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**SUSTAINABILITY
REPORT 2019**

2019 HMM Sustainability Report

Hyundai Merchant Marine SUSTAINABILITY REPORT 2019

2019 HMM Sustainability Report



Hyundai Merchant Marine Co.,Ltd.

194, Yulgok-ro, Jongno-gu, Seoul, Republic of Korea
www.hmm21.com



ABOUT THIS REPORT

Overview

Hyundai Merchant Marine (HMM) is publishing its first sustainability report in 2019 to share with its stakeholders its activities and performance with respect to creating social, environmental and economic value.

The 2018-2019 HMM Sustainability Report, which is based on the results of a materiality test, contains detailed information on activities and performance concerning the topics that have been selected as core issues as shown in 'Focus Area.'

Reporting Principles

This report has been prepared in compliance with the Core Option of the Global Reporting Initiative (GRI) Standards. The financial performance has been documented on a consolidated basis according to the Korea International Financial Reporting Standards (K-IFRS.)

Reporting Scope

This report covers the activities and performances of HMM headquarters as well as all domestic and overseas branches and affiliates, including the activities of its affiliates related to vessel and terminal operations. Footnotes are included where there is a need for particular attention to the report's scope and boundaries.

Reliability of the Report

To ensure reliability, the report has been verified by a third party assurance provider, Korea Management Registrar, based on the three principles of AA1000 (materiality, inclusivity and responsiveness). The results of this verification can be found on page 106~107 of the report.

Inquiries

Market Intelligence Team

Address 194 Yulgok-ro, Jongro-gu Seoul (03127)
Tel 02-3706-5887
E-mail jy.yoo@hmm21.com



COVER STORY

The bold typeface and concise layout represent the strength, honesty and purity of HMM.

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MESSAGE FROM THE CEO

Through sustainable management,
we will create value and establish
the foundation for a new leap forward.

Dear Stakeholders,

HMM has published its first sustainability report this year. Through this report, we want to share our achievements thus far and the direction we plan to take going forward. It is our hope that this report will not only present the various sustainable activities we've managed but also serve as an open and transparent channel to help us communicate better with our stakeholders.

2019 was a year of various challenges for HMM in its efforts to reach new heights. First of all, we have signed up as a full member of one of the world's top three alliances, THE Alliance. HMM's membership will officially start on 1 April 2020. With the opportunity to collaborate with members throughout the world, HMM pledges to strengthen its competitive-edge and provide a reliable service

on a mid- to long-term basis in order to become one of the world's best shipping companies. In addition, we renewed our CI(Corporate Identity) to solidify our brand value and reputation, established an R&D team and actively recruited talented people to build a future-oriented organizational structure. With the new R&D team, it has become possible for us to be even more proactive in compliance with environmental regulations, reviewing the adoption of autonomous ship technologies and participating in projects for building an R&D platform, including eco-friendly hydrogen-powered ships. Other achievements made by HMM includes securing advanced IT capacity through building a digital ecosystem, and topping the global schedule reliability with 91.8% in June, 2019. Without support from all stakeholders, including shareholders, employees, customers, suppliers, communities and the Korean government, these accomplishments wouldn't have been possible.



December, 2019
Hyundai Merchant Marine
President & CEO
Jae Hoon Bae

But HMM refuses to rest on its laurels. It will move forward to further contribute to global society through sustainable development.

First, we will continue to work on satisfying our customers with our new approaches. As a full member of THE Alliance, we are expected to gain an upper hand in the market for megaships and in building partnerships. We will do our best to provide an optimized vessel operation based on the cooperation with other members and to improve profitability. HMM's ambition is to strengthen competitiveness by improving schedule reliability, customer-friendliness, flexibility and agility, and to impress its customers by going beyond mere satisfaction.

Second, we will continue our commitment to a sustainable environment. By minimizing pollution, responding to IMO regulations and establishing environmental management strategies, we will strive to become a

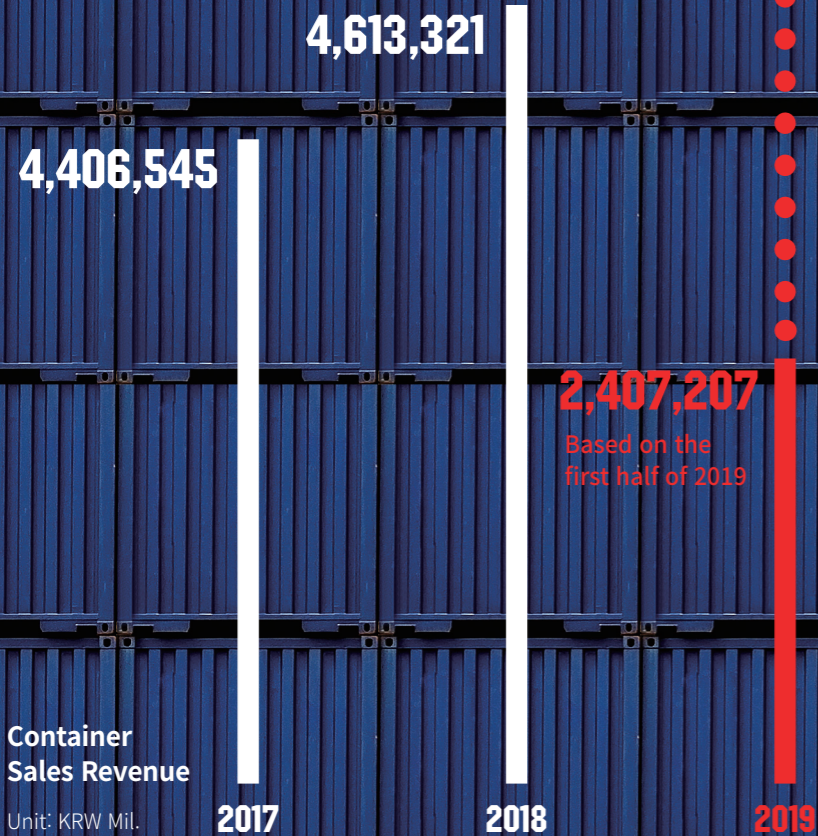
company that operates and grows in a sustainable way. To curb SOx emissions, we plan to complete installations of scrubbers on not only the ships that are currently in operation but also twelve new 24,000 TEU ships and eight 15,000 TEU ships by 2021. Furthermore, we will continue striving to reduce our GHG emissions by 50% by 2030 and to attain zero carbon emissions by 2050. HMM will spare no expense in long-term investments for future-oriented and sustainable shipping, such as Alternative Marine Power (AMP), Maritime Autonomous Surface Ships (MASS) and hydrogen fuel. In order to realize the goal of co-prosperity with society, HMM plans to use the year 2019 as a foundation for its new leap forward. We pledge to put forth our best efforts for continued growth and achievement of social values along with our stakeholders, including our employees.

1.INTRODUCTION

HMM aims to become one of the world's leading logistics companies and is actively investing in expanding its fleet, securing terminals and logistics facilities in major global hubs, and developing customer-centric IT systems. In addition, we are implementing active policies to reduce carbon emissions and pursuing a sustainable environment through the use of eco-friendly products. In the future, HMM will strive to create sustainable economic values and strengthen its competitiveness.

014_ About HMM

020_ Business Overview





HMM is proactively implementing a professional and deep-rooted strategy to cope with environmental regulations

Towards Carbon Neutral Shipping

HMM is planning to actively pursue strategies to reduce CO₂ and invest in technology to achieve zero CO₂ emissions by 2050, which is an even bigger challenge than IMO's GHG reduction strategy. ULCVs that will be delivered starting from 2020 are being built as eco-friendly ships that will reduce GHG emission intensities by at least 52 percent compared to existing ships. Through this, HMM is on the path to exceed IMO's goals for international shipping.

In addition, we will actively participate in various R&D activities that facilitate CO₂ Neutralization of the maritime shipping sector, such as the project to build hydrogen-powered ship platforms and collaboration on eco-friendly smart ships, so that we can contribute to the gradual realization of decarbonization. HMM has been proactively responding to environmental regulations, including the use of the world's first 11,000TEU scrubber-equipped container ships.

HMM is at the forefront of the paradigm shift within the shipping industry, and by our proactive response we hope to create opportunities out of upcoming regulatory and environmental challenges.

0 ZERO CO₂ emissions (2050 goal)

50% CO₂ emissions (2030 goal)
*Compared to 2008 / Based on total emissions



Youngsun Kim,
Leader of R&D Team

WE ARE **DEEPER**



HMM is expanding its position as an IT Frontier shipping company by using next-generation shipping and logistics system

Conversion to the Cloud System

For the first time in the global industry, HMM converted its major IT aspect of finance, accounting (ERP) and also our website (homepage) into a Cloud System. All other key data and applications are expected to transform into a Cloud System by June 2020. In addition, we will implement cost savings and integration management through 'NewGAUS 2020', cloud based next-generation IT system that manages all of business scope from sales management, booking reservation, vessel operation, to expense control. Multiple data centers, domestic and international, will ensure rapid and stable IT service capabilities. This will allow our internal users to better serve our global clients with the highest level of customer satisfaction. Recognizing the importance of IT change management, HMM will continue enhancing its position as a shipping company at the frontier of pioneering IT development.

NewGAUS 2020

Next-generation shipping and logistics system



Sanghoon Park,
Leader of Process
Innovation (Team II)

Jinman Kim,
Leader of Process
Innovation (Team I)

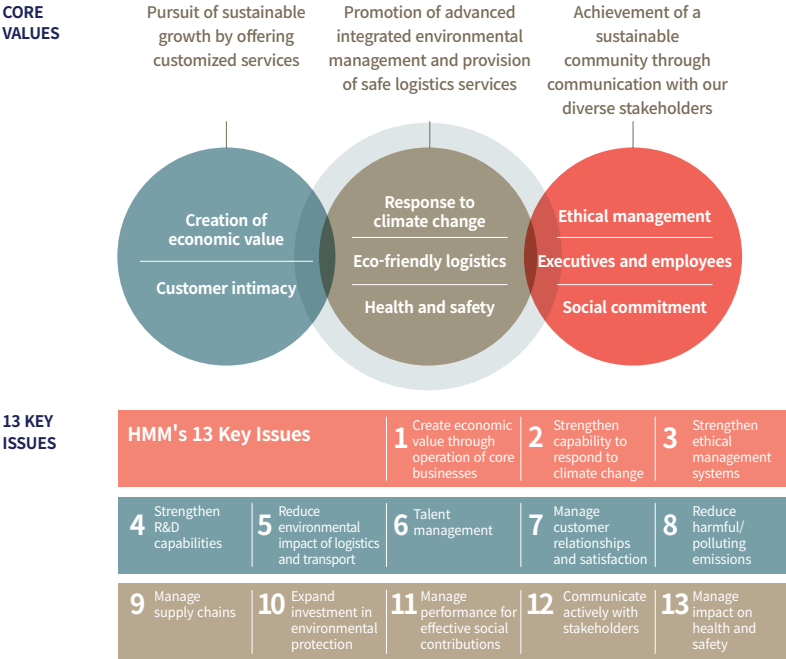


HMM will take a leap forward as a global leader in the shipping and logistics industry through corporate sustainability management

Establishment of Strategies for Sustainable Management

HMM established the "2019 Sustainable Management Strategies and Tasks" to embed the value of sustainability throughout the company.

In order to continually lead and improve future sustainable value creation in the global shipping and logistics industry, we selected eight core values and thirteen key issues upon which to focus. With our customer-centric framework strategy in place, and by listening, communicating and collaborating with all stakeholders, HMM is ready to create and enhance sustainable future value chains.



Jiyeon Yoo,
Deputy General Manager of
Market Intelligence Team




About HMM

Company Status

Since its establishment in March 1976 as a shipping company, Hyundai Merchant Marine has been engaged in the shipping industry with container ships, bulk carriers and tankers. HMM was listed on the Korea Stock Exchange in October 1995, and with several increases, has a capital of KRW 1,592,050 million as of June 30, 2019. We are a comprehensive shipping and logistics company that strives to provide


the best transportation services using a combination of ships, logistics facilities, routes connecting the world, industry-leading IT systems and skilled shipping professionals. We are creating synergy through our partnerships with affiliates centered on services and relevant businesses.

General




NAME OF COMPANY

Hyundai Merchant Marine Co., Ltd.




HQ LOCATION

194 Yulgok-ro, Jongno-gu Seoul, Korea




PRESIDENT & CEO

Jae Hoon Bae




NUMBER OF EMPLOYEES

3,590 employees




DATE OF ESTABLISHMENT

March 25, 1976




ISSUED CAPITAL

KRW 1,592,050 million



INDUSTRY

Marine transportation



OUTSTANDING STOCK

316,552,195 (common shares)

(As of June 30, 2019)

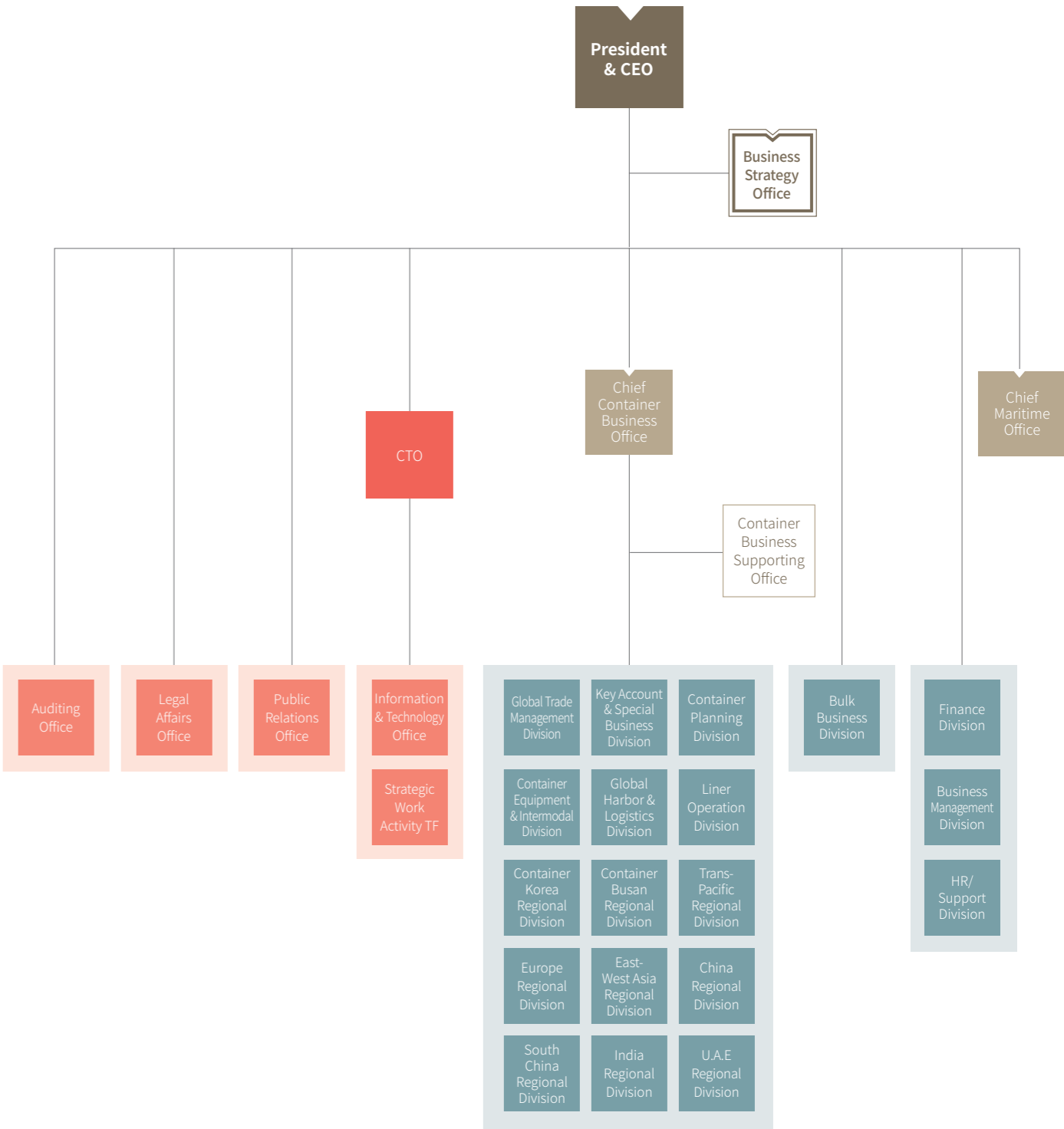
Overview of Domestic Subsidiaries

Company name	Industry	Investment status	Location
Hyundai Ocean Service Co., Ltd	Ship management	100%	5F, 63, Jungang-daero, Jung-gu Busan, Korea
HMM Pacific Co., Ltd	Shipping Agency	100%	194, Yulgok-ro, Jongno-gu Seoul, Korea
HT Algeciras Co., Ltd	Finance	100%	194, Yulgok-ro, Jongno-gu Seoul, Korea

* Haeyoung Maritime Services Co., Ltd. merged into Hyundai Ocean Service Co.,Ltd as of June 01, 2019.
* HMM Pacific Co., Ltd. was incorporated on April 29, 2017.

Organization Chart

(As of August 2019)



Business Status

HMM has a stable business structure based on fleet of more than 90 ships including container ships, large tankers, oil product tankers, LNG carriers, dry cargo and heavy-lift ships, as well as routes and networks connecting the world. We are implementing various policies in each business unit to create synergic

effects. We will grow into a global shipping and logistics company by continuously investing in fleet expansion, securing terminals and intermodal and logistics in major global bases and developing customer-oriented IT systems.

53 Container ships
29 Dry-bulkers 9 Tankers

CONTAINER SERVICE

We have continuously expanded our network of routes to build a global service network that connects the world. By securing additional regional branch networks, we are honing our competitive edge to compete with mega global shippers.

BULK SERVICE

We transport cargo around the world on bulk carriers ranging in size from 30,000 MT to 300,000 MT With a detailed profit-oriented sales strategy combined with efficient fleet composition and optimal business portfolio construction between ships and chartered/operated vessels, we are increasing our global competitiveness and responding to market changes flexibly.

TERMINAL SERVICE

HMM operates its own terminals in Tacoma, US; Kaohsiung, Taiwan; and Algeciras, Spain. With the acquisition of new terminals, we hope to expand our terminal business and take a leap forward in becoming a global terminal operator by pursuing efficient operation through strategies such as cost improvement.

Fleet Status (As of October 2019)

Category	Ship Type	No. of ship	DWT	TEU
Type of ship	Container ships	53	-	435,041
	Dry-bulkers	29	2,510,249	-
	Tankers	9	1,916,316	-
Total		91		

* Includes ships that are owned and chartered for more than a year (more than 3 years for container ships).

History

HISTORY

1970's

- 1976
- Established Asia Merchant Marine Co., Ltd. (the precursor of HMM)
 - Three tankers purchased (Korea Sun, Korea Star and Korea Banner)
- 1977
- Started tramper service
- 1978
- Launched the conventional break bulk liner service between the Far East and the Middle East
- 1979
- Established Tokyo branch and Incheon office

1980's

- 1980
- Launched the Asia-Latin America route
 - Commissioned Hyundai No.1, the first car carrier in Korea
- 1981
- Initiated the first ore & coal carrier service in South Korea with the commissioning of Hyundai Pacific

- 1982
- Launched the Asia-US route
- 1984
- Established HMM Group

1990's

- 1991
- Launched Korea's first direct service to Russia on the Busan - Vostochny route
- 1992
- HMM established offices in Europe and Hong Kong
- 1993
- Simultaneously acquired ISM Code and ISO 9001 certifications
- 1994
- Launched Korea's first LNG carrier, the Hyundai Utopia
 - Established Sao Paulo branch in Brazil

- 1996
- Opened exclusive container terminal in Kaohsiung, Taiwan
 - Acquired ISO 14001 certification
- 1997
- Global container service provided with APL & MOL
 - Hyundai Atlas selected as the first Green Ship in Korea
- 1999
- Acquired 100% management rights for Long Beach Terminals in California
 - Opened exclusive container terminal (WUT) at the port of Tacoma, US
 - Opened Busan Hyundai container terminal
 - Acquired ISO 9001 and ISO 14001 certifications in the terminal sector

2000's

- 2000
- Launched HMM (France) S.A. in France
 - Reached sales revenue of KRW 5 trillion as first in the Korean shipping industry
- 2001
- Deployed 6,500TEU container ship on the Pacific-Southwest service (PSW) route
- 2002
- Selected as a Green Supplier by Tetra Laval in the environmental field
 - Launched an additional service route, PSV, between Asia and the west coast of the US and Canada

- 2003
- Established Global Integration System(GIS)
- 2005
- Expanded cooperation with Grand Alliance
 - Launched a 310,000 MT
- 2006
- Received ISO 45001 (Occupational health and safety management system)
- 2009
- HMM (Europe) Ltd gained Authorised Economic Operator' (AEO) status
 - Opened first domestic direct route between Vietnam and the US

2010's

- 2010
- Certified by the Authorized Economic Operator (AEO) as level AA, a first for a Korean shipping company
 - Launched 'HMM SMART (m.hmm21.com)' service for smart phones
- 2011
- Opened California United Terminal (CUT) at the Port of Los Angeles
 - Signed a contract with DSME for five 13,100 TEU ULCVs
 - Awarded certification for Green Management System, a first in the Korean shipping industry
 - Launched the world's largest alliance G6
- 2012
- Established a ship management company, Hyundai Ocean Service Co., Ltd
 - MV Pacific Pride certified as an eco-friendly ship, a first in Korea
- 2013
- Received 'Carbon Management Industry Leader' award from the CDP Korea (First in the Korean shipping industry for three consecutive years)
- 2015
- Launched a new Far East-South America service
 - The new 'Rotterdam World Gateway (RWG)' terminal opened, with HMM as a key shareholder

- 2016
- Launched a route for new container ships among China, South Korea and Russia
- 2018
- Started a '-60°C Ultra Freezer' shipping service
 - Launched two 11,000 TEU container ships equipped with scrubber systems
- 2019
- Signed with THE Alliance as a regular member
 - Acquired five Eco-Type VLCCs
 - Completed transition of IT-based key tasks onto the Cloud System
 - At Lloyds List Global Freight Awards in London, HMM awarded the "Environmental Award"

Business Overview

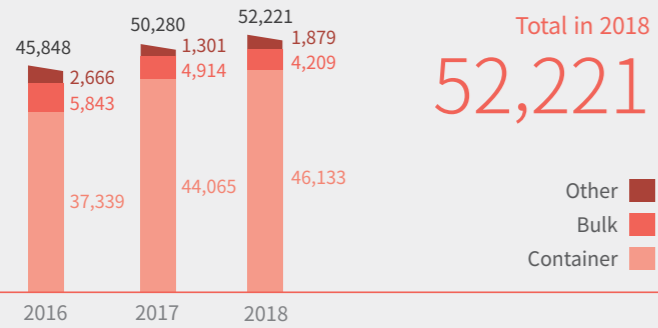
Creating and Distributing Economic Value

Key Performance and Plan

In 2018, HMM puts forth its best effort to restore customer confidence in Korean shipping and to reduce fixed costs by lessening variable costs in the short term and building large-sized ships. As a result, HMM was able to reach KRW 5.222 trillion in sales in 2018, in which the container business unit contributed to 88.3 percent of total sales with KRW 4.613 trillion, and the bulk business unit contributed to 8.1 percent of total sales with KRW 420.9 billion. We proactively responded to new environmental regulations by operating the world's first scrubber-equipped container ships of 11,000 TEU* or greater. Also, by signing 20 new contracts for eco-friendly ULCVs(Ultra Large Container Vessels), we laid the foundation to take a leading position in competing with other global shippers. Finally, HMM secured again the operating rights to the port 4 terminal at Busan Newport in January this year. As a result, it is now possible for us to

Sales Revenue of Key Businesses (Unit: KRW 100 million)			
Category	2016	2017	2018
Container	37,339	44,065	46,133
Bulk	5,843	4,914	4,209
Other	2,666	1,301	1,879
Total	45,848	50,280	52,221

* Based on K-IFRS' consolidated financial statements



Distribution of Economic Value

HMM creates value through business activities based on its resources and expertise, and distributes this value to stakeholders.

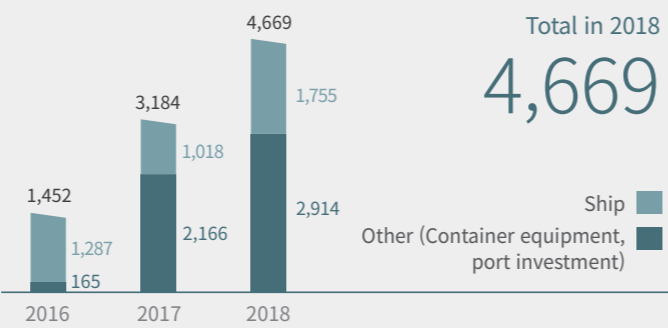
save a significant amount of handling costs. HMM intends to prepare for a leap forward as a top-class global shipping company through methods such as improving mid- to long-term profitability by acquiring five ultra-large vessels equipped with scrubber systems that minimize fuel consumption. In addition, we strive to strengthen our internal competitiveness and pursue the highest level of customer satisfaction based on improved service and efficient organizational operation, such as sailing route improvements.



* TEU: Unit of container (a 20 feet container)

Investment of vessel & equipment and Financing (Unit: KRW 100million)			
Category	2016	2017	2018
Ship	1,287	1,018	1,755
Other (Container equipment, port investment)	165	2,166	2,914
Total	1,452	3,184	4,669

* Financing: KRW 272.4 billion in self-financed funds and loans



(As of December 31st, 2018)

Category	Detail	Unit	Performance
Partners	Raw material costs	KRW million	320,854
Social Commitment	CSR fund for employees	KRW million	17
Employees	Total annual salary	KRW million	88,959

CONTAINER SERVICE



856,000
TEU
more carried in 2018



HMM launched container transportation services between Asia and North America in 1985, connecting more than 60 service routes and more than 100 ports worldwide as of 2019. This global service network includes Asia-America, Asia-Europe and Asia-Middle East/South America. In particular, we are responding to our customers' needs using a variety of ships ranging from small-sized ships of 1,000 TEU to mega ships of 13,100 TEU. We have also been providing our customers with competitive services and optimized network configuration through our alliance with global shipping lines.

In a continuing effort to reinforce our competitiveness, we are strengthening our investment in mega ships and sales of special container services including ultra-freezer cargo. We are also actively investing in opening new routes and increasing slot, Internet of Things (IoT), blockchain and cloud-based development. In addition, to respond to IMO environmental regulations in 2020 and to strengthen our competitiveness through economies of scale, we will order eco-friendly mega container ships to further expand our slot and service.

Market Share

(Unit: %)

Category	Asia → US West Coast			US West Coast → Asia		
	2016	2017	2018	2016	2017	2018
HMM	5.2	6.9	6.9	6.2	8.7	9.5
EVERGREEN	12.1	11.2	11.5	12.4	11.8	12.7
COSCO	9	11.1	10.5	5.6	7.9	7.9
MSC	6.7	7	7.3	7.3	6.9	7.2
MAERSK	7.2	7.4	7	7	8.5	7.9

* Asia: Far East, Southwest & Southeast Asia

* US West Coast: US (Canada excluded)

* Container volume of the US route (Source: PIERS)

Container Ships

In 1985, HMM started container transportation services between Asia and North America. As of 2019, we have established a global service network linking more than 60 service routes and over 100 ports worldwide, including routes among Asia-USA, Asia-Europe, and Asia-Middle East/South America. In particular, we meet the needs of our customers with a variety of ship types, ranging from small ships of 1,000 TEU to mega ships of 13,100 TEU. HMM is facing considerable uncertainty in 2019. Geopolitical instability and an oversupplied market situation have intensified. Therefore securing

competitiveness is most important for sustainable growth. In order to strengthen competitiveness, HMM is stepping up investment in mega ships and special container services such as Ultra Freezer cargo, as well as investing in opening new service routes, increasing shipping lines, and building IoT, blockchain and cloud infrastructures. In addition, in order to comply with IMO environmental regulations in 2020 and to strengthen competitiveness through economies of scale, we will order eco-friendly mega container ships to further expand the scope of slot and services.

Trans-Pacific Route

Amid weak market conditions, the US-China trade dispute caused a temporary increase in front-loading volume ahead of an increase in tariffs. This increased demand was accompanied by a rise in freight rates, which enabled HMM to pursue the maximization of its sales by replacing large vessels to the American west coast. Making the most of this momentum, we managed to maximize sales and improve profitability on the Trans-Pacific routes. However, as the US-China trade dispute continues, we are facing falling demand due to previous front-loading. In response, we are actively seeking to reduce costs by streamlining high-cost inland transportation in America.

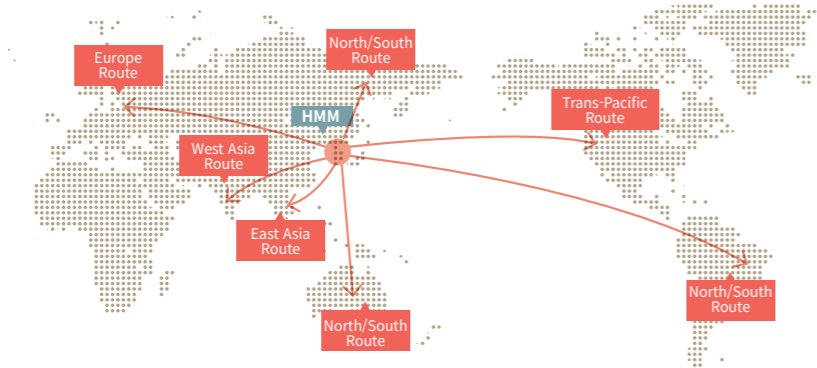
Europe Route

For Europe, we have asserted our effort to refine our collaborative services with the 2M Alliance and to increase our supplies. As a result, our shipments increased significantly, which enabled us to lay the foundation in terms of shipper and cargo volume for the deployment of 24,000 TEU ships in 2020. Since the beginning of this year, freight rates have steadily declined due to oversupply on the European routes. Therefore, we are actively pursuing cost reductions by purchasing slot from THE Alliance with the aim of improving our profits.

