COSCO SHIPPING Holdings Co., Ltd. Sustainability Report 2019

-0500



Contents











Ô١

S

Eı

erview	
About the report Statement of Chairman Outline of report disclosure About COSCO SHIPPING Holdings	2 3 7 11
stainability governance	
Governance mechanism Stakeholders and material topics	 17 18
onomic topics	
Economic performance Dual-brand effects and synergies Indirect economic impacts Supplier Management Serving the customers Safe production Compliance Evironmental topics Energy conservation and emission reduction Effluent and waste treatment Environmental protection DCIAL TOPICS	23 25 26 31 33 35 37 45 49 49
• Employment and Diversity	 53
Employee training and growth	54
Ensuring employees' occupational health and safety	 56
Protecting employee rights	57
Employee care and assistance	58
Contribution to public welfare	60
pendix	
Index table for ESG	65
Index table for GRI	67
Statistical Table	73
Report Scope	87
Independent assurance statement	89

Time frame: January 1, 2019 to December 31, 2019

Organization Name: COSCO SHIPPING Holdings Co., Ltd.

Release cycle: The Social Responsibility Report is released annually. The previous version was issued in March 2019, and the issue date of this Report is March 2020.

Guidance: This report is in line with the Environmental, Social and Governance Reporting Guide of the Hong Kong Stock Exchange (released in July 2015) and is based on the Global Reporting Initiative (GRI) Sustainability Reporting Standards 2016 and prepared by referencing the Core option.

Scope: The entity disclosed in this report is carefully selected based on the selection criteria of "whether there is actual business operation" and the overall impact of the entity on COSCO's environment, society and governance. The production units / companies with no actual business operation or with little or no impact despite actual operation are filtered out. According to our selection process, the report covers three first-tier subsidiaries (COSCO SHIPPING Lines, COSCO SHIPPING Ports and Orient Overseas (International) Limited) as well as their affiliates in the financial statements. Should there be any exceptions, there will be description of specific statistical methods and data dimensions in the corresponding chapters. For the list of specific companies, please refer to the report scope in Appendix part.

Reporting principles: the Report is prepared based on the following basic principles:

Materiality - The Company believes ESG exerts significant influence on the investors and stakeholders, thus the Report should disclose any important and significant ESG matter.

Response: We disclosed the process of identifying important environmental, social and governance factors in the report, including the identification of stakeholders, and the use of the importance matrix for the assessment of material issues. Based on the communication mechanism with stakeholders and the principle of materiality, we identified important ESG-related factors, focused on them, and disclosed corresponding measures in the report.

Quantitative – KPIs need to be measurable so that the effectiveness of ESG policies and management systems can be evaluated and validated. Quantitative information should be accompanied by a narrative explaining its purpose and impacts with comparative data where applicable.

Response: We disclosed the environmental and social data in accordance with the requirements of the THE ENVIRONMENTAL, SO-CIAL AND GOVERNANCE REPORTING GUIDE and referred to the GRI2016 standard, then disclosed the calculation methods and assumptions of the data in the report.

Balance - The Report should provide an unbiased picture of the Company's performance on ESG, and should avoid any selections, omissions, or misleading presentation that may inappropriately influence the readers on their decision making.

Response: We promise that the information disclosed in this report is true, objective, and not exaggerated or fictitious, which is to maximize the information that can help investors make fair and effective decisions.

Consistency - The Company should use consistent methodologies to allow for meaningful comparisons of ESG data over time. The Company should disclose in the ESG report any changes to the methods used or any other relevant factors affecting a meaningful comparison.

Response: We used the same disclosure statistics method as in 2018 and compared the data in the report.

Definitions: For the sake of readability, in this report, COSCO SHIPPING Holdings Co., Ltd. is referred to as "COSCO SHIPPING Holdings", the "Company" or "We", China COSCO SHIPPING Corporation Limited is referred to as "COSCO SHIPPING Group" or the "Group", COSCO SHIPPING Lines Co., Ltd. is referred to as "COSCO SHIPPING Lines" or "CSL", "COSCO SHIPPING Ports" Limited is referred to as "COSCO SHIPPING Ports" or "CSP", Orient Overseas (International) Limited is referred to as "OOIL", "Orient Overseas Container Line Ltd." is referred to as "OOCL".

Data: The data employed in this Report are from open government outlets and internal statistical reports of COSCO SHIPPING Holdings, as well as third-party investigations, interviews and other sources. External assurance: We invited DNV GL as the assurer to ensure the accuracy, balance, comparability, timeliness, clarity, and reliability of the Report.

Access: Chinese and English digital versions of the Report are available on www.hkex.com.hk or http://hold.coscoshipping.com Contact information: If you have any question about the Report, please email huangy@coscon.com or call +86-021-35124888-211550.

Special note: The economic data involved in this report is consistent with the data published in 2018 COSCO SHIPPING Holdings' Annual Report, which means the data here is based on COSCO SHIPPING Lines, COSCO SHIPPING Ports and OOIL. Other environmental data and social data involved in the report will be listed separately by companies. If for any reason the information is restated, we will indicate it as a footnote in the report.

During the reporting period, the company's operating position, business form, ownership and organizational structure did not change significantly.

About the Report

Statement of Chairman



Dear shareholders,

First of all, on behalf of the Board and the management of COSCO SHIP-PING Holdings, I would like to express my sincere gratitude to all our shareholders and customers around the world for their continuous attention and support to COSCO SHIPPING Holdings. Meanwhile, I would also like to thank all of our staff, onshore and offshore, for their diligence, tenaciousness and joint efforts in helping COSCO SHIPPING Holdings achieve very good results over the past year.

In 2019, the global economic and trade situation faced severe challenges. Economic growth had hit a new low since the financial crisis, and the demand growth in container shipping had slowed year-on-year. However, in the face of challenges, COSCO SHIP-PING Holdings adhered to the guiding principle of "outperform the market, drive innovation, and lead the era" and the Ocean & Plus strategy, to deeply facilitate various work including globalization, quality, digitalization and end-to-end business development Through the collaboration of the dualbrand fleets and the cooperation between port and shipping operations, the Company continued to improve quality and efficiency, and realized synergies in various aspects, which significantly improved the Company's operating performance.

Adhering to the globalization strategy, actively dealing with the impact of China-U.S. trade friction and promoting the risk resistance capability

In 2019, COSCO SHIPPING Holdings adhered to the globalization strategy and continued to increase its shipping capacity in emerging markets, non-China markets and regional markets, on the basis of maintaining the competitive advantages of the major east-west services, which was in line with the changes in the global economic and trade pattern. The optimization and adjustment of its capacity allocation structure and cargo structure effectively helped to deal with the uncertainty brought about by the China-U.S. trade friction.

In respect of the terminal business, as the world's leading ports operator, COSCO SHIPPING Ports, a subsidiary of the Company, actively optimized the global terminal network and improved the operation quality and service level of terminal companies in which it has controlling stakes. COSCO SHIPPING Ports Abu Dhabi Terminal, as the company's core terminal for independent investment and construction and independent operation and management in the Middle East, successfully entered into formal commercial operations and aims to become a major container gateway port and important hub in the Middle East. In 2019, COSCO SHIPPING Ports successfully acquired 60% equity interest in Chancay Terminal in Peru, which is the first terminal project in South America controlled by the company, as well as a milestone for the company to build a global port network.

Returning to the service essence of shipping and practicing the customer-oriented concept to enhance market competitiveness

In 2019, the Company focused on solving the pain points of customers to constantly improve service quality and achieve a new leap in quality development, which effectively enhanced market competitiveness.

COSCO SHIPPING Lines launched "Quality Wins 2019", an activity in customer service, which focused on customers' pain points of service

reflected in the customer satisfaction survey, studied and found the cause one by one, and implemented the improvement plan. At the same time, with the help of OOCL's leading IT system, COSCO SHIPPING Lines improved its booking platform functions, transshipment operations and schedule management, and therefore greatly improved its service reliability.

Realizing better-than-expected synergies with the implementation of the dual-brand strategy

In 2019, the Company took the advantages of the scale and synergies after the acquisition of OOIL, and further tapped potentials in route network optimization, container management, supplier procurement, and IT system construction. The dual-brand strategy achieved significant results, and the total synergies realized in 2019 exceeded the target set at the beginning of the year.

During the year, COSCO SHIPPING Lines and OOCL strengthened the overall arrangement of shipping capacity to optimize vessel types deployed for each route. Through the exchange of several vessels of different types by chartering, the fleet resources were fully utilized. The Company achieved dual-brand complementary advantages in route planning. The intra-regional routes in Europe are managed and operated by COSCO SHIPPING Lines, and the Transatlantic routes are managed and operated by OOCL. The OOCL brand has entered the African and South American markets, covering 10 Far East-Africa routes and 5 Far East-South America routes. All feeder services and shipping agency services of COSCO SHIPPING Lines have opened up the use to OOCL. effectively extending and upgrading the respective service areas and capabilities of the two brands. In addition, the two liner companies coordinated the management of the containers, shared the container inventory information of both parties through the IT system, and coordinated the arrangement of empty box reposition, which effectively improved the efficiency of container use.

Promoting the digitalized development with conforming to the trend of information era

In July 2019, the subsidiaries of COSCO SHIPPING Holdings announced the execution of Global Shipping Business Network (GSBN) services agreements with other maritime industry operators. Under these agreements, each signatory commits to establish the GSBN, a non-profit joint venture to accelerate the digital transformation of the shipping industry.

After nearly half a year technical preparations of the Company's dual-brand IT team, in August 2019, COSCO SHIPPING Lines started to upgrade its IT system from the IRIS2 system to the IRIS4 system used by OOCL, and the system switch was completed route by route under the global online situation. The successful upgrade of the system further improved the efficiency of internal management, which laid a solid foundation for improving the customer service experience.

COSCO SHIPPING Ports actively promoted the "5G Smart Port Lab", and built the world's first 5G signal full coverage terminal port at Xiamen Ocean Gate Terminal, to provide high-quality wireless communication service for existing production operations, office operations, warehousing and logistics, and external services.

Actively fulfilling social responsibilities and leading the sustainable development of the industry

The Company vigorously develops green shipping, smart ports, and smart vessels, and fully implements emission reduction regulations including the IMO2020 low sulphur cap, and plays an exemplary role in the industry in energy conservation, environmental protection and technological innovation.

In 2019, the Company continued to promote and use various

advanced energy-saving and emission reduction technologies, and effectively reduced fuel consumption through management measures such as optimizing fleet structure, optimizing shipping routes, and improving ship operation efficiency in ports, thereby reduced the impact of business operations on environmental and carbon emission.

In response to the new regulation on limiting sulphur emission implemented worldwide by International Maritime Organization (IMO) in 2020, the Company proactively studied and compared various solutions, and decided to use low-sulphur fuel that complies with the standards and install scrubbers on a small number of vessels to meet the requirement of new regulation. As at the end of 2019, a total of 7 vessels of the Company's dual-brand fleet were retrofitted with scrubbers and put into operation. In the fourth quarter of 2019, the Company's all other vessels in operation were scheduled for tank cleaning and first filling of low-sulphur fuel on a route by route, ship by ship and tank by tank basis so as to ensure that all the vessels in operation satisfy with the new requirements before 1 January 2020.

Since the beginning of 2020, facing the sudden outbreak of COV-ID-19, COSCO SHIPPING Holdings has actively fulfilled its social responsibilities and made every effort in the epidemic prevention and control. The Company immediately initiated the emergency response plan, adopted a series of active and effective prevention and control measures and strictly complied with the control policies on epidemic prevention made by different countries and regions, which effectively protected the life, health and safety of its on-shore and off-shore employees and ensured the smooth and orderly business operation. Furthermore, for the purpose of actively making contribution to the battle against the epidemic, the Company coped with the difficult situation to give priority to ensure the transportation of supplies for epidemic prevention and the living in the epidemic areas and opened the "Green Channel", which fully demonstrated its strong commitment to prudence and responsibility

Looking forward to 2020, overall, the sluggish global economic growth is accompanied by increasing uncertainties, the long-term stability of the Chinese economy and the short-term superimposed pressures coexist, and the relief of the shipping capacity growth pressure and the increased risk go hand in hand.

As a global leading container liner company and terminal operator, facing the challenges and opportunities in the shipping market, COSCO SHIPPING Holdings will adhere to the "Three Focuses", namely focus on high-quality development, focus on breakthrough development and focus on integrated development, with the sense of urgency, and promote to achieve higher quality and more sustainable development in accordance with the established strategies.

Focus on high-quality development to enhance core competitiveness

COSCO SHIPPING Holdings will pay more attention to the transition from high-speed growth to high-quality development while maintaining moderate scale growth.

In respect of the container shipping business, the Company will firmly advance the global route network layout to enhance global competitiveness and further adjust and optimize the route capacity structure. Meanwhile, the Company will consolidate its global sales network and increase its ability to create value in order to continuously improve service quality and customer experience. Moreover, the Company will continue to improve the onshore supporting logistics network, taking the China-Europe Land and Sea

Statement of Chairman

Express as a model, to strengthen the channel construction, extend the service value chain and improve the design and construction of end-to-end service channels, so as to provide customers with more competitive full-service products.

In respect of the terminal business, the Company will continue to strengthen the construction and structural adjustment of its global terminal network and actively expand logistics industry chain in order to build a comprehensive port service platform.

Focus on breakthrough development to promote digital innovation

The Company will grasp the new opportunities that digitalization will boost the development of global trade and logistics industry, by promoting digital innovation and practice along the industrial chain. The Company will strengthen digital network construction to improve serviceintegrating capabilities. The Company will make full use of the advantages of the IRIS4 system to comprehensively improve our support for customer service. All business processes will be standardized, concreted and digitized, and the "long distance and wide coverage" business model of global container liner business can be effectively connected in the system.

The Company will also continue to work with all parties to promote the development of the GSBN blockchain alliance, and use data to realize digital collaboration to promote digital innovation in the shipping industry. Meanwhile, the Company will accelerate the commercial application of the Internet of Things (IoT) technology and the development of shipping e-commerce platforms to provide customers with more convenience.

Focus on integrated development to promote the release of synergies

The Company will adhere to efficient coordination of the two brands by highlighting their complementary advantages of the global operation and enhancing the global value-added service capabilities. Relying on the advantages of scale, the dual-brand fleet will build a more comprehensive service network according to customer needs and further realize synergies in various aspects.

The Company will continue to promote industrial chain collaboration. In respect of synergy between ports and shipping businesses, the Company will set the successful development of the container terminals in Piraeus Port in Greece as a model and actively promote the construction and development of the Abu Dhabi terminal and the Chancay terminal in Peru, in accordance with the win-win integrated development model of fleet and terminal cooperation.

In short, the current situation of the industry is very challenging, and we must carefully analyze the market conditions and actively seize market opportunities. We firmly believe that in 2020, there are challenges, but also more opportunities; there are difficulties, but also greater hopes. Looking back what we have gone through in the past, we always find opportunities for balance in the imbalance, and achieve possible leap forward in the impossible. The development of our industry and enterprises is just like our huge ship sailing in the sea. She always experiences strong winds and waves and can always reach the destination in the end.

In the new year, as the most significant component of core businesses, listed platform of the container shipping service supply chain and listed flagship of China COSCO SHIPPING Group, COSCO SHIPPING Holdings will adhere to "Three Focuses" and value creation, seize the day and never lose the time, and endeavor to build the Company as a world class integrated container shipping service provider, to provide customers with better services and to create greater value for shareholders.

イタネで,



Outline of report disclosure

This section outlines the big data disclosure and the outline of our report for readers to get information guickly.

In 2019, our revenue amounted to RMB 150,540,591 thousand yuan, and achieved an annual profit of RMB 10,194,317 thousand yuan. The profit attributable to the equity holders of the company was 6,690,106 thousand yuan. Our operating performance is as follows.



Terminal Business

Oil leakage

Social security

data

()

No. of injuried employees 83_{person}

No. of death at work



Sustainability Report 2019

Outline of report disclosure

Corporate governance

We have established a sustainability governance mechanism. The specific practice of the sustainable development working group has been established. The work related to sustainable development shall be reported to the management and the board of directors of the company at least once a year, covering the risk identification related to sustainable development, assessment of annual substantive issues, and relevant contents of the sustainable development report, which shall be finally determined by the board of directors. We carry out internal and external audit at least once a year to supervise and enhance the internal monitoring system. (Please refer to the section of Sustainability Governance for more details.)

Economy

Exert Synergy : We have been promoting the internal cooperation with OOIL since 2019 by forming a collaborative team of professionals, the synergies of which has brought nearly 558 million dollars in value. With the impact of dual brands, we worked together with OOCL to help Shanghai Shipping Exchange (SSE) in releasing carrier schedule reports and trial running the Global Carrier Schedule Performance (GCSP) index. In addition, we have established cooperation with the Ocean Alliance and joined the Global Shipping Business Network (GSBN) to promote the shipping industry.(Please refer to the section of Dual-brand Effects and Synergies for more details.)

Scientific Development and Economic Responsibility: In 2019, we have incorporated more technology to drive business growth. Our subsidiaries have introduced 5G technology in the operations of ports, enhanced containers, and applied artificial intelligence in logistics management.

We have been supporting the Belt and Road Initiative (BRI) by advancing China-Europe rail freight and China-Europe land-sea express. During our expansion in port operations, we promoted the trade between China and Latin America with the successful investment in the Port of Chancav in Peru. We also contributed to the second China International Import Expo (CIIE) by providing exhibit freight and shipping services. (Please refer to the section of Indirect Economic Impacts for more details.)

Supplier Management: We have a very strict supplier management system with access requirements, evaluation, ratings, rewards and punishment measures. We greatly promote green supply chains during procurement, reviewing suppliers' environment, social, and governance performance while considering the impact of our choice of procurement plans, suppliers, and products on the surrounding environment and people living nearby. In the meantime, we conduct risk evaluation and annual audit to ensure effective procurement. (Please refer to the section of Supplier Management for more details.)

Compliance: COSCO SHIPPING Holdings has been implementing anti-corruption by establishing a mechanism for filing complaints, offering protection for whistleblowers, and promising not to treat whistleblowers differently. We promote anti-corruption and provide training for all employees to raise their awareness of probity. Having signed the letter of anti-corruption commitment and responsibility agreement with relevant authorities, we perform comprehensive audit as well as risk identification and evaluation to detect the weakness and deficiencies in anti-fraud practice and carry out rectification accordingly in a timely manner. The audit and risk assessment work shall be reported to the board of directors on a regular basis.

COSCO SHIPPING Holdings is consistent in business compliance and promotes antitrust efforts in global operations. We have established a comprehensive risk management system within the company and taken the ESG related risks in our current corporate risk management system and carried out regular risk identification and reviews. We provide diverse legal training for employees to enhance their awareness of compliance and help them improve day-to-day work performance. (Please refer to the section of Compliance for more details.)

Fnvironment

Energy conservation and emission reduction: Environmental protection remains of great concern to COSCO SHIPPING Holdings. We deeply understand the impact of environment for the sustainability of the shipping industry. That's why we've been giving priority to saving energy and reducing emissions. We Pay attention to environmental related risks in the annual risk management work and report it to the management. We have also established ISO14001 environmental management system and ISO 50001 energy management system for a long time, and have been continuously certified by external professional organizations.

COSCO SHIPPING Holdings actively respond to the national 13th five-year plan for emission reduction, and has been setting lower fuel consumption targets year by year to cut greenhouse gas (GHG) and other waste gas emissions. During operations, we have dedicated teams for energy saving and emission reduction efforts who will carry out measures to ensure relevant goals are fulfilled. For example, new ships integrate with the concept of environmental protection, use cleaner fuels, and actively disclose carbon emissions in the supply chain. We have also established an energy management system to improve energy efficiency. We treat the oily wastewater and garbage on board produced during operations strictly to minimize the impact on the environment. Moreover, the occurrence of pollution incidents is directly related to the performance of the management

Biodiversity: COSCO SHIPPING Holdings is an active participant of environmental protection efforts. We promote environmental protection around the Company and encourage our staff to take part in relevant activities. We are also a supporter of international environmental protection initiatives. In 2019, COSCO SHIPPING Lines took part in the "Protecting Blue Whales and Blue Skies" program and was honored to win international environmental protection awards.

Coping with climate change: We focus on the impact of climate change, strive to reduce carbon emissions from business activities, and use cleaner energy to reduce the impact on the climate.

(Please refer to the section of Environmental Protection for more details.)

Society

Staff recruitment: COSCO SHIPPING Holdings diversifies the corporate talent pool through campus recruiting, online recruitment, and social hiring in a fair and transparent way. We prohibit discrimination and unfairness in any form due to the factors irrelevant to work. (Please refer to the section of Employment and Diversity for more details.)

Employee Training and Growth: COSCO SHIPPING Holdings highly values employee self-improvement and career growth. We have established an efficient training system as well as annual training plans and programs based on business needs, which provides great career development and promotion opportunities for employees. On top of traditional programs, in 2019, we added more interesting sessions and upgraded the online learning platform, and the online learning platform has also been upgraded. (Please refer to the section of Employee Training and Growth for more details.)

Occupational Health and Safety: We conduct internal and external audits of the iso45001:2018 system every year, and in accordance with the iso45001:2018 occupational health and safety management standards and ISM rules, we have established Risk Assessment and Operation Control Procedure of Occupational Health and Safety, to manage the occupational health and safety of all staff, including regular employees and labor dispatch employees in a unified way. (Please refer to the section of Occupational Health and Safety for more details.)

Safe Production: We attach great importance to safe operation, COSCO SHIPPING Lines and COSCO SHIPPING Ports sign the letter of responsibility for safe production every year, regard safety work performance as an assessment standard, and the assessment result is directly related to the salary of the management. We carry out risk management and audit covering safety production every year, and report the results to the board of directors of the company on a regular basis. (Please refer to the section of Safe Production for more details)

Social Welfare: In 2019, COSCO SHIPPING Lines donated over RMB10.62 million, COSCO SHIPPING Ports donated over RMB8.74 million, and OOIL donated RMB4.70 million, totally donated RMB24.06 million for social causes. (Please refer to the section of Contribution to Public Welfare for more details.)



About COSCO SHIPPING Holdings

COSCO SHIPPING Holdings Co., Ltd. ("COSCO SHIPPING Holdings"), a subsidiary of COSCO SHIPPING Corporation Limited ("COSCO SHIPPING Group"), which holds 46.22% equity interests of COSCO SHIPPING Holdings, was set up on March 3, 2005, headquartered in Shanghai. COSCO SHIPPING Holdings successfully listed on the HKEX on June 30, 2005 (Stock Code: 01919), and on Shanghai Stock Exchange on June 26, 2007 (Stock Code: 601919). We are committed to becoming one of "the world's first-tier container shipping and wharf investment management suppliers". Currently we hold 100.00% shares in COSCO SHIPPING Lines and 48.84% shares in COSCO SHIPPING Ports, 75% shares in OOIL and 100% shares in China COSCO (Hong Kong) Limited ^[1]. Its headquarters are located in Shanghai, Hong Kong, China.



 \bigcirc

Value concept of the Company

The Company takes "creating of value for customers and the society" as its obligations. It performs its social responsibilities as a corporate citizen with people as the basis, market as the orientation, technology as the measure and benefits as the center, and insists on double-wheel drive of production operation and capital operation. It expands international shipping business, actively expands terminal industry, and cultivates and enlarges the container leasing business. It promotes the transformation from a comprehensive shipping enterprise into a leader in shipping and logistical cluster, and from a transnational operation company into a transnational company and a global company, so as to fulfil the better, faster and sustainable development targets. In the meanwhile, we ask our employees to be honest, patient and adhere to our national laws, regulations, ethics, and professional ethics and maintain the company's image. In addition, we also manage our suppliers (such as requiring them to sign the Anti-Commercial Bribery Commitment Letter, Social Standards Compliance Questionnaire, etc.) to convey our ideas and values to suppliers.

