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# 2024

COSCO SHIPPING Energy Transportation Co., Ltd. **Sustainability Report** 





Hong Kong Stock Exchange Stock Code: 01138 Shanghai Stock Exchange Stock Code: 600026

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# **About This Report**

### **Overview**

This report is the 17th sustainability (CSR) report ("the Report") released by COSCO SHIPPING Energy Transportation Co., Ltd. since the first one was released in 2008. The Report systematically elaborates the strategies, policies, measures, and achievements of COSCO SHIPPING Energy Transportation Co., Ltd. in corporate social responsibility (CSR) and sustainable development in 2024.

### **Reporting Period**

The Report covers the period from January 1 to December 31, 2024 ("the Reporting Period"), and includes additional information beyond the stated Reporting Period.

### **Organizational Coverage**

The Report covers COSCO SHIPPING Energy Transportation Co., Ltd. ("COSCO SHIPPING Energy", "this Company", "the Company", or "we") and its subsidiaries. China COSCO SHIPPING Corporation Limited ("COSCO SHIPPING Group" or "the Group") is the controlling shareholder of the Company. COSCO SHIPPING LNG Investment (Shanghai) Co., Limited ("COSCO SHIPPING LNG") is a wholly-owned subsidiary of the Company. China LNG Shipping (Holdings) Limited (CLNG) is a 50/50 joint venture between the Company and China Merchants Energy Shipping Co., Ltd. COSCO PetroChina SHIPPING Co., Ltd. ("COSCO PetroChina SHIPPING") is a subsidiary controlled by the Company. Dalian COSCO SHIPPING Energy Supply Chain Co., Ltd. ("Dalian COSCO Energy") is a wholly-owned subsidiary of the Company. Shanghai COSCO SHIPPING Chemical Carrier Co., Ltd. ("COSCO Chemical Carrier") is a wholly-owned subsidiary of the Company. Shenzhen COSCO Longpeng LPG Transportation Co., Ltd. ("Shenzhen Longpeng") is a subsidiary controlled by the Company. COSCO SHIPPING Tanker Commercial Management Limited ("COSCO Tanker Commercial Management") is a wholly-owned subsidiary of the

### **Reporting Cycle**

The Report is released in each fiscal year.

### **Data Sources**

All information and data included in the Report come from the official documents and related statistics of COSCO SHIPPING Energy, covering this Company's headquarters and subsidiaries. Unless otherwise stated, the reporting scope and standards are consistent with those of the annual report. No retrospective adjustments are made to prior period data for enterprise combination under common control in 2024. Unless otherwise specified, the currency involved in the Report refers to the RMB.

### **Reference Standards**

The Report is prepared with reference to the *Environmental, Social and Governance Reporting Code* issued by the Stock Exchange of Hong Kong ("HKEX"), the *Guidelines No. 14 of Shanghai Stock Exchange for Self-Regulation of Listed Companies—Sustainability Report (Trial)* released by the Shanghai Stock Exchange, and the *SDG Compass* by the United Nations.

### **Reporting Principles**

### The reporting principles are as follows:

### · Materiality

Following the procedure of identifying material topics stipulated by the HKEX *Environmental, Social and Governance Reporting Code* and the *Guidelines No.14 for Self-Regulation of Listed Companies — Sustainability Report (Trial)* released by the Shanghai Stock Exchange, we identify ESG factors concerned by internal and external stakeholders based on our communication and surveys with them and then determine material topics for disclosure.

### · Quantitation

The Report discloses quantitative targets and performance data measured against environmental and social indicators. All indicators have specified statistics scopes and calculation methods. Performance data for three consecutive years are disclosed under partial indicators, improving data comparability.

### • Balance

The Report provides an unbiased picture of the Company's performance and avoids selections, omissions, or presentation formats that may inappropriately influence a decision or judgment by the report reader.

### · Consistency

The Report follows the statistics disclosure methodology adopted in the previous annual report. Changes will be indicated in the Report, if any.

### **Report Compilation Process**

The Report is prepared through several procedures to ensure objectivity, compliance, integrity, and transparency. These procedures include the analysis of domestic and international CSR standards, the benchmarking of CSR reports released by peer companies, the collection of report data, the investigation and interviews for report preparation, the double materiality topics analysis, the writing of the report and the review and approval by specialized departments, and the release and review of the Report.

### **Report Formats**

The Report is available in print and digital formats. The digital version can be accessed and downloaded at: https://energy.coscoshipping.com/

### **Report Languages**

The Report is available in simplified Chinese, traditional Chinese, and English. In case of any discrepancy, the simplified Chinese version shall prevail.

### **Contact Information**

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### **Confirmation and Approval**

The Report was approved by the Board of Directors on March 26, 2025.

# **Message from the Chairman**

Amid profound transformations in the global economy and energy landscape, the shipping industry, an essential pillar of international trade, is undergoing an unprecedented transformation and upgrade. The convergence of climate change, energy transition, and digital transformation has not only reshaped industry dynamics but also unlocked new growth opportunities for COSCO SHIPPING Energy. As a global leader in energy transportation, we remain at the forefront of the times, committed to driving the synergistic development of the economy, environment and society. We strive to contribute to a more inclusive, greener and more sustainable future.

### **Diversifying Energy and Chemical Transportation Solutions**

In 2024, we advanced the integration of energy and chemical logistics supply chains, establishing a new operational model that integrates value chains in oil, liquefied natural gas (LNG), and chemicals. This marked a significant step toward operations that integrate multiple core business segments and multiple industry chains ("multi-core, multi-chain" business model). We operate the world's largest and most comprehensive fleet of oil tankers, and are actively promoting our green and low-carbon transition by investing in eco-friendly vessels and adopting biofuels. As a key player in the global LNG transportation market, we actively engage in the development and operation of LNG shipping projects both in and outside China, working alongside our partners to create a synergistic ecosystem that seamlessly integrates shipping and cargo operations. In liquefied petroleum gas (LPG) and chemical transportation, we uphold the oil-chemical integration strategy to deliver integrated logistics solutions that are high-quality, specialized, safe, and reliable.

### Ensuring Safety as Our Solemn Commitment to Employees, Customers, and Society

Safety is the lifeline of the Company as well as our solemn commitment. In 2024, we upgraded our safety management system with digital and intelligent technologies and explored the application of Al in ship management. These advancements have enhanced our risk warning and emergency response capabilities, making safety management more accurate and efficient. We recognize that safety is not only a rigid requirement mandated by systems and regulations, but also needs to be fostered through a strong safety culture. By strengthening our safety culture, we ensure a safe and healthy working environment for our crew and onshore employees. We remain committed to protecting the lives of our crew and ensuring the Company's sustainable development by upholding higher standards and stricter safety management practices.

### **Decarbonizing Our Fleet for a Greener Future**

With growing global concerns about climate change and biodiversity conservation, the shipping industry is under increasing pressure to reduce its emissions. The International Maritime Organization (IMO) has introduced a proactive strategy for reducing greenhouse gas (GHG) emissions, requiring all shipping companies to assume their respective responsibilities. COSCO SHIPPING Energy has set a long-term goal. With 2020 as the base year, we aim to peak the carbon emissions of our self-owned tanker fleet by 2030 and achieve carbon neutrality by 2050. In 2024, we advanced the transition to a green and low-carbon fleet by piloting the application of cleaner biofuels, investing in the development of methanol dual-fuel tankers, and developing the design of ammonia dual-fuel vessels. In addition, we have formulated the Statement on Biodiversity *Conservation* to maximize the protection of marine ecosystems.

### **Cultivating Talent in Emerging Industries and Key Fields**

Talent is the cornerstone of our high-quality development. In 2024, we took a systematic approach to talent cultivation and recruitment in alignment with our strategic priorities, with a focus on key areas such as digitalized supply chains, technological innovation, and green, low-carbon development. By formulating talent development plans and recruiting outstanding graduates and professionals in and out of China, we built a strong talent pipeline that supports "multi-core, multi-chain" integrated development. In the future, we will continue to optimize the talent structure and strengthen the talent pool in key areas to provide strong support for the Company's high-quality development.

We firmly believe that business development is intrinsically linked to ESG progress, with each reinforcing and complementing the other. Practicing sustainable development is not only our responsibility, but also a fundamental driver and key objective in advancing the Company's high-quality growth. Only by deeply embedding sustainability principles into our strategy and operations can we gain a competitive edge when facing challenges of the future and achieve long-term, steady progress. We remain committed to our vision — "to be an outstanding leader in global energy transportation" and our mission — "connect the world by supply chains and deliver energy by ships". Guided by this mission, we will drive the green transformation of the shipping industry and contribute to the security and stability of the global energy supply chain.



Chairman of COSCO SHIPPING Energy

# **Statement from the Board of Directors**

# | Responsibilities of the Board

The Board of Directors of COSCO SHIPPING Energy, the highest authority and decision-making body responsible for ESG governance, formulates and reviews policies and regular issues related to the Company's sustainable development. It also monitors ESG material topics that may affect the Company's business, operations, and stakeholders' interests. The Board of Directors is fully accountable for the Company's ESG strategies and reporting and ensures the authenticity, accuracy, and integrity of the ESG report.

# | Risk Management

The Risk and Compliance Management Committee, under the Board of Directors, is responsible for the Company's ESG risk management. The Committee dynamically identifies and updates the Company's material risks, including ESG risks, on an annual basis, and assesses, manages, and monitors these risks. In addition, the Committee regularly submits risk lists to the Board of Directors, providing comprehensive analyses and decision-making support covering ESG risks to ensure the risk management system operates effectively.

# | Materiality Assessment

The Board of Directors evaluates, determines, and prioritizes material topics that significantly affect the Company. It discusses and sets the Company's sustainability priorities based on the external sustainability landscape, the Company's development strategy, and engagement with internal and external stakeholders. The Board of Directors also identifies and evaluates material ESG topics by considering both impact and financial materiality (double materiality). The Company continuously monitors ESG trends and benchmarks against industry peers, and enhances our sustainable development strategies and management approaches.

# | Target Tracking

We have set a GHG emissions target for our self-owned tanker fleet, aiming to peak carbon emissions by 2030 and achieve carbon neutrality by 2050, using 2020 as the base year. We have also set up long-term management goals of "zero harm to people, zero safety incidents, and zero environmental pollution", along with short-term management objectives for 2024 of "no more than four minor injuries of crew and no more than three minor injuries of shore-based staff". The Board of Directors will monitor achievements and review sustainability efforts related to these goals.

# **About Us**

# | Company Profile

COSCO SHIPPING Energy Transportation Co., Ltd. (Stock code 600026. SH, 1138. HK), established in Shanghai on June 6, 2016, is a subsidiary of China COSCO SHIPPING Corporation Limited engaged in the transportation of oil, liquefied natural gas (LNG), liquefied petroleum gas (LPG), and chemicals. It is a specialized company restructured from the energy transportation sectors of the former China Ocean Shipping Company and the former China Shipping (Group) Company. COSCO SHIPPING Energy is committed to becoming a one-stop energy transportation solution provider, providing all-ship, all-weather, customized services for more than 200 domestic and international customers, with the business covering more than 300 ports worldwide.



# | Business Scale

COSCO SHIPPING Energy operates the world's largest tanker fleet by capacity, covering all major tanker types, including Very-Large Crude Carrier (VLCC), Suezmax, Aframax/Long Range 2 (LR2), Panamax/Long Range 1 (LR1), and Medium Range (MR). We stand out globally with a comprehensive range of vessel types and hold a leading position in the coastal oil transportation market. As of the end of 2024, we owned and operated a fleet of 159 tankers with a total capacity of 23.74 million DWT and had 12 tankers with a total capacity of 2.36 million DWT order backlog. Leveraging its capabilities in all-type, all-location, all-weather, and all-process safety management, the Company provides reliable energy transportation services to global customers.

COSCO SHIPPING Energy is a leader in China's LNG shipping sector and a key participant in the global LNG shipping market. By the end of 2024, we had invested in 87 LNG carriers with a total capacity of 15.05 million cubic meters, of which 50 carriers, accounting for 8.42 million cubic meters, were already in operation. By actively participating in the development and operation of global LNG shipping projects, newbuilding supervision, and safety management, we collaborate with partners to serve the global natural gas industry chain, and build a synergistic business model that integrates LNG shipping with cargo operations.

COSCO SHIPPING Energy is forward-looking in promoting the integration of energy and chemical transportation. We acquired the chemical and LPG transportation arms of China COSCO SHIPPING Corporation Limited in 2024, effectively consolidating traditional energy, chemical and liquified cargo transportation resources. The acquisitions expand our business portfolio and create a new development pattern characterized by multi-core, multi-chain operations.

# | Safety Management

Guided by its vision "to be an outstanding leader in global energy transportation" and core values of credibility, safety, efficiency, and transformation (CSET), COSCO SHIPPING Energy strives to build a brand boasting premium safety and world-class competitiveness in ship management. We have established a high-standard safety management system, assembled a team of highly skilled safety professionals and crew, and built the world's largest energy transportation fleet, which we operate, covering a comprehensive range of vessel types. These efforts enable us to provide high-quality and professional transportation services to customers.

# | Global Presence

The Company has established a global marketing service system and a global security and emergency response system. Our customer service network is headquartered in Shanghai, with regional centers in Dalian, Beijing, and Guangzhou, and branches in Hong Kong (China), Singapore, the U.S., the U.K., Japan, and South America. Leveraging our global presence, as well as the scale and structure of our fleet, we provide 24/7 uninterrupted transportation solutions and value-added services, with diversified cargo, customer, and route types.

# | Organizational Structure



# **ESG Highlights in 2024**

### Developed a Low-Carbon Fleet ·

COSCO SHIPPING Energy actively advanced its low-carbon fleet development. In November 2024, we placed an order for six LNG/methanol dual-fuel ready VLCCs, and in February 2025, we placed another order for two Aframax and two LR2 methanol dual-fuel tankers, and two methanol dual-fuel ready Panamax tankers. This initiative accelerates the transition to a low-carbon fleet and aligns with the low-carbon trend of the shipping industry.

### Enhanced Ship R&D and Management Through Innovation

COSCO SHIPPING Energy actively advanced the transition to cleaner fuels, engaging in joint R&D on ammonia dual-fuel ammonia/LPG carrier, research on ammonia-powered tanker design and safety standards, and the development of methanol dual-fuel main engines. To enhance ship Carbon Intensity Indicator (CII) ratings, we pursued research and application of new energy-saving and carbon-reduction technologies, implemented technological upgrades, and leveraged a full-lifecycle digital intelligence platform for vessel operations to optimize and monitor ship energy efficiency.



In 2023, COSCO SHIPPING Energy secured an ESG-linked syndicated loan from the Bank of China, setting the sustainability performance targets (SPTs) tied to key performance indicators (KPIs) for carbon dioxide (CO<sub>2</sub>) and nitrogen oxides (NO<sub>x</sub>) emissions per unit turnover, as well as the workplace fatality rate. During the Reporting Period, we achieved our first-year SPTs and unlocked the initial preferential interest rate. This marked a shift in our ESG management towards value creation.



COSCO SHIPPING Energy actively explored new business models in the energy and chemical logistics supply chains, driving integration reforms and advancing the transition to a more diversified business portfolio. Furthermore, we strengthened our ESG structure and mechanism. In 2024, we established an ESG Management Office and a Low Carbon and Technical Support Office, embedding ESG principles into all aspects of our operations.

### Governance Performance

Percentage of employees provided with business ethics training

100%

Number of business ethics disputes

Number of information security violations

Π

# Use of biofuel





Percentage of NO<sub>x</sub> emissions per unit turnover reduced from 2023

3.28%



Number of environmental violations

2,001.95 tonnes

Percentage of vessels' CO<sub>2</sub> emissions per unit turnover reduced from







### Social Performance

Number of employee fatalities

Π

Percentage of employees who received training

100%

Total investment in rural revitalization

RMB **750,000** 

Total investment in charitable programs

RMB 10,087,100

# **Honors and Awards**

# **March 2024**

Shanghai Municipal Transportation Commission; Shanghai Municipal Human Resources and Social Security Bureau First Shanghai International Shipping Center Construction Awards for Outstanding Groups and Individuals

### Outstanding Group (COSCO SHIPPING LNG) Outstanding Individual (China Pool)

# January 2024

Pudong Maritime Safety Administration 2023 "Sunshine Safety Inspection" Awards

Best Vessel of the Year (MV "DA CHI")

# August 2024

China Federation of Logistics & Purchasing (CFLP)

National 5A Logistics Enterprise Certification

5A Logistics Enterprise Accreditation (COSCO PetroChina SHIPPING)

# June 2024

China Media Group (CMG) 2024 Annual ESG Action Report

Named among China's Top 100 ESG Listed Companies

# **July 2024**

Cailian Press 2024 Asia-Pacific Innovation & Development Awards

S&P Global CSA Corporate Engagement Team (Greater China Team) S&P Global Sustainable1 Summit Asia-Pacific ESG Pioneer Award & Sustainability Yearbook (China 2024) Launch Ceremony

Industry Mover

# September 2024

Ministry of Human Resources and Social Security; State-owned Assets Supervision and Administration Commission (SASAC) of the State Council

Selection and Commendation of Model Workers and Advanced Collectives in Central State-Owned

### Model Worker of Central SOEs

Hong Kong Marine Department; Hong Kong Shipowners Association

Annual Luncheon cum Award Presentation Ceremony

2023 Outstanding Performance Award in Port State Control Inspection

Shanghai United Assets and Equity Exchange Gold Award for M&A Reform Practices

2024 Golden Bull Corporate Sustainability Forum and the 2nd Guoxin Cup ESG Golden Bull Awards Ceremony Earned spots in "ESG Golden Bull Top 100" and "ESG Golden Bull Top 50 Central SOEs"; "MV 'Yuan Rui Yang': Anchored in Excellence, Committed to Green Future of the Blue Ocean" recognized as a standout ESG case example

Hong Kong Ta Kung Wen Wei Media Group Limited 14th Hong Kong International Financial Forum and China Securities Golden Bauhinia Awards Ceremony

Special Annual Award – Most Innovative Listed Company

# November 2024

SASAC Social Responsibility Bureau Parallel Forum on State-Owned Enterprises' Social Responsibility, the 7th China Enterprise Forum

Ranked No. 83 in the Central SOEs ESG Pioneer 100 Index

Tencent gq.com; Finet Group Limited

2024 Hong Kong Listed Companies Development Summit Forum and the 11th Top 100 Hong Kong Listed Companies Awards Ceremony

Ranked 18th in the Most Valuable Investment Award Ranked 6th in the Hong Kong Stock Connect Top 50 Performers

UN Global Compact (UNGC)

Release Conference of UNGC's "20 Case Examples for 20 Years" corporate sustainability case report and the first UNGC global roadshow showcasing Chinese corporate sustainability initiatives

Recognized as one of the UNGC's "20 Case Examples for 20 Years" corporate sustainability case report



# December 2024

China Securities Journal; China Reform Holdings Corporation Ltd.

# 01

Robust **Governance:** Paving the Way for a Sustainable Future

A robust corporate governance system is essential for compliance and long-term value creation. COSCO SHIPPING Energy remains dedicated to enhancing its governance system and risk management mechanism, upholding the Code of Business Ethics, and ensuring transparent, efficient communication with stakeholders. We also advance the development of an ESG management system to establish a strong foundation for high-quality development.

Contributing to the following UN SDGs:







M AND AND

Safety First: Leading the Way in Maritime

# **Corporate Governance**

# | Governance Structure

COSCO SHIPPING Energy strictly adheres to regulatory requirements in China and abroad and corporate governance standards for listed companies. In accordance with the *Articles of Association*, we continuously refine the working protocols and procedures of the Board of Directors and its specialized committees. We have established a robust governance system centered on the Shareholders' Meeting, the Board of Directors, the Board of Supervisors, and specialized committees. We regularly review and enhance our rules of procedure to ensure that all governing bodies operate in a regulated, efficient, and accountable manner, thereby strengthening governance capabilities and supporting long-term sustainable development.