West Asia Route

HMM has expanded its service capacity through continuous efforts to increase cargo while replacing ships on the Middle East (8,600TEU→13,000 TEU) / India (6,000TEU→8,000TEU) routes in the 2nd half of 2017. In this way, we have positioned ourselves as a key player in the region despite the recent deployment of large ships by other shipping companies. For Middle East Business, we have reduced costs of the empty equipment positioning in the area by securing additional large amounts of petrochemicals from the

Middle East, and we are improving our profit margins through the management of low-profitability cargo. Meanwhile, in preparation to comply with stricter environmental regulations, we are actively recovering the additional costs by collecting bunker surcharges for cargo shipping in Shanghai/Ningbo, China from December 2018 and imposing war risk surcharges in response to escalating tensions on the Strait of Hormuz between the U.S. and Iran.



East Asia Route

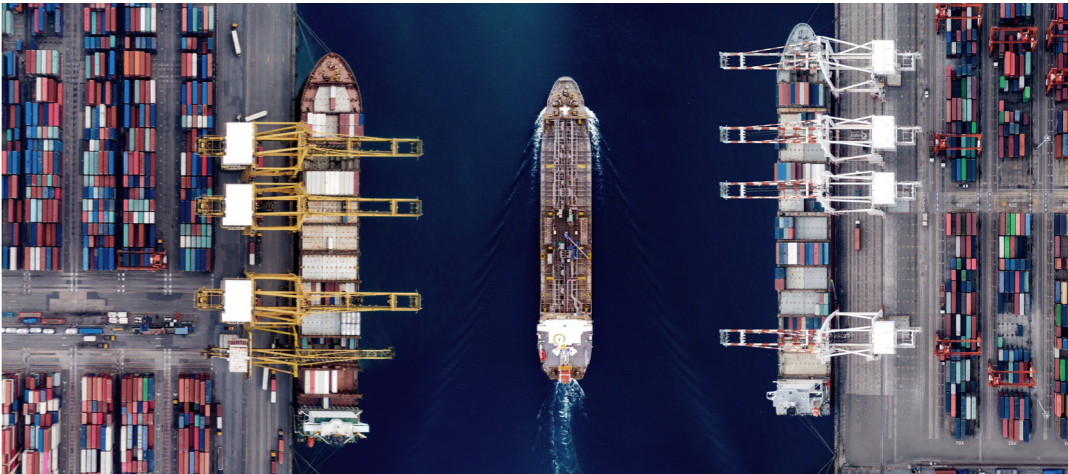
Focusing on the steady expansion of the Southeast Asian market and the increase in trade volume, we have worked actively to develop services in East Asia in consideration of the sales opportunities within the Asian region and potential business connections with the America/Europe business. Consequently, sales volume is rapidly growing, and we are also achieving a cargo linkage effect for the American/European business. At the same time, HMM is focusing on its inter-port business which is to utilize unused slot of

us or Middle East/India service between ports in Asia region. With shipping companies being drawn to the business potential of the Asian market, freight rates have continued to fall due to the recent launch of new services and the enlargement of their mother ships. In response to this pressure on freight rates and costs, HMM has conducted studies to deploy ships of appropriate sizes and rationalize the cost of services.

North/South Route

The North/South routes which include Russia, South America and Australia, have been in stable operation. To strengthen our business between Australia and Asia, where trade volume has recently been increasing, we are expanding our sales volume by deploying ships on the Australian routes. However,

as the cargo volume is declining due to the US-China trade dispute, we are looking for ways to improve the business. We are also preparing for an expansion of sales opportunities, especially on the profitable South America routes.



HMM will terminate its cooperation with the 2M Alliance and become a member of THE Alliance in April 2020. The decision to work with THE Alliance was made in consideration of the effectiveness of operating mega ships (24,000 TEU) which come in from the second quarter of 2020 and the optimization of HMM's sales capacity in the long term. In particular, we expect an increase in satisfaction among our shippers and better profits by HMM capacity slot and providing various services on the America/Europe routes. Once cooperation with THE Alliance begins, slot will be increased on the American and European routes and service coverage will be expanded, which will enable us to provide services that better meet our

shippers' needs. Regulations on low sulphur fuel oil enacted by the International Maritime Organization (IMO) will take effect from 2020 with the aim of reducing pollution. HMM has established a proactive plan to install devices that will reduce sulphur emissions. The devices called 'scrubbers' will be installed on ships currently in operation, and newly built ships to be delivered in 2020. In this way, we aim to actively participate in the efforts of the international community in protecting the environment, such as improving the atmosphere through the reduction of harmful substances.

BULK
SERVICE



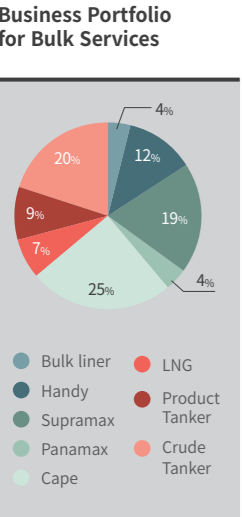
Full compliance with
IMO 2020



New vessels
5 Ships
Eco-Type VLCCs



2020 sales goal of
KRW 600 billion



In the Tanker Business, since HMM launched its first three VLCCs(Very Large Crude-Oil Carriers) in 1976, we have been operating a diverse range of vessels, including VLCCs, medium range tankers, oil product carriers and LNG carriers. Based on long-term contracts with domestic and overseas refiners, we generate stable profits by transporting crude oil from the Middle East / West Africa / Caribbean Sea to the Far East / US / Europe. In addition, we expose some vessels to the spot market during bull markets to boost profitability. Especially in the second half of 2019, the market has been rising due to increased cargo volume, increased ton-miles from expanded crude oil exports to the US and dry docking of a number of ships for scrubber installation. HMM expects to maximize profits once our new scrubber-equipped VLCCs enable the reduction of fuel costs. The dry bulk business has grown with the operation

Market Trends for Bulk Services

Category	2016	2017	2018					2019			
			Q1	Q2	Q3	Q4	Average	Q1	Q2	Q3	Average
Baltic Dry Index (BDI)	673	1,145	1,175	1,260	1,607	1,363	1,353	798	995	2,030	1,285
World Scale (WS)	59	59	41	45	53	88	57	56	41	54	51

Tanker

Crude Oil Tankers

Providing the world’s best service with the highest competitiveness in sales, a catalyst for the birth of HMM

Based on solid ties with the top refiners in Korea and the world, including S-Oil, GS Caltex, SK Energy, Hyundai Oilbank, Petron, Unipet, Reliance and others, HMM has placed itself among the world’s most competitive shipping companies through the following approaches: ① operation of competitive fleets of VLCC and Suezmax and a stable sales structure based on long-term contracts, ② accurate

of owned ships and chartered vessels of the Capesize (over 100,000 DWT), Panamax (65,000~99,999 DWT), Supramax (40,000~64,999 DWT) and Handysize (10,000~39,999 DWT) classes. The Dry Bulk Business began in 1977 with three tugboats transporting materials to construction sites in the Middle East. Since we launched Korea’s first specialized ore and coal transportation service in 1981, we have provided maritime transportation services for iron ore, coal, grains and various bulk cargoes in cooperation with the world’s major ironworks, power companies and raw material suppliers. We strive to optimize our profit structure and reinforce our expertise through competitive fleet formation, efficient management of operations and the maintenance of stably proportioned long-term contracts. All the while, we aim to steadily enhance our sales competitiveness by actively responding to external changes.

market outlook followed by preemptive measures for revenue generation, ③ and outstanding quality in operations and transportation services by fostering sales/operation experts of high caliber. For even greater compliance to the IMO regulations on SOx emissions that are to take effect in 2020, five VLCCs have been newly built and delivered. With this brand-new fleet, we will continue to build on our competitiveness and provide top-notch service to our customers.

Product Tankers

Enhancing market presence by targeting niche markets with highly competitive owned tankers

With a fleet of 50,000 DWT MR tankers, HMM transports Clean Petroleum Products (CPP) such as gasoline, gas oil, naphtha, jet fuel and kerosene for key global refineries, petrochemical companies and traders. We have established a solid presence in the market based on accumulated experience in tanker marketing and

operations. While closely keeping up with increasing demand from emerging economies such as China and India, we will do our utmost to become Asia’s leading carrier of refined oil products, as we need to be ready for a potential increase in refined product trade as a result of the IMO’s heightened environmental regulations post-2020.

Trampers

Cape & Panamax

Excelling as a driver of the world’s economic growth by transporting key industrial cargoes such as iron ore and coal

HMM employs owned ships and chartered Capesize and Panamax vessels to provide transportation of mass bulk cargoes such as iron ore, coal, phosphate rock and grains. We maintain close ties with key customers in China, Australia, Brazil and Southeast Asia, and we have gone beyond our focal area of

operation in the Pacific to the Atlantic, where we are actively engaging with new customers and building up our market share in the region. We aim to fully optimize our fleet for maximum profitability by reorganizing and expanding our fleet of owned ships and long/short-term chartered/operated vessels, and will do our best to enhance competitiveness and customer satisfaction by fostering professional marketing/operating manpower.

Supramax & Handy

Enhancing our competitive edge through a vast global sales network

HMM provides transportation services for various bulk cargoes including fertilizer, cement, iron ore, coal, grain and sugar to destinations worldwide. We operate a diversified fleet of owned ships and chartered vessels ranging from 30,000 DWT to 60,000 DWT, which is made up of top-of-the-line vessels younger than 5 years on average. Based on a stable business position supported by strong ties with existing key customers, we have been actively growing our customer base through a vast network of overseas

representatives. Furthermore, we are expanding our area of operation to the Atlantic and North America from our existing focus in the Asia Pacific region. HMM will continue to do its utmost to achieve business optimization by acquiring more owned ships, securing more chartered/operated vessels as well as profitable long-term contracts. We will not shy away from delivering the highest level of satisfaction by strengthening our distinguished customer-oriented service through the development of professional resources in marketing/operations.

Bulk Liner

Bulk Liner

Making a leading contribution to Korea's trade through a steadfast and reliable liner service of 40 years

HMM’s bulk liner service began its journey in September 1977 when a fleet of tugboats like Chungryong 1, 2 and 3 were deployed to deliver construction materials to construction sites in the Middle East. We regularly operate general cargo vessels varying in size from 30,000 DWT to 60,000 DWT through loading ports in Korea, China, Taiwan, Japan and Southeast Asia to offloading ports in the Americas, Latin America, West India, the Middle East

and Europe. These vessels transport steel products, wooden goods, general cargoes from Korean and overseas manufacturers, trading companies and various major shippers. As “providing the best service for customer satisfaction” is our sales motto, we exert our most sincere efforts to providing safe, on-time delivery of our customer’s valuable cargoes to discharging ports. HMM takes great pride in having sailed alongside global economic growth for the last 40 years, and we promise to continue providing our customers with excellent service.

TERMINAL
SERVICE



HMM operates terminals in Tacoma, USA; Kaohsiung, Taiwan; Algeciras, Spain and elsewhere. We are building a reputation as a terminal operator with cutting-edge facilities, excellent operational efficiency and thorough safety management.

Without stopping here, the company is continuously working to progress as a future global terminal operator by pursuing the acquisition of additional terminal shares.

USA

WUT(Tacoma, USA)

Washington United Terminals (WUT) achieved operational optimization towards the end of 2018 through an upgrade of its IT system. Following HMM’s joining of THE Alliance in the second quarter of 2020, we plan to continuously increase our volume and profit in cooperation with members.

TTI (Long Beach, USA)

In January 2017, HMM acquired a 20% stake in Total Terminals International LLC (TTI), the formal base terminal of Hanjin Shipping, which led to the signing of a competitive contract for loading and unloading in the LA/Long Beach area. As a result, HMM was able to reduce loading and unloading costs and is providing a stable shipping service. The Port of Long Beach serves as a major strategic base for HMM and in accordance

with the Compliance and Clean Air Action Plan of the California Air Resources Board (CARB,) we are making efforts to gradually reduce exhaust emissions at TTI to achieve ZERO emissions of our terminal equipments by 2030. And with the provision of shore power to ships which started on January 1st, 2014, we are committed to reducing emissions by 80% by 2020.

Taiwan

HPC / KHT (Kaohsiung, Taiwan)

Since the new acquisition of the HMM Pacific Corporation (HPC) terminal in April 2017, HMM has operated two terminals in Kaohsiung, Taiwan, including the existing Kaohsiung Hyundai Terminal (KHT). We are currently providing a stable loading and unloading service to client shipping companies and shippers utilizing our maximized capacity, and we plan to continuously rationalize these two terminals into a directly managed hub connecting Asia and America by expanding equipment and facilities with our membership in the new alliance.

South Korea

HPNT(Busan, South Korea)

HMM reclaimed the operational rights of HPNT (PSA Hyundai Pusan Newport Terminal) in January 2019. The terminal’s facilities paved the way towards improving its shipping productivity and loading/unloading services, reducing domestic stevedorage and improving services for our shippers. Going forward, we aim to work continuously to increase the port’s freight volume, including trans-shipment cargo, in association with THE Alliance starting in the second quarter of 2020.

Europe

TTIA (Algeciras, Spain)

Total Terminals International Algeciras (TTIA) serves as a bridgehead for trans-shipment to the Mediterranean, North Africa and Europe and HMM expects that this terminal will expand its base of operations and secure market competitiveness in the region for the mid-and long-term. TTIA operates the majority of its terminal equipments with electricity as a semi-auto terminal and therefore contributes to air quality improvement with 40% less GHG emissions. It also generates its terminal profits only from third-party supplies, making its port business a major source of revenue. Accordingly, HMM is pursuing strategic investments for more stable and sustainable revenue generation.

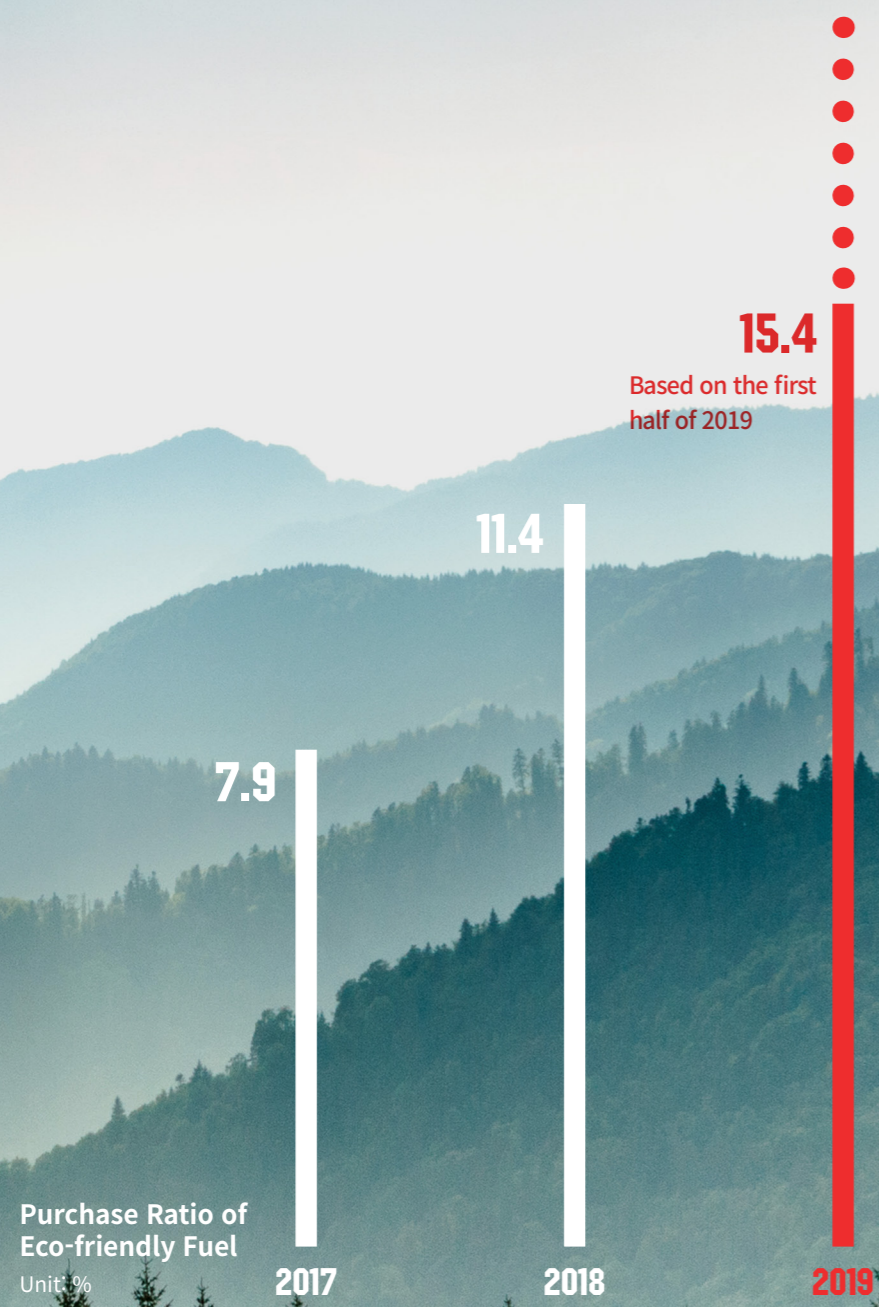
RWG (Rotterdam, The Netherlands)

Located at the first and the last stop of the Trans Siberian Railway, the Rotterdam World Gateway (RWG) terminal is an eco-friendly terminal that is entirely automated and computer-controlled, operating on 100% green energy. It was designed with top priority given to safety and stability, and operates with maximized efficiency based on state-of-the-art systems connecting the sea, roads and railways. HMM has secured a cutting-edge terminal in the port of Rotterdam, the largest hub in Europe, and is expanding its sales network connecting Asia, Europe and the Atlantic Ocean, for greater sales capacity and profitability.



Terminal Status

Name	Location	Phone	Homepage
WUT	1815 PORT OF TACOMA ROAD, TACOMA, WA 98421-3710	1-253-396-4900	http://www.uswut.com/
TTI	301 Mediterranean Way, Long Beach, CA 90802	1-562-256-2649	http://www.totalterminals.com/
KHT	Hyundai Kaohsiung Terminal #118/119 Terminal, No.4 Center 40, Chi-Ching 1st Road, Chi-Ching Districk Kaohsiung, Taiwan	886-7-571-8518	-
HPC	Pier 78, Container Terminal NO.5 3F NO.6 Dong Ya South Road, Xiao Gang District, Kaohsiung 81243, Taiwan	886-7-823-5202	http://www.hmmpac.com/
HPNT	454, Sinhangnam-ro, Gangseo-gu, Busan, Republic of Korea	82-51-290-1700	https://www.hpnt.co.kr/
TTIA	Muelles de Isla Verde Exterior s/n- 11207 Algeciras, Candiz	34-956-022-490	http://www.ttialgeciras.com/
RWG	Amoerweg 50, port number 8790 3199 KD ROTTERDAM MAASVLAKTE THE NETHERLANDS	31-10-742-2000	https://www.rwg.nl/
KIT	240, Keonbudu-ro, Gwangyang-si, Jeollanam-do, Republic of Korea	82-61-798-1700	https://www.kitl.com/index.kitl



2.SUSTAINABILITY

HMM strives to strengthen cooperation by listening to the voices of various stakeholders, including clients, business partners, shareholders, investors, local communities, executives and employees.

To grow as a leader in the global shipping and logistics industry, we will continue to improve our services and do our best to satisfy our stakeholders to create sustainable future values.

- 030_Governance
- 032_Risk Management
- 034_Global Network
- 036_Ethical Management
- 038_Sustainable Management
- 041_Materiality Assessment

Governance

Composition of the BOD

The Board of Directors at HMM deliberates and makes decisions on matters specified in the laws and Articles of Incorporation or matters entrusted by general meetings. It handles important matters related to the company's basic management policies and major business operations and supervises all businesses executed by directors and executives. As of June 2019, the board consists of five directors, including two inside and three independent directors. In order to strengthen the board's independence, it is required to maintain a ratio of independent directors of at least 50%. According to the Article 40 of Articles of Incorporation, a chairman of the Board of Directors shall be elected by the Board of Directors, and term of office also

Selection of Directors

Independent directors are appointed in accordance with the qualification criteria set forth in the relevant regulations, such as the Commercial Act, and are selected at the general meeting of shareholders after a strict evaluation and recommendation by

shall be determined by the resolution of the Board of Directors. The Board of Directors in HMM is served by the CEO, and any independent director may also be appointed the chairman of the Board of Directors. All independent directors maintain independence from management based on Article 382 of the Commercial Act regarding the ineligibility of independent directors and the provisions of Article 17 of our Articles of Incorporation. To prevent conflicts of interest, independent directors cannot, without prior approval from the board, engage in business activities or serve as general partners/directors of other companies in the same category as HMM, either for their own purposes or for those of a third party.

the BOD and the Independent Director Nomination Committee. During the process of appointing independent directors, HMM verifies the interests of the directors and the company.

Operation of the BOD

The Board of Directors holds quarterly meetings and supplementary meetings as required. BOD meetings are convened by the BOD's Chairman or the CEO, who can call for a meeting upon the request of any director who specifies the purpose and agenda thereof. For independent directors to faithfully perform their duties, we provide detailed data in advance so that the relevant matters can be reviewed before the meeting of the BOD and the committees within the BOD. Furthermore, to help our independent directors

improve their understanding of our business and deepen their expertise, we offered a tour of a scrubber-fitted vessel in 2018 and a visit to newly constructed VLCC in 2019. In 2018, a total of 15 board meetings were held, including 4 regular and 11 ad-hoc meetings, and resolutions were made on a total of 24 agenda items, with an average attendance rate of independent directors of 98.5%.

Composition of the BOD (As of June 2019)				
Category	Name	Major Assignments	Expertise	BOD Roles
Executive Director	Jae Hoon Bae	President & CEO	Overall Management	• Chairman of the Board • Chairman of the Independent Director Nomination Committee • Chairman of the Finance and Economy Committee • Chairman of the Risk Management Committee
	Jin Ki Park	Senior Executive Vice President	Overall Management	• Member of the Finance and Economy Committee
Independent Director	Gyu Bok Kim	Advisor at law firm Kim & Chang	Finance	• Chairman of the Audit Committee • Member of the Independent Director Nomination Committee • Member of the Risk Management Committee
	Min Hyun Youn	Former Senior Advisor of Sinokor Merchant Marine	Shipping	• Member of the Audit Committee • Member of the Independent Director Nomination Committee • Member of the Risk Management Committee
	Yo Ick Song	Former Head of Container Business Office of HMM	Shipping	• Member of the Audit Committee • Member of the Independent Director Nomination Committee • Member of the Risk Management Committee

Operation of BOD Subcommittees

The HMM board operates four subcommittees: the Audit Committee, the Independent Director Nomination Committee, the Finance and Economy Committee, and the Risk Management Committee. The board delegates much of its authority to subcommittees to enable more professional decision-making and more effective operations. The board clarifies the roles and responsibilities of each member and thus seeks mutual checks and balances within the board. The committees of the board are run mainly by independent directors. The Audit Committee consists entirely of independent directors, and independent

directors make up more than half of the Independent Director Nomination Committee and the Risk Management Committee. Most notably, the Risk Management Committee was established in April 2018 to enhance shareholder value, and strengthened the Audit Committee's supervisory function. Accordingly, a system was put in place under which investments in other companies or collateral (guarantees) over a certain size are reported to the Audit Committee before approval by the board. This enables independent directors to conduct a preliminary check on major management risks prior to the board meetings.

Role & Operational Status of BOD Committees (As of June 2019)		
Category	Composition	Role & Operations
Audit Committee	3 Independent Directors	• Audits company accounting and business executed by directors • Held 7 times in 2018, 4 times in 2019
Independent Director Nomination Committee	3 Independent Directors	• Recommends independent director candidates at the general meeting with respect to the relevant laws, the Articles of Incorporation and the regulations of the BOD • Held 2 times in 2019
Finance and Economy Committee	2 Executive Directors	• Enhances efficiency in decision-making through delegation of authority related to current BOD resolutions
Risk Management Committee	3 Independent Directors	• Carries out overall management and control to promptly recognize/measure/monitor/control all risks that may arise in company management • Held 2 times in 2018 and 2 times in 2019

Performance Evaluations and Remuneration of the BOD

The remuneration of directors is discussed at board meetings along with an evaluation of their expertise in business and their active participation in board activities. Remuneration is provided within the limits approved at the general meeting of shareholders and

in 2018 and 2019, the limit capped at KRW 2 billion. Decisions on the remuneration and reappointment of independent directors take into account their faithfulness, professionalism and ethics in the activities of each committee.

Board Remuneration (Unit: KRW million; as of Dec. 2018)			
Category	No. of people	Total amount	Average remuneration per person
Executive Director	3	750	250
Independent Directors	Member of the Audit Committee	3	127
	Non-member of the Audit Committee	1	41

Shareholder Status

As of December 2018, the largest shareholder of HMM is Korea Development Bank, with a stake of 13.05% in common stock. The shareholding ratio, including

persons with special interests, is 17.47% in common stock.

Stocks and Shareholders (As of Dec. 2018; common stock)			
Category	Shareholder Name	Owned Shares	Ratio(%)
Largest shareholder	Korea Development Bank	41,199,297	13.05
Person with special interests in the largest shareholder	Korea Ocean Business Corporation	13,943,850	4.42
Total		55,143,147	17.47

* The existing shares owned by Korea Shipping & Maritime Transportation were inherited by Korea Ocean Business Corporation upon its establishment.

Risk Management

Risk Management System

As corporate operations are vulnerable to a variety of risks, HMM systematically manages risks on a permanent and regular basis in response to those that may occur over the course of management and sales activities. In particular, we strive to minimize risks by recognizing the possibility of fluctuations in economic value in terms of profitability, net cash flow and asset value in advance, considering changes in oil prices, exchange rates, interest rates, freight

rates, charter rates or disasters, and accidents and regulations. In addition, we classify risks based on their characteristics as financial, investment, market, operational, legal, and other risks to be managed by designated operational teams. This way, we aim to manage complex risks in an effective manner while considering their social and environmental aspects, thereby increasing the value of the company.

Committees for Risk Management

HMM manages various risks on a company-wide basis through the establishment of risk management regulations, codes of practice and risk management committee regulations. In addition, we have delegated authority to the Strategic Information Team

(now the Risk Management Team) as the general manager of company-wide risks, and have set up separate risk operation teams for each risk item to practice permanent and regular risk management.

Category	Permanent Risk Management
Approach to Risk Management	• Frequent checks on key indicators (dry bulk/tanker/container freight, exchange rates, interest rates, charterage, oil prices, stock price, etc.) and reporting on the particularities•Frequent discussions on fluctuations of major risk items, weekly reporting on the risk management checklist and market situation
Category	Regular Risk Management
Approach to Risk Management	• Monthly reporting on major risk management items to the Risk Management Council, reporting to the BOD the following month on matters reported to the Council • Conducting separate committee meetings when a matter should be approved by the Risk Management Committee

Operation of Risk Management

The basic principle of HMM’s risk management system is the assignment of operational teams to each risk. In order to minimize the impact of the risk in question, each operational team specifically defines tasks to be executed and documents them in the code of practice at each managing step (planning, monitoring, measurement, analysis/evaluation, feedback/task improvement). We periodically review the code of practice to evaluate the effectiveness and efficiency of our methodology of managing risk

and to incorporate improvements into the code of practice. Furthermore, we immediately report to the Risk Management Council and notify the internal Risk Management Team as soon as we expect any rapid changes in our business execution or recognize that any risk regulation or code of practice is violated. For risks not properly handled due to violations of regulations and procedure, disciplinary action will be taken in conformity with internal regulations.

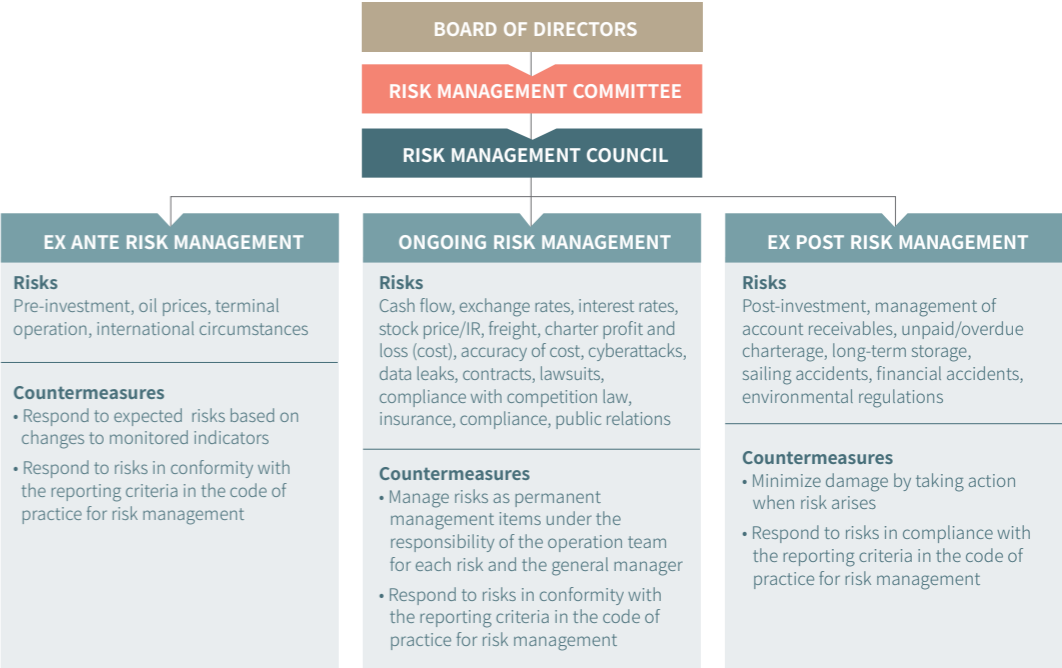
Risk Management in Investment

To manage risks in investment, HMM divides them into two categories: risks before investment and risks after investment. HMM recognizes these two

categories as major risks to be managed and includes them in the category of 27 major risk items.

