
</tr>
<tr>
<td></td>
<td>• Development of human resources</td>
<td>• Development of new sailing routes (Arctic Ocean)</td>
</tr>
<tr>
<td></td>
<td>• Pursuit of workforce reforms</td>
<td>• Highly transparent and fair management</td>
</tr>
<tr>
<td></td>
<td>• Promotion of diversity</td>
<td>• Decision-making based on appropriate risk management</td>
</tr>
<tr>
<td></td>
<td>• Contribution to regional revitalization</td>
<td>• Realization of sustainable economic growth through the development of human resources and local infrastructure</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Encouragement of active economic activity and increased economic activity in emerging countries</td>
</tr>
<tr>
<td>Governance and Compliance to Support Businesses</td>
<td>• Adherence to fair business transactions</td>
<td>• Risk of accidents as a result of an accident</td>
</tr>
<tr>
<td></td>
<td>• Prevention of bribery and corruption</td>
<td>• Existence of work-related injuries</td>
</tr>
<tr>
<td></td>
<td>• Establishment of information security structure</td>
<td>• Establishment of autonomous sailing</td>
</tr>
<tr>
<td></td>
<td>• Prevention of harassment</td>
<td>• Realization of sustainable economic growth through the development of human resources and local infrastructure</td>
</tr>
<tr>
<td></td>
<td>• Protection of human rights</td>
<td>• Encouragement of active economic activity and increased economic activity in emerging countries</td>
</tr>
</tbody>
</table>

* The Wind Challenger Project is a joint industry-academia research project that aims to significantly reduce the amount of fuel consumed by large vessels by maximizing the use of wind power through the installation of massive sail panels on vessels. MOL participates in this project, which commenced in 2009.
For Our Sustainable Growth

Value-Added Transport Services

Through the transportation of various goods, such as resources, energy, raw materials, and products, the MOL Group supports people’s lives and industries around the world. By continuing to provide efficient, safe, and reliable transport services sustainably, which is the core of our business, we will fulfill our role as an important part of economic and social infrastructure.

Offshore Businesses

Drawing on our expertise and techniques cultivated in the field of energy transport through the operation of LNG carriers and tankers, we seek to offer solutions beyond transportation, such as FSRUs and FPSOs, to meet the demand for energy primarily in emerging countries.

Terminals

We operate container terminals in five locations in Japan and eight locations overseas,* and also provide stevedore services across Japan for car carriers and other conventional cargo ships. Accordingly, we have developed a comprehensive terminal business.

Logistics

Making full use of our wide-ranging network that spans across 27 countries, we deliver a diverse combination of logistics services to our customers, including marine, air, and land transportation as well as customs clearance and warehouse management.

Marine Transport

Based on the track record and expertise we have gained in our over 130-year history, we provide safe and reliable transport services on a daily basis. In addition, through the operation of a diverse fleet that is world-leading in scale, we are able to offer large volume and low-cost transport services for various cargoes.

* Overseas container terminal business is scheduled to be transferred to the integrated container shipping business company, ONE.

Addressing Sustainability Issues

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Customers

- Food manufacturers
- Paper manufacturers
- Iron and steel producers
- Electric power companies
- Oil companies
- Gas companies
- Automobile and construction equipment manufacturers
- Other manufacturers
- Trading houses
- Forwarders

End-consumers

Addressing Sustainability Issues

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End-consumers
In sustainably providing value to society through transportation, the most important element is ensuring reliable safe operation. To visualize the process for achieving safe operations, MOL adopted the 4 Zeroes (zero serious marine incidents, zero oil pollution, zero fatal accidents, and zero cargo damage) as its goals and monitors the continuous number of days that these 4 Zeroes are achieved. In this way, we are increasing the safety awareness among all employees in their daily duties. In addition to the 4 Zeroes, we have other key performance indicators (KPIs) listed below. For this year in particular, we have adopted “Development of Groupwide safety and quality management” as a focus area under “Rolling Plan 2019” and all corporate officers and employees of the Group are prioritizing efforts to realize the world’s highest standards for safe operation.