# | The Shareholders' Meeting

The General Meeting provides a direct channel for the Board of Directors to communicate and establish a positive relationship with shareholders. To ensure equal participation and the exercise of shareholders' rights, we convene the General Meeting annually in strict accordance with the procedures stipulated in relevant laws, regulations, and the *Articles of Association*. In 2024, we held 4 General Meetings, deliberating 26 proposals.

# | The Board of Directors

Elected by the Shareholders' Meeting, the Board of Directors completed its term renewal during the Reporting Period. We have formulated rules of procedure for the Board of Directors, to ensure that the Board makes well-informed, rational decisions and effectively implements the resolutions of the Shareholders' Meeting.

The duties of the Board of Directors mainly include

- Determining the investment scheme and business plan Preparing the profit distribution and loss recovery proposals
- Formulating the capital operation proposal and implementing resolutions approved by Shareholders' Meetings

To promote board diversity, we have developed and implemented the *Board Diversity Rule*, according to which director candidates are selected based on various factors including, but not limited to, gender, age, race, language, cultural background, educational background, industry experience and professional experience.



# | The Board Committees

The Board of Directors has established five specialized committees, namely, the Strategy Committee, the Audit Committee, the Remuneration and Appraisal Committee, the Nomination Committee, and the Risk and Compliance Management Committee.



# | The Board of Supervisors

By the end of the Reporting Period, the Board of Supervisors consisted of four members, including three male supervisors and one female supervisor. It is responsible for reviewing financial reports and other financial information submitted by directors at the Shareholders' General Meeting and supervising the conduct of the Board of Directors and senior management in their duty performance. By the end of 2024, the Board of Supervisors convened 9 meetings and reviewed 24 proposals.

Sustained Actions: Advancing Toward a Low-Carbon Future Employee-Centric Approach: Investing in Our People for Sustainable Growth

Social Commitment in Action: Co-creating a Compassionate Ecosystem

Non-executive directors

Independent non-executive directors



Female director

Amended regulation documents, including the *Articles of Association*, totaling

Analyzes the Company's long-term development strategy, investment decisions, financial budgets, and strategic plans for investment projects, and offers suggestions to the Board of Directors.

Examines the Company's financial statements, reviews decisions on the appointment of independent auditors, approves audit-related services, and supervises the Company's internal financial reporting procedures and management policies to ensure financial transparency and compliance.

Evaluates the remuneration composition and appraisal standards of directors and senior management and offers suggestions.

Nominates Board members and recommends the nominees to Shareholders'

Deliberates risk control strategies and major risk control solutions, assesses the effectiveness of the Company's risk management, promotes the rule of law, and supervises managers' compliance with rules and regulations.

# | The Senior Management

The senior management is the executive body and reports to the Board of Directors. The authority of senior management is strictly defined by the *Articles of Association* and other corporate governance regulations. By the end of 2024, our senior management team comprised six executives, including five male executives and one female executive.

COSCO SHIPPING Energy highly values the training for directors, supervisors, and senior management to enhance their abilities to perform their duties. In 2024, we arranged for a total of 52 participants to join training programs organized by the China Association for Public Companies and the Shanghai Stock Exchange. These programs covered topics such as ESG, policy interpretation, and anti-fraud measures.

# **Risk Management**

# | Risk Management Framework

We strictly comply with applicable laws and listing regulations. With reference to the *Fundamental Norms for Corporate Internal Control*, we have established a three-level risk management framework comprising the Board of Directors (together with its Risk and Compliance Management Committee and Audit Committee), the senior management and functional departments, ensuring comprehensive risk oversight and end-to-end control.

### The Three-level Risk Management Framework of COSCO SHIPPING Energy



Under this framework, we have implemented three lines of defense system involving business units, the Risk Management Department, and the Supervision and Audit Department. Board members bring extensive risk management expertise, ensuring regulatory compliance while fostering value creation and high-quality business development.

### The Three-level Risk Management Structure of COSCO SHIPPING Energy

Every Functional Department and Business Unit	Engages all employ
Legal and Risk Management Department	Provides guidance a
Supervision and Audit Department	Conducts risk mon Company's risk cor



The Company engages external agencies to conduct internal control reviews and issue risk management reports annually.

The Company carries out two to three re-evaluation analyses focusing on key specific risks each year, to establish a comprehensive, thorough, and systematic risk management mechanism.

In addition, we have implemented a comprehensive closed-loop audit and supervision system. We ensure risk management and oversight are performed for all operational aspects of the Company by conducting internal and external audits, routine and special audits, while also facilitating the remediation of internal control deficiencies and risk management gaps.

# | Risk Identification and Response

COSCO SHIPPING Energy has established a dynamic monitoring mechanism to track significant changes in major risks, continually identify emerging major risks and significant business risk events, and promptly devise risk response plans and strategies. Furthermore, we have instituted an inclusive risk collection and reporting channel. Through the channel, we regularly distribute risk identification questionnaires to employees and encourage them to contribute to risk management based on their experience, thus enhancing overall risk management practices.

Each year, we conduct an assessment of our top ten risks. Along with the usage of quantitative analysis to evaluate risk probability, magnitude of impact, and potential consequences, we scientifically determine risk tolerance thresholds, and use tools such as sensitivity analysis and stress testing to develop a systematic risk management matrix, which includes risk ratings, control measures, and responsible parties. In 2024, regulatory compliance risk in business operations was identified as one of the major risks. Thanks to a robust risk prevention and control system, the Company did not experience any significant risk events in 2024.

In 2024, we integrated ESG risks into our comprehensive risk assessment system. Key risks related to compliance, operations, and climate change were identified. We also conducted an assessment of climate-related risks, systematically analyzing their impact on facilities and assets.

- vees in dailv risk control
- \_\_\_\_\_
- and supervision, and promptly corrects risk control defects
- nitoring and audit, and evaluates the effectiveness of the ntrol measures independently



Internally



### During the Reporting Period

Our internal controls operated effectively, without any significant or crucial deficiencies.

from Kev

Production

and Operation

Personnel

# | Internal Control and Compliance Management

Our objective is to ensure a comprehensive, effective internal control and compliance system, which provides targeted measures for key areas and risks and engages all employees for coordinated, integrated solutions. We uphold a "holistic compliance" approach, embedding compliance requirements into business operations. To reinforce accountability, management personnel are required to sign a *Compliance Commitment Statement*, ensuring compliance risk management is effectively implemented. In 2024, we conducted 18 compliance and risk control training sessions for all personnel, including Board members, our employees, and crew (contractor employees).

### Enhancing Top-Level Design for Compliance and Risk Control

We conduct risk control meetings for key projects, strengthening top-level design for compliance and internal control to ensure alignment between risk management measures and strategic objectives.

### Improving the Regulatory Framework to Strengthen Compliance Management

We have revised or introduced 36 policies, including the Investment Management Compliance Guide and the Business Compliance Negative List. We have also advanced the development of a tailored risk control framework for entities such as COSCO SHIPPING LNG, China Pool, and CLNG.

### Accelerating Digital Transformation for Enhanced Compliance and Risk Control Efficiency

We integrate compliance requirements into business processes, enabling end-to-end online assessments and reviews across risk control, operations, and ship management. We also use dynamic visualization technologies to strengthen risk control in critical areas.

In 2024, we engaged external professional agencies to conduct a comprehensive audit of our internal control and compliance systems at headquarters and five key domestic and international subsidiaries. Risk control was reinforced in critical areas such as major decision-making, special risk assessments, and large fund transactions. These measures ensure the effectiveness of the internal control and compliance systems, and effective implementation of relevant control measures.

# **Business Ethics**

# An Inspiring Corporate Culture

We have developed the Integrity Culture Development Plan to promote business ethics awareness among employees. An annual anti-corruption meeting is convened to review and implement the integrity and anti-corruption policies set by regulators and COSCO SHIPPING Group. This meeting evaluates the effectiveness of the Company's integrity and anti-corruption initiatives over the past year and sets priorities for the year ahead.



commercial bribery.

# Governance System

We strictly comply with laws and regulations related to business ethics. We have established business ethics policies, including the Code of Conduct, the Anti-Commercial Bribery Management Measures, the Management Measures for Corruption Risk Prevention and Control, the Manual for Prevention and Control of Integrity Risk in Important Business Areas, and the Manual for Prevention and Control of Shipboard Integrity Risk. We have established a set of internal policies to enforce a zero-tolerance approach to violations of business ethics, including bribery, corruption, fraud, discrimination, extortion, money laundering, monopolistic practices, and unfair competition.

To ensure the effective implementation of business ethics policies and requirements, we have established a robust governance framework. The Board of Directors serves as the highest oversight body for business ethics, while the Supervision and Audit Department supervises the implementation of business ethics policies and initiatives. This department develops annual work plans and regularly reviews policy implementation. To strengthen our supervisory system, we have established the Supervision and Audit Department, which conducts disciplinary inspections and audits, and plans, organizes and coordinates anti-corruption, integrity-building, and anti-commercial bribery efforts. In 2024, this department set up a Technical Maintenance and Equipment Audit Office and hired professionals to enhance audit coverage and quality. Moreover, we have fully digitized our internal audit processes, enabling the Supervision and Audit Department to continuously monitor corrective actions based on audit findings.

Furthermore, we have integrated business ethics performance metrics into employee compensation and performance evaluations. Violations of business ethics policies and the employee codes of conduct are subject to strict disciplinary measures.

1 The Company strictly complies with the United Nations Convention Against Corruption and all applicable anti-commercial bribery laws and regulations in the jurisdictions where it operates, whether as a contracting party, subcontractor, or third party. We firmly oppose any form of

2 The Company has developed and strictly implemented necessary anti-commercial bribery

Ine Company continually strengthens its anti-commercial bribery management system in alignment with international conventions, legal frameworks, and anti-corruption governance

 Each year, the Supervision and Audit Department requires key personnel at the manager level and above at the headquarters and affiliated units to sign a Commitment to Integrity. As part of the commitment, the key personnel pledge to adhere to laws and regulations and resist

# | Audit Oversight

We conduct thorough business ethics audits at all operational sites through special audits and regular oversight.

### Economic responsibility audit

We conduct economic responsibility audits for management personnel during their tenure and upon departure, which covers all operations every two to three years. These audits focus on key areas, including integrity in professional conduct, performance in making and executing decisions on major financial matters, internal control system development and implementation, and environmental protection. In 2024, economic responsibility audits were completed for two subsidiaries.

### Special audit

In 2024, we carried out a special audit on fuel management, thoroughly evaluating fuel procurement, bunkering, and consumption. The audit aimed to identify weaknesses in business management and ethical compliance while enhancing the Company's fuel management.

For each vessel's discharge of oily water, we hire a third-party agency to conduct on-site inspections and monitor the discharge process. We also designate supervisors to inspect the discharge of oily water from time to time.

During the Reporting Period, COSCO SHIPPING Energy had no cases of corruption and bribery.

# | Training

We have developed a business ethics training system, offering tailored courses for Board members, senior management, and onshore employees. The training covers critical topics such as anti-commercial bribery, anti-corruption, anti-money laundering, anti-fraud, personal data protection, sanctions compliance, violation handling, and compliance risk management. The training also addresses common anti-corruption challenges in high-risk areas, incorporating case studies and the latest regulatory requirements. At least once a year, we conduct a business ethics training session for all employees. In addition, the *Supervision and Audit Bulletin* is published monthly and distributed across the Company. Education sessions are held for newly promoted executives, expatriate personnel, and young employees to strengthen their awareness of risk management and improve the Company's ethical performance. Business ethics training also extends to key subcontractor personnel, including crew members. Each month, an intensive training session is held for crew members scheduled to board the following month. During the Reporting Period, 8,387 crew members received the training before boarding.

We conduct annual technical maintenance and

equipment audits to assess cost management and

operational efficiency. These audits cover ship repair and

spare parts procurement across all vessel types, including

chemical tankers, LPG carriers, and oil tankers. These

audits cover ship repair and spare parts procurement

across all vessel types, including chemical tankers, LPG

We annually engage a third-party audit firm to review

our financial statements and internal controls. Based on

audit recommendations, we continuously improve our

carriers, and oil tankers.

management practices.

### 2024 Anti-Commercial Bribery and Anti-Corruption Training

Indicator	Unit	2024
Total number of directors trained	person	9
Percentage of directors trained	%	100
Total number of senior management trained	person	7
Percentage of senior management trained	%	100
Total number of employees trained	person	907
Percentage of employees trained	%	100

# Whistleblower Protection

COSCO SHIPPING Energy has established clear reporting channels, procedures, and investigation guidelines outlined in key documents such as the *Manual for Prevention and Control of Integrity Risk in Important Business Areas (Revised Edition)* and the *Anti-Commercial Bribery Management Measures.* These measures encourage oversight from employees, business partners, third parties, and the public. Moreover, we have established a robust whistleblower protection mechanism to ensure strict confidentiality of whistleblower identities and reported information. We guarantee the personal and financial safety of whistleblowers and their families, protecting them from any form of threat. We strictly prohibit all retaliatory actions and remain committed to safeguarding the legitimate rights of whistleblowers.

# **ESG Management**

# **ESG Governance**

COSCO SHIPPING Energy continues to improve its ESG governance structure, embedding ESG principles into all aspects of its operations. This ensures the seamless integration of ESG management with corporate governance. In 2024, we further strengthened our ESG governance structure by establishing the ESG Management Office, which serves as the executive body supporting the management and the ESG Working Group.



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Recipient: The Supervision and Audit Department of COSCO SHIPPING Energy

### ESG Governance Structure of COSCO SHIPPING Energy

The Board of Directors	As the highest decision-making body responsible for the Company's ESG matters, the Board of Directors assumes full responsibility for ESG strategies and reporting. It makes overall arrangements, advances ESG management, and reviews relevant performance.
The Strategy Committee	Assists the Board of Directors in overseeing key ESG issues, responsible for conducting research on ESG strategies, setting development goals, establishing evaluation mechanisms, providing recommendations, and carrying out ESG governance supervision.
The Senior Management	Responsible for organizing and promoting ESG management, ensuring our ESG philosophy is deeply integrated with business operation practices.
The Compliance Management Committee	Composed of the Chairman, general manager, and other executives, it is responsible for organizing and coordinating compliance management, fostering a culture of compliance, and establishing regulations that incorporate compliance management requirements into business operations.
The Safety Management Committee	Composed of the general manager, senior executives, and heads of relevant departments and subsidiaries, it is a critical component of the Company's work safety decision-making as well as safety and environmental management. It ensures the implementation of the resolutions of the Board of Directors on safety and environmental protection.
The Cybersecurity Committee	Composed of the general manager, relevant senior executives, and heads of departments, it is the highest decision-making body of the Company's network and information security management.
The ESG Working Group	Implements and promotes the Company's ESG issues and regularly communicates and reports progress to the management. Uses the resources of the newly-established ESG Management Office to develop the ESG management framework, implements and promotes the Company's ESG initiatives, and regularly communicates and reports progress to the management.

### The Board's Sustainability Efforts

Integrating sustainability into decision-making

• When making decisions on newbuilding projects, the Board of Directors conducts a thorough assessment of aspects related to low-carbon development, including the adoption of low-carbon fuel propulsion systems and the application of green and low-carbon technologies. This approach ensures that future vessels are competitive in terms of carbon intensity and can help reduce the overall carbon emissions of the fleet.

Monitoring progress towards sustainability goals

• The Board of Directors has reviewed the Green and Low-Carbon Transformation Strategies and set the following goals: (1) reduce emissions of international shipping by more than 30% by 2030 and by about 80% by 2040 compared to the 2020 level; (2) reduce emissions of domestic shipping by about 10% by 2030 and by more than 40% by 2040 compared to the 2020 level; and (3) achieve carbon neutrality by 2050 for the entire fleet.

• To this end, the Board of Directors has established the Low Carbon and Technical Support Office, which regularly reviews emission performance and adjusts the program as needed.

The ESG governance team's extensive expertise in areas such as strategic assessment, economic research, financial asset management, risk management, and accounting enable them to effectively monitor and manage the progress toward sustainability objectives. Through monthly Board reports and briefings on specific matters, team members provide timely updates on sustainability-related impacts, risks, and opportunities, ensuring that ESG management is closely aligned with the corporate strategy.

Chao TIAN

The Chief Financial Officer. Mr. Chao TIAN holds a PhD in Financial and Accounting Management and is a Senior Accountant and Senior Economist. He is a Certified Public Accountant (CPA, non-practicing, China), Fellow Chartered and Certified Accountant (FCCA, non-practicing, UK), and Fellow Chartered Management Accountant (FCMA, non-practicing, UK). He previously served as Financial Director at China Ocean Shipping (Group) Company ("COSCO"), Board Member and General Manager of the Finance Department of Antwerp Gateway Terminal in Belgium. He boasts extensive expertise in sustainability management.

Yidan NI

The Secretary of the Board. Ms. Yidan NI is certified as a Senior Economist, Corporate Legal Consultant, and ESG Reporting Specialist, and is recognized as a Chartered Secretary and Chartered Governance Professional by the Hong Kong Chartered Governance Institute. She boasts extensive expertise in sustainability management.

### ESG Performance-based Executive Remuneration

The Company has developed the Scheme on Tenure System and Contractual Performance Appraisal for the Management (Revised Edition), aligning executive performance incentives with the Company's performance in attaining environmental and safety objectives. The performance assessment criteria include major workplace safety incidents, significant oil spills, major environmental emergencies, and severe violations of laws and regulations. If any such incident occurs, leading to severe consequences or negative impacts, the Company will enforce a "one-vote veto" policy in executive performance assessments.

### Stakeholder Communication

The Company interacts with stakeholders, including customers, government agencies, regulators, shareholders, employees, communities, suppliers, industry peers and organizations, and media organizations online and offline, to gather their recommendations and expectations regarding ESG management and practices. These insights serve as a critical reference for enhancing corporate governance.

### 2024 Key Performance Highlights

Disclosed interim announcements on two stock exchanges, totaling



Conducted offline

Participated in brokerage strategy conferences, totaling

29

Organized online performance briefings, totaling

Zheng ZHANG

The ESG Management Office Manager. Mr. Zheng ZHANG is a Certified Public Accountant (CPA, non-practicing, China). He previously served as Information Disclosure Supervisor in the Board Office, Investor Relations Manager, Manager of the Capital Operations Office in the Strategy and Corporate Management Department, and Manager of the New Energy Development Office in the Business Expansion Department at COSCO SHIPPING Energy. He boasts extensive expertise in sustainability management.

Held conference calls, Received investor totaling site visits, totaling 33 These activities collectively reached



Stakeholders	Main Concerns	Our Response
Government agencies/Regulators	Tax compliance Job creation Financial performance Sustainable growth of corporate value	Abide by laws Create local employment opportunities and jobs Release regular corporate and sustainability reports Enhance communication with government agencies/regulators Promote business growth while ensuring stable and sustainable profitability
Shareholders/Investors	Compliant operation Integrity management Risk management and internal control Board independence and diversity Sustainability	Improve value creation Hold General Meetings Enhance communication with investors Strengthen internal control and supervision Release regular corporate and sustainability reports
Employees	Basic rights protection Talent attraction and retention Employee training and development Compensation and benefits Diversity and equal opportunities Occupational health and safety	Help employees in need Offer competitive pay and benefits Provide various employee training programs Organize employees' congress and discussions Provide open and effective communication channels
Community	Public welfare and philanthropy Poverty alleviation/Rural revitalization	Organize public welfare activities Contribute to rural revitalization Participate in maritime rescue operations
Environment	Climate change response Hazardous waste management Marine biodiversity conservation Carbon reduction targets Low-carbon fuel research and application Fleet energy efficiency	Develop the <i>Green and Low-Carbon Transformation</i> <i>Strategies</i> Identify climate-related risks and opportunities Promote green shipping Reduce GHG emissions Implement environmental protection throughout the process Disclose environmental performance data
Customers	Global energy supply security Shipping safety Quality customer services Cybersecurity and information security Customer satisfaction Customer privacy protection	Optimize the distribution of global service sites Provide customized services Maintain an open customer feedback system Ensure rigorous shipping safety management Conduct customer satisfaction surveys Increase the use of information technologies
Suppliers	Responsible sourcing Supplier management Supplier diversity Industrial chain development	Provide equal opportunities Select suppliers based on merit Implement responsible sourcing practices Provide training and support for crew
Peers/NGOs/Industry Organizations	Industry cooperation Fair competition Industrial development Participation in industry initiatives	Carry out strategic cooperation Participate in industry research and standards development Participate in industry forums and meetings
Media	Media collaboration Brand building	Hold media briefings and press conferences Release company news

# | Double Materiality Assessment

Following the Guidelines No.14 of Shanghai Stock Exchange for Self-Regulation of Listed Companies — Sustainability Report (Trial), COSCO SHIPPING Energy has established a process for defining financial materiality and impact materiality topics. Stakeholders are engaged in the double materiality assessment.

