



中远海运能源运输股份有限公司  
COSCO SHIPPING Energy Transportation Co., Ltd.

2018

## Corporate Social Responsibility Report

COSCO SHIPPING Energy Transportation Co., Ltd.

SSE Code: 600026

HKEX Code: 01138



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# About This Report

## Time in Scope of the Report

This "Report" covers the period from 1 January to 31 December, 2018, and includes additional information beyond the stated reporting period.

## Organizations in Scope of the Report

The Report covers COSCO SHIPPING Energy Transportation Co., Ltd. and its subsidiaries "COSCO SHIPPING Energy", "the Company" or "we", including COSCO SHIPPING Tanker (Shanghai) Co., Ltd. "Shanghai Tanker", COSCO SHIPPING Tanker (Dalian) Co., Ltd. "Dalian Tanker" and COSCO SHIPPING LNG Investment (Shanghai) Co., Ltd. "Shanghai LNG".

## Release Cycle of Report

A corporate social responsibility "CSR" report is released each financial year. This Report is the 11th CSR report released by the Company since 2008.

## Report Data Description

All information and data included in this Report come from the official documents and related statistics of COSCO SHIPPING Energy.

## Reference Standards

This Report is prepared with reference to the Environmental, Social and Governance Reporting Guide (HK-ESG) released by The Stock Exchange of Hong Kong Limited, the Notice of the Shanghai Stock Exchange on Strengthening Listed Companies' Assumption of Social Responsibility and the Issue of Guides from the Shanghai Stock Exchange on Environmental Information Disclosure by Listed Companies, as well as the Notice on Further Improvement of Information Disclosure on Poverty Alleviation by Listed Companies issued by the Shanghai Stock Exchange, and the GRI Sustainability Reporting Guidelines and Guidelines (GRI Standards) for Enterprises for Sustainable Development Goals (SDGs) of the United Nations as issued by the Committee for Sustainability Reporting Standards.

## Form of Release

The Report is released in printed and online forms. It is available for online query and download via the following link: <http://en.energy.coscoshipping.com/>.

## Report Languages

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

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# Message from the Management

The year 2018 marks the 40th anniversary of China's economic reform, the first year to implement the spirit of the 19th National Congress of the Communist Party of China and a crucial year for the building of a well-off society and continued implementation of the 13th Five-Year Plan. In the meantime, COSCO SHIPPING Energy endeavoured to innovate and develop its businesses after the restructuring. In 2018, COSCO SHIPPING Energy actively prepared itself for market challenges amid rising trade protectionism and unilateralism, drastic changes in the international political arena and changes in the global governance system. We strive to facilitate supply-side structural reforms, improve the business layout, and stimulate greater potential and vitality for further development, thereby achieving leap-forward development as a great drive for China in building the power of shipping.

We believe that constant fulfillment of social responsibilities is a mission for state-owned enterprises. Throughout the years, we have incorporated the sense of responsibility into our corporate growth strategy, which has motivated us to achieve high quality sustainable development. COSCO SHIPPING Energy applies the value of social responsibility - "Integrated Capacity, Infinite Capability" in corporate governance to build our core competitiveness. With commitment to sustainable development, the Company takes responsibility for serving society through business operations that create integrated value in the economy, society, and environment. Meanwhile, the Company stays connected with all stakeholders to reach the prospect of greater sustainability.

The shipping industry is highly globalized. It prospers from the development of international trade and cross-regional cooperation and coordination. While strengthening internationalized business practices, COSCO SHIPPING Energy seizes opportunities in technological innovation and industrial reform in clean energy. Leveraging our world-class fleets, COSCO SHIPPING Energy constantly seeks to innovate the business model of energy transportation, optimizes the global layout of resources, and upgrades performance in petroleum, LNG and alternative energy shipping businesses to become a key business player in the global market, thereby contributing to the building of an open, inclusive, balanced and interest-sharing economic globalization and freedom of trade and investment. COSCO SHIPPING Energy also participates in the establishment of the Maritime Silk Road and Polar Silk Road in line with the Belt and Road Initiative, and provides energy transportation service for countries along the two roads, working towards a green and inclusive regional energy system. Moreover, COSCO SHIPPING Energy follows the trend of green development and recognizes the environmental impact of corporate operations and development, and incorporates the concept of green and low-carbon practices into the full life cycle control on shipbuilding, navigation and management, which mirrors our commitment to being a green energy transporter and leader.

Sharing is key to equitable distribution of resources and achievements, and is the ultimate goal of social development. COSCO SHIPPING Energy has been dedicated to sharing with society the accomplishments of business development and safeguarding social harmony and well-being. We care for our employees, and strive to support their health, career development and quality of life. We also stay connected with the underdeveloped communities, and actively work on targeted initiatives to contribute to the national effort in poverty alleviation and the building of the extensive well-off society.

Challenges sow the seeds of accomplishments. In 2019, COSCO SHIPPING Energy will keep pace with the market trends, and maximize our innovative potential to embrace new challenges. The Company will further integrate the sense of responsibility into the effort in exploring a sustainable business model that caters to the demands of social development and enhance the communication and coordination with all stakeholders to create and share value in sustainability.

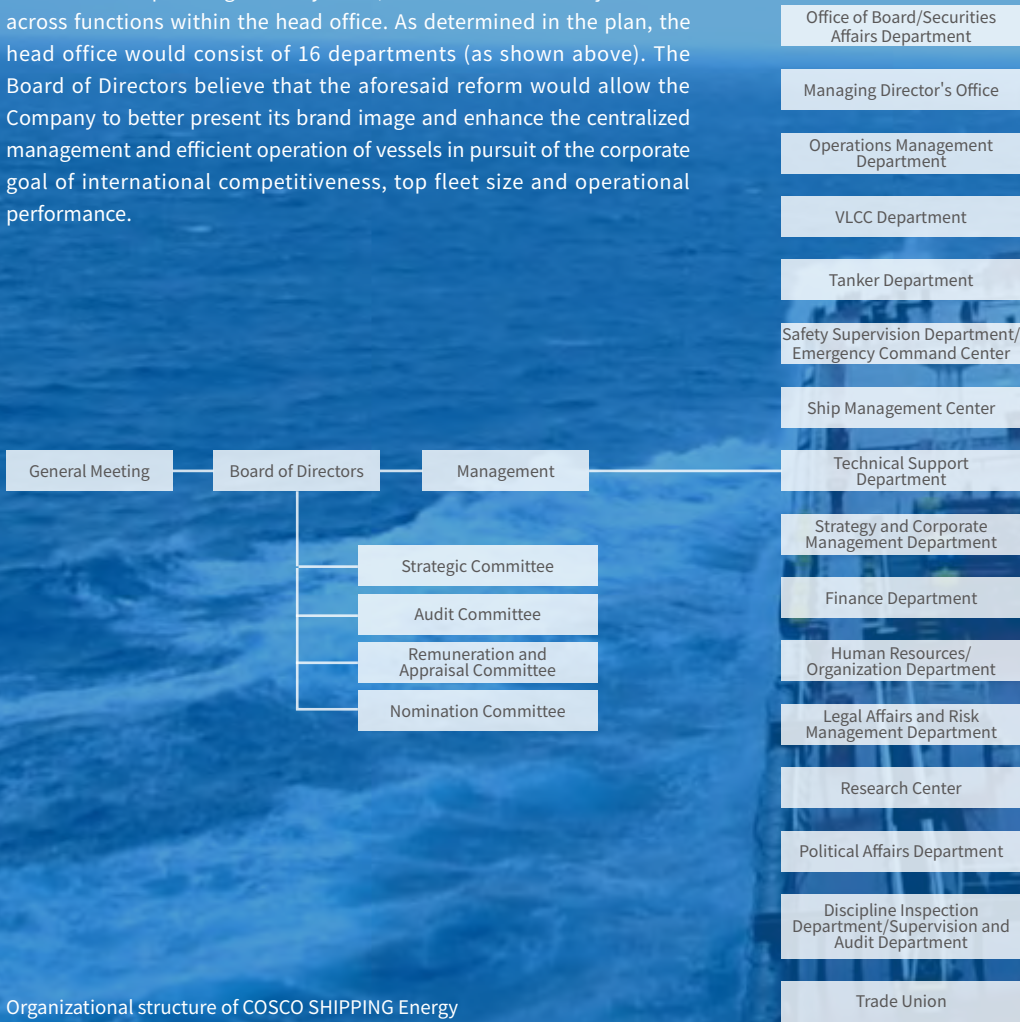


# About Us

COSCO SHIPPING Energy Transportation Co., Ltd., headquartered in Shanghai and formerly known as China Shipping Development Company Limited (01138·HK, 600026·SH), is a subsidiary of China COSCO Shipping Corporation Limited formerly known as COSCO SHIPPING Group specializing in the shipment of energies including oil and liquefied natural gas, and has several affiliated companies, including COSCO SHIPPING Tanker (Shanghai) Co., Ltd. "Shanghai Tanker", COSCO SHIPPING Tanker (Dalian) Co., Ltd. "Dalian Tanker", COSCO SHIPPING LNG Investment (Shanghai) Co., Ltd., China Shipping Development (Hong Kong) Shipping Co., Ltd., COSCO SHIPPING Oil Transportation (Singapore) Co., Ltd., COSCO SHIPPING Oil Transportation (England) Co., Ltd., COSCO SHIPPING Oil Transportation (America) Co., Ltd. and COSCO PetroChina SHIPPING Co., Ltd.

COSCO SHIPPING Energy is committed to being a leader in the global energy transportation industry with strong international competitiveness, brand influence and customer satisfaction. With active involvement in the Belt and Road Initiative, the Company provides large petrochemical enterprises and strategic partners with round-the-clock global services covering all types of tankers.

On 12 December 2018, the Board of Directors of COSCO SHIPPING Energy approved the corporate reform plan targeting the oil tanker operation models and ship management systems, as well as relevant adjustments across functions within the head office. As determined in the plan, the head office would consist of 16 departments (as shown above). The Board of Directors believe that the aforesaid reform would allow the Company to better present its brand image and enhance the centralized management and efficient operation of vessels in pursuit of the corporate goal of international competitiveness, top fleet size and operational performance.



Organizational structure of COSCO SHIPPING Energy

## Social Responsibility Value

Integrated Capacity,  
Infinite Capability

## Corporate Vision

To be an excellent leader in  
global energy transportation  
with strong international  
competitiveness, brand influence  
and a positive reputation

## Development Concepts

Safe Development  
Cooperative Development  
Innovative Development





Key Data

Indicator	2018	2017
Economic Performance		
Total assets (RMB 100 million)	(A Shares) 634.16 (H Shares) 634.16	(A Shares) 603.88 (H Shares) 603.88
Operating revenue (RMB 100 million)	(A Shares) 122.86 (H Shares) 121.00	(A Shares) 97.78 (H Shares)95.05
Net profit (RMB 100 million)	(A Shares) 1.05 (H Shares) 0.75	(A Shares) 17.66 (H Shares) 17.75
Self-owned ships	148	125
Gross tonnage (million dwt/million cubic meters)	19.03/1.05	17.17/0.7
Volume of freight (million tonnes)	154.836	119.523
Turnover (100 million tonne-miles)	5,453.7	4,068.8
Volume of crude oil shipment (million tonnes)	129.342	109.740
Volume of product oil shipment (miliion tonnes)	25.175	9.612
Average age of vessels (year)	8.5	7.6
Total number of suppliers	670	666
Suppliers from Hong Kong, Macao, Taiwan and foreign countries and regions	108	106
Suppliers from Mainland China	562	560
Environmental Performance		
Nitrogen oxides emissions (ton)	90,116.38916	74,987.2254
Unit turnover emissions of nitrogen oxides (kg/1,000 tonne-miles)	0.1695	0.1928
Sulfur oxides emissions (ton)	62,149.2339	51,715.3279
Unit turnover emissions of sulfur oxides (kg/1,000 tonne-miles)	0.1169	0.133
Greenhouse gas emissions (ton)	3,373,667.58	2,807,280.3807
Unit turnover emissions of greenhouse gases (kg/1,000 tonne-miles)	6.3441	7.2181
Carbon dioxide emissions (ton)	3,221,401.957	2,680,577.8274
Unit turnover emissions of carbon dioxide (kg/1,000 tonne-miles)	6.0578	6.8923
Oil pollutant emissions (ton)	85,058.93	90,810.78
Oil content of pollutant water (ton)	18,019.51	15,381.64
Hazardous waste emissions (ton)	0	301.73
Unit turnover emissions of hazardous waste (kg/1,000 tonne-miles)	0	0.0008
Non-hazardous waste emissions (ton)	848.42	558.87
Unit turnover emissions of non-hazardous waste (kg/1,000 tonne-miles)	0.0016	0.0014
Total energy consumption (electricity, gas, and oil) (million tons of standard coals)	1.481034	1.232387
Unit turnover of energy consumption (kg standard coals /1,000 tonne-miles)	2.7851	3.1687
Gross oil consumption (million tons)	1.035821	0.861922
Unit oil consumption (kg/1,000 tonne-miles)	1.9487	2.2162
Oil and gas conserved (ton)	142,729.39	2,015.578
Lubricating oil consumption (ton)	7,689.68	7,642
Total water consumption (m³)	451,285	395,314
Water conserved (m³)	228,968	150,827
Total electricity consumption for office in Shanghai Head Office (kW•h)	2,144,678.4	715,891
Total fuel consumption of official vehicles in Shanghai Head Office (Litre)	65,036	46,366

Index	2018	2017
Social Performance		
Total number of employees	737	3,157
Number of expatriate employees	12	18
Number of new employees	17	4
Number of minority employees	20	131
Number of disabled employees	11	11
Coverage of labor contract (%)	100	100
Coverage of social insurance (%)	100	100
Return rate after maternity leave (%)	100	100
Total investment in trainings (million RMB)	1.456	3.6585
Number of employee training sessions	280	462
Number of employees trained	2,510	6,516
Per capita training time (hours)	33.1	48
Client satisfaction (%)	100	100
Number of client complaints	0	1
Complaint handling rate (%)	-	100
Supplier inspection coverage (%)	85	85
Passing rate of zero deficiency (%)	81.88	80.53
Anti-typhoon success rate (%)	100	100
Passing rate of ISPS inspection (%)	100	100
Potential safety hazard examination and controlling activities (times)	12	12
Investment in production safety (million RMB)	113.3687	86.7512
Accidents of work-related deaths (times)	0	0

All the crew of Dalian Tanker were transferred to China Shipping International, which resulted in a significant change in the total number of employees in 2018.