KPIs Related to the Thorough Enforcement of Safe Operation

<table>
<thead>
<tr>
<th>KPI</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continuous achievement of the 4 Zeroes for</td>
<td>* Serious marine incidents</td>
</tr>
<tr>
<td></td>
<td>* Oil pollution</td>
</tr>
<tr>
<td></td>
<td>* Accidents</td>
</tr>
<tr>
<td></td>
<td>* Cargo damage</td>
</tr>
<tr>
<td>LTIF*1</td>
<td>0.7 or below</td>
</tr>
<tr>
<td>Average operational stoppage time*2</td>
<td>24 hours or less per vessel each year</td>
</tr>
<tr>
<td>Operational stoppage accident rate*3</td>
<td>1.00 or below per vessel each year</td>
</tr>
</tbody>
</table>

Regarding the above KPIs, in fiscal 2018 we were unable to achieve 2 as an accident regrettably occurred where the cargo space of a MOL-operated vessel caught fire. Also, as on the graph above, we were unable to achieve 3.
**For Our Sustainable Growth**

**Marine and Global Environmental Conservation**

MOL has identified five important themes for the Sustainability issue of “Marine and global environmental conservation,” which are “Prevention of marine pollution,” “Promotion of measures to mitigate climate change,” “Reduction of air pollution,” “Responses to environmental regulations,” and “Realization of transport means with low environmental burden.” We are taking specific measures to address these important themes, such as reducing CO2, SOx, and NOx emissions, thorough ballast water management in order to preserve biodiversity, and selecting vessel demolition yards from a standpoint of the impact to the environment. At the same time, we are examining new initiatives for reducing marine plastics.

**To Curtail Greenhouse Gas (GHG) Emissions**

Compared with other transportation methods, the amount of CO2 emissions and air pollutants from marine transport per transport unit is remarkably small because a large volume of cargo can be moved all at once. However, we cannot ignore the fact that marine transport contributes to the overall amount of emissions being released into the atmosphere, having a negative impact on the environment. Accordingly, we have adopted GHG emissions targets under MOL Group Environmental Vision 2030, which was formulated in April 2017, in order to make active efforts to reduce GHG emissions as an eco-minded company.

**CO2 Emitted When Transporting One Ton of Cargo One Kilometer**


In April 2018, the IMD* determined GHG emissions targets in accordance with the Paris Agreement.** Based on the IMD targets, we are currently considering revisions to our targets as well as concrete measures for achieving these targets.

**SOx Regulations**

The SOx regulations limit the percentage of sulfur content in fuel in order to curtail the amount of sulfur in gas emissions. Since January 2020, the IMO will lower the current limit of 3.5% or less to 0.5% or less.

There are primarily three ways to comply with the tightening regulations: Use compliant oil, install SOx scrubbers, and use LNG or other alternative fuels. While our approach for the time being focuses mainly on the use of compliant oil, we are examining the best choice for each of our vessels.

**Ballast Water Management**

The Ballast Water Management Convention highlights the negative impact of the cross-border transfer of foreign marine organisms, which occurs when vessels release ballast water, on marine ecosystems. Under the convention, all vessels are mandated to install ballast water treatment systems by 2024.

In anticipation of the enactment of the Ballast Water Management Convention, adopted by the IMO, we decided to make the installation of ballast water management systems a Company-wide policy in fiscal 2014. As of April 2019, we have completed all necessary inspections for 142 vessels, which is roughly 56% of owned vessels.

**Ship Recycling**

When we demolish a ship, we select yards that are verified by ClassNK* for compliance with the Ship Recycling Convention. In addition, we are working on making inventory lists in accordance with the Ship Recycling Convention.

**Environmental Management Structure**

Environment-related policies were previously discussed at meetings of the Technology, Innovation and Environment Committee, the CSR Committee, or others. In April 2019, we established the Environmental Management Committee, which serves under the Executive Committee and is chaired by the vice president, to confirm important management issues and address urgent necessary efforts. In addition to formulating environmental targets and monitoring progress made toward reaching those targets, the Environmental Management Committee will be in charge of promoting environmental and emission-free businesses, which we aim to establish all over the world in the future.

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*The International Maritime Organization (IMO) is an international maritime organization established in 1948 to promote cooperation among governments agencies on a variety of issues in the maritime field, including marine safety and prevention of marine pollution by vessels.