Category	Approach to Risk Management
Risks before Investment	1. Investment proposed for a given LOB and reviewed by the Investment Planning Team and related teams 2. Review of risks prior to investment through working-level meetings of investment-related teams and the Investment Deliberation Committee meetings 3. Final review of the execution of the investment at the Investment Deliberation Subcommittee and the Investment Deliberation Committee
Risks after Investment	• Check performance against plan at 3 months / 6 months / 12 months after the execution of investment or the start of business • Discover new risks after investment execution and report to the Risk Management Committee and BOD

Framework for Risk Governance



BOD's Supervision of Risk Management

The corporate activities of HMM is always exposed to various risks that arise in the business environment. Thus, we manage risks in detail by assigning operational teams and other related teams to each risk. However, the supervision of the BOD is required for crucial issues. In order to proactively respond to changes in the external environment and to strengthen risk management functions, the Risk Management Committee was upgraded to a committee within the Board of Directors in April 2018. The Risk Management Committee carries out comprehensive management and control to identify, measure, monitor and control all risks that may arise in the course of management in a timely manner. HMM newly established the Risk Management Council

as a subordinate organization of the Risk Management Committee in May 2018 and revised the Risk Management Regulation. In accordance with Article 13, Paragraph 2 of the Risk Management Regulation, we constantly monitor risks by reporting the matters discussed in the Risk Management Council, the company's overall risk management organization, to the Risk Management Committee and the BOD. In principle, the Risk Management Committee meets to handle company-wide risk items every quarter, but since major risks are reported every month at the BOD, which includes all members of the Risk Management Committee, only matters absolutely requiring a Committee resolution are deliberated and resolved at the Committee.

Response to Risks

HMM stipulates the code of practice for risk management and the risk management regulations separately to respond to emergency and crisis situations according to the reporting criteria. We classify risk items in detail and delegate relevant teams, reporting

contents and monitoring indicators in order to establish countermeasures. Based on this, each sector plays its role under the risk response system when a risk actually occurs, to respond to and manage risks as promptly as possible.

Taskforce for International Response

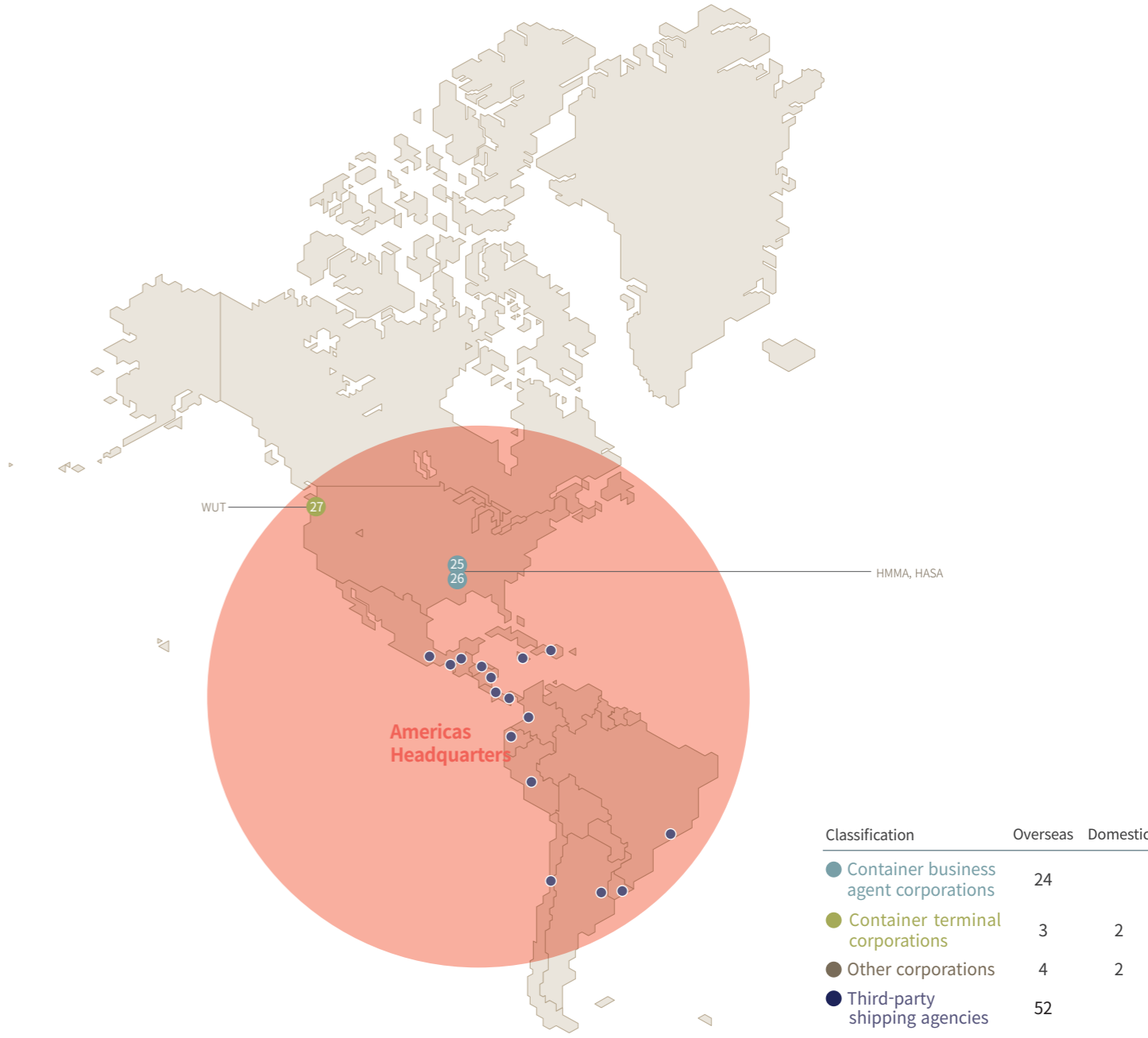
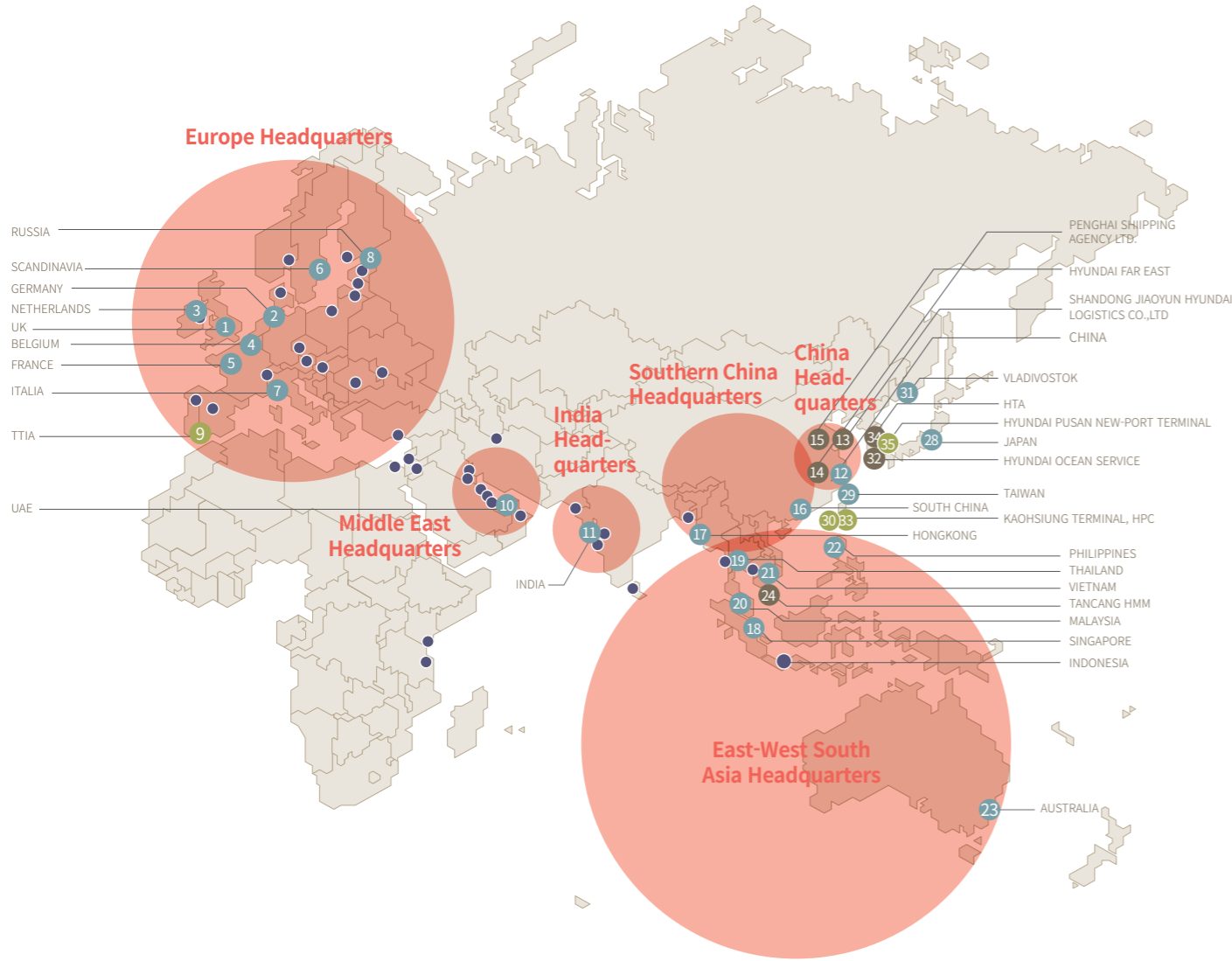
HMM defines and manages international changes affecting the shipping industry as a separate risk item. We identify ‘international risk’ as a main risk to be managed and have included it in the 27 major risk management items. Major international risks

reported to the Risk Management Council include the US-China trade dispute, tensions in the Strait of Hormuz, sanctions against Iran, etc. We have created a separate taskforce for the latter two.

Global Network

Headquarters and corporations

HMM is strengthening its competitiveness based on its global network of 27 overseas corporations including 3 terminal corporations, 66 branches and offices, other 4 JVs and 52 third party agencies all under its 7 overseas headquarters.



Classification	Overseas	Domestic
Container business agent corporations	24	
Container terminal corporations	3	2
Other corporations	4	2
Third-party shipping agencies	52	

Europe Headquarters 1 UK 2 GERMANY 3 NETHERLANDS 4 BELGIUM 5 FRANCE 6 SCANDINAVIA 7 ITALY 8 RUSSIA 9 TTIA	Middle East Headquarters 10 UAE	India Headquarters 11 INDIA	China Headquarters 12 CHINA 13 SHANDONG JIAOYUN HYUNDAI LOGISTICS CO.,LTD 14 PENGHAI SHIIPPING AGENCY LTD. 15 HYUNDAI FAR EAST	Southern China Headquarters 16 SOUTH CHINA 17 HONGKONG	East-West South Asia Headquarters 18 SINGAPORE 19 THAILAND 20 MALAYSIA 21 VIETNAM 22 PHILIPPINES 23 AUSTRALIA 24 TANCANG HMM	Americas Headquarters 25 HMMA 26 HASA 27 WUT	Other corporations 28 JAPAN 29 TAIWAN 30 KAOHSIUNG TERMINAL 31 VLADIVOSTOK	Domestic J/V 32 HYUNDAI OCEAN SERVICE 33 HPC 34 HTA 35 HYUNDAI PUSAN NEW-PORT TERMINAL
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Operations of Ethical Management

Charter of Ethics
Ethical management principles for HMM to fulfill its management philosophy
Code of Ethics
Standards of ethical behavior to provide direction for the ethical management principles
Guidelines
Specific standards of judgment and behavior for practicing ethical management at work
Anti-Corruption and Bribery Policy
Guidelines to enable all employees to conduct business in an ethical manner in compliance with the Anti-Corruption Law
Programs for Ethical Management
Activities to build and develop a fair and transparent corporate culture
Training & Promotion
Activities to help employees diligently practice ethical management and spread ethical culture

Results of Customized Training on Ethical Management in 2018 (offline)

Category	Training on ethical management & anti-corruption	Introductory training on ethical management/ anti-corruption
Trainee	Overseas dispatched employee	New hires
Number of sessions	2	1
Participants	33	24

* Other online training for all employees is conducted regularly.

Ethical Management

Ethical Management System

HMM recognizes the importance of ethical management as a source of competitiveness for the company. Amid tightening international regulations on unethical acts and corruption, we operate a range of systems and programs to establish ethical

management. We regularly revise our Code of Ethics to reflect domestic and international trends in ethical management and instill in our employees standards of ethical judgment and behavior to help them make good decisions.

Organizations for Ethical Management

1. Ethical Management Committee

In March 2018, HMM established the Ethical Management Committee, an organization that reviews and decides the company’s overall ethical management policies to strengthen the ethical management system. We have added a new clause related to the Ethical Management Committee stipulating the details of its

establishment and operation. Accordingly, we strive to deliberate and decide on a range of issues related to ethical management and to review the major policies and related performance. In principle, the Ethical Management Committee convenes twice a year but can plan ad-hoc meetings when major issues arise.

2. Extended Application of Audit Regulations

In accordance with regulations, HMM conducts audits of our domestic and overseas subsidiaries, domestic and overseas branches and other for-profit and non-profit corporations under the control

of the company. We aim to ensure transparency in overall management activities by establishing audit standards at the company level and by conducting audits in an efficient and systematic manner.

Practicing Ethical Management

1. Pledge of Ethical Conduct

All employees express their commitment to ethical management by signing and regularly renewing a pledge to Ethical Conduct. In accordance with the Code of Ethics and the Anti-Corruption Law, the

pledge includes a commitment not to engage in unfair trade, fraudulent or corrupt practices, improper solicitation or provision of money and valuables as prohibited by relevant laws.

2. Self-evaluation of Compliance with Ethical Management

HMM trains employees to always check their compliance with ethical management regulations when carrying out their tasks. We provide employees

with a checklist for self-evaluations on whether they are working ethically, enabling them to embody ethical management in their daily work.

3. Training on Business Ethics

HMM offers a variety of training programs to encourage employees to practice ethical management and anti-corruption. These include online training courses for all employees and customized offline training for each group. In addition to mandatory training for new and experienced employees joining the company, we

conduct training whenever necessary, such as when dispatched employees start work at a new post or during Korean holidays like New Year’s Day or Korean Thanksgiving Day when receiving of certain kinds of gifts can raise ethical issues.

4. Anti-Corruption and Bribery Policy

HMM has enacted anti-corruption guidelines to ensure that our employees conducting business around the world comply with domestic/overseas anti-corruption laws. Employees are prohibited from engaging in corruption of any kind according to the Anti-Corruption

and Bribery Policy as well as the Charter of Ethics, Code of Ethics and Guidelines. Under these requirements, employees carry out their business activities in a legal and ethical manner.

Reported Ethical Issues

Year	2016	2017	2018
Cases	7	3	6

Counseling and Reporting System

HMM operates various channels to engage all stakeholders and receive reports on ethical issues. We accept reports via online, fax and email regarding the receipt of money, goods and entertainment; the

gaining of unfair advantages through rank, and the abuse of authority. We guarantee the anonymity of informants and work to build a culture in which they can comfortably consult on and report such cases.

Compliance Management

HMM strives to fulfill its role and responsibility as a global company. By complying with the laws of each country in which we do business, we aim to follow fair and transparent business practices, pursue sound development of the company and secure customer trust. HMM has established compliance control standards to minimize or eliminate legal risks related to sales and operations. In accordance with Article 542, Paragraph 13 of the Commercial Act and Article 18 of the

Compliance Control Standards of the company, the compliance officer checks whether the Compliance Control Standards are observed and reported to the BOD once a year. The ‘Report on the Operational Reality of the Compliance Control System in 2018’ was discussed during an ad-hoc BOD meeting held on Nov. 12th, 2018. The report included compliance-related matters, a review of laws regarding HMM’s self-rescue plan, investment matters, responses to marine accidents and major disputes.

Transparent Disclosure of Information

In June 2018, HMM carried out a program for check-ups on disclosed information to ensure the transparent disclosure of information. We have strengthened monitoring through this program, which allows our employees to search officially announced regulations, standards and explanatory materials on the company’s portal. In addition, company-wide training on official

notices was conducted for person in charge of public disclosure, team leaders etc. On top of this, we are administering a system of ‘Weekly Checks of Disclosed Information,’ under which we review the responsibilities regarding the disclosure of current and future tasks of all teams so that this practice is integrated into daily preliminary tasks.

Membership in MACN

In September 2019, HMM finalized its membership in the Marine Anti-Corruption Network (MACN). MACN is a global network with a vision of a corruption-free maritime industry. As a MACN member, HMM will

endeavor to comply with seven principles, including the establishment and compliance of anti-corruption programs, internal and external risk assessments, and transparency in disciplinary with compensation.

Tax Policy

HMM fulfills its tax obligations in all countries and regions where it operates. We comply with tax laws and systems, and actively manage tax risks. In addition, HMM has established standards and

procedures for transparent tax payment and risk management in a systematic manner in order to respond to tax-related laws and systems.

Principles of Taxation

HMM strives to fully comply with our payment obligations by establishing and observing the following tax management principles, and setting up sound and transparent tax policies.

1. Compliance with tax laws and regulations
HMM complies with the tax laws and regulations of all countries and regions where it operates and responds proactively to related laws and regulations.
2. Tax risk management
HMM takes into account tax risks to minimize them before making decisions on tax-related issues.
3. Operation of transparent tax structure & building of trust
HMM never uses tax avoidance schemes, does not utilize tax

- havens, does not carry out any manipulation and thus strives to build cooperative and trusted relationships with the tax authorities based on reliability and respect.
4. Compliance of standards for international transactions
HMM does not reduce its tax burden using loopholes in tax treaties or special cases in the countries and regions of its domestic/overseas worksites. We sincerely fulfill our tax payment obligations through standard international transactions.

Sustainable Management

Vision and Core Values

HMM's Mission, Vision, Core Values and 13 key issues for sustainability embody HMM's pledge to share with all stakeholders its passion and progress in pursuing sustainable management and realizing its goals. Through our unrelenting effort and innovation, we will become a leader in the maritime logistics industry that creates value for a sustainable future.

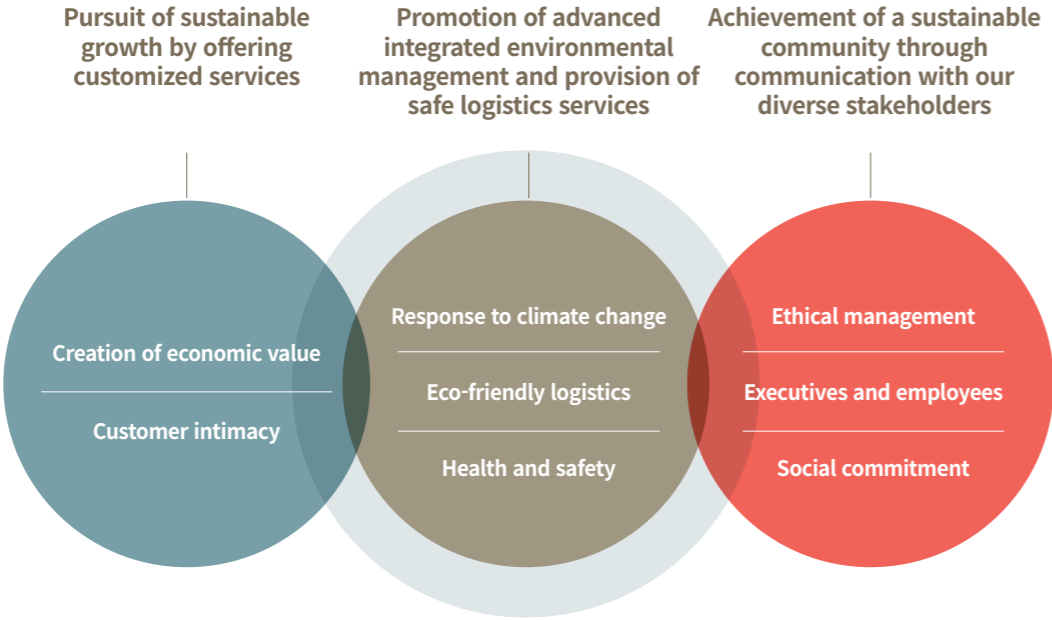
MISSION

A leader in the global shipping and logistics industry that creates value for a sustainable future

VISION

HMM aims to build a healthy market ecosystem as a leader in the maritime logistics industry based on sustainable innovation and customized services. In addition, we pursue sustainable growth in all areas of economy, society and the environment by constantly communicating with various stakeholders.

CORE VALUES



13 KEY ISSUES

HMM's 13 Key Issues		1 Create economic value through operation of core businesses	2 Strengthen capability to respond to climate change	3 Strengthen ethical management systems
4 Strengthen R&D capabilities	5 Reduce environmental impact of logistics and transport	6 Talent management	7 Manage customer relationships and satisfaction	8 Reduce harmful/polluting emissions
9 Manage supply chains	10 Expand investment in environmental protection	11 Manage performance for effective social contributions	12 Communicate actively with stakeholders	13 Manage impact on health and safety

Commitment to the UN SDGs

The UN's Sustainable Development Goals (SDGs) are goals that the international community should implement by 2030 to achieve sustainable development around the world. As a member of global civil society, HMM intends to take part in solving the future environmental and social problems of mankind by helping to fulfil the SDGs. Focusing on the goals that are most relevant to our business characteristics and our direction for sustainable management, we are building a framework to achieve this.

UN SDGs

• The UN's SDGs are common goals to be achieved by the United Nations and the international community from 2016 to 2030

• These goals cover a wide range of areas such as: social issues (poverty, diseases, education, women, children, refugees, conflicts, etc.), environmental and climate change issues (climate change, energy, environmental pollution, water, biodiversity, etc.), and economic issues (technology, housing, labor-management relations, employment, production and consumption, infrastructure construction, domestic, etc.)

The SDGs are the biggest common objective of the international community, which by 2030 aims to resolve issues through the implementation of 17 major goals and 169 specific goals.

1 NO POVERTY

GOAL 1

End poverty in all its forms

2 ZERO HUNGER

GOAL 2

End hunger, achieve food security and promote sustainable agriculture

3 GOOD HEALTH AND WELL-BEING

GOAL 3

Ensure healthy lives and promote well-being for all at all ages

4 QUALITY EDUCATION

GOAL 4

Provide inclusive high-quality education and life-long learning opportunities

5 GENDER EQUALITY

GOAL 5

Achieve gender equality and empower all women and girls

6 CLEAN WATER AND SANITATION

GOAL 6

Ensure availability and sustainable management of water and sanitation

7 AFFORDABLE AND CLEAN ENERGY

GOAL 7

Provide affordable and sustainable energy

8 DECENT WORK AND ECONOMIC GROWTH

GOAL 8

Ensure sustainable economic growth, decent work and employment

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

GOAL 9

Build infrastructure, promote sustainable industrialization

10 REDUCED INEQUALITIES

GOAL 10

Eliminate inequality within and among countries

11 SUSTAINABLE CITIES AND COMMUNITIES

GOAL 11

Make cities and human settlements safe, resilient and sustainable

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

GOAL 12

Ensure sustainable consumption and production patterns

13 CLIMATE ACTION

GOAL 13

Take urgent action to combat climate change and its impacts

14 LIFE BELOW WATER

GOAL 14

Conserve the oceans, seas and marine resources in a sustainable manner

15 LIFE ON LAND

GOAL 15

Protect terrestrial ecosystems and forests, combat desertification, conserve biodiversity

16 PEACE, JUSTICE AND STRONG INSTITUTIONS

GOAL 16

Promote peaceful and inclusive societies, provide access to justice for all and build an inclusive administration system

17 PARTNERSHIPS FOR THE GOALS

GOAL 17

Strengthen the means of implementation of these goals and revitalize the global partnership among companies, parliaments and countries

Stakeholder Engagement

HMM maintains communication channels with major stakeholders that directly or indirectly impact its business activities, such as clients, business partners, employees, shareholders/investors and local communities. Through continuous communication with our stakeholders, we identify important issues in each sector and carry out business activities in

consideration of the opinions collected. We review and reflect stakeholder interests and opinions in our sustainability management activities while reporting our activities and achievements concerning topics identified as material issues in our sustainability reports.

Communication Channels with Stakeholders

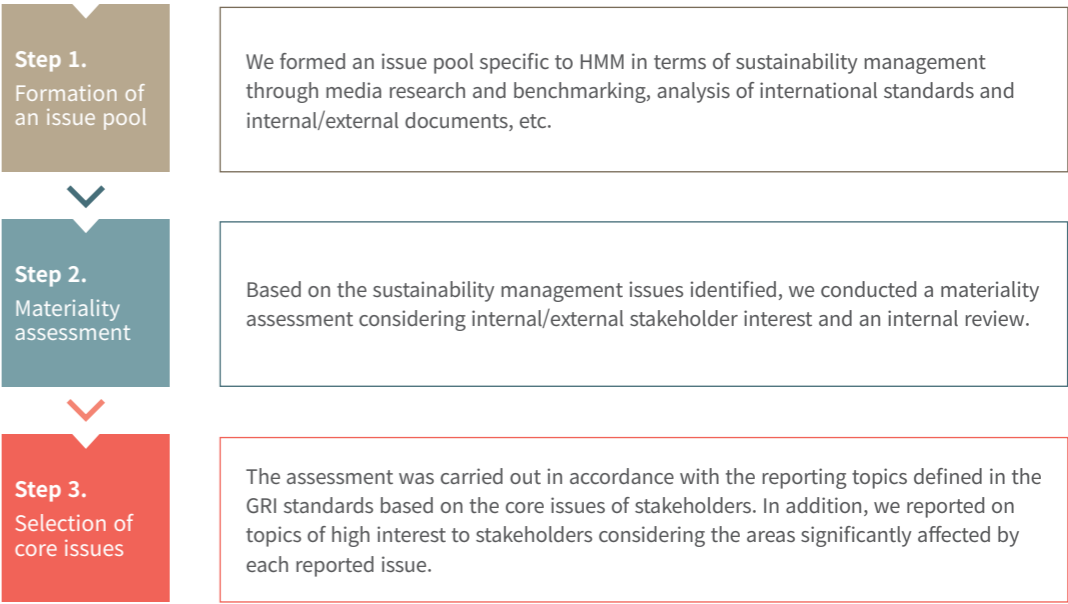
Primary Stakeholders	Major Issues	Communication Channels	Activities of HMM
Clients	Shippers <ul style="list-style-type: none">• Communication• Service quality• Cargo safety/security• Environmental impact management• Human rights & labor practices	<ul style="list-style-type: none">• Briefing sessions• Customer satisfaction index• E-Service• Website	<ul style="list-style-type: none">• Briefing sessions for shippers• VOC collection & resolution• Online surveys of the customer satisfaction
Employees	Onshore employees/ seafarers <ul style="list-style-type: none">• Human rights & labor practices• Workplace safety and health• Fair performance assessments & rewards• Employee benefits• Sound labor-management relations	<ul style="list-style-type: none">• HMM CMR (Cyber Meeting Room)• CEO-team leader/employee meetings• Monthly meeting(HQ)• Labor-management council• Sales strategy meetings	<ul style="list-style-type: none">• Operation of cyber meeting room engaging all employees• Information sharing between employees & chances for open communication
Business Partners	Vendors, Business partners <ul style="list-style-type: none">• Collaboration• Ethical management/fair business relations• Service quality management• Safety management	<ul style="list-style-type: none">• Discussion meetings	<ul style="list-style-type: none">• Discussion meetings with partner companies
Shareholders/ Investors	Companies, institutions and individual HMM shareholders <ul style="list-style-type: none">• Improvement of financial performance & company competitiveness• Risk management• Governance transparency• Information disclosure	<ul style="list-style-type: none">• General meeting of shareholders• Public notices of performance• Investor meetings, etc.	<ul style="list-style-type: none">• General meeting of shareholders• Regular (constant) public notices &quarterly performance announcements• Frequent investor meetings
Local Communities	Local residents & communities near our worksites <ul style="list-style-type: none">• Social contribution activities• Indirect economic effects• Environmental impacts on local communities	<ul style="list-style-type: none">• Social contribution activities of employees	<ul style="list-style-type: none">• Merchant ship experience for kids• Participation of DALLAS HEART WALK• Transportation of Good Neighbors relief supplies

Materiality Assessment

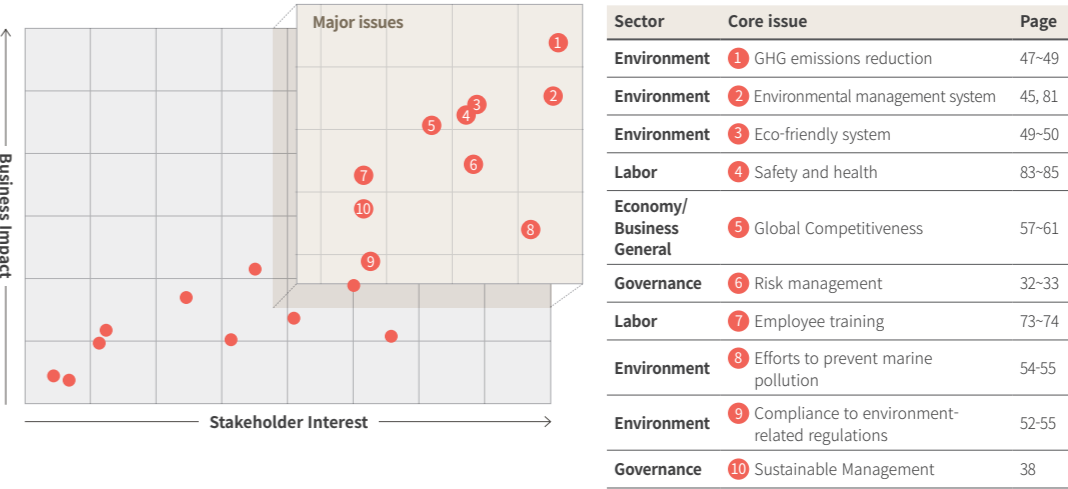
Materiality Assessment

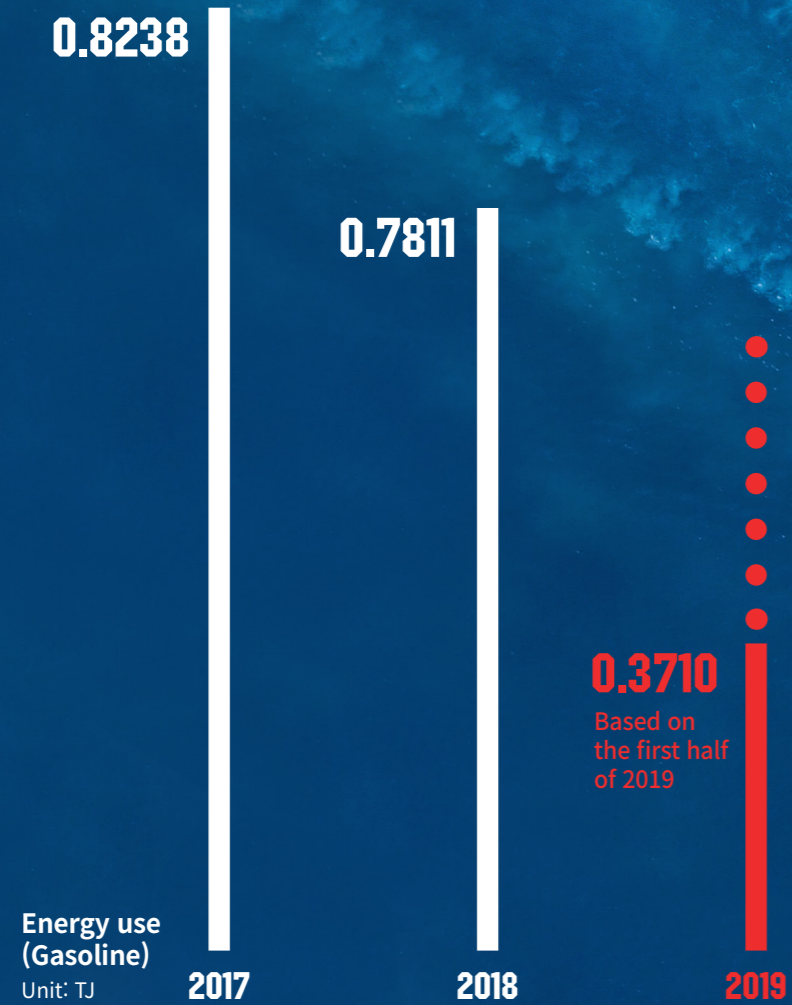
In preparing this report, we conducted a materiality assessment in accordance with the reporting principles established in the GRI (Global Reporting Initiative) guidelines – stakeholder inclusiveness, sustainability context, materiality and completeness. We formed an issue pool with 78 items reflecting global sustainability initiatives and standards, industrial initiatives and media research. We also

carried out business relevance and stakeholder impact assessments on 34 issues, taking into account the particularities of the shipping industry and the current status of HMM. After a priority evaluation, we identified 10 material issues through an internal review. The issues identified as important topics for 2018-2019 are reported in the FOCUS AREA section.