Honors and Recognition

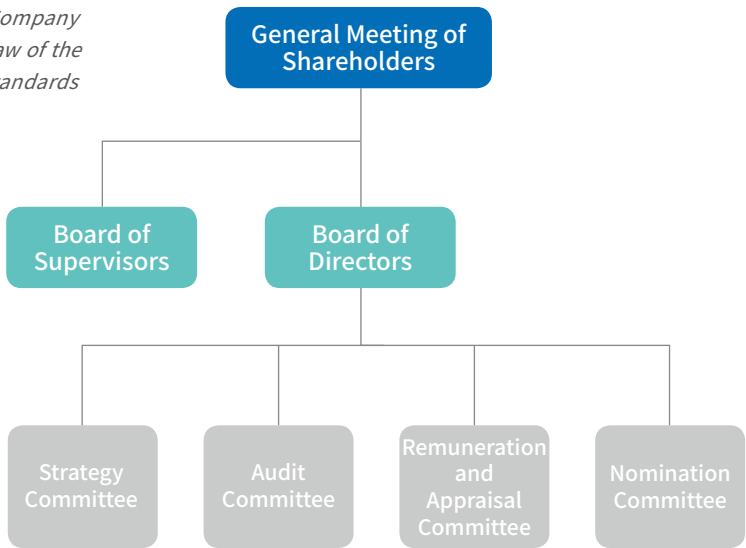
Time	Award	Issuing Authority
January 11th, 2018	Environmental Protection Award of the 12th People's Enterprise Social Responsibility Award	Award Ceremony of the 12th People's Enterprise Social Responsibility Award, organized by people.cn
April 19th, 2018	Best Investment Value Award for Top 100 H Share Listed Companies	The 2nd Hong Kong Listed Companies Development Summit hosted by Top 100 Hong Kong Listed Companies Research Center and organized by Finet.HK
December 20th, 2018	Award for Outstanding Enterprise with Sustainable Environmental Practices	Annual Conference on Sustainable Competitiveness of Chinese Enterprises, jointly organized by the Social Responsibility Committee of the Chinese Institute of Business Administration of Chinese Academy of Social Sciences and Beijing Rongzhi Corporate Social Responsibility Institute
December 28th, 2018	Outstanding Enterprise Award on Corporate Social Responsibility	Shanghai Listed Companies, jointly organized by the Listed Companies Association of Shanghai, YICAI and Shanghai Federation of Economic Organizations, guided by Shanghai Branch of China Securities Regulatory Commission, Shanghai Federation of Trade Unions and Shanghai Stock Exchange, with academic support from American Bureau of Shipping

# Corporate Governance

COSCO SHIPPING Energy strictly complies with domestic and overseas laws and regulations and continuously improves its corporate governance system. In 2018, the Company formulated Management System for External Guarantees, Administrative Measures for External Investments, Implementation Rules of the Cumulative Voting System, Administrative Rules Governing Connected Transactions, etc., so as to constantly improve corporate governance, enhance the effectiveness of the Company's governance system and the capability of sound decision-making and risk control that support smooth operations of the Company.

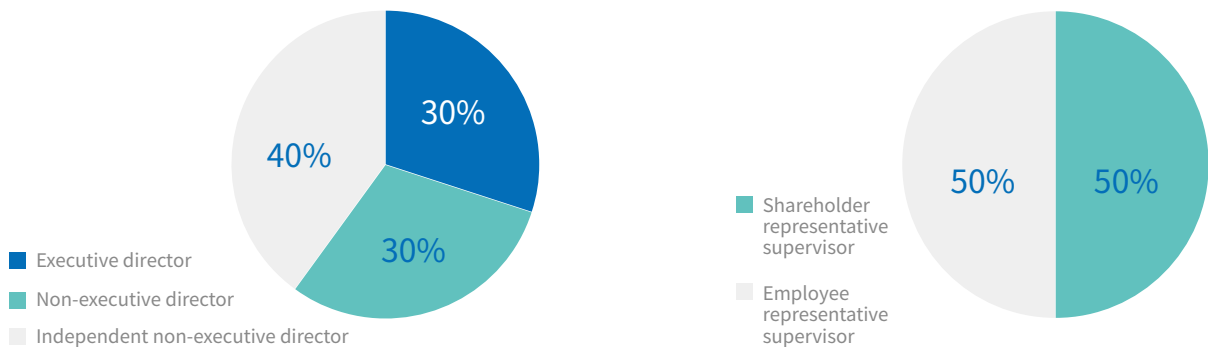
## Improving Governance Structure

COSCO SHIPPING Energy strictly complies with the *Company Law of the People's Republic of China*, the *Securities Law of the People's Republic of China*, *Corporate Governance Standards for Listed Companies issued by China Securities Regulatory Commission*, the *Rules Governing the Listing of Stocks on Shanghai Stock Exchange*, *Governance Guidelines for Listed Companies in Shanghai Stock Exchange*, the *Rules Governing the Listing of Securities and the Corporate Governance Code of The Stock Exchange of Hong Kong Limited*, as well as other relevant rules and regulations. The Company has formed a corporate governance structure that consists of the General Meeting of Shareholders, the Board of Directors, the Board of Supervisors, and the corresponding Special Committees, each of which operates independently, balances effectively, and coordinates with each other.



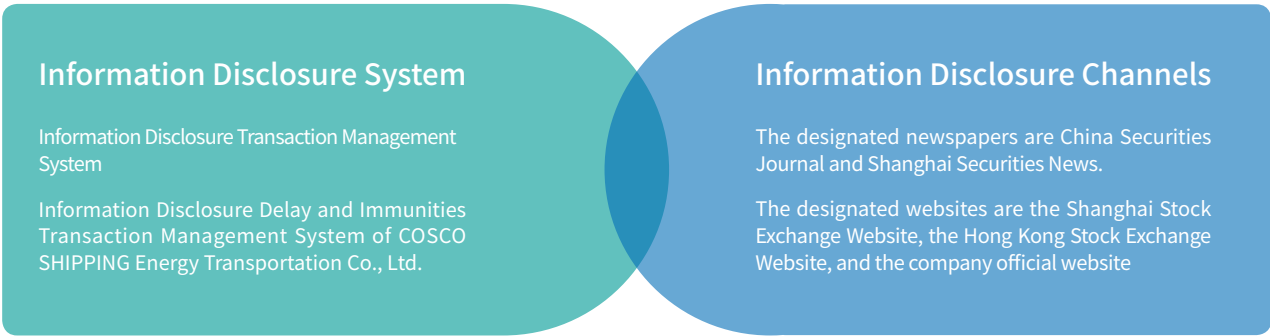
In 2018, the Company convened twelve meetings of the Board of Directors, which reviewed 42 proposals, and eight meetings of the Board of Supervisors, which reviewed 24 proposals. Meanwhile, the Company held three general meetings, including the annual general meeting.

## Members of the Board of Directors



# Strengthen Information Disclosure

COSCO SHIPPING Energy formulates policies on information disclosure and administrative measures for investor relation in accordance with the information disclosure requirements for listed companies. The Company timely discloses standardized, accurate and complete information deemed to be relevant by means of telephone calls, in-person visits, online communication, reverse roadshows and disclosures on the Shanghai Stock Exchange to respond to questions from investors and maintain positive interactions with them.



## Examples of Investor Relation Management in 2018

On January 25th, 2018, the Company organized a reverse roadshow, hosting 16 institutional investors and 10 media reporters. The Company introduced the current LNG transportation business and its characteristics to present the corporate image as a leader in LNG transportation in China.

On March 1st, 2018, the Company held an investor conference presenting the capital investment in COSCO PetroChina SHIPPING Co., Ltd. (formerly known as Dalian PetroChina Shipping Co., Ltd.) to enhance the understanding among institutional investors. 52 research analysts and investors (39 via phone and 13 on-site) attended the conference.








From June to August 2018, with invitation from Industrial Securities, Changjiang Securities and Haitong Securities, we made a keynote speech with the theme of "Global Oil and Gas Transportation Patterns and Trends" at the investment strategy conference, presenting the characteristics and growth potential of oil and gas transportation industry.

# Responsibility Management

Guided by the value of "Integrated Capacity, Infinite Capability," we recognize the government, shareholders, clients, partners, employees, communities, the environment and other stakeholders as indispensable support in the development of the Company, and commit ourselves to fulfilling our responsibility for every stakeholder.

## Social Responsibility Management

Under the guidance of China COSCO SHIPPING Corporation Limited, the Board Office of COSCO SHIPPING Energy is responsible for social responsibility activities and management. We strive to promote the sustainable development of the Company, industry and society by integrating the concept of social responsibility in the ordinary business and daily operations.

	Communities	Publicize the corporate values to the local community to achieve harmony and bonding between the enterprise and the community
	Partners	Pursue win-win results through collaboration and reciprocity
	Shareholders	Operate with transparency and wisdom to preserve and increase asset values, and guarantee the legitimate rights and interests of each shareholder
	Government	Comply with laws and regulations, develop businesses with insightful expertise, and maximize the value created for the economy, society and the environment
	Clients	Uphold the virtue of credibility, adhere to the customer-centric concept, and provide clients with excellent and reliable services
	Employees	Put people first, protect the employees' rights and interests, and accomplish both individual and corporate development
	Environment	Fulfill the environmental requirements on energy conservation and emissions reduction, make efforts in transporting clean energy and minimize impact to the marine ecological environment

## Analysis on Material Topics

In order to better understand the stakeholder's expectations for the Company, COSCO SHIPPING Energy collects social responsibility issues from various stakeholders including investors, clients, the government, media, communities and industry experts, as well as industry peers and the internal analysis in the Company, analyzes and sorts the issues by substance and importance, and timely adjusts substantive issues based on the context of the Company, society, and industry to better respond to demands of society.