### How Double Materiality Topics Are Determined

### 1 Understanding the organizational context

Analyze the sustainability characteristics of the shipping industry based on regulatory requirements and industry standards, including the IMO and the Environment 2011 and the SASB Marine Transportation Standard.

### 2 Identifying topics

Identify double materiality topics based on the guidelines of the Shanghai Stock Exchange, regulatory requirements, industry standards, and widely accepted international ESG rating frameworks, and analyze the impacts, opportunities, and risks based on the characteristics of the shipping industry.

### 3 Assessing materiality

Evaluate the 18 topics in terms of their impacts, opportunities, and risks. We conducted a double materiality survey using questionnaires to collect feedback from members of the Board of Directors and the Board of Supervisors of COSCO SHIPPING Energy, Senior Management, executives from the headquarters' finance department, and executives and employees from the headquarters and main subsidiaries. A total of 118 valid questionnaires were collected.



### 4 Prioritizing topics

Set thresholds for financial and impact materiality, and prioritize topics based on survey results. Two topics are identified as having double materiality: occupational health and safety, and climate change response.

### S Validation and confirmation

Review assessment results against expert opinions and industry standards before sending the results to the Board of Directors for final approval.

### 6 Reporting

Disclose the assessment process in the 2024 Sustainability Report of COSCO SHIPPING Energy, and separately disclose financially material topics and those with impact materiality in accordance with the Guidelines No.14 of Shanghai Stock Exchange for Self-Regulation of Listed Companies — Sustainability Report (Trial).

• Health and safety Climate change response • Ecosystem and biodiversity conservation

• Environmental compliance management

Explanation of material topic assessment and disclosure

 Indicators related to waste recycling and reuse under the circular economy are disclosed in the "Resource Use and Emissions" section.

•The topic of "technology ethics" is not applicable to the Company, as we do not engage in scientific research or technological development in ethically sensitive areas such as life sciences.

 Information on supply chain security and equal treatment of SMEs is disclosed in the "Sustainable Supply Chain" section.

 Information on anti-unfair competition is disclosed in the "Business Ethics" section

•To clearly distinguish between ESG management approaches and management topics, due diligence and stakeholder communication are disclosed in the "ESG Management" section and are not reflected in the materiality matrix.

# 02

Excellence in Leadership: Building a Community of Shared Development

The transition to green, low-carbon, and intelligent operations is driving transformation and innovation in the shipping industry. Upholding its vision — "to be an outstanding leader in global energy transportation", COSCO SHIPPING Energy is committed to ensuring the security and stability of the global energy supply chain, contributing to the sustainable development of the global economy and society.

Contributing to the following UN SDGs:





# **Expanding Business Operations**

COSCO SHIPPING Energy leverages its leading fleet capacity, global route network, extensive marketing system, and advanced safety management to provide reliable energy transportation for customers worldwide. In 2024, we enhanced our fleet competitiveness and expanded our presence in the energy and chemical logistics supply chain. We aim to build a high-quality energy transportation ecosystem and offer integrated solutions for global energy transportation. Moreover, we work closely with maritime organizations, ship classification societies, and industry partners to drive green transformation, service innovation, and supply chain synergy, supporting the industry's transition towards sustainable and high-quality development.

# | Oil Transportation

COSCO SHIPPING Energy operates the world's largest tanker fleet, covering all major tanker types. We stand out globally with the most comprehensive range of vessel types, enabling seamless domestic and international shipping, large and small vessel coordination, and crude and refined oil transportation. Our routes extend across major global ports. In 2024, we upgraded our core fleet, including VLCCs and Aframax tankers, and advanced the development of key transportation hubs. We focused on expanding our partnerships in the Middle East, Southeast Asia, and Europe while optimizing route planning.

### E Case

### **Expanding the Global Tanker Fleet**

On November 22, 2024, COSCO SHIPPING Energy signed a contract with Dalian Shipbuilding Industry Co., Ltd. (DSIC) and China Shipbuilding Trading Co., Ltd. (CSTC) to construct six 307,000 DWT crude oil tankers. These VLCCs boast advanced performance, improved energy efficiency design indexes, and compliance with LNG READY and METHANOL READY standards.

On February 14, 2025, COSCO SHIPPING Energy signed a contract with COSCO SHIPPING Heavy Industry Co., Ltd. for the construction of six tankers, including two Aframax, two LR2, and two Panamax tankers. Among them, the two Aframax and two LR2 tankers are methanol dual-fuel vessels, while the two Panamax tankers meet the METHANOL READY requirements.

The delivery of these new tankers will significantly optimize the Company's fleet structure, expand its transportation capacity, and meet the growing global demand for energy transportation, which will further enhance the Company's core competitiveness.



Signing Ceremony for Contract Between COSCO SHIPPING Energy, DSIC, and CSTC

Signing Ceremony for Contract Between COSCO SHIPPING Energy and COSCO SHIPPING Heavy Industry Co., Ltd.

# | LNG Shipping

COSCO SHIPPING Energy is a leader in China's LNG shipping sector and a key participant in the global LNG shipping market. By actively participating in the development and operation of global LNG shipping projects, newbuilding supervision, and safety management, we collaborate with partners to serve the global natural gas industry chain, and build a synergistic business model that integrates LNG shipping and cargo operations.

### Case

### An Outstanding Example of Collaboration in China's LNG Industry Chain

In partnership with China National Petroleum Corporation (CNPC) and China State Shipbuilding Corporation Limited (CSSC), COSCO SHIPPING Energy developed the first LNG transportation project, which is 100% invested and constructed by China, to build eight 174,000-cubic-meter LNG carriers. With the successful delivery of MV "HUA SHAN" and MV "KONG TONG" in 2024, all vessels in the second phase of the project are now fully operational, marking a milestone in China's LNG industry chain collaboration.



### Advancing QatarEnergy's LNG Project to Support the Belt and Road Initiative



Naming Ceremony for the QatarEnergy Project



Employee-Centric Approach: Investing in Our People for Sustainable Growth



Naming Ceremony for MV "KONG TONG"

In 2024, COSCO SHIPPING LNG, CLNG, and their partners secured contracts for six and two 271,000-cubic-meter LNG carriers, respectively. These eight QC-Max vessels will ensure reliable and efficient LNG transportation between Qatar and the wider global markets. The winning of these contracts deepens our partnership with QatarEnergy, reinforces our leadership in global LNG transportation, and highlights our comprehensive capabilities and competitiveness in international energy logistics.

# | LPG, Chemicals, and Other Tanker Business

In 2024, COSCO SHIPPING Energy initiated a reform to integrate its energy and chemical logistics supply chains, advancing the transition to a more diversified business portfolio. The goal is to create an integrated oil, gas, and chemical shipping supply chain system. We will continue to develop integrated logistics solutions, optimize energy logistics, and leverage our chain operations to deliver more comprehensive and efficient services. By fostering deeper synergy between business growth and customer value, we aim to further strengthen our market competitiveness.

### LPG Transportation

We are committed to building China's top and a world-leading fleet of LPG carriers, and focus on improving the resilience and safety of the LPG industry supply chain.

Case

Inauguration of Dalian COSCO SHIPPING Energy Supply Chain Co., Ltd.

On November 15, 2024, our new subsidiary, Dalian COSCO SHIPPING Energy Supply Chain Co., Ltd. was inaugurated in Dalian, Liaoning Province. At the ceremony, the Dalian Municipal Government, Changxing Island Administrative Committee and relevant business partners signed investment or business cooperation agreements with Dalian COSCO Energy on LPG fleet development and hydrogen-based transport business.



Inauguration of Dalian COSCO SHIPPING Energy Supply Chain Co., Ltd. and Agreement Signing Ceremony

### **Chemicals Transportation**

Adhering to the oil-chemical integration and ship-tank synergy strategies, we are committed to providing tailor-made, high-quality, professional, safe, and hassle-free chemicals transportation services to global customers. By the end of 2024, we owned eight vessels with a capacity of 73,000 DWT.



MV "HUAYUN LIYUAN"



### Delivery of Chemical Tanker MV "Huayun Liyuan"

On December 26, 2024, the naming and delivery ceremony of the Company's chemical tanker MV "HUAYUN LIYUAN", the second tanker of its kind delivered, was held in Taizhou, Jiangsu Province. The 7,450 DWT stainless steel chemical tanker integrates green, intelligent, and eco-friendly technology elements. It adopts an advanced energy-saving hull design, with 12 independent cargo tanks, meeting the IMO Tier III emission standards and the i-Ship (E) notation for energy efficiency management of intelligent vessels.

### Liquified Cargo Transport and Carbon Market Business

To support the "carbon peak and carbon neutrality" goals, we vigorously promote the research and development of liquified cargo transport business. We explore low-carbon energy transportation solutions such as green methanol, ammonia, and liquid CO<sub>2</sub> (LCO<sub>2</sub>) transportation. We also engage in carbon trading and carbon asset management, fostering collaboration across the energy transportation value chain to drive innovation and growth.



### Leading the Way in Liquified Cargo Carriers

On November 28, 2023, Shenzhen Longpeng signed a contract with COSCO SHIPPING Heavy Industry (Dalian) Co., Ltd. to build a 6,300-cubic-meter LPG/liquid ammonia carrier. This project allows the company to stay ahead of the curve in the green ammonia supply chain, build its clean energy transport brand, and boost its fleet's competitiveness.

# **Improving Service Quality and Efficiency**

COSCO SHIPPING Energy adheres to the business philosophy of "customer-centricity", establishing a global marketing service system integrated with a worldwide safety and emergency support framework to comprehensively meet clients' global transportation needs. The Company provides 24/7 online services with real-time coordination and rapid response capabilities, delivering high-quality transportation solutions and superior service experiences to customers.

# | Transport Service Quality Management

We have established a robust customer service and oversight system based on the Client Management Measures and Regulations on Tanker Transport Service Quality Management, to improve the quality of our transport services. We maintain long-term strategic partnerships with oil companies, LNG industry clients, traders, and brokerage firms in and out of China. Through digital technology, innovative key account (KA) marketing strategies, and global customer visits by our business development teams, we accurately assess customer needs and deliver diverse, customized, high-quality services.

In 2024, we upgraded our China Pool service platform, Service Hub, adding new features such as real-time vessel CII data, fuel consumption monitoring and analysis, and voyage charter performance analysis. These interactive features deliver greater experience and convenience to customers.





Case

### Helping Customers Cut Transportation Costs

On August 13, 2024, COSCO SHIPPING Energy's MV "XIN SHEN YANG" docked at the 300,000-tonne crude oil terminal in Qinzhou, Beibu Gulf, Guangxi Province, with a 20-meter draft. This upgrade from the previous 19.5-meter draft increases cargo capacity by about 10,000 tons, saving customers about USD 100,000 per voyage in transportation costs.

### 2024 Key Performance Highlights

Number of significant incidents concerning service safety and quality

Amount of damage resulting from significant incidents concerning service safety and quality



# | Customer Satisfaction

To improve customer service quality, we conduct satisfaction surveys every year, sending questionnaires to target customers via email and a customer service app. We identify customer concerns based on the survey results and give timely responses and feedback.

Tanker segment	Other segments	Customer satisfaction
85%	100%	100%

Regulations on the Quality Management of Transportation Services to specify the responsibility determination and dispute/complaint resolution process, and established a dedicated team to manage the process. For major complaints, we set up a task force to investigate and identify causes, determine responsibility, and develop an investigation report and a corrective action plan. The goal is to improve service quality and customer satisfaction.

2024 Key Performance Highlights		
Customer complaints received	Complaint resolution rate	
1	100%	

# | Data Security and Customer Privacy Protection

COSCO SHIPPING Energy complies with the Data Security Law of the People's Republic of China and the Personal Information Protection Law of the People's Republic of China. We have established a cybersecurity and information security management system based on ISO 27001 and have developed and implemented the Company Cybersecurity Management Manual and the Shipboard Cybersecurity Management Manual. To oversee cybersecurity, we have set up a Cybersecurity Committee, chaired by the General Manager, with the Head of the Digital Transformation Department leading the shore-based cybersecurity and information security task force. We have set clear objectives, including management of 100% shore-based cybersecurity and information security incidents and 0 incidents throughout the year. We have also implemented an information and data security risk management mechanism. In addition, information security is included as a mandatory performance indicator for employees and the management, with strict actions taken against violations. In 2024, the Company reported no data security incidents.

We have developed a cybersecurity and information security emergency response plan and conduct regular drills to ensure that all relevant personnel are familiar with emergency procedures. This helps prevent data breaches and cybersecurity risks. After each emergency response, we conduct a risk assessment and update the plan to continuously improve emergency management capabilities, ensuring more secure and reliable services for customers.

To protect customer privacy, we have established an Information Resource Confidentiality Policy in the Company Cybersecurity Management Manual. This policy requires all personnel who use information resources to maintain strict confidentiality. Users are not allowed to access any data or programs in internal systems without authorization or explicit consent. Moreover, our Code of Conduct states that we will not knowingly disregard confidentiality obligations to third parties. We ensure proper handling of customer information by encrypting it when necessary, sharing it only with authorized personnel, and prohibiting the disclosure of related information on public forums or social media. In 2024, the Company reported no incidents of customer privacy breaches.

# **Driving Technological Innovation**

COSCO SHIPPING Energy advances high-quality development through technological innovation, focusing on three core areas: shipping operations, business management, and customer service. We accelerate digital transformation and actively promote the integration and innovation of emerging technologies such as green and low-carbon solutions, clean energy, big data, and artificial intelligence in energy transportation. We are committed to fostering and fully leveraging new quality productive forces.

# | Technological Innovation Management

We have established and implemented several regulations, including the 14th Five-Year Plan for Technological Development, the Regulations on R&D Investment Statistics (Trial), the Measures for Technological Innovation Management, and the Headquarters Implementation Rules for Technology Talents Incentives (Trial). We have also revised the Regulations on Research Project Management to enhance the technology innovation management system. To ensure effective innovation and sustainable green development, we have set up a dedicated Technology Innovation Department. This department oversees technological innovation and low-carbon initiatives, ensuring high-quality innovation and green development and the realization of tangible results.

### 2024 Key Performance Highlights

Total R&D investment accounting for a portion of total revenue, at кив 15,345.81 0.66%

# | Technological Innovation and Application

We focus on key research areas and major projects, particularly in green and intelligent shipping. By integrating and optimizing innovation resources, research platforms, and technical talent, we accelerate the transformation and application of technological advancements to enhance overall innovation capacity. Meanwhile, we implement a comprehensive digital transformation strategy centered on "intelligent decision-making, smart operations, intelligent ship management, and smart customer service." Leveraging mobile internet, big data, blockchain, and artificial intelligence, we drive innovation in areas such as cargo and vessel safety, operational efficiency, green and low-carbon solutions, and industry chain management. These efforts contribute to the high-quality development of the energy transportation sector, foster business model innovation, and help build a new industry ecosystem.

### Developing new types of fuel-powered vessels

We advanced the joint R&D of ammonia-powered ammonia carriers. The design for a 50,000-cubic-meter ammonia dual-fuel ammonia/LPG carrier received an Approval in Principle (AIP) certificate. We conducted research on ammonia-powered tanker designs and safety standards, and advanced joint development of methanol dual-fuel tanker types and main engines.

requirements.

2024

### R&D employees

workforce share, at 105 11.58%

representing its





### Case

Al-Powered Navigation Active Safety System Debuts at the 2024 World Artificial Intelligence Conference

In July 2024, COSCO SHIPPING Energy showcased its Al-powered Navigation Active Safety System at the World Artificial Intelligence Conference. The Company presented its active safety system for vessels, which focuses on enhancing the navigation safety of its energy fleet. The system has three core functions: bridge watchkeeping behavior monitoring, intelligent identification of navigation collision risks, and berthing and unberthing assistance. These features effectively improve vessel safety. The system's algorithms have been upgraded, and its bridge watchkeeping behavior recognition function is now operational on more than 70 vessels. This function also won first place in the inaugural national "AI+" Industry Intelligent Algorithm Competition. Looking ahead, the Company plans to expand the application of this function, providing enhanced solutions for maritime safety.



## | Intellectual Property Management

We place great importance on the creation, protection, and efficient use of intellectual property. To strengthen the full lifecycle management of intellectual property and enhance our management capabilities, we have established the Regulations on Innovation Achievements Management (Trial).



# **Sustainable Supply Chain**

COSCO SHIPPING Energy has established a comprehensive supplier management framework, including the Supplier Management Measures, the Procurement Management Measures, the Regulations for Managing Procurement through Tendering, the Regulations for Managing Procurement through Non-Tendering Procedure, and the Manual for Prevention and Control of Integrity Risk in Important Business Areas. These policies cover the entire supplier management process, from supplier selection and risk assessment to contract performance evaluation and audit supervision. This ensures the identification and mitigation of business ethics, environmental, and social risks associated with suppliers. We have also formed a Supplier Committee, led by senior executives responsible for procurement and supplier management, to oversee supplier-related decisions and governance. All suppliers, including small and medium-sized enterprises, receive equal treatment, and the Company strictly adheres to contractual obligations. In 2024, there were no overdue payments for contract settlements.

### **Supplier Approval**

All suppliers must sign the Compliance Commitment, the Anti-Commercial Bribery Commitment, the Notice of Environmental and Occupational Health and Safety Management, and the Due Diligence Questionnaire before entering the supplier pool. These documents establish supplier conduct guidelines and ensure compliance with the Company's gualification requirements. The supplier due diligence process includes an assessment of suppliers' anti-corruption management practices to verify their compliance.

### COSCO SHIPPING Energy's ESG Requirements on Suppliers

Suppliers must comply with relevant laws and regulations regarding production processes and equipment, pollutant emissions, product packaging, hazardous waste disposal, product storage and transportation, and emergency management. They must also obtain certifications related to quality, safety, environmental protection, industry standards, and third-party gualifications.



### **Supplier Rating**

We have developed the Annual Supplier Evaluation Form to conduct yearly assessments of our suppliers. This evaluation follows a standardized process and criteria, covering multiple dimensions, including supplier qualifications, product/service quality, delivery and service timeliness, and after-sales support. In addition, we conduct an anti-commercial bribery assessment for suppliers. Suppliers who violate regulations are added to the Commercial Bribery Blacklist, reported, and prohibited from conducting business with the Company. We perform both single-instance and annual evaluations of suppliers. Based on the results of the annual assessment, suppliers are classified into four categories: A, B, C, and D. For key suppliers, we also conduct on-site evaluations to verify and ensure their capabilities in safety, environmental management, occupational health, and social responsibility. In 2024, 93.82% of suppliers were classified into Category A.

Category A	Category B	Category C
<ul> <li>Key suppliers who</li></ul>	<ul> <li>Suppliers suitable for</li></ul>	<ul> <li>Suppliers sub</li></ul>
are given priority in	conventional business	concerned are
procurement	cooperation	and generally

### **Empowering Suppliers**

We organize industry exchanges and skills training to share the latest developments and provide technical support and guidance for suppliers, strengthening supplier capabilities. Based on the annual evaluation results, we use the strengths and best practices of top-performing suppliers as benchmarks for similar suppliers, encouraging overall service quality improvement. For suppliers requiring guidance, we assist them in addressing issues and deficiencies, further enhancing their service quality. We encourage suppliers to align themselves with our latest policies and regulations to enhance risk management and promote coordinated supply chain development.

### 2024 Key Performance Highlights

Total number of suppliers

651

the Chinese mainland



Number of suppliers outside

ubject to key inspections of reas to promote rectifications, excluded from procurement during the rectification period.