Results of the Materiality Assessment





3.FOCUS AREA

HMM is committed to creating value with stakeholders throughout the entire process from R&D and planning to the service stage, and is reviewing economic, social and environmental issues by identifying focus areas that can affect business activities. Identified issues are reported in detail in the report and systematically managed for implementation of sustainable management.

- 044_Environment
- 056_Innovation
- 066_Supply Chain Management
- 072_Employee
- 080_Safety and Health
- 086_Social Commitment
- 090_European Headquarters

01. Environment

GHG emission intensity
3.0 gCO₂eq / ton.km
Goal for 2020

GHG reduction rate
compared to 2008
40% reduction rate
Goal for 2020

To respond proactively to climate change, HMM takes part in meetings related to GHG emissions nationally and internationally and contributes to developing measures for the shipping industry. We plan to make consistent efforts to promote eco-friendly growth with low-carbon and strengthen our clean reputation.

Why is it important?

Since the adoption of the UN Framework Convention on Climate Change in 1992, the international community has focused on curbing GHG emissions to respond to global warming. Countries renewed their pledges for emission reductions beyond 2020 at COP21 on December 21, 2015. Unlike its predecessor, the Kyoto Protocol, the Paris Agreement sets obligations for all parties. Therefore, both developed and developing countries are required to submit emissions reduction plans and regularly report on their implementation. In addition, stricter regulations, such as those of the International Maritime Organization (IMO), on sulphur oxide emissions from ships are in place to minimize the shipping industry's environmental impact on the oceans.

Our approach

HMM is trying to fulfill its environmental responsibility by minimizing the environmental and climate impact caused by its work at sea and on land. To actively respond to global warming and climate change crises, which are global issues, we are complying with internal and external environmental regulations and are reducing energy and fuel consumption of ships and terminals to ultimately become an eco-friendly logistics company. To cope with environmental changes, HMM is conducting various activities. Since 2006, we have managed greenhouse gas emissions from ships and formed an organization dedicated to environmental management in 2010 to meet domestic and international needs.

GHG emission intensity

Unit	2016	2017	2018
gCO ₂ eq/ton.km	3.69	3.89	3.79

GHG reduction rate

Unit	2016	2017	2018
%	27.2	23.3	25.2

*Overall fleets (based on own ships, BBCHP, BBC)



Environmental Management System

Environmental Plan

HMM has joined global efforts to conserve the environment. We are administering this by complying with eco-friendly policies and principles based on sustainable development and by promoting the 3R (Reduce, Reuse, Recycle) campaign for the prevention of pollution. For more effective management, we announce environmental policies reflecting our commitments and set targets for implementation.

Guidelines for the Environment

We acknowledge the opportunities ahead in addressing climate change. To create a better, more prosperous future through environmental management, we will:

- Be transparent with GHG emissions reports and support clients' sustainable growth.
- Comply with domestic and international regulations and consistently improve performance.
- Respond to climate change through eco-investing.
- Promote sustainable green growth.
- Strengthen partnerships to raise awareness of green management and improve capacity.

Environmental Management System

HMM is the first South Korean shipping company to be verified for its management system, which integrates conventional environmental management with parts of other systems for energy, GHG and social responsibility. Combining ISO 14001 (EMS), ISM CODE (SMS), ISO 9001 (QMS), ISO 45001, GMS and ISO 50001, we have created the ESQS (HMM-ESQS), which is a comprehensive management system for environment, safety and quality. Based on these systems, we have rigorously implemented eco-friendliness, health and safety, and quality considerations into our business.

Assessment of Environmental Impacts

To minimize its impact on the environment, HMM not only examines and assesses its operations and businesses, but also sets related follow-up goals and programs. Every December, impact assessments are conducted on waste, air and water quality controls and noise/vibrations, resource and energy consumption. The company aims to realize full implementation of environmental policies through consistent management and improvement.

Committees for Environmental Management

Through the Environment Safety & Quality Committee, led by the CEO, HMM sets mid- and long-term goals, regularly evaluates progress, and thereby makes consistent improvements. The various roles the Environment Safety & Quality Committee takes on include establishing comprehensive safety measures and policies for vessels to prevent accidents, as

well as assessing the feasibility and suitability of its management system. Under the Environmental Safety-quality committee, there is an advisory committee made up of experts in different fields, a management group to respond to global environmental issues on a company level, and working-level committees for each fleet to better take into account their different characteristics.

Environmental Management System

Environment Safety & Quality Committee		
<div><ul style="list-style-type: none">• Deliberate and decide on environmental safety policies and strategies• Deliberate investment plans for related facilities to improve their environmental and safety aspects• Deliberate the feasibility and suitability of the management system for the environment and safety• Approve plans for the environment, safety and quality; analyze performance and establish measures</div> <div><ul style="list-style-type: none">• Establish comprehensive measures to ensure safe sailing and to prevent accidents• Develop policies for the prevention of accidents• Select model vessels that follow all the guidelines• Deliberate items on the agenda for each fleet's working-level committee</div>		
Advisory Committee	Emergency Preparedness & Response Committee	Shipboard Environmental Safety-Quality Committee
<div><ul style="list-style-type: none">• Design concepts for environmental conservation and management• Set environmental conservation regulations and guidelines</div>	<div><ul style="list-style-type: none">• Establish and implement emergency rescue measures• Establish and implement measures to minimize damage to people, vessels and cargo and to minimize pollution• Operate the emergency response situation room• Check and select safe sea routes and ports for emergency response</div>	<div><ul style="list-style-type: none">• Establish implementation measures for environmental management and accident prevention• Establish safety measures for identified risks• Establish plans for emergency training, environmental protection and safety training</div>

Response to Climate Change

Crisis and Opportunity

To proactively respond to climate change, HMM attends GHG-related meetings at home and abroad and takes part in formulating response measures. We have been a driving force behind various efforts, such as the establishment of a comprehensive GHG management system and green office and training courses, which led to the development of strategies to solve the climate change issue. Moreover, we examine efficient response measures such as participating in an emissions trading pilot system,

certifying eco-friendly firms and participating in certification systems for environmental technology. Based on these efforts, HMM plans to build a carbon asset management system, which will eventually curb GHG emissions from vessels. Tackling climate change is HMM’s ultimate goal, and to achieve this, we apply strict standards when building new facilities to improve energy efficiency. We will continue striving to reduce the effects of climate change and to maximize business opportunities through efficient measures.

Strategy for Climate Change

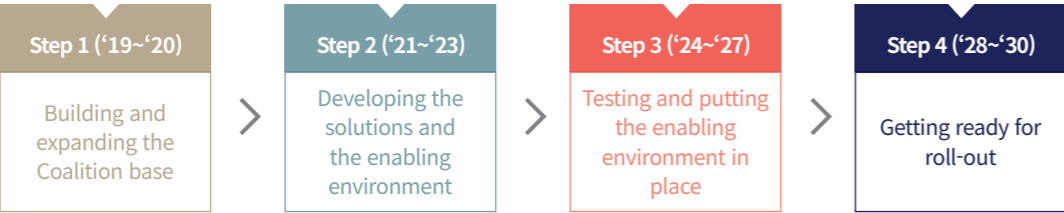
HMM has designed the Green Energy Efficiency Management System (GEEMS), through which we monitor and analyze emissions in real time. It works to improve energy efficiency by installing highly energy-efficient equipment on vessels under construction. For container carriers, which are responsible for over 80% of the company’s emissions, HMM has set mid- and long-term targets of reducing levels of GHG emissions by 60% by 2020 compared to that of 2008, and is on course to achieve this goal. The company plans to consistently analyze the energy efficiency of vessels for operation and performance optimization.

By publishing environmental reports, GHG inventory reports and booklets on environmental regulations in the shipping industry, we also aim to expand our efforts beyond the company. HMM conducts research together with the government, equipment firms, universities and research centers to develop environmental technologies for ships with the aim of contributing to building eco-friendly vessels. We further aim to realize the government’s low-carbon growth targets through new business projects as well as contribute to achieving a low-carbon society by reducing emissions.

Getting to Zero 2030 Coalition

As it is impossible for one company or organization to achieve it alone, it is time for a fundamental change for the reduction of emissions from vessels. HMM is preparing to completely break away from carbon emissions, going beyond the mere raising of energy efficiency. Participating in the 'Getting to Zero 2030 Coalition' that promotes the

commercialization of pollution-free ships on deep-sea trade routes by 2030 is our step toward decarbonization. HMM will continue to face the generation of energy conversion by setting long-term strategies and engaging in various collaborative works.



Newly established R&D

HMM has newly established an R&D task force focusing on mid- and long-term plans for emissions reduction and the construction of Smart Ships.

We aim to build a foundation on which we can develop core technologies for eco-friendly ships and respond to global environmental regulations.

IT System for Efficiency Control

To secure high energy efficiency in its vessels, HMM has adopted Vessel Insight, an IT management solution to reduce vessels’ energy consumption and optimize their operations. It collects and analyzes

a vast amount of data and recommends optimal trim and routes. This enables the company to make decisions that reduce fuel consumption and operational costs.

GHG Emission Reduction Targets

HMM calculates the company’s BEF (Base Emission Factor) for vessels of each type and size. By setting mid- and long-term reduction targets, we are able to efficiently manage and reduce GHG emissions. We recognize that the problem of emissions varies greatly between fleets depending on their types and

sizes, and so we have revised our reduction targets to center around container carriers, which account for 80% of our total emissions. HMM aims to reduce 60% of its emissions by 2020 compared to that of 2008, and as of 2018, we have reduced them by 44.6%.

(Container ships)

Unit: gCO ₂ /TEU-K													Performance		Goal	
Year	08Y	09Y	10Y	11Y	12Y	13Y	14Y	15Y	16Y	17Y	18Y	19Y*	20Y	21Y		
CO ₂	78.00	69.60	68.70	65.40	58.30	49.20	43.70	43.46	42.00	44.89	43.24	42.62	32.04	29.94		

*As of first half of 2019

Management System for Green Energy Efficiency

HMM has been managing and operating vessel GHG emissions since 2006. But to step up our efforts to meet the rising demand in Korea and abroad, we created a special team for environmental management in 2010. Consisting of experts on ships, terminals, logistics and planning, the team largely focuses on systematic management, such as

GHG Inventory

The GHG Inventory refers to a list of the emission sources of different facilities and processes to enable the company to manage emissions statistically and operate systematically. The GHG Inventory is a management system that oversees direct emissions from vessels, terminals and HQ as well as indirect emissions from using general electricity. Moreover,

Supply Chain Carbon Calculator

From ships to land transportation such as trucks and trains, HMM operates and manages a system that automatically calculates GHG emitted from departure to arrival for each. Based on demand from shippers we built it for the purpose of identifying the carbon footprint of our ships, and these services are provided on our website. Shippers can find out which route will

EEDI Calculator

EEDI Calculator calculates the energy efficiency of vessels in a similar way to the fuel-efficiency of cars. In its 62nd session, the Marine Environment Protection Committee agreed on the mandatory adoption of the EEDI for ships built from 2013 onward. In principle, the EEDI only applies to new ships, but HMM has independently developed a system to calculate the EEDI of existing ships, thereby significantly improving energy efficiency.

SEEMP

The SEEMP is a guideline that encourages ship operators to improve energy efficiency. It was made mandatory for all ships at MEPC 62 and went into effect from 2013. HMM has already developed its SEEMP and implemented it on all ships in operation. Our version of SEEMP encompasses various GHG

identifying GHG emissions sources and operating the Green Energy Efficiency Management System (GEEMS). The system comprises the GHG Inventory, the Supply Chain Carbon Calculator, the Energy Efficiency Operational Indicator (EEOI)/Energy Efficiency Design Index (EEDI) Calculator and the Ship Energy Efficiency Management Plan (SEEMP).

the company also manages NOx, SOx and PM, thereby systematically monitoring concentrations of pollutants in the atmosphere in real time and establishing reduction plans. The GHG Inventory conforms to international standards such as ISO 14064 and IPCC 2006, and has been verified by the Korean Register.

leave the smallest carbon footprint by typing in the starting point, the destination and the cargo on board. The Supply Chain Carbon Calculator was developed under the methods suggested by the CCWG, but HMM was able to secure reliability using its own calculation for GHG emissions.

EEOI Calculator

The EEOI indicates how efficiently vessels operate, which enables ship operators to carry out the important task of demonstrating how efficient their vessels really are. With our own calculation system for EEOI, separate from the one suggested by the IMO, we are able to effectively analyze energy efficiency.

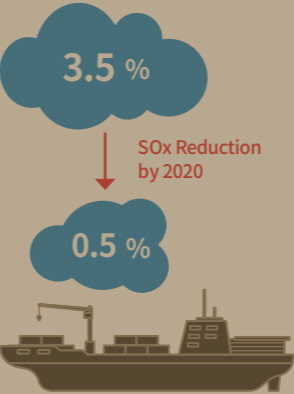
emissions reduction methods and technologies that we have used. Through the PDCA (Plan-Do-Check-Action) cycle, which establishes and implements reduction targets and measures and assesses emissions for each fleet, we have demonstrated our determination to reduce GHG emissions.

HMM will continue to endeavor to minimize environmental impact by establishing various CO₂ reduction strategies and installing scrubbers on vessels to reduce the large amount of air pollutants generated during transport.



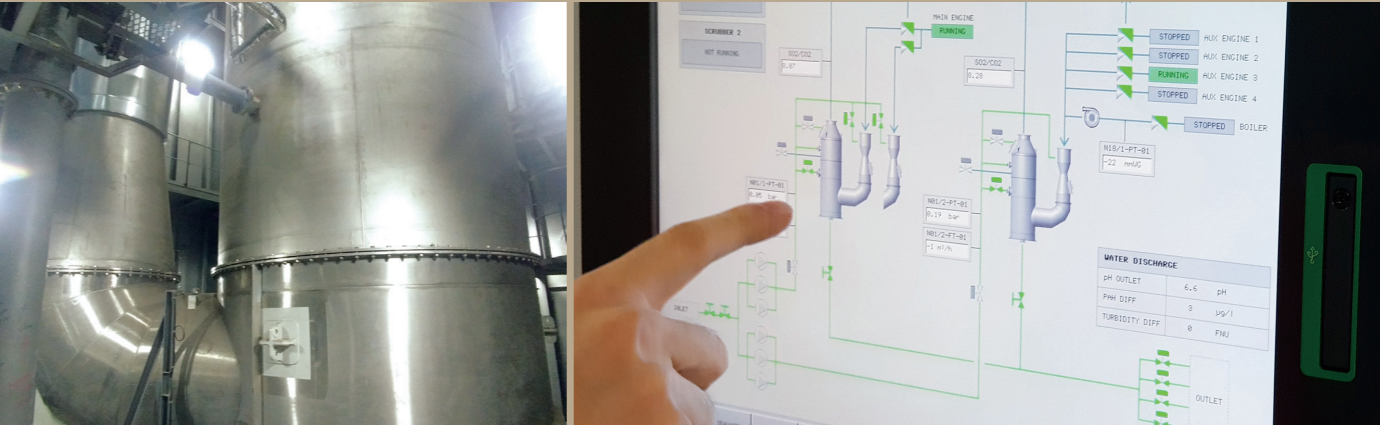
Establishing CO₂ Neutral Strategy

HMM has established a CO₂ reduction strategy to reduce greenhouse gases. The International Maritime Organization (IMO) predicts that GHG emissions generated during ship transport will account for more than 10 percent of global GHG emissions. In order to cope with these environmental regulations, HMM is actively pursuing CO₂ reduction strategies and investing in technology to achieve zero CO₂ emissions via measures to absorb the CO₂ emitted when fuel is used. In the future, HMM will strive to carry out eco-friendly operations by developing various measures and plans to alleviate environmental problems.



Building an eco-friendly system

HMM wishes to adhere to environmental regulations by installing scrubbers. We pre-installed scrubbers to filter emissions, including sulfur oxides, on 20 ULCV and 5 VLCC new ships. In addition, we will complete the installation of additional scrubbers on 19 container ships currently in service by the first half of 2020. Establishing an eco-friendly fleet through the installation of scrubbers is a way for HMM to reduce the emission of sulfur oxides that cause environmental pollution.



Operation Efficiency
① Weather routing ② Trim optimization ③ Performance monitoring ④ Slow steaming
Hull Resistance
① Hull optimization ② Bow modification ③ Hull/Propeller cleaning ④ Hull coating ⑤ Micro bubble
Engine Efficiency
① M/E De-rating ② Electric Engines ③ T/C Cut off
Propulsion Efficiency
① Pre-swirl stator ② Mewis duct ③ Propeller boss cap fin ④ Rudder fins
Others
① WHRS ② Shaft generator ③ LNG fuel engine ④ Homogenizer ⑤ Energy Saving System(ESS) ⑥ Alpha lubricator ⑦ LED lamp ⑧ Mass flowmeter, additives, etc

Investment in Eco-friendly Facilities

Through its investments, HMM is making progress in improving efficiency onboard and reducing GHG emissions. We plan to deploy eco-friendly and highly energy-efficient container facilities and reefers with low Global Warming Potential (GWP) indexes.

We are working to minimize carbon dioxide emissions and maximize fuel and energy efficiency by installing facilities, such as those for reducing hull resistance, improving propulsion efficiency and enhancing engine efficiency.

Eco-friendly Transportation

To build an eco-friendly transportation system, HMM has deployed Automated Transfer Cranes (ATCs) to terminal yards and switched from an engine-driven method, which burns conventional fossil fuels, to an electricity-driven method. This has helped to

significantly reduce fuel oil usage in terminals and made HMM a leader of environmental management in the shipping industry. We have also reduced our electricity bills by around 5% via the installation of solar panels on top of terminal gates.

Automated Transfer Crane

Conventional container cranes had to be operated manually by people onboard, but a number of ATCs can be controlled from the central control room at the same time. This ensures operational efficiency, prevents human error and saves energy.

Tandem Crane

Conventional cranes can work on just one container at a time, but tandem cranes can move two 40-foot containers simultaneously, thereby improving operational efficiency and reducing energy consumption by half.

Automated Container Recognition Tools

Containers can be automatically distinguished using tools such as OCR (Optical Character Recognition), RFID (Radio Frequency Identification) and RDT (Radio Data Transfer). They detect the location of containers within the yard and along the transportation route,

and send the information to the central control room. This allows higher operational efficiency since it minimizes the transportation of the containers and reduces energy consumption.



Automated Eco-friendly Ports

HMM has adopted automated terminals at eco-friendly ports in line with the global trend and strives to properly treat pollutants that may be created inside the ports. In addition, we not only work to reduce labor and operational costs through automation and

improve the productivity of conventional ports, but we also use eco-friendly unloading equipment that runs on electricity, not diesel, to minimize pollution. HMM is ready to compete with other global companies based on this system of automated facilities at ports.



Eco-friendly Vessels

HMM's M/V Pacific Pride was the first vessel belonging to a Korean shipping company to be certified as an 'eco-friendly vessel.' The certificate recognizes shipping companies for outstanding vessel management and

operation, and compliance with IMO environmental regulations. Vessels are assessed for their eco-friendliness and management capacity. HMM has received this certification for seven other ships as well.

Eco-friendly Shipping Company

In November 2019, HMM won the Environment Award at the Global Freight Awards 2019, hosted by Lloyd's List, a British journal on shipping. Furthermore, HMM was selected as an 'Eco-friendly Vendor' by Auckland

Port in the U.S. in recognition of its contribution to local environmental protection with respect to reducing air pollutants by using 100% Alternative Marine Power (AMP) in January 2019.



Compliance with Environmental Regulations

SOx Regulation : Installation of Scrubbers

Environmental regulations have become a key issue in the shipping industry. The IMO has strengthened regulations to reduce SOx emissions from ships, which are a significant cause of air pollution. Starting January 2020, when SOx regulations go into effect, ships worldwide must decrease the SOx concentrations of the fuel they use from the current 3.5% to lower than 0.5%. Carriers can either use different fuel, such as low sulphur oil and LNG, or install scrubbers.

HMM has acted proactively to install scrubbers that reduce SOx in ship emissions. In 2018, they were installed on two additional 11,000 TEUs. More ships will be fitted with scrubbers depending on future regulations issued by the IMO.

There are different types of scrubber systems: open loop scrubbers that treat exhaust gases using seawater, which is then discharged into the sea; closed-loop scrubbers using minimal seawater, which

is then neutralized and reused; and hybrid scrubbers that selectively use the advantages of both the open and closed loop scrubbers.

HMM is set to take delivery of 20 ULCVs, one by one, starting in the second quarter of 2020. We plan to fit all of them with scrubbers in line with environmental regulations. Among them, eight 15,000 TEUs will be fitted with open-loop scrubbers, while twelve 24,000 TEUs will be fitted with hybrid scrubbers.

2020~	Scrubbers installed on 12 new 24,000 TEU ships, 8 new 15,000 TEU ships
2019	Scrubbers installed on 5 new VLCCs
2018	Scrubbers installed on 2 new 11,000 TEU ships
2017	Preliminary review of scrubber installation

GHG Reduction from ships : IMO GHG Reduction Roadmap

Tackling environmental issues that threaten our very existence requires a global effort. The shipping industry also needs to take responsibility for its activities in the marine environment. As part of efforts

Stage-by-Stage Plan for the shipping industry

According to the IMO strategy, the shipping industry plans to take action in stages. First, in the short term (2018-2023), it will formulate global plans and strategies to reduce GHG emissions, to strengthen regulations such as the EEDI Phase 4, to adopt regulations on new energy efficiency, and to utilize all available technologies including LNG ships and Alternative Marine Power (AMP).

As for mid-term measures (2023-2030), the plan is to

HMM's Response Plans

To reduce GHG emissions, HMM plans to strengthen energy efficiency management on ships currently in operation, and to switch to eco-friendly fuel in the coming years. Plus, it seeks to improve the energy efficiency of new ships and to actively address GHG issues in the shipping industry through emissions

to address the issue proactively, IMO adopted the initial strategy for IMO GHG reduction, which is the first step on the IMO GHG Reduction roadmap.

realize the goal of reducing emissions from ships by 40%. This includes using low-carbon or carbon-zero fuels, strengthening new energy efficiency regulations and adopting innovative emissions reduction through market-based measures (MBM).

In the long term (beyond 2030), the plan will see the development of low-carbon or decarbonized fossil fuels that will eventually bring decarbonization to the international shipping industry.

trading. We believe that, by 2030, these efforts will help achieve a 70% reduction in carbon emissions (for containers) per cargo by unit compared to emissions levels in 2008, and that carbon neutrality can be achieved by 2050.

IMO's Major Stages for GHG Emissions Reductions from Ships



Response Plans for Air Pollution

Regulations on air pollutants emitted from ships are getting stricter worldwide. In particular, there is a growing need to strengthen regulations on SOx and NOx, and ports in Hong Kong and China are coming up with more regulations to prevent further air pollution.

SOx emissions	HMM closely adheres to the international convention and reports in detail its recent activities in the 'SOx regulations-Installation of scrubbers' section.
NOx emissions	Fuel injection valves have been transitioned to the sliding type. Plus, there were other various efforts, such as installing engine control systems for improving fuel efficiency. For certain ships, Selective Catalyst Reduction (SCR) technologies were loaded, which dramatically remove NOx.
PM emissions	HMM manages energy usage on vessels to respond to related regulations regarding PM emissions.
Cargo vapor emissions	HMM has equipped all oil tankers with equipment for collecting harmful oil mist produced during the transfer of cargo oil onto oil tankers to improve the atmosphere and create a pleasant environment.

Alternative Marine Power (AMP)

AMP enables vessels to turn off their engines and use electricity generated onshore during berthing. While in port, vessels must still run their engines to generate electricity for heating, lighting and refrigeration, which emits a lot of GHG. HMM signed the AMP MOU with the Ministry of Maritime Affairs and Fisheries and the port authorities of Busan, Incheon and Gwangyang to reduce fine dust and pollution. Ships will have to turn their engines off and get onshore power supply for two years at the Busan Port, starting January 1st, 2020. All ships fitted with AMP will be able to participate.

The pilot project is expected to play a significant role in reducing pollution caused by ship engines at ports where they have had to be kept running to maintain

onboard temperatures. In the future, HMM will take on full responsibility for the marine environment as the nation's leading oceanic shipping company.



AMP installed on an HMM vessel

Reinforcement of Environmental Responsibility

Ballast Water

To ensure stable and efficient propulsion, ships take seawater into their ballast tanks and discharge it, achieving balance and safe sailing. However, the water which is taken in at port includes sediment and biological material, which can be discharged into the sea in a different region. This can have a serious impact on the marine ecosystem. Therefore, the IMO adopted the Ballast Water Management Convention, which went into force in September 2017, making it mandatory for all ships to

install an approved ballast water treatment system. HMM has established and implemented its own ballast water management plans, and will install and operate three types of systems for each container carrier, expanding installation gradually until 2022. In addition, HMM strives to minimize environmental impact by continuously measuring acidity, turbidity, nitrate, etc. when discharging water into the ocean, and complying with the provisions of the Convention.

Use of Fresh Water

HMM defines water as 'distilled water generated by evaporating seawater from a vessel' and manages its consumption. In addition, HMM is trying to reduce

costs and environmental pollution by minimizing the supply and demand of water from the land and distilling the seawater.

Harmful Chemical Substances

The paint used for ship hull coatings prevents marine organisms from adhering to the hull. However, the coating adversely affects not only attached organisms but also other seabed creatures. Accordingly, HMM

applies eco-friendly antifouling paint. In addition, eco-friendly chemicals are used in removing scales and carbonized oils generated from various machineries.