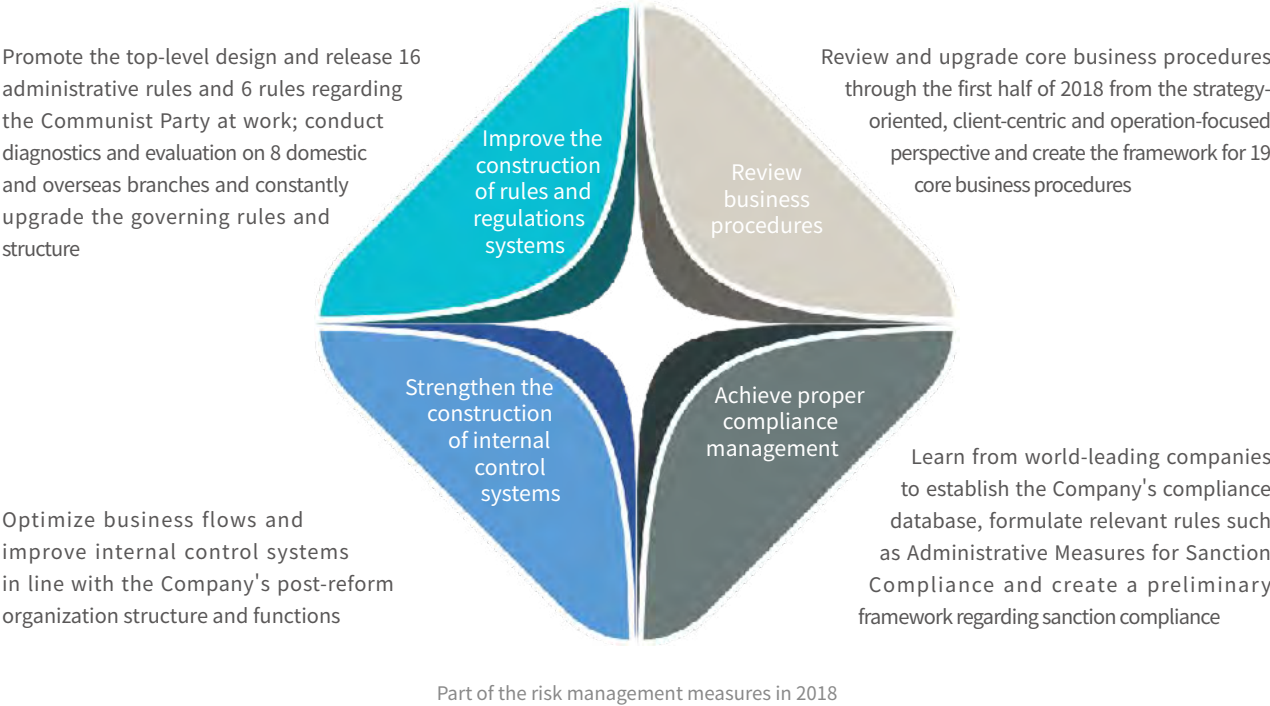
## Communication with Stakeholders

Category of Stakeholders	Demands and Expectations	Responses of the Company
State-Owned Assets Supervision and Administration Commission of the State Council ("SASAC")	<ul style="list-style-type: none"><li>• Preserve and increase the value of state property</li><li>• Consciously accept the supervision of SASAC</li><li>• Actively fulfill social responsibility as a state-owned enterprise</li></ul>	<ul style="list-style-type: none"><li>• Promote the sustainable and steady growth of business and profitability, and strengthen the communication with SASAC</li><li>• Release the corporate social responsibility report, and actively initiate corporate programs in areas such as poverty alleviation</li></ul>
Shareholders	<ul style="list-style-type: none"><li>• Increase stock price steadily</li><li>• Operate with transparency and disclose major decisions to shareholders</li></ul>	<ul style="list-style-type: none"><li>• Enhance communication with investors</li><li>• Constantly improve profitability</li><li>• Hold general meetings of shareholders</li><li>• Release the annual report and social responsibility report on a regular basis</li></ul>
Government	<ul style="list-style-type: none"><li>• Operate in accordance with laws and regulations</li><li>• Promote employment and local economic and social development; reinforce environmental protection</li></ul>	<ul style="list-style-type: none"><li>• Observe laws and regulations</li><li>• Create jobs for local communities</li><li>• Facilitate upstream and downstream development</li><li>• Promote business operations with environmental protection practices</li></ul>
Clients	<ul style="list-style-type: none"><li>• Transport energy safely, efficiently and at low cost</li><li>• Provide quality services with quick responses</li></ul>	<ul style="list-style-type: none"><li>• Optimize the layout of the global office network and offer customized service</li><li>• Open channels for customer feedback</li><li>• Ensure shipping safety and respond to pirates and natural disasters</li></ul>
Employees	<ul style="list-style-type: none"><li>• Increase wages and benefits steadily</li><li>• Provide opportunities for career development</li><li>• Maintain a safe and healthy working environment</li><li>• Ensure available channels for expressing individual demands</li></ul>	<ul style="list-style-type: none"><li>• Provide better remuneration and benefits</li><li>• Carry out various on-the-job trainings</li><li>• Provide assistance to employees in need</li><li>• Launch the staff congress, employee symposium and other communication meetings</li></ul>
Suppliers	<ul style="list-style-type: none"><li>• Maintain a stable business relationship</li><li>• Conduct fair, open and just business procurement</li><li>• Collectively enhance performance upon mutual interests</li></ul>	<ul style="list-style-type: none"><li>• Provide fair opportunities and base selection upon merits</li><li>• Require reasonable prices and quality service</li><li>• Be responsible for both parties in procurement processes and develop business together with suppliers</li></ul>
Partners	<ul style="list-style-type: none"><li>• Achieve mutual benefits and win-win results through collaborative efforts and advantages</li><li>• Promote industry development</li></ul>	<ul style="list-style-type: none"><li>• Establish strategic cooperation agreements</li><li>• Initiate school-enterprise cooperation</li><li>• Attend industry forum meetings</li></ul>
Media	<ul style="list-style-type: none"><li>• Stay transparent in operations</li><li>• Respond to major issues in a timely manner</li></ul>	<ul style="list-style-type: none"><li>• Hold media communication meetings and press conferences</li><li>• Release news information</li></ul>
Communities	<ul style="list-style-type: none"><li>• Protect the living environment in communities</li><li>• Promote poverty alleviation in communities</li></ul>	<ul style="list-style-type: none"><li>• Invest in community building and poverty alleviation</li><li>• Launch fellowship activities with the street and community residents, and initiate care giving activities</li></ul>
Social organizations	<ul style="list-style-type: none"><li>• Protect the marine environment</li><li>• Participate in public projects in areas such as supporting environmental protection and community development</li></ul>	<ul style="list-style-type: none"><li>• Release the CSR Report to disclose performance in relation to the economy, safety, society, environment and other aspects</li><li>• Donate to social organizations or pay membership dues</li></ul>



Risk Management

Comprehensive risk management and internal control are key to maintaining stable operation of the Company. The Company constantly optimizes the overall risk management system and improves the capability of operations management and risk control. In 2018, the Company was not involved in any material penalty for violation of laws and regulations.



Case

Building the compliance management system for overseas LNG investment

Recognizing the golden period for LNG business, while increasing the investment in LNG transportation projects, the Company faces emerging risk control associated with sensitive issues from international politics and the conflict between the procedures for project evaluation and approval and the short time frame in international bidding and tendering. Accordingly, the Company established an International Compliance Team for comprehensive research on the laws and regulations of investment target countries. Meanwhile, the Company completed further optimization on the internal control procedures within Shanghai LNG and effectively combined compliance management and risk control to serve the Company's business development.

In order to enhance employees' risk awareness and risk prevention capability, the Company set up a legal information sharing and communication mechanism. The monthly Legal Information publication analyzes cases of hot spots and difficulties during operations from a legal perspective. The Company also implements legal communication mechanism for shipping business, which allows operations personnel to discuss legal issues in actual business during quarterly seminars and internal trainings, to ensure the effective legal risk control within the Company.

Integrity Compliance

COSCO SHIPPING Energy strictly abides by the *Regulations of the Communist Party of China on Disciplinary Actions*, *Regulations of the Communist Party of China on Internal Oversight*, *Regulations of the Communist Party of China on Accountability*, *Working Rules of the Discipline Inspection Authority of the Communist Party of China on Supervision of Discipline Implementation*, *Regulations of China COSCO Shipping Corporation Limited on Discipline Inspection, Supervision, Petition and Reporting*, *Regulations of China COSCO Shipping Corporation Limited on Inspection of Party and Government Disciplinary Cases*, as well as *Regulations of China COSCO Shipping Corporation Limited on the Trial of Party and Government Discipline Cases*. The Company has also formulated *Administrative Measures of COSCO SHIPPING Energy Transportation Co., Ltd. on Discipline Inspection and Supervision (Provisional)*, *Administrative Measures of COSCO SHIPPING Energy Transportation Co., Ltd. on Internal Audit and Implementation Measures of COSCO SHIPPING Energy Transportation Co., Ltd. on the Inspection of Party Committee (Provisional)*. Meanwhile, the Company leads its subsidiaries in integrity compliance based on their respective characteristics of business and management status to ensure that all employees are responsible for and compliant with business ethics.

The Secretary of the Committee for Discipline Inspection is responsible for integrity compliance of the Company, and the internal audit division of the Company reports to the Audit Committee on a regular basis. The Company's internal audit is characterized by full coverage of financial responsibilities, specific audit on key business areas and a focus on process tracking in the audit of ship facilities. In 2018, the Company completed 23 audit projects, put forward 93 audit opinions and suggestions, and completed supervision and implementation of such opinions and suggestions.



Enhance the management of integrity compliance		
<p>Perfect the mechanism</p> <ul style="list-style-type: none"><li>Organize all direct affiliates and departments to sign liability statements with detailed duty assignment</li><li>Through group and individual talks, reinforce anti-corruption responsibility</li><li>Enhance supervision and inspection of "decisions on important issues, appointment and dismissal of important cadres, decisions on investment in important projects and use of large-sum capital", ship oil pollutant and special affiliated enterprises</li><li>Maintain and timely update to the integrity archives of the Company's management</li></ul>	<p>Promote integrity risk prevention and control</p> <ul style="list-style-type: none"><li>Organize the compilation of the draft of the Manual for Prevention and Control of Ship Integrity Risks and integrate job duties, working process, integrity risks, and preventative measures and key examination procedures</li><li>Conduct constant inspections on the control of integrity risks by means such as supervisor visits, special inspections, and dialogue with ship leaders</li></ul>	<p>Strengthen education on integrity</p> <ul style="list-style-type: none"><li>Organize studies on relevant themes and visits to Chen Yun Memorial and arrange integrity-related reading and quiz activities</li><li>Create publicizing animation on oil pollutant management</li><li>Circulate typical cases from the COSCO SHIPPING Group to achieve broader education and communication</li><li>Publish the 12th time of the Newsletter on Discipline Inspection, Supervision and Auditing and release four volumes of publicity on integrity</li></ul>

Following the concept of overall risk management, the Company closely coordinates with the internal control division to enhance the risk control concerning key business areas and integrity on board, identify areas of corruption risk, and formulates control measures, establishing an integrity risk control system. In the meantime, the Company leverages international compliance standards and related knowledge from other industries in actively carrying out anti-commercial bribery activities and formally incorporates relevant clauses in external agreements and contracts. The Company provides a designated e-mail and hotline for reporting any violation, registers all complaints, and takes measures as required.



# Create Infinite Value with Development of the Times

Energy is the foundation and power for economic development, and thus energy transportation plays an important role in the stable development of the social economy and people's livelihoods. Facing the changeable energy supply relations and market situations, COSCO SHIPPING Energy actively undertakes the responsibility of global energy transportation guided by the strategy - "strategic transformation of traditional business and aiming to Blue Ocean for emerging businesses" with focus on the "Four Global Leadings" (world-leading fleet scale, world-leading business structure, world-leading safety marketing and world-leading business model), and strives to top the world in the scale of fleet and operational capacity with strong international competitiveness, thereby laying a solid foundation for the sustainable economic growth of the world.





【Special】

## Serve the Belt and Road Initiative and Deliver Energy to the World

With all forces to build the Middle East Gulf - Burma Route (the Persian Gulf - Made Island) VLCC "punctual liners"

the Company has completed

31

voyages

with shipping volume of

8.05

million tons

for PetroChina Burma Project

VLADIMIR RUSANOV - The Queen of Ice and Snow

The Belt and Road Initiative is highly conducive to economic growth alongside and creates favorable conditions for the international operation of shipping logistics companies. Based on "State-Owned Oil with State-Owned Transport", we closely follow the pace of business development of Chinese oil and gas companies to expand the routes for oil transportation along the Belt and Road with full capacity to guarantee operational safety and reliability. Meanwhile, we also exert ourselves to build the "Maritime Silk Road" to provide international energy transportation service with higher quality and convenience for the economic development of the region along the route.

Given the high coincidence between the main operating route of COSCO SHIPPING Energy and the Maritime Silk Road, COSCO SHIPPING Energy spares no efforts to build an "important channel" for oil transportation along the Belt and Road. Meanwhile, COSCO SHIPPING Energy also builds two core routes on the Maritime Silk Road, namely the "Middle East Gulf - China Route" and "Pan-Southeast Asia Route". In 2018, COSCO SHIPPING Energy kept optimizing the route structure, building core routes centering on the "the Belt and Road", and taking greater efforts in oil export transportation of the countries along the route.

As an energy carrier, COSCO SHIPPING Energy takes an active part in the major energy investment project proposed by the Belt and Road Initiative - Yamal LNG Project. Targeting the Northern Sea Route, the Company developed a customized ship and conducted an "ice-breaking voyage".



LNG (Liquefied Natural Gas) is a form of natural gas liquefied at an ultra-low temperature of  $-163^{\circ}\text{C}$  with a volume of 1/625 of natural gas in the same quality. The major constituent of LNG is methane. The liquefaction of gas can greatly save space for transportation and storage. LNG ships feature high technology, difficulty, additional value, and costs as recognized worldwide.

Yamal Project is the first extra-large energy cooperation project in Russia since China put forward the Belt and Road Initiative. Located in the Arctic Circle within the territory of Russia, Yamal Project is the largest LNG project in the Arctic Circle, integrating natural gas exploitation, liquefaction, transportation, and sales and hailed as "the Energy Pearl Embedded in the Arctic Circle". It is expected that a large quantity of Yamal LNG will be supplied to Europe and Asia through the Northern Sea route, which will change the structure of world natural gas market.

Vladimir Rusanov of COSCO SHIPPING Energy took the lead to transport LNG to China via the Arctic channel in the Yamal Project. She is an ARC7 ice-class LNG carrier specially designed and built for Yamal Project with the capability of breaking ice up to 2.1m thick under  $-52^{\circ}\text{C}$  which earned it the title of "Queen of Ice and Snow".



# The Story Behind the Queen of Ice and Snow

## Success born from opportunity

China LNG Shipping (Holdings) Limited (CLNG, with 50% equity held by COSCO SHIPPING Energy) was accidentally informed that PetroChina had concluded a letter of intent for stock purchase agreement for an LNG Project with Novatek, Russia during a visit to PetroChina.

Then, CLNG formed a project team instantly. It organized commercial and technical staff to acquire relevant information on the project and formulate a participation plan based upon meticulous study. Meanwhile, it dispatched a group to visit PetroChina's LNG Project Division in Russia, to seek out the optimal approach to participating in the project.

Following unremitting efforts, at the end of June 2013, PetroChina LNG Project Division reached a consensus with CLNG, and CLNG made an outline for participation in Yamal LNG Transportation Project and submitted the same to PetroChina and the Yamal Project team for reference. PetroChina LNG Project Division formally recommended CLNG to the ship investment for the project.

## Heroes behind the Queen of Ice and Snow

Shanghai LNG gave the icebreaker a gorgeous name: Queen of Ice and Snow. To reach the acme of perfection on the ship, Yamal Project Team made constant efforts in Geojedo while enhancing their own capabilities.

Chen Ming, the PIC of the project supervision team, was on the job as a newlywed. The bright light of the dormitory at night was the only companion of the young man in a foreign country. His only hope was that Queen of Ice and Snow would bring the Chinese New Year to the Arctic Circle.

Captain Xie Guangming, the member of the supervision team responsible for cargo tank supervision, overcame the difficulty of an inability to drive, rode a bicycle to climb the slope more than 20 kilometers every day to go through the scattered test sites despite bad weather.

Chief Engineer Miao Zhilun, responsible for engine supervision, was nicknamed the "Chief Engineer on Wheels".

Each quarter, Miao cycled nearly

4,000kilometers

to complete more than

20

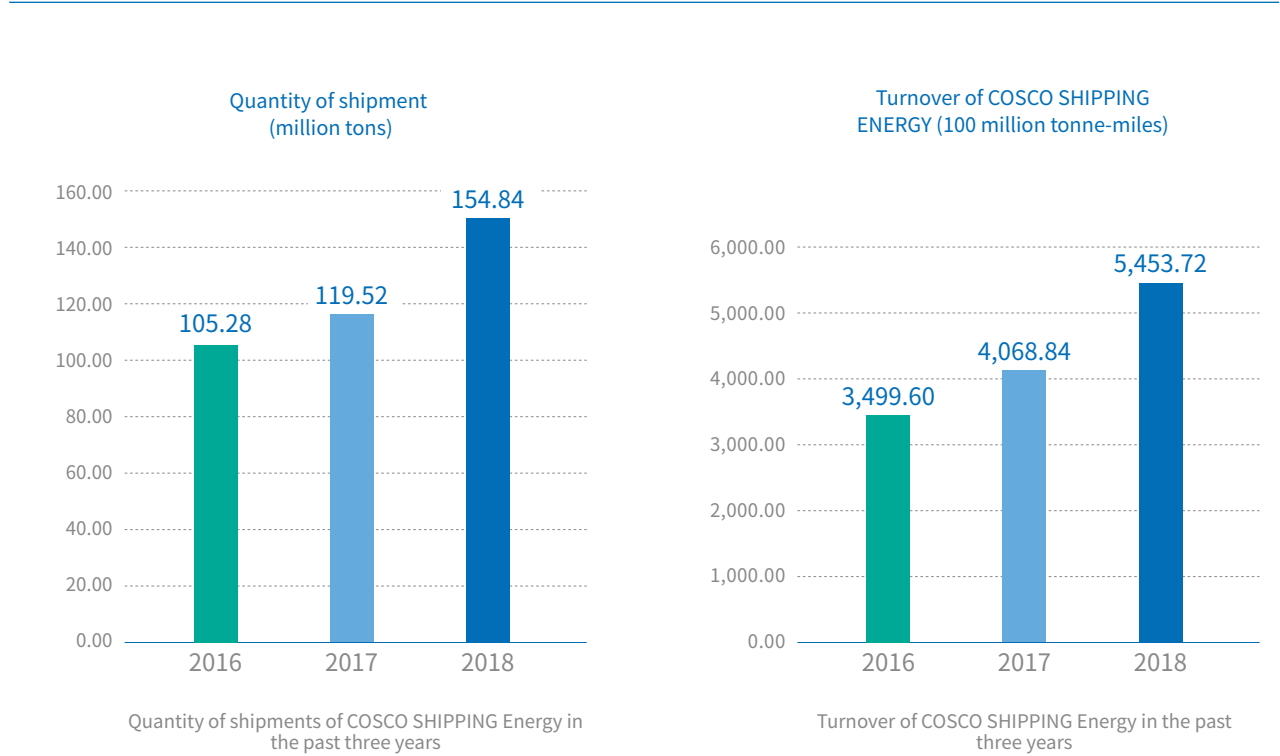
off-site inspections

Thanks to the efforts of the project team, the first carrier of Shanghai LNG H2424 recorded the shortest building period (7 months) from launch to completion of sea and gas trial for LNG carriers of Daewoo Shipbuilding & Marine Engineering. She received the highest evaluation on the level of completeness and the quality from charterers, and thus deserve the name the Queen of Ice and Snow.