### Category D

 Suppliers to be eliminated from the supplier pool and banned from cooperation

Number of suppliers in the Chinese mainland





# 03

Safety First: Leading the Way in Maritime Transportation

Safety is the cornerstone of the shipping industry and the foundation of COSCO SHIPPING Energy's operations. We uphold safety as our paramount priority, continuously refining our safety management system, strengthening risk prevention and control, and fostering a safety-first culture that improves safety awareness and skills among employees. With outstanding safety management, we safeguard global energy transportation.

Contributing to the following UN SDGs:





# Governance

# | Safety Management Structure

We have established a Safety Management Committee ("Safety Committee") responsible for formulating safety operation policies, objectives, plans and measures, organizing specialized safety inspections, and conducting regular safety performance evaluations. Each ship has established a ship safety committee to manage ship safety, crew health, and environmental protection in strict accordance with relevant regulations. Regular meetings between ship-based and shore-based safety committees are held to analyze potential safety hazards and develop mitigation measures, ensuring effective implementation of safety management protocols.

The company has established a comprehensive, all-employee, whole-process work safety accountability system, conducting onboard inspections and safety audits to enforce safety responsibilities. The Chairman and General Manager are the primary safety officers. The Board of Directors reviews the *Annual Safety Performance Report* each year, while the General Manager delegates safety tasks and objectives to departments. The Safety Committee monitors the execution of annual safety goals, assesses performance, and provides suggestions for improvement. To reinforce accountability, the Company regularly evaluates safety performance for both shore-based staff and crew, following the *Measures for the Comprehensive Assessment and Evaluation of Headquarters Employees and the Ship Performance Assessment Measures* of COSCO SHIPPING



Organizational Structure for Safety Management

# | Safety System Certification and Audits

COSCO SHIPPING Energy has implemented and continuously improved its quality and safety management systems based on domestic and international standards, including: ISO 9001:2015/GB/T 19001-2016 – Quality management system, GB/T 33000-2016 – Certificate of Work Safety Standardization Construction Grade, ISO 45001:2018/GB/T 45001-2020 – Occupational health and safety management system, SY/T 6276-2014 – Petroleum and natural gas industries — health, safety and environmental management systems. These systems apply to COSCO SHIPPING Energy's headquarters, all operational vessels managed by its subsidiaries, and seafarers (including supplier-affiliated employees). They ensure safe vessel operations and protect crew health across oil, LNG, and chemicals transportation.

### COSCO SHIPPING Energy's Quality and Safety Management System Certifications

### Certification

ISO 9001:2015/GB/T 19001-2016 Quality management s

GB/T 33000-2016 Certificate of Work Safety Standardiz Construction Grade

ISO 45001:2018/GB/T 45001-2020 Occupational health and safety management system

SY/T 6276-2014 Petroleum and natural gas industries health, safety and environmental management systemeters and environmental management systemeters.

Each year, third-party agencies assess the effectiveness and compliance of our management systems. We also conduct internal audits to ensure alignment with international and domestic regulations, treaties, policies, and industry standards. These efforts drive continuous system standardization and process optimization while reinforcing safety measures. In 2024, we updated our integrated management system documents twice, introduced nine new risk assessment templates, and revised or removed existing ones to enhance operational safety and efficiency.



	Number of Certified Companies
system	8
ization	7
em	6
es — ems	4

# Strategy

COSCO SHIPPING Energy prioritizes safety above all else. We follow a prevention-first approach, continuously improving safety management, enhancing crew safety awareness and skills, and ensuring the safety of both vessels and personnel. These efforts strengthen the Company's competitive edge in global maritime transportation.

# | Fostering a Safety Culture



### + Building a safety culture

We promote a safety culture through various initiatives, including onboard safety campaigns, "Safety Month", and the "Ankang Cup" safety knowledge quiz. These activities reinforce safety awareness and create a strong safety culture. Crew members are encouraged to take an active role in vessel safety management and standards development.

### Enhancing safety awareness and skills

We provide ongoing training to ensure all employees understand safety requirements. An annual health and safety training program is developed and strictly implemented across all departments in positions involving significant environmental safety, occupational health safety, and energy management receive specialized training to continuously improve their safety awareness and skills.

# | Improving Safety Management

We strictly comply with international mandatory conventions, rules, and international recommended guidelines including IMO's safety management regulations, as well as Chinese laws and regulations, including the *Work Safety Law of the People's Republic of China* and the *Rules for the Administration of the Safe Operation of Ships and the Prevention of Pollution of the People's Republic of China* (NSM).

### Comprehensive safety management

### Updates to safety regulations

### Three-year safety action plan

In 2024, we established a safety task force for integrating energy and chemical logistics supply chains. The team conducted early on-site assessments and prepared a checklist of safety handover documents to ensure a safe and smooth transition. After integration, all units were guided to align with the headquarters' regulatory requirements, enhance their safety accountability systems, and implement a dual-prevention safety mechanism. These measures ensure safety oversight across all locations and all business, including oil, gas, and chemicals transportation.

In 2024, we introduced the Regulations on the Investigation of Work Safety Responsibilities and the Regulations on Major Hazard Supervision and Management. We also developed the Safety Operating Guidelines for Ships in Singapore Waters to support safe vessel operations in the region. In addition, we revised key safety policies, including the Safety Committee Meeting Procedures, the Emergency Management Regulations, and the Typhoon and Flood Prevention Regulations, reinforcing the safety policy that prioritizes safety, focuses on prevention, and emphasizes comprehensive management while constantly improving the safety management system. In 2024, we launched the *Three-Year Safety Action Plan*, which focuses on intensifying hazard identification and remediation, enhancing key risk controls, reinforcing the foundation of safety management, and advancing the Company's overall safety governance. The plan is being systematically implemented to ensure workplace safety.

# | Ensuring Ship and Navigation Safety

### Vessel "Five Preventions"

Routinely implement the "Five Preventions" safety work for vessels—collision/grounding prevention, piracy prevention, fire/explosion prevention, pollution prevention, and occupational injury prevention—by strictly following protocols such as the *Collision Prevention Plan*, the *Contingency Plan for Pirate Threat*, and the *Safety Instructions for Fire and Explosion Prevention*, and monitor the implementation of measures for preventing work-related injuries. In 2024, 9,056 vessel movements were spot-checked using videos caught on CCTV cameras, with 11 violations identified and corrected. The Company tracked 26 typhoons and provided guidance for 206 vessel movements, achieving a 100% typhoon avoidance success rate and effectively ensuring vessel operational safety.

# Haz

### Hazard identification and mitigation

Following the *Three-Year Safety Action Plan*, we continuously detect and address major safety risks. In 2024, we inspected 1,383 vessel movements, rectified 38 major hazards, conducted comprehensive safety inspections of 84 vessel movements, and performed 446 supervisory ship checks, including 175 onboard visits. Shipboard also carried out 5,711 self-inspections.

# Ship maintenance and repairs

With a whole-lifecycle management philosophy, we implement "one-ship-one-strategy" tailored maintenance plans and dry-dock schedules. Our focus is on managing aging vessels, conducting routine maintenance, and assessing ship conditions to ensure safe operations.

### Digital intelligence empowerment

We deploy smart technologies to enhance navigation safety. By the end of 2024, two vessels had been equipped with a complete system featuring three core functions: bridge watchkeeping behavior monitoring, intelligent identification of navigation collision risks, and berthing and unberthing assistance. The bridge watchkeeping risk identification and alert module has been deployed on 75 vessels.

# | Safeguarding Occupational Health and Safety

We have established a comprehensive occupational health and safety management system according to the GB/T 45001-2020 and ISO 45001:2018 standards to ensure a safe and healthy work environment. In line with the *Instructions for Control and Plan Management of Crew Occupational Health Hazards*, we systematically identify occupational health risks and develop targeted occupational health and safety plans. We also conduct regular training on workplace safety and accident prevention according to the *Instructions for Crew Familiarization and Training*, to ensure seafarers understand their duties and operational procedures, and to improve their skills for safety. In addition, we purchase shipowners' liability insurance, covering compensation for injuries, illnesses, or fatalities, along with necessary related expenses.

# | Implementing Effective Contingency Management

We have implemented the Shipboard Emergency Response Plan and the Shore-Based Emergency Response Plan. We have also established an Emergency Response Steering Group, led by the General Manager, to oversee emergency planning and execution. We continuously enhance our emergency response capabilities and collaborate with China COSCO SHIPPING Corporation Limited to build a global emergency response network. In 2024, we participated in the Hong Kong-Zhuhai-Macao Bridge Anti-Collision Drill and the Rizhao Large Oil Tanker Emergency Drill. We guided nine maritime search and rescue operations and conducted two shore-based drills, five ship-shore drills, and ten tabletop simulations.

### E Case

### Multi-Party Joint Ship-to-Shore Emergency Drill

On May 23, 2024, COSCO SHIPPING Energy conducted a multi-party joint ship-shore drill together with COSCO SHIPPING Tanker (UK) Company Limited and Unipec UK Co., Ltd. The drill simulated the grounding of MV "YUAN GUI YANG" at Singapore anchorage to test emergency response and crisis management capabilities. Our safety management team swiftly coordinated emergency actions, working with ship classification societies and insurers to refloat the ship without injuries or environmental pollution. The team demonstrated exceptional vessel management and safety assurance capabilities.



# Management of Impacts, Risks, and **Opportunities**

COSCO SHIPPING Energy has implemented the Shipboard Hazard Identification and Risk Control List and the Company Hazard Identification and Risk Control List to identify risk, conduct risk stratification and implement tiered controls.

### Shipboard risks

We assess risks in ten key areas: cargo operations, chemical cargo handling, navigation safety, safety management, life-saving and fire protection, critical equipment, non-critical equipment, environmental management, shipboard supplies, and occupational health and safety. Each hazard source, hazardous scenario, or event is identified along with affected personnel, objects, or environments and the consequences. Risk control measures, responsible departments, and designated personnel are clearly defined.

### Shore-based risks

We identify risks in offices, commuting, boarding, disembarking, business travel, shipboard operations, vehicle access to/departure from oil depots and terminals, and new building supervision. Each hazard source is identified and assessed to determine affected personnel and potential consequences. Risk control measures are specified, and responsible departments and personnel are assigned.

# **Indicators and Targets**

	Long-term safety management goals:	Zero harm to people, zero safety incidents, and zero environmental pollution.
•	Short-term safety management goals:	Limit crew minor injuries to no more than four cases a shore-based staff minor injuries to no more than three case

	Indicator	Unit	2024
	Number of culpable catastrophic-/major-level work safety accidents	/	0
Incident statistics	Number of serious-level work safety accidents	1	0
(including crew and onshore employees)	Number of general-level work safety accidents	/	0
	Number of minor accidents	/	1
Work-related fatalities (includ	Work-related fatalities (including crew and onshore employees)		0
Work-related fatality rate	Work-related fatality rate		0
Working days lost to work-re	Working days lost to work-related injuries (crew)		240
Lost time injury frequency ra	number of lost-time injuries per million working hours	0.09	
Lost time injury frequency ra	Lost time injury frequency rate of onshore employees (employees of the Company)		0.00
Investment in work safety	Investment in work safety		222,137,400
	Investment in work-related injury insurance for employees	RMB	2,209,000
		%	99.89%
Investment in safety insurance	Percentage of employees provided with work-related injury insurance	Note: • As of the end of 2024, on employee's insurance wa processed.	
	Investment in safety liability insurance for employees	RMB	12,600
	Number of Port State Control (PSC) detentions	1	0
Safety inspections	Number of non-compliant vessels in safety inspections conducted by China COSCO SHIPPING Corporation Limited	/	0

and

# 04

# Sustained Actions: Advancing Toward a Low-Carbon Future

The shipping industry is vital to global trade and impacts climate and the environment. Upholding the sustainability philosophy, COSCO SHIPPING Energy accelerates its transition to a greener fleet. We are committed to low-carbon and zero-emission shipping, sharpening our competitive edge while driving sustainable development through concrete actions.

Contributing to the following UN SDGs:





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# **Environmental Management**

COSCO SHIPPING Energy strictly adheres to domestic and international environmental laws, regulations, and industry standards, including the *Marine Environmental Protection Law of the People's Republic of China*, the *Regulations of the People's Republic of China on the Prevention and Control of Marine Pollution from Ships*, and the *International Convention for the Prevention of Pollution from Ships* (MARPOL). We also adopt applicable IMO-recommended rules and guidelines to enhance our environmental management system. By systematically integrating green shipping philosophy into all operational processes, we ensure effective environmental management across all business activities and achieve the comprehensive execution and deep integration of management systems.

We have established a governance framework led by the Board of Directors, Strategy Committee, and ESG Working Group, responsible for overseeing climate action, emissions management, biodiversity conservation, and green office practices. The Board of Directors is the ultimate decision-making body on environmental affairs, with the Chairman serving as the primary person responsible for safety and pollution prevention.

We have established our environmental management systems in line with international and domestic standards including GB/T 24001/ISO 14001 Environmental management system, GB/T 23331/ISO 50001 Energy management system, and SY/T 6276-2014 Petroleum and natural gas industries — health, safety and environmental management systems. These systems cover our oil and LNG transportation operations, ensuring effective implementation across all operation processes.

### Quality and Safety Management System Certifications

Certification	Number of Certified Companies
GB/T 24001/ISO 14001 Environmental management system	8
GB/T 23331/ISO 50001 Energy management system	1
SY/T 6276-2014 Petroleum and natural gas industries — health, safety and environmental management systems	4

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Third-party agencies assess the effectiveness and compliance of our environmental management systems each year. Concurrently, we conduct annual internal environmental audits to verify compliance of our environmental and energy management documentation with both international and domestic environmental laws, standards, and industry regulations. Through this dual audit mechanism, we continuously refine standardization and process in environmental management, ensuring continuous improvements to our management, and enhancing environmental protection measures while effectively reducing operational risks.

### **Environmental Compliance Management**

To strengthen environmental governance, we have developed key regulatory documents, including the Occupational Health and Safety, the Environment and Energy Management Manual, the Hazard Identification and Risk Control List, and the Shipboard Significant Aspects List, and implemented the Identification and Evaluation of Environmental Aspect Procedure.

Our risk assessment mechanism spans the entire value chain, considering operational timelines, status changes (normal, abnormal, or emergency), and multiple indicators such as environmental impact, occurrence frequency, regulatory compliance, and technical feasibility. This integrated approach ensures scientific rigor and comprehensiveness in assessment. Based on the assessment results, we implement a tiered management strategy. Specifically, we set improvement targets and action plans for major environmental aspects, while maintaining routine monitoring for general environmental aspects. We establish a dynamic update mechanism to ensure timely adjustments in response to regulatory changes or business expansions. We also set risk tolerance thresholds and conduct sensitivity analyses and stress tests, creating a systematic risk control list to support long-term sustainability.

In the past three consecutive years, the Company has maintained a clean record with zero oil spill incidents, nor has it incurred any major environmental penalties due to excess emissions or any major administrative penalties imposed by environmental agencies due to environmental violations.

# **Response to Climate Change**

# Governance

COSCO SHIPPING Energy has established an environmental management framework led by the Board of Directors, the Strategy Committee and the ESG Working Group. The Board of Directors formulates and reviews climate-related policies, leads and supervises climate initiatives, and integrates climate-related risks and opportunities into strategic planning. The Strategy Committee is charged with conducting climate strategy research, sets targets and evaluation mechanisms, and advises the Board of Directors on climate issues. The ESG Working Group operates as the implementation arm, responsible for designing executable climate action plans and ensuring their operational execution across business units.

We formed a Green and Low-Carbon Steering Group, led by the Chairman, to oversee and coordinate our green and low-carbon transition efforts. A Green and Low-Carbon Transition Working Group was also established to explore alternative fuels, plan future energy use, and invest in green industries and technologies. This working group works closely with business and functional departments to drive the Company's sustainability goals.

### Working mechanism

The working group collects and analyzes developments in green technologies, and reports work progress to the steering group regularly. Climate-related factors are incorporated into our remuneration system, with incentives encouraging innovation and broad participation to enhance efficiency and competitiveness.



Employee-Centric Approach: Investing in Our People for Sustainable Growth

Social Commitment in Action: Co-creating a Compassionate Ecosystem

### Talent development

We strengthen talents development in green and low-carbon fields. We collaborate with maritime organizations, research institutions, universities, and professional consultancies to provide ESG training for board members and senior executives. This includes training on green regulations, strategic planning and execution, and technology development and application. The goal is to improve their understanding of climate issues. In 2024, 17 training sessions were conducted on topics including specialist skills and green development, with 202 participations completing specialized training on carbon-neutral fuels for vessels.

### 2024 Sustainability Report COSCO SHIPPING Energy Transportation Co., Ltd.

COSCO SHIPPING Energy uses the following climate scenarios

# | Strategy

COSCO SHIPPING Energy proactively responds to the global shipping industry's green transition. Under our 14th Five-Year Plan, we have set dual strategic pillars of "digital & intelligent transformation" and "green and low-carbon development", focusing on energy transition and technological innovation. Through the integrated application of diversified energy solutions, the Company is piloting clean and renewable energy propulsion systems to explore sustainability pathways for the industry. Guided by the Board of Directors, we have developed the Green and Low-Carbon Transformation Strategies to identify climate-related risks and opportunities. We implement targeted measures and action plans to constantly enhance fleet sustainability and operational efficiency.

### Identification of climate-related risks and opportunities

We identify and evaluate climate-related risks and opportunities across our operations and value chain. We analyze short-, medium-, and long-term climate impacts in key areas such as ship operations, fuel use, carbon asset management, and the supply chain. Using quantitative analysis, we assess financial risks from additional costs in shipbuilding and operations, measuring current and projected financial impacts. Based on these findings, we have developed phased climate response strategies to align business growth with climate goals.

The Company defines the short term as the year 2025, the medium term as the period from 2026 to 2030, and the long term as the period from 2031 to 2050. In our Green and Low-Carbon Transformation Strategies, we have clearly outlined measures to address climate risks and opportunities across the short, medium, and long term.

We employ internationally recognized climate scenario analysis methodologies to assess climate change-related risks, by referring to the International Energy Agency's (IEA) Net-Zero Emissions by 2050 (NZE) and Stated Policies Scenario (STEPS), along with the Intergovernmental Panel on Climate Change's (IPCC) Representative Concentration Pathways (RCP) models. The assessment covers our global operations and focuses on physical risks (such as extreme weather and rising sea levels) and transition risks (such as policy changes, technological advances, and market shifts). By analyzing key variables including carbon pricing, energy transition, and operating costs — under different climate scenarios, we evaluate potential impacts on our operations and financial performance, providing a scientific basis for strategic prioritization.





STEPS: a scenario which reflects current policy settings based on sector-by-sector and country-by-country policies that are in place, as well as those that are under

NZE by 2050: a scenario that sets out a pathway for the global energy sector to achieve net-zero CO<sub>2</sub> emissions by 2050, which does not rely on emissions reductions from outside the energy sector to achieve its goals.

RCP8.5: global average temperature by 2100 is 4°C or higher above pre-industrial

RCP4.5: global average temperature increases relative to pre-industrial levels by no higher than 2°C by 2100, i.e., "temperature increase of 2°C or lower" scenario.