Ozone-depleting Substances (ODS)

Ships use a variety of refrigerants for freezers, air-conditioners, unit-coolers and reefers. To manage substances that damage the ozone layer, HMM has been keeping records of Ozone-depleting substances (ODS) and a list of related installations since 2010.

Some ships even have refrigerant recovery machines to reduce pollution and offset leakage emissions. The company plans to continuously reduce ODS by installing more refrigerant recovery machines and retrofitting machines that use alternative refrigerants.

Bilge Water

The oily bilge water pretreatment system is installed on all vessels to effectively separate the oil components of the bilge generated. In addition, annual inspections

of 15ppm monitoring devices are carried out by specialists.

Gray water and Sewage

Sewage discharged from vessels is treated and discharged through sewage treatment devices or stored in a separate holding tank. Gray water, which is

discharged from galleys, is responding to regulations such as the Vessel General Permit by installing its own holding.

Ship Recycling

Recycling old ships primarily takes place in countries like India, Pakistan and Bangladesh. Because accidents in this field of work continue to affect human lives and cause pollution, there is increasing demand for measures to protect employees and the environment in these countries. The IMO adopted the Hong Kong Convention in 2009 for safe and environmentally sound recycling of ships. Although it has not come into force at the time of publishing, HMM has adopted its own clear procedures in line with the 2009 Hong Kong Convention for safe and environmentally sound recycling of ships. The EU has adopted the Ship Recycling Regulation and upholds strict requirements to make sure that ship breaking, dismantling and recycling takes place in an environmentally sound and safe manner. All EU-flagged ships and ships that sail in EU territorial waters, regardless of origin, must have onboard an inventory of hazardous materials or related documents starting on January 1st of 2021.

HMM keeps records of hazardous material such as asbestos, PCBs and ODSs (ozone depleting substances) starting from the initial new building of a ship. This allows ship breakers to be aware of the materials onboard, to prepare measures for the safety of employees and for environmental protection. When scrapping a ship, HMM conducts inspections to select the safest and most eco-friendly ship recycling yard. We make sure HMM officials or qualified supervisors hired by the ship-breaking agent are on site to supervise the entire process.

Management

- Protect the health of crew by banning the use of harmful chemical substances during shipbuilding
- Prevent the indiscriminate use of harmful chemicals by keeping and managing an inventory during operation
- Protect the health of ship scrappers and the environment from harmful chemicals by ensuring the systematic dismantlement of ships

Improvement of Energy efficiency (Greenship)

Ninety-nine percent of the energy used by HMM is used on ships. However maritime transport remains the most efficient energy usage by unit*. Through fleet management HMM is further improving on the ship energy efficiency.

Ship Energy Efficiency				Unit: The typical fuel oil consumption (g/DWT*km)
2016	2017	2018	2019*	
1.2051	1.2485	1.2158	1.0714	

*As of first half of 2019

* Energy usage by unit: Distance of voyage times the amount of fuel consumption compared to deadweight capacity

Activities for Energy Reduction

HMM invests in various types of facilities to improve energy efficiency. We utilize energy reduction facilities in accordance with the characteristics of each vessel, analyzing and disclosing performance and consistently expanding investment to verify the effectiveness of our facilities. For efficient operation,

our offices perform regular maintenance checks, and also carry out various measures to conserve fuel and electricity, such as driving on cruise-control and turning off the lights during lunch breaks and after office hours.

Monitoring System for Energy Efficiency

For the efficient consumption of energy by ships, HMM monitors and analyzes energy efficiency in real time using a scientific monitoring system

independently developed to conserve fuel costs. It is currently being used on 29 container carriers, and the number is expected to increase in the future.

02. Innovation

Average schedule reliability of the first half of 2019

83%
(As of SeaIntel)

To adapt to the fast-changing global business environment and achieve consistent growth, we need to innovate and create a future growth engine. By fulfilling the value of the company and shareholders, HMM strives to be the world’s top shipping company.

Why is it important?

Especially for South Korea, whose economy is largely based on trade, shipping is a strategic industry critical for transporting vital goods in and out of the country in case of emergency, and plays a key role in building the country’s competitive edge. Despite a slowdown in the economy and the shipping industry, international shipping companies have continued to order container carriers and establish plans for eco-friendly ships to maintain their competitiveness. HMM also needs to strengthen its competitive edge and actively respond to the fast-changing business environment.

Our approach

HMM is putting forth its best efforts to gain customers' trust and to overcome the non-competitiveness of fixed costs by reducing floating costs in the short term and building large ships in the long run. In particular, digitalization and securing large eco-friendly ships are key factors in determining a company's competitive edge. HMM pursues high-quality growth for sustainable development, and for this, provides differentiated services by ordering high-efficiency ships and proactively adopting advanced IT technologies throughout its operation, management and services.

KPIs

Category	Unit	2016	2017	2018	2019
Schedule reliability	%	82	77	71	83
Rank	No.	17	4	11	2

(As of first half of 2019)



Reinforcement of Global Competitiveness



12 ships
24,000TEU

8 ships
15,000TEU

Eco-friendly ULCV

ULCVs are fitted with ME engines that automatically control fuel depending on the speed of the ships and the environment, making them 20% better than conventional ships in terms of fuel efficiency. Because ULCVs can carry a large amount of cargo at once, shipping each container costs significantly less, allowing the company to save money. The annual fuel cost of ULCVs per TEU is around 70% that of the conventional 13,000 TEUs and 30% that of 8,600 TEUs. As fuel accounts for about 50% to 60% of total operation costs, it is critical for a shipping company. In line with the global trend of ULCVs, HMM has ordered twelve 24,000 TEUs and eight 15,000 TEUs in September 2018. By expanding capacity, we have secured a competitive edge in terms of operational

costs, preparing the company for international environmental regulations to take effect in 2020. HMM always tries to find ways to improve the quality of its services by securing fuel-efficiency and expanding capacity.

* Capacity: All available space for cargo

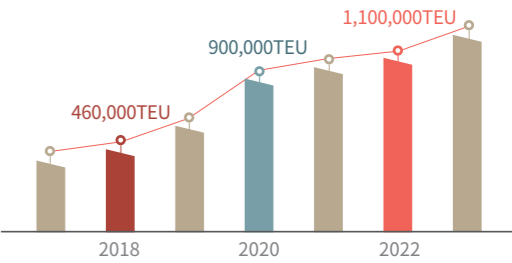
Comparison of HMM Containers’ Annual Fuel Consumption

Category	Current Ships		New Ships to be Ordered	
	8,600 TEU	13,000 TEU	15,000 TEU	24,000 TEU
Annual Fuel Cost (1,000 USD)	36,386	23,632	20,704	25,746
Annual Fuel Cost per Unit (USD/TEU)	4,230	1,820	1,480	1,290

Expansion of Capacity

In addition to the existing eco-friendly ULCVs, HMM plans to expand its capacity to 1.1 million TEUs by 2022 from 460,000 TEUs in 2018. This is expected to increase our market share from 2% to 4% or 5%.

Capacity Expansion Plans

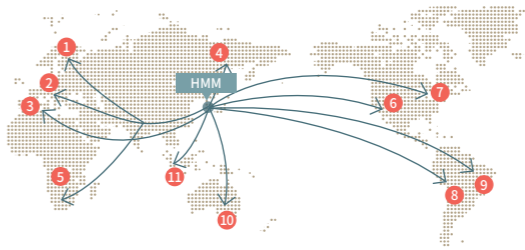


Expansion of Service Networks

HMM has been increasing its cargo volume in the Americas and Europe, especially in Asia. We plan to deploy mega ships on routes in the Northern Europe

and the Mediterranean regions starting in 2020, and the Atlantic region and Africa moving forward.

Service Network Expansion Plans



- 1 Launch of India/ Northern Europe Route
- 2 Continuous Expansion of the Asia/ Northern Europe Route
- 3 Expansion of Mediterranean Route
- 4 Expansion of Russian Route
- 5 Launch of the African Route
- 6 Expansion of the Western North American Route
- 7 Expansion of the Eastern North American Route
- 8 Expansion of the Western South American Route
- 9 Expansion of the Eastern South American Route
- 10 Launch of the Australian Route
- 11 Expansion of the South-East Asia's Coverage Area

TDR Campaign

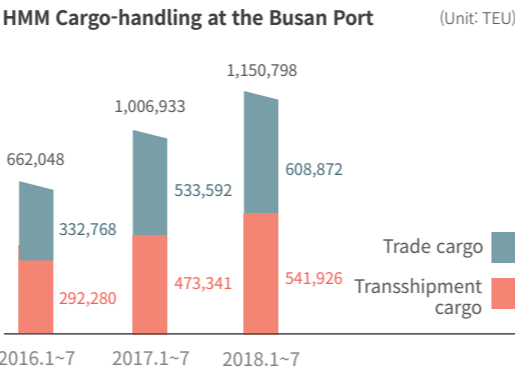
With the goal of increasing net profit, HMM has rolled out the Tear Down & Redesign (TDR) campaign, which is a business plan in addition to our existing ones. It is centered on the idea of earning an additional \$30 in operational profit and saving \$20 in costs for each TEU. Amid high fuel costs and a slowdown in business operations, this is a move away from a profit and loss structure in which sales costs are higher than sales, and encourages profit growth regardless of negative external factors. To achieve the TDR campaign goal, we have divided the TDR Room at headquarters into six different sections. Progress towards the goal is written on the wall in each room, allowing employees

to monitor their performance. This has culminated in meaningful progress through dedicated savings efforts for all major items, including costs for fuel, equipment, unloading and transportation.



Record-breaking TEU Volume at the Busan Port

Thanks to the reliable services and inventory, the Busan port set a record by handling 1.158 million TEUs of containers in July 2018. As for international trade, TEU volume came to 608,872, which is an increase of around 14.1% compared to 2017. Transshipment, it totaled 473,341 TEU, which is an increase of more than 84% compared to 2017. As these two categories have been continuously increasing, TEU volume is likely to surpass 2 million in the near future, and a new record is being set every year.



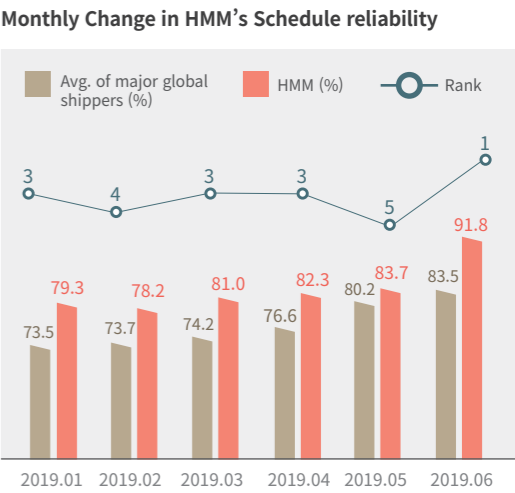
Delivery of Five New VLCCs

The five 300,000 tonnage VLCCs that HMM ordered from Daewoo Shipbuilding & Marine Engineering in September 2017 were delivered from January to September 2019. The ships were ordered in 2017 when building costs were at their lowest. At USD 420 million, the order was extremely cost-efficient for HMM. They are the latest eco-type ships, fitted with scrubbers in preparation for the IMO SOx emissions

regulations in 2020. The names of the five ships (Partner, Creator, Leader, Winner, Victor) signify that HMM is a trusted partner to its customers and a winner in creating new values for the global shipping industry. The delivery of the five VLCCs is a significant moment and marks a new beginning for both HMM and the Korean shipping industry.

No. 1 in Schedule reliability

According to SealIntel, a Denmark-based global market intelligence provider, HMM maintained its schedule reliability of sailing as of end of June at a rate of 91.8%, an 8% increase from the month before. This is higher than the worldwide average for 15 leading shipping lines, which stood at 83.5%. The research was based on major global sea routes and hubs in the Americas, Europe, the Atlantic, Latin America and the Mediterranean. HMM was ranked fifth out of the 15 leading shipping companies in May 2019, but the following month's data brought us all the way to the top. We have always done our utmost to win the trust of shippers, and will work even harder to satisfy shippers by keeping our promises.



Innovative Technology and Services

Membership in THE Alliance

To adapt to an environment of constant change, HMM has consistently participated in alliance memberships, starting with the New World Alliance in January 1998. In April 2020, we will join a new group – THE Alliance, which is considered one of the world’s top three shipping alliances. The membership agreement was signed in June 2019, and it is expected to help HMM restore trust in the global shipping industry, to improve our cost structure and to expand sea routes to secure a more balanced set of ports of call. We also plan to work to improve our management system by adding flexibility, which will strengthen our competitive edge on a global scale. Starting in the second quarter of 2020, we will deploy 20 new ULCVs, participate more actively in alliance activities and reform our management structure in a way that is high-efficiency

and low-cost. In addition, a 10-year membership in THE Alliance ensures mid and long-term stable fleet operation. HMM will be working with other global member companies, such as Hapag-Lloyd in Germany, ONE in Japan and Yang Ming in Taiwan, thereby creating synergistic effects for the Asia-Americas sea route. With this aim in mind, HMM held a business strategy meeting in July 2019 on shipping containers in the Americas for the second half of the year, in which specific business goals and future directions were proposed. With our full membership in THE Alliance, HMM will be able to devise strategies at different levels to proactively respond to the fast-changing outside world as we strive to become a top-tier shipping company.

HMM’s Sea Routes for services after Joining THE Alliance in 2020



Hub Ports around the World

By securing terminals in hub ports in Korea and abroad, HMM is putting its best efforts into securing cost competitiveness and providing timely services. We have secured enough berths and terminals to make the service network reliable and cost-efficient. We will lay out a proper course of action on a mid- to long-term basis and continue to expand development and investment in profitable terminals. Moreover, ahead of the deployment of 24,000 TEU ULCVs in 2020, HMM is reviewing the establishment of a JV terminal at a major hub port in Southeast Asia. This will help bring in more business opportunities, such as developing and operating port terminals in Southeast Asia, the Middle East and India.

Hub Ports around the World



The Cold Chain System

The purpose of the cold chain system is to preserve the freshness and quality of food and produce by keeping temperatures in the transportation environment in a specified low range. This is critical to minimizing the delivery time for fresh produce and products often distributed by air. However, thanks to advancements in reefer technology, maritime logistics has emerged as a viable option. With cutting-edge technologies such as the Internet

of Things (IoT), HMM is preparing for growth in the cold chain market. In particular, we are looking into adopting a system of IoT applications for reefers. IoT technology enables shippers to check temperatures inside reefers and the status of the cargo inside at any time or place. Therefore, HMM finished a test run of the IoT and reefer-integrated service in August 2017, and will officially incorporate this system by 2020.

Side Opening Containers & Ultra Freezer

In December 2018, HMM signed exclusive contracts with major shippers to build 40-foot side opening containers. The commercialization of these containers, whose sides can be folded back over 180 degrees, allow cargo to be shipped in a more convenient, cost-efficient and less time-consuming way. Moreover, they increase competitiveness in exporting. We aim to ship around 250FEU (FEU: a 40-foot container) with side opening containers in a year. This is expected to secure a stable cargo volume and bring in a consistent flow of profit. Using the technology we have secured in the reefer business, HMM provides ultra freezer services, which

enables internal container temperatures to drop as low as -60°C. This compares to regular refrigerated containers, whose temperatures can go only as low as -35°C to -40°C. Our ultra freezer services first started in January 2018 on a Barcelona-bound ship departing from Busan. Because cargo from Europe has a particular need for these services, HMM expects widespread use once we focus more on routes to Europe with the start of our membership with THE Alliance in 2020. HMM currently has a total of 50,000 TEU of reefers, and has ordered an additional 5,000 TEU as of June 2019. They will all be delivered within this year.

Container with Open Sides



Ultra Freezer



Controlled Atmosphere Containers

For the shipping of fresh produce and food products, which were previously transported only by air due to a number of difficulties, HMM has introduced Controlled Atmosphere (CA) containers and is in the process of expanding related business opportunities. Because it is now possible to swiftly control concentrations of oxygen and carbon dioxide by injecting nitrogen gas into the container using active CA equipment, we can provide shipping services that guarantee our shippers a fresh, high-quality product.

CA Containers



Digitalization

Early Adoption of Cutting-edge IT

The global shipping industry is concentrating its efforts on fundamental innovation based on information technology such as blockchain, artificial intelligence and cloud computing. In the shipping industry, blockchain, in particular, is the optimal technology for securing logistics visibility. Linked to global supply chain management and better transaction reliability, it will bring major changes to the shipping and logistics industry. Accordingly, for a shipping company to remain competitive, it

is essential to secure the IT capabilities to keep up with this technology. Under a mid to long-term vision of Smart Shipping, HMM has begun to adopt technologies like the Internet of Things (IoT), Big Data, and blockchain. With the introduction of IoT for the management of reefer containers, HMM can check the condition of containers in real time and control them from land when necessary. Blockchain enables HMM to quickly share transport information and improve security.

Organization for IT Innovation

In August 2018, HMM established a team dedicated to responding to the 4th Industrial Revolution to strengthen our global competitiveness. The Process Innovation (PI) Team is responsible for innovating the work processes and IT systems. It consists of key experts in each area, including infrastructure building and operations, information and security,

business analysis, and software programming. With its specialists, the PI Team integrates cutting-edge technologies such as IoT, cloud, and Big Data solutions, into actual jobs as part of building effective work systems. This is being pursued in tandem with improvements to existing processes.

Real-time Monitoring of Ships and Cargo

With the installation of IoT sensors, HMM is now able to monitor ships and cargoes in real-time from a Command & Control Room. The IoT sensors enable us to easily conduct across-the-board integrated

management. The shippers can also manage the containers in real-time. Before the installation of the sensors, monitoring was possible only up to twice a day, but now we expect it to be continuous.

AI Technology for Optimal Route Analysis

With Vessel Insight, which captures and analyzes a range of data including operational records, weather and

currents, HMM can optimize routes in real-time, making it possible to reduce costs and respond to crises.

Next-generation Shipping Logistics System

In 2019, HMM has begun the full-scale development of a cloud-based, next-generation shipping and logistics system. NewGAUS, a system developed independently by HMM, enables the management of all kinds of data, from vessel data such as contracts and reservations to human resources, management and operations. We have built a cloud environment to support our container and bulk businesses, and we plan to carry on, step by step, moving all applications

and data onto the cloud, including those for shipping and settlement. In building cloud-based system, we expect to see a cost-saving effect compared to existing on-premise methods. Also, with cloud servers located in every part of the world, we look forward to faster and more stable data management. We started to plan in July 2018 and will complete our development of the system by 2020, thereby leading the digitalization of the shipping industry.

Next-generation Infrastructure System

In building HMM’s cloud-based infrastructure, we plan to move from the existing mainframe. By newly developing a cloud-based system, we will overcome the difficulties in the existing system such as cloud conversion, adaptation to new technology and the operational requirements of the Internet Data Center

(IDC). After the start of the 2020 Process Innovation(PI), we aim to create an environment in which we can introduce new technologies such as blockchain and its security features, Robotic Process Automation (RPA) and Big Data, by improving program speed and reducing server costs by 35% service for shippers.

System-building Strategy during HMM’s PI (Next-generation platform)



Big Data Analysis Systems in Shipping

The building of a Big Data analysis system will enable HMM to more efficiently manage vessels, equipment, and routes. We plan to analyze trends in an even more sophisticated way, enabling accurate market forecasts and responses.

Real-time Mobile Services

We provide mobile services enabling customers to verify shipment locations and even the temperature of refrigerated cargo.

Introduction of Blockchain

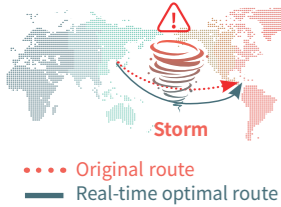
Transporting one shipment of cargo involves more than 30 agencies and some 200 pieces of paperwork. With blockchain, shipping is faster, simpler and at the same time more secure and transparent. HMM introduced blockchain on a sea trial for the first time in August 2017. In June 2018, we began working on

blockchain with the financial industry, and in July, the Korea Customs Service carried out a blockchain trial for export procedures. In May 2019, we joined the Digital Container Shipping Association (DCSA), an industry group pursuing standardization in shipping work processes and data.

MOU on Promoting ‘Industry 4.0’

HMM has signed a memorandum of understanding with Oracle for strategic cooperation in strengthening IT competitiveness based on ‘Industry 4.0.’ Under this MOU, we plan to maximize the effects of the 2020 process innovation and the application of the next generation cloud systems by 2020. In doing so, we expect to achieve several results, including the provision of a convenient and stable IT service environment to internal users as well as customers. Going forward in cooperation with Oracle, HMM

expects to build a cloud-based working environment, engage in mutually beneficial IT cooperation with the shipping industry in Industry 4.0 and set up a Joint Lab. Through such cooperation in new technology services and by raising our global brand value, we will strengthen our competitiveness. Working with Oracle in a bilateral operations committee, we expect to actively pursue cooperation in the implementation of new key technologies of the 4th Industrial Revolution such as blockchain, IoT and AI.

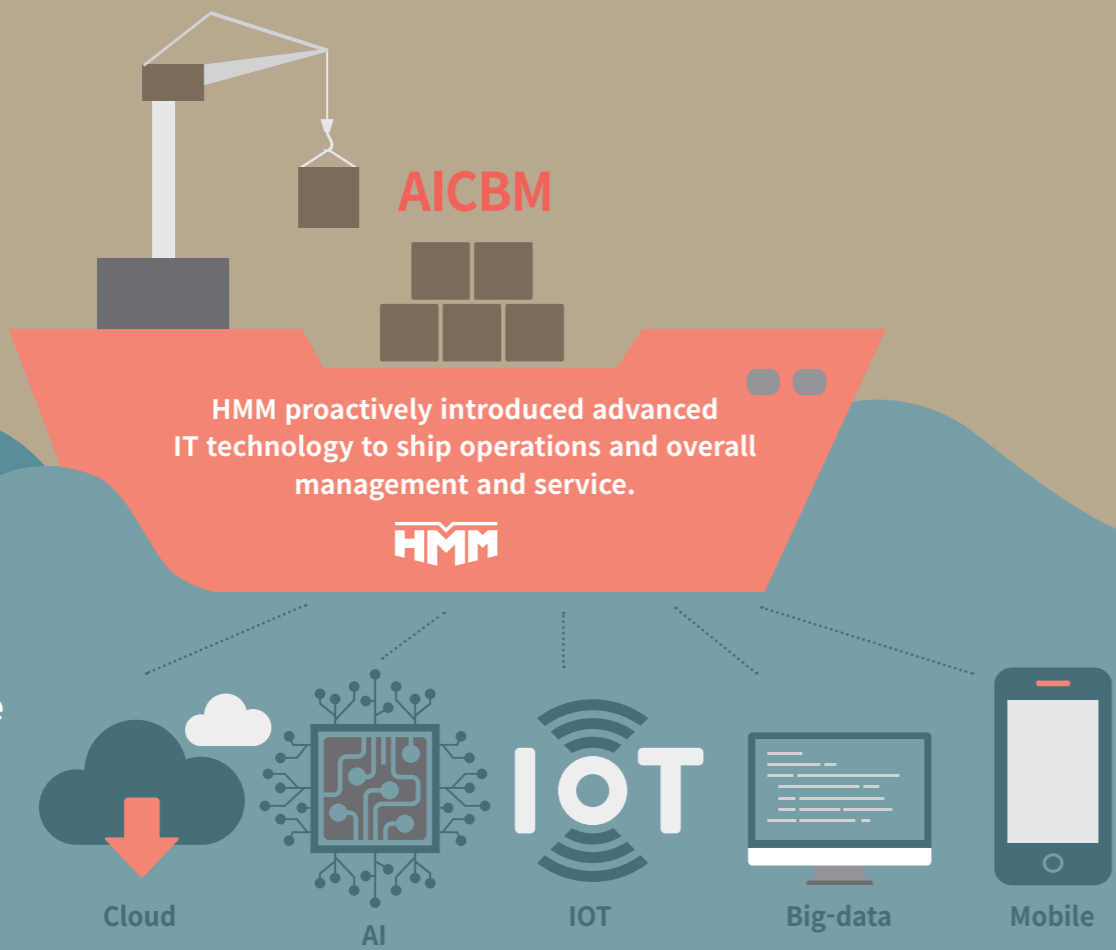


HMM is expanding its position as an IT Frontier shipping company through a next-generation shipping and logistics system. To that end, we transformed our main IT-based operations into a Cloud System in 2019 to enhance our competitive edge in terms of speed, accuracy, and reliability.

Cloud
System
Completion

HMM migrated its major IT-based operations such as finance, website and accounting (ERP) into a Cloud System. HMM signed an 'Industry 4.0' MOU with Oracle to establish a cloud system. We plan to establish a cloud-based business environment and jointly provide new technology services. Also, HMM plans to convert all data and major applications to the Cloud System by June 2020 and aims to implement rapid integration management through the establishment of an IT system that manages all information, including operations, contracts and reservations, ships, and personnel management. By deploying cloud systems, HMM plans to not only save money but also provide fast, uninterrupted, and more reliable IT services in any situation to customers and internal system users worldwide.

Representative
Technology
of the Fourth
Industrial
Revolution



Data Security

Data Security & Information Protection

HMM complies with the international standards on information protection and related laws at home and abroad. We take steps managerially, technologically, and physically to protect information regarding our core technologies and personnel, which are the source of our competitiveness. With a dedicated information protection organization, the company manages risks through security measures reflecting aspects such as law, the business environment, and technological change. Also, the headquarters is receiving with diagnosis and consulting services in order to raise the standards of security, and identify and improve any weaknesses.

Domestic and Overseas Information Protection Laws

HMM complies thoroughly with applicable domestic and overseas laws such as the Personal Information Protection Act and the Act on Promotion of Information and Communications Network Utilization and Information Protection, etc. To do so, we keep up to date on the passage and revision of laws and regulations and respond proactively. We are continuously improving our level of protection for general and personal information, and are maintaining the latest security standards to ensure safety and continuity in our management of customer information.

Information Security Management System Certification

We have been certified for our information security management system under the international standard ISO 27001. This certification requires a strict evaluation of 14 areas (clauses) and 114 specific items (controls) related to policies, personnel security, physical security, development/operational security, and others. It thereby verifies that HMM

has measures in place for the reliable protection of information. Through continuous improvements and strengthening of HMM's information protection system, we can respond effectively to security threats. In this way, we will continue our efforts to improve reliability and meet our customers' need for information protection to ensure safe transactions.

Information Protection Training

Recently, cyberattacks on global shipping companies have resulted in system disruptions and caused economic losses. Since shipping companies are gradually speeding up the introduction of information technology, we are providing training to all employees to increase security awareness. We share methods of

protecting against cyberattacks and enact security measures through training. Since July 2018, we have held three offline sessions on personal information protection and ransomware, recent security issues, information protection consulting and more.

Year		Training Hours	Number of Participants
2018	H1	2,441 hours	2,441 employees
	H2	2,457 hours	2,457 employees

03. Supply Chain Management

Purchasing amount of eco-friendly fuel and lubricating oil

KRW
23.6 billion

(As of June 2019)

As a global company, HMM is thoroughly engaged in efforts to manage sustainability risks in the supply chain network. We aim to boost the value of the supply chain by making responsible purchasing decisions and focusing on the long term.

Why is it important?

HMM strives to deliver high-quality services for shippers. These services can only be provided by cooperating with our company's numerous suppliers and partners, which not only require increased competitive positioning and sustainability from HMM, but in the overall supply chain as well.

Our approach

HMM, along with its numerous suppliers, aims for a high level of customer satisfaction by providing differentiated services to its customers. We purchase a wide variety of goods from other firms, which include office equipment, ship stores and fuel oil. We also utilize their services for training, consulting and the maintenance of cargo terminals. HMM provides necessary support to its suppliers to ensure that they can keep up to speed with global standards in terms of technology and legal compliance.

KPIs

(As of first half of 2019)

Category	Unit	2016	2017	2018	2019
Number of major suppliers	Company	74	119	85	74
Purchase amount	KRW mil.	149,969	232,790	311,725	153,899



Supply Chain Management

Supply Chain Management System

HMM's global supply chain includes container terminals, depots, rail-freight companies, haulage companies, feeder operators etc. across the globe in addition to office, ships related suppliers. HMM strives to manage risks and opportunities in the supply chain and achieve co-prosperity by considering sustainability at all stages of selecting, operating and evaluating suppliers. We pursue a sustainable corporate ecosystem by securing competitiveness of our suppliers. All goods and services are subject to international regulations and laws, and the latest legal requirements are identified in advance and observed.

In particular, we support compliance to international standards and regulations in human rights, environment, safety and ethics from the supply chain perspective, calling forth more active engagement from suppliers. In addition, we place our priority on working with suppliers that provide eco-friendly products such as materials that reduce the use of harmful substances, those that conserve resource and energy, and are recyclable so that we can minimize the environmental impact that can occur in the process of building parts, using materials, and overall operation.

Risk Management for Supply Chain

HMM provides services that create customer value with our various partnerships. We are working to enhance the competitiveness of our supply chain while adhering to international regulations and fulfilling our corporate social responsibility. We undertake comprehensive risk evaluations of suppliers to ensure their compliance with standards on the environment, human rights, labor and ethics.

All global suppliers doing business with HMM is selected and evaluated by identical criteria and are required by contract to adhere to the company's code of conduct. We provide the support needed to help them comply with local laws and international regulations and to help them manage sustainability risks in human rights, health and safety, ethics and the environment.