## Become the World-leading Carrier

The in-depth adjustment of the world's political and economic patterns and change in the energy supply-demand relationship at present is a challenge to the stability of energy transportation around the world. COSCO SHIPPING Energy, sticking to its mission, timely seizes the opportunities of periodical shipping development to reduce costs and increase the number of ships with high capacity, in order to solidify its global leadership in fleets and guarantee stable and effective energy transportation in China and the world.



New Ships of COSCO SHIPPING Energy in 2018

Energy for Transportation	Name of Ship	DWT	Type of Ship	Date of Building
Oil tankers	Lian Bai Hu	72,745	Panamax	2018/3/26
	Xin Hui Yang	307,663.60	VLCC	2018/4/24
	COSWISH LAKE	318,737.00	VLCC	2018/6/6
	LIAN YANG HU	72,712	Panamax	2018/7/2
	LIAN SHAN HU	72,780	Panamax	2018/9/17
	COSNEW LAKE	318,803	VLCC	2018/9/18
	XIN MAO YANG	307,663.60	VLCC	2018/10/11
	LIAN GUI HU	72,821.90	Panamax	2018/12/5
LNG carriers	Fedor Litke	98,000	LNG	2018/1/8
	Eduard Toll	98,000	LNG	2018/1/12
	CESI WENZHO	84,064	LNG	2018/1/31
	Pan Americas	83,312	LNG	2018/1/31
	Vladimir Rusanov	79,970	LNG	2018/3/26
	CESI LIANYUNGANG	84,064	LNG	2018/5/31
	Pan Europe	83,312	LNG	2018/7/10
	Rudolf Samoylovich	98,000	LNG	2018/9/6
	Vladimir Vize	79,970	LNG	2018/10/19
	Georgiy Brusilov	98,000	LNG	2018/12/10



Panamax is designed for the navigation lock on the Panama Canal, as the breadth and draft are strictly restricted by the locker chamber of the Panama Canal.

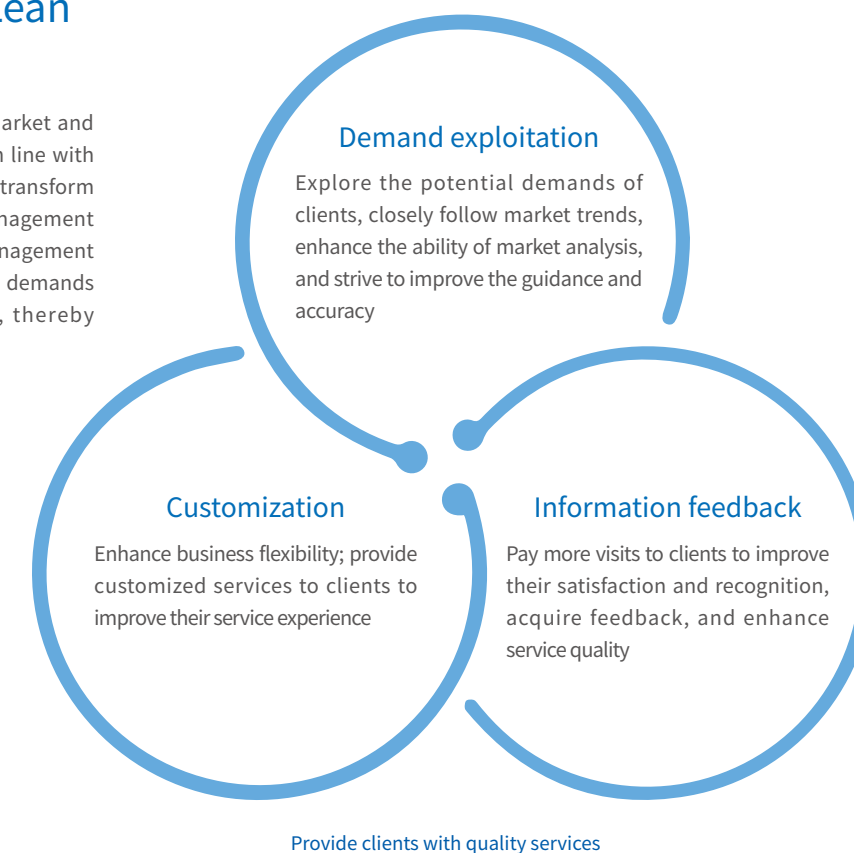
A VLCC (very large crude carrier) features a capacity equivalent to 2 million barrels of crude oil. It is universally accepted that "producing a VLCC is comparable to producing an aircraft carrier". COSWISDOM LAKE is the first VLCC of COSCO SHIPPING Energy after the Company's reorganization.





## Provide Quality and Lean Client Service

COSCO SHIPPING Energy establishes a market and client-oriented operational mechanism in line with clients' demands; makes great efforts to transform from extensive management to lean management in order to enhance operational and management efficiency; and timely responds to clients' demands and safeguards information security, thereby achieving a win-win outcome with clients.



## Extend Businesses Around the World

From ship centering to client centering, COSCO SHIPPING Energy initially set up a global marketing service system and global security assurance system and established eight global client operations and service platforms to maintain a good partnership with 440+ clients all over the world. In 2018, the Company increased its capacity in the western market and developed several new international routes (e.g. the Red Sea Triangle Route with UNIPEC and the TESORO American Western Coast Route). Nearly two hundred imported cargoes of crude oil in tonnage of tens of millions were transported from Bay Area, Africa and America to Chinese crude refinery, which provided sufficient power and raw materials for the economic and social stability of China and the world.

### Eight Client Operation and Service Platforms



## Case

### Dalian Tanker gives the top priority to client's interest for a win-win outcome

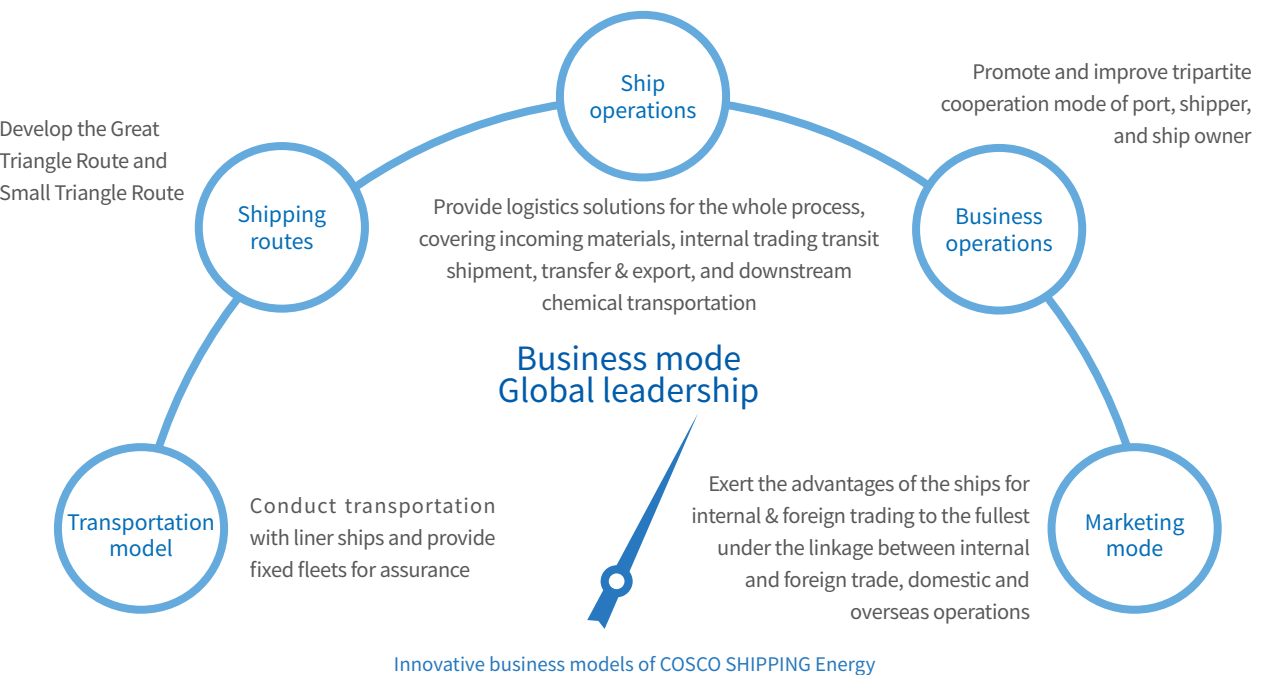
With an active part in the cooperative project between SINOCHEN and HENGLI PETROCHEMICAL, Dalian Tanker, the subsidiary company of COSCO SHIPPING Energy, dispatched personnel to make a keynote speech on oil tanker transportation at HENGLI PETROCHEMICAL on Changxing Island, Dalian, and kept in communication with clients to understand their demands on transportation. Being responsible for clients, Dalian Tanker worked with Dalian Municipal People's Government, Port of Dalian, and other organizations to deal with the excess charge for tug boat service at Changxing Island, Dalian. Meanwhile, Dalian Tanker helps save about RMB58 million in costs for HENGLI PETROCHEMICAL, which lays a good foundation for further cooperation.

Dalian Tanker helps HENGLI PETROCHEMICAL save about

**RMB58million**

Promote a Flexible and Innovative Business Model

The innovation of the business model determines corporate development. COSCO SHIPPING Energy constantly optimizes the energy transportation model and routes, develops new marketing models and ship operation models, and enhances coordination between domestic and overseas trade. Aiming to realize the world-leading business model, COSCO SHIPPING Energy strives to provide efficient and high-quality energy transportation services in less time and with lower costs.



Case

Higher quality service based on efficient coordination

COSCO SHIPPING Oil Transportation (England) Co., Ltd., in line with the requirements of COSCO SHIPPING Energy on "working with foreign companies on authorization and linkage mechanisms", actively participates in the coordination with the offices in Shanghai, UK, and USA, and constantly enriches the linkage in order to effectively unify marketing, information collection, information sharing, client development, and provision of personalized service.

In 2018, COSCO SHIPPING Oil Transportation (England) Co., Ltd. completed

29shipments

as compared to 13 in 2017 up by

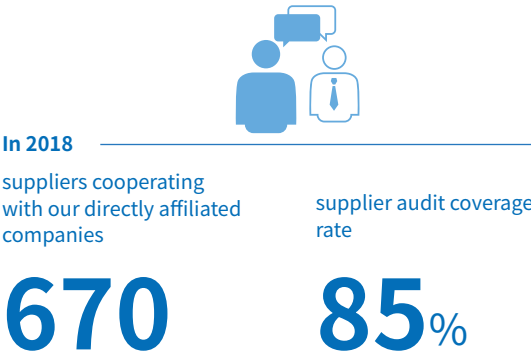
123%

Achieve Win-Win Cooperation with Partners

Support from suppliers and partners is indispensable for the growth of an enterprise. With an emphasis on growth with suppliers and partners, COSCO SHIPPING Energy encourages suppliers to fulfill responsibilities and participate in scientific research and industry experience exchange in order to set up a harmonious and win-win supply chain ecosystem and promote the sustainable development of the industry.

Build a Sustainable Supply Chain

The Company's Management Measures of COSCO SHIPPING Energy on Administration of Suppliers specifies the mechanism of supplier admittance, selection, evaluation, and elimination and include the supplier's social reputation and qualifications on safety and environmental protection in the admittance criteria for evaluation, in a bid to enhance the suppliers' awareness and capability of responsibility fulfillment and boost the sustainable development of the supply chain.



Promote Industry Development

With active cooperation with industry partners, the Company takes part in high-tech research and development, industry project research, and industry talent development, so as to contribute its experience and wisdom to industry development.

Industry cooperation projects of COSCO SHIPPING Energy

Development of industry talent based on university-enterprise cooperation

Work with Dalian Maritime University to promote the building of China International Energy Transportation Research Center, set up industry-university research cooperation and exchange mechanism and improve the capability of professional research and practice

Seize market opportunities with accurate judgment

Issue reports on crude oil market and periodic research achievements of the tanker industry, and enhance the judgment ability of crude and fuel oil markets

Upgrade the ship-based technologies with scientific research innovation

Participate in the High-Tech Ship Research Project of the Ministry of Industry and Information Technology of the People's Republic of China and Green Technology Research and Loading Experiment for New Ships, and promote the improvement of the ship technologies and environmental performance



# Foster Stable Development Based on Security

Safety is the lifeline for oil transportation enterprises. COSCO SHIPPING Energy takes active measures to achieve "zero accidents, zero damage, and zero pollution" and provides safety and quality energy transportation solutions guided by the strategy of "world-leading safety marketing" and with a focus on "high-standard management system".





## Solidify the Foundation of Safety Management

COSCO SHIPPING Energy establishes a comprehensive management system according to the *International Management Code for the Safe Operation of Ships and for Pollution Prevention*, *Management Code of the People's Republic of China for the Safe Operation of Ships and for Pollution Prevention*, and the standards of Tanker Management and Self-Assessment, including shore and ship security, occupational health, and energy and efficiency management. Meanwhile, the Company gradually promotes the establishment of high-standard safety management systems and forms safety mechanisms integrating ship management, safety supervision, and technical support, with equal stress on operations, maintenance, and supervision. In 2018, the Company established the safety management system with unified and high standards according to the *Construction Plan for the Management System with Unified and High Standards* and obtained approval from relevant competent authorities, which provided a standard norm for safety operations and management on ships. In addition, the Company also built the safety management system of ship network with the experts of China Classification Society and gave full play to the advantages of "Internet + Safety Management" to improve the capability of overall safety management of ships.