**On the Third meeting of the Special Environmental Protection Committee, held in April 2018, the IMD determined targets for reducing the GHG emissions of international shipping services. The targets are expressed in terms of fuel efficiency, which is expected to improve by 2025 compared with 2008 levels by 50% or more by 2025, and by 75% or more by 2050. In addition, these targets are for a 50% reduction in total GHG emissions by 2050, while aiming to contribute to eventually eliminating GHG emissions as quickly as possible within the 21st century.

*The Paris Agreement is a target to limit the increase in the global temperature to between 1.5°C and 2°C compared with pre-industrial levels. The agreement aims to limit global warming to well below 2°C, compared with pre-industrial levels. The agreement also aims to pursue efforts to limit the temperature increase even further, to 1.5°C.

**The Energy Efficiency Design Index (EEDI) is an index used during the design of a new ship to calculate its greenhouse gas emissions on a giga tonne-kilometer basis. The required EEDI reduction rate in each phase is as follows: Phase 1: -10%, Phase 2: -20%, and Phase 3: -30% to 35% (depending on type of vessel).
For Our Sustainable Growth
Addressing Sustainability Issues
Marine and Global Environmental Conservation

Our Efforts to Address Environmental Issues

In the management plan announced in fiscal 2017, we set our goal to develop environmental and emission-free businesses into core businesses in the future. Since then, we have proceeded with various efforts to achieve this goal. Over the past three years, a total of ¥18.4 billion has been invested in environment-related areas.

Environmental Investments [Unit: billion yen]

<table>
<thead>
<tr>
<th>Fiscal year</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental-related R&amp;D initiatives</td>
<td>0.4</td>
<td>0.5</td>
<td>0.9</td>
</tr>
<tr>
<td>Utilization and expansion of existing environmental technologies</td>
<td>0.5</td>
<td>0.8</td>
<td>1.9</td>
</tr>
<tr>
<td>Response to environmental regulations</td>
<td>3.1</td>
<td>3.1</td>
<td>3.6</td>
</tr>
<tr>
<td>Initiatives to save bunker fuel</td>
<td>1.1</td>
<td>0.8</td>
<td>0.6</td>
</tr>
<tr>
<td>Initiatives of Group companies</td>
<td>0.5</td>
<td>0.7</td>
<td>0.6</td>
</tr>
<tr>
<td>Total</td>
<td>5.6</td>
<td>5.7</td>
<td>7.3</td>
</tr>
</tbody>
</table>

Our Vision of the World under the 2°C Scenario
Cleaner society, shift toward renewable energy, and decrease in fossil fuel demand

MOL’s Vision of the World under the 2°C Scenario
Future Measures to Mitigate Climate Change

CO2 Emissions Reduction Business
Support emissions reductions

- PBGF / Utilization of wind power as energy for vessel propulsion / Northern Sea Route / LNG to Powership / CO2 capture and storage (CCS) / Sale of highly energy-efficient equipment (storage batteries, LED lighting, etc.)
- Propeller Boss Cap Fins (PBCF) is a kind of propeller attachment jointly developed by MOL, Akishima Laboratories (Mitsui Zosen) Inc., and MOL Techno-Trade, Ltd. that helps reduce the resistance to ship propulsion.

PBCF / Utilization of wind power as energy (for vessel propulsion) / Northern Sea Route / LNG to Powership / CO2 capture and storage (CCS) / Sale of highly energy-efficient equipment (storage batteries, LED lighting, etc.)

Environmental Value Creation Business
Create value from environmental activities themselves and conduct related trading activities

- Clean energy / Green finance / Investment in energy-saving and renewable energy ventures companies / Emission rights businesses (Sale of carbon offsets)
- In fiscal 2018, we issued a total of ¥10.0 billion in Green Bonds for the purpose of raising funds for our green projects, ¥5.0 billion of which sold to individual investors for the first time as a Japanese company.
- In addition, in July 2019 we plan on issuing a total of ¥20.0 billion in Sustainability Bonds, which extends the usage of the funds to projects that address issues related to the SDGs.