Our business

The business operated by COSCO SHIPPING Lines, COSCO SHIPPING Ports and OOIL are three of the core business segments of COSCO SHIPPING Holdings. As a member of the shipping alliance, COSCO SHIPPING Lines is the third largest container shipping company in the world, and the largest one in Asia. It mainly engages in international and domestic maritime container shipping services and related business. COSCO SHIPPING Ports is the largest container terminal operator in the world that mainly engages in container terminal operations. OOIL is one of the world's largest integrated international transportation, logistics and terminal operation companies. It is also an industry leader in the use of information technology and e-commerce to manage the entire cargo process, and with container shipping and logistics as its main business.

International initiative

The Company participated in activities of CCWG (Clean Cargo Working Group) affiliated to BSR (Business Social Responsibility). We have been adhering to the CCWG's mission to actively report on the emissions of carbon dioxide, sulphides and nitrides based on our global routes, making comparison with the industry average level to help understand our environmental performance and discover space for improvement. Besides, this provides reference for the container transportation customer and cargo transportation agent in the process of their evaluation of suppliers. At the same time, we are also a member of WPCI (World Ports Climate Initiative). We have participated in the environment ship index ESI certification initiated by it since 2012, and committed to working in environmental management. In addition, we also join Cargo Smart's Blockchain plan to support the establishment of a Global Shipping Business Network (GSBN), accelerate the digital transformation of the shipping industry, and make efforts to promote the development of the shipping industry.



Member of the association

COSCO SHIPPING Lines affiliated to the Company is a member of following international organizations: World Shipping Council, Box Club, World Liner Data Ltd, Maritime Anti-Corruption Network, Cargo Incident Notification System, The Baltic and International Maritime, Container Owners Association, etc.. It is also a member of 30 domestic organizations including China Shipping Society (standing councilor), Shanghai Association of Traffic and Transportation (vice president unit), Shanghai Navigation Society (vice councilor and councilor), China Association of Port-of-Entry(standing councilor), China Ship-owners Association(standing councilor, councilor), Shanghai Ship-owners Association (vice president unit), etc..

COSCO SHIPPING Ports is also a member of several associations and organizations, such as Business Environment Council, China Port Association, Container Branch of China Port Association, China Port Association, China Institute of Navigation, National Technical Committee for port standardization, etc..

OOCL is also a member of several associations and organizations, such as Box Club, Business Environment Council, Clean Cargo Working Group, Hong Kong General Chamber of Commerce, Maritime Anti-Corruption Network, Member of Hong Kong Port Operation Committee, The Hong Kong Liner Shipping Association, World Shipping Council, etc..

Our supply chain

We as a member of the shipping industry, which mainly focuses on container transportation and terminal business, our upstream industry mainly has shipping related and petrochemical industries. The former mainly provide shipbuilding and ship repair services for us. The latter mainly provides fuel and engine oil for us. Our downstream is mainly concentrated in domestic and foreign trade business, involving steel, chemical, consumer goods and other industries.

Early warning mechanism

We focus on the risk management. In order to further promote the prevention of risks and unknown losses, we established an early warning mechanism, including: early warning of changes in assumptions in the process of formulating strategic objectives; uncertain tracking warning in the process of risk assessment; external environmental volatility risk and warnings of risk preference and tolerance.

[1]: China COSCO (Hong Kong) Limited is not included in our ESG Report as there is no substantive business.

About COSCO SHIPPING Holdings

Awards



January 8, 2019

were listed in the top 50 of the first "New Fortune Best Listed Company" selected by Guanghua-Rotman Centre for Information and Capital Market Research.



April 25, 2019

won "The world's top 1000 Chinese transport and logistics enterprises award" of Asia Weekly.



August 2019

13

won the Capital Operation Benchmark Award in the 13th China Listed Companies Value Selection.

COSCO SHIPPING Holdings Co., Ltd.



January 2019

were awarded the 14th "Golden Round Table Award-Board Value Creation Award" of Chinese Listed Companies hosted by "Board of Director" magazine.



May 2019

our company A-share was included in the FTSE Russell global stock index series.



September 9, 2019

were included as a member of the Hang Seng Corporate Sustainability Index Series in the second year.



January 16, 2019

were honoured as a Most Socially Responsible Listed Company by Tonghuashun Zhitong Caijing in the 2017 Golden Hong Kong Stocks Awards contest.



June 28, 2019

OOCL was awarded the "Green Shipping Award" at the Seatrade Asia Maritime Awards held in Hong Kong.



December 2019

were awarded the "Golden Round Table Award- Excellent Board Award" hosted by "Board of Director" magazine.



February 2019

won the "Outstanding Shipping Company" award of the first international shipping technology and internet conference.



July 10, 2019

was shortlisted in the Fortune China 500 list, ranking 75th.

Management system



For the sustainable development of the Company, we have developed corresponding policies and requirements covering quality, environment, safety, and society, which become part of our code of conduct.

In our container shipping business, our subsidiary, COSCO SHIPPING Lines has obtained the GB/T19001-2016/ISO9001: 2015 Quality Management Systems – Requirements, GB/T24001-2016/ ISO14001: 2015 Environmental Management Systems -Requirements with Guidance for Use, ISO45001:2018 Occupational Health and Safety Management Certification, and RB/104-2013/ ISO50001:2018 Energy Management Systems Requirements, etc.; OOCL has obtained Safety, Quality and Environmental Management System (SQE) Certification, ISO9001: 2015 Quality Management Systems - Requirements, and other external authentication. On this basis, we have established quality management system, environmental management system, occupational health and safety management system, and energy management system.

In our port business, many terminals under COSCO SHIPPING Ports have obtained quality management certifications, environmental management certifications, occupational health and safety management system certifications, such as ISO9001, ISO14001, ISO50001, ISO14064, and ISO45001. Based on this, we establish internal management rules and implementation.

We established the social responsibility, risk and internal control management system according to the ISO26000 Social Responsibility, ISO31000 Risk management – Principles and Guidelines, and the Basic Rules for Enterprise Internal Control issued by the Ministry of Finance of the PRC, China Securities Regulatory Commission, the National Audit Office, China Banking and Insurance Regulatory Commission, to fulfil our corporate social responsibility, respect and safeguard the human rights of corporate staff and other relevant personnel, especially their rights in health and safety, freedom, wages and benefits, and oppose any disregard and violation of human rights.

Sustainability governance

some-

Economy, compliance and impacts are significant topics for businesses pursuing sustainable development, as well as topics of consistent interest to stakeholders including investors, business partners, government authorities, NGOs, and customers. COSCO SHIPPING Holdings has been investing in technology to drive growth and maximize the returns to our stakeholders. We actively undertake our social responsibilities, supporting public causes to make positive impacts in the countries and regions where we operate.

COSCO

Governance mechanism

In 2019, we have made dedicated efforts to balance economic growth, conserve natural resources, and protect the environment by improving the governance measures for sustainable development. COSCO SHIPPING Holdings formed dedicated governance and business teams, formulated explicit business implementation and regulation procedures, and carried out regular audit and inspections to fulfill its obligations to shareholders and social responsibilities.

We have established a sophisticated governance structure in accordance with the requirements of the modern company system. At COS-CO SHIPPING Holdings, the Board of Shareholders is the highest governing authority and the Board of Directors determines the dayto-day business operations. Currently, the Board of Directors consists of 8 members, including 4 executive directors and 4 independent non-executive directors. There are 6 committees under the Board of Directors who support the management of business risks and compliance exposures, namely, the Strategic Development Committee, the Risk Control Committee, the Approval Committee, the Compensation Committee, the Nomination Committee, and the Executive Committee. COSCO SHIPPING Holdings' Board of Supervisors is the body of oversight that supervises both the Board of Directors and management.

In 2019, COSCO SHIPPING Holdings continued to promote the integration of sustainable development related work into the responsibilities of the risk control committee, so as to promote the overall responsibility of the risk control committee for sustainable development. The sustainability team specifically implements the mechanism of sustainable development related work.

At present, the sustainability team is composed of the leaders in charge of the company and the heads of each department. The sustainability team is responsible for the specific practice of sustainable development, including leading the organization of risk identification related to sustainable development, leading the communication with stakeholders and discerning important topics, doing data collection as well as drafting the report. The sustainability work is reported to the Board of Directors at least once a year, which serves as an effective mechanism for communication and decision-making. The Board of Directors will review the final content of the sustainable development report. At the same time, the Company also carries out internal and external audits at least once a year to supervise and enhance the internal monitoring system and ensure the effectiveness of relevant measures and action plans.

As required by the general disclosure rules of the Environmental, Social and Governance Reporting Guide, COSCO SHIPPING Holdings has included the identified material environmental, social and governance matters in this report, presenting the sustainability performance of the Company during operations based on the ESG reporting principles of materiality, quantitative, and balance.



Stakeholders and material topics

Stakeholders' expectations and requests are important considerations for COSCO SHIPPING Holdings when formulating sustainable development strategies. We take multiple approaches to identify the action areas of relevance to our stakeholders, mainly our customers, employees, shareholders, suppliers, communities, partners, labor unions, insurers and financial institutions, governments, and nongovernmental organizations (NGOs). This report is focused on the material topics of special interest to our stakeholders. That's why during the reporting period, we communicated with them frequently in the forms of meetings, interviews, opinion polls, and work visits, listening to their comments, suggestions and understanding their concerns and needs, which are the bases on which we make and adjust our approaches

During 2019, COSCO SHIPPING Holdings held 202 meetings with investors via roadshows, investor meetings, receptions, and conference calls where we met 757 investors and analysts. Based on compliance with laws and regulations, we stayed open and effective to present to the public the developments of the Company and promoted our two-way communication with the capital market. Specifically, we participated 33 domestic and foreign investor meetings, hosting 95 conferences with a total of 338 analysts and investors. We held 10 roadshows, convening 51 conferences and meeting a target audience of 127 persons. We received 24 visits, holding meetings with 65 guests. We had 23 conference calls with 41 communications in total. In the meantime, we attached great importance to the communication with small and medium investors as well as the protection of their rights and interests. In 2019, we have increased interaction with the media and held 2 press conferences revealing corporate performance.

In addition, we held supplier meetings regularly, conducted periodical customer satisfaction surveys and customer visits, communicated with NGOs, took part in external seminars, and carried out staff opinion polls to understand the topics of interest to our stakeholders and gave feedback. Through the above diversified communication methods, and considering the importance of the topics to COSCO SHIP-PING Holdings and its stakeholders, then merging with the actual operating conditions, the topic boundaries was clarified. The details are presented below.

Economic Material topics	Main stakeholders	Topic classifica	tion Corporate response	Chapter index
 Economic performance Dual-brand effects Indirect economic impacts Social and economic compliance Customer satisfaction and complaints Customer privacy protection Anti-corruption Supplier management 	 Shareholders G o v e r n ment authorities Partners Suppliers Customers NGOs 	 Internal Internal Internal Internal Internal Internal/ external 	 •Cutting cost while increasing efficiency to enhance lean management •Adopting technology to drive growth •Creating synergies •Supporting the Belt and Road Initiative •Developing the China-Europe land-sea express and the China-Europe rail freight •Supporting CIIE •Fully complying with social and economic regulations •Providing internal legal training and education •Carrying out comprehensive risk management •Conducting customer satisfaction surveys and improving the protection rules for customer privacy •Increasing anti-corruption efforts and probity education •Establishing an anti-corruption and antifraud reporting mechanism •Implementing strict supplier assessment and audit 	 Economic performance Dual-brand effects and synergies Indirect economic impacts (Technology drives growth, With development comes responsibilities Compliance (So- cioeconomic compli- ance) Customer service Compliance (Anti- corruption manage- ment) Supplier manage- ment

Environmental material topics	Main stakeholders	Topic classification	Corporate response	Chapter index
 Biodiversity Waste gas emissions Effluent and waste Energy Climate change and response GHG emissions Water resource management Environmental compliance 	 • G o v e r n-ments • Communities • NGOs • Shareholders 	 Internal Internal Internal Internal Internal Internal Internal Internal 	 Standardized management of ballast water Using low sulfur oil Strict disposal of effluent and waste Implementing energy saving and emission reduction Improving business efficiency by increasing technology reform Monitoring and assessing energy consumption Preventing extreme whether events Cutting GHG emissions Saving water Observing local environmental laws and regulations 	 Energy saving and emission reduction Energy saving and emission reduction Effluent and waste treatment Energy saving and emission reduction Environmental protection Energy saving and emission reduction

Environmental material topics Main stakeholders

Topic classification Corporate response

Chapter index

•Employee care	 Employees 	 Internal 	•Enriching employee activities	•Employee care and as-
•Employment	• L a b o r	 Internal 	 Increase labor union communication 	sistance
•Non-discrimination	unions	•Internal	 Providing employee benefits 	•Employment
•Child labor	•Communi- ties	•Internal/ external	 Creating a standard, transparent hiring mechanism 	and diversity
•Forced labor	•Govern-	•Internal/	•Providing reasonable compensations	 Protecting employee
•Diversity and equal	ments	external	for employees	rights
opportunities	•NGOs	•Internal	•Compliance with laws and regulations	 Protecting
 Training and educa- tion 	•Sharehold- ers	•Internal	•Providing reasonable employee leaves	e m p l o y e e rights
Labor complaints		•Internal	•Promoting an equal corporate culture	 Protecting
mechanism		•Internal	•Enhancing diversity in recruitment	employee
•Occupational health		•Internal	•Providing effective, practical training for	rights
and safety		•Internal	employees	•Employment
•Shipping safety			•Building a multi-level communication	and diversity
•Community welfare			mechanism	• Employee training and
			 Providing employee health checks 	and and
			 Preparedness for accidents 	
			 Implement safe production 	
			•Strict control over the transportation of dangerous goods	
			•Targeted poverty alleviation	

Compared with the previous year, there is no significant change in material topics and topic classification in 2019.COSCO SHIPPING Holdings identified a total of 27 material topics of concern to both the Company and to our stakeholders based on corporate development and our communication with stakeholders. As listed above, the topics cover economic, environmental, and social aspects. Among them, there are four newly introduced topics: dual-brand effects, climate change and response, greenhouse gas emissions, employee care and assistance. According to the global standards for sustainability reporting by the Global Reporting Initiative (GRI), the Company assessed the 27 topics from the perspectives of "importance to the organization" and "importance to stakeholders" and categorized them into 11 topics of high

materiality, 14 of medium materiality, and 2 of light materiality. A brief introduction to the highly material topics is presented as follows.

Economic topics include economic performance, indirect economic impacts, dual-brand effects, social and economic compliance, customer satisfaction and complaints. The year 2019 is the first year since the acquisition of OOIL. Creating synergetic effects has been the topic of great interest to our stakeholders. Sustained economic value creation and compliance during operations are important dimensions affecting the sustainability of a business. The positive impact that a company brings to society is the measure of its social responsibility. Therefore, economic topics are of special concern to shareholders, governments, NGOs, business partners, suppliers, and customers. We also value customer experience. Knowing its importance in business competition, we have been making extra efforts to improve services and create better customer experience.

Environmental topics cover energy, effluent and waste, waste gas emissions, and biodiversity. The largest cost for shipping companies is energy consumption, the waste produced by which (e.g. waste gas, GHG) poses the severest impacts on the environment. That is the most significant topic for both shipping companies and stakeholders. Besides, the shipping course affects maritime lives, that's why biodiversity protection is also an important topic for shipping companies.

Social topics consist of occupational health and safety as well as shipping safety. Given the high risks facing the shipping industry, safety is an eternal theme for shipping businesses. Ensuring safety is the top priority for the survival and growth of a shipping company. Therefore, safety is a topic of great concern to our employees, shareholders, and more stakeholders. Based on the principle of materiality in preparing this report, the abovementioned topics which are of most concern to our stakeholders are included in the 2019 sustainability report.



Economic topics 1180 COSCO SHIPPING No CARDONNY

Economic topics



Economy, compliance and impacts are significant topics for businesses pursuing sustainable development, as well as topics of consistent interest to stakeholders including investors, business partners, government authorities, NGOs, and customers. COSCO SHIPPING Holdings has been investing in technology to drive growth and maximize the returns to our stakeholders. We actively undertake our social responsibilities, supporting public causes to make positive impacts in the countries and regions where we operate.

Economic performance

Our subsidiaries, COSCO SHIPPING Lines (wholly owned), COSCO SHIPPING Ports, and OOIL operate container shipping and terminal businesses. In 2019, the continuing trade friction between the United States and China added the uncertainties in world trade relations. COSCO SHIPPING Holdings has been dealing with external challenges while cutting costs and increasing efficiency to create synergies. During the reporting period, the Company maintained steady performance compared with 2018.^[1]

Business revenue and profits

Business income and cost during past three years

In 2019, COSCO SHIPPING Holdings earned a total business revenue of RMB 150,540,591 thousand yuan, an increase of 25.09% compared with the same period in 2018.

The operating cost was RMB 135,211,892 thousand yuan, an increase of 22.11% compared with the same period in 2018.

In 2019, the annual profit was 10,194,317 thousand yuan, and the profit attributable to the equity holders of the company was RMB 6,690,106 thousand yuan.



Container shipping business

In 2019, the growth of container shipping demand slowed, which relieved the pressure on the supply side. During the reporting period, COSCO SHIPPING Holdings, with its business scale and the collaboration between COSCO SHIPPING Lines and OOCL, expanded its global presence while addressing market changes and delivered 25,739,103 TEUs of container shipping services. The details are as follows.

During the reporting period, COSCO SHIPPING Lines handled 18,784,961 TEUs of container shipping, up 2.28 % from 18,366,108 TEUs in 2018. The business revenue reached RMB 98.56 billion, an increase of 7.88 % from RMB 91.37 billion in 2018.

During the reporting period, OOCL handled 6,954,142 TEUs of container shipping. The business revenue of OOIL reached RMB 47.41 billion.^[2]

Terminal operations

During the reporting period, COSCO SHIPPING Ports strengthened lean management by increasing efficiency, improving services while cutting costs. It kept enhancing the throughput of its ports to 123,784,335 TEUs, up by 5.47% from 117,365,360 TEUs in 2018. The business revenue reached RMB 7.08 billion, a growth of 6.85% from RMB 6.63 billion in 2018.





Employee compensation

COSCO SHIPPING Holdings attaches great importance to protecting the rights and interests of employees and providing them with reasonable compensation and benefits.

During 2019, the Company paid RMB 8.84 billion for employee salaries and benefits.

Enterprise income tax

The Company complies with tax laws and regulation of the People's Republic of China as well as relevant tax regulations of the jurisdictions where we operate. During the reporting period, COSCO SHIPPING Holdings fulfilled its obligations as a taxpayer and filed taxes with the local tax authorities where we operated. In 2019, the Company paid RMB 409.99 million PRC enterprise income taxes, RMB 73.64 million Hong Kong profit taxes, and RMB 375.54 million Overseas taxation. During 2019, COSCO SHIPPING Holdings was not involved in any tax disputes or large fines or rulings due to violations of tax regulations.

Retained earnings

In 2019, the company did not distribute dividends to shareholders. As of December 31, 2019, the positive impact on retained reserves is RMB 10.43 billion compared to the beginning of the year.

[1]: The economic data is extracted from the company's annual report 2019. For details, please refer to the annual report and the annual report shall prevail.

[2]: In 2018, COSCO SHIPPING Holdings consolidated the statement of OOIL from July 1, therefore the related data in this section will not be compared with the previous year.

Dual-brand effects and synergies

In August 2018, COSCO SHIPPING Holdings acquired OOIL, which largely magnified the strength of the Company. During 2019, the first year since the acquisition, COSCO SHIPPING Holdings has been promoting a dual-brand strategy through internal business collaboration to realize economies of scale and make positive contribution to the shipping industry.

Creating synergies

During the reporting period, COSCO SHIPPING Lines and OOIL, the subsidiaries engaging in container shipping business, kept cooperating and complementing each other in resources – logistics services, networks, digital capabilities – to provide more and diversified services to create better customer experience. The Company established a collaboration team in 2019. The team has collaborative targets, projects, action plans, and tracking approaches to carry out work with a focus on "one ship crew, one equipment team, and one system".

As one ship crew, the Company scientifically manages the carrying capacity of the two liner companies, making feasible plans for increased competitiveness in shipping routes to deliver "Best Ship, Best Service", achieving "the strongest competitiveness of routes products and the lowest cost of single container network". As one equipment team, the Company promotes a dual-brand container management center. By building the Equipment Pool, we are able to realize unified container strategy, equipment mutual use and unified transportation, and to manage and make full use of the resources under the brands, which increases asset utilization ratio. As one system, the Company stays on the track of digitalized operations. For instance, the Company has steadily promoted the launch of IRIS4 system in COSCO SHIPPING Lines to improve team cooperation. During the reporting period, it advanced the switch between IRIS4 and IRIS2, which has now been applied in the entire organization and subordinate entities and proved to be a success. Under the collaboration of the Company, the OOIL acquisition has created synergies worth 558 million dollars during 2019.

Case study: Dual-brand operations to increase efficiency

During 2019, with the efforts of COSCO SHIPPING Lines's dual-brand container management, the yard suppliers of both OOCL and COSCO SHIPPING Lines are optimized. By the end of 2019, the number of suppliers of shared yard has increased from 198 before integration to 413. The promotion and use of the shared yard, on the one hand, increases the customer group of, on the other hand, provides more service options and business cooperation opportunities for the customers of both sides, and improves the efficiency of the container exchange, while reducing the trailer moving of empty boxes, making the operation mode more environmentally friendly.

In 2019, we will also take advantage of the business scale of both parties and reduce the yard supplier's rate through negotiation, reducing the yard cost of two brands by about 13 million US dollars in the whole year.

While enhancing economies of scale and creating tangible synergies, COSCO SHIPPING Holdings also encourages exchanges of experience among its teams to learn from each other, optimize business progress, and increase competitiveness to produce intangible synergies. With the joint efforts of the dual brands, we helped with the trial run of the Global Carrier Schedule Performance (GCS) index and its official release in November 2019. GCS contributes to enhanced lean management of related businesses along the supply chain of the shipping industry and helps cargo companies choose the right shipping service providers. The index can guide cargo owners to hand their cargos to liners with higher schedule reliability and pay for the worthy quality shipping services. At the same time, customers who are not demanding in time may also choose more affordable services based on their needs, which is definitely a win-win situation for both carriers and customers.



In addition, both sides have been working together to partner with industry alliances and associations to enhance competitive advantages and contribute to the development of the shipping industry. Specifically, in January 2019, the ocean alliance of which COSCO SHIPPING Lines and OOCL are members has extended the cooperation for ten years till 2027. The ocean alliance cannot realize effective operation without the efforts of the parties of concern. COSCO SHIPPING Lines and OOCL will continue and enhance communication and cooperation with other members of the alliance, working closer together to further empower the alliance in dealing with challenges and delivering better services. In July 2019, COSCO SHIPPING Lines, COSCO SHIPING Ports and OOCL have joined the Cargo Smart's Blockchain Initiative to support the Global Shipping Business Network (GSBN) by accelerating digital transformation, to promote the development of the shipping industry.

The combination of COSCO SHIPPIG Holdings and OOIL will not only benefit the Company by creating synergies but also contribute to the growth of the entire shipping industry with their joint efforts. In the coming years, COSCO SHIPPING Holdings will continue promoting both brands and maximize the dual-brand effects.



Dual-brand advantages

Since the acquisition of OOIL, COSCO SHIPPING Holdings has been promoting a dual-brand strategy, using the strengths of both brands to enhance competitive advantages and make positive impact on the industry.

To elevate customer experience, COSCO SHIPPING Lines, OOCL, and Cargo Smart, a shipping management software solutions provider, have been working together to promote the release of the schedule report of the Shanghai Shipping Exchange (SSE). The report formulated the calculation criteria of schedule reliability, revealing the service performance of global liner operations from the perspectives of routing products and services.