In 2018

the Company has involved in

0 extra serious, serious, major or ordinary accident

but did have

5 minor accidents



In 2018, Shanghai Tanker was given the "Award for Excellent Safety Management on Ships for Ocean-Going Shipping Lines" of Pudong Maritime Safety Administration of PRC at the "Sunshine Security Inspection" Year-end Technical Seminar held by Shanghai Maritime Safety Administration of PRC.



### Case

Develop new forms on safety management with Innovative ship management model

In 2018, the Management Practices on Ship Management Model of Total Control of COSCO SHIPPING Energy was listed into the highly recommended cases on safety innovation at the "Safety Traffic" held by the Safety Committee of the Ministry of Transport of the People's Republic of China.

With focus on one-stop service, shore support, pre-control, process control, and ship-shore integration, and based on the shipping management information system, the ship management model of total control integrates ship management functions and achieves overall control of the equipment, environment, and personnel. Initially equipped with the functions of a ship safety management platform and integrated management platform, the model features a higher concentration of safety management. Meantime, it provides support and guarantee for the Company's safety and stability and valuable reference and experience for the industry's safety management.



### Case

Achieve Zero Accidents for 15 Years under Lean Safety Management

The COSGREAT LAKE of Dalian Tanker, China's first VLCC, is a result of active exploration in management, navigation, ship maintenance, and safety culture inheritance. As of April 30th, 2018, during an operation of more than 5,300 days and nearly 2 million sea miles, the COSGREAT LAKE completed the shipment of nearly 30 million tons and 102 voyage tasks, called 85 ports in 32 countries and regions, and kept zero accident, casualty, and pollution for 15 years.





## Strengthen the Prevention and Control of Safety Risks

Under the principle of prevention foremost, we effectively prevent and control security risks, analyze, expect, investigate, judge, and control comprehensively on all kinds of security risk points, implement seasonal and regional security measures, and minimize or eliminate security risks. Moreover, we also conduct supervision on the safety management to the subordinates with full coverage and focus on maintenance, crew, and systems, apply on-site inspection and appraisal, and carry out safety management risk recognition and problem rectification in order to effectively ensure the safe and stable operation of fleets and improve the Company's safety management ability.

### Anti-piracy:

- Organize anti-piracy drills on a regular basis
- Conduct risk evaluation and prepare risk plans with reference to the ship features, atmosphere, facilities, and crew experience
- Keep enriching warning devices and apply armed guards on key routes

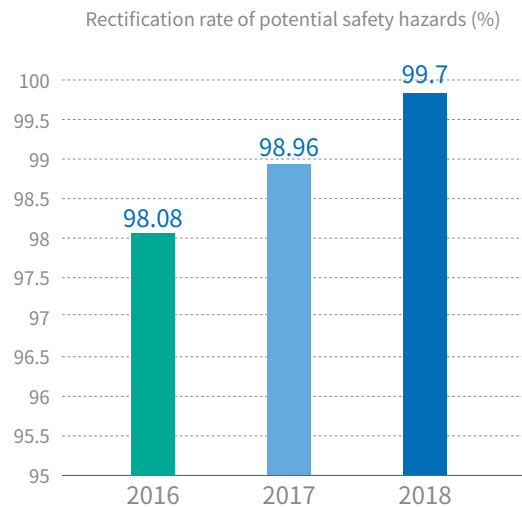
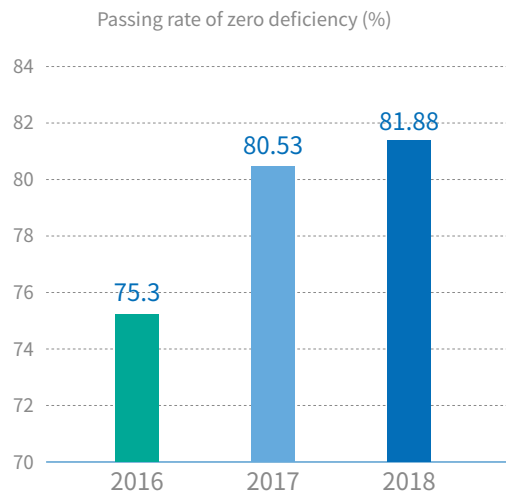
### Typhoon and Flood Prevention:

- Formulate the Notice on Further Prevention on Typhoon
- Provide meteorological data and port information and guide safety measures for ships
- Conduct risk evaluation on ports and special areas in advance and prepare relevant risk prevention measures

### Ship Safety:

- Adhere to the maintenance management of ship life cycle plan, specify maintenance standards and establish a complete planned maintenance system

In 2018, the Company conducted a "maritime affairs + company" inspection with the Yangpu Maritime Safety Administration, which successfully established a bridge between the maritime safety administration and ship management company and jointly enhanced the legal enforcement of maritime affairs and the management of ship safety.



## Build Safety Culture and Brand

COSCO SHIPPING Energy, by means of activities like safety training, Safety Production Month, and 119 Fire Control Propaganda Month, deepens the connotation of safety production, strengthens the education on safety production, and creates a safety production atmosphere.

### Shore-based staff training

**Training scheme:** Organize trainings for shore-based safety management staff based on the resources of China COSCO Shipping Corporation Limited and the Company

**Training method:** Conduct periodic trainings under the strategy of "Going Out and Inviting In" to effectively improve the abilities of the shore-based safety management staff

### Crew training

**Training scheme:** Coordinate with the crew management authority to prepare schemes for routine and planned trainings

**Training method:** Provide trainings before boarding and during the voyage and combine quality-oriented education and skill education to improve training efficiency

Safety training measures of COSCO SHIPPING Energy



### Case

#### Publicize safety production and develop corporate safety culture

The Company strives to build its corporate safety culture and arouse the enthusiasm of all employees to participate in the inspection and removal of potential safety risks by means of safety knowledge competitions, safety production competitions, and "Find Potential Safety Hazards Around Us" activity, in a bid to create a safe environment for production. In 2018, more than 1,400 employees and crew of 60 ships participated in the safety knowledge competition, and the Company received over 160 photos and reports in the "Find Potential Safety Hazards around Us" activity.



### Case

#### Hold China Oil Transportation Safety Forum and enhance cooperation in the safe development of oil transportation industry

The China Oil Transportation Safety Forum is a summit of the oil and gas transportation industry in China with a focus on security and future development which keeps leading the industry development for the purpose of safety. In 2018, COSCO SHIPPING Energy and China Ship Survey jointly undertook the 9th China Oil Transportation Safety Forum with the theme "Green, Development, Security, and Sharing". During the forum, various domestic and overseas organizations had discussions on the new trends and problems on the safety of oil transportation and decided to work together to achieve a safe, coordinated, and sustainable development for oil transportation.





# Achieve Green and Sustainable Development

The pursuit of green business is a prominent mark of the new era. COSCO SHIPPING Energy implements the concept of green development in business operations, corporate management and ship navigation to protect the environment and biodiversity, and aims to achieve the goal of shipping green energy with green practices, demonstrating the Company's dedication to domestic and global green energy transportation.





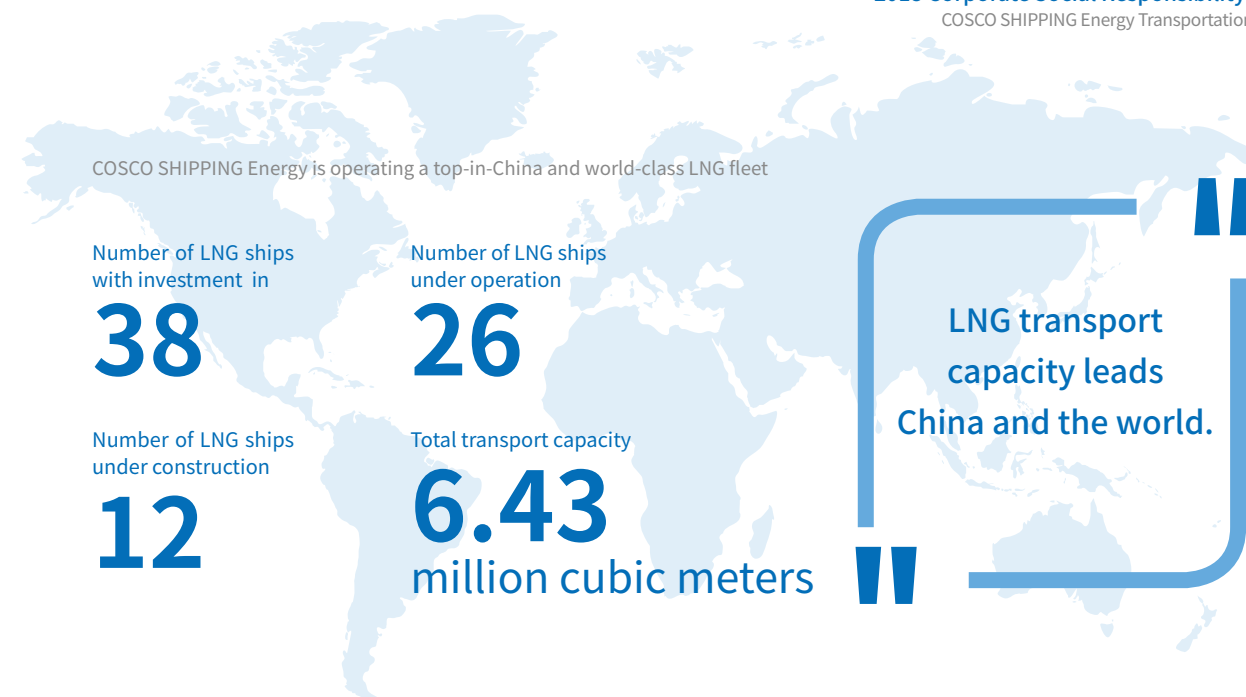


The first self-owned LNG carrier of China - DAPENG SUN

## Reinforce the Green Energy Strategy

With the advent of the clean energy technological and industrial revolution, clean energy enters a crucial period of significant development, change and adaptation. As a major clean energy transporter in China, COSCO SHIPPING Energy vigorously develops LNG and alternative energy (including methanol and ethane) transportation businesses, expands the Polar Silk Road amid the rapid development of green energy in China, and supports the national strategic goals on green energy and the global pursuit of sustainable development.

The Company actively puts the Blue Ocean strategy into effect to achieve the strategic goal of "leading China's LNG transportation market and being an important participant in the international LNG transportation market." The Company constantly seeks to expand its LNG transportation business and develops potential projects in a well-targeted approach. In 2018, the Company developed new routes, new businesses and new projects, including the Northern Sea Route; the Company's LNG transportation projects accomplished progress, and LNG transportation capacity of the Company expanded.



In 2018, for the first time COSCO SHIPPING Energy started the ice-breaking voyage, transporting LNG along the Polar Silk Road. The Company provides clients with customized Arctic LNG shipping service to safeguard energy transportation with high level of green consciousness, diversify the sources of energy, and achieve sustainable development.



### Case

COSCO SHIPPING Energy embarked on the revolution of energy development and transportation as LNG transported through the Northern Sea Route to reach China for the first time.

In July 2018, Vladimir Rusanov, the first Arc7 LNG carrier the Company built for YAMAL LNG Project, delivered the first Arctic LNG cargo to China. This voyage shortened the travel time by 20 days compared to the conventional route via Suez Canal, and reduced the fuel cost and carbon dioxide emission by 30%-40%. This was the first voyage to the Far East on the Northeast Passage via the Bering Strait. The first arrival of Arctic LNG brought new sources of clean energy to China, and marked an inception of LNG transportation as the exemplary cooperation on energy between China and Russia. COSCO SHIPPING Energy, as an important energy transportation leader, will constantly contribute to the optimization of energy supply network and green development of China.



### Case

Build a new future of LNG — Shanghai LNG Forum

In June 2018, the Company held Shanghai LNG Forum with the theme "Green, Safety, Development and Win-Win." and discussed LNG-related technologies and market development, the latest industry achievements, and the global trends of energy with Various industry partners attended the forum, including international oil and energy majors like Sinopec, China National Petroleum Corporation (CNPC) and CHN ENERGY, financial institutions such as Industrial and Commercial Bank of China (ICBC), China Development Bank (CDB) and the Export-Import Bank of China, as well as other organizations such as classification societies, shipyards, power generation companies and LNG technology enterprises.

## Enhance Whole-Cycle Management of the Environment

COSCO SHIPPING Energy constantly strengthens the construction of environmental management systems, strictly abides by the national laws and regulations and international conventions on the law of the sea and continues to improve the energy management system and the construction of ISO14000 environment management system. The Company has formulated administrative rules for energy conservation and emissions reduction according to relevant state laws and regulations and the *Administrative Rules of China COSCO SHIPPING Corporation Limited on Energy Conservation and Emission Reduction*, and has established a leaders' focus group organizing and supervising the tasks on energy conservation and emissions reduction.

The Company takes environmental performance as one of the performance indicators for senior executives as per the policies of China COSCO SHIPPING Corporation Limited and includes energy conservation and emissions reduction in the performance assessment system for persons-in-charge of all divisions or units as a restrictive element of the assessment.

The Company develops an excellent HSE management and green technology team, and innovates the 5S workplace management and "babysitting" management style, so as to incorporate environmental protection in all ship operation processes. Meanwhile, the Company takes various measures to reduce waste, such as procurement of green materials, use of recyclable equipment, and returning packages to suppliers.

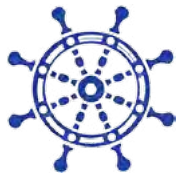
## Promote Green and Low-Carbon Shipping

COSCO SHIPPING Energy conducts green operations in line with the Ten Principles of the United Nations Global Compact, and strives to build green fleets featuring energy conservation, environment protection and high efficiency. While increasing the efficiency of power consumption during navigation, the Company strictly manages waste gas, waste liquid and solid wastes, so as to promote green and low-carbon shipping, protect the biodiversity, and lead the industry towards sustainable development.