Future Measures to Mitigate Climate Change

- Soft measures • Improve output limits on ships as part of efforts to curtail CO2 emissions / Conduct further noise testing • Enhance operational efficiency by keeping the fastest route and optimal trim using the Internet of Things (IoT)
- Hard measures • Install energy-saving equipment in new and existing vessels • Construct LNG-fueled vessels • Promote the Wind Challenger Project • Expand joint industry-academia research and R&D investment aimed at next-generation fuels, such as biofuel, as well as technological innovation of ships
- Business portfolio change • Expand renewable energy businesses such as offshore wind power generation and related businesses • Further develop offshore businesses such as FSRUs, which promote the use of eco-friendly LNG fuel, and the LNG-to-Powership business
- Response to climate-related regulations and conditions • Collaborate with related organizations to get involved in the formulation of rules at IMO • Collect information on carbon pricing and take action accordingly • Strengthen efforts to reduce GHG emissions

Participation in Task Force on Climate-related Financial Disclosures (TCFD)
We endorse the recommendations of the TCFD.

Scenario Analysis
In 2018, with the support of the Ministry of Environment and under TCFD recommendations, we conducted scenario analysis on a trial basis where we incorporated climate-related risks and opportunities into our management strategies. In this trial, we made an estimation of transport volumes, fuel demand, and other factors under the 2°C and 4°C scenarios. In doing so, we examined the impact of higher temperatures on our businesses and measures we can implement going forward. More details of our analysis are available in the Practical Guide for Scenario Analysis in Line with TCFD Recommendations which was published by the Ministry of the Environment.

Based on the insight we have gained through this trial, we will further deepen our scenario analysis, impact evaluation, and examination of future measures, and work to reflect the results in our management strategies.
For Our Sustainable Growth

Addressing Sustainability Issues

Innovation for Development in Marine Technology

To realize the 10-year vision, the MOL Group has established the three core strategies, including “Provision of ‘stress-free services,’ which MOL will offer from the customer’s perspective” and “Promotion of environmental strategies and development of the emission-free business into a core business.” With a view to executing these strategies, we are promoting technological development using natural energy and information and communications technology (ICT).

Basic Policy on Technological Innovation

For technological development in the marine industry, the focus has been on underlying technologies for the parts of ship. In recent years, the potential has expanded further due to the rapid development of ICT such as IoT and big data. Centered on the ISHIN NEXT—MOL SMART SHIP PROJECT, rapid development of ICT has been accelerated. In recent years, the potential has expanded further due to the focus had been on underlying technologies for the parts of ship. With a view to executing these strategies, we are promoting technological development using natural energy and information and communications technology (ICT).

For Our Sustainable Growth

Achievement of Safe Operation through Pursuing Autonomous Sailing

Autonomous sailing is one of the projects we are working on in the ICT area, a priority area for development under management plan. By promoting ICT utilization based on the marine technical skills that we have gained over our long history, we are working to prevent human errors, which are the major cause of maritime accidents, and help ensure the appropriate recognition, decision-making, and operation by crew members. In these ways, we are striving to provide safer and more high-quality transport services.

Currently, we are considering technological development for supporting vessel operation in congested sea areas and arrival/departure maneuvering as one of the utmost priorities. To that end, we are working to achieve the mechanization of watch-keeping and vessel operation, as well as auto berthing and un-berthing.

Examples of MOL’s Technological Development

Release of FOCUS Project Part I “Fleet Viewer” Application—Aiming for the Visualization of Marine Operations

In order to realize the visualization of marine operations through enhancing collection and utilization of vessel operation data, we are promoting FOCUS Project jointly with Mitsui E&S Shipbuilding Co., Ltd. and Wärtsilä Norden Inc. By utilizing voyage and engine data collected from approximately 150 vessels, we are developing applications for more advanced vessel operation monitoring and propulsion performance analysis. In doing so, we aim to strengthen the safe operation and reduce the environmental burden in marine transport. In May 2019, we launched “Fleet Viewer,” an application geared toward reinforcing ship management support systems. The system integrates real-time video images from the bridge camera with other vessels’ information from the AIS and radar (ship type, size, position, direction, speed, etc.), and displays on tablets and screens (screened out in Japan). In doing so, we aim to strengthen the safe operation and reduce the environmental burden in marine transport. In May 2019, we launched “Fleet Viewer,” an application geared toward reinforcing ship management support systems. The system integrates real-time video images from the bridge camera with other vessels’ information from the AIS and radar (ship type, size, position, direction, speed, etc.), and displays on tablets and screens (screened out in Japan).