Indirect economic impacts

COSCO SHIPPING Holdings is dedicated to promoting development with a vision of technology and change. Our main subsidiaries, COSCO SHIPPING Lines, COSCO SHIPPING Ports, and OOIL are committed to using technology to drive growth and contribute to industry innovation. Meanwhile, as an international large-scale shipping company, COSCO SHIPPING Holdings takes its responsibilities as a corporate citizen during development. The Company actively supports the Belt and Road Initiative by providing assistance in various activities, which brings positive effects to the economy of the surrounding countries while growing itself.

	—	٦
ompanies in the shipping industry, as well as a signifi- the reliability of departure, shipping and receiving as		1
ances of main lanes, global major liners and alliances or port liners during January to October 2019.		
a pivotal role in encouraging shipping and port busi-		ī

Technology drives growth

With the rapid development of science and technology, shipping companies are constantly creating new features for their products, services and operations with the help of technology. In 2019, COSCO SHIPPING Lines, COSCO SHIPPING Ports and OOIL respectively integrated 5G into automated terminal operations, applied artificial intelligence in warehouse management, and updated technology in container shipping, which promoted their own development as well as brought better experience to customers.

5G adoption in terminal operations

In 2019, the development of the 5th generation mobile networks ("5G" or "5G technology") became a hot topic in society. 5G technology can support high data rate, reduce delay, save energy, lower cost as well as improve system capacity and support large-scale device connectivity.

In 2019, Xiamen Ocean Gate Container Terminal, held by COSCO SHIPPING Ports, was concentrated on applying 5G technology to terminal operations. Xiamen Ocean Gate Container Terminal formally went into production in November 2011, and became the first automated, all-electric and zero-emission commercial terminal with independent property rights and patented technologies in China in March 2016. During the reporting period, COSCO SHIPPING Ports actively utilized resources to build an intelligence platform of supply chain replying on 5G, IoT and other technologies. In July 2019, Xiamen Ocean Gate Container Terminal and China Mobile Communications Group signed a strategic cooperation agreement, realizing 5G coverage around the entire terminal and completing various applications such as the communication control of automated guided vehicles (AGVs) and intelligent tally. Besides, switching to 5G networks can effectively and safely separate the data of terminal operations and that of other business of the company.

The application of 5G has greatly improved the efficiency and safety of terminal operations. Its high bandwidth can realize multidimensional real-time synchronization of ship-shore data. By connecting the terminal with ships, the information originally required for boarding confirmation can be transmitted before berthing, realizing simultaneous berthing of information and ships while saving a lot of manpower and time. The high data rates along with low latency feature of 5G can bring more HD video transmission and low-latency operational experience, making remote control more stable. In addition, with 5G technology we can monitor the terminal boundary and key stations through HD video to reduce the cost of optical fiber installation and manpower, as well as conduct inspection on high-altitude equipment to deal with the faults that are not easy to handle and find the problems that are not easy to find, so as to improve the safety of the entire terminal.

In the following reporting years, Xiamen Ocean Gate Container Terminal will continue developing "5G + Smart Port". New generation information technology such as 5G and Big Data will keep contributing to the high-quality development of the Terminal, making it a smart, model "5G + Port", and constantly improving the comprehensive competitiveness of ports in China.

Automated tally is more efficient

With the adoption of 5G technology, Xiamen Ocean Gate Container Terminal improved the efficiency of automated tally. The traditional bridge crane communication is designed based on monitoring system as an auxiliary function, and the reliability of each construction site has problems such as the life of fiber and mismatch of power cable.

Compared with the single picture posted back by the tally system under the traditional communication mode, the data transmission system of intelligent tally can post back more high-definition video synchronously, optimize the transmission efficiency and identification accuracy, and ensure business continuity.



Container improvement

COSCO SHIPPING Lines adheres to the operating principle of "we deliver value". In the process of development, it always keeps in mind the original aspiration of serving customers and creating value, and constantly improves its operating strengths. While handling goods with special requirements for storage, transportation, loading and unloading during container shipping, which are quite often during operations, COSCO SHIPPING Lines keeps improving its products and services according to customers' needs to deliver better transportation.

As of 2019, COSCO SHIPPING Lines' reefer container trade zone had been established for one year. During the year, the company continued optimizing its reefer container technology, adopting leading technology and providing sincere services to ship fresh food all over the world to more people timely. Fruits, vegetables and other fresh produce are common goods in reefer container shipping, which requires short-term and high-efficiency transportation as well as strict and effective storage. COSCO SHIPPING Lines uses Control Atmosphere (CA) technology to provide active and passive CA services, which can effectively inhibit the respiration of fruits and vegetables and retard their growth by adjusting and controlling the proportion of oxygen, nitrogen and other gases in the container. In addition, the ASC mode, a kind of multi-stage temperature control mode, is adopted to automatically change the temperature of reefer container based on the actual maturity of fruits and vegetables to adjust the maturity level with stable changes during the voyage, so that they can present the best state when arriving at the port. Besides, Cool Treatment technology and service can kill fruit flies at continuous low temperature without frostbiting the cargo, so as to meet the quarantine requirements.

In 2019, COSCO SHIPPING Lines launched "My Reefer" service on its e-commerce platform, allowing customers to clearly know

Master "fresh" technology, open up ice cream business

In 2019, COSCO SHIPPING Lines provided customers with door-to-door cold chain transportation service for the ice cream business from factory to factory. Refrigeration was required for the whole transportation process and its temperature needs to be kept at minus 18 degrees. The transportation covered two return routes from Tianjin to Guangzhou and from Guangzhou to Tianjin. While serving customers, it delivered "ice cream" to different regions around the country.

the real-time location, transportation track, temperature, and humidity changes of refer containers online, so as to provide customers with better transportation services.

COSCO SHIPPING Lines also strengthens the development of special containers. By 2019, it has developed and provided a variety of ultrahigh special containers. Specifically, the 20-foot ultrahigh coal container adopts a folding design and allows customers to pack in any angle. With its unique space design, it has obtained two utility model patents from the National Intellectual Property Administration, and certified by China Academy of Railway Science. The 20-foot ultrahigh bulk grain container can store more goods due to its ultrahigh feature, and its design facilitates the loading of goods from the top. Being waterproof and moisture-proof in the process of transportation, it can prevent the expansion of the container, thus effectively and safely shipping grains. The 20-foot ultrahigh coal container can carry more goods and avoid the reaction between the sulfur from coal and the zinc from traditional paint by selecting the paint material of the container, so that the goods can be safer, greener and "live longer". Besides, there are 20-foot multi-purpose ultrahigh containers and second-generation car frames. These special containers have been used widely since 2019, which makes profits for the company and provides better services to customers through technology reform, realizing the value of transportation.

In the next few years, COSCO SHIPPING Lines will continue improving and optimizing its products and services, leverage more technologies to develop itself, insist on innovation and improve its competitiveness.

Bringing AI into warehouse

OOIL Logistics, a subsidiary of OOIL, launched a new automated robotic warehouse in August 2019. The building area of the warehouse is approximately 38,928 square meters on two floors. OOIL Logistics utilized 39 Automated Guided Vehicle (AGV) warehouse management robots called "Electric Vehicles" (EVEs) in the warehouse.

"EVE" is a moving system that can control and direct the automated robots to carry the shelf stacks. After warehouse operators input instructions and order information into the system. EVEs can make path planning according to production demands and requirements. Robots can complete point-to-point movement of goods in the warehouse and facilitate both put-away and picking processes automatically without any manpower according the planned path. Manual operation area and QR code navigation are designed in the warehouse. The QR codes sealed on the floor will be read by the robots to guide their pre-programmed movements, which is not only accurate and efficient, but does not impede staff or equipment movement. With the help of robots, routine work and some dangerous warehouse work, such as handling and lifting heavy cargo, is done entirely by robots. Warehouse staff and teams can work in safer working conditions and concentrate more on critical collaborative tasks, so as to save costs, enhance safety as well as improve operational performance.



With the continuous change and development of technology, automated and unmanned technology has been constantly promoted, gradually accepted by the public and more widely used in various production and management. As a leading logistics supplier in the industry, OOIL Logistics will make full use of technology, promote intelligent production, optimize operational process, and promote the use of robots to eliminate potential mistakes and inefficiencies in human operations and remove various hazards, to realize low cost and high efficiency while boosting the scientific and technological development of the industry.

With development comes responsibilities

COSCO SHIPPING Holdings always keeps in mind its responsibilities as "a large company", and persistently plays an important role in the promotion of the Belt and Road Initiative. It constantly drives the economy of countries and regions where it operates, and actively contributes to national and public activities.

Implementing the Belt and Road Initiative

As of December 31, 2019, COSCO SHIPPING Lines and OOCL owned and controlled 507 self-operated container ships; operated 420 container liner routes, including 146 domestic routes (including the Yangtze River and the Pearl River shipping services) and 274 international routes (including international feeder services), covering the Americas, Asia Pacific, Latin America, Africa, Europe, Mediterranean, Southeast Asia, Japan and South Korea. There are about 700 domestic and overseas service networks. COSCO SHIPPING Lines deployed about 196 container vessels (1.40 million TEUs of carrying capacity) in the countries along the Belt and Road Initiative corridors, accounting for about 62.50% of the Company's total vessels.

COSCO SHIPPING Ports' terminal network covers the five main port regions in coastal areas of China, Southeast Asia, Middle East, Europe, South America and the Mediterranean, operating and managing 197 container berths at 36 ports worldwide. It has 16 terminals in operation, of which 5 are international terminals. As of December 31, 2019, COSCO SHIPPING Ports has deployed terminal operations in Greece, Spain, Belgium, United Arab Emirates, Peru, Egypt, Turkey, Singapore, South Korea, the United States, and the Netherlands. Most of the terminals in which COS-CO SHIPPING Ports invests or owns controlling interest are in the countries or regions along the Belt and Road corridors, and annual container handling capacity reached 113 million TEUs.

During the reporting period, COSCO SHIPPING Lines has implemented the Belt and Road Initiative by actively developing China-Europe railway express and China-Europe land and sea express. By the end of 2019, COSCO SHIPPING Lines operated 26 China-Europe railway express lines and during the reporting year, a total of 427 trains departed from China, covering Hunan, Shaanxi, Shandong, Jilin, Liaoning and Sichuan, transporting 32,027 TEUs of freight. Meanwhile, as a new symbol of the Belt and Road Initiative, China-Europe land and sea express has passed through Greece, North Macedonia, Serbia, Hungary, Slovakia, Austria and Czech, with a distance of about 2,000 kilometers. In 2019, COS-CO SHIPPING Lines delivered more than 82 thousand TEUs with China-Europe land and sea express, representing a year-on-year increase of 64%.

Case: Kazakhstan delivers corns to China through dry port

On December 23, 2019, about 1,000 tons of Kazakh corns were exported to Urumqi, China in 32 train containers through the dry port. It was the first batch output of Kazakh corns since the first test of 60 tons of transportation to China by truck in October.

Almaty, one of the main producing areas of Kazakh corns, is adjacent to the border between China and Kazakhstan. The dry port is located in the crucial position of transportation from Almaty to China. Since China and Kazakhstan reached a corn trade agreement at the end of 2018, the dry port continued tracking target customers and coordinated Altynkol station and Khorgos station to solve operational problems, and finally delivered the first transportation. It was a milestone shipping, which marks a historic step of the dry port in the development of eastbound container logistics services while providing strong support for the multimodal westbound container shipping via China-Europe (Asian) land and sea express.

In the future, the dry port will keep improving corns shipping mode and optimize the transportation details to deliver more eastbound containers through the dry port.

Since implementing the Belt and Road Initiative, the Company has been strengthening cooperation with local governments, which greatly facilitated local economy and gained good effects as well as wide recognition from the public.



Promoting the development of China-Latin America trade

With the increasingly frequent trade between China and Latin America, China has become the second largest trading partner of Latin America and Latin America one of the regions with the fastest export growth to China. In 2018, a special statement was issued at the 2nd ministerial meeting of China-CELAC Forum, which expanded the Belt and Road Initiative to Latin America, providing a new platform for China-Latin America cooperation.

As one of the countries with the best economic development in Latin America and the Caribbean Region, Peru will become an important link to promote China-Latin America trade once again. On January 23, 2019, COSCO SHIPPING Ports signed an agreement with Volcan Compañía Minera S.A.A. (hereinafter "Volcan"), a Peruvian mining company, to acquire 60% stake in Chancay Terminal. After the acquisition, the Terminal will be the first terminal project controlled by COSCO SHIPPING Ports in South America, as well as the Group's second greenfield port project invested overseas after Abu Dhabi Terminal. COSCO SHIPPING Ports will lead the Chancay Terminal project, and integrate "Chinese elements" into the design, construction, equipment manufacturing while outputting "Chinese standards" overseas. In addition to loading/unloading, the scope of port business will cover all port operations including extended services.

The success of Chancay Terminal not only promotes the growth of COSCO SHIPPING Holdings, but also meets Peru's urgent needs for economic development and drives its growth. As a new modern port, the Terminal will serve as a bridge linking the friendly economic and trade exchanges between China and Peru as well as between China and Latin America.

"

The co-investment in Puerto Chancay Port project by COSCO SHIPPING Ports and Volcan, a fruit of long-term friendly cooperation between China and Peru, will greatly facilitate the port and infrastructure construction in Peru, boost trade and deepen the cultural exchanges and friendship between the two countries. As a cooperation project between two highly influential companies in both countries, this project will energize Peru's economy and bring it business opportunities, while promoting investment and cooperation by other Chinese enterprises in the country.

-----Speech by Vice President of Peru

Actively supporting CIIE

China held the second China International Import Expo (CIIE) in 2019. For the transportation of exhibits, service providers are required to have strong transportation organization and carrying capacity as well as reliable, flawless services. COSCO SHIP-PING Holdings and its subsidiairies, who has rich experience in exhibition freight forwarding, made great contribution to CIIE with its years of practice and meticulous service culture.

During the second CIIE, the transportation services provided by COSCO SHIPPING Lines covered Italy, Japan, South Korea, Taiwan, France, Indonesia, the Philippines, the Republic of Vanuatu and more countries and regions. The exhibits transported include household appliances, kitchenware, cosmetics, auto parts, lighting equipment, solar panels, as well as foods requiring high-quality fresh-keeping transportation, such as bakery products, wine, coffee, etc. Relying on its strong transportation capacity and global network, the Company provided tailor-made services by developing specific plans based on the features of exhibits and providing the transportation environment as required. In the freight forwarding process, the Company realized a 24/7 service mechanism to ensure seamless docking and efficient cooperation during the loading/unloading with feeder ships. transshipment at transit ports and loading with trunk ships, so as to transport the exhibits to the CIIE site safely and efficiently. Our services gained the favor and praise of many exhibitors.

In the future, COSCO SHIPPING Holdings will keep its original aspiration, continue optimizing its service model, smooth its logistics channels, and play a greater role in promoting the construction of an open global economy and a community of shared future for mankind.

Case: Philippine products shipped smoothly

During the second CIIE, the Philippines organized 38 exhibitors to participate in the Expo. The exhibits included a variety of featured agricultural products, such as dried bananas, dried durians, coconut juice, coconut oil and pineapples, which are popular with the Chinese people.

After obtaining the exhibition information, COSCO SHIPPING Lines (Philippines) Inc. immediately took action to develop a more completed supporting scheme covering many links such as food-grade container source, warehouse packing, space booking, terminal site, and set up a special working group with the cooperation of sales, customer service, site, extended business and other departments. With the joint efforts of the team, the Company gained the trust of the Ministry of Industry and Trade of the Philippines, and remained the forwarder of their exhibits. In the process of organizing the shipment of exhibits, the CIIE working group of COSCO SHIPPING Lines (Philippines)



operated efficiently, actively communicating and tracking the whole process, ensured timely shipment and delivered the exhibits at the site of the Expo in time.

Supplier Management

As the supply chain management issues gradually attract the attention of the public, including suppliers and customers, COSCO SHIPPING Holdings keeps improving the its supplier management system by increasing the weight of sustainable development in the process of supplier access, evaluation and procurement, so as to effectively reduce relevant risks and improve the competitiveness of the supply chain. The Company has been improving its own environmental, social and governance capabilities while driving the growth of suppliers through the development of procurement, so as to promote the cooperation and win-win results between both parties. In 2019, COSCO SHIPPING Holdings continued strengthening and promote sustainable, green supply chain management through establishing system specifications, implementing supplier management, as well as conducting risk identification, regular supervision and audits.

Clear rules and regulations in management

During supply chain management, COSCO SHIPPING Holdings complies with the laws and regulations of each operating location, such as the Law of the People's Republic of China on Tenders and Bids and Government Procurement Law of the People's Republic of China. Besides, the Company has established regulations including the Basic Procedures for Competitive Procurement, the Basic Procedures for Non-Competitive Procurement, the Measures for the Management of Suppliers, and the Measures for the Management of Procurement to provide clear guidance and specifications for supplier and procurement management, and update and improve regularly. During the reporting period, COSCO SHIPPING Lines updated the Implementation Rules for New Container Operations, and COSCO SHIPPING Ports updated and improved the Supplier Management System to ensure that the existing documents can meet the latest external policy requirements and the actual internal operations of the Company. COSCO SHIPPING Holdings strictly implements supplier management and procurement based on the existing rules to ensure the effectiveness of the supplier management mechanism.

Procurement and supplier management

The supplier management of COSCO SHIPPING Holdings includes supplier access, evaluation, rating, reward and punishment. The Company has designated professionals to take the lead in supplier management and relevant departments shall cooperate with them. To evaluate new suppliers, the Company considers their ability and level of compliance with laws and regulations and sustainable development. All suppliers involved in COSCO SHIPPING Holdings, COSCO SHIPPING Lines and COSCO SHIPPING Ports, need to fill in the Anti-Commercial Bribery Commitment Letter and the Social Criteria Compliance Questionnaire, which covers specific requirements for anticorruption and anti-commercial bribery of suppliers as well as assessment and consideration of supplier in environmental management, health and safety management, compliance with laws and regulations, human rights management (e.g. child labor and forced labor), and supply chain management.

Suppliers can be included in the supplier base only after they pass the qualification examination. OOIL has set up risk indicators for supplier management to monitor the concentration of suppliers and the poor quality of services in each region and remind staff to take remedial measures against supplier mistakes by case sharing.

The Company regularly evaluates suppliers at least once a year. In addition assessing a supplier's service ability and product quality, the Company also pays attention to the environmental security and personal safety performance of the supplier, and continues promoting the concept of green supply, environmental protection and sustainability in the supply chain management. COSCO SHIPPING Holdings and its subsidiaries COSCO SHIPPING Lines and COSCO SHIPPING Ports also grade suppliers based on the evaluation results, terminate cooperation with suppliers whose ratings do not meet the requirements, and implement supplier blacklist management to record major violations, so as to continuously optimize the existing supply structure, ensure a high-quality system and reduce the risks in the supply chain.

COSCO SHIPPING Holdings has been actively promoting green supply chain management by fully considering the impact of the selected schemes, suppliers and products in the procurement on the surrounding environment and personnel. Specifically, the Company chose more environmentally-friendly, low-carbon and energy-saving products and services over others in procurement, and adheres to a zero tolerance and one-vote veto policy towards suppliers who caused safety incidents. The Company also included green supply in the aforementioned supplier evaluation to ensure effective implementation, regular supervision and promotion.

During the reporting period, the Company also strengthened the capacity building of suppliers, guiding suppliers to optimize relevant management through training. Besides, the Company actively participated in external training to improve its professional ability and operating efficiency while reducing business risk.

Risk assessment and regular audits

Comprehensive risk assessment are carried out in COSCO SHIPPING Holdings headquarters, COSCO SHIPPING Lines and COSCO SHIPPIN Ports. Dedicated departments and personnel will lead the risk assessment of supply chain management, which involves procurement behaviors, supplier selection, supplier assessment, and data maintenance. Internal professionals will grade the importance of the risks and form a standardized risk list. For highly important risks, the mainly responsible department will formulate countermeasures and regularly track the implementation of those measures.

The Company also performs annual external audits and regular internal audits, reviewing the compliance of procurement behaviors, supplier access, effectiveness of evaluation, and integrity of data to monitor the implementation of supply chain management by relevant departments. For the problems found during audit, the auditor will communicate with the company concerned to get the rectification plan and supervise its rectification progress. At the same time, OOIL will carry out regular re-inspections and tests after supplier evaluation to maintain effectively compliant.

Since February 2019, COSCO SHIPPING has carried out monthly sampling inspections on the supplier management of the headquarters and its subordinate units. The inspection contents include whether the supplier's admission is in compliance and the qualification is qualified. As of the end of December 2019, the inspection had covered a total of 218 suppliers.

Case: CSL actively participates in external training

In March, May and June 2019, COSCO SHIPPING Lines participated in the special training lectures on procurement held by China Bidding Procurement Training Network and Beijing Zhongpei Guoxin Education and Consulting Center on behalf of COSCO SHIPPING Holdings.

The training covered procurement and bidding management of state-owned enterprises, system optimization and contract risk prevention, and agency service schemes in non-bidding procurement. COSCO SHIPPING Lines' headquarters and relevant staff participated in the training and extended the knowledge of procurement, supplier management and more aspects.



During the reporting period, the company's supply chain structure has not changed significantly. As of December 31, 2019, the suppliers of COSCO SHIPPING Holding and its subsidiaries are as follows: COSCO SHIPPING Holdings (CSH) has a total of 86 suppliers, 10,637 of COSCO SHIPPING Lines (CSL), 6,594 of COSCO SHIPPING Ports, and 18,282 of OOIL Each. Among them, the distribution of domestic suppliers is: 80 of CSH, 8,756 of CSL, 2,686 of CSP, and 4,230 of OOIL; the distribution of overseas suppliers is: 6 of CSH, 1,881 of CSL, 3,908 of CSP and 14,052 of OOIL.

Supply chain management plays an important role in the sustainable development of a business. We will continue strict control of the procurement process, implement green supply, adhere to the establishment of a sustainable supply chain management system, and strive to provide strong support for the international shipping supply chain.



Serving the customers

Providing high-standard services to customers

In 2019, CCOSCO SHIPPING Lines improved service standards worldwide covering the whole process of international liner shipping services. For space booking, the 2-hour booking response was upgraded to a 2-hour booking confirmation service, and the target of booking timeliness was increased to 98% from 95% in the previous year. For issuing bill of lading, we put forward the service standard that "the original bill of lading will be ready within one working day after the vessel departure", and shortened it to the target of 8 working hours in internal tracking, so as to issue the bill of lading faster according to customer requirements. In terms of shipping on-time rate, COSCO's self-operated ships in 2019 is 96.59%, which is 1.38% higher than that in 2018. Through such adjustments, we hope our service standard will be higher and requirements stricter, so as to provide customers with better services.

Customer complaint and satisfaction management

In 2019, COSCO SHIPPING Lines conducted a customer satisfaction survey and distributed 2,479 questionnaires worldwide, including 1,605 copies in China and 874 in other 76 countries and regions. Finally, 2,295 effective questionnaires were returned, among which 1,605 were from China and 690 from overseas. According to statistics, the customer satisfaction index in 2019 was 88.68, which was improved compared with 88.03 in 2018 and 87.94 in 2017.

From January to October 2019, COSCO SHIPPING Lines received two customer complaints (one from domestic trade and the other from foreign trade), 578 customer concerns (386 from domestic trade and 192 from foreign trade), and 18,010 consults (5,634 from domestic trade and 12,376 from foreign trade). Compared with the same period in 2018, the number of complaints decreased by 71%, which is contributed by our multi-channel collection of customer needs around customer pain points to improve services one by one during 2019.