Selection and Assessment of Suppliers

All suppliers are selected through a fair and transparent evaluation process. They are assessed on their management and financial competence (technology, quality, costs), as well as their sustainability factors (ethics, environment). Selected suppliers are provided with support to enhance their competitiveness and to promote transparent and fair business practices. Our management guidelines also require the

enforcement of preliminary and post-transaction evaluations on suppliers. The purchasing department conducts annual evaluations of suppliers supplying ship stores and fuel. These are graded for quality, delivery time, costs, environmental/safety/QC standards and international legal compliance. Suppliers with high marks are provided with rewards and benefits, while those that fail to meet standards are restricted from bidding or de-registered.

Procurement Policy

HMM's procurement policy is disclosed to all relevant parties both in South Korea and abroad, and training is provided to ensure fair and transparent business transactions. Procurement decisions are

made on the basis of quality, cost and corporate social responsibility evaluations, which enable the sustainable management of the company's relationships with its suppliers.

HMM has built a system of purchasing eco-friendly materials and products of eco label-certified through a procurement policy for sustainable expansion. In doing so, we are procuring products that are certified with eco-labels, recycling marks and energy saving marks. Moreover, to enhance corporate value through eco-friendly management, HMM has established a procurement policy which contains guidelines for the mandatory purchase of eco-friendly products. HMM has disclosed the data for relevant performance annually to expand eco-friendly purchase.

Competitiveness of Supply Chains

Improving Process Through Cooperation : Terminal Operation

HMM is working with its suppliers to continually streamline its internal processes for more efficient terminal operations.

Fields of Collaboration

- Optimized navigation
- Bow design optimization for vessels
- Development of hull detachable components
- Optimization of stern design and propellers
- Development of a monitoring, recording & verification system
- Energy efficiency monitoring system
- Waste heat recovery system
- Fuel additives
- Ship coating
- New-generation propulsion
- Development of alternative fuel
- Non-greenhouse gas air pollutants (NOx, SOx, PM, etc.)
- VOC reduction equipment
- Energy Saving Technology – Marginal Abatement Cost
- LNG Fuelled Ship Feasibility

Global Supply Chain Management

HMM executes its tasks based on the company’s purchasing policy and its supplier’s Code of conduct. All employees in the purchasing department are required to make decisions based on ethical standards and social responsibility in addition to quality and cost factors. Suppliers are required to operate their businesses in accordance with international standards and local laws, and they must improve working conditions. This purchasing structure is also used to share information with our suppliers. It is also used in evaluations and

registration, compliance management and work environments, and the sharing of self-evaluation checklists. HMM operates a corporate division dedicated to comprehensive supply chain management, and key suppliers are centrally managed considering their strategic importance. The work environments of these companies are inspected and supported, and cooperation for mutual growth is promoted through assistance in R&D and employee training.

Collaboration

HDOS, a subsidiary of HMM and the Korean Register of Shipping, has jointly launched an R&D program on green ship technologies following an agreement reached on May 11th, 2015. Through this joint development of technology, HMM will commercialize technologies already acquired and concentrate its capacity on achieving substantial reductions in greenhouse gases and fuel costs. Although HMM has relied mostly on Europe and other countries for

green ship technologies, it is hoped that the joint R&D agreement will demonstrate the feasibility of developing those technologies indigenously in South Korea. We will actively support local shipbuilders and SMEs in the maritime industry that face the need for high-efficiency equipment in the construction of green ships so that they can become globally competitive through technology and product development.

Win-Win Growth and Cooperation

Enhancing the competitiveness of its suppliers translates to the strengthening of HMM’s own competitive standing, a driving force of sustainable growth. HMM values its suppliers and supports a variety of initiatives to strengthen its partnership and ensure mutual growth and cooperation.

We support mutual growth by fostering trust and cooperation with our suppliers while providing them with equal opportunities. Our charter of ethics emphasizes the establishment of fair business relationships and recognizes the importance of mutual growth and cooperation.

Code of Conduct for Suppliers

Through the ‘HMM Supplier Standards of Conduct,’ we aim to share with our suppliers the values of human rights, safety, the environment and ethical management. By agreeing to adhere to these Standards of Conduct, suppliers form a contractual

relationship with HMM. Through faithful adherence to these Standards of Conduct, we and our suppliers aim to fulfill their social responsibilities and achieve sustainable growth.

1. Human Rights and Labor
Compliance with Working Hours
Outside of emergency situations, weekly working hours shall not exceed the maximum hours prescribed by the laws of the relevant country.
Compensation and Benefits
Suppliers shall comply with all laws related to compensation, including minimum wage, overtime pay and other legally prescribed benefit-related matters.
Prohibition on Child Labor and Management of Young Workers
Suppliers are prohibited from employing children. ‘Children’ are defined as persons younger than 15 years old or those younger than the minimum age of employment as defined by local laws. In the case of on-site practical training programs, participants shall not be engaged in work considered dangerous to their health and safety according to laws and regulations.

Prohibition on Discrimination
Employment practices such as hiring, pay, promotions, bonus, training and the provision of training opportunities, shall not discriminate race, skin color, age, sex, sexual orientation, gender identity, ethnic origin, disability, pregnancy, religion, political orientation or marital status.
2. Health and Safety
Industrial Safety
To prevent workers’ exposure to safety risks (electric shock, fire, fall hazards, crush and impact hazards), suppliers shall implement process designs, technological/administrative controls, facility safety inspections, work processes and safety training.
Prevention of Industrial Accidents and Disease Prevention
Suppliers shall maintain systems to prevent industrial accidents and occupational disease and to protect against recurrence.

3. Environmental Protection
Prevention of Environmental Pollution
Suppliers shall make efforts, in accordance with local laws and regulations, to reduce and eliminate all forms of waste by improving production processes, replacing raw materials, recycling and reusing resources, etc.
Energy Reduction and Use of Eco-friendly Products
Suppliers shall make efforts to reduce energy consumption and minimize greenhouse gas emissions by improving energy efficiency, and they shall make efforts to use and/or produce eco-friendly products.
Management of Harmful Substances and Waste
Suppliers shall identify the properties of harmful substances and waste, dispose of them after processing according to the relevant laws, and make efforts to reduce the amounts produced.

4. Ethical Management
Transparent Management and Prohibition on Illicit Gains
To maintain the highest standards of integrity in all business relationships, all forms of corruption, including illicit gifts and bribes, are strictly prohibited, and suppliers shall comply with all legal standards related to anti-corruption. Furthermore, anonymity is guaranteed to whistleblowers.
Protection of Intellectual Property
Technological/commercial materials, information and intellectual property acquired in doing business with HMM may not be shared with third parties without prior consent.

Cross-Sector Cooperation

As South Korea’s largest shipping company, HMM works with shipbuilders and shippers to strengthen the mid to long-term competitiveness of the shipping industry.

Financial Support

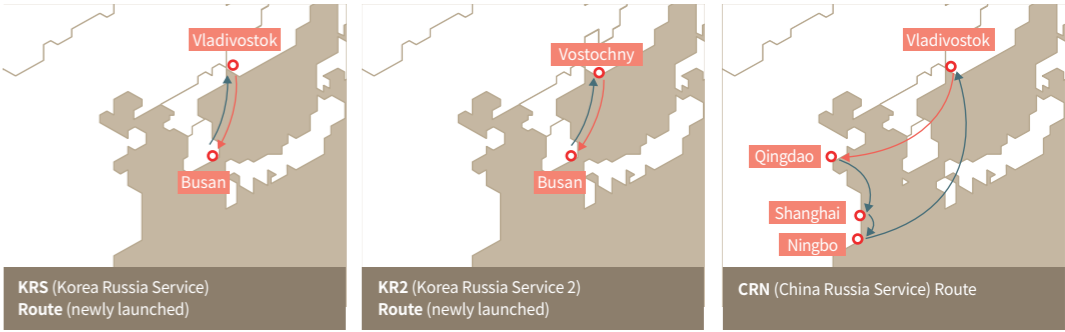
We are undertaking a number of efforts to promote win-win growth by bolstering our financial support of suppliers and revising subcontract payment terms.

Communication Channels

HMM stays up to date on the opinions and requirements of the field by activating communication channels with suppliers, and we actively reflect them in management activities. HMM operates a channel allowing employees to report violations of work environment standards and human rights infringements that occur internally at our suppliers’ offices. Reports are filed through our homepage, landlines, e-mail and mobile phones. The relevant departments investigate the matter within seven days and respond to the informant with an action plan to address the issue. HMM helps to improve the work environment and management policies through open communication and utilization of reporting channels.

Expansion of Cooperation

HMM, in cooperation with the Russian shipping firm FESCO, has expanded the number of shipping routes among South Korea, China and Russia to three. Previously, there had been a single CRN (China Russia North Service) route jointly operated between HMM, FESCO and CMA-CGM. With the expansion, the existing CRN service route will be reorganized, with two new services being added, namely KR2 (Korea Russia Service 2) and KRS (Korea Russia Service), which will connect Busan to ports in Russia.



Customer Satisfaction Management

Customer Satisfaction

HMM provides world-leading transportation services with its fleet of 90 vessels, logistics facilities, diverse network of shipping routes, industry-leading IT infrastructure and skilled professionals. We focus on providing reliable and high-quality services to our

customers all over the world. We provide competitive maritime transportation services by improving customer access through a wide network of shipping routes and by ensuring that cargo arrives safely and in a timely manner.

Fuel Surcharge Policy that is Fair for All

Shipping companies determine bunker surcharges on the basis of many variables, including fluctuations in global oil prices and the use of low sulphur fuel oil. HMM has decided to impose bunker surcharges as several areas including China and Taiwan have been designated as ECAs (Emission Control Area) in 2019, requiring the use of less than 0.5% sulphur in fuels. In 2018, the company held a briefing session for shippers to clarify its decision to introduce bunker surcharges due to rising oil prices around the globe. The surcharges were introduced in January 2019, which have been collected separately from freight charges.

Provision of Differentiated Values

HMM aims to achieve full customer satisfaction by providing differentiated values that go beyond traditional expectations. We have established an e-Biz system that enables customers to check their shipping information quickly and easily, which is being continuously improved through the application

of advanced IT technology. In particular, we are constantly adapting to changes in the shipping environment centered on blockchain technology by joining the Digital Shipping Association, adopting Electronic B/L, and providing comprehensive logistics services in South Korea.

Digital Ecosystem for Import and Export

HMM plans to create an integrated logistics platform, converting trade documentations used among merchant firms into electronic forms, which simplifies fund settlement operations. The integrated logistics platform is a fintech service that interconnects various digitalized trade documentation and finance when calculating combined logistics costs between shipping firms, forwarders (customs brokers) and merchant firms. HMM provides key cargo shipping information to the integrated logistics platform, which is then used

to provide differentiated services to customers by adding shipment and cargo information to the customer's financial management and ERP system information. Our automated process of freight collection will improve customer convenience, and we plan to convert various kinds of trade documentation into electronic forms. By applying sophisticated IT technologies such as the digital conversion of logistics information, we plan to strengthen our competitiveness in the trade logistics ecosystem and expand cooperation with related industries.

Tailored Services based on Industry 4.0

HMM plans to maximize the effects of cloud-computing of next-generation systems and achieve innovation in our work processes by 2020. This will provide a convenient and reliable service environment for both internal and external client

users. We have laid a strong foundation for high-quality IT services that stand out from those of other global shipping companies, and will provide real-time information on freight charges and restrictions for customers' convenience.

Communication Channels

HMM focuses on satisfying the needs of shippers based on mutual trust. Through meetings and presentations, we are working to strengthen our relationship with shippers. We invite shippers for presentations on an annual basis to brief them on various services offered by HMM and respond to any queries they may have regarding changes in shipping routes and the market environment in general.



Briefing session for shippers

Services for the Customer

Customer Feedback

HMM operates a VOC (Voice of Customer) system to effectively respond to feedback from its customers, and collects their opinions regarding the quality of the services on a regular basis. Feedback is provided via the customer support section of our website. They are quickly identified and processed by departments that can provide assistance to the customer. In order to improve the

quality of our services and share customer values that exceed their expectations, we collect feedback through various channels and implement them in our management operations after an internal review. In particular, in areas that require major improvements in terms of service quality, the operations department executes needed measures on-site, and reports their results to management on a regular basis.

Online Satisfaction Surveys

HMM conducts a satisfaction survey every year for customers using the company's website. Based on the results of the survey, We identify the needs and

difficulties of our customers in order to improve systems and procedures in cooperation with the relevant departments.

04. Employee

Training expense
for employees on
land

KRW
400
million

(As of 2018)

HMM holds a firm belief that technology and human resources are the best assets the company can have to lead future industries. In accordance with this notion, we are making determined efforts to respect the human and labor rights of our employees and are striving to cultivate talent globally.

Why is it important?

It is important to recruit and maintain employees with global competence in order to become a world-leading shipping company. Therefore, all worksites must comply with international human rights and labor standards, and employees must be provided with a satisfactory work environment that allows them to better focus on their tasks.

Our approach

HMM is striving for win-win growth between the company and its employees while maximizing its organizational capacity through efficient management and talent-based human resource development. In 2019, we started examining and revamping our work culture, human resource policies and organizational structure in order to boost job satisfaction.

KPIs

(As of June 2019)

Category	Unit	2016	2017	2018	2019
Total training hours per employee on land	Hours	30,941	46,574	49,286	24,515
Total training hours per seafarer	Hours	21,389	20,983	21,832	19,526



Human Resource Management

Nurturing Talents

HMM operates a human resource development program to train talented employees who can work autonomously, drive innovation and become global experts. To ensure that all employees can reach their full job potential, we provide various training programs ranging from fundamental management and global competence to on-the-job training.

Talent Nurturing System

Type	Goals	Training Programs
Leadership training	Acquisition of basic skills required for HMM employees and leadership training	<ul style="list-style-type: none">Onboarding programs for new-comersOnboarding programs for newly appointed managementAdvanced leadership/management programs for team leaders and executives
Global competence training	Cultivating global business talent with a global mindset and foreign language skills	<ul style="list-style-type: none">Global on-boarding trainingExpatriate trainingIn-house/Mobile language courses
On-the-job training	Continuous development of knowledge, skills and attitude as a global maritime business expert	<ul style="list-style-type: none">Training by job function (shipping, finance, accounting, HR, management)In-house/Onsite job trainingExternal professional training

Training on New Technology

Key countries around the world are adopting smart marine logistics based on 4th Industrial Revolution technologies, which process logistics-related information in an efficient manner. HMM is staying ahead of these technological changes and helps employees acquire the necessary skills.

Support with Job Creation

HMM endorses the South Korean government's job creation drive by supporting the LINC+ (Leading Industry-University Cooperation) program and recruiting outstanding trainees from state-sponsored projects operated by the Ministry of Oceans and Fisheries. HMM conducted job interviews to recruit outstanding students at a job fair at Mokpo National Maritime University in January 2019. We plan to recruit talented individuals by providing students with the opportunity to receive training on eco-friendly employment and take part in job interviews. In addition, HMM participated as a training provider for a program operated by the Ministry of Oceans and Fisheries to nurture talented young professionals in the maritime industry. We have strengthened our procedures for human resource training to better verify the job competence of trainees.

LINC+	Purpose To foster suitable talent for companies and connect job-seekers to employers	To select outstanding trainees and foster talent customized to the needs of companies
UNIVERSITY COOPERATION	Purpose 1. To secure talent in advance and strengthen trainee competence for quick adoption to tasks 2. To promote joint industrial-academic projects and solidify on-the-job training 3. To establish a model of industrial-academic cooperation and boost employment 4. To apply on-the-job curriculum into undergraduate programs	Conclusion 1. To administer training programs as academic credits (1-2 credits) 2. To fortify completion criteria (at least 80% attendance rate, score 80 or higher for credit) 3. To enable use of evaluation results for job applications

Professional Training

HMM is consistently strengthening training that will help increase employees' capabilities. In 2018, training was expanded to include Accounting and Finance Training, Team Leadership Training and Company Operations Training, which aim to strengthen job competency and improve individual expertise and productivity. In September 2018, Accounting and Finance Training has been provided to senior employee of level 4 or higher through online lectures for the duration of two months. This training is set to be standardized for all senior employee of level 4 or higher and is being gradually expanded to other employee. For leadership, Team Leadership Training is being provided as a three-year course in human resource management, organizational management and performance management. This is being

administered as a collective training with content including vision setting, organizational efficiency, conflict resolution and communication. Company Operations Training, which was established to encourage the sharing of shipping expertise and to enhance understanding between teams, has been expanded from online courses to include offline training as well, and has been made compulsory for regular employees all the way up to senior managers. The curriculum is designed especially to share expert shipping knowledge, such as common maritime operations, containers and bulk shipping, so that it can be immediately used in practical settings. HMM strives to foster shipping experts by establishing a wide range of training systems adapted to the unique characteristics of the shipping industry.

Nurturing Specialists

HMM has been actively contributing to its employees' personal and professional development. In particular, we operate programs to improve our employees' understanding of cultures and capabilities in language to raise their global competitiveness. We have been offering online and offline language courses and one-on-one phone lessons, as well as seminars designed to enhance understanding the political and cultural backgrounds of different regions in the world.

Training Programs (As of June 2019)					
Category	Unit	2016	2017	2018	2019*
Total training hours per onshore employee	Hours	30,941	46,574	49,286	24,515
Total training hours per seafarer	Hours	21,389	20,983	21,832	19,526
Total investment in training	KRW mil.	465	523	404	174

HMM's certificate award ceremony



Job Transfer Program

To foster exceptional employees with a wide range of professional experience, HMM operates a job transfer program. Through a regular rotation of duties each year, our domestic employees are offered the opportunity to find positions for which they are best suited, and then fostered as specialists in that field over the long term. Moreover, we select employees with high performance and strong abilities in English or other foreign languages and send them to one of our 20 overseas headquarters

or 70 overseas branches or offices. After the new CEO was appointed in 2019, we engaged in open communication to listen to employee suggestions on overseas assignments and regular job transfer programs. To avoid bias towards particular departments or individuals, we plan to introduce measures such as establishing a talent pool in each of our headquarters, which will provide more transparency and fairness in our overseas job program.

Fair Performance Appraisals and Compensation

HMM presents our business strategy and related aims to all our employees, based on which we provide fair performance appraisals and compensation. We carry out two performance appraisals a year, and provide promotions, compensation and development programs based on the results. Managers in positions above department head or team leader are evaluated through a Management By Objectives (MBO) system, which evaluations their individual targets and achievement rates. A promotion scoring system is in

place at each level of management, and individuals that score higher than the average are referred to the personnel committee for a promotion evaluation. Individuals showing objectively exceptional progress or achievements will be given promotion opportunities regardless of length of service as part of our drive to promote an ability-centered hierarchy. We also have a grading system for bonuses based on individual or organizational appraisal results to ensure a business performance and merit-based rewards system.

Nurturing Maritime Experts Global on-boarding training

To enhance its employees' operational knowledge and base capabilities, and to help them become experts in shipping, HMM provides training programs for seafarers. These are aimed at low to mid-level employees who are in charge of practical duties, and are provided at the HDOS Training Center. There, they receive onboard training in areas such as ocean safety regulations, ship layout and characteristics. Then they board an actual container ship on the Busan-Shanghai route, where they receive further training on sea routes and ships in general. One night and two days are spent in Shanghai, where they learn

about distribution systems. And finally, a visit to an overseas headquarters is included in the program, which lasts four nights and five days. In 2019, a total of 24 employees took part in the global on-boarding training program, starting with new recruits who had joined on May 29th, up to employees who had been with us for three years and those who could not take part in the program the previous year.

Operational Status

Content	2017-2019
No. of participants in global on-boarding training	89 employees

Onboard the Hyundai Pride



Class in progress at the HDOS Training Center



Human Rights and Diversity

Human Rights Policy

HMM respects and upholds basic human rights principles, including the Universal Declaration of Human Rights, the UN Guiding Principles on Business and Human Rights, labor principles recommended by the International Labour Organization and ratified by national governments, and regulations of nations in which HMM operates.

HMM's Guidelines on Human Rights

Working Hours	HMM adheres to working hours in compliance with the laws of each country.
Prohibition of Child Labor	HMM does not employ children or person under the age of 15.
Minimum Wage	In accordance with Korea's Minimum Wage Act, the Seafarers' Act of Korea and the relevant laws of each country, HMM provides compensation equal to or greater than the minimum wage.
Prohibition of Discrimination/ Respect for Diversity	HMM treats all employees equally and with respect. HMM prohibits discrimination based on race, skin color, gender, religion, political opinion, social origin, age, educational attainment, disability or any other basis.
Health and Safety	HMM complies with laws regarding health and safety in the workplace. HMM applies a range of standards to prevent accidents and ensure a safe work environment.

Promoting Diversity

HMM promotes diversity in its workforce. As of 2018, men accounted for 68.2% (604 persons in total) of all onshore employees, while women accounted for 31.8% (281 in total). For seafarers, foreign employees are provided with support to aid them in communication and to keep them informed of the company's policies, work-related guidelines and information on life onboard a merchant vessel. HMM employs 125 fixed-term workers on land and at sea, who receive the same level of corporate benefits as regular employees.

Employee Composition (Korea)

Category	Unit	2016	2017	2018	2019
Women among seafarers	%	1.77	1.01	1.17	1.40
Women among land-based employees	%	31.60	32.70	31.80	31.60
Women in management positions	%	8.20	9.00	12.60	12.17
Disabled employees	Persons	5	5	5	5
Persons of National Merit	Persons	18	17	19	22

*Persons of National Merit include both employees on land and at sea.

Education on Human Rights

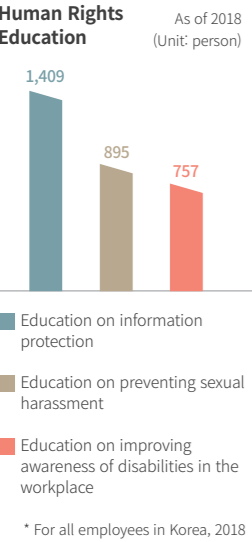
HMM conducts annual training to its entire workforce in Korea, including contract and dispatched workers, on prevention of sexual harassment and on disability awareness. In accordance with the legal amendment on workplace harassment that was passed in July 2019, the company has revised its office regulations and established an incident management process to

respond to violations. HMM also regularly provides training on information protection to its employees in order to raise their awareness on security. In 2018, training was expanded to include external workers as well. Those unable to attend the offline sessions due to business trips or leaves were provided with online training.

Management of Workplace Environment for Seafarers

HMM manages its seafarers from hiring to retirement in accordance with international labor guidelines on seafarers. Crew members work 8 hours a day for a total of 40 hours a week. We abide by all standards

defined by the ILO's Maritime Labor Convention in order to provide seafarers with a satisfactory working environment and living conditions.



Labor-Management Culture

Labor-Management Relations

HMM has established mutually-beneficial Labor-Management relations based on understanding and trust between the company and its employees. In March 2018, a joint declaration was adopted by the company and its employees to bolster cooperation, promising to create a conflict-free organizational culture and achieve the common goal of re-establishment of Korea's maritime sector. The HMM labor union was created in September 2016, and as of now, 45% of the company's onshore employees are members. Seafarers have also created their own independent union.

Operation of the labor management council	HMM regularly operates a labor management council which is held once every fiscal quarter with the management and representative workers in participation. This council is administered to collect employees' opinions, concerns and suggestions, and to reinforce working conditions as well as establish cooperative relations between the company and its employees. HMM desires to listen to the opinions of its employees and continuously improve the working environment.
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Labor-Management Communication

HMM promotes a horizontal organizational culture and open dialogue. For this purpose, the HMM Cyber Meeting Room was created to strengthen communication between employees and management. HMM CMR is a platform that allows lively discussions on company matters and plans to launch overseas services in phases. The meetings have resulted in further training opportunities, trial operation of flex-time working hours and Family Ship Tour. Discussions on a variety of other topics have taken place at the meetings, giving employees a platform to voice their feedback for consideration by management.

Counseling Channels

HMM helps employees resolve stress and psychological difficulties through counseling channels. These are designed to reduce stress and help with employee well-being and personal development. Counseling is available on a variety of platforms, including face-to-face sessions, telephone, e-mail and intranet, with results and advice provided within 10 days. Regular face-to-face meetings are also held with all seafarers. to identify their grievances regarding difficulties in communication and in their tasks.

Use of Counseling Channels for seafarers (As of June 2019)

Category	Unit	2016	2017	2018	2019
No. of cases received	Persons	9	3	6	-
Response rate	%	100	100	100	-

Expatriate Management System

HMM is a global company with 7 regional headquarters, 27 subsidiaries, 56 branch offices and 7 overseas offices. Our global network of container ship and bulk carrier operations and management is run with the help of our expatriates in other countries. Those expatriates have the opportunity to experience overseas operations and become more globally competitive.





Work and Life Balance

Improving Workplace Culture

HMM has revamped its working hour structure in accordance with the new law mandating a 52-hour limit to the work week, while fostering a work culture to enhance task focus and immersion.

Automatic PC Shutdown
To more effectively manage individual working hours, HMM has implemented an automatic PC shutdown system as of August 2018. Automatic PC shutdowns reduce unnecessary overtime and weekend work and encourage employees to concentrate on their task more efficiently during work hours.

Club Activities
HMM is actively supporting in-house club activities to relieve stress on employees and promote leisure activities. We pursue a work-life balance by providing club rooms to enhance communication among executives and employees, which leads to creating synergy at work. The internal clubs, consisting of baseball, soccer, basketball, bowling, swimming,

Flexible Working Hour System
HMM has adopted flexible working hour system since 2019 for employees with children. It is available for employees with children under the age of 8 or in the second grader or below. This allows those with young children to find a balance between work and their responsibilities at home.

reading, etc. (13 Seoul headquarters, 6 Busan headquarters) play significant roles in the harmony of executives and employees, boosting morale, and positive image expansion through regular meetings, internal competitions, and participation in external competitions.

Maternity Protection Program

HMM supports a variety of maternal protection programs to help reduce burdens related to pregnancy and childbirth. We provide mothers with 12 months of

maternity leave as stipulated by law and have set up a maternal care center to assist employees who have to manage a work and family balance.

Childbirth and Maternity Leave (As of June 2019)					
Category	Unit	2016	2017	2018	2019
Percentage of female employees returning to work after maternity leave	%	92.0	84.6	93.1	100.0
No. of female employees on maternity leave	Persons	25	26	29	13
No. of female employees returning from maternity leave	Persons	23	22	27	13

Welfare Support

HMM operates a variety of welfare programs to provide more benefits and a better working environment. In June 2018, the company held an event that was attended by all employees from HMM headquarters

in Seoul, the Busan office, and HDOS. The ‘HMM Sports day for Unity’ event was held for the first time since 2012, and provided an opportunity for communication and bonding through team-building activities.

Family Ship Tour

In May, 2019 HMM invited 20 employee-child pairs and gave them the chance to get on board the mega ship docked at Pusan newport terminal. Before boarding the vessel, the participants tried out a ship navigation simulator at Hyundai Ocean Service Training Center to explore how to operate the actual ship. HMM plans to expand this program to include not only the children of employees, but also their spouses and parents.



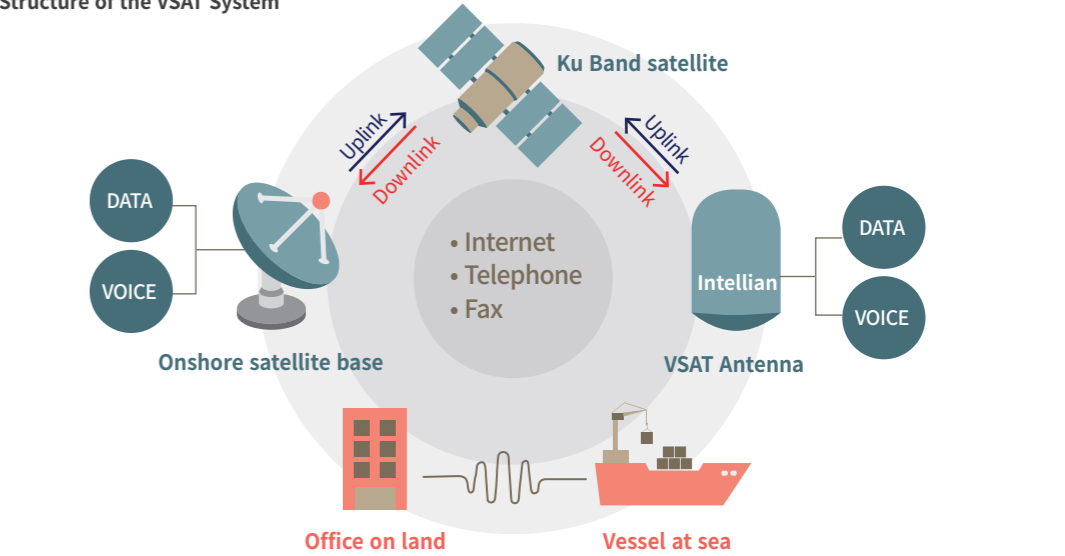
Family Ship Tour, 2019

Telecommunication with Families

HMM is seeking to expand its Smart Ship applications and make vessel operations more efficient by adopting the latest satellite communication equipment and services based on data communications. Through the introduction of a Maritime Very Small Aperture Terminal (MV-SAT) system, we aim to improve the efficiency of operations by reducing communication costs through the use of Internet

phones and establishing a real-time network between headquarters and the vessels. In addition, we are working to improve crew welfare by providing them with free access to this data communication network so they can contact family, relatives and friends. In this way, we plan to lay the foundation for our future Smart Ship infrastructure.

Structure of the VSAT System



Telemedicine Services

HMM strives to raise welfare for seafarers by providing medical services that are quickly and easily accessible through the telemedicine system. This service allows for regular monitoring of employees’ health for those on board for an extended period of time through

video communication between the vessel and the telemedicine research center, using appropriate tools. In case of an emergency, employees can receive guidance on first-aid procedures and directions on proper use of medicines.