### Climate-Related Risk and Opportunity Analysis

	Climate Change-Related Risks							
Ci	Risk ategory	, Risk Description	Financial Impact	Business Model and Value Chain Impact	Period	Strategy and Business Model Adjustment		
		China's targets to peak emissions by 2030 and achieve carbon neutrality by 2060 (the 30-60 climate goals), new provincial and municipal regulations, and the launch of the national carbon trading market have tightened policy requirements.	• Increase in operating costs (e.g., higher carbon emission expenses and penalties for non-compliance)	Upstream Our operations Downstream	Medium- term Long-term	We have established cross-departmental groups, including the Green and Low-Carbon Steering Group and Working Group, and the Energy Conservation & Emission Reduction Steering Group, under a climate governance framework led by the Board of Directors. We closely track regulatory requirements, enhance carbon asset management, and surrender allowances to cover annual emissions each year as required by the Shanghai Municipal Bureau of Ecology and Environment.		
Trancition riske	Policy and legal risks	The IMO's revised GHG strategy targets a 20% (striving for 30%) emission reduction by 2030, a 70% (striving for 80%) reduction by 2040, and net-zero emissions by 2050, all relative to 2008 levels.	<ul> <li>Increase in R&amp;D costs (e.g., greater investment in new technologies, materials, and processes)</li> <li>Rise in capital expenditure (e.g., expenditure for retrofitting energy intensive vessels and higher costs for building energy-efficient vessels)</li> <li>Fixed asset impairment (e.g., asset write-offs or early retirement caused by technological upgrades)</li> <li>Increase in supply chain costs (e.g., higher expenses for building and leasing energy- efficient vessels and procuring low-carbon fuels)</li> </ul>	Upstream Our operations Downstream	Medium- term Long-term	We have established cross-departmental groups, including the Green and Low-Carbon Steering Group and Working Group, and the Energy Conservation & Emission Reduction Steering Group, under a climate governance framework led by the Board of Directors. We closely track global regulations and mandatory requirements, formulate the <i>Green and</i> <i>Low-Carbon Transformation</i> <i>Strategies</i> , and launch energy-saving and emission-reduction initiatives.		
		The EU Emissions Trading System (EU ETS) became applicable to the maritime sector effective January 1, 2024, introducing ETS-linked surcharges on EU-related routes.	<ul> <li>Increase in operating costs (e.g., higher carbon emission costs for traditional fuels and higher procurement costs for alternative fuels)</li> </ul>	Our operations	Short-term Medium- term Long-term	We have formed a dedicated task force to study the EU ETS and related regulations. We have formulated the <i>Regulation</i> on EU ETS Compliance Guidelines Management (Trial) and opened an account in the Union Registry for compliance.		

			Climate Cha	nge-Related	Risks	
	isk egory	Risk Description	Financial Impact	Business Model and Value Chain Impact	Period	Strategy and Business Mode Adjustment
	gal risks	The FuelEU Maritime regulation limits the carbon intensity of vessels that call at, stay in, or depart from ports in EU member states.	<ul> <li>Increase in R&amp;D costs         <ul> <li>(e.g., greater investment in new technologies, materials, and processes)</li> <li>Increase in capital expenditure (e.g., higher costs for building dual-fuel vessels)</li> <li>Fixed asset impairment (e.g., asset write-offs or early retirement caused by technological upgrades)</li> <li>Increase in operating costs (e.g., higher charter rates for compliant, energy-efficient vessels, increased low-carbon fuel prices, and growing carbon emission costs)</li> </ul> </li> </ul>	Upstream Our operations	Medium- term Long-term	We promote the rational and diversified use of alternative energy sources. We pilot new and clean fuels such as LNG, green methanol, and biofuels, along with our corresponding propulsion systems, to progressively achieve low-carbon and zero-carbon emission transportation across our fleet.
Transition risks	Policy and legal risks	Amendments to Annex VI of the IMO MARPOL introduced the Energy Efficiency Existing Ship Index (EEXI) and the CII, effective from January 1, 2023.	<ul> <li>Increase in R&amp;D costs (e.g., greater investment in new technologies, materials, and processes)</li> <li>Rise in capital expenditure (e.g., expenditure for retrofitting energy- intensive vessels and higher costs for building energy-efficient vessels)</li> <li>Fixed asset impairment (e.g., asset write-offs or early retirement caused by technological upgrades)</li> <li>Decrease in revenue (e.g., limited business areas due to failure to meet environmental protection requirements)</li> </ul>	Upstream Our operations	Short-term Medium- term Long-term	We have established cross-departmental groups, including the Green and Low-Carbon Steering Group and Working Group, and the Energy Conservation & Emission Reduction Steering Group, under a climate governance framework led by the Board of Directors. We closely track IMO regulatory requirements and ensure fulfillment of EEXI and CII requirements.
	Technical risks	Ship owners must develop energy- efficient vessels according to the IMO requirements for Energy Efficiency Design Index (EEDI) and CII.	<ul> <li>Increase in R&amp;D costs         <ul> <li>(e.g., greater investment             in new technologies,             materials, and processes)</li> <li>Rise in capital             expenditure (e.g.,             expenditure for retrofitting             energy-             intensive vessels and             higher costs for building             energy-efficient vessels)</li> <li>Fixed asset impairment             (e.g., asset write-offs or             early retirement caused             by technological             upgrades)</li> </ul> </li> </ul>	Upstream Our operations	Short-term Medium- term	We have established cross-departmental groups, including the Green and Low-Carbon Steering Group a Working Group, and the Energ Conservation & Emission Reduction Steering Group, under a climate governance framework led by the Board o Directors. We have also developed the <i>Green and</i> <i>Low-Carbon Transformation</i> <i>Strategies</i> and stepped up effo to support low-carbon innovations and green technology development.

Employee-Centric Approach: Investing in Our People for Sustainable Growth

Safety First: Leading the Way in Maritime Transportation

	Climate Change-Related Risks							
Risk Category		Risk Description	Financial Impact	Business Model and Value Chain Impact	Period	Strategy and Business Model Adjustment		
Transition risks		Ship owners must step up investments in research on energy-saving systems, drag-reduction technologies, and carbon capture devices to reduce emissions in compliance with emissions reduction regulations.	<ul> <li>Increase in R&amp;D costs (e.g., greater investment in new technologies, materials, and processes)</li> <li>Rise in capital expenditure (e.g., expenditure for retrofitting energy- intensive vessels and higher costs for building energy-efficient vessels)</li> </ul>	Upstream Our operations	Short-term Medium- term	We have established cross-departmental groups, including the Green and Low-Carbon Steering Group and Working Group, and the Energy Conservation & Emission Reduction Steering Group, under a climate governance framework led by the Board of Directors. We have also developed the <i>Low-Carbon Fleet</i> <i>Transition and Development</i> <i>Program</i> and stepped up efforts to support low-carbon innovations and green technology development.		
		With the transition that shifts the drivers of demand from refined oil to chemicals, growth in refined oil transport demand has slowed.	• Decrease in revenues	Upstream Our operations Downstream	Medium- term Long-term	To meet evolving customer demand, we are expanding into chemicals transport, expanding our fleet for liquified cargo transport to include all types of vessels and extending end-to-end energy supply chain services.		
	Market risks		Under low-emission scenarios, demand for clean energy continues to grow, while demand for crude oil transport is declining.	• Decrease in revenues (e.g., reduced business volume due to lower service demand)	Upstream Our operations Downstream	Long-term	We keep track of the global energy transition by aligning fleet capacity with trade demand, exploring marine transport of CO <sub>2</sub> , tracking fuel price trends, and locking in prices when appropriate to optimize fuel cost management.	
		Increase in low- and zero-carbon fuel costs: The shipping industry has a rising demand for low- and zero-carbon fuels, which may lead to supply shortages and drive up fuel prices.	<ul> <li>Increase in operating costs</li> </ul>	Upstream Our operations	Medium- term Long-term	We closely monitor the fluctuations in fuel market prices and make lock-in purchases in a timely manner.		
		Tighter market access regulations in Europe, the United States, and Asia are raising entry barriers.	<ul> <li>Decrease in revenue (e.g., limited business areas due to failure to meet environmental protection requirements)</li> <li>Increase in operating costs (e.g., additional carbon emission costs incurred by compliance with market access regulations)</li> </ul>	Our operations	Short-term Medium- term Long-term	We align with global market trends, plan global routes from a big-picture perspective, increase support for green and low-carbon innovation and technology R&D, and strengthen carbon asset management.		

	sk gory	Risk Description	Climate Change-Ro Description Financial Impact		Period	Strategy and Business Model Adjustment
	Reputational risks	Poor management of emissions and energy efficiency may lead to an environmentally unfriendly image, harming the Company's reputation and weakening brand loyalty among customers, partners, investors, and other stakeholders.	<ul> <li>Lower revenues due to reduced customer trust</li> <li>Less available capital due to increased financing difficulty and declining investor confidence</li> </ul>	Our operations Downstream	Medium- term Long-term	We have established cross-departmental groups, including the Green and Low-Carbon Steering Group and Working Group, and the Energy Conservation & Emission Reduction Steering Group, under a climate governance framework led by the Board of Directors. We have also developed the <i>Green</i> <i>and Low-Carbon Transformation</i> <i>Strategies</i> and stepped up efforts to support low-carbon innovations and green technology development to promote sustainability.
	Acute risks	Extreme marine weather events, such as typhoons and tsunamis, are likely to become more frequent and severe, leading to ship damage, cargo loss, and crew injuries.	<ul> <li>Increase in maintenance costs (e.g., higher ship maintenance costs)</li> <li>Increase in insurance costs (for example, it is difficult to insure vessels in high-risk areas.)</li> </ul>	Our operations Downstream	Long-term	We design routes with reference to guidelines and meteorological information, and develop resilience by strengthening countermeasures to minimize the negative influences caused by extreme weather. We carry out daily maintenance and itemized inspection in strict accordance with requirements of China
Physical risks	Act	Extreme weather-induced transportation difficulties: Extreme weather makes navigation difficult and hampers planned operations or timely delivery of goods, increasing the risk of breach of contract.	<ul> <li>Decrease in revenue (e.g., Transportation difficulties, supply chain disruption, and other factors that cause decreases in the task fulfillment rate can result in lower revenue.)</li> <li>Increase in default costs (e.g., the cost of breach of contract will rise if the contract cannot be completed on time)</li> </ul>	Our operations Downstream	Medium- term Long-term	Classification Society (CCS) at the equipment maintenance stage. We require deck officers to receive meteorological information on a daily basis at the sailing stage, and the shore-based supervisor to track meteorological information of the sea area in real time.
	Chronic risks	Climate change worsens air quality, reduces food and water safety, and spreads diseases, threatening crew health and well-being.	• Higher spending on crew safety protection, mental health, and hygiene management, increasing operating costs	Our operations	Long-term	We provide the employees with routine physical examinations, psychological consulting and high-temperature subsidies through comprehensive occupational health and safety management to look after employees' mental and physica health.

Employee-Centric Social Commitment in Action: Approach: Co-creating a Compassionate Investing in Our People for Ecosystem Sustainable Growth

	Climate Change-Related Opportunities						
Opportunity Category	Description	Financial Impact	Business Model and Value Chain Impact	Period	Strategy and Business Model Adjustment		
Resource efficiency	Carbon regulations in the shipping industry are tightening. We implement technological upgrades for higher energy efficiency and lower GHG emissions, enhance vessel energy efficiency through smart management, and reduce fuel consumption per unit turnover.	• Decrease in operating costs (such as reducing unit energy consumption and energy use cost through energy efficiency improvement)	Our operations	Short-term Medium- term Long-term	We formulate the <i>Ship Energy</i> <i>Efficiency Management Plan</i> , upgrade vessels for better fuel efficiency, and implement smart ship management systems to reduce energy use.		
Energy source	We adopt low-emission energy and explore alternative fuels to improve our energy mix.	<ul> <li>Decrease in operating costs (e.g., use of alternative fuels with lower pollution control costs and diversified fuel options to reduce price volatility)</li> <li>Increase in revenue (e.g., increased demand for transport services using low-carbon fuels)</li> <li>Increase in available capital (e.g., investors prefer low-emission service providers)</li> </ul>	Upstream Our operations	Short-term Medium- term Long-term	We use clean alternative fuels such as LNG, green methanol, and biofuel to provide low-carbon transport services.		
Products and services	Amid the energy transition and the trend towards declining demand for refined oil and increasing demand for chemicals, we expand into liquified cargo and chemicals transport, and offer liquefied CO <sub>2</sub> shipping and storage services.	<ul> <li>Increased revenue (e.g., business diversification and customer base expansion)</li> </ul>	Our operations Downstream	Medium- term Long-term	To meet evolving customer demand, we are expanding into chemicals transport, expanding our fleet for liquified cargo transport to include all types of vessels and extending end-to-end energy supply chain services.		
	We provide low- and zero-carbon transport solutions to meet regional compliance requirements and improve customer retention.	• Increase in revenue (e.g., high-tech products and services drive revenue growth)	Our operations Downstream	Medium- term Long-term	We upgrade vessels for energy savings, enhance intelligent controls, and promote the use of clean fuels such as LNG, green methanol, and biofuel.		
Market	Stricter carbon rules, higher costs for building low-emission vessels, and elevated ship management standards are raising industry entry barriers and increasing market concentration.	• Increased revenue (e.g., stronger bargaining power in transport services)	Our operations	Medium- term Long-term	We increase support for green innovation and R&D, accelerating the shift toward low-carbon technologies.		

Opportunity	Description	Climate Change-Relate	Business Model and	Period	Strategy and Business Mode
Category	Description	Financial Impact	Value Chain Impact	Period	Adjustment
	We respond to climate change and secure green financing.	• Lower financing costs	Our operations	Short-term Medium- term Long-term	We collaborate with industry chain stakeholders, share experience with each other, and jointly conduct studies on carbon footprint in the energy supply chain, aiming to boost our low-carbon competitiveness.
Market	We strengthen carbon asset management through active participation in carbon trading.	<ul> <li>Increased current assets</li> </ul>	Our operations	Short-term Medium- term Long-term	We strengthen carbon asset and trading management by establishing robust frameworks for carbon trading and dual-carbon (peaking and neutrality) governance systems Through proactive collaboration with industry chain partners on carbon asset management initiatives, we are strategically enhancing low-carbon competitiveness.
	In high-emission scenarios, rising oil demand drives the volume of oil transport. In low-emission scenarios, demand for low- and zero-carbon shipping increases.	• Increased revenue	Our operations Downstream	Medium- term Long-term	We strengthen our core business as the foundation of our growth, align with the global energy transition trend, and expand low- and zero-carbon transport services
Adaptability	We align with the energy transition by developing oil shipping, LNG shipping, and liquified cargo shipping and by investing in green innovation and R&D.	<ul> <li>Increased revenue (e.g., optimized resource allocation and targeted market exploration enhance integrated services for different customers)</li> <li>Maintenance and appreciation of asset values (e.g., the market valuation of the fleet can increase by planning ahead)</li> </ul>	Our operations	Medium- term Long-term	We develop new ship types, improve fleet management, advance energy-efficiency upgrades and intelligent ship management, and innovate products and services to boost competitiveness.
	We work with shipyards and fuel suppliers to support joint transformation and build a more resilient, adaptable supply chain.	• Decreased operating costs (e.g., improved supply chain resilience and reliability reduce supply chain costs)	Upstream Our operations Downstream	Medium- term Long-term	We work closely with supply chain partners to embed low-carbon practices into supply chain management and drive digital, low-carbon, and intelligent development in energy transport.

Employee-Centric Approach: Investing in Our People for Sustainable Growth

### Pathway to green & low-carbon transition

COSCO SHIPPING Energy has set a long-term goal. With 2020 as the base year, we aim to peak the carbon emissions of our tanker fleet by 2030 and achieve carbon neutrality by 2050. To achieve this, we have developed separate transition pathways for international and domestic shipping based on new technologies and development of alternative fuels. We also advance major green transition projects.

### International shipping

We use carbon intensity as a core metric, following emission reduction requirements from the IMO and the EU, and adopting advanced energy-saving and alternative fuel technologies. We calculate both the rate of carbon intensity reduction and total CO<sub>2</sub> emissions.

To meet the 2050 net-zero emissions target, we are implementing measures across three areas: alternative fuels, including LNG, green methanol and biofuels; operational efficiency, including voyage speed optimization and intelligent routing planning, and technical efficiency upgrades, including energy-saving appendages, Hydrodynamic hull optimization, lightweight structures, Anti-fouling coatings, and wind-assisted propulsion.



### **Domestic shipping**

We are committed to peaking carbon emissions by 2030 and achieving carbon neutrality by 2050. We have established absolute emission reduction targets and implementation pathways based on 2020 levels. This initiative aligns with China's "30.60" climate goals, the Ministry of Transport's "14th Five-Year Plan" regulations on greenhouse gas reduction for domestic shipping, and advances in energy-saving technologies and low-carbon energy applications.



### **Key Tasks and Projects**

### Task 1: Fleet structure optimization

Project 1: Build energy-saving, eco-friendly vessels

•Project 2: Phase out aging vessels that operate at high fuel consumption levels

•Project 4: Build one 6,300 m<sup>3</sup> LPG/ammonia carrier

energy efficiency monitoring and assessment system



### Task 4: Green innovation

•Project 8: Conduct pre-research on ammonia dual-fuel Aframax tankers

•Project 9: Develop and demonstrate coating resistance reduction and energy saving technology

### Task 5: Low-carbon supply chain management

•Project 10: Pilot blockchain-based electronic bills of lading in domestic energy shipping

### Task 6: Green capability building

•Project 11: Collaborate with partners to build an emissions database and evaluation system

### Costs and funding for the low-carbon transition

In our Green and Low-Carbon Transformation Strategies, we assess the additional construction and operating costs related to new energy application, management efficiency optimization, and technical efficiency improvements. These assessments are conducted in five-year cycles. Based on these results, we continue to increase investment in green innovation and technology development, and allocate dedicated funding to support key initiatives. We use a mix of internal funds and market-based financing tools, including financial leasing, equity financing, and industry-finance collaboration, to meet the financial needs of the low-carbon transition.

### Kev actions in 2024



Onboard carbon capture system



In 2024, we advanced research of Carbon Capture, Utilization, and Storage (CCUS) technologies for vessels. We developed methodologies for assessing carbon footprints and techno-economic feasibility under the Ship-Based Carbon Capture and Offshore Storage Project. We also estimated potential capture demand and built a logistics and cost model. The system design received AIP certification from the China Classification Society, laying a solid foundation for future emission reduction and resource efficiency improvement.

# Management of Impacts, Risks, and Opportunities

COSCO SHIPPING Energy has built a structured system to manage climate-related impacts, risks, and opportunities. Guided by a multi-level governance framework and efficient management practices, we ensure that our approach is standardized, systematic, and continuously improving. We have established a Green and Low-Carbon Steering Group, which is headed by the Company's Chairman. The group consists of four specialized working teams, integrating climate-related impacts, risks, and opportunities into the Company's overall risk management framework. We regularly identify, assess, and update lists of transition risks—such as regulatory changes and technological innovations—and physical risks, including extreme weather events. We also implement targeted measures to stay proactive and forward-looking in addressing climate challenges.

### **Transition Risks**

To manage transition risks associated with climate change, we have established a comprehensive risk response mechanism. We closely monitor global and domestic policy and regulatory developments to ensure compliance. At the same time, we track global energy transition trends and explore emerging markets, such as marine transport of low- and zero-carbon energy and CO<sub>2</sub>. We pilot clean energy solutions, including LNG, green methanol, and biofuels. We also beef up investments in green and low-carbon technology innovation. By diversifying our clean energy use and getting technologically prepared for the future, we steadily advance the transition toward low- and zero-carbon shipping operations. These efforts help mitigate potential risks in policy, technology, market dynamics and reputation, while enhancing our sustainability performance.

In 2024, based on a thorough analysis of macro policies, market trends, and technology developments, we conducted an annual major risk assessment in line with the Risk and Internal Control Manual. The assessment covered seven areas: financial assets, market competition, business strategy, health and safety, compliance, and reputation. It systematically evaluated the likelihood and impact of risks to ensure effective risk management measures. Industry policy risks related to GHG emissions and environmental protection regulations in shipping were among the top ten risks identified for the year.



We have formed a dedicated task force to study the EU ETS and related regulations. We have formulated the Regulation on EU ETS Compliance Guidelines Management (Trial) and opened an account in the Union Registry for compliance. Furthermore, the company implements annual compliance planning with defined carbon guota allocation and budget mechanisms, having successfully completed the 2023 Shanghai municipal carbon emissions compliance settlement, and we have drafted the Regulations for Participating in the Shanghai Carbon Trading (Trial).

Safety First: Leading the Way in Maritime Transportation

### **Physical Risks**

Based on the climate risk assessment, the physical risks we currently face are mainly from extreme weather events and natural disasters. We use a risk matrix that combines qualitative and quantitative methods to evaluate and analyze hazard sources during ship operating. We then formulate and enforce preventive measures to protect personnel, vessels, and cargo.