Future Targets [After 2023]

New technologies in various fields

ICT, e.g., big data utilization

Safety and the Environment

Technologies that reduce environmental burden in order to protect the global environment

Actively develop technologies to meet the needs of customers and society while inheriting the technological expertise MOL has cultivated thus far.

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Human Resource Cultivation and Community Development

With a goal to cultivating human resources with personal initiative and a sense of responsibility who can create new value and play an active role in the global market, we promote the growth of each employee by offering a wide variety of training programs based on position and category of skills. These programs include onboard training for young employees, which aims to deepen their knowledge of vessels and operations, in addition to enhancing their awareness of safety through firsthand experiences on the frontlines. They also include the One MOL Global Management College, which is designed to develop management executives for the next generation.

### Efforts toward Human Resource Development

#### Development of human resources who are globally active

<table>
<thead>
<tr>
<th>Staff</th>
<th>Coordinator</th>
<th>Team Leader</th>
<th>General Manager</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOL BEST English training</td>
<td>Training programs before overseas transfer</td>
<td>Chinese-language courses</td>
<td>One MOL Global Management College</td>
</tr>
<tr>
<td>Long-term overseas training</td>
<td>Short-term overseas training</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Promoting diversity

<table>
<thead>
<tr>
<th>Ethnics</th>
<th>In-port agency</th>
<th>Onboard training</th>
<th>Accounting, presentations, logical writing, and facilitation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading contracts in English</td>
<td></td>
<td></td>
<td>Posting of safety awareness</td>
</tr>
</tbody>
</table>

#### Strengthening of fundamental skills

<table>
<thead>
<tr>
<th>Business strategies</th>
<th>ITL Leadership training</th>
<th>Business innovative leadership</th>
<th>MOL Management College</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excel skills</td>
<td>International School</td>
<td>Management Office</td>
<td>Marketing Office</td>
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<tr>
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<td>Digital skills</td>
<td>Health and Safety</td>
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### Efforts toward Sustainable Growth

#### Human Resource Cultivation and Community Development

Human resources are the driving force for the Group’s growth and what underpin our brand and reliability. We aim to achieve sustainable growth based on MOL CHART, the values shared by all Group members worldwide, and by creating an organizational culture that allows a diverse group of human resources from different backgrounds, including nationality and gender, and with varying attributes to work positively and lively. Furthermore, by offering opportunities for professional education by in-house educational institutes located in countries such as the Philippines and providing stable employment, not only will we secure top-quality seafarers that are indispensable to the Group’s operations, we will also contribute to the economic and industrial development of emerging countries.

#### Basic Policy on Human Resource Development

Developing human resources, which act as the source of our added value, and ensuring diversity are two important issues to address in order to realize our 10-year vision to “Become a Group of Business Units with No. 1 Competitiveness in Respective Areas.” In the development of Group human resources, our goal is to cultivate human resources with personal initiative and a sense of responsibility who can create new value and play an active role in the global market. To realize this goal, we provide training programs that support the growth of each employee while at the same time create an environment that brings out the full potential of our diverse human resources and allows them to work energetically.

#### Fostering an Organizational Culture Based on MOL CHART

To operate the wide range of MOL Group businesses on a global scale, we have been proactively employing people of different nationalities and backgrounds. Nowadays, in a time of significant changes in the external environment, it is becoming increasingly important that we have a group of people that are diverse not only in terms of nationality and gender but also in how they view and approach different situations. We can keep creating value only when such diverse people collaborate in a way each member extends his or her unique capabilities to the fullest. With that said, in order to continuously enhance our corporate value on a Groupwide level, it is imperative to establish shared values that we cherish as a group to overcome the regional, linguistic, and cultural boundaries. Therefore, we formulated MOL CHART in April 2015 as a set of values that are to be embraced by all Group members. By instilling MOL CHART in all domestic and overseas Group employees, as well as in all crew members on our vessels and making it the foundation on which each employee makes decisions, we are fostering a corporate culture that further ensures compliance, enhances safety awareness, and promotes the creation of new value.