### Greener Ships

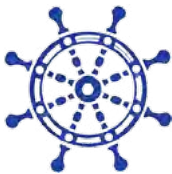
Eco-friendly vessels is key to achieving "green shipping." COSCO SHIPPING Energy spares no effort in environmental technology innovation, promotes the extensive use of green technology, and establishes strict requirements for ship quality in terms of energy conservation, noise reduction and waste disposal.

In 2018, the Company had several eco-design ships delivered and continued to collaborate with COSCO SHIPPING Heavy Industry Co., Ltd., Lloyd's Register Group Limited and other organizations in exploring further technical innovation in shipbuilding, laying a solid foundation for improving the performance on eco-efficiency.



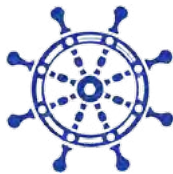
#### "CESI LIANYUNGANG"

With a dual-fuel electric propulsion system, the ship is one of the most advanced and environmentally friendly LNG ships of the world.



#### "XIN HUI YANG"

The ship is designed with excellent hull curves and equipped with energy-saving equipment with proprietary intellectual property, featuring safety, environmental friendliness and economical values.



#### "LIAN GUI HU"

The ship is equipped with an eco-friendly smart host, efficient oars, and energy-saving devices, meeting the requirements of IMO Phase 3 (2025) seven years in advance.

Eco-conscious fleet of COSCO SHIPPING Energy

## Green Shipping

With IT-based methodology, COSCO SHIPPING Energy enhances the monitoring of energy use and environment impact, promotes the application of "energy efficiency modules" on the shipping management platform, and improves the efficiency of energy consumption by optimizing the process of using, loading and unloading and transportation. Meanwhile, the Company emphasizes waste disposal and management, and constantly optimizes the pollution reduction and treatment to prevent pollution to the sea, the air and the ports in pursuit of the goal of "zero pollution".

### Accomplishment of the Objectives for Energy Conservation and Emissions Reduction by COSCO SHIPPING Energy in 2018

Indicator		Unit	Objectives for 2018	Accomplishment
Energy Conservation Goal	Total quantity of energy consumed	million tons of standard coals	1.4588	1.481034
	Power consumption (1,000 tonne-miles)	kg/1,000 tonne-miles	2.4763	1.9487
	Integrated energy consumption from every thousand RMB of operating revenue	ton of standard coals/ thousand RMB	0.1328	0.12272
Emissions Reduction Goal	Emission intensity of sulfur dioxide	kg/1,000 tonne-miles	0.1486	0.1169
	Emission intensity of nitrogen oxide	kg/1,000 tonne-miles	0.2154	0.1695

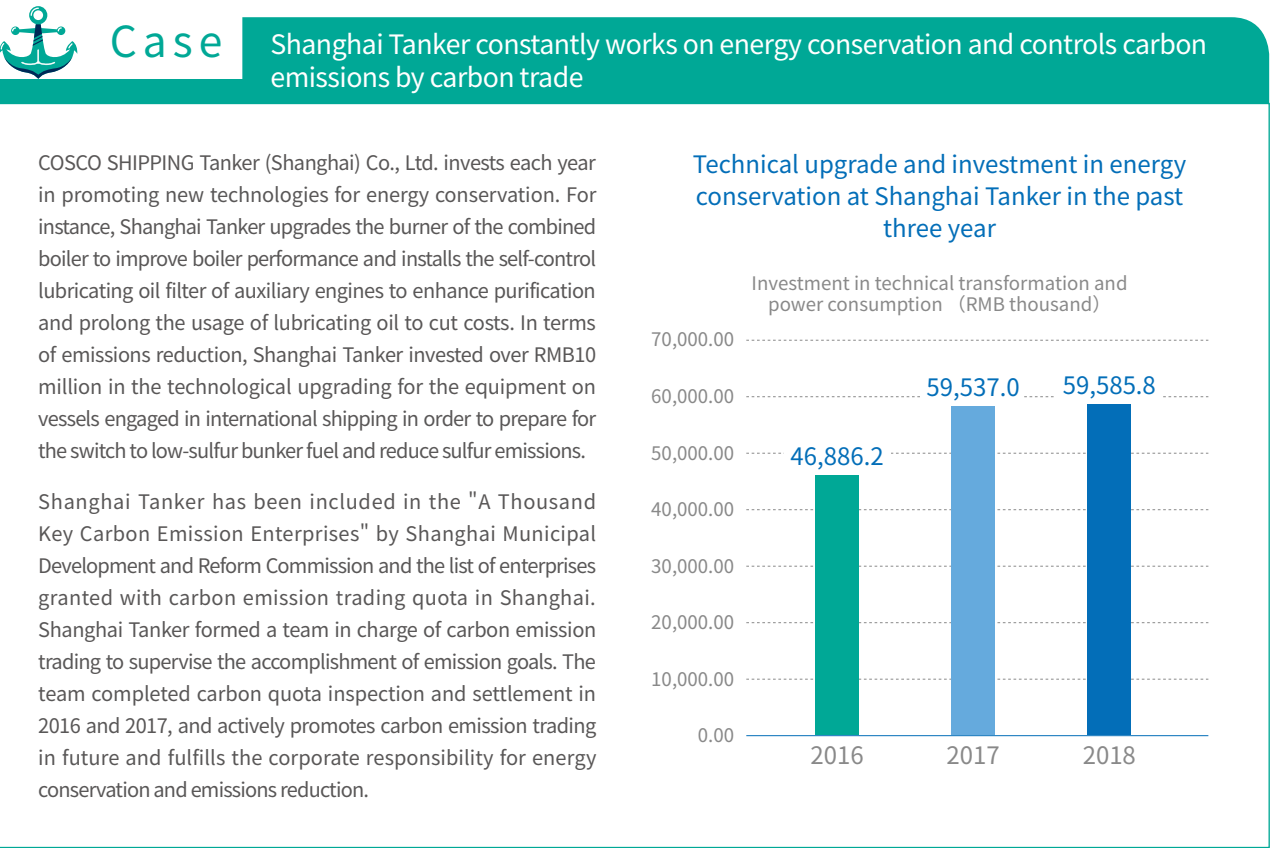
Since the release of the IMO Sulfur Cap, the Company has underscored bunker fuel and technical modifications for vessels and outline a plan concerning relevant technologies and management, in order to meet the requirements before the Sulfur Cap takes effect in 2020 and promote the green business development and environmental improvement worldwide.



*2020 Sulfur Cap: According to the International Maritime Organization (IMO) sulfur cap, starting 1 January, 2020, all ships, except those equipped with exhaust gas cleaning systems, shall consume bunker fuel with sulfur content of less than 0.5% m/m.*



The Company implemented sophisticated fuel management policies, including optimizing the loading dates, steaming at economic speed and swapping ship positions. The Company also enhances information sharing to improve the accuracy of data regarding loading and unloading plans at the ports and reduce fuel consumption.



Targeting the identified environmental factors, COSCO SHIPPING Energy has formulated elaborate management procedures for the generation, treatment and discharge of oil pollutant, sewage and garbage, and has established specific requirements on the emission control of ozone depleting pollutants, nitrogen oxides, sulfur oxides, chimney particles and volatile organic compounds. Meanwhile, the Company refrains from discharging any vessel pollutant to the marine nature reserves, coastal tourist spots, major fishery areas and other waters under special protection. The Company has also issued management standards that are more stringent than international conventions regarding wash-water and waste discharge. For example, the tanker wash-water is prohibited from being discharged into the sea via the oil discharge monitoring system but is disposed of with the solid wastes onshore.

Each of the Company's vessels shall carry the Garbage Record Book issued by the maritime affairs authority of the flag states and keep records. The Company put forward the Garbage Management Plan formulated in accordance with Article 10 of MARPOL 73/78 Annex V and the Guidelines for the Development of Garbage Management Plan from the IMO. The Garbage Management Plan of the ships with Chinese flags are subject to additional examination and approval of maritime affairs authority in China. Each ship organizes at least one quarterly training for the Garbage Management Plan and make records accordingly. All garbage onboard shall be managed according to the Garbage Management Plan. All crew members onboard shall strictly comply with and execute the Garbage Management Plan.

In 2018  
The Company was not involved in any major incident of pollution

0

Protect Marine Biodiversity

COSCO SHIPPING Energy values management of ballast water and has formulated the *Ballast Water Management Plan* according to domestic and international laws and regulations, international conventions and relevant provisions of the World Health Organization and port authority of each country. Meanwhile, the Company has stipulated that operations on ballast water shall be performed in accordance with the Ballast Water Management Plan of the ship and relevant systematic documents and shall be recorded in the *Ballast Water Record Book*.

In 2018, the Company invited experts from equipment manufacturers, classification societies and large oil companies to join the study over the interpretation, fulfillment, problems and countermeasures on *International Convention for the Control and Management of the Ships' Ballast Water and Sediments*, the IMO Sulfur Cap and other environmental regulation issues. The Company also organized several internal seminars to prepare for new compliance requirements. In 2019, 16 vessels of the Company will be installed with ballast water treatment systems.



# Build a Harmonious Enterprise for Employees

The growth of employees is the foundation for the sustainable development of an enterprise. COSCO SHIPPING Energy takes employees as the key to success and strives to create a healthy environment and broad career development platform for employees under the "people-oriented" concept, so as to help employees achieve personal value.



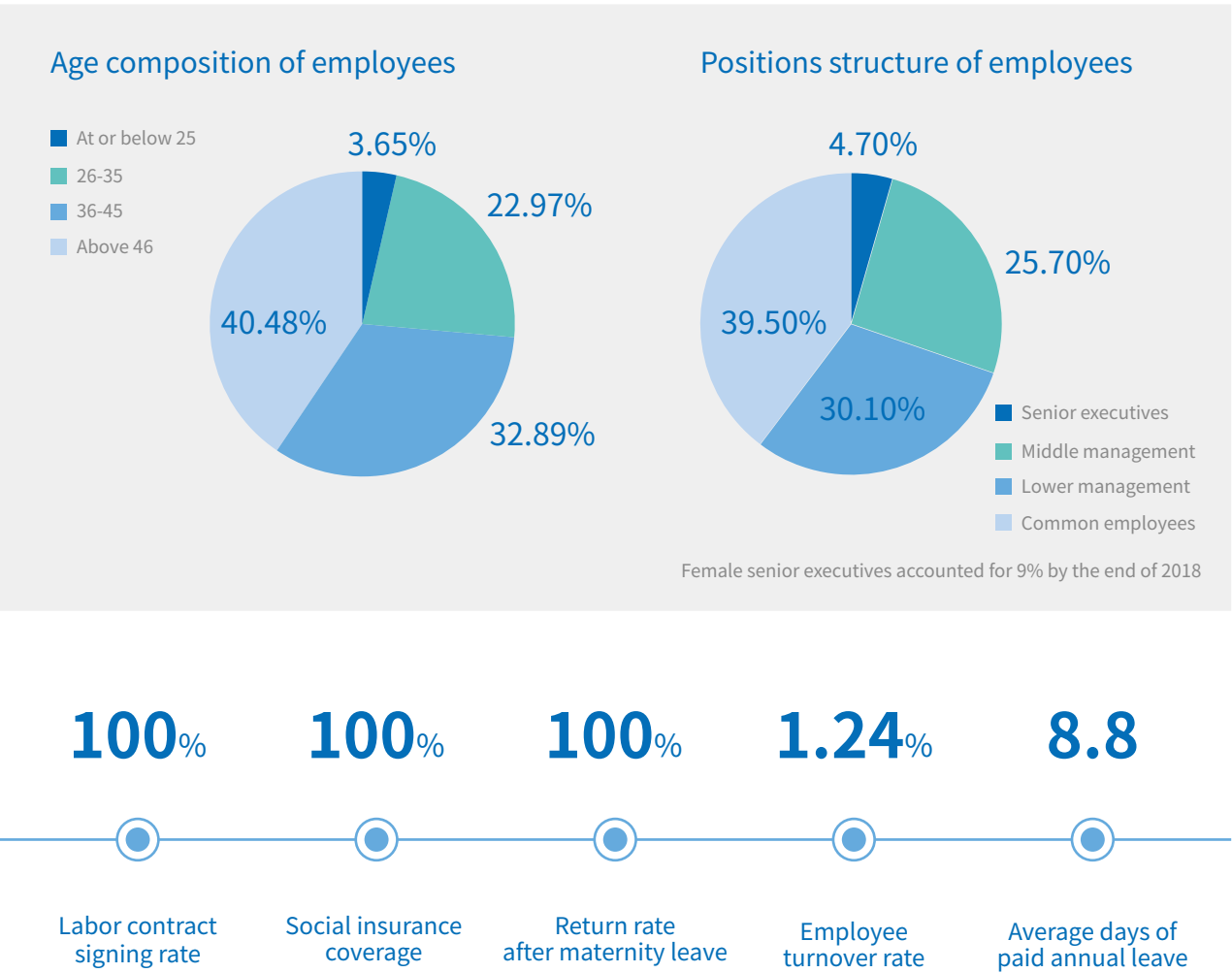


## Safeguard the Rights and Interests of Employees

In strict compliance with labor laws and regulations, COSCO SHIPPING Energy never stops optimizing remuneration distribution mechanism and boosting employees' communication to safeguard their rights and interests and create a favorable environment for career development.

### Uphold Employment Equity

The Company refrains from employment of any child labor or forced labor and makes all-out efforts to wipe out discrimination and achieve equal pay for equal work in strict compliance with the *Labor Law of the People's Republic of China*, *Labor Contract Law of the People's Republic of China* and *Regulations of Paid Annual Leave of Employees*. The Company signs labor contracts with employees in the principle of equality and free will, pays social insurance for employees, safeguards the statutory vacation rights of employees, and strives to create equal and fair working conditions for employees. In 2018, the Company had 737 employees, of which female employees and overseas local employees accounted for 34.9% and 11.4% respectively, and there were 28 minority employees, 11 disabled employees, 12 expatriate employees and 19 new employees.