Ningbo Branch of COSCO SHIPPING Lines constantly improves service standards with practical actions

The customer service department of COSCO Shipping Ningbo Branch focuses on the three main work lines of document quality, service quality and process optimization, optimizes the internal operation process and continuously improves the customer service level. 1.Grasp the quality of documents and strengthen the prevention of risks

The customer service department of Ningbo branch implements the "three checks" mechanism of document quality. Through the selfexamination, spot check and supervision of BPs, we establish self-inspection projects for key points, risks, mistakes and omissions in the business, and business problems encountered periodically and conduct self-inspection regularly. Through self-examination and rectification of problems found, we have standardized the business processes such as export signing, import order replacement, and contract number changes, so as to strengthen the risk prevention capabilities of documents and enhance service capabilities. Compared with 2018, as of the end of 2019, the KPI of the Ningbo Port booking process has increased by 1% (up to 98.39%), the KPI of the manufacturing process has been close to 100%, and the KPI of the transit provisioning information maintenance has increased by 0.5% (up to 99.78%). KPI of import arrival notice increased by 0.42% (up to 99.96%). KPI comprehensive score of each service index ranks first in domestic and overseas regions and branches.

2.Carry out regular customer visits

In 2019, the customer service team of Ningbo branch developed the visiting mechanism and organized the communication skill training for customer managers, further strengthened the customer visiting work of the headquarters and branch companies. Through daily visits, the customer service team understands the needs of customers, so as to publicize 9 service standards and e-commerce functions to customers, and improve customer experience.

3.Implement micro innovation mechanism

In 2019, the customer service department of Ningbo Branch continued to implement the micro innovation working mechanism, and encouraged employees to put forward effective suggestions in the aspects of optimizing business process details, simplifying operation steps, improving system functions, and discovering potential risks, so as to realize the personal value of employees. In 2019, in response to the problems encountered during the IRIS4 system switching process, the customer service department of the Ningbo branch actively explored and tapped new system functions to effectively solve practical business problems. While steadily advancing system switching, it improved service standards and customer experience.

Customer visits by the service teams

In order to timely understand what customers think and want, our domestic and foreign customer service teams visited customers regularly and frequently (domestic branch: four times a month; overseas: two times a month) during 2019 to seek customers' opinions, solve their problems in time and improve customer satisfaction.

By the end of the reporting period, there were 1,010 visits to customers in China and 1,393 customer visits overseas, from which 931 service issues were sorted out and classified as 72 items in 14 categories, which will be the bases for further assessment of service improvement.

Customer privacy protection

It is the duty of COSCO SHIPPING Holdings to protect customer information and respect customer privacy. In 2019, we made constant efforts to improve customer privacy protection and prevent any loss or illegal use of customer information. The Company signed confidentiality agreements with customers, promising to keep confidentiality of contract contents including but not limited to terms and conditions and freight rates. When customer information is needed, the Company will explain the reasons and purpose. The Company has made promise not to share customer information with others except for its employees, agencies authorized by the customers, partners or subsidiaries, nor disclose or sell information of customers or potential customers. During 2019, the Company did not receive any customer complaints due to violation of customer privacy.



Safe production

Any safety incidents with a company will affect its operating performance and can have adverse effects on the entire organization and even its country. Therefore, we must fully understand and control the dynamic situation of production safety of the Company, strengthen supervision while making efforts to prevent extreme weather events and pirate attacks to ensure safe production.

We strictly follows the rules and regulations on safe production such as the International Safety Management Code for the Operation of Ships and for Pollution Prevention (ISM code) Production Safety Law of the People's Republic of China and the Regulations on the Reporting, Investigation and Handling of Work Safety Accidents. COSCO SHIPPING Lines and COSCO SHIPPING Ports sign the letter of responsibility for safe production every year, making safety performance an assessment standard and the assessment results will be directly related to the salaries of management. Every year, we carry out comprehensive risk management covering production safety, prepare risk management reports and present to the Board of Directors for review. During daily operations, we report production safety management regularly.

We have formulated documents such as the Security Code, the Safe Production Management Measures, the Safety Management Responsibility Provisions and the Comprehensive Emergency Plan for Safe Production, which regulate important matters to be observed in production activities as well as the responsibilities of relevant departments. In daily operations, the Safety Management Committee of the Company, composed of leaders and the principal of each functional department, is responsible for communicating relevant requirements and instructions and implementing safe production. In addition, we carry out a full range of training and emergency drills related to safe production every year to strengthen production safety management. We participated in a number of external security programs. For instance, our subsidiary OOCL is a certified member of the "Partners in Protection" program by Canada Border Service Agency (CBSA), assisting CBSA in strengthening border security, fighting against organized crime, detecting and preventing the smuggling of contraband.

In order to continuously improve the safety management level of container transportation business, to truly understand the performance of ship leaders and crew members on board and the implementation of rules and regulations, and to solve the practical problems of ship management on board, designated staff ashore were required to conduct vessel safety inspection on board. A leading group for safety inspection were assigned to make on-board safety inspection plans, clarify the inspection contents and implementation requirements, as well as summarize the defects founded and track the rectification. For the safety management of ports, we formulated the Regulations on the Safe Production of On-site Teams, which defines the responsibilities of the terminal and on-site teams, specifies the standards of safe production and activities, to build the safety awareness that is recognized and observed by all staff.

Extreme weather events

Typhoon has brought great risks and challenges to ship navigation and safe production around terminals. The coastal areas of China are typhoon-prone areas, and it is very common for southeastern coastal areas to be hit by typhoons every year.

Therefore, we adhere to the principle of "prevention is priority, readiness in advance, escape if necessary, and prepare for unforeseen circumstances", and collect precise typhoon information by making use of advanced technology related to the high altitude, ground and global meteorological information network. We have formulated the Instructions on Prevention of Typhoon and the Regulations on the Prevention of Flood and Typhoon and established prevention and emergency mechanisms. For the container business, we update the guidance on typhoon and flood prevention every year, arranging specific activities and strengthening shipshore communication to smoothly carry out the typhoon and flood prevention work. For the port business, we constantly improve the Work Plan for Prevention of Typhoon and Disaster Resistance, further clarify the responsibilities of departments and teams, and carry out specific work according to the established plan. At the same time, we strengthen safety management in emergency drills, equipment maintenance, and practical implementation. In addition, we summarize our work every year to identify and settle problems to ensure our personal and property safety.



Pirate attacks

Pirates attack frequently in the Middle East, from the south end of the Red Sea, the Gulf of Aden, the Arabian Gulf to the Indian Ocean, and from the Somali coastline to the Indian coastline. In order to ensure navigation safety, we adhere to the principle to "prevent first, stay alert, use our own resources, prepare in advance, act promptly, and stop pirates from boarding".

We analyze the areas with frequent pirate attacks and identify the key anti-piracy areas. Before entering piracy-prone areas, we will employ a third-party armed escort team to conduct 24hour, all-round, dynamic tracking and monitoring on our ships. The captain will ask the crew to get prepared and stay alert, and provide antipiracy alarm signals and contact information.

We also have a safety cabin, which is designed to provide the crew with shelter and a retreat place in case of threat or damage from armed pirates, so as to ensure their personal safety and basic needs. In addition, we also organize regular antipiracy training and emergency drills, including the use of safety cabin, anti-piracy measures, emergency procedures and the safe use of anti-piracy equipment.





The shipment of dangerous goods

The International Maritime Organization (IMO) has formulated the International Maritime Dangerous Goods Code in order to ensure the safe shipment of dangerous chemical goods and to protect the marine environment from pollution. As the shipment of dangerous chemical goods features a long shipping period and many links, and the weather and sea conditions change rapidly during the shipment, the supervision and management of shipment safety of dangerous chemical goods is a long-term, complex and arduous work. Therefore, we keep improving the sense of responsibility of practitioners and their competence to ensure safe shipment.

We have formulated the Operation Procedures for the Acceptance and Carriage Confirmation of Dangerous Goods, defining the entire process from customers' applications for space booking to the transportation of goods, and strictly implement the operation procedures. For example, when we receive customer inquiries or applications regarding space booking for dangerous goods, our staff will check whether the products provided by customers are listed as dangerous goods. If they are classified as dangerous goods, we should check their specific categories and UN numbers and classify them as prohibited or restricted goods according to the Company's policies, then determine the transportation paths. During the shipment, the dangerous goods should meet the requirements of loading/unloading and isolating.

During daily operations, our subsidiaries also carry out training related to the transportation of dangerous goods on a regular basis, explaining the acceptance and carriage conditions and cautions of dangerous goods, and sorting out the problems encountered. In addition, we have dangerous goods systems, such as OOCL's DGSmart system, which includes training courses and respective responsibilities of all relevant parties involved in the transportation of dangerous goods. Besides, DGSmart system connects the entire process of dangerous goods transportation.

Compliance

In order to maintain a fair, orderly business environment, compliance has long been regarded as the foundation for development at COSCO SHIPPING Holdings. The Company has been promoting compliance first in internal governance, with anti-corruption and probity requirements for all employees of the organization.

Anti-corruption management

Anti-corruption management has been a constant concern to all sectors in the society, including our stakeholders such as customers and suppliers. COSCO SHIPPING Holdings maintains zero tolerance towards bribery and corruption. We has incorporated anti-corruption in our daily operations while pushing forward the anti-corruption work of upstream and downstream enterprises to a reasonable extent. As of December 31, 2019, the Company has established a sound anti-corruption management mechanism, including management system and policies, reporting channel, regular supervision and audits, as well as anti-corruption activities and training.

Improvement of management system

At present, COSCO SHIPPING Holdings and its subsidiaries have developed directive documents to clearly regulate the Company's anticorruption work such as the Working Rules of the Coordination Group for the Construction of an Honest Party and Anti-corruption Work of COSCO SHIPPING Holdings, Assessment Measures for Party Conduct and Anti-corruption Work Performance of COSCO SHIPPING Holdings, the Implementation Management Method of Audit Opinions and Suggestions of COSCO SHIPPING Lines, the Regulations on Staff Reporting Management of the COSCO SHIPPING Ports. During the reporting period, the Company also updated and improved the directive documents such as the Administrative Measures for the Probity Archives of the Discipline Inspection Commission of COSCO SHIP-PING Holdings, and the Administrative Measures on the Transfer of Clues Found by the Audit of COSCO SHIPPING Lines. The Company has been promoting the construction of policies to specify and improve regulations and guidance for anti-corruption.

In order to carry out anti-corruption effectively, COSCO SHIPPING Holdings has signed the letters of commitment and responsibility on anticorruption and probity with its subsidiaries including COSCO SHIPPING Lines, COSCO SHIPPING Ports and other relevant departments to implement and delegate anti-corruption management work.

COSCO SHIPPING Holdings and its subsidiaries have set up independent departments to implement anti-corruption policies. The independent departments of the company supervise the lawfulness and compliance of the performance of operation and management personnel (including those with relevant powers) in accordance with the policies and regulations, and adhere to the principle of seeking truth from facts and complying with the regulations, so as to promote the unity of the internal management mechanism and the corruption prevention system of the enterprise. Through supervision, the company timely finds out violations of regulations, puts forward suggestions on the basis of analysis of causes, and clarifies rewards and punishments. The company has also established an effective mechanism for handling bribery and corruption cases. For example, the subsidiary COSCO SHIPPING Lines has established the Emergency Response Plan for Commercial Bribery. In case of emergency, all departments shall coordinate to deal with it in a timely manner. At the same time, the company has clarified the principles of rejection of gifts and the procedures for registration, reporting and disposal among all employees in order to establish a clean internal culture.

In addition, the Company stays in strict compliance with the laws, regulations and industrial norms of the location where it operates, such as the United Nations Convention against Corruption, the Anti-Money Laundering Law and the Company Law to put an end to bribery and corruption in any form. We have been managing illegal actions at the outset strictly according to laws and corporate rules and regulations. Our subsidiary COSCO SHIPPING Lines and OOCL joined the Maritime Anti-Corruption Network (MACN) to work with fellows in the industry to eliminate any form of corruption within the industry.

Establishing reporting channels

COSCO SHIPPING Holdings and its subsidiaries have set up independent departments to handle reporting letters and visits. We have a hotline and E-mail for anti-corruption reporting to encourage employees to disclose corruption. We promise to protect whistleblowers, including protecting their personal information, protecting them from discrimination and dismissal for reporting. The Company's independent departments shall handle every reporting letter and visit seriously, with the promise to investigate report clues, to hold people accountable for verified problems, and to close supervision loopholes. In addition, the illegal behaviors shall be transferred to the relevant departments for handling according to the actual situation. For major cases, the handling results will be reported to the company's management or the board of directors as required.

During 2019, COSCO SHIPPING Lines, a subsidiary of COSCO SHIPPING Holdings, accepted 54 reporting letters and clues, and four of the cases were filed. After discipline review, three CPC members were expelled, two were left for inspection, one was given serious warnings, 10 were admonished, 20 were reminded, two were removed from administrative positions, one was demoted, three were transferred from their posts, one was suspended from his post, three were notified, one was criticized and educated, four were ordered to make written inspection. Illegal funds of RMB168.6 thousand yuan was refunded and compensated, and RMB22.9 thousand of performance-related salary was deducted as fines.

During 2019, COSCO SHIPPING Ports, a subsidiary of COSCO SHIPPING Holdings, accepted three letters and visits, among which two were settled within the authority of the department, with a settlement rate of 100% while the other one was transferred to the local discipline inspection authorities according to its administrative authority. The company received one piece of clue commissioned by the superior organization which was transferred from the auditor. The preliminary verification of the clue is completed and further processing will be followed.

Regular supervision and audits

Every year, the company carries out comprehensive audit work and comprehensive risk identification and assessment work covering corruption and fraud, so as to find out the defects and deficiencies of the company in anti-corruption practice. The audit work is performed by independent departments, including internal and external audit. The problems found in the audit work will be dealt with in accordance with company policies, and the defects will be implemented by the inspected department. The risk assessment work is led by independent departments and assisted by relevant departments. For the results of risk assessment, the responsible departments actively put forward risk response plans and implemented them continuously. Audit work and risk assessment work are regularly reported to management or the board of directors.

In addition, we have been promoting the anti-corruption work of upstream and downstream enterprises, by conducting regular assessments on suppliers, requesting suppliers to fill in the letter of anti-commercial bribery commitment and the social norms compliance questionnaire. We prohibit business activities with suppliers who have violated rules and regulations. COSCO SHIPPING Holdings consistently assumes the social responsibilities as a leading enterprise and is committed to contributing to the healthy development of the industry.

Anti-corruption activities and education

The Company regularly promotes anti-corruption and provides training for all employees. During the reporting period, based on its operations, the headquarters of COSCO SHIPPING Holdings carried out the competition of "Probity Demonstration Post" and "Probity Demonstration Model" in all departments, at all posts, and among all employees of the Company to encourage honest practice and self-discipline. COSCO SHIPPING Holdings also organized "the month of probity education", in which its subsidiary COSCO SHIPPING Lines actively participated. During the activities, COSCO SHIPPING Lines organized employees to answer questions about anti-corruption and probity through online platforms or in written forms to enhance employees' anti-fraud awareness. It also organized employees to visit education bases and theme exhibitions to make full use of the cultural resources of the locations where it operated. In the meantime, COSCO SHIPPING Lines also held an exhibition of anti-corruption and probity art works, in which employees could actively participate to achieve better effects. During the event, COSCO SHIPPING Lines selected 122 excellent works by staff and made exhibition boards and brochures for display within the company.

During the reporting period, COSCO SHIPPING Holdings also strengthened anti-corruption supervision and investigation on its overseas subsidiaries. In October 2019, in order to strengthen the probity management and control of overseas terminals, COSCO SHIPPING Ports, a subsidiary of COSCO SHIPPING Holdings, arranged professionals to go abroad to conduct supervision and investigation on the discipline inspection work of Abu Dhabi Terminal, and put forward improvement suggestions for the risks identified and follow up on the implementation.

The Company strengthened anti-corruption training for all employees. COSCO SHIPPING Lines provided training for employees through group learning, seminars, and intensive discussions. In 2019, COS-CO SHIPPING Lines organized a total of 107 learning sessions for the theory learning central group of the CPC Committee within its system, in which 2,601 members participated. It also held 11 Party lectures, in which 154 employees attended, as well as 49 lectures on case warning and education, with 1,599 participants. It purchased and distributed 959 books related to probity. The training and learning activities were attended by members of the board of directors, management and ordinary staff and achieved good results.



Our subsidiary COSCO SHIPPING Ports keeps abreast of the policies of Hong Kong Independent Commission Against Corruption (ICAC), so it can grasp relevant requirements of probity operations in time. On October 15, 2019, COSCO SHIPPING Ports organized 27 employees to attend the lecture on probity operations held by the ICAC. The main contents included an introduction of corruption prevention laws and regulations in Hong Kong, conflicts of interest that employees of listed companies need to focus on, business scope that may easily cause corruption as well as methods of anti-corruption and corruption prevention. In the meantime, the company distributed training materials such as the Warning against Corruption to all staff and urged everyone to learn. During 2019, the above training and education events have achieved good results.

In November 2019, OOIL, our subsidiary, conducted anti-corruption training, which covered all staff within the Group, including the Board of Directors and the general employees. The training introduced the definition of bribery, relevant laws and regulations, and ways to make contact with public officials. The sessions were provided online, sending to every employee by e-mail, and timely completion was required.

We not only focus on anti-corruption, but also incorporate the requirements for preventing extortion, fraud and money laundering into the daily assessment of employees. We stay in strict compliance with laws and regulations of the location where we operate by checking erroneous ideas at the outset, and constantly help enterprises develop in a clean, healthy and sustainable way.

During the reporting period, COSCO SHIPPING Holdings and its subsidiaries did not have any legal proceedings for bribery, corruption, extortion, fraud, or money laundering, and there were no incidents of dismissal or disciplinary actions against employees due to corruption.

Socioeconomic compliance

As the precondition of sustainable development of a company, socioeconomic compliance has been a constant concern to all stakeholders such as investors, suppliers, and customers, governments, and staff members. COSCO SHIPPING Holdings attaches great importance to social and economic compliance and remains compliant with business ethics in daily operations. We have formulated rules to regulate the day-to-day operations of the Company. Through regular, comprehensive risk management, we analyze, identify and control risk factors that may affect the Company's development to ensure the corporate soundness and sustainability. We also provide various legal training in accordance with business demands to improve all employees' awareness of legal compliance.

Information disclosure

COSCO SHIPPING Holdings has been disclosing information in strict accordance with the Company Law of the People's Republic of China, the Rules Governing the Listing of Stocks on the Shanghai Stock Exchange, the Rules Governing the Listing of Securities on the Stock Exchange of Hong Kong Limited and other laws and regulations as well as the Articles of Association of the Company and the Administrative Measures for Information Disclosure of COSCO SHIPPING Holdings to ensure the reliability, transparency, and timeliness of information disclosure and effectively protect the rights and interests of investors.



Management of related party transactions

COSCO SHIPPING Holdings follows relevant laws and regulations on listed companies to ensure the regulatory compliance of related party transactions. We have formulated the Administrative Measures for Related Party Transactions, and been disclosing information in accordance with the listing rules. In the daily management of related party transactions, COSCO SHIPPING Holdings regularly updates the list of related parties, identifies related party transactions in time, maintains dynamic monitoring of continuous and material transactions, discloses related party transactions, and ensures the legitimacy and compliance of related party transactions in accordance with the listing rules and administrative measures for companies in Hong Kong and Shanghai.

The Company also formulated the Administrative Measures for Special Affiliated Enterprises, which have been implemented throughout the Company's headquarters and subsidiaries. The Measures require that management of the Company disclose related party information of relevance to themselves, and strictly prohibit any form of tunneling and propping in the Company's system.

Comprehensive risk management

Through comprehensive risk management, COSCO SHIPPING Holdings continuously implements risk management and internal control within the system. Based on the internationally adopted COSO-ERM framework and the Basic Rules for Enterprise Internal Control issued by the Ministry of Finance of the PRC, China Securities Regulatory Commission, the National Audit Office, China Banking Regulatory Commission and China Insurance Regulatory Commission, as well as the actual operation conditions of the Company, we have established an effective risk management system. The board of directors of the company shall bear the ultimate responsibility for the risk management work, and the risk control committee is set up to take charge of the relevant work.

In 2019, the Company integrated ESG-related risks into the existing risk management and control framework, including the risks related to promoting sustainable development, the environmental risks faced by the Company, and the risks of new climate challenges. The Company regularly conducted comprehensive risk identification and assessment from five perspectives of strategy, market, finance, operations and legal position, covering ESG-related risks, anti-corruption related risks and risks that might be involved in the whole business process. The Company evaluated the risks identified one by one, drew a risk heat map, and promoted all departments to establish risk response measures to ensure the effectiveness and feasibility of the risk management and internal control system. The Company's risk management work is reported to the Board of Directors, and progress of risk management in the previous year is assessed regularly.

During the reporting period, COSCO SHIPPING Lines, a subsidiary of COSCO SHIPPING Holdings, also actively promoted overseas subsidiaries' risk assessment and management, strengthened communication with overseas subsidiaries, and comprehensively implemented and improved risk management within the company.

In 2019, COSCO SHIPPING Holdings introduced a new risk assessment system and piloted around its subsidiary COSCO SHIPPING Lines. The system provides detailed risks and the specific responsible departments to promote efficient management of risks. COSCO SHIPPING Holdings will try to promote the launch of the new system around the Company's headquarters and all subsidiaries in accordance with actual circumstances. During the reporting period, COSCO SHIPPING Lines also actively pushed forward risk warning indicators, with designated professionals to be in charge of detailed, feasible indicators for each risk to promote the establishment and improvement of the risk warning mechanism.

Anti-monopoly

COSCO SHIPPING Holdings is committed to maintaining a good market order, adheres to international anti-monopoly laws and regulations, and promotes an orderly and fair competition in the industry. The Company continuously follows and timely updates changes in international anti-monopoly policies and regulations, and adopts follow-up measures actively.

In June 2019, COSCO SHIPPING Lines organized an in-house special training on anti-monopoly. In September 2019, COSCO SHIPPING Lines invited external professionals to give a special presentation on the centralized (anti-monopoly) declaration, in which the heads of relevant departments and business personnel of the Company actively participated and had discussions on key topics and problems in practice. In December 2019, the headquarters of COSCO SHIPPING Holdings held a lecture themed "Corporate Governance and Compliance Management", inviting professionals to provide training for employees of the company and its subsidiaries on corporate governance, compliance management, and anti-monopoly. The headquarters of COSCO SHIPPING Holdings and its subsidiaries actively participated in the activities on site and online via video or audio resources. The employees communicated with the teachers, and effectively improved everyone's awareness of compliance and anti-monopoly.

During the reporting period, COSCO SHIPPING Ports, a subsidiary of COSCO SHIPPING Holdings, actively provided COSCO SHIPPING Group with feedbacks on the revision suggestions on the Anti-monopoly Law, the Provisions of Prohibiting Abuse of Dominant Market Position (Exposure Drafts) and other regulations as required. In the meantime, COSCO SHIPPING Ports also provided effective training materials, including the knowledge related to anti-unfair competition and international sanctions, to its subordinate terminal companies (such as Chancay Terminal, Abu Dhabi Terminal), so as to push forward anti-monopoly at subordinate companies.

In addition, our subsidiary OOIL also established and implemented the competition law compliance program, including formulating guidelines and provide obligatory training for staff to ensure that their behaviors comply with the competition regulations.

Legal training and education

COSCO SHIPPING Holdings has an in-house department and legal staff responsible for promoting the rule of law, including establishing relevant directive documents, following external policies, and providing legal training and education around the Company.

As the Company operates around the world, COSCO SHIPPING Holdings continuously follows the changes in laws, regulations, and policies in the locations where it operates, and communicates and cooperates actively with local lawyers to timely identify policy and regulation updates related to its business operations, and prompt subordinate companies to take effective actions as necessary.

The Company provides legal training within the organization every year to improve employees' awareness of the rule of law and legal literacy, and create a good culture of legal compliance around the Company. In December 2019, COSCO SHIPPING Holdings conducted a campaign named "the month of legal education" to promote laws and regulations. The Company's headquarters and subsidiaries actively participated through online platforms. The topics covered the Constitution, criminal law, civil law, corporate law, maritime law, anti-unfair competition law and more, which enhanced employees' awareness of the rule of law and legal literacy. In October 2019, our subsidiary COSCO SHIPPING Ports also provided employees with training in export compliance through lectures, helping employees to better carry out daily work.