05. Safety and Health

Safety Training

Frequent
Navigation
training

Regular
Monthly
safety
training

Lost Time Injury
Frequency(LTIF)

0.68

The top priority of HMM is the health and safety of all employees around the world. Through certification of ISO 45001, we have established a system to manage any health and safety concerns that may arise, and we are continually striving to improve our high standards. We also follow the regulations set out in the International Safety Management Code (ISM Code), which is aimed at preventing accidents at sea as well as marine pollution.

Why is it important?

Workplace safety is key to achieving sustainability in business and society. For a company to protect its employees and their families, as well as to prosper mutually with the local community, it must adopt a health and safety system that manages risk factors at all times, prevents accidents and responds to emergencies. With the recent amendment of the Occupational Safety and Health Act, the management of the safety environment has been expanded to include our suppliers as well. Systems to prevent industrial accidents are no longer based on individual worksites but must be managed systematically on a company level, thus creating a greater level of responsibility for a safe environment.

Our approach

The top priority at HMM is the health and safety of employees at all business sites. The amendment of the Occupational Safety and Health Act coming into force in January 2020 aims to stop the outsourcing of dangerous work and strengthen the responsibilities and regulations of contractors regarding industrial accident prevention. Based on the standards set by ISO 45001, we operate a safety management system that follows the principles of planning, practicing, checking and acting. By continuing to push for higher levels of health and safety standards, we are reducing our accident and loss worktime rate, which in turn increases productivity.

(Seafarers only / As of June 2019)				
Category	Unit	2017	2018	2019
Working hours	hours	7,527,168	7,547,088	2,934,384
No. of accidents	cases	12	9	2
Lost Time Injury Frequency(LTIF)	-	1.59	1.19	0.68



Health & Safety Management

Health & Safety Management System

HMM is continuing efforts to manage workplace safety and promote the health of our employees. We are proactively responding to the revisions to the Occupational Safety and Health Act, and to continue improving health and safety for our employees and

those of our affiliates, we invested in businesses to improve the environment and conducted activities to strengthen work site safety and employee welfare in 2019.

Health & Safety Risk Management

The environment, energy, safety, welfare, quality management systems of HMM are operated in conjunction with one another. To ensure the effective management of influencing factors in all activities, we carry out a regular audit at least once a year and interim audits when needed. The reviews are carried out by internal auditors who are selected based on qualifications set by company regulations. The internal auditors receive regular quality control training from external experts, as well as in-house training, to improve their auditing abilities and quality

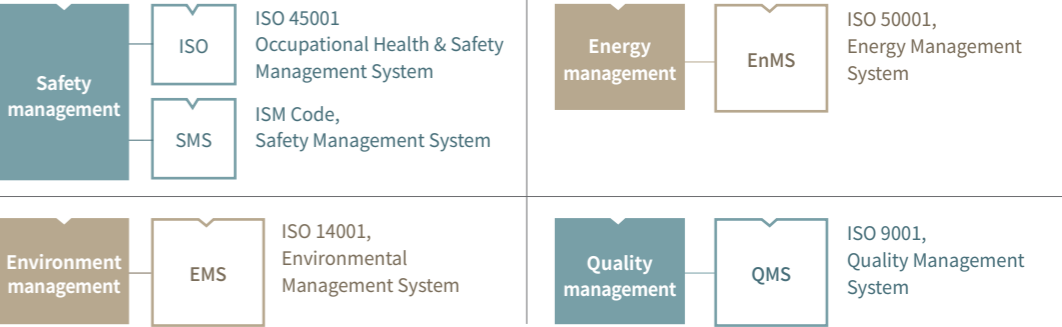
control. In addition, these audits are divided into office and ship, and corrective action is immediately taken for audit findings. Office and ship audits are conducted separately in order to carry out inspections according to their different management procedures. After the audits are completed, necessary improvements are swiftly undertaken for any identified issues to ensure that management systems are operating fully up to standard.

ESQS Integrated Management System

HMM strives to ensure the safe management of our workplaces and to that we look after the health of our employees. To maintain high standards for environmental, health and safety management, as well as shipping services that satisfy our customers, we have established the ESQS policy, which applies to all our onshore and seafarer operations. ESQS (HMM-ESQS) is our integrated environmental, health and safety quality management system. It is designed to ensure the quality of our environment, health and safety measures and services. Through this system we are working to systematically

ensure our environment, health and safety standards. In particular, we have acquired the ISO 45001 international standard for health and safety management to prevent industrial accidents and create the best possible working environment. Moreover, to prevent shipping accidents and marine pollution, we follow the International Safety Management (ISM Code) which provides guidelines for the shipping industry, both on land and at sea. Through the health and safety management system, we are striving to improve safety for our employees and provide a healthy work environment.

ESQS Integrated Management System



Workplace Safety Management

Elimination of Potential Risks

To improve health and safety conditions for our employees on land and at sea, HMM works actively to identify risk factors at the workplace. For employees working at our facilities, warehouses and ports, we provide training tailored to their special circumstances and risks. We also provide training to employees going abroad on business trips and on specific locations to which they are traveling. Depending on the nature of the work, various factors can be considered risks, such as noise-related stress, time differences and weather-

related dangers, as well as accidents involving rope work and shift rotation. To continuously improve our health and safety standards, we have been diligently taking steps to prevent such accidents. Since an accident at sea in 2017, we have been running a Zero-Accident Campaign involving measures such as more rigorous safety training and work approval systems. In 2018 and 2019, there were no major safety accidents both at sea and on land.

Training on Safety

To raise safety awareness and minimize accident risks, HMM operates a legally prescribed safety training program. As well, we provide training to higher standards in terms of safety responsibility. There are also special training programs related to off-duty accidents using real life examples. Regular employees are trained on basic safety regulations and awareness, contributing to the prevention of accidents. As well as regular safety and risk prevention training, other programs cover CPR and fire response. Through these real-life safety and fire drills, we aim to improve safety awareness among

our employees and offer them the skills to be able to respond calmly to unforeseeable accidents.

CPR Training & Fire Drill



Expansion of Safety Culture to Suppliers

HMM has set out regulations taking responsibility for the safety management of suppliers. Through comprehensive inspections, we keep up-to-date on the implementation of safety measures at our suppliers' offices and any unsatisfactory areas

discovered are dealt with using appropriate response measures. By sharing our safety management direction, we demonstrate HMM's high priority on employee safety.

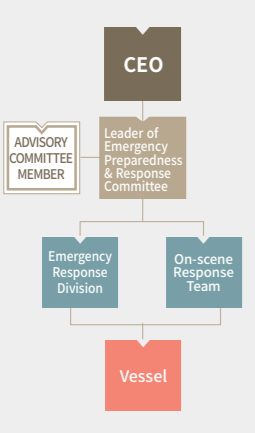
Emergency Response System

HMM focuses on establishing a culture of safety based on fundamental rules and principles. To prevent environmental and safety accidents, we analyze the potential danger of all kinds of environmental accidents and maintain a 24-hour monitoring system. In case of an emergency, we are swift to announce and communicate the current situation and set up our emergency response measures. We operate an emergency operations unit to prevent environmental, health and safety accidents and minimize any damage. Specialists in each department are appointed to run the emergency operations unit and receive continuous training to be prepared to respond to such situations.

Roles of Divisions

Name	Main Roles
Leader of Emergency Preparedness & Response Committee	<ul style="list-style-type: none">• Assigns duties to each team in the Emergency Response Division and manages the On-scene Response Team• Establishes and implements emergency response measures• Establishes and operates measures to reduce environmental pollution and damages to passengers, ship and/or cargo• Reports to the management on current progress and results• Leads other duties required for handling emergency situations
Emergency Response Division	<ul style="list-style-type: none">• Maintains contact with on-site for operations, stays up-to-date on current progress and manages data• Analyzes seaworthiness and establishes safety measures for passengers• Maintains intimate contact with external maritime rescue organizations• Adjusts duties for government offices or authorities concerned
On-scene Response Team	<ul style="list-style-type: none">• Manages and reports all on-site operations• Directs on-site rescue operations/ preventative measures• Leads other duties required for on-site operations

Organizations for Emergency Response



Employee Health and Welfare

Health Management System

HMM's health management system comprises three elements: work environment, health promotion and disease prevention. On this basis, injuries or illnesses that occur on our vessels or in affiliated businesses are covered by our health and safety standards as we work to protect our assets from damage and destruction. In the operation of our vessels and subsidiary businesses, we have maintained good health and safety practices and safe working environments. At the same time, we run management systems that continuously assess all risk factors and areas of danger. We are continuously working to improve the management techniques and emergency response capabilities of our employees on land and at sea.

Health promotion	<ul style="list-style-type: none">• Conducting medical check-ups• Operating in-company fitness facilities• Implementing health promotion activities : anti-smoking campaigns, promoting the use of stairs, serving healthy food
Work environment	<ul style="list-style-type: none">• Assessing harmful factors in the work environment• Investigating harmful factors in the musculoskeletal system• Managing stress levels of employee at sea
Disease prevention	<ul style="list-style-type: none">• Providing guidance on avoiding infectious diseases• Supporting vaccinations against influenza (Designate hospitals near the company for inoculations)

Benefits Packages

HMM provides employees with a benefits package that include various perks. A system of points on a benefits card can be spent like cash on an online and offline benefits shopping mall. In terms of food, employees can choose from four different menu items every day, which includes healthy options. We also conduct a food satisfaction survey at the end of every year to actively respond to employee suggestions,

helping to improve their health. We also provide an in-company childcare center to assist our employees in looking after and educating their children.

In-company childcare center



Health Support for Onshore employees

HMM runs a comprehensive annual health examination for our employees over the age of 35. (employees under the age of 35 receive regular and comprehensive health examinations

interchangeably.) We also provide fitness facilities at our business sites so that our employees can always maintain their physical health.

Health Support for seafarers

In order to protect the health of employees at sea, HMM adheres to global conventions and regulations on this matter. As outlined in the Standards of Training Certification and Watchkeeping for seafarers, and the Maritime Labor Convention (MLC), we check a person's suitability before we put them onboard ships, and then we continue to monitor their progress. Moreover, HMM tries to prevent the risk factors for health through medical check-ups and vaccinations,

and we also provide medical services on our ships. In order to manage the psychological stress that comes with isolation at sea, we also conduct regular risk assessments. We provide services such as psychological examinations, group counseling and group training to promote better mental health. We are looking to improve working conditions for our seafarers and help them manage stress so that they experience higher satisfaction in their work life.

Safety on Vessels

Safe Sailing

Accidents at sea can put human lives at risk and cause economic losses for our clients, so thorough prevention is essential. HMM understands the unique characteristics of the shipping industry so that its clients can be assured that HMM operates its ships in a safe manner. As a part of the C-TPAT(Customs-Trade Partnership Against Terrorism) and other security programs, we have maintained high safety levels in our distribution systems.

Management for Safe Sailing

Safety on ships	Industry health and safety	Maritime security	Environmental protection
Safety of cargo and assets are guaranteed in addition to safety of employee and ships	Safety and risk prevention measures reduce dangers of transporting cargo by sea	Danger of attacks identified and minimized through security systems	Measures are taken to minimize environmental pollution

To ensure voyages are both economical and safe, we strictly abide by international regulations, codes and restrictions. The awarding of ISM and ISO 45001 certifications demonstrate that we meet all the strict international requirements related to safety. We do everything we can to guarantee the safety of our ships and their operation so that our customers’ cargo safely reaches its destination. We aim to win trust through quality service.

Measures for Accident Prevention

To minimize the risk of accidents, HMM has established thorough preventative measures for a variety of scenarios, including human accidents, accidents at sea and accidents caused by equipment malfunction. We also have a management process for dealing with shipping accidents by type that allows for a swift response to a variety of situations in a proper manner.

If an accident occurs, thorough investigations are carried out on site, and countermeasures are taken to rectify any issues. The results of investigations are reported to our shipping accident data system, and the details are shared to prevent similar accidents from recurring.

Human accidents	<ul style="list-style-type: none">Conduct safety trainingEnsure safety through management of human errorsReinforce safety training before boardingPrevent accident recurrence by sharing investigation results
Accidents at sea	<ul style="list-style-type: none">Improve crew skills and knowledge of onboard accident preventionMake continuous efforts to prevent accidents during port entry and departureMinimize accidents caused by sudden weather eventsPrevent recurrence of accidents by sharing investigation results

Accidents caused by equipment malfunction	<ul style="list-style-type: none">Review technical information based on previous engine reportsTake preventative measures based on causes of equipment malfunctions, and prevent accident recurrence through information-sharingIncrease reliability of equipment by expanding availability of technical informationStrengthen on-site checks of ship maintenance to drive substantive business performanceIncrease support for upgrading old vessels
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Other accidents	<ul style="list-style-type: none">Investigate causes and establish corresponding countermeasures
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Compliance with International Maritime Transport Regulations

According to the mandatory regulations set out in the International Ship and Port Facility Security Code (ISPS Code), HMM establishes security measures for its vessels and is awarded a compliance certification upon verification of its implementation. Every port state has the right to enforce port state controls (PSC)

to see whether all vessels docked in its ports are following its standards of occupational health and safety according to IMO's requirements of SOLAS, MARPOL and MLC. In 2018, HMM had 111 ships detained by port state control, and on average 0.9 deficiencies were found.

KPI Results on Safe Sailing		
Category	LTIF	PSC Deficiency Ratio*
unit	-	Rate
2016	2.25	1.0
2017	1.59	1.0
2018	1.19	0.9
2019 H1	0.68	1.1

* Deficiencies found on PSC inspection

Both Employees on Land and at Sea Joint Emergency Response Training

To identify potential emergencies related to maritime accidents and be able to respond swiftly, we have established scenarios for a variety of accidents. All our ships carry out emergency response drills every month. And in accordance with the ISM Code, we conduct an annual joint emergency response drill between our ships and employees on land to prepare for any emergency that could endanger people, ships or the marine environment. After the drill is completed, the results are analyzed and any issues found are incorporated into the drill to enable those in charge to improve their maritime emergency response capabilities.

Response to Terror and Piracy

HMM is operating in the Indian Ocean where the presense of pirates poses considerable dangers, including kidnapping. To deal with piracy, we use a set of practices established by the International Maritime Organization (IMO) called the Best Management Practices (BMP). To avoid dangerous situations, ships arriving at ports in the Indian Ocean and the Gulf of Oman use the most recently updated safe navigation guides indicating safe water routes, and they avoid waters known to be dangerous. If our ships happen to navigate through dangerous waters, there are safety bunkers on board to which crew can escape if the ship is attacked. We are continuously developing effective ways to manage the risks associated with unexpected terror incidents and pirate attacks.

Dangerous Cargo

Policies on Handling Dangerous Goods

Dangerous cargo are explosive, flammable, toxic or corrosive items that can potentially cause harm to people, hull and others. The most important element in transporting dangerous cargo is that they cannot be transported if the transport method does not satisfy all of the international, local and regional regulations and guidelines. Of the world’s dangerous goods, 90% are chemical products. For safe transport, items are packaged following guidelines set by the International Maritime Dangerous Goods Code (IMDG Code). To protect the crew, the ship and the environment, dangerous cargo are categorized into 9 levels of isolation and separation. All our employees on land and at sea check that all relevant regulations and internal guidelines are strictly followed. Dangerous cargo or harmful chemical substances that have

shipping limits or are prohibited are listed on our website. HMM transported approximately 130,000 TEU worth of dangerous cargo in 2018, up 14% from the previous year, making up 3% of our total transported cargo. Among them, paints and other flammable liquid materials (Class 3) made up about 30%, while carbonic acid and similar corrosive substances (Class 8), batteries and other dangerous cargo (Class 9) made up 20% each. Chemicals used in fireworks are classified as the most dangerous (Class 1) in the IMDG Code, and because of their highly dangerous nature their transport is limited, only accounting for 1% of the dangerous cargo we ship. Because of the danger, HMM has stopped all transport of Class 1 items.

Organization of Management

HMM operates a separate DG center responsible for the management of dangerous cargo. Under the shipping container management team, the DG center

reviews whether orders received from the sales team can be shipped, and systematically signs off on about 2,000 orders a week.

Training on Dangerous Cargo

To prevent accidents involving dangerous cargo, HMM has managed their movement continuously by using our company systems, making sure they follow guidelines set in the IMDG Code, as well as shipping and port regulations. By developing such systems along with training, we have endeavored to reduce anomalies and mistakes and in turn reduce excess costs. If an accident involving dangerous goods does occur,

we respond in an efficient manner, in order to minimize the time and costs by working with relevant teams. Following the guidelines set by the IMDG Code, we also offer regular training to employees who handle dangerous cargo, along with ship captains and cargo managers. Through these efforts we have had no accidents involving dangerous goods since 2006.

Safe Sailing Commitment Rally

Every year, the CEO of HMM and seafarers meet on board a ship to reaffirm their determination to lead by example and they, together with crew, held a Safe Sailing Commitment Rally. In May 2019, 150 seafarers working in Busan took part in the rally and resolved to ensure safe sailing.

2019 Safe Sailing Commitment Rally



06. Social Commitment

Employee volunteers

168 employees
2018

139 employees
(As of June 2019)

HMM aims to play its part in building an even happier society. By strategically carrying out social contribution programs, we are determined to create shared value and realize a better future.

Why is it important?

There is a growing demand for companies to engage in social responsibility to improve the quality of life for all humanity. Therefore, global companies are not only sponsoring volunteerism and social contribution programs, but also contemplating on their roles in addressing social problems and creating social value.

Our approach

HMM has been engaging in social contribution activities to contribute to improving our communities and to enhancing the quality of life. Under many social contribution programs that we operate, our employees and volunteers are continually sharing with our neighbors in need. We have also been redistributing part of our profits to society as a part of our effort to practice corporate social responsibility.

KPIs

Category		2016	2017	2018	2019
Voluntary services	Services	Volunteering at a soup kitchen	Briquette delivery	Briquette delivery & Kimchi making	Volunteering at a fire site in Gangwon
	Persons	80	26	57	37

(In South Korea/As of June 2019)



Social Contributions

Social Contribution Activities

HMM employees have been taking a hands-on approach in contributing to society by actively participating in programs that support education and culture, help the underprivileged and provide disaster relief. We sponsor social contribution activities through programs such as collecting small change

from our employees' wages as donations (amounts under KRW 1,000). As of January 2019, we have raised a total of KRW 28.7 milion and used it to sponsor programs such as kimchi-making and sending out Lights of Hope. We are working to build a better future through our social contribution activities.

Major Activities

Social Responsibility	Social Volunteering	Culture/Environment	International Aid
<ul style="list-style-type: none">• Ocean Conservancy• Gangwon forest fire disaster relief	<ul style="list-style-type: none">• Children's Merchant Marine Experience School• Volunteering at a soup kitchen• Bread-baking• Helping serve lunch at Rapael's House• Kimchi-making and sharing• Furniture-making• Blood drives	<ul style="list-style-type: none">• Seoul Forest maintenance• Daehangno Waterway maintenance	<ul style="list-style-type: none">• Hat-knitting for infants• Sponsoring the seaborne shipment of relief goods• Lights of Hope

Notable Social Contributions

Forest Maintenance

Acting on its conviction that the sum of small actions by each employee can contribute to saving the Earth, HMM is increasing the awareness of its employees on climate change and drawing appropriate responses by publishing books and offering training, which helps to engender environmentally-conscious global leaders. HMM is also engaged in a company-wide environmental campaign that has helped increase interest in forests. To protect and maintain Seoul Forest, the most popular park for relaxation in the Korean capital, more than 500 employees from HMM Head Office have removed weeds, fertilized trees and planted seedlings. Our social contributions have not gone unrecognized: HMM won an award for the highest number of hours in maintenance in the Group sector

at the 'Sharing love for Forests' event hosted by the City of Seoul. Moreover, as part of HMM's active and continued social contribution program, employees at HMM Busan branch's container divisions have been cleaning gravesites and removing weeds every Friday at the UN Memorial Cemetery in Daeyeon-dong in Busan, Korea.



Purchasing Local Products at Sister Villages

Under the supervision of the Ministry of Agriculture, Food and Rural Affairs, HMM has established sister relationships with farming and fishing villages. To contribute actively and continuously to these sister relationships, our employees have prioritized making group purchases of the agro-fishery products produced in our sister villages and volunteered

as helping hands. This is supplemented by the continuous development of multipronged programs to foster mutual exchange and cooperation. By cultivating sister relationships, HMM plans to become a leading model of healthy urban-rural exchanges progressing into a relationship of cooperation and coexistence.

Children’s Merchant Marine Experience School

In August 2019, HMM invited 30 children to the Merchant Ship Experience School for Kids, where they were immersed in a variety of activities. The children visited the Hyundai Pusan New Port Terminal and the Hyundai Ocean Service's Training Center where, through a simulator, they experienced what it is like to



Volunteering at a fire site in Gangwon, Korea

More than 50 of our incumbent and first-year employees who joined the company in 2019 went to Okgye-myeon, Gangneung to help residents impacted by forest fire. Their volunteer work included clearing debris and assisting with recovery efforts in areas declared as special disaster zones. Moreover, for Goseong County, which needed space to shelter the victims, store relief supplies and set up a temporary



Volunteer Work in Fan-Making

We have been donating summer survival products to the neighbors in need. On July 19, 2019, HMM visited people suffering from the heat wave and elderly people living alone in Hongje-dong Ant Village in Seoul to deliver fans and offer our friendship. We believe that delivering hand-made fans increased our employees’ interest in the regional communities. We will continue to carry out social contribution programs to help our economically and socially marginalized neighbors.

operate a ship. They also toured the facility and saw the mega-ships and countless containers that sail the vast seas. HMM provides children interested in the sea with vivid marine experiences and encourages them to dream big.



office, HMM utilized its core expertise and made social contributions commensurate to its standing as Korea's national flagship carrier by donating a total of 30 container boxes to Goseong County and Sokcho city, Gangwon Province. HMM will continue to visit and actively assist our neighbors in need, including those in disaster areas.



Sharing Our Hearts through Social Commitment

Every year, HMM employees volunteer to assist our neighbors in need. They share their hearts with the community through their involvement in social

contribution activities such as baking bread, making kimchi and donating charcoal briquettes.

Bread-baking

With the Korean Red Cross at Jongno, Jung-gu Volunteer Center, HMM bakes bread to support children and social welfare centers.

Making and sharing kimchi

In November 2018, HMM held a kimchi-making event for our neighbors in need. We bought kimchi ingredients with the social contribution fund raised by our employees' small change collection. Our employees personally made about 300kg worth of kimchi and delivered it to 60 families in need living in Yangcheon-gu.

Donating briquettes

In November 2018, we delivered 2,200 briquettes to underprivileged people in Hongje 2-dong, Seodaemun-gu, and replaced broken briquet boilers with new ones to help vulnerable people in the community experience a warm winter.

Global Social Contribution Activities

Participation in the DALLAS HEART WALK

HMM America Headquarters (AHQ) participated in the DALLAS HEART WALK hosted by the American Heart Association for the second year in a row. The event features training programs on adopting healthy lifestyles and preventing heart diseases and strokes. HMM has raised USD 2,474 in donations for this charity.

2019 DALLAS HEART WALK



Shipping Good Neighbors’ Relief Goods to Vietnam

Using its expertise in shipping industry, HMM sponsored the Good Neighbors organization by transporting their relief supplies. In October 2018, from Incheon Port and via the Port of Ho Chi Minh, Vietnam, HMM delivered two 40-foot containers of clothes, hats, socks and shoes to locals residents in An

Giang and Hau Giang Provinces. We plan to continue to utilizing our container ships to support the shipping of international relief supplies and humanitarian aid and put our best foot forward as a socially responsible company.

Volunteering for Social Commitment in Vietnam

The Vietnam affiliate of HMM carries out social contribution activities for Social Commitment every year with a budget of around \$1,200. These include volunteering at orphanages and centers for disabled youth (Ky Quang Pagoda Orphanage, Thien Phuoc Charity Center), eradicating housing

poverty and building homes (Thanh Xuan – Hoa Bing Orphanage). We also promote voluntary participation by employees and provide support through donations of funds and goods. In this way, we are working towards the mutual prosperity of Social Commitment including Ho Chi Minh, Hanoi, Haiphong and Danang.



Date	Supported Organization	Type of Volunteer Activity
2019. 06. 14	Thien Phuoc Charity Center	Care for children with disabilities
2018. 12. 08	Labor and Social Affairs Thanh Xuan School	HIV patients, orphan care
2018. 11. 24	Thanh Xuan – Hoa Binh Orphanage	Care and rehabilitation for children with disabilities
2018. 11. 16	Thien Phuoc Charity Center	Care for children with disabilities
2018. 06. 11	Ky Quang Pagoda Orphanage	Care for children with disabilities and orphans
2018. 06. 10	Danang Center supporting agent orange victims	Job training and rehabilitation support

European Headquarters

(As of December 2019)

Corporate name	Hyundai Merchant Marine (Europe) Ltd.
Location	London, United Kingdom
Number of employees	74 (Europe HQ) 47 (Gt. Britain)
Business Information	Main focus, container shipping and container logistics. Combined Europe HQ, and HMM (Gt. Britain) organisation.

HMM
Europe,
London



Introduction

HMM Europe “Available to go the extra mile for valued customers” HMM have been operating in Europe since 1986, with the first full-container service starting in 1992. The European Headquarters has been located in London since 1996.

The Regional Headquarters (RHQ) in London oversees all HMM between Iceland and the Suez Canal, encompassing our North Europe, Central Europe, Scandinavian and Southern European organizations. Today (December 2019), HMM have 12 container services operating between Europe and Asia, owns the TTIA facility in Algeciras, Spain, and has a shareholding in Rotterdam World Gateway (RWG) in the Netherlands. Whether clients are shipping standard, refrigerated or out of gauge/oversized cargoes, HMM Europe has both the global and local

expertise and service network to get customers’ cargo to its destination on time.

As HMM invest in supporting global trade by improving and growing both our ocean transport services and European logistics networks in a sustainable and environmentally friendly way, we are also continuously enhancing our e-Business tools, whilst always maintaining a knowledgeable and friendly customer service, available to go the extra mile for valued customers.

Meanwhile we look forward to Quarter 2, 2020 when HMM will join THE Alliance and enhance our service offering further as we bring our latest 12x24,000 TEU eco friendly mega-vessels into service on the Europe – Asia trade.

Environment

Members of European Headquarters(EHQ) work together with HMM HQ colleagues on global sustainability issues and participate in both of the below initiatives.

Since 2005, HMM have been a member of Clean Cargo, a business-to-business (B2B) leadership initiative involving major brands, cargo carriers, and freight forwarders dedicated to reducing the environmental impacts of global goods transportation and promoting

responsible shipping.

Following HMM’s commitment to become net carbon neutral by 2050, HMM have also joined the ‘Getting to Zero Coalition’ in November 2019 as we strive to meet the challenge of climate change.

In November 2019, HMM EHQ was honored to win and collect the Environment Award on behalf of the global HMM family at the Global Freight Awards in London in recognition of our performance since 2009.

> Winner
Environment Award

Global Freight Awards
Lloyd’s Loading List | 2019

Focal Area

Supply Chain

Security

As part of the international supply chain, HMM as a carrier, gained Authorized Economic Operator (AEO*; Customs Simplification, Safety and Security) status in 2009, and has been regularly audited ever since. We continuously contribute to the development of security related solutions, aiming to maximise security and minimise the impact on customers’ supply chain flow. Full information is available on www.hmm21.com related to global security initiatives such as C-TPAT.

*AEO; A status granted by UK / European Customs to reliable traders who comply with designated criteria and offer a high degree of security in respect of their role in the supply chain.

Intermodal Network & First / Final Mile

As part of our overall service offering, HMM can also offer container collections or deliveries by barge, by rail and by road. Always sensitive to the environment, for trunk leg transportation, the most environmentally friendly intermodal transportation modes are used (e.g. inland waterway barge transportation, plus rail services).

For the first and final mile, trucks are always required even in intermodal transportation. Using the UK as an example, our own contract vehicles conform with the latest Euro 6 specifications, and our professional drivers are trained in the latest techniques to ensure they drive as effectively and economically as possible in order to protect the environment.

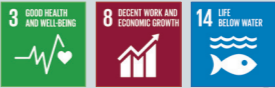
Maritime Supply Chain



Health & Safety

HMM consider occupational health and safety a fundamental material topic. In this respect, we promote personal, and environmental safety in our European operations, navigational safety* in line with SDGs 3, 8 and 14, applicable to international shipping regulations and other relevant international instruments, plus proper cargo-handling and management.

* Training/operation; Vessel / navigational items controlled by Seoul HQ and ships crew



Corporate and Social Responsibility (CSR)

HMM Europe and its employees have supported the below charities in 2019.



Local Community & Social Contribution

No	Activities
1	Save the Children (various activities such as employee Christmas Jumper Day fundraising)
2	Other charities supported locally include; British Heart Foundation, Macmillan Cancer Support, Dogs Trust, and the Royal National Lifeboat Institution (RNLI).