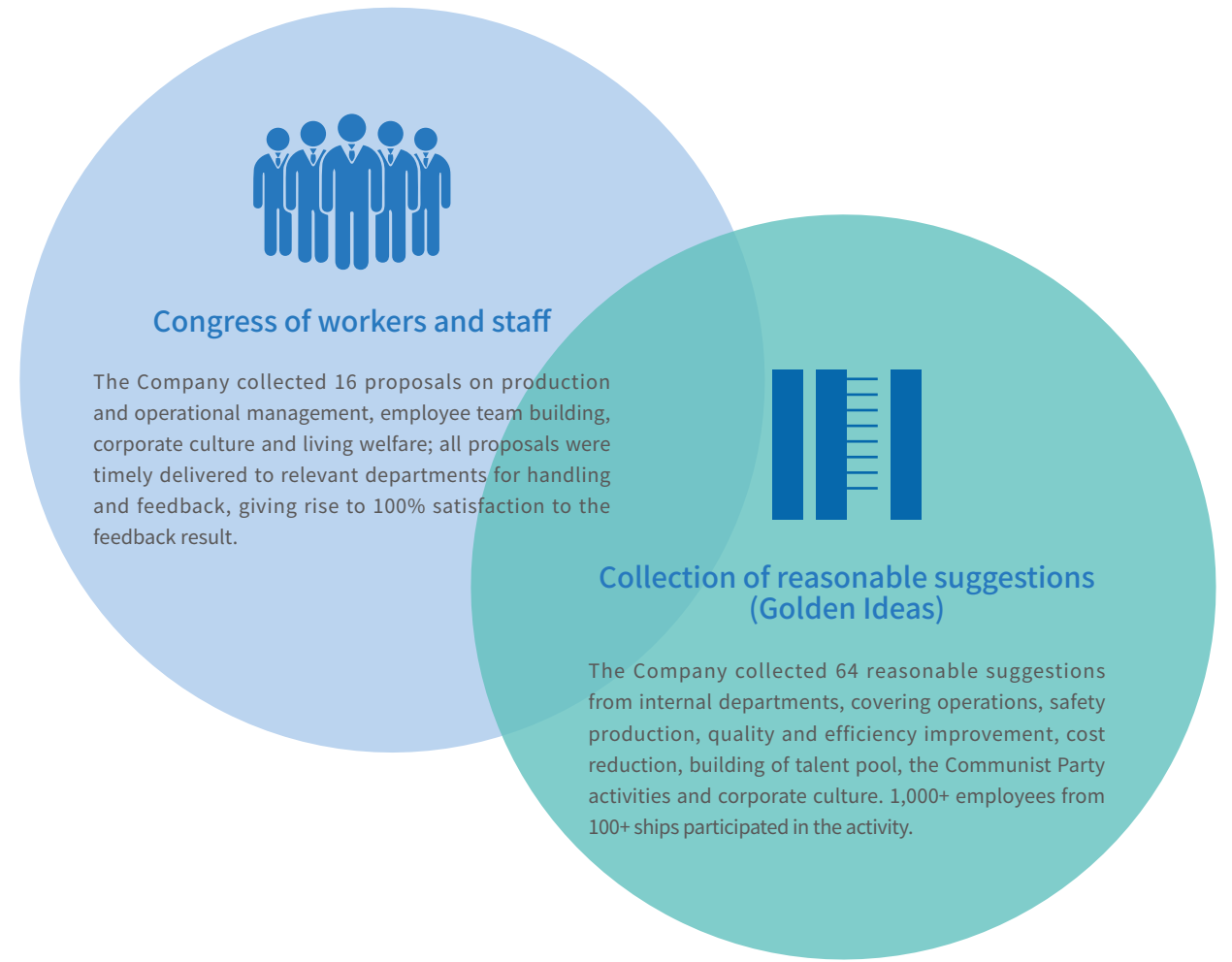
## Optimize Remuneration Management

The Company continuously seeks to upgrade the wage distribution system, designs a market-based, diversified and differential remuneration system, manages remuneration based on assessment results, and enhances the linkage between performance and remuneration. Meanwhile, the Company sets up and improves the inspection, analysis and evaluation mechanisms for management, conducts 360-degree annual assessments with an IT-based approach to encourage the management to achieve improvements, and actively explores diversified incentive mechanisms for talent motivation.

In 2018, the share incentive scheme of the Company was formally approved by the SASAC. The number of employees eligible for the incentive scheme did "not exceed the upper limit of the number of employees for incentives and options prescribed by the SASAC". In addition, the Company also assisted in the calculation of the quantity of stock options to every employee eligible for the scheme, so as to promote the growth of employees with the Company.

## Provide Communication Channels

The Company keeps improving the internal communication management system mainly through the workers' congress, establishes the employee communication management committee, and annually holds a meeting of the workers' congress, meetings of all labour committee members and staff representatives of the labour union, as well as the labour union work experience seminar. This enhances the communication between the Company and the employees, and facilitates the building of an inclusive and amicable workplace family.



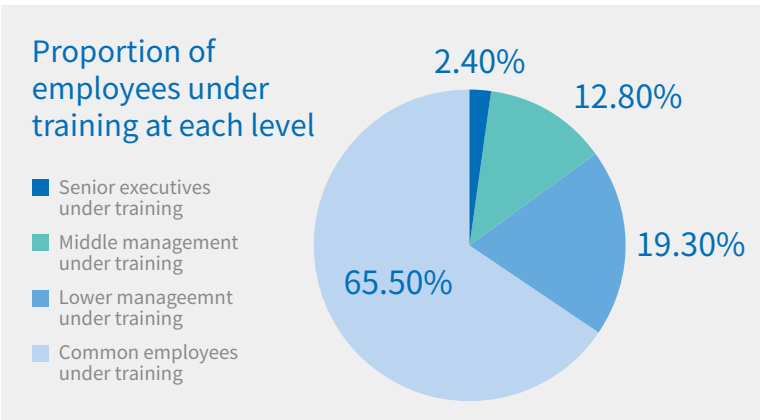
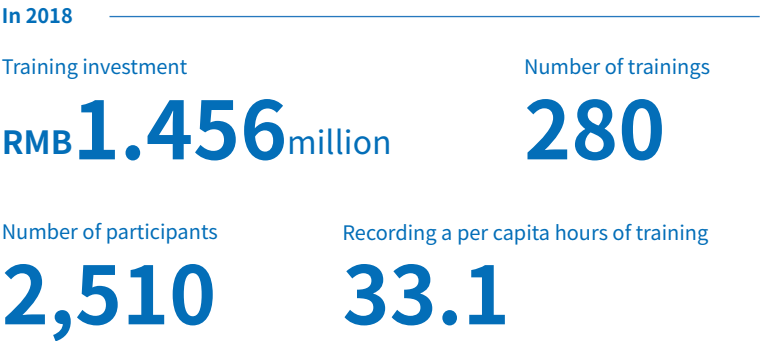
Support Employee Development

COSCO SHIPPING Energy cherishes the value of every employee, establishes personnel cultivation mechanisms to enhance employees' integrated vocational skills, and promotes career development for achieving personal value.

Optimize the Employee Training Mode

The Company develops a diversified and multi-level training system and formulates the *Administrative Measures of COSCO SHIPPING Energy on Employee Training (Provisional)* to regulate the contents of training objects, training organization, training implementation, assessment and examination, and fund guarantee, which provides an institutional guarantee for building a learning-oriented energy enterprise. Meanwhile, the Company also formulates the *Implementation Details of COSCO SHIPPING Energy Transportation Co., Ltd. on Overseas Practice of Cadre Talents (Provisional)* and strives to step up the training of young cadres and international talents by taking full advantage of overseas branches and project partners.

Through active development of internal and external training resources, the Company has built up the mobile learning platform, human resources information management system (SAP HR), and the "leader speech on stage" and internal trainer system and keeps enriching the resources for internal trainings. Under active contact with the Party school of COSCO SHIPPING Group, the Company develops 50+ courses based on department demands and assists employees in self-study online at any time.



Case

Enhance the cultivation of international leadership talents

The Company constantly promotes talents into the expatriate talent pool of the COSCO SHIPPING Group and enhances the echelon establishment for the expatriate management staff of the four overseas offices. By the end of 2018, 41 employees were included in the expatriate talent pool, and 60 employees passed the English examination for the talent reserve or acquired the equivalent qualification. In 2018, the Company dispatched three management employees to Singapore and Hong Kong offices, providing employees with opportunities to work overseas.

Build a Platform for Further Growth

The Company develops an innovative talent discovery and cultivation mode, builds a corporate culture featuring "running" and establishes a platform for outstanding talent for self-expression and self-breakthrough via "CSET Hero Express" and "Working Procedures for Project Responsibility System".

Case

Hold "CSET Hero Express" Event for Exploring Outstanding Talents

The event focuses on the operational development reform and provides employees with a platform to demonstrate their talents and skills, highlighting the concept "Heroes come from responsibility." The Company carries out the event in six competition divisions, in which employees participate voluntarily or through recommendation. In 2018, 650+ employees took part in 440+ competitive activities.

Case

Implement "Working Procedures for Project Responsibility System" to Develop Versatile Talent

In connection with the 19 lean management projects in 2018, the project responsibility system aims to help build a platform for training and finding young talent among different institutions, titles, and regions. By the end of 2018, the Company dispatched over 200 management staff (of which 70% were young cadres) in project promotion and for the development of versatile talent.

Promote Career Development

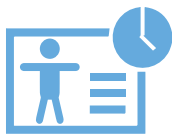
The Company provides equal promotion opportunities for employees and implements the position transfer mechanism at the Head Office, across entities within the Company and in COSCO SHIPPING Group for competent employees to stretch their talents and gain experience. In the meantime, the Company actively promotes the selection and recruitment of highly educated young talent with professional technical skills. In 2018, the Company introduced three employees at the middle and top management level, selected four young cadres as department heads, and transferred two young cadres to human resources organization and discipline inspection and supervision department for position communication.



Maintain Occupational Health

COSCO SHIPPING Energy focuses on employee health in the workplace, strives to control the health risks in working places, puts the responsibilities on occupational disease prevention and control into practice, and enhances training and education on occupational health.

The Company endeavors to build an occupational health management system for employees. By the end of 2018, Dalian Tanker and Shanghai Tanker had completed an occupational health and safety management course according to OHSAS18001 and obtained the certification. The Company conducts operations under the guidance of health and safety concepts in accordance with the Liability System on Protection against Professional Hazards of COSCO SHIPPING Energy and local regulations on labor health and lays equal emphasis on the employees of partners and contractors. The Company also puts occupational health in the annual safety production objective as an important index for the appraisal of management, in order to further promote the occupational health management of employees.



In 2018

Coverage of physical examinations of employees

100%

Recorded work-related deaths

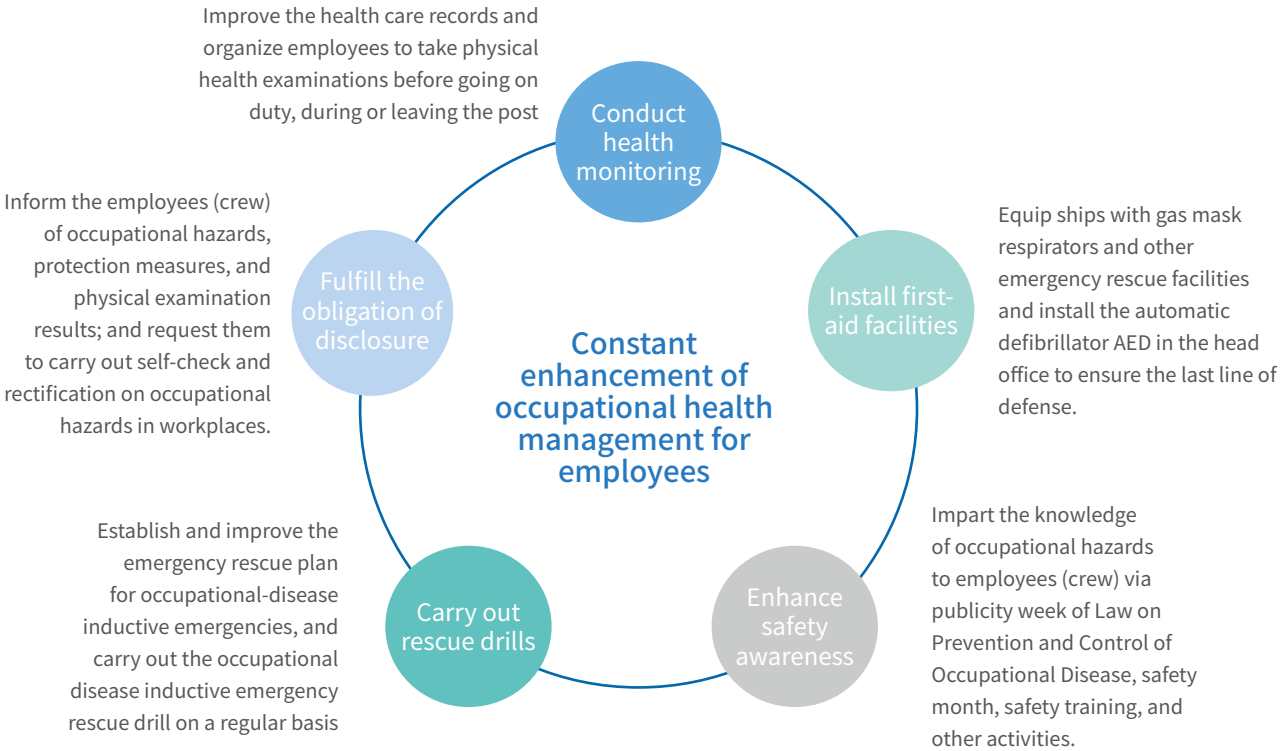
0

Employee suffered from a work-related injury

1

Loss of days due to work injury

0



Build a Warm Haven

COSCO SHIPPING Energy cares for its employees' living, provides aid to those in need, and makes efforts to improve their happiness by means of various recreational and sports activities.

Care for Employees

The Company actively assists employees in need by means of consolation on frontier employees and those in hospital for serious illness, and cares for retired employees with gifts on holidays and education assistance. Meanwhile, the Company also arranges knowledge lectures, provides professional gynecological examinations, and builds a "Mother's Room" for female employees to create a favorable working environment. In 2018, the Company visited 2,636 sick and needy employees(crew), offered solicitude to ships over 80 times, issued RMB441,400 as solatium and RMB28,000 as student subsidies under "Education Assistance in Golden Autumn", and helped 26 children of employees in need of education.



Union of COSCO SHIPPING Energy titled as "National Model Worker Family" by All-China Federation of Trade Unions

Enrich Cultural Life

The Company exerts itself in building a platform for various recreational and sports activities like guess lantern riddles, appreciation of books and films, spring and autumn outing, healthy hiking, photo taking and ladies' Yoga, to satisfy the increasing demands of employees on spiritual culture, relieve work pressure, and increase the sense of belonging and happiness for employees.