With the increasing importance of compliance management, COSCO SHIPPING Holdings, as a leading enterprise in the industry, will continue improving socioeconomic compliance, adapt to the global economic environment and competition rules, and develop in a sustainable way. During 2019, the Company did not have any heavy monetary fines or non-monetary sanctions for violating social and economic legislation.





Environmental topics



With the impact of global environmental trends and social governance, the risk related to environmental protection is of constant concern to us and stakeholders. It is particularly important to pursue ecological and green shipment to protect the marine environment and conserve the marine ecosystem given the strategically increasing importance of oceans today. We value green production, and strictly abide by domestic and foreign laws and regulations related to environmental protection, including but not limited to the Environmental Protection Law of the People's Republic of China, the Energy Conservation Law of the People's Republic of China, and the Marine Environment Protection Law of the People's Republic of China, the Law of the People's Republic of China on the Prevention and Control of Environmental Pollution Caused by Solid Waste, the Law of the People's Republic of China on the Prevention and Control of Water Pollution, the Implementation Scheme of the Domestic Emission Control Areas for Atmospheric Pollution from Vessels and the International Convention for the Prevention of Pollution from Ships. All of our subordinate companies have assigned staff to follow the latest tendencies of environmental protection at home and abroad, and continuously incorporate new requirements and standards into the corporate policies and administrative measures. At the same time, guided by ISO140001 Environmental Management System, RB/104-2013/ ISO50001: 2018 Energy Management System, we have established and operated an environment and energy management mechanism in line with our own operating conditions. The environment and energy management mechanism was approved by external professional institutions each year to ensure effectiveness. Besides, we also actively promote environmental protection and respond to inquiries from stakeholders. During 2019, we did not violate any relevant environmental laws and regulations.

Energy conservation and emission reduction

The 13th Five-year Plan to Save Energy and Cut Emissions issued by the State Council specifies the targets of energy conservation and emission reduction during the 13th five-year plan period, setting a goal to cut energy consumption by 15% by 2020 per ten thousand yuan of GDP from 2015, and to keep the total energy consumption within 5 billion tons of standard coal. Besides, domestic emissions of chemical oxygen demand, ammonia nitrogen, sulfur dioxide and nitrogen oxide should not exceed 20.01 million tons, 2.07 million tons, 15.8 million tons and 15.74 million tons, which decreased by 10%, 10%, 15%, and 15% respectively compared with 2015.

We attach great importance to energy conservation and emission reduction, and support the national targets in this respect. We have formulated the Measures for the Management of Energy Conservation and Emission Reduction, and set up a dedicated leading group, specified responsibilities of relevant departments, made medium and long-term schemes and annual work plans for energy conservation and emission reduction. In the meantime, regular meetings are held to examine our efforts and summarize experience to ensure the implementation of the annual work plan.

Meanwhile, in order to understand energy data more accurately, we have formulated the Energy Review Procedures and the Management Procedures for Energy Benchmarks and Performance Parameters. Employees can identify energy factors that can be controlled or influenced in the production activities and business operations according to energy review methods and requirements of the Energy Review Procedures. In this way, we can assess energy impacts to determine the energy factors of priority control and discover the equipment, facilities, systems, and procedures that have serious impacts on energy consumption so as to achieve the goal of energy conservation and consumption reduction. Moreover, we collect and monitor fuel consumption, capacity and mileage on a daily basis and issue Weekly Report of Fuel Management, the Monthly Report of Fuel and Lubricant Oil Management and Monthly Best Fuel Consumption Per Nautical Miles and Fuel Rating for Each Ship to ensure the goal is implemented.

We understand that the ship's carbon emission during operations mainly comes from the fuel burned in the fuel devices, mostly the fuel originated from the main engine. The carbon discharged from the main engine is closely related to the engine type, fuel type, ship speed, draft and the environment. Therefore, taking these factors into account, we take diversified measures to achieve energy conservation and emission reduction

Energy conservation and environmental protection for newly-built ships

When building new ships, we adopt the world's most advanced design philosophy and the most excellent construction techniques. featuring low energy consumption and low emission. In order to comply with the development concepts of energy conservation, emission reduction and environmental protection, we have optimized the hull form in ship design, adopted high-efficiency propellers and energy-saving devices, and selected reasonable technical parameters and equipment configurations to reduce fuel consumption and emission so as to greatly improve fuel economy. The ship's Energy Efficiency Design Index (EEDI) has met the MARPOL 2025 target ahead of schedule.

24-hour dynamic monitoring

In order to continuously optimize the route and improve the fleet's fuel efficiency and operating performance, and to implement the company's safety, on-time, cost reduction, and efficient operation goals, we rely on ship fuel budget management (pre-guided), operation monitoring (monitored during the event), and fuel cost analysis (post-analysis) to achieve closed-loop management of fleet operating costs. At the same time, we strengthened daily dynamic monitoring of ships, and tracked and reported ship stoppages, track detours (drifting midway), and medical rescue and other changes on a 24-hour basis we increased the monitoring frequency of ships with unreasonably speeding, control the unreasonable peak value and high consumption points, promptly urge them back to a reasonable interval. Guided by the best operating practices for ships, we adhere to the combination of stable working conditions and optimal shipping routes, and strive to achieve safety, on-time and economic balance of ship operations.

Ship deceleration plan

Our subsidiary OOCL has adopted the voluntary deceleration plan at the Port of Los Angeles and the Port of Long Beach since 2005 to reduce the emission when ships were arriving at the port. The plan initially encouraged ships to slow down when they were in a twenty-nautical-mile radius around the port, and subsequently the radius range was increased to forty nautical miles. Since the launch of the plan, OOCL has been navigating with reduced speed in areas within twenty nautical miles from the port, then it has been slowing down further offshore. These actions helped reduce the fuel consumption of ships, thereby reducing emissions of sulfur oxide, nitrogen oxide, suspended particles and greenhouse gases in coastal areas

Using cleaner fuels

In accordance with the decision passed on the 70th meeting of the Marine Environment Protection Committee under the IMO (MEPC70), since January 1, 2020 the amount of sulfur in the fuel oil used by ships worldwide shall not exceed 0.5%. For some sulfur emission control areas. not beyond 0.1%. Moreover, in accordance with the latest requirements of the IMO, all ships without desulfurization equipment will be prohibited from carrying fuel oil with excessive sulfur content after the global sulfur limit came into effect in 2020.

We strictly observes relevant regulations. Both COSCO SHIP-PING Lines and OOCL will implement the sulfur limit based on the allowed timetable to reduce emissions and contribute to environmental protection around the world. To meet the requirements, we will mainly use low-sulfur fuel oil and also try other compliance methods, such as installing desulfurization towers. On March 28,

2019, our subsidiary COSCO SHIPPING Lines has entered into a low-sulfur fuel oil supply agreement with the marine fuel supplier, DOUBLE RICH LIMITED. According to the agreement, DOUBLE RICH LIMITED shall provide COSCO SHIPPING Lines with marine fuel oil with sulfur content not exceeding the 0.5% m/m limit required by the IMO to help our container shipping fleet better fulfill the requirements of the International Convention for the Prevention of Pollution from Ships

Carbon emission calculator

In order to better achieve the goal of reducing carbon emissions and guide the efforts of energy conservation and emission reduction, both COSCO SHIPPING Lines and OOCL launched carbon emission calculators in 2010. The calculator can help customers calculate carbon dioxide emissions throughout the supply chain. which demonstrates our resolution in energy conservation and emission reduction as well as our determination to help customers understand and manage their end-to-end supply chain carbon footprint Two of our subordinate liner companies are members of the Clean Cargo Working Group (CCWG), who are open to public scrutiny and voluntarily report their carbon dioxide, sulfide and nitride emissions on global routes. In order to improve our environmental performance through comparing with the other companies in the same industry across the world.



In the past three years, our company has achieved certain results in energy conservation and emission reduction. The fuel consumption intensity and greenhouse gas and exhaust emissions intensities have decreased to varying degrees. In 2019, the marine fuel consumed by COSCO SHIPPING Lines was 5,122,752.60 tons, decreased from the previous year. The marine fuel consumption intensity decreased by 4.80% from 2018. The carbon dioxide emission intensity decreased by 4.83% from the previous year. The emission intensities of NOx and SOx decreased by 4.65% and 3.57% respectively over the previous year. The marine fuel consumed by OOIL was 1,752,080.00 tons in 2019, the emissions of carbon dioxide, NOx and SOx were 5,494,480.00 tons, 161,810.00 tons, 74,290.00 tons respectively.

Energy conservation and emission reduction in the marine shipping sector also needs strong support from ports. The main energy sources for terminal operations are fuel and electricity. In order to give full play to the synergies of energy conservation and emission reduction, we continue increasing investment in relevant technology, unswervingly implementing the "oil-to-electricity conversion" project and using cleaner energy, such as electricity, to reduce pollutant emissions.



emission in tensities NOx



marine fuel oil with sulfur content

2019 COSCO Shipping Lines Marine Fuel Comsumption



	2017	2018	2019
CO2 (Scope1&2) (ton)	14,900,262.80	16,014,898.35	15,931,758.72
CO2 emission intensity (kg/ kiloton per nautical mile)	15.04	14.90	14.18
Nitrogen Oxides (NOx)(ton)	431,179.20	463,453.66	461,047.68
NOx emission intensity (kg/ kiloton per nautical mile)	0.44	0.43	0.41
Sulphur Oxides (SOx)(ton)	287,464.80	308,969.10	307,365.12
SOx emission intensity (kg/ kiloton per nautical mile)	0.29	0.28	0.27

The greenhouse gas and exhaust emissions amount and intensity of COSCO SHIPPING Lines in 2019

"Oil-to-electricity conversion" of gantry cranes

The application of all-electric or hybrid rubber-tired gantry cranes instead of traditional diesel-powered ones can effectively reduce the overall diesel consumption, carbon emission and noises generated during operations, as well as improve energy efficiency and save operating cost. During 2019, A total of 16 gantry crane oil-toelectricity projects have been completed in Jinjiang Pacific Terminal, Nantong Tonghai Terminal, and Jinzhou New Era Terminal. It has been calculated that nearly 200 tons of carbon emissions have been saved. In addition, Lianyungang New Oriental Terminal completed the installation of two gantry crane lithium battery packs in 2019 for the transfer operation of the gantry crane yard.



Replacing LED lamps

Many of our subordinate terminals have been replacing high voltage sodium lamps with more durable and energy-saving LED lamps to reduce energy consumption. During 2019, Jinjiang Pacific Terminal has saved 40,000 RMB through the innovating LED downlight equipment.



Shore power supply at ports

If a port has shore power equipment, it can prevent the emission of harmful substances from burning diesel fuel while saving the cost of the ship's power supply at the port and the maintenance cost of the ship's power generation facilities. By the end of 2019, several terminals have used or installed shore power equipment, including Ocean Gate Terminal, Quanzhou Pacific Terminal, Jinjiang Pacific Terminal, Nantong Tonghai Terminal, Guangzhou South China Oceangate Terminal. Moreover, in 2019, the shore power equipment of Guangzhou South China Oceangate Terminal was successfully connected to the generators from the new African ship and the new Oceania ship. The power supply switched from ship to dock, indicating that the port has a strong and stable power transmission capacity.

In 2019, the diesel consumption and CO2 emissions of COSCO SHIPPING Ports increased compared with last year, mainly because energy consumption and emissions data of some ports can be collected in 2019. From the perspective of consumption intensity, it has a slight increase for diesel, a decrease for gasoline compared to 2018, and carbon dioxide emission intensity slightly increased compared to 2018.

	2017	2018	2019
Diesel (Litre)	59,065,133.00	55,577,110.00	74,441,466.55
Diesel intensity (Litre/ TEU)	1.14	0.94	1.07
Gasoline (Litre)	1,294,114.00	926,344.00	726,817.01
Gasoline intensity (Litre/ TEU)	0.02	0.02	0.01
Total CO2 (ton)	529,787.00	525,565.00	630,585.69
Total CO2 intensity (kg/ TEU)	10.18	8.86	9.03

In addition to strictly controlling the use of fuel, we also emphasize the importance of saving water. We have been working on seawater desalination by using the waste heat from the equipment to produce fresh water for domestic use and facilities, which reduces the pressure on fresh water supply on shore. In addition, we continuously promote employees' awareness and habits of water conservation and encourage them to optimize the use of water in the ship's system. Some of our ships are equipped with seawater desalination devices. For those ships, we can desalinate seawater and reduce the use of fresh water resources. In 2019, the fleet of COSCO SHIPPING Lines consumed 177,327.30 tons of fresh water in total, having decreased by 7% compared with the previous year, and realized 82,845.47 tons seawater desalination, increased by 80% compared to 2018. While the fleet of OOIL consumed 149,970 tons of fresh water in total, and realized 183,350 tons seawater desalination.





С С

> The amount of seawater desalination

183, 350

Sharing



Effluent and waste treatment

A healthy marine environment is the basis for the sustainable development of the shipping industry, therefore, strict management of the ship's effluent and garbage is necessary. We attach great importance to the marine environment, therefore, we require that the management of COSCO SHIPPING Lines sign the letter of safety responsibility that includes pollution incidents from production ships into the assessment scope, which directly affects their performance appraisals. In the meantime, the crew are required to strictly comply with the Ship's Garbage Management Plan to minimize the negative effects on the marine environment. There were no major effluent and waste leakage events during 2019.

In order to prevent marine incidents and pollution, and to protect the marine ecosystem, in accordance the Administrative Provisions for Preventing the Watercraft Pollution on the Ocean Environment promulgated by the State Council and the Ship Pollutant Emission Standards by the Ministry of Environmental Protection, we have formulated the Ship's Garbage Management Plan by reference to MARPOL 73/78 and Resolution MEPC.219 (63), MEPC.220 (63). The plan specifies the responsibility of every crew member and requires management to provide training concerning the rules of vessel garbage collection, disposal and storage. All the garbage should be stored, incinerated and disposed of after being classified and processed. In the meantime, we have also formulated the Operational Provisions of COSCO SHIPPING Lines on Oily Wastewater Treatment to prevent risks, which provides a complete operational process to bring the oily wastewater back on shore. For unexpected oil discharges, we have developed the Shipboard Oil Pollution Emergency Plan to help the crew take prompt measures to reduce and control the impact of an accidental oil spill. In terms of effluent discharge management, we have established dedicated effluent treatment stations or facilities at the port to dispose of port effluent, and timely supervision and effective management are carried out to strengthen the daily maintenance of effluent treatment facilities to ensure that all indicators of discharged effluent meet or exceed the national or local standards. For the household garbage around the port, we require concentrated storage of the household waste in a garbage pool and disposal at fixed sites. The sanitation service department are responsible for the transportation and further processing. The waste shall be disposed of on a daily basis. In the process of transfer, the garbage should be kept in a closed container in order to minimize the negative effects on the environment. For hazardous waste, COSCO SHIPPING Ports has established a corresponding management system and a specified unit to be in charge of waste prevention and control. We have carried out solid waste declaration and formulated a hazardous waste warehouse implementation plan. We have standardized the storage and transfer of hazardous waste, established and improved legitimate procedures and approaches to the transfer and disposal of hazardous waste

Environmental protection

We adhere to the concept of sustainable development and are trying to balance enterprise development and ecological protection. We believe that environmental protection is the prerequisite and a necessary condition for sustainable development. We have strengthened the management of ship's ballast water and been making efforts to minimize the negative impacts on the marine environment. In addition, we also enhance the environmental protection awareness of our staff by organizing relevant activities.

Strengthening environmental protection awareness

We promote green offices by encouraging double-sided printing, saving paper, recycling, saving electricity and environment-friendly procurement measures, to make environmental protection a natural act of employees. We have also organized various forms of promotion activities about environmental protection, such as training in environmental laws and regulations, knowledge competitions and lectures, to increase environmental protection awareness and encourage more staff to take action.

Participating in environmental protection activities

Our subsidiary OOCL designated the first week of July as "Green Week" to promote environmental awareness and encourage employees to participate in meaningful environmental activities around their offices and residential communities. These activities include planting trees, resource conservation and environmental protection. In addition, we participated in Earth Hour on March 30, 2019 again to support the environmental movement. We encourage everyone to join us in support of that initiative.

Controlling the discharge of ships' ballast water

The IMO has formulated the International Convention for the Control and Management of Ships' Ballast Water and Sediments 2004 (BWM Convention) and relevant implementation guidelines to help the government and relevant parties reduce the risk of introducing harmful aquatic organisms and pathogens from ships' ballast water and sediments. The BWM Convention entered into force on September 8, 2017, China submitted instruments to IMO on October 22, 2018. The BWM Convention came into force in China on January 22, 2019.

COSCO SHIPPING Lines has formulated a number of directive documents before the BWM Convention came into force, such as the Instructions on Ballast Water Management and the Ballast Water Management Plan, to prohibit any violation of the BWM Convention. In actual operations, we mainly manage the ballast water through four steps: ballast water operation, replacement, safety inspection and recording. For example, during the handling of the ballast water, it should be avoided to absorb the ballast water in the restricted area and position, and the ballast sediment should be checked and cleared in time. Ballast water should be replaced according to the ballast water exchange standard (D-1) or ballast water performance standard (D-2) stipulated in the certificate and for D-1, the water should be replaced in a water area at least 200 nautical miles from the nearest land and 200 nautical miles deep. When the external environment is not allowed it is better to get far away from terrestrial waters. In all cases, the water should be replaced at least 50 nautical miles from the nearest land and at a depth of 200 meters. For D-2, suction and discharge should be carried out through the ballast water treatment device. The volume of the ballast tank should be inspected regularly after replacement and should be recorded in the ballast water record book.



Protecting blue whales and blue skies

COSCO SHIPPING Lines, as a pioneer in environmental protection in the global liner industry, attaches great importance to environmental protection. In 2018, COSCO SHIPPING Lines took the initiative to contact the sponsors of "Protecting Blue Whales and Blue Skies" to participate in the program. From July to December 2018 and May to November 2019, our ships lowered speed to 10 knots when sailing through the Santa Barbara Channel Region and the San Francisco Bay Area to protect one of the world's major habitations of blue whales. In the meantime, ship's low speed mode reduced the emission of greenhouse gases, suspended particles and other pollutants effectively. Through ceaseless efforts, COSCO SHIPPING Lines was recognized by the program sponsors and was honored international awards in 2019.

Refusing to carry shark fin related products

Both COSCO SHIPPING Lines and OOCL have undertaken to refuse to ship whales, sharks, dolphins and related products. This policy has demonstrated our sense of responsibility and practical action to support the global halt on the trade of endangered and protected marine animals.



Social Topics



HIKE GOLF

COSCO SHIPPING Holdings aims to ensure the occupational health and safety of employees and create harmonious labor relations. Starting from the sustainable development strategy, establish a talent team that meets the company's development strategy requirements. In combination with international and domestic laws, regulations, and conventions, the company has formulated relevant policies for employee recruitment, management, as well as occupational health, labor safety, and welfare benefits.

Employment and diversity

COSCO SHIPPING Holdings actively promotes its global operations and development, and strives to maintain equal and diversified employment opportunities. We are always committed to fully attract, agglomerate, motivate and use diversified talents to build a harmonious and efficient staff team. Therefore, the company establishes and strictly abides by the Staff Management Procedures and the Recruitment Procedures, and continues to replenish outstanding talents in a fair and transparent manner through multiple channels such as campus recruitment, online recruitment, and social recruitment. We offer equal employment opportunities in all aspects of recruitment, professional development, promotion, training and rewards, regardless of skin colour, nationality, race, age, gender, religious belief or physical defect. It is prohibited to cause any form of discrimination or unfair treatment. In addition, the company also provides disabled employees with salaries and benefits that are not deviated from those of ordinary employees, so that disabled employees can find their own job positioning and truly realize a fair and equal corporate culture.

By the end of the reporting period, the total number of employees of COSCO SHIPPING Holdings were 40,781, working at the headquarters, COSCO SHIPPING Lines and COSCO SHIPPING Ports, and OOIL. Among them, the number of contracted employees was 33,618, and the number of outsourced employees (leased workforce from third-party companies) was 7,163. In 2019, the number of new employees including COSCO SHIPPING Holdings, COSCO SHIPPING Lines, COSCO SHIPPING Ports and OOIL totaled 2,546, including 1,392 male employees and 1,154 female employees. More detailed information about the data please refer to section: Statistical Table.



During the reporting period, COSCO SHIPPING Holdings headguarters resigned 1 person, the turnover rate was 2.94%; the resignation number of COSCO SHIPPING Lines was 588, and the turnover rate was 3.86%: the resignation number of COSCO SHIPPING Port was 499, and the turnover rate was 4.78%; the resignation number of OOIL was 1,021, and the turnover rate was 11.97%.We fully respect the personal choices of our employees. When employees leave, we will handle the separation procedures according to law.



Employee training and growth

The ultimate of enterprise competition and development lies in talent competition, that's why we pay attention to the improvement of employees' quality and their personal development, the company established an efficient training system, and formulated reasonable annual training plans and training programs based on business needs, so that employees can obtain better career development and sufficient promotion opportunities, realizing their self-worth and promoting the development of the company at the same time.

Equal promotion

We provide employees with equal, fair and transparent promotion channels. The company's promotion channels are dual-channel, including management sequences and business sequences. Employees can choose the appropriate career path according to their own circumstances. In addition, the company conducts annual assessments of employees in accordance with the "Employee Assessment Procedures". The assessment indicators are a combination of qualitative and quantitative indicators, and employees are regularly promoted based on the assessment results to ensure that each employee has a fair and equal promotion opportunity.





Efficient training

We organize trainings following the Management Measures for Staff Education and Training, the Management Measures for Internal Trainers and other directive documents. We add new and diversified training content on the basis of the traditional training courses, and the online learning platform has also been upgraded. For example, for the company's online learning platform "JIZHI-HUI", in 2019, the company introduced external high-quality online courses such as "20 Workplace English for Foreign Enterprise Employees Studying", "Word \ Excel \ PPT Micro Classes" and supported the form of video courseware for employees to learn more conveniently.

During 2019, COSCO SHIPPING Holdings provided 34 employees with 1.054 hours of training and the percentage of employees trained was 100%; COSCO SHIPPING Lines provided 10,191 employees with 260,136 hours of training and the percentage of employees trained was 100% (For formal employee training only, does not include labor staff leased to third-party companies);OOIL provided 8,015 employees with 63,518 hours of training and the percentage of employees trained was 94%; the headquarters of COSCO SHIPPING Ports provided 321 employees with 14,476 hours of training and the percentage of employees trained was 100%



employees (person)

COSCO SHIP-PING Holdings



The headquarters of COSCO SHIP-PING Ports

OOIL

34 10, 191 321 8,015

Case: Further development of The Talent Plan

In 2019, COSCO SHIPPING Lines continued to deepen the development of The Talent Plan. Every week, overseas members of The Talent Plan shared presentations on the local humanities, cultures, scenic spots, business profiles and other aspects of the country, which promote learning exchanges between employees at home and abroad, and strengthen domestic members' understanding of the situation in overseas countries. In addition, we also arrange domestic members of The Talent Plan to participate in the financial courses. In the form of group sandbox, the managers of relevant business departments assume specific management roles, and simulate the overall operation of the company to improve management skills



Case: COSCO SHIPPING Ports held internal training for container terminal operations

On December 17-18, 2019, COSCO SHIPPING Ports held a series of professional trainings on container terminal operations. Colleagues with rich terminal working experience were invited as training instructors to share the terminal operation process, terminal equipment, container terminal KPIs, etc. with employees at the headquarters functional department. Employees of various functional departments participated in the study according to their own job requirements, and a total of 89 people from the four courses participated in this training. After two days of study, the participants in the training generally reported that the course content allowed them to have a deeper understanding of the front-line operations of the terminal and improved everyone's expertise in terminal operations.