### Founding One of the Largest Maritime Academies in the Asia-Pacific Region

In August 2018, we opened one of the largest maritime academies in the Asia-Pacific region, MOL Magsaysay Maritime Academy Inc. (MMMA) in the Philippines. Filipino seafarers, comprising approximately 70% of all Group crew members, serve as the core workforce on our operating vessels. To date, we have co-managed the Magsaysay Institute of Shipping (MIS), which aims to develop Filipino crewmembers that can support our high safety standards. At MIS, we conduct onboard training using a training vessel dedicated to the institute. In addition, based on the Academia-Industry Linked Program (AILP) promoted by the Philippine government, we implement a cadet training curriculum at MIS named “Third-Year Program,” which involves education and training at Company facilities for students selected from partner maritime schools. At the recently opened MMMA, we accept a maximum of 300 students per year and endeavor to turn out high-quality seafarers stably and continuously based on the track record and insight we have gained from managing the MIS. We expect the graduates of MMMA to not only succeed onboard but also become personnel that can lead our organization in various fields, including safety management, voyage management, and technical support for sales divisions.

We have thus far worked on employee training through the establishment and operation of training centers that allow our crew members to acquire technical operation skills and receive pre-boarding training. One important characteristic of the MMMA is that, as an academy, it allows us to provide education to students before they become seafarers. In addition to ship operating techniques, the MMMA emphasizes fundamental education, the ability to think logically, and a strong sense of discipline. Based on such policy, the MMMA aims to develop human resources that can someday lead the future of the Philippines itself. At the inauguration ceremony for the MMMA held in September 2018, we welcomed around 700 guests, including Secretary of the Department of Transportation Arthur Tugade, Senator Grace Poe, and H.E. Koji Haneda, the Japanese Ambassador-designate to the Republic of the Philippines. Through the MMMA, we will aspire to develop outstanding human resources who can handle safe operation at a world-class level while at the same time offering high-quality education and creating stable employment. In these ways, we will contribute to the development of local communities.
Promoting "Workstyle Reforms"

We have established ‘Workstyle reforms’ as a priority area for development under our management plan. The aim of these reforms is to enhance our competitiveness of our business and accelerate innovation through a corporate culture that supports employees to work in a lively manner. To achieve our 10-year vision, we must execute work procedures with a high level of efficiency, encourage creative thoughts that are not constrained by conventional ideas, and promote a culture and organization that can spur such creativity. In September 2016, we established the Improvement of Work Efficiency Committee, which is chaired by the president. Centered on this committee, we have been making various efforts in four focus areas—personnel system reforms, corporate culture reforms, workplace / workstyle reforms, and operational reforms—in order to enhance productivity and create time to pursue innovation that transcends conventional frameworks. At the same time, we endeavor to achieve a corporate culture where each employee can work with satisfaction and motivation.

### Four Areas of Focus for Reforming Workstyles

1. **Personnel system reforms**
   - Introduced a new structure for the personnel system in fiscal 2018 based on the following principles:
     - Establish a system that supports early identification and cultivation of managers who will lead the organization with accountability and initiative.
     - Diversify the range of career paths to develop or secure specialists and give employees with various backgrounds more opportunity for accomplishment.

2. **Corporate culture reforms**
   - Conduct round-table conferences named “HOT Dialogue” to enhance communication between the president and each division and between the general managers, etc.
   - Provide company support for employees’ gatherings across divisions.
   - Prepare discussion board for all employees on in-house social network application.
   - Implement No Overtime Days
   - Introduce “Creating momentum for the future”
   - Encourage male employees to take childcare leave

3. **Workplace reforms**
   - Introduce a remote work program
   - Create space by reducing the amount of paper documents and establish employee lounge area for more communication
   - Introduce a pilot office where employees are free to choose desk by drop-in basis and start to measure effects of such office

4. **Operational reforms**
   - Promote the use of robotic process automation (RPA)
   - Provide facilitator training to teach employees the skills needed to manage meetings better
   - Introduce large touchscreen displays (Surface Hub) to improve meeting productivity
   - Start the Paper OFF! Project, which aims to significantly reduce the amount of paper documents

### New ideas and constructive discussions

The President Serves as Chairman of the Improvement of Work Efficiency Committee

**Sustainable corporate growth**

- “Creating innovation”
- “Differentiation from competitors”
- “Leading the industry in individual competitiveness”