# | Indicators and Targets

COSCO SHIPPING Energy's GHG emissions mainly result from direct CO<sub>2</sub> emissions from vessels. Taking into account the current carbon footprint of the fleet we own and future capacity plans, we have set a long-term goal. With 2020 as the base year, our self-owned tanker fleets will strive to achieve carbon peaking by 2030 and carbon neutrality by 2050.

2025 GHG reduction target: We target a 2% reduction in CO<sub>2</sub> emissions per unit turnover from our tanker fleet in 2025 compared to 2024. We will closely track progress toward this goal throughout our operating in 2025.

\*Methodology for target setting:

Sectoral decarbonization approach (SDA): We set emission reduction targets based on the GHG reduction strategies and sectoral decarbonization pathways from authoritative institutions such as the IMO, aligning with industry-wide decarbonization strategies and timelines.

Absolute emission reduction approach: In line with China's "30-60" climate goals, we have set corresponding goals and work to achieve them through energy-efficiency upgrades, the development and use of new marine materials, and the development of alternative energy-powered vessels.

Since being covered by Shanghai's carbon emissions quota system in 2020, we have been continuously improving our compliance with carbon trading requirements. In 2024, we surrendered the allowances to cover 2023 emissions in accordance with the requirements of the Shanghai Municipal Bureau of Ecology and Environment.

	Energy and Res
Indicator	U
	M
	tonne of coa
	Note:
Total energy consumption	<ul> <li>2024 data includes fi for official vehicles. No</li> <li>2023 data includes fi vehicles. No natural ga</li> <li>2022 data includes fi vehicles. No natural ga</li> <li>Calculations follow G Energy Consumption ar Inventory Inventories (Tr</li> </ul>
	MWh/1,000
-	tonne of coal equival
Energy consumption per unit turnover	Note:
	<ul> <li>This Report presents places, compared to the places.</li> </ul>
Total fuel consumption	tor
Fuel consumption per unit turnover	kg/1,000 t
	Direct En
Fuel oil	tor
High-sulfur fuel oil	tor
Low-sulfur fuel oil	tor
Biofuel	tor
	tor
Diesel	Note: • As of the end of 2024 vessels switch to diese United States require (
Lubricants (non-combustion)	tor
	Indirect Ei
Total electricity consumption (office use)	k٧
Total electricity consumption (office use)	tonne of coa
	Clean and Renewable
Use of biofuel	M
Use of biofuel	tonne of coa
Biofuel share in energy mix	
	<u>i</u>

Resource Use		
Unit	2024	
MWh	14,613,681.23	
coal equivalent	1,796,021.42	
No natural gas was used. s fuel oil, diesel, purchased gas was used. s fuel oil, diesel, purchased gas was used. (GB/T 2589-2020 General R and the Provincial Guideline (Trial).	chased office electricity, and gasoline office electricity, and gasoline for official office electricity, and gasoline for official ules for Calculation of Comprehensive s on the Compilation of Greenhouse Gas	
)00 tonne-mile	0.0242	
valent/1,000 tonne-mile	0.0030	
nts values of energy consun o three in the 2023 report.	nption per unit turnover to four decimal	
tonne	1,255,900	
10 tonne-mile	2.08	
Energy		
tonne	1,203,308.01	
tonne	225,281.15	
tonne	976,024.91	
tonne	2,001.95	
tonne	52,603.25	
esel at ports. In addition, em	d 20 vessels with scrubbers. These ission control zones in Europe and the ich increased diesel consumption.	
tonne	11,375.28	
t Energy		
kWh	2,187,422.33	
coal equivalent	268.83	
ble Energy (Biofuel)		
MWh	23,382.24	
coal equivalent	2,873.68	
%	0.16	

GHG Emissions			
Indicator	Unit	2024	
GHG emissions	tonne of CO <sub>2</sub> equivalent	3,915,784.08	
	tonne of CO <sub>2</sub> equivalent	3,914,509.96	
Scope 1 (vessels)	Note: • Scope 1 ship emissions = Heavy fuel oil * 3.114 + • Emission factors for fuels (excluding biofuel) are fi • The biofuel factor is based on ISCC certification.		
	tonne of CO <sub>2</sub> equivalent	100.35	
Scope 1 (official vehicles)	<ul> <li>Note:</li> <li>Scope 1 official vehicle emissions = Gasoline consumption * Lower heating value (44.800 MJ/kg) * Carbon content (18.90 kgC/GJ) * Oxidation rate (98%) * 44/12/1000</li> <li>The factors are based on the <i>Guidelines for Greenhouse Gas Emission Accounting and Reporting for Industrial and Other Sector Enterprises (Trial).</i></li> </ul>		
	tonne of CO <sub>2</sub> equivalent	1,173.77	
Scope 2 (electricity purchased for onshore offices)	The calculation is based on the 2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas     hased for		
CO2 emissions per unit turnover (Scope 1 vessels)	kg of CO₂ equivalent/1,000 tonne-mile	6.49	
	tonne of CO <sub>2</sub> equivalent	1,237.20	
Total CO <sub>2</sub> emission reduction • Emissions were reduced in 2024 by replacing fuel oil with biofuel.		l oil with biofuel.	

# **Marine Biodiversity Conservation**

Green transformation has become a global consensus and a shared commitment across the shipping industry. We recognize that biodiversity is essential to human survival and the foundation of sustainable economic and social development. We are committed to building a cleaner and more resilient business ecosystem. To that end, we have established a medium- and long-term environmental management plan focused on achieving zero pollution, high energy efficiency, and low emissions. We work to minimize the environmental impact of our vessels on the ocean, atmosphere, and coastal areas.

# **Our Commitment**

In April 2023, with Board approval, we issued the *Biodiversity Conservation Statement*, affirming our support for the *Kunming-Montreal Global Biodiversity Framework*. We are committed to protecting biodiversity both on land and along our shipping routes.

We pledge not to operate near global or national ecological reserves that are critical to biodiversity. When operating near such areas, we maintain a safe distance to avoid negative impacts. All subsidiaries should follow this policy and encourage suppliers to adopt similar practices.

Although our main operations are ocean-based and do not directly impact on forests, we strictly comply with all relevant forest protection laws and regulations. We prohibit illegal logging, promote afforestation, and apply these standards to both onshore operations and ship activities. All subsidiaries should uphold these commitments and encourage suppliers to reduce deforestation and take steps to protect or restore forest ecosystems.

# **Our Actions**

We comply with the *Marine Environmental Protection Law of the People's Republic of China* and other relevant laws and regulations, as well as international conventions such as the *International Convention for the Control and Management of Ships' Ballast Water and Sediments* and the *International Convention on the Control of Harmful Anti-fouling Systems on Ships.* We also study the environmental regulations of coastal states and port regulators to ensure legal and compliant navigation.

We proactively identify environmental aspects and risks during shipping that could cause irreversible damage to marine biodiversity. These include ballast water discharge, oily water, navigational noise pollution, oil spills, toxic and hazardous substance leakage, sewage and garbage discharge, air emissions, and ship dismantling. We assess and manage these risks through targeted plans, including but not limited to ballast water management, garbage management, biofouling management, and oil spill response.

	·		0
Ballast water management	•	We regulate ballast water handling across the fleet through policies including the <i>Environmental Aspect Control for Ships</i> , the <i>Ballast Water Management Plan</i> , and the <i>Ballast Water Operation for Tankers</i> .	0
Biofouling management	(废)	We implement control measures through dedicated plans and maintain a <i>Biological Fouling Record Book</i> to prevent the transfer of invasive aquatic species through biofouling.	0
Route planning	• 25	We consider navigational safety, distance, cargo volume, port location, and maritime technologies when planning routes. We avoid areas important for marine species migration, breeding, and habitation, and reduce noise pollution. For particularly sensitive sea areas (PSSA), we follow national regulations and maintain safe distances to avoid causing negative impacts.	
Oil spill response	• Ç	We focus on preventing and managing marine pollution incidents such as oil spills. We have formulated an <i>Contingency Plan for Oil Spill and Environmental Pollution</i> , and provide safety training and drills for seafarers. We also enforce pre-loading checks and shipowner self-inspections, and analyze similar incidents to prevent recurrence.	0
Emissions reduction	•	We invest in developing new energy-powered vessels and use low- or zero-emission alternative fuels to cut GHG emissions. We reduce air and marine pollution by using low-sulfur marine fuel and higher-grade hull coatings.	
Supplier management	•	We manage suppliers from the upstream stage. At the shipbuilding stage, we work with shipyards and ship classification societies to prohibit the installation of materials that contain asbestos. Suppliers must provide asbestos-free declarations to prevent harm to the marine environment during ship operations.	0
Awareness and capacity building	• <b>A</b>	In line with multiple initiatives, we run awareness campaigns both onboard and onshore to strengthen employees' awareness of biodiversity conservation.	
			0
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# **Resource Use and Emissions**

# | Water Resource Management

Shipboard water is primarily from seawater desalination and supply ships. All vessels are equipped with seawater desalination systems. We also closely manage water used for ship operations and consumed by crew members. We regularly assess potential water-related risks in our operations. At present, we don't face any significant water scarcity risks.

Use of Water			
Indicator	Unit	2024	
Total water consumption	m³	705,447.94	
Use of water on vessels	m³	695,283.00	
Office water use	m³	10,164.94	
Water saved	m³	323,150.00	
	m³/1,000 tonne-mile	0.001153	
Water use intensity (vessels)	Note: • Water use intensity in 2022, 2023, and 2024 is calculated based on shipboard water use. • The rise in shipboard water use in 2024 is mainly due to the acquisition of LPG and chemical tanker fleets. • Most shipboard water comes from onboard desalination systems and supply ships.		

# | Wastewater Management

We strictly comply with the *International Convention for the Prevention of Pollution from Ships* (MARPOL 73/78) and have implemented a comprehensive wastewater management system. This system covers the entire process for managing oily water, sewage, tank washing water and ballast water. Regular inspections and internal audits are conducted on pollution control equipment to ensure compliance. Both onshore and onboard teams follow standardized procedures for managing pollutants and wastes. Vessels operating within designated navigation areas submit monthly reports on pollutant handling. The environmental protection team develops pollution control plans and annual plans. All oily water generated during cargo operations is recovered onshore, achieving the zero-discharge target. In 2024, oily water discharge decreased by 30.98% compared to the previous year.

	<b>Oily water:</b> The <i>Environmental Protection Manage</i> discharge to the shore reception facilities (onshore service providers handle onshore disposal to ensu
	Tank washing water: All oil-contaminated tank wa real time, and discharged to suitable port reception
°Ç°	Sewage: We continue to upgrade domestic sew. meet international conventions, regulations, and r
	<b>Grey water:</b> When required by port authorities, w regulations. In ports that do not have such regulat reduce the burden on the coastal environment.

agement Procedure clearly defines the procedures for both re disposal) and outboard discharge. Only certified third-party sure compliance.

vashing water is collected in slop tanks onboard, monitored in ion facilities.

wage treatment systems on vessels to ensure all discharges mandatory standards.

we discharge and record grey water in accordance with local ations, we discharge grey water off shore as far as possible to

# Exhaust Gas Management

Exhaust gas from vessels mainly results from the combustion of marine fuels, producing nitrogen oxides (NO<sub>x</sub>), sulfur oxides (SO<sub>x</sub>), volatile organic compounds (VOCs), and particulate matter. We continue to enhance emissions management through equipment maintenance and technical upgrades.

### SO<sub>x</sub> emission reduction

We reduce  $SO_x$  emissions by using low-sulfur fuels and retrofitting existing vessels with scrubbers. We monitor Emission Control Areas (ECAs) and regularly update compliance lists to ensure all operations meet regulatory requirements.

### NO<sub>x</sub> emission reduction

We reduce  $NO_x$  emissions by maintaining and upgrading equipment and optimizing operational procedures in strict compliance with international standards. All vessels delivered after 2019 are equipped with after-treatment systems that meet Tier III  $NO_x$  emission standards.

### VOC emission reduction

We have developed a VOC management plan. Vessels are equipped with cargo vapor recovery systems to collect VOCs generated during cargo operations and offload them to onshore facilities.

### Particulate matter emission reduction

We enhance equipment maintenance to ensure complete fuel combustion and reduce particulate matter emissions.

### Ozone-depleting substances (ODS) emission

No vessels are equipped with systems that use ODS. However, each ship maintains an *Ozone Depleting Substances Record Book* and provides accurate information. We prohibit the supply of spare parts or materials containing ozone-depleting substances to vessels.

# | Waste Management

COSCO SHIPPING Energy strictly complies with relevant regulations and international conventions on ship-generated waste. We manage onboard waste in accordance with legal requirements and oversee the proper disposal and compliant discharge of hazardous materials, aiming to minimize environmental impacts throughout the ship lifecycle. We invite external experts to deliver specialized training on green and low-carbon shipping, focusing on waste management. The training is provided to personnel from the ship management department.

### Ship recycling

We follow the ship lifecycle assessment (LCA) approach and comply with the *Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, 2009* (HKC) and the *EU Ship Recycling Regulation* (EU-SRR). Environmentally sound and safe recycling technologies are applied during dismantling, and each ship is accompanied by an Inventory of Hazardous Materials (IHM) to avoid environmental harm during ship breaking.

### Ship garbage management

Domestic waste is offloaded and processed onshore whenever possible. We promote the use of environmentally friendly and recyclable materials to reduce waste at the source. We comply with the *International Convention on the Control of Harmful Anti-fouling Systems on Ships* and strengthen monitoring to reduce the discharge of hazardous substances such as paints and chemicals during ship operations and maintenance.

We hold a semi-annual environmental review meeting to evaluate energy efficiency and environmental performance, identify existing issues, and plan future actions. In 2023, we introduced the *Ship Pollutant Management Plan*, setting 2025 targets for ship-generated waste, using 2022 as the baseline.

egory
General plastic bag
Packaging materia
Food waste
Oily water and sludge after the tank
Bilge water
Oil residue

Exhaust Gas, Wastewater, and Waste Discharge		
Indicator	Unit	2024
	tonne	94,304.46
NO <sub>x</sub> emissions	Note: • NO <sub>x</sub> emissions = Fuel oil consumption * 0.0759 + Diesel consumption * 0.0567 + Biofuel consumption * emission factor (the biofuel consists of 24% biodiesel and 76% low-sulfur fuel oil, with respective emission factors of 0.0567 and 0.0759). • The factors are based on the Fourth IMO Greenhouse Gas Study 2020.	
NO <sub>x</sub> emissions per unit turnover	kg/1,000 tonne-mile	0.1564
	tonne	11,514.03
SO <sub>x</sub> emissions	bte: The SO <sub>x</sub> emission factor comes from the <i>Statistical Statement on Energy Conservation</i> <i>d Ecological Environmental Protection of Central SOEs</i> . Formula: $E_{SO2L}$ = High-sulfur fuel oil consumption * 19 * Sulfur content * 10 <sup>3</sup> + w-sulfur fuel oil consumption * 19 * Sulfur content * 10 <sup>3</sup> + Diesel consumption * 19 * Ifur content * 10 <sup>3</sup> + Biofuel consumption * 19 * Sulfur content * 10 <sup>3</sup> Low-sulfur fuel oil contains 0.5% sulfur. High-sulfur fuel oil is treated using scrubbers, sulting in a sulfur content equivalent to that of low-sulfur fuel oil. Diesel contains 0.1% Ifur. Biofuel consists of 24% biodiesel (0.1% sulfur) and 76% low-sulfur fuel oil (0.5% Ifur).	
SO <sub>x</sub> emissions per unit turnover	kg/1,000 tonne-mile	0.02

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	2025					
ags	Reduce by 3%					
als	Zero discharge					
	Reduce by 10%					
er cleaning	Reduce by 10%					
	Reduce by 5%					
	Reduce by 10%					
Exhaust Gas, Wastewater, and Waste Discharge						
--------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------	--	--	--	--
Indicator	Unit	2024				
Oily water discharged	tonne	74,706.67				
	tonne	8,762.86				
Hazardous waste discharge	Note: • The decline in oily water and hazardous w repairs in 2023.	vaste in 2024 is mainly due to more ship				
	g/1,000 tonne-mile	14.53				
Hazardous waste per unit turnover	Note: • In 2024, hazardous waste includes the oil • Data for 2022 and 2023 have been retro					
Oil spills	tonne	0				
Non-hazardous waste discharge	tonne	598.35				
Non-hazardous waste discharge per unit turnover	g/1,000 tonne-mile	0.99				
Total amount of waste recycled/reused	tonne	144.44				
Percentage of waste recycled/reused	%	1.54				
	tonne	2,871.47				
Total waste disposal	Note: • Includes uncollected incinerated waste, discharge of solid waste to onshore reception facilities, and food waste discharged at sea in accordance with international conventions.					
Waste incinerated without energy recovery	tonne	404.25				
Waste disposed of by other means	tonne	2,467.22				
Number of owned international navigation vessels with ballast water treatment systems	/	118				
Percentage of owned international navigation vessels with ballast water treatment systems	%	100				
Number of owned vessels with scrubbers	/	20				
	%	12.04				
Percentage of owned vessels with scrubbers (excluding LNG carriers) Note: • Vessels without scrubbers use low-sulfur fuel oil.						

In 2024, NO<sub>x</sub> emissions per unit turnover decreased by 3.28%, oily water discharge decreased by 30.98%, hazardous waste discharge per unit turnover decreased by 33.20%, and non-hazardous waste discharge per unit turnover decreased by 18.85%, compared to 2023.

# **Green Office Practices**

COSCO SHIPPING Energy actively promotes green office practices. We regularly conduct awareness campaigns, training, and knowledge-sharing activities on energy conservation and emissions reduction. These efforts cover energy management, waste disposal, and emissions control to ensure efficient resource use and minimize the environmental impact of office operations.

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## Energy management

We have set up the Energy Conservation & Emission Reduction Steering Group and Office, which oversee major initiatives, implement company-wide actions related to water, lighting, air conditioning, and elevator efficiency, and develop medium- and long-term plans. These plans are reviewed and updated regularly. The teams also provide ongoing supervision, guidance, and performance evaluations.

# General solid waste management

We promote paperless operations. The property management company collects everyday office waste — such as paper, cardboard, beverage cans, fruit peels, disposable food containers, plastic bags, and glass bottles — on a daily basis. Waste is sorted into organic and inorganic categories, then bagged or bundled for timely removal by recycling stations or local sanitation services. To support proper disposal, each floor is equipped with clearly labeled bins for different waste types and dedicated containers for used batteries.



Toxic and hazardous waste generated in the office — such as used batteries, toner cartridges, printer ribbons, spent lamps, old electronics, discarded circuit boards and components, and medical items — is collected and handed over to licensed third-party recyclers. Toxic and hazardous waste from equipment maintenance is promptly collected and disposed of in compliance with regulations.

# Food waste management

Cafeterias manage food waste — such as leftover food, disposable tableware, and used napkins according to local government regulations for the food service industry.



# Sewage management

Office wastewater must meet local discharge standards and is subject to regular sampling and testing. If a local authority issues a notice of noncompliance, the Company will work with the property management company to identify the issue and implement corrective measures promptly.

# Vehicle emissions

To reduce air pollution, employees must follow local vehicle emissions standards and ensure regular emissions testing.

# 05

# Employee-Centric Approach: Investing in Our People for Sustainable Growth

The success of a company lies in its people. COSCO SHIPPING Energy remains committed to growing alongside its employees. We provide broad development opportunities and comprehensive support to promote employee well-being, working together to build a sustainable future.

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Contributing to the following UN SDGs:



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Safety First: Leading the Way in Maritime Transportation

# **Protecting Employee Rights and Interests**

We adhere to the development concept of being "people-oriented", respecting and protecting employees' legal rights. We build a harmonious, inclusive, and dynamic working environment through institutional protection and humanistic care.