Case: Cyber Security Awareness Training of OOCL

With the increasing complexity of Internet technology, common cyber attack methods such as cracking corporate information security systems, email scams, spear phishing, and social media fraud are increasingly rampant. Therefore, OOCL actively launches relevant measures and training activities, organizes network security training and assessment every year, updates the database and its development trends monthly, improves employees' awareness of network security, and popularizes relevant knowledge to ensure that each employee is protected from such Threat.



Ensuring employees' occupational health and safety

COSCO SHIPPING Holdings always puts employees' occupational health and safety first, conducts internal and external audits of the ISO5001: 2018 system every year, and makes corrections and improvements based on the audit results. We have established the Occupational Health and Safety Risk Assessment and Operation Control Procedures in accordance with the ISO5001: 2018 Occupational Health and Safety Management Standards and ISM Rules to uniformly manage the occupational health and safety of all employees. In 2019, in order to further strengthen production safety management, implement similar laws and regulations such as the Safety Production Law in various countries and regions, so as to effectively prevent and reduce various accidents, COSCO SHIPPING Lines revised the COSCO SHIPPING Lines Safety Production Duty Management Regulations, "Administrative Measures for Emergency Response Plans for COSCO SHIPPING Lines", "Consolidated Emergency Response Plans for COSCO SHIPPING Lines" and "Administrative Provisions for Safety Education and Training of COSCO SHIPPING Lines", so as to strengthen each operation units' responsibility of safe production, and provide implementation basis for the investigation of safety production responsibility.

In 2019, there was no work-related injuries in the COSCO SHIP-PING Holdings headquarters: in COSCO SHIPPING Lines, the 1,000-person injury rate was 0.0657‰, and 1 cases of work-related injuries and 0 death occurred; in COSCO SHIPPING Ports, the 1,000-person injury rate was 5.75‰, and 60 cases of work-related injuries and 0 death occurred; in OOIL, the 1,000-person injury rate was 2.58‰, and 22 cases of work-related injuries and 0 death occurred.

COSCO SHIPPING Holdings' work injury related data for the three years from 2017 to 2019 are shown in the following table (the 2017 and 2018 data do not include OOIL and the 2019 data include OOIL). The direct cause of the death accident in 2018 was that the maintenance staff was not properly seated during the operation and did not wear the safety rope. After the accident, all the teams in the COSCO SHIPPING Ports re-learned the safety production rules and regulations, improved safety awareness, and stipulated that when working at heights, Wear a safety rope. View all transmissions and install the necessary guards.

	2017
Work-related fatalities (person)	0
Work-related injuries (person)	86
Total number of missed work days	1,297

Safety Inspection

In 2019, we strengthened the on-site inspection of ships and land units, focusing on the implementation of the ship, dangerous goods storage and transportation, special equipment and safety rules and regulations. All kinds of safety supervisors carried out on-site safety supervision and inspection of ships for 245 times, 531 rectification items, 219 on-site rectification and 312 tracking rectification items, At present, all of them have been rectified. The land unit has inspected 91 times, 236 items have been rectified, 212 items have been rectified on the spot, 24 items have been rectified, and all problems found in the inspection have been corrected in time.





COSCO SHIP-PING Holdings

COSCO SHIP-**PING Lines**

The headquarters of COSCO SHIP-PING Ports

001

0.00 0.0657 5.75 2.58

2018	2019
1	0
95	83
1,414	1,979

Labor Protection

We set up a special fund to provide labor protection articles, and distribute corresponding labor protection articles for employees free of charge in combination with the actual needs of each unit, then arrange a specific administrator to be responsible for the daily management of labor protection articles, so as to ensure that the labor protection articles required by employees meet the national standards

Medical Test

The company always pays attention to the physical and mental health of the staff, organizes the land staff to have a physical examination once a year, and arranges the crew to have a medical test before each boarding. After the physical examination, the company invited medical experts to the unit to answer questions and consult the health of the employees, as well as the summary of the physical examination work, and entered the health files of the employees, so as to properly arrange the rest and treatment for the employees with diseases.

The occupational health and safety of employees is a key topic that COSCO offshore control continues to focus on. In the future, we will pay attention to safety work, pay attention to employees' health, constantly improve existing policies and measures, and regularly assess safety risks, so as to continuously reduce any potential safety hazards and realize the company's long-term stability.

Safety Education

In order to spread safety and health awareness to employees' daily work and life, we actively organize various safety education activities, and encourage employees to participate in safety training and certification. In 2019, in the container transportation business, the company held training courses for safety management personnel of all units, completed 43 sessions of centralized safety training before the crew embarked; organized more than 340 person times of conversation training for part-time labor safety supervisors of ships; organized one session of special training course for part-time labor safety supervisors of ships; and held 6 sessions of centralized safety training for crew members of new ships. In addition, this year, the company also focuses on strengthening the training of occupational health and safety supervision and management personnel, regularly arranging and learning advanced safety management concepts and methods, fully combining business practice and safety theory, and ensuring that 100% of the unit leaders, occupational health and safety management personnel and special operators are employed with certificates

Case: COSCO SHIPPING Lines Jinzhou Co., Ltd. carried out fire fighting knowledge training

In order to further improve the awareness of fire safety and do a good job in the work, COSCO SHIPPING Lines Jinzhou Co., Ltd. organized all employees to learn "Fire Safety Knowledge Lecture" on January 7, 2019. The instructor of Jinzhou safety fire training center was invited to train everyone on fire safety knowledge, including various cases often encountered in work and life, as well as the safety of vehicles, how to prevent accidents, and the use of fire equipment. Through this training, the fire awareness of employees has been enhanced. Everyone said that they will always bear in mind the importance of safety in the future work, so as to keep the alarm bell of safety production ringing.



Protecting employee rights

The company is based on international human rights conventions such as the Universal Declaration of Human Rights and the International Covenant on Economic, Social and Cultural Rights as well as relevant core labor conventions of the International Labor Organization, and Labour Law, The labor contract Law, Regulations about Forbidding from the Use of Child Laborers, Feme Law, and Trade Union Law, then Incorporate anti-discrimination, prohibition of child labor, opposition to forced labor human rights principles and requirements into sustainable development management, strictly abide by international conventions and rights related to human rights, and prohibit any discriminatory behavior.

As of 2019, there have been no discriminatory acts at any of our locations, nor have there been any incidents or complaints that violate the rights of ethnic minorities or the freedom of religious belief. At the same time, COSCO SHIPPING Holdings with its subsidiaries, COSCO SHIPPING Lines and COSCO SHIPPING Ports signed collective labor contracts with all employees through unions. The company's obligations, employees' rights, and dispute settlement methods were specified in the contracts. We actively protect the legal rights of employees in any form, and we are willing to actively communicate and negotiate with employees to protect their legitimate interests against the rights and interests of employees and the possible damage to their rights caused by major changes in the company's operations.

Prohibition of child labor and forced labor

COSCO SHIPPING Holdings expressly prohibits the use of child labor. We have formulated relevant policies and comprehensive preventive measures in important aspects such as employee recruitment to prevent the use of child labor. At the same time, in accordance with the requirements of the international social responsibility standard SA8000, the "save child labor procedure" has been established to carry out remedial work in accordance with the requirements of laws and regulations in the event that child labor is employed due to work errors. We also pass on these ideas to suppliers and require them to make a commitment not to use child labor when they enter the market, so as to ensure that they do not use child labor

COSCO SHIPPING Holdings stopped the occurrence of forced labor. We explicitly prohibit the use of forced labor, debt repayment or contract labor, and have made detailed and reasonable provisions in the important links of enterprise recruitment, employment and resignation, so as to eliminate the use of forced labor from specific practice. In this year, forced labor has never occurred in our operation and suppliers.



Our labor union, as a representative of the employees, signed the Collective Contract with the Company and established a mediation mechanism for resolving labor disputes. In the event of labor disputes, the union will mediate and provide legal services. When it comes to major corporate decisions, we notify all employees through the workers' congress, local area network, newspapers, posters and other means. In the future, COSCO SHIPPING Holdings will continue to protect the rights and interests of employees, effectively resolve labor disputes, and promote the stability of the staff and society as the primary task, then take this as the basis for the realization of a better life of employees, and build a bridge of trust with employees.

Employee care and assistance

COSCO SHIPPING Holdings is committed to creating a well working environment with people oriented, advocating balance of work, and hoping that employees can find fun in their work. Therefore, the company actively organizes all kinds of activities, enlivens the cultural life of employees, strives to create a good working atmosphere for employees, and jointly promotes the construction of corporate culture.

Protecting rights and benefits of employee

As a leader of shipping companies, COSCO SHIPPING Holdings is committed to serving as a role model and providing employees with competitive salaries and benefits. In terms of remuneration, the company strictly abides by the minimum wage management regulations of local governments to ensure that the basic salary of all types of employees is not lower than the legal requirements, pay for social insurances including basic endowment insurance, medical insurance, unemployed insurance, employment injury insurance, and maternity insurance and housing fund fully and timely. In addition, we withhold and pay the personal insurance monthly on behalf of the employees.

Our employees enjoy statutory off-days and holidays, paid leaves, family visit leaves, as well as other holidays specified by Chinese policies and the Company's regulations. Employees' salary on overtime hours and holidays are payed strictly according to Chinese policies and the Company's regulations.

As for Company's benefits, we provide employees with daily lunch, annual medical examination for staff mental and physical health, as well as various health security services that employees can choose based on their needs. In order to help employees with their legal issues, enhance their legal awareness for safeguarding rights and boost company growth in a balanced way, the Company regularly carries out legal consultations for employees and invites professional lawyers to give legal advice.



Case: COSCO SHIPPING Lines organized legal lectures

On July 31, 2019, a total of more than 60 employees attended the "Legal Knowledge Training Seminar" organized by COSCO SHIPPING Lines in conjunction with Shanghai Siwei Lema Law Firm. This seminar is based on the monthly legal consultation, analyzed the legal issues that employees generally have doubts, and provided targeted explanation of legal common sense. At the scene of the activity, the lecturer explained in a simple way, interactived Q & A on the stage. The participants frequently held up their mobile phones to record the content of the explanation. Employees said that they learned a lot of legal knowledge that can be applied in life.





Case: Headquarter of COSCO SHIPPING Holdings organized "Embossing Art" activity

In order to enrich the cultural life of employees and convey the concept of green life, on December 11, 2019, headquarter of COSCO SHIPPING Holdings organized "Embossing Art" activity. 19 employees including company leaders, department heads and ordinary employees took part in this activity. While learning the "Embossing Art", the employees enhanced their team awareness, and cultivated their sentiments. Everyone's environmental love of nature has been inspired.



Case: COSCO SHIPPING Ports won men's basketball game championship.

In May 2019, after 30 fierce competitions in a week, the first COSCO SHIPPING Group men's basketball competition (Shanghai competition area) ended successfully. Team members of COSCO SHIPPING Ports fully demonstrated the spirit of sports competition, demonstrated the vigor and vitality of COSCO port, and finally won the championship.





Case: Team development activity of OOCL

On November 16, over 300 colleagues of OOCL gathered in Dongguan for a full day teambuilding event, which was packed with fun games and a challenging mega domino group project. Participants were grouped into 20 teams to compete in various games, which required teamwork and collaboration to win. It is worth mentioning that all teams worked together on a super challenging project in creating a huge map with domino tiles. The project required extensive collaboration, persistence and mindfulness of every employee of OOCL.



Contribution to public welfare

COSCO SHIPPING Holdings take social responsibilities as a corporate citizen. In 2019, we as always organized and participated in a variety of socially useful activities to help people in need and contribute to society. In 2019, COSCO SHIPPING Lines donated over RMB10.62 million, COSCO SHIPPING Ports donated over RMB8.74 million, and OOIL donated RMB4.7 million , totally donated RMB24.06 million for social causes.

Poverty alleviation

In 2019, COSCO SHIPPING Holdings and its subsidiaries continued to promote poverty alleviation projects in various regions, we actively promote poverty alleviation projects in various regions. For example, in Guiyunhua Village, Guiyunhua Manchu Township, Zhuanghe City, Dalian, we donated more than RMB 100,000 for aid fund; in five fixed-point assistance areas such as Tibet, Yunnan, and Hunan, We have purchased over RMB 1.57 million specialty products in the help area to help these areas.

Case: "Double 100" pairing action between village and enterprise

In 2019, COSCO SHIPPING Lines actively participated in the targeted poverty alleviation project of "double 100" villages, we signed a pair agreement with Xindian Village, Tiantai Town, Chishui City, Zunyi, and injected over RMB 760,000 of poverty alleviation funds. COSCO SHIPPING Lines focused on funding the "Crayfish Breeding Construction Project", expanding the Industrial Road and installing street lamps, then supplemented by purchasing agricultural products from poor households. Xindian Village will be helped to win the battle of poverty alleviation, and the love of the COSCO SHIPPING Lines staff will be widely spread.



Case: COSCO SHIPPING Ports actively purchase featured products from poor areas

In 2019, COSCO SHIPPING Ports purchased 210 special agricultural products in Yuanling, Hunan Province, according to the list of special products in designated areas, totaling RMB 89,880. It combined designated support work with caring employees, expanded the procurement of special agricultural products, and made contribution to poverty alleviation.









Volunteer activities

Since March 2019, COSCO SHIPPING Lines has sent staff to the core positions of Import Expo Bureau, National Convention and Exhibition Center and Lead Team office of urban service, which provides strong support for the second Import Expo. On the eve of the Expo, we dispatched staff to the forum office, the investment promotion office, the operation center of the National Convention and Exhibition Center, and the comprehensive coordination group of Shanghai Municipal Service Guarantee leading group to provide comprehensive, thoughtful, warm and meticulous services for the second Import Expo and related supporting forums.



Carry out charity

OOCL United Kingdom Colleagues Take on Charity Mud Run to Support Children in Need

On September 15, 2019, colleagues from OOCL UK branch took part in a mud run to raise money for "Rainbow Children Charity", which gathered funds for specialist equipment to help seriously ill children. On the day of the event, our colleagues performed a 6-km mud race, overcoming obstacles, and demonstrating the power and determination of OOCL to help social charity.





Love education activity



Since the launch of the "Wanghua Wishfulness" love education activity, it has received strong support from employees and funders at all levels of the company. In addition to the original funding in 2019, our staff has increased the claim to help 2 elementary students, and accumulated 71 pairs. A total of RMB 138,000 was raised to provide children with one-to-one funding to help them fulfill their dream of going to school. The funding groups also received letters from students one after another this year, revealing the gratitude of the students. The group also issued honorary certificates to the funding groups and funders, affirming everyone's dedication.



"

In the future, we will continue to to carry forward the spirit of fulfilling social responsibilities, serving the society, and dedicating love, holding up more hope with the power of love, and spreading love to more people who need care and help.



----COSCO SHIPPING Holdings Co., Ltd.



This charpter includes Index table for ESG, Index table for GRI, Statistical Table,Report Scope and Independent assurance statement.

Index table for ESG

	Code	Chapter
Level	Code	Chapter
	A1 Emissions	Energy conservation
	Information on:(a) the policies; and(b) compliance with relevant laws and regulations that have a	and emission
	significant impact on the issuer relating to air and greenhouse gas emissions, discharges into water	reduction
	and land, and generation of hazardous and non-hazardous waste.	
	A1.1	Statistical Table
	The types of emissions and respective emissions data.	
	A1.2	Statistical Table
	Greenhouse gas emissions in total (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	
	A1.3	Statistical Table
	Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of	
	A1.4	Statistical Table
	Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of	Statistical Table
	production volume, per facility).	
	A1.5	Energy conservation
	Description of measures to mitigate emissions and results achieved.	and emission
	A1.6	Energy conservation
	Description of how hazardous and non-hazardous wastes are handled, reduction initiatives and	and emission
	results achieved.	reduction
A Environmental		
Environmental	A2 Use of Resources	Energy conservation and emission
	Policies on the efficient use of resources, including energy, water and other raw materials.	
		Statistical Table
	Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in total (kWh in '000s)	
	and intensity (e.g. per unit of production volume, per facility).	
	A2.2	Statistical Table
	Water consumption in total and intensity (e.g. per unit of production volume, per facility).	F
	A2.3	Energy conservation
	Description of energy use efficiency initiatives and results achieved.	and emission
	A2.4	Energy conservation
	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency	and emission
	initiatives and results achieved.	reduction
	A2.5	N/A
	Total packaging material used for finished products (in tonnes) and, if applicable, with reference to	
	A3 The Environment and Natural Recourses	Environmental
	Policies on minimising the issuer's significant impact on the environment and natural resources.	protection
	A3.1	Environmental
	Description of the significant impacts of activities on the environment and natural resources and the	protection
	actions taken to manage them.	P101001011
	B1 Employment	Employment and
	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a	Diversity
	significant impact on the issuer relating to compensation and dismissal, recruitment and promotion,	Diversity
	working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and	
	B1.1	Statistical Table
	Total workforce by gender, employment type, age group and geographical region.	
	B1.2	Statistical Table
B Social	Employee turnover rate by gender, age group and geographical region.	Statistical Table
		Enquiring annulation of
	B2 Health and Safety	Ensuring employees'
	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a	occupational health
	significant impact on the issuer relating to providing a safe working environment and protecting	and safety
	employees from occupational hazards.	Ctatiatical Table
	B2.1	Statistical Table
	Number and rate of work-related fatalities.	

Level	Code	Chapter
	B2.2	Statistical Table
	Lost days due to work injury.	
	B2.3	Ensuring employees'
	Description of occupational health and safety measures adopted how they are implemented and	occupational health
	monitored.	and safety
	B3 Training and Development	Employee training and
	Policies on improving employees' knowledge and skills for discharging duties at work. Description	growth
	of training activities.	°
	B3.1	Statistical Table
	The percentage of employees trained by gender and employee category (e.g. senior management,	
	middle management).	
	B3.2	Statistical Table
	The average training hours completed per employee by gender and employee category.	
	B4 Labor Standards	Protecting employee
	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a	rights
	significant impact on the issuer relating to preventing child and forced labour.	ngnis
	B4.1	Drotacting amplayee
		Protecting employee
	Description of measures to review employment practices to avoid child and forced labour.	rights
	B4.2	Protecting employee
	Description of steps taken to eliminate such practices when discovered.	rights
	B5 Supply Chain Management	Supplier Management
	Policies on managing environmental and social risks of the supply chain.	
	B5.1	Supplier Management
	Number of suppliers by geographical region.	
	B5.2	Supplier Management
	Description of practices relating to engaging suppliers, number of suppliers where the practices	
	are being implemented, how they are implemented and monitored.	
	B6 Product Responsibility	Serving the customers
	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have	-
	a significant impact on the issuer relating to health and safety, advertising, labelling and privacy	
B Social	matters relating to products and services provided and methods of redress.	
	B6.1	N/A
	Percentage of total products sold or shipped subject to recalls for safety and health reasons.	
	B6.2	Serving the customers
	Number of products and service related complaints received and how they are dealt with.	Serving the customers
		N1/A
	B6.3	N/A
	Description of practices relating to observing and protecting intellectual property rights.	
	B6.4	N/A
	Description of quality assurance process and recall procedures.	
	B6.5	Serving the
	Description of consumer data protection and privacy policies, how they are implemented and	customers
	monitored.	
		Anti comunition
	B7 Anti-corruption	Anti-corruption
	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a	management
	significant impact on the issuer relating to bribery, extortion, fraud and money laundering.	ļ
	B7.1	Anti-corruption
	Number of concluded legal cases regarding corrupt practices brought against the issuer or its	management
	employees during the reporting period and the outcomes of the cases.	
	B7.2	Anti-corruption
	Description of preventive measures and whistle-blowing procedures, how they are implemented	management
	and monitored.	
		O antrik stiller t
	B8 Community	Contribution to public
	Policies on community engagement to understand the needs of the communities where the issuer	welfare
	operates and to ensure its activities take into consideration the communities' interests.	
	B8.1	Contribution to public
	Focus areas of contribution (e.g. education, environmental concerns, labour needs, health,	welfare
	culture, sport).	
ļ		Ountell II i i i'
	B8.2	Contribution to public
	Resources contributed (e.g. money or time) to the focus area.	welfare

Index table for GRI

GRI content index	Disclosure	Corresponding chapter	Reason be omitted
GRI 101 General Disclosure			
GRI102: General Disclosures	102-1 Name of the orga-	About the Report	
2016	nization		
	102-2 Activities, brands, products,	About COSCO SHIPPING Hold-	
	and services	ings	
	102-3 Location of headquarters	About COSCO SHIPPING Hold-	
		ings	
	102-4 Location of operations	Outline of Report Disclosure	
	102-5 Ownership and legal form	About COSCO SHIPPING Hold- ings	
	102-6 Markets served	Outline of Report Disclosure	
	102-7 Scale of the organization	Outline of Report Disclosure	
	102-8 Information on employees and other workers	Employment and Diversity	
	102-9 Supply chain	About COSCO SHIPPING Holdings	
		Supplier Management	
	102-10 Significant changes to the organization and its supply chain	About the Report	
	102-11 Precautionary Principle or approach	About COSCO SHIPPING Holdings	
	102-12 External initiatives	About COSCO SHIPPING Hold- ings	
	102-13 Membership of associations	About COSCO SHIPPING Hold- ings	
	102-14 Statement from senior decision-maker	Statement of Chairman	
	102-16 Values, principles, stan- dards, and norms of behavior	About COSCO SHIPPING Hold- ings	
	102-18 Governance structure	Outline of Report Disclosure	
	102-40 List of stakeholder groups	Stakeholders and material topics	
	102-41 Collective bargaining agreements	Protecting employee rights	
	102-42 Identifying and selecting stakeholders	Stakeholders and material topics	
	102-43 Approach to stakeholder engagement	Stakeholders and material topics	
	102-44 Key topics and concerns raised	Stakeholders and material topics	
	102-45 Entities included in the con- solidated financial statements	About the Report	
	102-46 Defining report content and topic Boundaries	Stakeholders and material topics	
	102-47 List of material topics	Stakeholders and material topics	
	102-48 Restatements of informa- tion	About the Report	
	102-49 Changes in reporting	Stakeholders and material topics	1
	102-50 Reporting period	About the Report	1
	102-51 Date of most recent report	About the Report	
	102-52 Reporting cycle	About the Report	

GRI content index	Disclosure	Corresponding chapter	Reason be omitted
	102-53 Contact point for questions regarding the report	About the Report	
	102-54 Claims of reporting in ac- cordance with the GRI Standards	About the Report	
	102-55 GRI content index	Index table for GRI	
	102-56 External assurance	Independent assurance statement	
Major issue GRI 200 Economy Sta	andard Series		•
GRI 201 Economic Performance	103-1 Explanation of the material topic and its Boundary	Economic Performance	
	103-2 The management approach and its components	Economic Performance	
	103-3 Evaluation of the manage- ment approach	Economic Performance	
	201-1 Direct economic value gener- ated and distributed	Economic Performance	
GRI 203 Indirect Economic	103-1 Explanation of the material	Indirect economic impacts	
Impacts	topic and its Boundary	With development comes responsibilities	
	103-2 The management approach	Indirect economic impacts	
	and its components	With development comes responsibilities	
	103-3 Evaluation of the manage-	Indirect economic impacts	
	ment approach	With development comes responsibilities	
	203-2 Significant indirect economic	Indirect economic impacts	
	impacts	With development comes responsibilities	
GRI 205 Anti-corruption	103-1 Explanation of the material topic and its Boundary	Anti-corruption management	
	103-2 The management approach and its components	Anti-corruption management	
	103-3 Evaluation of the manage- ment approach	Anti-corruption management	
	205-3 Confirmed incidents of cor- ruption and actions taken	Anti-corruption management	
Major issue GRI 300 Environment	Standard Series		
GRI 302 Energy	103-1 Explanation of the material topic and its Boundary	Energy conservation and emission reduction	
	103-2 The management approach and its components	Energy conservation and emission reduction	
	103-3 Evaluation of the manage- ment approach	Energy conservation and emission reduction	
	302-1 Energy consumption within the organization	Statistical Table	
GRI 303 Water and Effluents	103-1 Explanation of the material topic and its Boundary	Energy conservation and emission reduction	
	103-2 The management approach and its components	Energy conservation and emission reduction	
	103-3 Evaluation of the manage- ment approach	Energy conservation and emission reduction	
	303-1 Interactions with water as a shared resource	Statistical Table	