4.APPENDIX

- 094_ ESG Data
- 095_ Financial Data
- 096_ Performance
- 102_ GRI Standards Index
- 104_ External Evaluations, Associations and Awards
- 105_ Assurance Statement on GHG
- 106_ Third Party's Assurance Statement



ESG
(Environment,
Society,
Governance)
Data

Category	Item	Page
Sustainable Management Strategies	• Submit vision and targets for sustainable management	38-41, 44, 45, 56, 66, 72, 80, 86
	• Details of key actions and agenda for implementing sustainable management strategies	
	• Frequency and visibility of tracking processes for sustainability KPI long-term goals	
	• PR/Marketing efforts on sustainability goals, progress and performance	
	• Types of sustainability policies currently implemented by the company	
Ethics/ Strategy	• Highest decision-maker for sustainability targets, etc. of sustainable and/or environmental management programs	36, 37
	• Code of ethics and compliance-related policies and scope of application	
	• Report on greenhouse gas emissions, quarterly report on carbon emissions	
	• Measures for the ship-breaking process to ensure worker health and safety, minimize environmental impact	
	• Amount invested in environmental innovation in the past 18 months, and amount to be invested in the next 12, 24, 36 months	
Environment/ Strategy	• Participate in Ship Recycling Transparency Initiative (SRTI) or develop internal measures for ship recycling	44-55, 68, 101, 105
	• Climate change targets	
	• Compliance plans for IMO2020 sulfur oxide regulations	
	• Explanation of environmental management system and scope of application	
	• Activities performed with universities and research institutes, etc. to respond to environmental issues other than biofuels	
Safety/ Quality	• Opinion on fuel alternatives to HFO, MDO, MFO, etc. and alternative fuels for the future maritime industry	80-85
	• Establishment of safety measures and targets	
	• Employee understanding of safety regulations and guidelines	
	• Activities to achieve safety-related KPIs and targets	
	• Model for shipper participation in sustainable management	
Employee Participation/ Training	• Development and execution of programs for sustainability-related employee training, raising participation rates and opinion-gathering	40, 41, 72-76, 86-89, 99
	• Community commitment on sustainability issues	
	• Employee engagement in environment improvement activities	
	• Issues related to social responsibility policy	
	• Plans for communication with and contributions to communities, government and global organizations	
Social Commitment	• Measures to encourage employees to dedicate expertise, time and capital to local community participation	40, 41, 86-89, 100
	• Methods of measuring impact on local communities (ex. volunteering hours, contribution amounts, goods)	
	• Third-party verification of sustainability data	
	• Third-party verification of emissions from company services	
	• Business-wide carbon emissions estimates and relevant methods	
Verification	• Performance results for KCGS	19, 104, 105
	• External Evaluation	
	• Business-wide carbon emissions estimates and relevant methods	
	• Performance results for KCGS	
	• External Evaluation	

Financial
Data

Consolidated Statements of Comprehensive Income (As of June 2019)

Subject	Unit	2016	2017	2018	2019
Revenue(Sales)	KRW 1 mil.	4,584,810	5,028,016	5,222,124	2,712,901
Cost of sales	KRW 1 mil.	5,101,550	5,129,550	5,498,944	2,778,345
Gross profit	KRW 1 mil.	(516,740)	(101,534)	(276,820)	(65,444)
Selling general administrative expenses	KRW 1 mil.	316,651	305,246	281,836	153,100
Operating profit(loss)	KRW 1 mil.	(833,391)	(406,780)	(558,656)	(218,544)
Other income	KRW 1 mil.	106,016	165,417	136,625	44,160
Finance income	KRW 1 mil.	841,322	109,593	146,863	64,948
Finance cost	KRW 1 mil.	350,527	340,338	210,554	210,501
Income of associates and jointly controlled entities	KRW 1 mil.	539,509	(104,045)	8,587	(143)
Profit(loss) before tax	KRW 1 mil.	(415,454)	(1,187,000)	(778,892)	(377,570)
Income tax expense	KRW 1 mil.	15,707	3,740	11,671	1,612
Profit(loss)	KRW 1 mil.	(458,201)	(1,190,740)	(790,563)	(379,182)
Other comprehensive income	KRW 1 mil.	72,376	(107,660)	(17,229)	4,129
Total comprehensive income	KRW 1 mil.	(385,825)	(1,298,400)	(807,792)	(375,053)

Consolidated Financial Statement (As of June 2019)

Subject	Unit	2016	2017	2018	2019
Current assets	KRW 1 mil.	1,289,991	1,386,678	1,747,647	1,467,400
Non-current assets	KRW 1 mil.	3,108,107	2,215,740	2,373,793	4,879,819
Total assets	KRW 1 mil.	4,398,098	3,602,418	4,121,440	6,347,219
Current liabilities	KRW 1 mil.	810,295	680,218	1,105,603	1,900,029
Non-current liabilities	KRW 1 mil.	2,636,481	2,025,280	1,976,166	3,604,719
Equity attributable to owners of the parent entity	KRW 1 mil.	947,826	894,809	1,038,495	841,197
Current capital	KRW 1 mil.	898,599	1,568,318	1,578,318	1,592,050
Non-controlling interests	KRW 1 mil.	3,496	2,111	1,176	1,274
Total equity	KRW 1 mil.	951,322	896,920	1,039,671	842,471

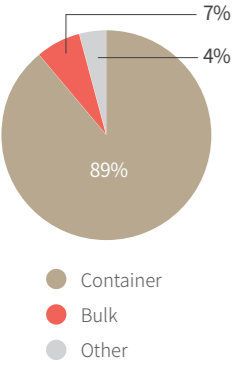
Consolidated Statements of Cash Flows (As of June 2019)

Subject	Unit	2016	2017	2018	2019
Cash flows from operating activities	KRW 1 mil.	(638,958)	(275,381)	(416,902)	144,449
Cash flows from investing activities	KRW 1 mil.	1,473,908	(227,965)	(672,787)	(37,331)
Cash flows from financing activities	KRW 1 mil.	(502,954)	661,544	987,385	(79,478)
Net increase (decrease) in cash and cash equivalents	KRW 1 mil.	331,996	158,198	(102,304)	27,640
Cash and cash equivalents, beginning of the year	KRW 1 mil.	203,569	533,674	676,365	562,901
the effect of exchange rate changes on cash and cash equivalents	KRW 1 mil.	(1,891)	(15,507)	(11,160)	(5,594)
Cash and cash equivalents, end of the year	KRW 1 mil.	533,674	676,365	562,901	584,947

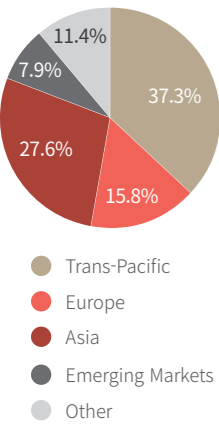
Performance

Economic
Performance

2019 by Business Sector (As of June 2019)



2019 by Region (As of June 2019)



Sales

Sales by Business Sector (As of June 2019)

Category	Unit	2016	2017	2018	2019
Container	KRW 1 mil.	3,733,938	4,406,545	4,613,321	2,407,207
Bulk	KRW 1 mil.	584,262	491,382	420,883	203,445
Other	KRW 1 mil.	266,610	130,089	187,920	102,249
Total	KRW 1 mil.	4,584,810	5,028,016	5,222,124	2,712,901

Sales by Region (As of June 2019)

Category	Unit	2016	2017	2018	2019
Trans-Pacific	KRW 1 mil.	2,060,490	2,114,183	2,181,337	1,011,574
Europe	KRW 1 mil.	930,745	910,925	833,144	428,761
Asia	KRW 1 mil.	696,475	1,112,569	1,300,667	749,487
Emerging Markets	KRW 1 mil.	262,007	288,757	284,868	212,896
Other	KRW 1 mil.	635,093	601,582	622,108	310,183
Total	KRW 1 mil.	4,584,810	5,028,016	5,222,124	2,712,901

Organization (As of June 2019)

Category		Unit	2016	2017	2018	2019
Domestic business sites	Companies	No.	1	1	1	1
	Branches	No.	6	6	5	5
	Others	No.	3	5	5	4
Overseas business sites	Companies	No.	25	26	27	27
	Branches	No.	68	66	64	63
	Others	No.	4	5	5	5
Total		No.	107	109	107	105

Performance Distributions (As of June 2019)

Category		Unit	2016	2017	2018	2019
Corporate tax		KRW 1 mil.	15,707	3,740	11,671	1,612
Social Commitment	Social contributions	KRW 1 mil.	2	8	17	13
Business Partners	Purchasing ¹⁾	KRW 1 mil.	157,938	242,484	320,854	160,530
Employee compensation	Onshore (Men)	KRW 1 mil.	46,276	38,227	41,391	19,661
	Onshore (Women)	KRW 1 mil.	12,143	11,153	12,095	5,901
	Offshore (Men)	KRW 1 mil.	42,720	34,853	35,186	16,457
	Offshore (Women)	KRW 1 mil.	640	418	287	155
	Total	KRW 1 mil.	101,779	84,651	88,959	42,173
Total		KRW1 mil.	275,426	330,883	421,501	204,328

1) Purchasing: Includes fuel and lubricants.

Governance (As of June 2019)

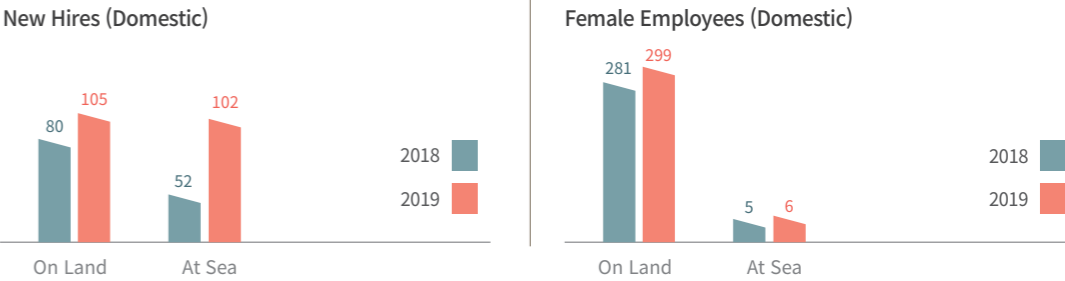
Category		Unit	2016	2017	2018	2019
Board of Directors Operation	No. of regular Board meetings	Cases	4	4	4	2
	No. of ad-hoc Board meetings	Cases	26	14	11	5
	Total no. of Board meetings	Cases	30	18	15	7
	No. of agenda discussed	Cases	50	27	24	15
	Attendance rate of executive directors	%	98	94	79	97
	Attendance rate of independent directors	%	62	99	99	100
	No. of executive directors	Persons	3	2	3	2
Board compensation	Total compensation of executive directors	KRW 1 mil.	1,865	670	750	705
	No. of independent directors	Persons	4	4	4	3
	Total compensation of independent directors	KRW 1 mil.	191	173	168	74

Performance

Social
Performance

Directors and Employees

* New hires and employee status include employees of overseas corporations and third party agencies. (As of June 2019)



New Hires (As of June 2019)

Category			Unit	2016	2017	2018	2019
Domestic	On Land	Men	Persons	33	80	56	75
		Women	Persons	31	54	24	30
		Total	Persons	64	134	80	105
	At Sea	Men	Persons	43	36	51	98
		Women	Persons	-	1	1	4
		Total	Persons	43	37	52	102
Domestic total			Persons	107	171	132	207
Overseas	Overseas Corporations	Men	Persons	141	175	224	128
		Women	Persons	185	191	236	127
Overseas total			Persons	326	366	460	255
Total				433	537	592	462

*All expenses incurred in the recruitment process are paid by HMM.

Employee status (As of June 2019)

Category			Unit	2016	2017	2018	2019	
Domestic	On Land	Men	Persons	525	575	604	646	
			%	68	67	69	68	
		Women	Persons	243	279	281	299	
			%	32	33	31	32	
		Total	Persons	768	854	885	945	
		At Sea	Men	Persons	388	393	423	429
	%			98	99	99	99	
	Women		Persons	7	4	5	6	
			%	2	1	1	1	
	Total		Persons	395	397	428	435	
	Domestic total			Persons	1,163	1,251	1,313	1,380
	Overseas	Overseas Corporations	Men	Persons	933	988	1,032	1,068
				%	47%	47%	48%	48%
Women			Persons	1,053	1,116	1,123	1,142	
			%	53%	53%	52%	52%	
Overseas total			Persons	1,986	2,104	2,155	2,210	
Total				3,149	3,355	3,468	3,590	

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Turnover Rate (As of June 2019)

Category		Unit	2016	2017	2018	2019
On Land	No. of employees	Persons	77	44	50	38
	Turnover Rate	%	8.4	4.3	5.0	3.8
At Sea	No. of employees	Persons	42	57	46	24
	Turnover Rate	%	11	15	11	6

Respect for Diversity (As of June 2019)

Category		Unit	2016	2017	2018	2019
On Land	Disabled	Persons	5	5	5	5
	Veterans	Persons	18	17	19	22
At Sea	Foreigners	Persons	337	337	347	358
	Veterans	Persons	1	1	1	1

Maternity Protection Program (As of June 2019)

Category		Unit	2016	2017	2018	2019
On Land	Using childcare leave	Persons	24	25	23	8
	Returning from childcare leave	Persons	22	21	21	8
	Retained for 12 months after return from childcare leave	%	91	95	100	-
At Sea	Using childcare leave	Persons	1	1	6	5
	Returning from childcare leave	Persons	1	1	6	5
	Retained for 12 months after return from childcare leave	%	100	100	100	100

※ No onshore employees had been employed longer than 1 year as of June 2019.

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Human Rights Education (As of June 2019)

Category		Unit	2016	2017	2018	2019
On Land	Education on sexual harassment	Hours	648	719	895	-
	Education on protection of work rights	Hours	-	-	757	811
At Sea	Education on sexual harassment	Hours	570	542	615	326
	Education on protection of work rights	Hours	-	-	216	190

Labor Union (As of June 2019)

Category		Unit	2016	2017	2018	2019
On Land	Union membership	%	-	26.0	40.0	44.9
	Communication between employer and employee	Cases	4	4	4	2
At Sea	Union membership	%	100	100	100	100
	Communication between employer and employee	Cases	3	3	3	2

*Labor Union was founded in September 2016.

Counselling (As of June 2019)

Category		Unit	2016	2017	2018	2019
On Land	No. of cases received	Cases	7	3	6	-
	Response rate	%	100	100	100	
At Sea	No. of cases received	Cases	9	3	6	-
	Response rate	%	100	100	100	-

Employee Talent Development (As of June 2019)

Category		Unit	2016	2017	2018	2019
On Land	Total training	Hours	30,941	46,574	49,286	24,515
	Training per person	Hours	49	62	63	29
At Sea	Total training	Hours	21,389	20,983	21,832	19,526
	Training per person	Hours	54	53	51	45

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Workplace Health & Safety(As of June 2019)

Category		Unit	2016	2017	2018	2019
At Sea	Working hours	Hours	-	7,527,168	7,547,088	2,934,384
	No. of injuries	Cases	-	12	9	2
	LTIF	%	-	1.59	1.19	0.68

*No. of injuries for employee on land are 0.

Volunteer Activities(As of June 2019)

Category		Unit	2016	2017	2018	2019
Programs		No.	5	3	7	7
Participants		Persons	91	31	168	139

Win-Win Growth(As of June 2019)

Category		Unit	2016	2017	2018	2019
Total no. of partners		Companies	162	200	205	153
No. of main partners		Companies	74	119	85	74
Total purchasing from partners		KRW 1 mil.	157,938	242,484	320,854	160,530
Purchasing from main partners		KRW 1 mil.	149,969	232,790	311,725	153,899

Performance

Environmental
Performance

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Energy Use(As of June 2019)

Category	Sub-category		Unit	2016	2017	2018	2019
Energy Use	Ships	Heavy fuel Oil	TJ	22,515	22,527	23,318	12,138
		Marine Diesel Oil	TJ	242	225	354	266
		Total	TJ	22,757	22,752	23,672	12,404
	Onshore	Diesel	TJ	204.72	57.52	269.35	172.27
		Electricity	TJ	114.65	52.00	186.16	201.91
		Gasoline	TJ	34.30	1.07	9.25	3.93
		LNG	TJ	4.25	4.53	4.88	6.22
		Total	TJ	357.92	115.13	469.64	384.33

Fresh water & Waste oil(As of June 2019)

Category	Unit	2016	2017	2018	2019
Use of Fresh water	Ton	19,262	20,262	19,325	11,946
Waste oil produced	m ³	10,610	10,067	10,669	5,679

※ No major spillage occurred.

Garbage(As of June 2019)

Category	Unit	2016	2017	2018	2019
Amount of garbage generated	Ton	1,534	1,353	1,462	845

Eco-friendly Fuel & Lubricant Purchasing(As of June 2019)

Category	Unit	2016	2017	2018	2019
Total fuel & lubricant purchased	KRW 1 bil.	148	231	309	153
Eco-friendly fuel & lubricant purchasing	KRW 1 bil.	11	18	35	24
Eco-friendly purchasing ratio	%	7	8	11	15

Environmental Protection Spending & Investment(As of June 2019)

Category	Unit	2016	2017	2018	2019
Investment cost	KRW 1 mil.	376	507	549	348

GHG Emissions(As of June 2019)

Category	Category	Unit	2016	2017	2018	2019
Scope1	Fixed combustion	tCO ₂ eq	18,189	10,077	21,312	13,654
	Portable combustion	tCO ₂ eq	1,828,157	1,827,613	1,902,551	997,645
Scope2	Electricity	tCO ₂ eq	11,997	8,715	25,829	25,212
Scope3	Business trip	tCO ₂ eq	710	-	726	352
	Commute	tCO ₂ eq	-	-	985	468
	Onshore asset of lease	tCO ₂ eq	115	-	107	55

GRI Standards Index

Universal Standards (GRI 100)

Category	Index	Content	Page	Comment
Organizational Profile	102-1	Name of the organization	14	
	102-2	Activities, brands, products, and services	14	
	102-3	Location of headquarters	14	
	102-4	Location of operations	34-35	
	102-5	Ownership and legal form	14	
	102-6	Markets served	14, 34-35	
	102-7	Scale of the organization	15	
	102-8	Information on employees and other workers	14, 97	
	102-9	Supply chain	67	
	102-12	External initiatives	39	SDGs
	102-13	Membership of associations	104	
Strategy	102-14	Statement from senior decision-maker	5	
	102-15	Key impacts, risks, and opportunities	20	
Ethics and Integrity	102-16	Values, principles, standards, and norms of behavior	36	
	102-17	Mechanisms for advice and concerns about ethics	77, 99	
Governance	102-18	Governance structure	30-31	
	102-20	Executive-level responsibility for economic, environmental, and social topics	30-33	
	102-21	Consulting stakeholders on economic, environmental, and social topics	40	
	102-22	Composition of the highest governance body and its committees	30-33	
	102-30	Effectiveness of risk management processes	32-33	
	102-31	Review of economic, environmental, and social topics	30-33, 45	
	102-34	Nature and total number of critical concerns	41	
	102-40	List of stakeholder groups	40	
Stakeholder Engagement	102-41	Collective bargaining agreements	77	
	102-42	Identifying and selecting stakeholders	40	
	102-43	Approach to stakeholder engagement	40	
	102-44	Key topics and concerns raised	40-41	
Reporting Practice	102-45	Entities included in the consolidated financial statements	14	
	102-46	Defining report content and topic Boundaries	41	
	102-47	List of material topics	41	
	102-48	Restatements of information	2	
	102-49	Changes in reporting	-	First report issued in 2019
	102-50	Reporting period	2	
	102-51	Date of most recent report	2	
	102-52	Reporting cycle	2	
	102-53	Contact point for questions regarding the report	2	
	102-54	Claims of reporting in accordance with the GRI Standards	2	
Management Approach	102-55	GRI content index	2	
	102-56	External assurance	2, 105-107	
	103-1	Explanation of the material topic and its Boundary	41	
	103-2	The management approach and its components	44, 56, 66, 72, 80, 86	
	103-3	Evaluation of the management approach	44, 56, 66, 72, 80, 86	

Topic specific Standards

Economic Performance (GRI 200)

Category	Index	Content	Page	Comment	
				Major	General
Economic Performance	201-1	Direct economic value generated and distributed	20, 96	O	
	201-2	Financial implications and other risks and opportunities due to climate change	44-46	O	
Indirect Economic Impacts	203-1	Infrastructure investments and services supported	60-61	O	
	203-2	Significant indirect economic impacts	56-60	O	
Anti-corruption	205-3	Confirmed incidents of corruption and actions taken*	-	O	
*No significant incidents of corruption					

Environmental Performance (GRI 300)

Category	Index	Content	Page	Comment*	
				Major	General
Energy	302-1	Energy consumption within the organization	101		O
	302-4	Reduction of energy consumption	101		O
	302-5	Reductions in energy requirements of products and services	101		O
Water	303-4	Water discharge	101		O
Emissions	305-1	Direct (Scope 1) GHG emissions	101	O	
	305-2	Energy indirect (Scope 2) GHG emissions	101	O	
	305-3	Other indirect (Scope 3) GHG emissions	101		O
	305-5	Reduction of GHG emissions	44, 47, 101	O	
	305-6	Emissions of ozone-depleting substances (ODS)	54	O	
	305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	52-53	O	
Effluents and Waste	306-3	Significant spills	101	O	
Supplier Environmental Assessment	307-1	Non-compliance with environmental laws and regulations**	-	O	
* In addition to the core issues selected through the materiality test, general issues are also reported. ** No significant violations of environmental laws					

Social Performance (GRI 400)

Category	Index	Content	Page	Comment	
				Major	General
Employment	401-1	New employee hires and employee turnover	97		O
	401-3	Parental leave	98, 78		O
Occupational Health and Safety	403-1	Occupational health and safety management system	81-82	O	
	403-5	Worker training on occupational health and safety	81-82	O	
	403-6	Promotion of worker health	83	O	
	403-9	Work-related injuries	80, 100	O	
Training	404-1	Average hours of training per year per employee	99	O	
	404-2	Programs for upgrading employee skills and transition assistance programs	72-75	O	
Diversity and Equal Opportunity	405-1	Diversity of governance bodies and employees	76		O
Human Rights Assessment	412-2	Employee training on human rights policies or procedures	76, 99		O

External Evaluations, Associations and Awards

External Evaluations

Category		2019 Result
Lloyd's Loading List Global Freight Awards	Environmental Awards	Winner
Korea Corporate Governance Service(KCGS)	Environmental	B+
	Social	B+
	Governance	B+
	Total	B+

Associations

Year Joined	Association	Position	Activities
Korean Associations			
2010	KCCI Logistics Committee	Vice Chair	- Committee under the Korea Chamber of Commerce & Industry
2000	Korean Register	Director	- Classification society
1994	Korea International Trade Association	Member	- Association related to the Korean trade ministry and trade information
1980	Korea Enterprise Federation	Director	- Labor-management relations consultative group
1976	KCCI Seoul Chamber of Commerce & Industry	Member	- Automatic membership based on annual revenue (at least KRW 17 bil.)
1976	Korean Shipowners' Association	Vice Chair	- Domestic shipping company consultative group
Overseas Associations			
2010	WLDL	Member	- Designated decision-making body after dissolution of European alliance (ELAA)
2003	Lloyd's Register (Korean Committee)	Member	- Korean member of UK classification society
2000	DNV GL (Korean Committee)	Member	- Korean member of Norwegian classification society
2000	World Shipping Council (WSC)	Director	- Interest group representing container shipping companies
1997	BIMCO	Member	- Largest consultative group for all container/bulk shipping companies
1996	American Bureau of Shipping (Korea National Committee)	Member	- Korean member of U.S. classification society
1994	International Council of Containership Operators (The Box Club)	Member	- Representative group of global container shipping companies
1993	Asia Shipowners' Association (ASA)	Member	- Alliance of shipowners in Asian countries
1993	Shipping Policy Committee (SPC)	Vice Chairman	- Asian Shipowners' Association subcommittee

Awards

Date	Award	Awarding Organization
2019.11	Global Freight Awards 2019 / Environmental Award : Winner	Lloyd's Loading List
2019.8	Top award for use of public data on oceans and fisheries	Ministry of Oceans and Fisheries
2019.6	No. 1 in schedule reliability	SeaIntel
2019.6	2018 "Recognized Performance" Award	U.S. AgTC*
2019.1	Award Eco-Friendly Vendor	Awarding Organization Auckland Port, U.S.
2017.12	No. 1 in schedule reliability	SeaIntel
2017.1	No. 1 in schedule reliability	SeaIntel
2014.1	Excellence in climate change response (4th consecutive year)	CDP Korea Committee
2014.5	Outstanding Partner Award	Target
2013.1	Carbon Management Leader Award	CDP Korea Committee
2013.6	Summit Award for Economic Contribution	City of Tacoma, U.S.
2012.7	Provider of the Year (3rd consecutive year)	Target
2012.6	International Supply Chain Provider	JC Penney
2012.5	No. 17 Gold Tower Order of Industrial Service Merit on Sea Day	Ministry of Oceans and Fisheries
2012.5	Best Partner Carrier(9th consecutive year)	SONY
2011.6	World No. 3 in environmental practices	SeaIntel
2010.1	Performance Partners Awards of Excellence	World Trade 100

* AgTC: Agriculture Transportation Coalition

Assurance Statement on GHG



GHG Verification Certificate

Certification No . FTR-GHGI-001-2019

Hyundai Merchant Marine Co., LTD.

Hyundai Group Bldg. Yeonji-dong, Jongno-gu, Seoul, Korea

Korean Register(KR) hereby certifies that the GHG inventory of the above organization has been verified and found to be in accordance with the requirements of the GHG Inventory Standards detailed below.

ISO 14064-1 : 2006 / KS Q ISO 14064-1 : 2006

ISO 14064-3 : 2006 / KS Q ISO 14064-3 : 2006

The GHG Protocol of WBCSD & WRI : 2004

KR confirms that the amount of GHG emissions of the above organization are

: Period 1st January to 31st December 2018 4,731,155,17 tCO₂-eq

Korean register 36, Myeongji ocean city 9-ro,

Gangseo-gu, Busan, Republic of Korea (46762)

KOREAN REGISTER



Managing Director of R&D Center

Third
Party’s
Assurance
Statement

To the Readers of HMM Sustainability Report 2019 :

Foreword

Korea Management Registrar Inc. (hereinafter “KMR”) has been requested by HYUNDAI Merchant Marine CO.,LTD. (hereinafter “HMM”) to verify the contents of its Sustainability Report 2019 (hereinafter “the Report”). HMM is responsible for the collection and presentation of information included in the Report. KMR’s responsibility is to carry out assurance engagement on specific data and information in the assurance scope stipulated below.

Scope and standard

HMM describes its efforts and achievements of the corporate social responsibility activities in the Report. KMR performed a type2, moderate level of assurance using AA1000AS (2008) and SRV1000 from KMR Global Sustainability Committee as assurance standards. KMR’s assurance team(hereinafter “the team”) evaluated the adherence to Principles of Inclusivity, Materiality and Responsiveness, and the reliability of the selected GRI Standards indices as below, where professional judgment of the team was exercised as materiality criteria.

The team checked whether the Report has been prepared in accordance with the ‘Core Option’ of GRI Standards which covers the followings.

- GRI Standards Reporting Principles
- Universal Standards
- Topic Specific Standards
 - Management approach of Topic Specific Standards
 - Economic Performance: 201-1, 201-2
 - Indirect Economic Impacts: 203-1, 203-2
 - Anti-Corruption: 205-3
 - Energy: 302-1, 302-4, 302-5
 - Water: 303-4
 - Emissions: 305-1, 305-2, 305-3, 305-5, 305-6, 305-7
 - Effluents and Waste: 306-3
 - Environmental Compliance: 307-1
 - Employment: 401-1, 401-3
 - Occupational Health and Safety: 403-1, 403-5, 403-6, 403-9
 - Training: 404-1, 404-2
 - Diversity and Equal Opportunity: 405-1
 - Human Rights Assessment: 412-2
 - Socioeconomic Compliance: 419-1

This Report excludes data and information of joint corporates, contractors etc. which is outside of the organization, i.e. HMM, among its reporting boundaries.

Our approach

In order to verify the contents of the Report within an agreed scope of assurance in accordance with the assurance standard, the team has carried out an assurance engagement as follows:

- Reviewed overall report
- Reviewed materiality test process and methodology
- Reviewed sustainability management strategies and targets
- Reviewed stakeholder engagement activities
- Interviewed people in charge of preparing the Report

Our conclusion

Based on the results we have obtained from material reviews and interviews, we had several discussions with HMM on the revision of the Report. We reviewed the Report’s final version in order to confirm that our recommendations for improvement and our revisions have been reflected. When reviewing the results of the assurance, the assurance team could not find any inappropriate contents in the Report to the compliance with the principles stipulated below. Nothing has come to our attention that causes us to believe that the data included in the verification scope are not presented appropriately.

▪ Inclusivity

Inclusivity is the participation of stakeholders in developing and achieving an accountable and strategic response to sustainability

- HMM is developing and maintaining stakeholder communication channels in various forms and levels in order to make a commitment to be responsible for the stakeholders. The assurance team could not find any critical stakeholder HMM left out during this procedure.

▪ Materiality

Materiality is determining the relevance and significance of an issue to an organization and its stakeholders. A material issue is an issue that will influence the decisions, actions, and performance of an organization or its stakeholders.

- HMM is determining the materiality of issues found through stakeholder communication channels through its own materiality evaluation process, and the assurance team could not find any critical issues left out in this process.

▪ Responsiveness

Responsiveness is an organization’s response to stakeholder issues that affect its sustainability performance and is realized through decisions, actions, and performance, as well as communication with stakeholders.

- The assurance team could not find any evidence that HMM’s counter measures to critical stakeholder issues were inappropriately recorded in the Report.

We could not find any evidence the Report was not prepared in accordance with the ‘Core Option’ of GRI standards.

Recommendation for improvement

We hope the Report is actively used as a communication tool with stakeholders and we recommend the following for continuous improvements.

- HMM identified key topics based on the due materiality assessment process and faithfully included them in the report, which is inspiring. In the future, the company is advised to enhance detailed strategic systems of each area and develop and improve performance indicators for individual strategic initiatives in order to implement sustainable management in harmony with society.

Our independence

With the exception of providing third party assurance services, KMR is not involved in any other HMM’s business operations that are aimed at making profit in order to avoid any conflicts of interest and to maintain independence.

October, 24th, 2019