**Enhancing productivity**

- Reform corporate culture
- Improve efficiency of working processes
- Reduce time spent on low-priority activities

**Creating a corporate culture and working style that enhance productivity and lead to new ideas and constructive discussions in order to encourage innovative thinking**

**Enhancing employee satisfaction**

- Clear separation of work and private life
- Working “smartly”
- Creating momentum for the future

Promoting Diversity and Inclusion

The MOL Group positions the promotion of diversity as an important management strategy in order to continue to be a dynamic and innovative organization that can flexibly respond to changes in the external environment and realize sustainable growth.

We provide various forms of support and are working to establish an environment that allows each of the approximately 15,000 multinational employees and seafarers working in the Group to maximize their abilities and play an even more active role, regardless of differences in experience, values, life stages, and attributes. We established the Diversity and Healthcare Management Office in the Human Resources Division in 2017 (currently the Diversity and Healthcare Management Team), thereby creating a system to more intensively carry out these efforts. Moving forward, we will improve our working environments so that employees of various nationalities and from different backgrounds can contribute to the greatest extent possible. By doing so, we will enhance the comprehensive strengths of the Group.

**Promoting Health and Productivity Management**

We believe that ensuring the safety and health of our employees and creating a work environment, including on vessels, where they can work with peace of mind provides the foundation for our corporate activities.

Based on this belief, centering on the Diversity and Healthcare Management Team, the Company spearheaded efforts to provide a wide range of support and establishes an environment that enables each and every employee to maintain and improve their mental and physical health and work with energy and motivation. These efforts were evaluated highly, with MOL being selected as a “White 500 Company” in the largest enterprise category of the 2019 Certified Health and Productivity Management Organization Recognition Program, a cooperative initiative by Japan’s Ministry of Economy, Trade and Industry that supports innovative organizations.

### Key Initiatives in Health and Productivity Management

- In collaboration with workstyle reforms, formulate “Smart Work Plans” for each division to reform workstyles, correct the issue of long working hours, and achieve a work-life balance with the goal of creating time for generating new value.
- Provide the mental and physical support of all employees—including onboard and overseas employees—through collaboration between the Human Resources Division and occupational health physicians, in-house doctors, clinical psychologists, and public healthcare nurses.
- Conduct mental health consultations at major locations in Japan and introduce a web-based mental health self-check tool.
- Organize health courses and campaigns on themes such as quitting smoking, stretching, walking, and sleep and eating habits, thereby promoting employee health awareness.
- Implement the “Breakfast Campaign” that provides breakfast at the employee cafeteria during summer to help improve work efficiency and health.
- Adopt “MOL Body Fit Exercise,” a unique calisthenics routine that supports the health of ocean-going employees, as well as nutrition improvement projects on MOL’s list.

### Recruitment of an Athlete

MOL recruited its first athlete in 2016, hiring wheelchair rugby player Karu Kurashahi. She balances both office work and athletic activities, working for the Human Resources Division two days a week (including one day of remote work) and practicing three days a week.

MOL Group executives and employees eagerly support Ms. Kurashahi who participates in both domestic and international competitions and always delivers an outstanding performance including a victory in the World Championships in 2018 as a member of the national team.

In 2017, MOL signed an official sponsorship agreement with BLITZ, Ms. Kurashahi’s wheelchair rugby team. In 2018, we became an official partner of the Japan Wheelchair Rugby Federation. In addition to helping to promote the expansion of wheelchair rugby, we will work to foster an environment that encourages our diverse employees to play active roles inside as well as outside the Company.

**Promoting “Workstyle Reforms”**

**For Our Sustainable Growth**

**Addressing Sustainability Issues**

**Human Resource Cultivation and Community Development**

**Creation of an Environment that Draws Out Employees’ Capabilities to Their Full Extent**

**Promoting Diversity and Inclusion**

**Promoting Health and Productivity Management**

**Recruitment of an Athlete**

**Key Initiatives in Health and Productivity Management**

**For more information regarding our health and productivity management initiatives, please visit the website below.** [https://www.mol.co.jp/csr/hr/health/index.html](https://www.mol.co.jp/csr/hr/health/index.html)