GRI content index	Disclosure	Corresponding chapter	Reason be omitted
GRI 304 Biodiversity	103-1 Explanation of the material	Environmental protection	
	topic and its Boundary		
	103-2 The management approach	Environmental protection	
	and its components 103-3 Evaluation of the manage-	Environmental protection	
	ment approach	Environmental protection	
	304-2 Significant impacts of ac-	Environmental protection	
	tivities, products, and services on		
	biodiversity		
GRI 305 Emissions	103-1 Explanation of the material topic and its Boundary	Energy conservation and emission reduction	
	103-2 The management approach and its components	Energy conservation and emission reduction	
	103-3 Evaluation of the manage- ment approach	Energy conservation and emission reduction	
	305-1 Direct (Scope 1) GHG emis- sions	Statistical Table	
	305-2 Energy indirect (Scope 2)	Statistical Table	
	GHG emissions		
GRI 306	103-1 Explanation of the material	Effluent and waste treatment	
Effluents and Waste	topic and its Boundary		
	103-2 The management approach and its components	Effluent and waste treatment	
	103-3 Evaluation of the manage- ment approach	Effluent and waste treatment	
	306-1 Water discharge by quality	Statistical Table	
	and destination		
	306-2 Waste by type and disposal method	Statistical Table	
	306-3 Significant spills	Effluent and waste treatment	
GRI 307 Environmental Compli- ance	103-1 Explanation of the material topic and its Boundary	Environmental topics	
	103-2 The management approach	Environmental topics	
	and its components		
	103-3 Evaluation of the manage- ment approach	Environmental topics	
	307-1 Non-compliance with environ- mental laws and regulations	Environmental topics	
Major issue GRI 400 Society Stan	-	I.	1
GRI-401 Employment	103-1 Explanation of the material topic and its Boundary	Protecting employee rights	
	103-2 The management approach and its components	Protecting employee rights	
	103-3 Evaluation of the manage-	Protecting employee rights	
	ment approach 401-1New employee hires and	Statistical Table	
	employee turnover		
	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	Protecting employee rights	
GRI-403 Occupational Health and Safety	103-1 Explanation of the material topic and its Boundary	Social Topic	
	103-2 The management approach and its components	Ensuring employees' occupational health and safety	
	103-3 Evaluation of the manage- ment approach	Ensuring employees' occupational health and safety	

GRI content index	Disclosure	Corresponding chapter	Reason be omitted
	403-2 Hazard identification, risk as-	Ensuring employees' occupational	
	sessment, and incident investigation	health and safety	
GRI-404 Training and Education	103-1 Explanation of the material topic and its Boundary	Social Topic	
	103-2 The management approach and its components	Employee training and growth	
	103-3 Evaluation of the manage- ment approach	Employee training and growth	
	404-1 Average hours of training per year per employee	Statistical Table	
	404-2 Programs for upgrading employee skills and transition as- sistance programs	Employee training and growth	
GRI-405 Diversity and Equal Opportunity	103-1 Explanation of the material topic and its Boundary	Employment and Diversity	
	103-2 The management approach and its components	Employment and Diversity	
	103-3 Evaluation of the manage- ment approach	Employment and Diversity	
	405-1Diversity of governance bod- ies and employees	Statistical Table	
GRI-406 Non-discrimination	103-1 Explanation of the material topic and its Boundary	Employment and Diversity	
	103-2 The management approach and its components	Employment and Diversity	
	103-3 Evaluation of the manage- ment approach	Employment and Diversity	
	406-1 Incidents of discrimination and corrective actions taken	Employment and Diversity	
GRI-407 Freedom of Association and Collective Bargaining	103-1 Explanation of the material topic and its Boundary	Protecting employee rights	
	103-2 The management approach and its components	Protecting employee rights	
	103-3 Evaluation of the manage- ment approach	Protecting employee rights	
	407-1 Operations and suppliers in which the right to freedom of as- sociation and collective bargaining may be at risk	Protecting employee rights	
GRI-408 Child Labor	103-1 Explanation of the material topic and its Boundary	Protecting employee rights	
	103-2 The management approach and its components	Protecting employee rights	
	103-3 Evaluation of the manage- ment approach	Protecting employee rights	
	408-1 Operations and suppliers at significant risk for incidents of child labor	Protecting employee rights	
GRI-409 Forced or Compulsory Labor	103-1 Explanation of the material topic and its Boundary	Protecting employee rights	
	103-2 The management approach and its components	Protecting employee rights	
	103-3 Evaluation of the manage- ment approach	Protecting employee rights	
	409-1 Operations and suppliers at significant risk for incidents	Protecting employee rights	
GRI-415 Public Policy	103-1 Explanation of the material topic and its Boundary	Contribution to public welfare	

GRI content index	Disclosure	Corresponding chapter	Reason be omitted
	103-2 The management approach and its components	Contribution to public welfare	
	103-3 Evaluation of the manage- ment approach	Contribution to public welfare	
	415-1 Political contributions	Contribution to public welfare	
GRI-418 Customer Privacy	103-1 Explanation of the material topic and its Boundary	Serving the customers	
	103-2 The management approach and its components	Serving the customers	
	103-3 Evaluation of the manage- ment approach	Serving the customers	
	418-1 Substantiated complaints concerning breaches of customer- privacy and losses of customer data	Serving the customers	
GRI 419 Socio economic Compli- ance	103-1 Explanation of the material topic and its Boundary	Socioeconomic compliance	
	103-2 The management approach and its components	Socioeconomic compliance	
	103-3 Evaluation of the manage- ment approach	Socioeconomic compliance	
	419-1 Non-compliance with laws and regulations in the social and economic area	Socioeconomic compliance	

(1) Energy consumption and waste emissions

Table 1: COSCO SHIPPING Holdings

Indicators	Unit	2019	2018
Water	ton	426.00	449.00
Water intensity	ton/capital	12.53	12.83
Electricity	thousand kwh	127.33	128.78
Electricity intensity	thousand kwh/capital	3.75	3.68
Gasoline	ton	3.31	6.40
Gasoline intensity	ton/capital	97.35	182.86

Table 2: COSCO SHIPPING Lines

Indicators	Unit	2019	2018
Electricity	Electricity (thousand kwh)	5,171.49	5,463.12
	Electricity per capital (thousand kwh/capital)	4.70	4.97
water	Production water (ton)	177,327.30	190,386.90
	Domestic water (ton)	38,972.00	43,198.00
	Total water (ton)	216,299.30	233,584.90
	Water intensity (ton/RMB10,000 Turnover)*	2.19	2.56
Gas	Gas (m3)	330,515.00	391,177.00
	Gas intensity (m3/capital)	300.47	355.62
Fuel	Fuel oil (heavy oil)(ton)	4,950,552.52	4,992,708.20
	Diesel oil (light oil)(ton)	172,200.08	156,776.80
	Total fuel (ton)	5,122,752.60	5,149,485.00
	Fuel intensity (kg/ kiloton per nauti- cal mile)	4.56	4.79
Grease	Grease (ton)	14,776.60	11,698.80
	Grease intensity (kg/ kiloton per nautical mile)	0.01	0.01
Gasoline	Gasoline (ton)	19.14	19.96
	Gasoline intensity (ton / person million)	0.02	0.02
Greenhouse gas ^[2]	CO2 emission (ton) -direct	15,931,758.72	16,014,898.35
	CO2 emission intensity-direct (kg/ kiloton per nautical mile)	14.18	14.90
	CO2 emission (ton) -indirect	4,181.67	na
	CO2 emission intensity-indirect (ton/capital)	3.80	na
Air Emission ^[3]	Nitrogen Oxides (NO x)(ton)	461,047.68	463,453.66
	NO x emission intensity (kg/kiloton per nautical mile)	0.41	0.43
	Sulphur Oxides (SO x)(ton)	307,365.12	308,969.10
	SO x emission intensity (kg/kiloton per nautical mile)	0.27	0.28

Indicators	Unit	2019	2018
Waste water	Oily water (ton)	91,520.90 ^[4]	76,251.30
	Domestic waste water (ton)	35,074.80	38,878.20
	Waste waste intensity (ton/million RMB turnover)*	1.28	1.26
wastes	Production hazardous waste (m3)	32,485.80 ^[5]	2,136.27
	Hazardous waste intensity (m3/ million RMB turnover)	0.33	0.02
	Domestic non-hazardous waste (kg)	92,400.00	92,400.00
	non-hazardous waste intensity(m3/ million RMB turnover)	0.94	1.01
Dangerous Goods	Handling quantity of dangerous goods (TEU)	161,169.00	148,346.00

Remarks: Water, electricity, and gas consumption information are from the statistics of COSCO SHIPPING Lines' headquarters. Production water, fuel consumption, and exhaust emission data are from the of COSCO SHIPPING Lines' ships purchasing fuel oil. The data of CO2 emission, wastewater and waste are from the COSCO SHIPPING Lines' headquarters and its ships purchasing fuel oil. The denominator (per capital) is based on the number of employees working at the headquarters, which is 1,100.

[1] * means we have revised the data for 2018 based on the actual situation. [2] Scope1: CO2 Emission factor=3110g/kg fuel by IMO MEPC/29/18/Dec.1989 Scope2 CO2 Emission factor: 2012-2014 Average of the 2012-2014 carbon dioxide baseline emission factors for the Eastern China region power grid. [3] Sox factor =Sulfur content weight% 20g/kg fuel. If sulfur content is 3% 1Kg of fuel will create 60g of SOx

NOx Two-stroke emission factor: 87g NOx/kg fuel.

NOx four-stroke emission factor: 57g NOx/kg fuel.

[4] COSCO SHIPPING has added 10 large vessels in 2019, so the oily water generated has increased compared with last year. [5] COSCO SHIPPING has added 10 large vessels in 2019, so the hazardous waste generated has increased compared with last year.

(1) Energy consumption and waste emissions

Table 3: COSCO SHIPPING Ports^[2]

Indicators	Unit	2019	2018
Purchased Electricity	Electricity (thousand kwh)	547,036.00	454,835.93
	Electricity intensity (thousand kwh/ TEU)	0.0078	0.0077
Purchased Heating	Heating (MJ)	6,562.00	6,322.18
	Heating intensity (KJ/TEU)	0.09	0.11
Water	Total water (ton)	2,738,853.00	2,733,992.00
	Water intensity (ton/TEU)	0.04	0.05
Gas	Liquefied Petroleum Gas (LPG) (Litre)	140,563.67	141,702.00
	LPG intensity (Litre/TEU)	0.002	0.002
	Liquefied Natural Gas (LNG) (kg)	17,129,550.54	16,436,900.00
	LNG intensity (Litre/TEU)	0.25	0.28
	Natural gas (m3)	417,234.00	406,976.00
	Natural gas intensity (m3/TEU)	0.01	0.01
Energy	Diesel (Litre)	74,441,466.55	55,577,110.00
	Diesel intensity (Litre/TEU)	1.07	0.94
	Gasoline (Litre)	726,817.01	926,344.00
	Gasoline intensity (Litre/TEU)	0.01	0.02
Material	Grease (kg)	840,502.93	626,579.00
	Grease intensity (kg/TEU)	0.01	0.01
Greenhouse gas ^[3]	CO2 emission (ton) -direct	221,031.09	na
	CO2 emission intensity-direct (kg/ TEU)	3.16	na
	CO2 emission (ton) -indirect	409,554.60	na
	CO2 emission intensity-indirect (kg/ TEU)	5.86	na
	Total CO2 (ton)	630,585.69	525,565.00
	Total CO2 intensity (kg/TEU)	9.03	8.86
Waste water	waste water (m3)	989,880.00	827,228.00
	Waste water intensity (m3/TEU)	0.01	0.01
Wastes	Hazardous waste (kg)	4,123,816.00	3,173,025.00
	Non-hazardous waste intensity (kg)	1,334,372.00	702,670.00
	waste intensity (kg/TEU)	0.08	0.07
Dangerous goods	Handling quantity of dangerous goods (TEU)	65,127.00	77,500.00

[1] * means we have revised the data for 2018 based on the actual situation.

[2] Since COSCO Shipping Ports (CSP) Wuhan Terminal has not yet commenced operations, its environmental performance was not included. The energy consumption and GHG emissions do not include COSCO-PSA Terminal. We will explore more detailed disclosure in future reports. Since the throughput of CSP Abu Dhabi Terminal was included since April 2019, its energy consumption and GHG emissions from January to March were not included.

For grease and water usage, COSCO-PSA Terminal was not included. We will explore to make more detailed disclosure in future reports. Since the throughput of CSP Abu Dhabi Terminal was included since April 2019, its statistics from January to March were not included. Since CSP Wuhan Terminal has not yet commenced operations, its environmental performance was not included.

[3] GHG emissions were calculated based on the 100-year Global Warming Potentials, provided by the Intergovernmental Panel on Climate Change (IPCC) in its Fifth Assessment Report (CO2: 1, CH4: 28, N2O: 265).

1. GHG emissions from our operations in China were calculated based on the GHG Protocol Tool for Energy Consumption in China (Version 2.1) issued by Greenhouse Gas Protocol;

2. GHG emissions from our operations in Hong Kong were calculated based on "Appendix 2: Reporting Guidance on Environmental KPIs" issued by The Stock Exchange of Hong Kong Limited;

3. GHG emissions from our operations overseas were calculated based on the "Emission Factors from Cross-Sector Tools" issued by Greenhouse Gas Protocol; 4. for those GHG emission factors from electricity generation not covered by (1) to (3) above, the calculation was based on Carbon Footprint Country Specific Electricity Grid GHG Emission Factors v1.0 (Jun 2019) and relevant information provided by local electricity suppliers (applicable to the operations in Hong Kong

and overseas); and

5. the above statistics do not include fugitive emissions from fire-extinguishing systems and refrigeration/air-conditioning equipment.

(1) Energy consumption and waste emissions

Table 4: OOIL^[2]

Indicators	Unit	2019
Energy	Electricity (thousand kwh)	28,438.80
	Solar Energy (thousand kwh)	214.56
	Natural gas (thermal)	17,601.00
	Fuel Oil (marine heavy oil)	1,752,080.00
	Diesel (litre)	621,580.00
	Gasoline (litre)	109,750.00
	Liquefied Petroleum Gas (LPG) (kg)	7,694.00
	Ethyne (kg)	1,578.00
Energy intensity	Electricity Intensity (thousand kwh/ TEU)	0.0041
	Natural Gas Intensity (thermal/TEU)	0.0025
	Fuel Intensity (ton/TEU)	0.25
Material	Marine Lubricant	9,813,700.00
Water	Fresh Water (ton)	149,970.00
	Water Intensity (ton/TEU)	0.02
Greenhouse Gas ^[3]	Carbon Dioxide (CO2) Direct (ton)	5,476,100.00
	Carbon Dioxide (CO2) Indirect (ton)	18,380.00
	CO2 Emissions Intensity-vessels (g/ TEU-km)	41.30
Air Emission ^[4]	Nitrogen Oxides (NO x) (ton)	161,810.00
	Sulphur Oxides (SO x)(ton)	74,290.00
	Particulate Matter (PM)(ton)	12,200.00
	Non Methane Volatile Organic Com- pounds (NMVOCs) (ton)	5,400.00
	Carbon Monoxide (CO)(ton)	4,850.00
	Toxic Emission intensity (ton/TEU)	0.04
Wastes	Hazardous Wastes (litre)	1.11
	Hazardous Wastes intensity (itre/TEU)	0.00000016
	General wastes (m3)	19,221.00
	General wastes intensity(m3/TEU)	0.00276
No. of dangerous goods handling	TEU	128,218.00

[1] * means we have revised the data for 2018 based on the actual situation.[2] This is new part in 2019, and it is not compared with 2018[3] GHG factor is based on:

1. Third IMO Greenhouse Gas Study 2014

2. GMP factor: The relevant Global Warming Potential (GWP) is obtained from the Fifth Assessment Report (AR5) of the United Nations Intergovernmental Panel on Climate Change (IPCC), the applicable GWP values are: carbon dioxide (CO2) is 1, methane (CH4) is 28, Nitrous oxide (N2O) was 265.
 3. Emissions of electricity consumption are calculated with reference to the emission factors of each country or power company.
 [4] Air emission mainly produced by OOCL's vessels, the calculation methods are with reference to CCWG.

(2) Social data statistics^[2]

Table 1: COSCO SHIPPING Holdings

Indicators	Unit	2019	201
Total	Total employee (person)	34	3
By gender	Contracted male employee (person)	23	2
	Contracted female employee (person)	11	1
By age	Contracted employee: ≤30 (person)	6	
	Contracted employee: 30-50 (person)	25	
	Contracted employee: ≥50 (person)	3	
By employment type	Contracted employee (person)	34	3
	Part-time employee (person)	0	
By full-time,part-time	Full-time (person)	34	
type	Part-time (person)	0	
By area	Mainland contracted employee (person)	34	:
	Hong Kong contracted employee (person)	0	
	Foreign contracted employee (person)	0	
By level	Contracted employee of management level (person)	10	
	Other contracted employee (person)	24	:
New come staff	Total number of new male employees (person)	0	
	Total number of female new employees (person)	0	
	Total number of new employees under 30 years old (person)	0	
	Total number of new employees 30-50 years old (person)	0	
	Total number of new employees over 50 years old (per- son)	0	
	Total number of new employees in China (person)	0	
	Total number of new employees in overseas(person)	0	
Governing body	Total number of board members (person)	8	
	Number of male board members (person)	8	
	Number of female board members (person)	0	
	Board of Directors below 30 years old (person)	0	
	Board of Directors 30-50 years old (person)	2	
	Board of directors over 50 years old (person)	6	
	Number of minority and vulnerable groups on the board (person)	0	
Employee turnover /	Total number of contracted male employees (person)	1	
by gender	Total number of contracted female employees (person)	0	
Employee turnover	Percentage of contracted male employees	4.35	
rate by gender (%)	Percentage of contracted female employees	0	
Employee turnover /	Mainland contracted employee (person)	1	
by region	Hong Kong contracted employee (person)	0	
	Foreign contracted employee (person)	0	
Employee turnover	Percentage of mainland contracted employee	2.94	
rate by region (%)	Percentage of hong Kong contracted employee	0	
	Percentage of foreign contracted employee	0	

Indicators	Unit	2019	2018
Employee turnover /	Contracted employee age: ≤ 30 (person)	0	(
by age	Contracted employee age: 30~50 (person)	1	1
	Contracted employee age: ≥50 (person)	0	(
Employee turnover	Percentage of contracted employee age: ≤ 30	0	
rate by age (%)	Percentage of contracted employee age: 30~50	4.00	
	Percentage of contracted employee age: ≥50	0	
Employee turnover/	Turnover (person) of contracted employee	1	
total ratio	Turnover rate of contracted employee (%)	2.94	2.86
Occupational injury	Work-related fatalities (person)	0	(
	Ratio of Work-related fatalities	0	(
	Work-related injuries (person)	0	(
	Total number of missed work days	0	(
	Injury rate by thousand person (‰)	0	(
Training	Trained contracted employee	34	3:
	Total hours of training	1,054	2,420
	Percentage of contracted employee* (%)	100.00	94.2
	Trained contracted male employee (person)	23	2
	Percentage of contracted male employee (%)	100.00	91.6
	Trained contracted female employee (person)	11	1
	Percentage of contracted female employee (%)	100.00	100.00
	Trained contracted employee of management level (person)	10	
	Percentage of contracted employee of management level (%)	100.00	100.0
	Other trained contracted employee (person)	24	30
	Percentage of other contracted employee (%)	100.00	93.7
Average training	Average training hours of male employee (hour)	30.85	
hours ^[3]	Average training hours of female employee (hour)	31.31	
	Average training hours of management employee (hour))	32.16	
	Average training hours of other employee (hour)	30.52	
Supplier	Domestic	80	5
	Overseas	6	
Number of com- plaints received about products and services	Number of complaints (pieces)	0	
Number of corrup- tion suits filed and concluded by the company or its em- ployees	Number of cases (pieces)	0	

[1] * means we have revised the data for 2018 based on the actual situation.

[2] In 2019, the formula for calculating the turnover rate by different categories is: the number of resigned employees in this category / the total number of employees in this category as of December 31, 2019; the formula for calculating injury rate by thousand person is: number of injuries / regular employees / 1,000; The formula for calculating the training rate of employees in different categories is: the number of employees trained in this category / the total number of employees trained in this category.

[3] The formula for calculating the average training hours of COSCO SHIPPING Holdings is: cumulative training hours of same category employees / trained number of same category employees.

Index table

(2) Social data statistics^[2]

Table 2: COSCO SHIPPING Lines

Indicators	Unit	2019	2018
Total	Total employee (person)	17,249	17,080
By gender	Contracted male employee (person)	8,929	8,477
	Contracted female employee (person)	6,288	6,620
By age	Contracted employee: ≤30 (person)	2,163	2,440
	Contracted employee: 30-50 (person)	9,384	10,774
	Contracted employee: ≥50 (person)	3,670	1,883
By employment type	Contracted employee (person)	15,217	15,097
	Part-time employee (person)	2,032	1,983
By full-time,part-time	Full-time (person)	17,249	/
type	Part-time (person)	0	/
By area	Mainland contracted employee (person)	10,191	10,436
	Hong Kong contracted employee (person)	188	/
	Foreign contracted employee (person)	4,838	4,661
By level ^[3]	Contracted employee of management level (person)	9	11
	Other contracted employee (person)	15,208	15,086
New come staff	Total number of new male employees (person)	152	178
	Total number of female new employees (person)	126	155
	Total number of new employees under 30 years old	172	230
	(person)		
	Total number of new employees 30-50 years old (person)	106	103
	Total number of new employees over 50 years old	0	0
	(person)		
	Total number of new employees in China (person)	66	90
	Total number of new employees in overseas(person)	212	243
Governing body	Total number of board members (person)	11	11
	Number of male board members (person)	10	8
	Number of female board members (person)	1	3
	Board of Directors below 30 years old (person)	0	0
	Board of Directors 30-50 years old (person)	1	8
	Board of directors over 50 years old (person)	10	3
	Number of minority and vulnerable groups on the board (person)	0	0
Employee turnover /	Total number of contracted male employees (person)	351	381
by gender	Total number of contracted female employees (person)	237	297
Employee turnover	Percentage of contracted male employees	3.93	/
rate by gender (%)	Percentage of contracted female employees	3.77	/
Employee turnover /	Mainland contracted employee (person)	436	513
by region	Hong Kong contracted employee (person)	0	/
	Foreign contracted employee (person)	152	165
Employee turnover	Percentage of mainland contracted employee	4.28	/
ater by region (%)	Percentage of hong Kong contracted employee	0.00	
	Percentage of foreign contracted employee	3.14	

Indicators	Unit	2019	2018
Employee turnover /	Contracted employee age: ≤ 30 (person)	247	350
by age	Contracted employee age: 30~50 (person)	281	156
	Contracted employee age: ≥50 (person)	60	172
Employee turnover	Percentage of contracted employee age: ≤ 30	11.42	
rate by age (%)	Percentage of contracted employee age: 30~50	2.99	
	Percentage of contracted employee age: ≥50	1.63	
Employee turnover/	Turnover (person) of contracted employee	588	678
total ratio	Turnover rate of contracted employee (%)	3.86	4.49
Occupational injury	Work-related fatalities (person)	0	C
	Ratio of Work-related fatalities	0	C
	Work-related injuries (person)	1	C
	Total number of missed work days	0	(
	Injury rate by thousand person (‰)	0.0657	(
Training ^[4]	Trained contracted employee	10,191	15,097
	Total hours of training	260,136	310,707
	Percentage of contracted employee (%)	100.00	100.00
	Trained contracted male employee (person)	6,403	8,477
	Percentage of contracted male employee (%)	100.00	100.00
	Trained contracted female employee (person)	3,788	6,620
	Percentage of contracted female employee (%)	100.00	100.00
	Trained contracted employee of management level (person)	9	11
	Percentage of contracted employee of management level (%)	100.00	100.00
	Other trained contracted employee (person)	10,182	15,086
	Percentage of other contracted employee (%)	100.00	100.00
Average training	Average training hours of male employee (hour)	18.10	
hours ^[5]	Average training hours of female employee (hour)	36.40	
	Average training hours of management employee (hour))	11.68	
	Average training hours of other employee (hour)	25.80	
Supplier	Domestic	8,756	7,28
	Overseas	1,881	1,61
Number of com- plaints received about products and services	Number of complaints (pieces)	2	
Number of corrup- tion suits filed and concluded by the company or its em- ployees	Number of cases (pieces)	0	

 $\left[1\right]^{\star}$ means we have revised the data for 2018 based on the actual situation.