# | Lawful and Compliant Employment

We strictly comply with the Labor Law of the People's Republic of China, the Labor Contract Law of the People's Republic of China, and other applicable labor regulations in our areas of operation. We have revised the *Headquarters Employee Management Measures* and the *Regulations on Recruitment Management of Onshore Employees* to standardize processes for recruitment, transfer and secondment, leave and working hours, and contract termination. These updates help ensure lawful employment practices and stable, harmonious labor relations. Overseas branches or subsidiaries follow local laws and complete hiring procedures with headquarters' approval. In 2024, there were no incidents of child labor or forced labor in the Company.

In order to standardize the seafarer hiring, we have issued the *Instructions on Recruitment, Placement and Working Conditions for Onboard Crew*, defining core standards for recruitment, onboarding procedures, and working conditions. We have also established an annual audit system to review the qualifications and operations of crew management companies and their branches. Each year, we sign the *Crew Service Agreement* with crew management companies, strictly implement the regulations on rest and vacation for crew members, and ensure that crew members enjoy the same occupational health and safety protections as full-time employees. Internal and external audits are conducted annually to assess crew management and protect the interests of crew members.

We support and adhere to the Universal Declaration of Human Rights, the International Labour Organization Conventions, and the Ten Principles of the UN Global Compact. We respect the human rights of all employees and align our labor practices with international standards.

## Number and distribution of new hires in 2024 =







Employee-Centric Approach: Investing in Our People for Sustainable Growth Social Commitment in Action Co-creating a Compassionate Ecosystem

### Employee Turnover Rates in 2024 =





•Overall turnover rate = Number of employees who left / (Number of employees at the beginning of the period + Number of new employees during the period); Turnover rate by category = Number of employees who left in the category / (Number of employees in the category at the beginning of the period + Number of new employees in the category during the period) ·Voluntary turnover includes resignations, retirements, and early retirements.

# Diversity, Equity, and Inclusion

We strictly oppose any forms of discrimination based on age, gender, race, nationality, religion, disability, or pregnancy, and actively foster a diverse and inclusive workplace. We protect the rights and interests of female employees, implementing special labor protections during pregnancy, childbirth and breastfeeding. We also provide equal access to opportunities and resources to support female employees' professional development and enhance their competitiveness.

Our Code of Conduct clearly prohibits any form of harassment. We enforce a zero-tolerance policy against any actions, behaviors, or gestures targeting any individual or group that are unwelcome, humiliating, coercive, or hostile. We have established internal reporting procedures to ensure that all employees can promptly report incidents of discrimination or harassment they experience or witness. Disciplinary measures, including dismissal or legal action, are taken as necessary. In 2024, no incidents of discrimination or harassment were reported.

# **Compensation and Performance Management**

We are committed to building a fair, transparent, and performance-driven compensation system. Both the headquarters and subsidiaries have adopted the Employee Compensation Management Policy, which defines standards for setting pay levels and managing compensation. We offer competitive salaries and welfare benefits.

To strengthen performance assessment systems, the Company has improved a number of management policies, including the Measures on Term-Based and Contractual Management for Headquarters Middle Management (Trial). We have also revised the Regulations on Party Committee Officials Management, the Headquarters Employee Assessment Measures, and the Implementation Guidelines for Fleet Management Team Performance Assessment. We align performance evaluations with talent management and apply a company-wide system that focuses on value, capability, contribution, and conduct. We also use tools such as 360-degree feedback to conduct quarterly evaluations, ensuring objectivity and effectiveness.

## Employee Performance Appraisal Types •

# Goal management Develop an annual evaluation scheme that defines the scope, methods, criteria, and reporting requirements. Team-based evaluation Increase departmental autonomy in allocation, add a mechanism for the allocation of incentive packages for departmental autonomy, and strengthen the tilt towards core talents who have made special contributions.

In accordance with the Administrative Measures on Equity-based Incentives for Listed Companies, we have granted equity incentives to 131 employees under our stock option plan, to share the fruits of development with our employees.

# Democratic Communication

We have established a labor union committee in accordance with the law and implemented a democratic management and oversight system based on the Workers' Congress. We actively protect employees' legitimate rights, strengthen democratic participation, and safeguard the rights of female employees, working to build a harmonious labor relationship. In 2024, we successfully held the third session of our second Workers' Congress, with a total of 6 proposals from employees being solicited and deliberated on. Through mobile platforms such as the Labor Union App, we listen to employee feedback and respond promptly to their needs, further enhancing employee satisfaction and a sense of belonging. Union membership among employees stands at 100%.





## Multi-dimensional performance evaluation

Integrate multi-dimensional assessment and performance appraisal, as well as daily behavior, outstanding contributions, and reward and punishment records for a well-rounded assessment.

# Agile dialogue

Conduct periodic reviews of the achievement of employee and team performance objectives, and establish a feedback mechanism to ensure timely communication and support goal achievement.

Safety First: Leading the Way in Maritime Transportation

# **Supporting Employee Growth**

We foster employee development by offering comprehensive career paths and training programs. This approach aligns individual growth with corporate objectives, empowering employees while fueling the Company's long-term development.

# | Facilitating Career Advancement

We are committed to providing diverse career pathways and continuously refining our promotion mechanisms. We ensure fair and transparent promotions through policies such as competitive selection and leadership management regulations.

In 2024, we formulated and released the 2024 Talent Work Priorities and the Talent Development Plan (2024–2026), aligning talent career development across business units with strategic goals. We enhance employee competencies through targeted training, job rotation, cross-functional exchanges, and international development opportunities. According to the *Implementation Guidelines for Multi-Track Development of Key Personnel*, we encourage core staff to gain experience through assignments at client sites, overseas branches, grassroots units, and domestic and international vessels. These rotations support rapid development and broaden career horizons.

# Attracting and Developing Talent

We have actively implemented the *High-Level Talent Recruitment Guidelines (Trial)* and the *Implementation Rules for Headquar*ters Technology Talent Incentives (Trial) to attract and cultivate strategic talents in key areas of energy transport.

## Recruitment of high-caliber, cross-disciplinary talent

We have issued the *Implementation Plan for Building a World-Class Talent Team in Shipping Technology*, focusing on talent recruitment in digitalization, supply chains, tech innovation, and low-carbon development. We have invested in development through role-based practice, real-world projects, specialized training, and mentoring, continuously expanding our tech innovation team.

## Building talent pipelines

We have released the *Succession Planning Guidelines for Key Positions (Trial)*, established four talent pools— E-Voyage, E-Start, E-Assist, and E-Reserve, and built talent pipelines across ten business segments, including tankers, LNG, LPG, and chemical transport. The goal is to build three tiers of talent: seasoned professionals, high-potential individuals, and pipeline successors.

## Strengthening ship-to-shore talent development

We have introduced the *Dual-Track Talent Development Guidelines (Trial)* to promote mobility between ship and shore roles. We have also established a system for transitioning seafarers to onshore positions, encouraging two-way exchanges between seafarers and ship management staff to develop talent skilled in both navigation and management.

# Case

# Joint Seafarer Training to Boost Shipping Value Chain Development

To support the growth of China's LNG shipping industry and develop a high-caliber LNG crew, COSCO SHIPPING LNG collaborates with Dalian Maritime University and others on a joint seafarer training program. The partners co-authored the *Advanced Management of LNG Vessels*. This specialized textbook fills a gap in Chinese maritime education and contributes to building a new training model for high-end LNG talent.

As the Company expands into energy and chemical logistics, the importance of related talents is becoming more and more prominent. In 2024, COSCO Chemical Carrier signed a joint training agreement with the College of Shipping, Bohai University to train seafarers tailored to the chemicals shipping development. Ten students participated in an onboard internship on MV "JIN HAI ZHOU", helping align education with industry needs and laying a solid foundation for building a core seafarer team.

# Providing Tailored Training

We provide employees with comprehensive, practical, and structured training. Guided by the *Employee Education and Training Management Measures*, we support employees' professional growth and career development.

**Tailored programs to meet diverse needs:** We have developed the "Outstanding Leader" Training Program to offer training for five groups: senior executives, department heads, managers, key personnel, and new employees. The program focuses on global expansion, digital transformation, new quality productive forces, and ship-shore integration. Training formats include interactive workshops, expert seminars, and online courses, engaging employees at all levels for step-by-step learning.

**Diverse training types covering various fields:** Training is aligned with departmental needs and spans multiple areas, including market operations, ship safety systems, industry chain management, legal compliance, green and low-carbon development, business and financial management, and brand building.



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Employee-Centric Approach: Investing in Our People for Sustainable Growth Social Commitment in Action: Co-creating a Compassionate Ecosystem

#### COSCO SHIPPING Energy's "Outstanding Leader" Training Program •

Senior managementStrengthen corporate governance skillsMiddle management (department heads and managers)Improve international operation, problem-solving, team-building, execution, and communication skillsKey young talentImprove professionalism and job performanceNew employeesBuild job-specific skills and professional ethicsTalent (activation,Understand the Company's business processes; develop cross-functional	Trainee	Objective
(department heads and managers)Improve international operation, problem-solving, team-building, execution, and communication skillsKey young talentImprove professionalism and job performanceNew employeesBuild job-specific skills and professional ethics	management	Strengthen corporate governance skills
New employees     Build job-specific skills and professional ethics	tment heads and	
	ung talent	mprove professionalism and job performance
Talent (activation, Understand the Company's business processes; develop cross-functional	mployees	Build job-specific skills and professional ethics
empowerment, and retention) communication and collaboration skills; empower high-potential young talent		
Internal trainers Improve instructional skills and course development capabilities; build a pool of internal trainers and course resources base	al trainers	
International talents Cultivate global business leaders to support the Company's international strategy	ational talents	Cultivate global business leaders to support the Company's international strategy
Digital talents Promote data governance and cybersecurity; drive digital transformation	talents	Promote data governance and cybersecurity; drive digital transformation
Ship-shore integration talents Enhance safety awareness and strengthen core competitiveness in safety operatio	nore integration talents	Enhance safety awareness and strengthen core competitiveness in safety operations

### • Employee Training in 2024 •

Percentage of trained employees

100%

Total investment in employee training

RMB 5,081,100

Percentage of trained employees by gender (%)

Male employees		69.79%
Female employees	30.21%	

Percentage of trained employees by job level (%)

Senior management	0.77%
Middle management	9.70%
Junior management	18.08%
Average employee	71.45%

Average training hours per employee

162.17<sub>hours</sub>

Training investment per employee



Average training hours per employee by gender (hour)

Total training sessions

5.338



Average training hours per employee by job level (hour)



# **Safeguarding Employee Well-being**

We are committed to helping employees maintain a healthy work-life balance. We provide practical support based on employee needs and work to create a comfortable, caring, and supportive workplace.

# | Supporting Employees

We learn about employees' everyday concerns and take thoughtful, targeted actions to enhance their sense of belonging and overall well-being.

#### Efforts to Improve Employee Well-being =

Robust Governance Paving the Way for a

 $\leq$ We regularly organize diverse activities through ten employee clubs and introduce more cultural and sports events to

enrich employee experiences.

of Trade Unions' mutual aid programs for basic and enhanced health coverage to reduce the burden of

illness.

# Empowering Crew

We continue to strengthen our five core programs for crew empowerment, focusing on crew members' career development, onboard management, performance improvement, and family support. On the International Day of the Seafarer, the chairman and senior executives visited vessels to help resolve practical issues.

In 2024, we conducted a full review of crew affected by disasters or hardship. We conducted home visits and provided targeted assistance to help affected families return to normal life as soon as possible. We created a hardship information database to monitor the work and living conditions of affected crew. We also organized shipboard competitions, recreational activities, the "Heart of Energy" wellness activities, family open days, and improved onboard living spaces to strengthen the sense of belonging and well-being of crew.

2024 Key Performance Highlights					
Provided individual support for	Visited	Dis fun			
55 crew members	133 <sub>vessels</sub>	RM			

79



employees.

istributed consolation inds totaling

Benefited





# 06

# Social Commitment in Action: Co-creating a Compassionate Ecosystem

-

Companies thrive when society flourishes, and society thrives when companies operate responsibly and sustainably. COSCO SHIPPING Energy shares the benefits of its growth with the public, responding to societal needs and expectations. We continue to invest in rural revitalization and public welfare, promoting social harmony through responsible and philanthropic actions.

Contributing to the following UN SDGs:

1 POVERTY	2 ZERO HUNGER	3 GOOD HEALTH AND WELL-BEING	4 QUALITY EDUCATION	<b>11</b> SUSTAINABLE CITIES AND COMMUNITIES
<b>Ň</b> ŧŧŧ		-/v/\$		



# **Promoting Rural Revitalization**

To support China's rural revitalization strategy, we have established a leadership structure for targeted assistance, including a steering group, a working team, and an office to oversee implementation and ensure fruitful results

In Xizang, we conducted on-site visits in Luolong County to understand local needs. We focused on supporting education and healthcare and provided care packages to 147 families with children facing financial hardships. In all assistance efforts, we respect local communities, customs, and cultures, ensuring our operations do not disrupt residents' lives or cultural heritage.

The Company also joined the "Central Enterprise's Support for Farmers through Consumption Week" Activity. We purchased RMB 750,000 worth of products from the regions we support to help boost local industries and contribute to rural revitalization.



# **Supporting Community Development**

We actively participate in community development. We have issued the *Regulations* on External Donations and the Policy for External Donations to define areas of donation and ensure that all charitable activities are compliant and transparent. Through the COSCO SHIPPING Charity Foundation, we carry out charitable programs both domestically and internationally, including the "Long Voyage" program, covering disaster relief, poverty alleviation, and education support. We promote volunteerism among employees and encourage active participation in community service to make the world a better place.



Total investment in charitable programs





## Small Actions, Big Impact

In April 2024, COSCO SHIPPING Energy held a donation event at Menggong Elementary School in Menggong Village, Yunnan Province. The Company donated 100 bunk beds and 30 sets of tables and chairs for students at the school, continuing its support of the "Nurturing Young Minds" student aid program. Since partnering with the school in 2013, the Company has supported students for 11 years through letter exchanges, wish-granting activities, and painting events. In total, the Company has supported 138 students with donations amounting to RMB 295,200.

As a key force in maritime transport, COSCO SHIPPING Energy also contributes to maritime rescue efforts. In 2024, the Company participated in the Hong Kong-Zhuhai-Macao Bridge Anti-Collision Drill and the Rizhao Large Oil Tanker Emergency Drill. It coordinated nine rescue missions involving vessels such as MV "QIU CHI", MV "HECHI", and MV "HUACHI", helping safeguard maritime traffic.



# Appendices

# | Our Performance

Business Ethics						
	Indicator	Unit	2024	2023	2022	
Corruption,	embezzlement or bribery cases	/	0	/	/	
	Incidents of conflicts of interest	/	0	/	/	
non- compliance	Incidents of money laundering or insider trading	/	0	/	/	
Penalties	Funds involved in litigation or major administrative penalties for the Company's unfair competition during the reporting period	RMB	0	/	/	
	directors who received anti-commercial anti-corruption training	person	9	/	/	
	of directors who received anti-commercial anti-corruption training	%	100	/	/	
	senior managers who received rcial bribery and anti-corruption training	person	7	/	/	
Percentage of senior managers who received anti-commercial bribery and anti-corruption training		%	100	/	/	
	employees who received anti-commercial anti-corruption training	person	907	/	/	
	of employees who received rcial bribery and anti-corruption training	%	100	1	/	

Service Quality					
Indicator	Unit	2024	2023	2022	
Number of significant incidents concerning service safety and quality	/	0	/	/	
Amount of damage resulting from significant incidents concerning service safety and quality	RMB	0	/	1	

Supplier Management						
Indicator	Unit	2024	2023	2022		
Total number of suppliers	/	651	618	591		
Number of suppliers outside the Chinese mainland	/	129	114	133		
Number of suppliers in the Chinese mainland	/	522	504	458		
Supplier vetting coverage	%	100	100	100		

Energy and Resource Use						
Indicator	Unit	2024	2023	2022		
	MWh	14,613,681.23	13,235,706.23	12,656,018.87		
	tonne of coal equivalent	1,796,021.42	1,626,668.30	1,555,424.72		
Total energy consumption						
	MWh/1,000 tonne-mile	0.0242	0.0250	0.0236		
Energy consumption	tonne of coal equivalent/ 1,000 tonne-mile	0.0030	0.0031	0.0029		
per unit turnover Note: The 2024 report presents values of energy consumption per unit turnover to four decima compared to three in the 2023 report.						
Total fuel consumption	tonne	1,255,900	1,137,900	1,088,000		
uel consumption per	kg/1,000 tonne-mile	2.08	2.14	2.03		

# Direct Energy

Fuel oil	tonne	1,203,308.01	1,108,663.02	1,055,889.44
High-sulfur fuel oil	tonne	225,281.15	/	/
Low-sulfur fuel oil	tonne	976,024.91	/	/

Energy and Resource Use						
Biofuel	tonne 2,001.95 / /					
	tonne	52,603.25	29,199.38	32,064.13		
Diesel	Note: •As of the end of 2024, the Company retrofitted 20 vessels with scrubbers. These vessels switch to diesel at ports. In addition, emission control zones in Europe and the United States require ultra-low sulfur diesel, which increased diesel consumption.					
Lubricants (non-combustion)	tonne 11,375.28 10,168.03 9,896.00					
Indirect Energy						

Total electricity consumption (office use)	kWh	2,187,422.33	1,983,819.68	1,907,064.80
Total electricity consumption (office use)	tonne of coal equivalent	268.83	243.81	234.38

# Clean and Renewable Energy (Biofuel)

Use of biofuel	MWh	23,382.24	/	/
	tonne of coal equivalent	,	/	/
Biofuel share in energy mix	%	0.16	/	/

Use of Water					
Indicator	Unit	2024	2023	2022	
Total water consumption	m³	705,447.94	579,640.00	528,170.00	
Use of water on vessels	m³	695,283.00	567,849.00	520,391.00	
Office water use	m³	10,164.94	11,791.00	7,779.00	
Water saved	m³	323,150.00	/	/	
	m³/1,000 tonne-mile	0.001153	0.00107	0.000969	
Water use intensity (vessels)	Note: Water use intensity in 2022, 2023, and 2024 is calculated based on shipboard wat The rise in shipboard water use in 2024 is mainly due to the acquisition of LPG an chemical tanker fleets. Most shipboard water comes from onboard desalination systems and supply ship				

	GHG Emis	ssions					
Indicator	Unit	2024	2023	2022			
GHG emissions	tonne of CO <sub>2</sub> equivalent	3,915,784.08	3,547,208.23	3,391,976.76			
	tonne of CO <sub>2</sub> equivalent	3,914,509.96	3,545,989.84	3,390,837.32			
Scope 1 (vessels)	·Emission factors for fuels (excluding b	Note: Scope 1 ship emissions = Heavy fuel oil * 3.114 + Diesel oil * 3.206 + Biofuel * 2.496 Emission factors for fuels (excluding biofuel) are from the Fourth IMO Greenhouse Gas Study 2020. The biofuel factor is based on ISCC certification.					
	tonne of CO <sub>2</sub> equivalent	100.35	87.02	51.84			
Scope 1 (official vehicles)	Note: •Scope 1 official vehicle emissions = Gasoline consumption * Lower heating value (44.800 MJ/kg Carbon content (18.90 kgC/GJ) * Oxidation rate (98%) * 44/12/1000 •The factors are based on the <i>Guidelines for Accounting and Reporting Greenhouse Gas Emissions from</i> <i>Enterprises of Other Industries (Trial)</i> .						
	tonne of CO <sub>2</sub> equivalent	1,173.77	1,131.37	1,087.60			
Scope 2 (electricity purchased for onshore offices)	<ul> <li>•The calculation is based on the 2019 Refinement to the 2006 IPCC Guidelines for National Greenhous Gas Inventories and ISO 14064-1.</li> <li>•The emission factor for 2024 is 0.5366 tCO<sub>2</sub>/MWh, based on the Announcement on the Release of Carbon Dioxide Emission Factors for Electricity in 2022 issued by the Ministry of Ecology and Environment of the People's Republic of China.</li> </ul>						
	•The emission factor for 2023 is 0.5703 tCO <sub>2</sub> /MWh, based on the Announcement on the Release of Carbon Dioxide Emission Factors for Electricity in 2021 issued by the Ministry of Ecology and Environment of the People's Republic of China.						
	•The emission factor for 2022 is 0.5703 tCO <sub>2</sub> /MWh, based on the latest national average carbon emission factor for electricity generation as published by the Ministry of Ecology and Environment soliciting comments and recommendations for the <i>Guidelines for Calculation and Report of</i> <i>Greenhouse Gas Emissions from Enterprises—Power Generation Facilities (2022 Revision)</i> .						
CO2 emissions per unit turnover (Scope 1 vessels)	kg of CO₂ equivalent/ 1,000 tonne-mile	6.49	6.68	6.32			
	tonne of CO <sub>2</sub> equivalent	1,237.20	/	/			
Total CO <sub>2</sub> emission reduction	Note: •Emissions were reduced in 2024 by replacing fuel oil with biofuel.						