[2] In 2019, the formula for calculating the turnover rate by different categories is: the number of resigned employees in this category / the total number of employees in this category as of December 31, 2019; the formula for calculating injury rate by thousand person is: number of injuries / regular employees / 1,000; The formula for calculating the training rate of employees in different categories is: the number of employees trained in this category / the total number of employees trained in this category.

[3] The statistical scope of the number of COSCO Shipping Lines Management level is the leadership of COSCO Shipping Lines headquarters.
[4] The training data of COSCO SHIPPING Lines in 2018 includes overseas employees. In 2019, due to statistical inconveniences, the training data of overseas employees was not covered, and only the training data of contracted employees in mainland China was included. Among the contracted employees in mainland China, the number of male employees, female employees, management level employees and other employees was 6,403; 3,788; 9; 10,182.
[5] The formula for calculating the average training hours of COSCO SHIPPING Lines is: cumulative training hours of same category employees.

0

(2) Social data statistics^[2]

Table 3: COSCO SHIPPING Ports

Indicators	Unit	2019	2018
Total	Total employee (person)	14,971	12,816
By gender	Contracted male employee (person)	9,158	8,308
	Contracted female employee (person)	1,274	1,163
By age	Contracted employee: ≤30 (person)	1,829	1,858
	Contracted employee: 30-50 (person)	7,488	6,698
	Contracted employee: ≥50 (person)	1,115	915
By employment type	Contracted employee (person)	10,432	9,471
	Part-time employee (person)	4,539	3,345
By full-time,part-time	Full-time (person)	10,429	/
typel ^[3]	Part-time (person)	3	/
By area	Mainland contracted employee (person)	8,235	7,729
	Hong Kong contracted employee (person)	491	489
	Foreign contracted employee (person)	1,706	1,253
By level	Contracted employee of management level (person)	828	788
	Other contracted employee (person)	9,604	8,683
New come staff	Total number of new male employees (person)	438	415
	Total number of female new employees (person)	64	50
	Total number of new employees under 30 years old (person)	231	345
	Total number of new employees 30-50 years old (person)	258	115
	Total number of new employees over 50 years old (person)	13	5
	Total number of new employees in Hong kong (person)	43	45
	Total number of new employees in Mainland (person)	209	307
	Total number of new employees in overseas (person)	250	113
Governing body	Total number of board members (person)	12	14
	Number of male board members (person)	11	13
	Number of female board members (person)	1	1
	Board of Directors below 30 years old (person)	0	0
	Board of Directors 30-50 years old (person)	5	5
	Board of directors over 50 years old (person)	7	9
	Number of minority and vulnerable groups on the board (person)	0	0
Employee turnover /	Total number of contracted male employees (person)	418	460
by gender	Total number of contracted female employees (person)	81	92
Employee turnover	Percentage of contracted male employees	4.56	/
rate by gender (%)	Percentage of contracted female employees	6.36	/
Employee turnover /	Mainland contracted employee (person)	329	384
by region	Hong Kong contracted employee (person)	50	70
	Foreign contracted employee (person)	120	98
Employee turnover	Percentage of mainland contracted employee	4.00	/
rate by region (%)	Percentage of hong Kong contracted employee	10.18	/
	Percentage of foreign contracted employee	7.03	/

Indicators	Unit	2019	2018
Employee turnover /	Contracted employee age: ≤ 30 (person)	127	158
by age	Contracted employee age: 30~50 (person)	242	25
	Contracted employee age: ≥50 (person)	130	143
Employee turnover	Percentage of contracted employee age: ≤ 30	6.94	
rate by age $(\%)$	Percentage of contracted employee age: 30~50	3.23	
	Percentage of contracted employee age: ≥50	11.66	
Employee turnover/	Turnover (person) of contracted employee	499	552
total ratio	Turnover rate of contracted employee (%)	4.78	5.80
Occupational injury	Work-related fatalities (person)	0	
	Ratio of Work-related fatalities	0.00	0.01
	Work-related injuries (person)	60	95
	Total number of missed work days	1,957	1,414
	Injury rate by thousand person (‰)	5.75	7.40
Training $1^{[4][*]}$	Trained contracted employee	321	302
0	Trained contracted employee(person-time)	370	715
	Total hours of training	14,476	6,268
	Percentage of contracted employee (%)	100.00	100.00
	Trained contracted male employee (person)	238	224
	Percentage of contracted male employee (%)	100.00	100.00
	Trained contracted female employee (person)	83	78
	Percentage of contracted female employee (%)	100.00	100.00
	Trained contracted employee of management level (person)	153	144
	Percentage of contracted employee of management level (%)	100.00	100.00
	Other trained contracted employee (person)	168	158
	Percentage of other contracted employee (%)	100.00	100.00
Average training	Average training hours of male employee (hour)	39	
hours ^[5]	Average training hours of female employee (hour)	39	
	Average training hours of management employee (hour))	39	
	Average training hours of other employee (hour)	39	
Supplier	Domestic	2,686	3,279
	Overseas	3,908	2,588
Number of com- plaints received about products and services	Number of complaints (pieces)	0	
Number of corrup- tion suits filed and concluded by the company or its em- ployees	Number of cases (pieces)	0	

[1] * means we have revised the data for 2018 based on the actual situation.

[2] In 2019, the formula for calculating the turnover rate by different categories is: the number of resigned employees in this category / the total number of employees in this category as of December 31, 2019; the formula for calculating injury rate by thousand person is: number of injuries / regular employees / 1,000; The formula for calculating the training rate of employees in different categories is: the number of employees trained in this category / the total number of employees trained in this category.

[3] The statistical scope here is contracted employees of COSCO SHIPPING Ports.
[4] The training data of 2018 only include employees of the headquarters. In 2019, COSCO SHIPPING Ports headquarters' total employees, male employees, female employees, management level employees and other employees were: 321; 238; 83; 153; 168, and we have re-stated the 2018 training data. In 2018, COSCO SHIPPING Ports headquarters' total employees, male employees, female employees, management level employees and other employees were: 302; 224; 78; 144; 158.

[5] Since 2018, COSCO SHIPPING Ports has unified the calculation method of training hours as total training hours / trainees.

(2) Social data statistics^[2]

Table 4: OOIL^[3]

Indicators	Unit	2019
Total	Total employee (person)	8,527
By gender	Male employee (person)	3,922
	Female employee (person)	4,605
By age	Employee: ≤30 (person)	3,251
	Employee: 30-50 (person)	4,294
	Employee: ≥50 (person)	982
By employment type	Contracted employee (person)	7,935
	Part-time employee (person)	592
By full-time,part-time	Full-time (person)	7,935
type	Part-time (person)	592
By area	Mainland employee (person)	4,016
	Hong Kong employee (person)	1,142
	Foreign employee (person)	3,369
By level	Employee of management level (person)	422
	Other employee (person)	8,105
New come staff	Total number of new male employees (person)	802
	Total number of female new employees (person)	964
	Total number of new employees under 30 years old	1,385
	(person)	
	Total number of new employees 30-50 years old (person)	356
	Total number of new employees over 50 years old	25
	(person)	
	Total number of new employees in China (person)	1,081
	Total number of new employees in overseas(person)	685
Governing body	Total number of board members (person)	14
	Number of male board members (person)	11
	Number of female board members (person)	3
	Board of Directors below 30 years old (person)	0
	Board of Directors 30-50 years old (person)	4
	Board of directors over 50 years old (person)	10
	Number of minority and vulnerable groups on the board (person)	0
Employee turnover /	Total number of male employees (person)	409
by gender	Total number of female employees (person)	612
Employee turnover	Percentage of male employees	10.43
rate by gender (%)	Percentage of female employees	13.29
Employee turnover /	Mainland employee (person)	572
by region	Hong Kong employee (person)	138
	Foreign employee (person)	311
Employee turnover	Percentage of mainland employee	14.24
rate by region (%)	Percentage of hong Kong employee	12.08
	Percentage of foreign employee	9.23

Indicators	Unit		
Employee turnover /	Employee: ≤30 (person)		
by age	Employee: 30-50 (person)		
	Employee: ≥50 (person)		
Employee turnover	Percentage of employee age: ≤ 30		
rate by age (%)	Percentage of employee age: 30~50		
	Percentage of employee age: ≥50		
Employee turnover/	Turnover (person) of employee		
total ratio	Turnover rate of employee (%)		
Occupational injury	Work-related fatalities (person)		
	Ratio of Work-related fatalities		
	Work-related injuries (person)		
	Total number of missed work days		
	Injury rate by thousand person (‰)		
Training	Trained employee		
	Total hours of training		
	Percentage of employee (%)		
	Trained male employee (person)		
	Percentage of male employee (%)		
	Trained female employee (person)		
	Percentage of female employee (%)		
	Trained employee of management level (person		
	Percentage of employee of management level		
	Other trained employee (person)		
	Percentage of other employee (%)		
Average training	Average training hours of male employee (hour		
hours ^[4]	Average training hours of female employee (ho		
	Average training hours of management		
	employee (hour)		
	Average training hours of other employee (hour		
Supplier	Domestic		
	Overseas		
Number of com- plaints received about products and services	Number of complaints (pieces)		
Number of corrup- tion suits filed and concluded by the company or its em- ployees	Number of cases (pieces)		

[1] * means we have revised the data for 2018 based on the actual situation.

[2] In 2019, the formula for calculating the turnover rate by different categories is: the number of resigned employees in this category / the total number of employees in this category as of December 31, 2019; the formula for calculating injury rate by thousand person is: number of injuries / regular employees / 1,000; The formula for calculating the training rate of employees in different categories is: the number of employees trained in this category / the total number of employees trained in this category.

[3] The data of OOIL (Social segment) was incorporated into the scope of COSCO SHIPPING Holdings for the first time in 2019, so no comparison was made with the data for 2018. At the same time, OOIL only classifies all employees by region, gender, and age group, and does not classify contracted employees by region, gender, and age group.

[4] The formula for calculating the average training hours of OOIL is: average of total training between 2018 and 2019 / trained number of same category employees.

ndex table

	2019
	757
	240
	24
	23.29
	5.59
	2.44
	1,021
	11.97
	0
	0
	22
	22
	2.58
	8,015
	63,518
	94
	3,676
	93.73
	4,339
	94.22
rson)	397
/el (%)	94.08
	7,618
	94.00
nour)	7.67
(hour)	8.14
	6.44
hour)	8.00
	4,230
	14,052
	189
	0

Report Scope

The entity disclosed in this report is prudently selected based on the selection criteria of "whether there is actual business operation", and takes into account the overall impact of the entity on COSCO SHIPPING Holdings' environmental, social and governance. The production units that have no actual business operation or have little or no impact although they have actual operation are filtered out. According to our selection process, we have selected three first-level subsidiaries, COSCO SHIPPING Lines Co., Ltd., COSCO SHIPPING Ports Co., Ltd. and Orient Overseas (International) Co., Ltd., as well as the subsidiaries covered by the financial reports of the three first-level subsidiaries The list of specific subsidiaries is shown below.

COSCO SHIPPING Lines

No.	Name of Company	No.	Name of Company
1	SHANGHAI PANASIA SHIPPING CO.,LTD	21	COSCO SHIPPING Lines (Ningbo) Co., Ltd.
2	SHANGHAI COSCO INFORMATION & TECHNOLOGY CO., LTD.	22	Sanlly Container Services Co., Ltd.
3	Shanghai COSCO SHIPPING Lines Global Service Centre Ltd.	23	COSCO SHIPPING Lines (North America) Inc.
4	COSCO SHIPPING International Freight Co., Ltd.	24	COSCO SHIPPING Lines (Europe) GmbH
5	COSCO SHIPPING Lines Agency Co., Ltd.	25	COSCO SHIPPING Container Line Agencies Limited
6	COSCO SHIPPING Lines South-China Co., Ltd.	26	New Golden Sea Shipping Pte Ltd
7	SHANGHAI OCEAN SHIPPING CO.LTD	27	COSCO CONTAINER LINES (HONGKONG) CO.,LIMTED
8	China Shipping Container Lines Hainan Co.,Ltd.	28	COSCO SHIPPING Lines (Korea) Co.,Ltd.
9	Tianjin Binhai COSCO SHIPPING Lines Logistics Co., Ltd.	29	Coheung Maring Shipping Co.,Ltd.
10	Shanghai COSCO SHIPPING Lines Logistics Co., Ltd.	30	COSCO SHIPPING Lines (Japan)Co.,Ltd.
11	COSCO SHIPPING Lines (Dalian) Co.,Ltd	31	COSCO SHIPPING LINES (OCEANIA) PTY LTD
12	COSCO SHIPPING Lines (Xiamen) Co.,LTD	32	COSCO SHIPPING LINES (Panama) IN- CORPORATION.
13	COSCO SHIPPING Lines (Tianjin) Co., Ltd.	33	COSCO SHIPPING Lines (Brasil) S.A.
14	COSCO SHIPPING Lines (Shanghai) Co., Ltd	34	COSCO (Cayman) Mercury Co.Ltd
15	COSCO SHIPPING Lines (Qingdao) Co., Ltd.	35	GOLDEN SEA SHIPPING PTE. LTD.
16	COSCO SHIPPING Lines (Wuhan) Co.,Ltd.	36	COSCO SHIPPING Lines (Central America) Incorporation
17	Wuhan Cosco Logistics Co.,Ltd	37	COSCO SHIPPING Lines (South Africa) Pty. Ltd.
18	COSCO SHIPPING Lines Agency (Shanghai) Co., Ltd.	38	COSCO SHIPPING Lines West Asia FZE
19	COSCO SHIPPING Lines Agency (Xiamen) Co.,Ltd.	39	Tianjin Port Cimc-zhenhua Logistics Co., Ltd
20	COSCO SHIPPING Lines (Hainan) Co.,Ltd.		

Note: Compared with the previous year, in 2019, the sold YANGPU COSCO SHIPPING REFRIGERATION STORAGE & TRANSPOR-TATION CO., LTD. was deleted, and Tianjin Port CIMC Zhenhua Logistics Co., Ltd., which was acquired during the year, was added.

COSCO SHIPPING Ports

	No.	China		No.	China
)—	1	Quan Zhou Pacific Terminal	Non-	1	Asia Container Terminal
-	2	Jinjiang Pacific Terminal	con-	2	COSCO-HIT Terminal
ies	3	Xiamen Ocean Gate Terminal	trol-	3	Yingkou New Century Terminal
	4	CSP Wuhan Terminal		4	Yingkou Container Terminal
	5	Lianyungang New Oriental Terminal		5	Shanghai Pudong Terminal
	6	Jinzhou New Age Terminal		6	Shanghai Mingdong Terminal
	7	Nantong Tonghai Terminal		7	Ningbo Yuan Dong Terminal
	8	Guangzhou South China Oceangate Terminal		8	Dalian Container Terminal
	9	Guangzhou Nansha Stevedoring Terminal		9	Yantian Terminals ^[1]
	No.	Overseas		No.	Overseas
	10	Piraeus Terminal (Greece)		10	COSCO-PSA Terminal (Singapore)
	11	CSP Zeebrugge Terminal (Belgium)		11	Kumport Terminal (Turkey)
	12	CSP Abu Dhabi Terminal (United Arab Emirates)			
	13	CSP Valencia Terminal (Spain) ^[2]			
	14	CSP Bilbao Terminal (Spain) ^[2]			

Orient Overseas (International) Limted

No.	
1	Orient Overseas Container Line Ltd.
2	OOCL Logistics Ltd.
3	CargoSmart Ltd.

[1] Including Yantian Terminal Phases I, II and III.

[2] CSP Valencia Terminal and CSP Bilbao Terminal are collectively called CSP Spain Group.

China

Independent assurance statement

Scope and approach

DNV GL Business Assurance Group ('DNV GL') has been commissioned by COSCO SHIPPING Holding Stock Co., Ltd. ('COSCO SHIP-PING Holding') to carry out an independent verification of the COSCO SHIPPING Holding 2019 Sustainability Report ('the Report').

The verification was performed against the DNV GL Protocol for Verification of Sustainability Reporting (VeriSustain ®), which is based on our professional experience, international assurance best practice including International Standard on Assurance Engagements 3000(ISAE 3000) and the Global Reporting Initiative (GRI) Sustainability Reporting Guidelines.

In addition to verify the contents disclosed in the Report, we also evaluated the process of collecting, recording and summarizing the sustainable development performance information based on the principle of reliability and the COSCO SHIPPING Holding data protocols.

The disclosure of information and data in the "Report" refers to the HKEx ESG Guide Appendix 27 < Environmental, Social and Governance Reporting Guide> ('HK-ESG')

We understand that the reported financial data and information are based on data from COSCO SHIPPING Holding's 2019 Financial Annual Report, which had been audited by third party. The review of financial data taken from the Annual Report is not within the scope of our work.

We planned and performed our work to obtain the evidence which is necessary to provide a basis for our assurance opinion. Our assurance engagement was performed against VeriSustain® with 'Principle Adherence' type, we are providing a 'Limited level' of assurance. A 'high level' of assurance would have required additional work at Group and site level to gain further evidence to support the basis of our assurance opinion

Responsibilities

COSCO SHIPPING Holding is responsible for the collection, analysis, aggregation and disclosure of information contained in the Report. Our responsibility in performing this work is to the management of COSCO SHIPPING Holding only and in accordance with terms of reference agreed. The stakeholders of COSCO SHIPPING Holding are the intended users of this statement.

DNV GL was not involved in the preparation of any information or data included in the Report except for this Assurance Statement. DNV GL maintains complete impartiality toward any people interviewed and the verification by numerous public means to understand positive and negative comments on COSCO SHIPPING Holding. DNV GL expressly disclaims any liability or co-responsibility for any decision a person or entity would make based on this Assurance Statement.

Basis of our opinion

A multi-disciplinary team of sustainability and assurance specialists performed work at COSCO SHIPPING Holding headquarter. We undertook the following activities:

- Review of the current sustainability issues that could affect COSCO SHIPPING Holding and are of interest to stakeholders;
- Review of COSCO SHIPPING Holding's approach to stakeholder engagement and recent outputs;

• Review of information provided to us by COSCO SHIPPING Holding on its reporting and management processes relating to the Principles;

• Interviews with top management and senior managers responsible for management of sustainability issues and review of evidence to support issues discussed:

· Based on significant sustainability issues disclosed in the Report, visits to COSCO SHIPPING Holding's headquarter and 2 operation sites to review process and systems for preparing sustainability data and implementation of sustainability strategy;

· Review of supporting evidence for key claims and data in the report. Our checking processes were prioritized according to materiality and we based our prioritization on the materiality of issues at a consolidated corporate level;

· Performed sample-based checks of the processes for generating, gathering and managing the quantitative and qualitative data presented in the Report;

• An independent assessment of claim's reporting against the HK-ESG.

Opinion

On the basis of the work undertaken, nothing came to our attention to suggest that the Report does not properly describe COSCO SHIP-PING Holding's adherence to the Principles. In terms of reliability of the performance data, nothing came to our attention to suggest that these data have not been properly collated from information reported at operational level, nor that the assumptions used were inappropriate.

In our opinion, based on the scope of this assurance engagement, nothing came to our attention to suggest that the Report does not meet the content requirements of the HK-ESG, i.e.,

· General Disclosures: We reviewed the general disclosures reported in this Report and nothing came to our attention to suggest that the reported information generally does not meet the reporting requirement of HK-ESG and the reason for non-disclosure is explained.

• Key Performance Indicators: We reviewed the key performance indicators reported in this Report and nothing came to our attention to suggest that the reported information generally does not meet the disclosure requirement.

Observation

The following is an excerpt from the observations and opportunities reported back to the management of COSCO SHIPPING Holding.

However, these do not affect our opinion on the Report, and they are indeed generally consistent with the management objectives already in place.

• It is suggested to widen and deepen related sustainability performance information and data disclosure, to assure disclosed content and performance information to be matched with report boundary and scope

• It is suggested to disclose management method for sustainable materiality issues more clearly according to GRI guidance

• It is suggested to disclose the evaluation criterion and processes about suppliers' sustainability performance in the report. Opinion for report content and quality of principles:

Materiality: COSCO SHIPPING Holding has established a materiality issues determination process within the company. The Report disclosed the materiality issues which identified through the determination processes and the relevant sustainability context. The Report also revealed the management approach and performance achievement through the transparent display of important sustainability information.

Stakeholder inclusiveness: COSCO SHIPPING Holding has established a mechanism for stakeholders' communication and engagement through multiple actions. Stakeholder expectation has been integrated into operation process, the results of this communication and engagement already influenced the setup of the sustainability strategy of COSCO SHIPPING Holding to a certain degree. The stakeholders' engagement and their focus has been revealed in the Report.

Responsiveness: COSCO SHIPPING Holding has setup a response mechanism to improve the responsiveness to stakeholders through establishing sustainability policies, objectives and target as well as improving governance structure, management systems and processes. With consecutive 2 years historical data and explicit context, the Report respond to the main stakeholder concerns about COSCO SHIPPING Holding's economic, social and environmental indicators and performance, especially of the multiple materiality issues as disclosed in the Report. The indicators and sustainability performance as disclosed in the Report was based on the identification and analysis in materiality issues that related with COSCO SHIP-PING Holding's sustainability strategy.

Completeness: Within the reporting scope and boundary defined by COSCO SHIPPING Holding, we believe that the Report does not omit relevant information that could significantly influence stakeholders' decisions or reflects significant sustainability impacts during the reporting period.

Accuracy and Reliability: COSCO SHIPPING Holding has established a comprehensive sustainability performance information management processes, performance information and data about the key responsibility issues is accurately reflected in the Report. Per the requirements of moderate level of assurance, we believe the data/information presented in the Report are accurate and detailed for stakeholders to understand the organization's performance on material topics.

Neutrality: We consider the overall tone of the Report to be neutral and the presentation of information to be generally balanced. The emphasis on various topics in the Report is basically proportionate to their relative materiality.

Sustainability context: In the review of the audit team, we believe that the Report presents the performance in its own sustainability and general business context, through discussing the performance of the COSCO SHIPPING Holding in the context of the limits and demands placed on environmental, social resources at the sector and regional level. If there is any inconsistency between the Chinese and English versions, the Chinese version will prevail. 3

Quantitative: The Report disclosed the economic, social and environmental indicators and performance based on HK-ESG and relevant of GRI Standard 2016, also discloses the data assumptions and calculations. Consistency The Report used the same disclosure statistics method as in 2018 and compares with the date of previous year.

For DNV GL - Business Assurance Group



Alton a
David <u>Haleh</u> Approval Sustainability/Service Manager,
Greater China



Address: 658 dongdaming Road, Hongkou District, Shanghai Post code: 200080 Website: http://hold.coscoshipping.com This report is owned by COSCO Shipping Holdings, and can not be reprinted without permission

Sustainability Report 2019