Exhai	ust Gas, Wastev	vater, and Was	te Discharge				
Indicator	Unit	2024	2023	2022			
	tonne	94,304.46	85,803.42	81,960.37			
NOx emissions	Note: •NOx emissions = Fuel oil consumption * 0.0759 + Diesel consumption * 0.0567 + Big consumption * Emission factor (the biofuel consists of 24% biodiesel and 76% low-se oil, with respective emission factors of 0.0567 and 0.0759). •The factors are based on the Fourth IMO Greenhouse Gas Study 2020.						
	kg/1,000 tonne-mile	0.1564	0.1617	0.1527			
Unit turnover emissions of NOx		alues of NOx emissions 2 2022 and 2023 reports		ır decimal places,			
	tonne	11,514.03	10,587.78	10,091.87			
SO <sub>x</sub> emissions	<ul> <li>Note:</li> <li>•The SOx emission factor comes from the <i>Statistical Statement on Energy Conservation an Ecological Environmental Protection of Central SOEs.</i></li> <li>•Formula: Eso2L = High-sulfur fuel oil consumption * 19 * Sulfur content * 10<sup>-3</sup> + Low-sulf oil consumption * 19 * Sulfur content * 10<sup>-3</sup> + Diesel consumption * 19 * Sulfur content 80<sup>-3</sup>.</li> <li>•Low-sulfur fuel oil contains 0.5% sulfur. High-sulfur fuel oil is treated using scrubbers, resulting in a sulfur content equivalent to that of low-sulfur fuel oil. Diesel contains 0.19 sulfur. Biofuel consists of 24% biodiesel (0.1% sulfur) and 76% low-sulfur fuel oil (0.5% sulfur).</li> </ul>						
Unit turnover emissions of SOx	kg/1,000 tonne-mile	0.02	0.02	0.02			
Oily water discharged	tonne	74,706.67	108,242.88	86,777.35			
	tonne	8,762.86	11,536.24	10,197.87			
Hazardous waste discharge	Note: •The decline in oily water and hazardous waste in 2024 is mainly due to more ship repairs in 2023.						
	g/1,000 tonne-mile	14.53	21.75	19.00			
Hazardous waste per unit turnover	Wer Note: ·In 2024, hazardous waste includes the oil content in oily water and electronic waste. ·Data for 2022 and 2023 have been retrospectively adjusted to reflect this scope.						
Oil spills	tonne	0	/	/			
Non-hazardous waste discharge	tonne	598.35	645.24	927.10			
Non-hazardous waste discharge per unit turnover	g/1,000 tonne-mile	0.99	1.22	1.73			
Total amount of waste recycled/reused	tonne	144.44	102.03	150.58			

Exhaust Gas, Wastewater, and Waste Discharge							
Percentage of waste recycled/reused	%	1.54	/	/			
	tonne	2,871.47	2,701.55	2,407.54			
Total waste disposal	Note: ·Includes uncollected incinerated waste, discharge of solid waste to onshore reception facilities, and food waste discharged at sea in accordance with international conventions.						
Waste incinerated without energy recovery	tonne	404.25	398.02	/			
Waste disposed of by other means	tonne	2,467.22	2,303.54	/			
Number of owned international navigation vessels with ballast water treatment systems	/	118	/	/			
Percentage of owned international navigation vessels with ballast water treatment systems	%	100	/	/			
Number of owned vessels with scrubbers	/	20	/	/			
Percentage of owned vessels with scrubbers (excluding LNG carriers)	%	12.04	/	/			
	Note: •Vessels without scrubl	oers use low-sulfur fuel	oil.				

Safety Management					
Ir	ndicator	Unit	2024	2023	2022
	Number of culpable catastrophic-/major-level work safety accidents	/	0	0	0
Incident statistics (including crew and	Number of serious-level work safety accidents	/	0	0	0
onshore employees)	Number of general-level work safety accidents	/	0	0	0
	Number of minor accidents	/	1	2	1
Work-related fatalities onshore employees)	(including crew and	person	0	0	0
Work-related fatality ra	ate	%	0	0	0
Working days lost to work-related injuries (crew)		day	240	7	0
Lost time injury frequency rate of crew (supplier's employees)		number of lost-time injuries per million working hours	0.09	0.03	0
Lost time injury freque employees (employees		number of lost-time injuries per million working hours	0.00	1.90	0

Safety Management					
Investment in work saf	fety	RMB	222,137,400	/	/
Investment in work-related injury insurance for employees	RMB	2,209,000	/	/	
Investment in safety	Percentage of employees	%	99.89	/	/
insurance provided w	provided with work-related injury insurance	Note: ·As of the end of 20 processed.	024, one expatriate e	employee's insuranc	e was still being
	Investment in safety liability insurance for employees	RMB	12,600	/	/

Employee Overview						
Indicator	Unit	2024	2023	2022		
Total number of employees	person	907	791	770		
Distribution by employment type						
Proportion of full-time employees	%	100	100	100		
Proportion of part-time employees	%	0	0	0		
Proportion of regular employees	%	91.95	92.41	95.45		
Proportion of dispatched employees (excluding crew)	%	8.05	7.59	4.55		
Distribution by gender			-			
Male	%	69.79	71.05	70.91		
Female	%	30.21	28.95	29.09		
Distribution by age						
Proportion of employees aged 25 and under	%	2.21	2.53	2.73		
Proportion of employees aged between 26 and 35	%	18.63	18.08	18.83		
Proportion of employees aged between 36 and 45	%	30.21	30.59	30		
Proportion of employees aged between 46 and 55	%	38.59	38.18	37.66		

	Employee Overview				
Proportion of employees aged 56 and over	%	10.36	10.62	10.78	
Distribution by job level			- <u>-</u>		
Proportion of senior management	%	0.77	0.89	1.17	
Proportion of middle management	%	9.70	8.47	11.30	
Proportion of junior management	%	18.08	17.32	18.57	
Proportion of average employees	%	71.45	73.32	68.96	
Proportion of women in senior management	%	14.29	/	/	
Proportion of women in middle management	%	17.05	/	/	
Proportion of women in junior management	%	25.00	/	/	
Proportion of women in management	%	22.01	/	/	
Distribution by region				. <u>.</u>	
Chinese mainland	%	96.91	96.21	95.84	
Hong Kong, Macao, and Taiwan, China	%	2.10	2.65	2.73	
Regions outside China	%	0.99	1.14	1.43	
New hires			-		
Number of new hires	person	32	60	49	
Number of male new hires	person	23	42	34	
Number of female new hires	person	9	18	15	
Number of new hires aged 25 and under	person	5	/	/	
Number of new hires aged between 26 and 35	person	9	/	/	
Number of new hires aged between 36 and 45	person	9	/	/	
Number of new hires aged between 46 and 55	person	7	/	/	
Number of new hires aged 56 and over	person	2	/	/	

Employee Overview					
Proportion of employees with disabilities	%	0.22	0.01	0.13	
Proportion of employees who have joined the labor union	%	100	100	100	
	%	99.89	/	/	
Percentage of employees provided with social insurance	Note: ·As of the end of 2024, one expatriate employee's insurance was still being processed.				
Human capital ROI	/	2.09	/	/	

	Employee 7	Training		
Indicator	Unit	2024	2023	2022
Percentage of trained employees	%	100	100	100
Average training hours per employee	hour	162.17	199.24	133
Total training sessions	/	5,338	/	/
Total investment in employee training	RMB	5,081,100	/	/
Training investment per employee	RMB	5,600	/	/
Distribution by gender				
Percentage of male trainees	%	69.79	71.05	70.91
Percentage of female trainees	%	30.21	28.95	29.09
Average training hours per male employee	hour	167.83	195.17	140
Average training hours per female employee	hour	149.09	209.23	116
Distribution by job level	-	·		
Percentage of senior management trainees	%	0.77	0.89	1.17
Percentage of middle management trainees	%	9.70	8.47	11.30
Percentage of junior management trainees	%	18.08	17.32	18.57
Percentage of staff trainees	%	71.45	73.32	68.96

	Employee 1	Training		
Average training hours per senior executive	hour	199.85	550	252
Average training hours per middle manager	hour	196.87	299.28	167
Average training hours per junior manager	hour	230.74	212.96	161
Average training hours per average employee	hour	139.70	180.21	118

	Emplo	yee Turnover		
Indicator	Unit	2024	2023	2022
tal turnover rate	%	5.32	4.68	5.84
luntary turnover rate	%	5.07	/	/
stribution by gender				
rnover rate of male employees	%	5.80	4.25	6.78
rnover rate of female employees	%	4.20	5.00	3.57
stribution by age				
rnover rate of employees ed 25 and under	%	0.00	0.00	9.52
rnover rate of employees aged tween 26 and 35	%	3.89	2.70	3.45
rnover rate of employees aged tween 36 and 45	%	3.02	0.79	0.87
rnover rate of employees aged tween 46 and 55	%	3.65	3.32	2.41
rnover rate of employees ed 56 and over	%	23.66	23.08	34.94
stribution by region				
rnover rate of employees in the inese mainland	%	5.18	4.04	5.83
rnover rate of employees in Hong ng, Macao and Taiwan, China	%	9.52	15.38	4.76
rnover rate of employees tside China	%	10.00	10.00	9.09

Indicator	Unit	2024	2023	2022
Total turnover rate	%	5.32	4.68	5.84
Voluntary turnover rate	%	5.07	/	/
Distribution by gender			-	-
Turnover rate of male employees	%	5.80	4.25	6.78
Turnover rate of female employees	%	4.20	5.00	3.57
Distribution by age				
Turnover rate of employees aged 25 and under	%	0.00	0.00	9.52
Turnover rate of employees aged between 26 and 35	%	3.89	2.70	3.45
Turnover rate of employees aged between 36 and 45	%	3.02	0.79	0.87
Turnover rate of employees aged between 46 and 55	%	3.65	3.32	2.41
Turnover rate of employees aged 56 and over	%	23.66	23.08	34.94
Distribution by region				
Turnover rate of employees in the Chinese mainland	%	5.18	4.04	5.83
Turnover rate of employees in Hong Kong, Macao and Taiwan, China	%	9.52	15.38	4.76
Turnover rate of employees outside China	%	10.00	10.00	9.09

Indicator	Unit	2024	2023	2022
Total turnover rate	%	5.32	4.68	5.84
Voluntary turnover rate	%	5.07	/	/
Distribution by gender		-	-	-
Turnover rate of male employees	%	5.80	4.25	6.78
Turnover rate of female employees	%	4.20	5.00	3.57
Distribution by age		-	-	-
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## Note:

•Overall turnover rate = Number of employees who left / (Number of employees at the beginning of the period + Number of new employees during the period); Turnover rate by category = Number of employees who left in the category / (Number of employees in the category at the beginning of the period + Number of new employees in the category during the period) ·Voluntary turnover includes resignations, retirements, and early retirements.

# **Indicator Index**

Report Fr	amework	The Environmental, Social	The Guidelines No. 14 of Shanghai Stock Exchange for Self-Regulation of Listed Companies		Environmental Management	A1 General disclosure	Environme manageme
<b>Heading</b> About This Report	Subheading /	and Governance Reporting Code issued by the HKEX Mandatory disclosure of reporting principles; mandatory disclosure of reporting scope	—Sustainability Report (Trial) released by the Shanghai Stock Exchange	Sustained Actions:	Response to Climate Change	A2 General disclosure; A2.1; A2.3; A3 General disclosure; A3.1; Climate-related disclosures of governance, strategy, risk management, and indicators and targets	Climate cha utilization
Message from the Chairman	/	/	/	Advancing Toward a Low-Carbon Future	Marine Biodiversity Conservation	A1 General disclosure; A2.1; A3 General disclosure; A3.1	Pollutant dis and biodiver
tatement from the Board of Directors About Us	/	/	/		Resource Use and Emissions	A1 General disclosure; A1.1; A1.2; A1.3; A1.4; A1.5; A2 General disclosure; A2.2; A2.4; A3 General disclosure; A3.1	Pollutant diso disposal; wat utilization
ESG Highlights	/	/	/		Green Office Practices	A1 General disclosure; A1.1; A2 General disclosure	Waste dispos
Honors and Awards	/ Corporate Governance	/	/	Employee-Centric Approach:	Protecting Employee Rights and Interests	B1 General disclosure; B1.1; B1.2; B4 General disclosure; B4.1; B4.2	Employees
	Risk Management	/	/	Investing in Our People for	Supporting Employee Growth	B3 General disclosure; B3.1; B3.2	Employees
Robust Governance: Paving the Way for a Sustainable Future	Business Ethics	B7 General disclosure;	Anti-commercial bribery and anti-corruption; anti-unfair	Sustainable Growth	Safeguarding Employee Well-being	B1 General disclosure	Employees
		B7.1; B7.2; B7.3 Mandatory disclosure of	competition		Promoting Rural Revitalization	B8 General disclosure; B8.1; B8.2	Rural revitaliza
	ESG Management	governance structure	Stakeholder communication	Compassionate Ecosystem	Supporting Community Development	B8 General disclosure; B8.1; B8.2	Social contrib
Excellence in Leadership: uilding a Community of Shared	Expanding Business Operations Improving Service Quality and Efficiency Driving Technological Innovation	/ B6 General disclosure; B6.2; B6.5 B6.3	/ Product and service safety and quality; data security and customer privacy protection Innovation		Our Performance	A1.1; A1.2; A1.3; A2.1; A2.2; B1.1; B1.2; B2.1; B2.2; B3.1; B3.2; B5.1; B6.2; B7.1; B8.2	Climate change discharge; wast utilization; wate rural revitalizatio contribution; pr safety and quali bribery and ant
Development	Sustainable Supply Chain	B5 General disclosure; B5.1; B5.2; B5.3; B5.4	Supply chain security; equal treatment to small and medium-sized enterprises; due diligence		Indicator Index	/	/
	Governance	B2 General disclosure	Employees		Third Party Assurance	/	/
Safety First: Leading the Way in Maritime Transportation	Strategy	B2 General disclosure; B2.3	Employees				
	Management of Impacts, Risks, and Opportunities	B2 General disclosure; B2.3	Employees				
	Indicators and Targets	B2 General disclosure	Employees				

# **Third Party Assurance**

# TUVNORD

Assurance statement No. CN-202503-CSR-04

#### Assurance Statement of Sustainability Report

TÜV NORD (Hangzhou) Co.,Ltd. (abbreviated as "TNHZ") was entrusted by COSCO SHIPPING Energy Transportation Co., Ltd. (abbreviated as "COSCO SHIPPING Energy" or "the Company") to conduct an independent third-party assurance of COSCO SHIPPING Energy's 2024 Sustainability Report (abbreviated as "Report").

COSCO SHIPPING Energy is responsible for collecting, analyzing, summarizing, and disclosing the information mentioned in the Report, TNHZ carried out this work (Report Assurance) within the scope of authority recognized in the agreement with COSCO SHIPPING Energy. COSCO SHIPPING Energy Transportation Co., Ltd. is the designated user of this statement. This statement is based on COSCO SHIPPING Energy's 2024 Sustainability Report, and COSCO SHIPPING Energy is responsible for the integrity and authenticity of the information and data in the Report.

#### User of the Assurance Statement

This Assurance Statement is provided to all stakeholders of COSCO SHIPPING Energy.

#### Assurance Scope

- The key environmental, social and governance performance and related information for 2024;
- Assurance location: No. 670 Dongdaming Road, Hongkou District, Shanghai, China, which is the headquarters location of COSCO SHIPPING Energy:
- Evaluate the management processes such as collection, analysis, and assurance of the data and information involved in the report:
- Due to the economic data has been verified by another third party, no repeated verification will be conducted in this assurance

The on-site assurance conducted from March 6th to March 7th, 2025.

#### Assurance Method

- Evaluate the documentary information provided by COSCO SHIPPING Energy;
- Interview the information collectors of COSCO SHIPPING Energy for the report;
- Check the public information released on relevant websites and by the media, and verify the relevant data and information in the report through sampling:
- Evaluate the sustainability report in line with the requirements of the "GRI Sustainability Reporting Standards" (GRI Standards 2021) in aspects such as Balance. Comparability. Accuracy, Timeliness, Clarity, and Reliability:
- The report was evaluated in reference to the requirements for sustainable development reports in the Environmental. Social and Governance Reporting Code issued by the Stock Exchange of Hong Kong ("HKEX").

#### Assurance Standard and Level

"TNHZ Report Assurance Implementation Rules" SC - P - A015 Rev.00 (Based on the "AA1000 Assurance Standard" (V3) Type 2 / ISSA 5000 "General Requirements for Sustainability Assurance"), Assurance Level: Moderate Assurance / Limited Assurance.

#### Assurance Conclusion

COSCO SHIPPING Energy 2024 Sustainability report objectively reflects the company's work status and performance in the field of sustainable development in 2024, the data in the report is found to be reliable and objective through on-site assurance. TNHZ found no systemic or material errors.

• Materiality: COSCO SHIPPING Energy conducted a double materiality assessment on financial materiality and impact

# **TUVNORD**

- expectations of investors and other stakeholders;
- quantitation:
- discharge volume, which has a certain balance
- extent

#### Suggestions for Improvement

Through the assurance and evaluation activities, we propose the following improvements to COSCO SHIPPING Energy's environmental, social and governance practices and management:

- During the process of conducting materiality topic research, efforts should be made to cover as many external stakeholders as possible to enhance the validity of the assessment results:
- development report.

#### Special Statement

Excluded in this assurance statement:

- Activities other than information disclosure:
- SHIPPING Energy

#### Statement of Independence and Competence

TÜV NORD is a world-leading certification body with branches in more than 100 countries around the world. It provides inspection, testing and verification services, including management system and product certification; audits and training in the aspects of quality, environment, society and compliance; assurance of environmental, social responsibility and sustainability reports. As one of the global branches of TÜV NORD, TÜV NORD (Hangzhou) Co., Ltd. is independent, ensuring that there is no conflict of interest with COSCO SHIPPING Energy's branches or stakeholders during the report assurance process. All the information in this report is provided by COSCO SHIPPING Energy, and TNHZ has not been involved in the report preparation process.

In

The authorized person: Mr. Wang Peng Date: March 25th, 2025

Note: In case of conflict between the Chinese and English versions of this statement, please refer to the Chinese version

Assurance statement No. CN-202503-CSR-04

materiality. Focusing on 18 topics including "Health and Safety", "Combating Climate Change", and "Energy and Utilization", the company disclosed its significant objective performance in the fields of environment, society, and governance in 2024 through six chapters such as "Robust Governance: Paving the Way for a Sustainable Future". Respond promptly to the

Quantitation: The report discloses performance indicators in social, environmental and governance fields such as employee structure, operating income and carbon dioxide emissions in the form of a "Our Performance", which has a certain

Balance: The report objectively disclosed negative performance data such as Employee turnover rate and oily wastewater

Consistency: COSCO SHIPPING Energy ESG management Department is responsible for collecting, recording, arranging and analyzing the information and process used in the preparation of the report. The relevant departments of the sampled data in the assurance process can provide traceability, which ensures the quality and substance of the information to a certain

• It is recommended that the company comprehensively supervise and follow up on the implementation of the short-term,

medium-term and long-term sustainable development goals, and continue to disclose them to stakeholders in the sustainable

Statements regarding the standpoint, viewpoints, beliefs, goals, future development directions, and commitments of COSCO