The Company participated in the 2nd Workers' Games organized by COSCO SHIPPING Group and was awarded the First Prize



# Build Happy Communities

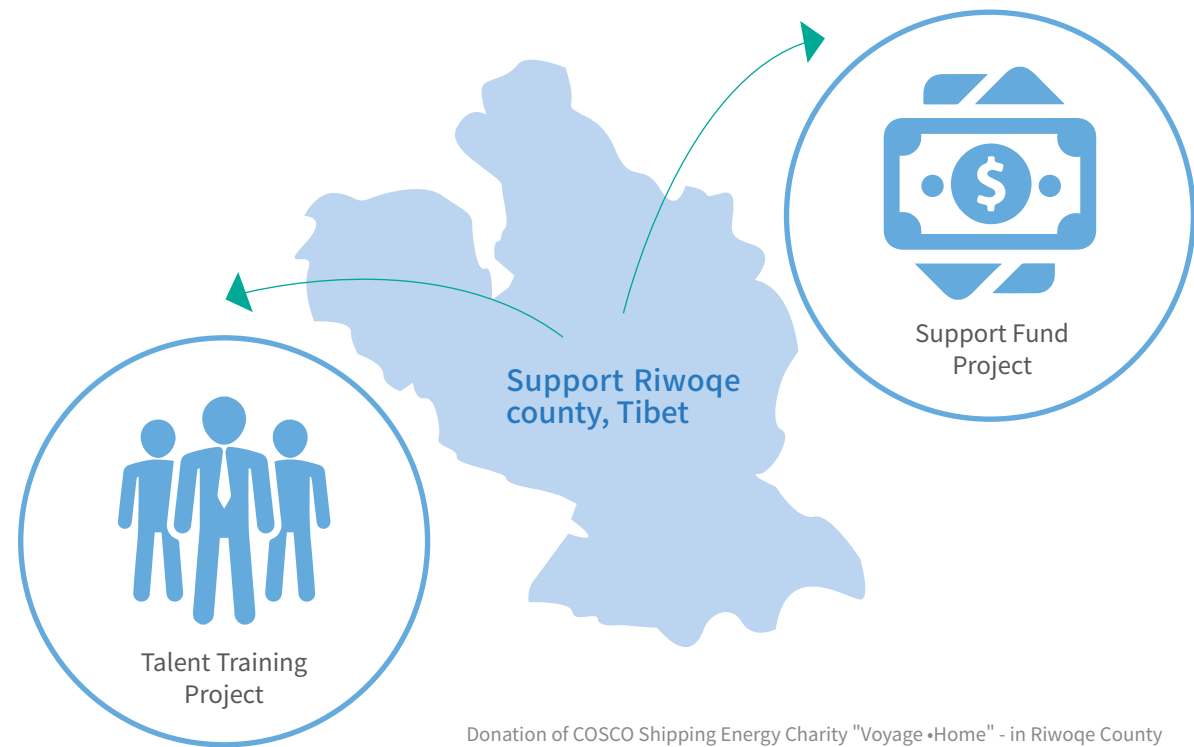
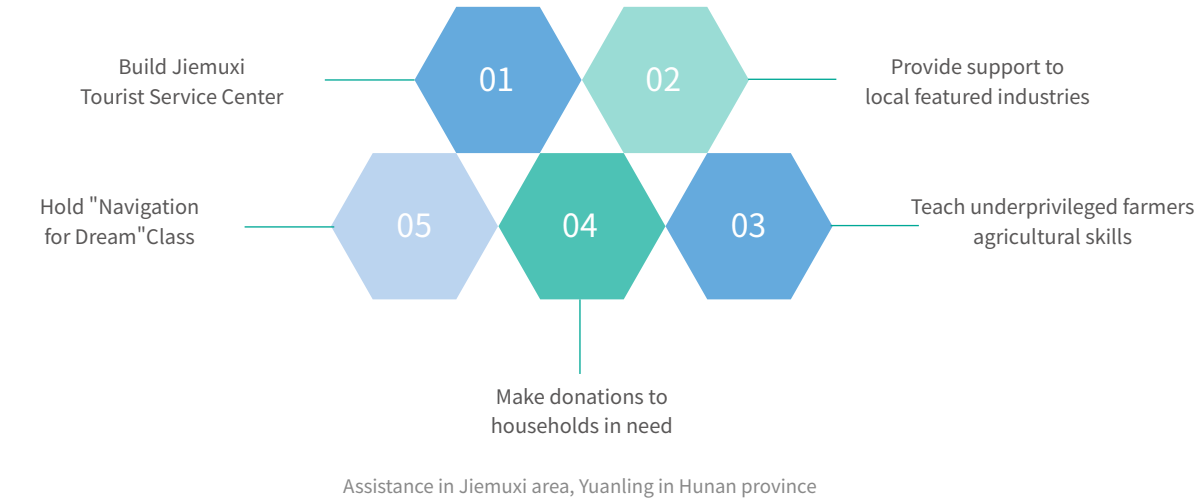
The community participation and support play an important role in corporate development, while the community development also needs the contributions from enterprise. COSCO SHIPPING Energy combines its advantages and local conditions to further promote targeted poverty alleviation, and actively holds public welfare activities to drive community development and make contributions to society.





## Targeted Poverty Alleviation

Actively engaged in poverty alleviation, COSCO SHIPPING Energy organizes employees to participate in donations in order to win the fight against poverty. In 2018, the Company donated RMB 4.0681 million to 13 poverty alleviation projects on industry, infrastructure, education, and assistance for the needy; purchased 870 pieces of Pu'er tea from Yongde County, Yunnan, and other poverty products, totaling RMB0.32 million; and raised a charity fund of RMB 68.1 thousand at the "October 17 --- Day of Poverty Alleviation".



## Advocate Public Welfare

The Company consistently views contributing to society as an important responsibility, provides voluntary services for public welfare, and helps employees gain social recognition while making contributions.



### Case

#### Actively satisfy the demands of community development and solve the problems of villagers

The Company organized employees to visit Yuyao Village, Shuyuan Town, Shanghai and actively communicated with village leaders to find out the demands on community development before preparing the assistance plan. The Company visits needy villagers each year. The Company paid visits to around 10 households and sent solatium to those in need as an aid and encouraged them to get rid of difficulties.



### Case

#### Providing voluntary services for the China International Import Expo

During the China International Import Expo, 13 outstanding young volunteers provided services such as pavilion guidance, conference service, booth explanation, concierge activity and logistical support, presenting the world the spirit of Cosco Shipping Energy, and contributing to the success of the first China International Import Expo.



Our service in China International Import Expo



# Our Commitment

## Innovation

Create value from sustainable development. With strategic transformation of traditional business and the Blue Ocean strategy for emerging businesses, we make constant reforms with a focus on "Four Global Leadings"; develop new business models centering on clients; and enhance communication with suppliers, research institutions, and other stakeholders to serve the industry for healthy development.

## Safety

Fulfill the responsibility of safety in development. Under constant enhancement of shore and ship safety, we set up a modern information safety management system to improve management efficiency. Meanwhile, we keep lifting the capacity of safety risk recognition, prevention, and treatment, strengthen employees' safety awareness, and develop a safety culture and brand for stable development.

## Green

Continue green and low-carbon development. Adhering to the United Nations Global Compact, we are striving to step up the building of LNG teams for the development of green energy with focus on the ecological civilization construction and green and low-carbon development in China. In the meantime, we pay attention to the building of green fleets in line with the requirements for environmental protection and continue to improve energy management regulations and increase energy utilization. We also lay great emphasis on the management of waste emissions by optimizing pollution abatement at the tail end, in a bid to achieve sustainable development.

## Community

Fulfill the obligations for corporate citizenship. It is our compelling obligation to relieve poverty. We spare no efforts in holding public welfare activities, advocating voluntary service, and promoting community development, and share our achievements with society to help win the fight against poverty as a responsible participant in our society.

## Employee

Practice responsibility for employee growth. While optimizing the human resources management model, we set up and keep improving the incentives and constraint mechanisms centering on performance and efficiency and constantly motivate the proactivity and creativity of employees. We are committed to building a harmonious environment with extensive care for employees for the joint development between the Company and employees.



ESG Indexes Guidance

Index		Chapter(s) Involved	Remarks
Aspect A1:Emissions			
General Disclosure	The emission of waste gases and greenhouse gases, pollution discharge into water and land and the production of harmful; compliance with relevant laws and regulations that have a significant impact on the issuer.	Achieve Green and Sustainable Development	
A1.1	The types of emissions and respective emissions data.	Key Data Promote Green and Low-Carbon Shipping	
A1.2	Greenhouse gas emissions in total (in tons) and, where applicable, intensity (e.g. per unit of production volume, per facility).	Key Data Promote Green and Low-Carbon Shipping	
A1.3	Total hazardous waste produced (in tons) and, where applicable, intensity (e.g. per unit of production volume, per facility).	Key Data Promote Green and Low-Carbon Shipping	
A1.4	Total non-hazardous waste produced (in tons) and, where applicable, intensity (e.g. per unit of production volume, per facility).	Key Data Promote Green and Low-Carbon Shipping	
A1.5	Description of measures to mitigate emissions and results achieved.	Promote Green and Low-Carbon Shipping	
A1.6	Description of how hazardous and non-hazardous wastes are handled, reduction initiatives, and results achieved.	Promote Green and Low-Carbon Shipping	
Aspect A2: Use of Resources			
General Disclosure	Policies on the efficient use of resources, including energy, water and other raw materials.	Achieve Green and Sustainable Development	
A2.1	Direct and/or indirect energy consumption by type (e.g. electricity, gas, or oil) in total (kWh in '000s) and intensity (e.g. per unit of production volume, per facility).	Key Data Enhance Environmental Management in the Whole Process	
A2.2	Water consumption in total and intensity (e.g. per unit of production volume, per facility).	Key Data Enhance Environmental Management in the Whole Process	
A2.3	Description of energy utilization efficiency plan and achievements .	Promote Green and Low-Carbon Shipping	
A2.4	Description of any issue in sourcing water applicable, water efficiency initiatives and results achieved.	Key Data Promote Green and Low-Carbon Shipping	
A2.5	Total packaging material used for finished products (in tons) and, if applicable, with reference to per unit produced.	-	N/A
Aspect A3: The Environment and Natural Resources			
General Disclosure	Policies on minimizing the issuer's significant impact on the environment and natural resources.	Achieve Green and Sustainable Development	

Index		Chapter(s) Involved	Remarks
A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them	Achieve Green and Sustainable Development	
Aspect B1: Employment			
General Disclosure	Policies on remuneration, dismissal, recruitment, promotion, working hours, holiday, equal opportunities, diversification, anti-discrimination and other treatments and benefits; and compliance with relevant laws and regulations that have a significant impact on the issuer.	Build a Harmonious Enterprise for Employees	
B1.1	Total workforce by gender, employment type, age group, and geographical region.	Key Data Insist on Employment Equity	
B1.2	Employee turnover rate by gender, age group, and geographical region.	Key Data Insist on Employment Equity	
Aspect B2: Health and Safety			
General Disclosure	Policies on the provision of safe working environment and protection of employees from occupational hazards; and compliance with relevant laws and regulations that have a significant impact on the issuer.	Boost Stable Development Based on Security Build a Harmonious Enterprise for Employees	
B2.1	Number and rate of work-related fatalities.	Key Data Maintain Occupational Health	
B2.2	Lost days due to work injury.	Maintain Occupational Health	
B2.3	Description of occupational health and safety measures adopted, how they are implemented and monitored.	Maintain Occupational Health	
Aspect B3: Development and Training			
General Disclosure	Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities.	Boost Stable Development Based on Security Build a Harmonious Enterprise for Employees	
B3.1	The percentage of employees trained by gender and employee category (e.g. senior management, middle management).	Optimize the Employee Training Mode	
B3.2	The average training hours completed per employee by gender and employee category.	Key Data Optimize the Employee Training Mode	
Aspect B4: Labor Standards			
General Disclosure	Policies on the avoidance of child labor or forced labor; and compliance with relevant laws and regulations that have a significant impact on the issuer.	Insist on Employment Equity	
B4.1	Description of measures to review employment practices to avoid child and forced labor.	Insist on Employment Equity	

Reader Feedback

Index		Chapter(s) Involved	Remarks
B4.2	The average training hours completed per employee by gender and employee category.		No violation
Aspect B5: Supply Chain Management			
General Disclosure	Policies on managing environmental and social risks of the supply chain.	Create Infinite Value with Development of the Times	
B5.1	Number of suppliers by geographical region.	Key Data	
B5.2	Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, how they are implemented and monitored.	Build A Sustainable Supply Chain	
Aspect B6 Responsibilities for Products			
General Disclosure	Policies on health and safety, advertisement, labeling, and privacy of products and services and relevant remedies; and compliance with relevant laws and regulations that have a significant impact on the issuer.	Create Infinite Value with Development of the Times	
B6.1	Percentage of total products sold or shipped subject to recall for safety and health reasons.		N/A
B6.2	Number of products and service-related complaints received and how they are dealt with.	Key Data	
B6.3	Description of practices relating to observing and protecting intellectual property rights.	Achieve Win-Win Cooperation with Partners	
B6.4	Description of quality assurance process and recall procedures.		N/A
B6.5	Description of consumer data protection and privacy policies, how they are implemented and monitored.	Provide Quality and Lean Client Service	
Aspect B7: Anti-corruption			
General Disclosure	Policies on the prevention of bribery, blackmail, fraud, or money laundering; and compliance with relevant laws and regulations that have a significant impact on the issuer.	Risk Management Integrity Compliance	
B7.1	Number of concluded legal cases regarding corrupt practices brought against the issuer or its employees during the reporting period and the outcomes of the cases.	Integrity Compliance	
B7.2	Description of preventative measures and report flows, and relevant execution and supervision methods .	Integrity Compliance	
Aspect B8: Community Investment			
General Disclosure	Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities' interests.	Build Happy Communities	
B8.1	Focus areas of contribution (e.g. education, environmental concerns, labor needs, health, culture, sport).	Targeted Poverty Alleviation	
B8.2	Resources (money or time) invested in focus areas (e.g. education, environmental concerns, labor needs, health, culture, sport) .	Targeted Poverty Alleviation Advocate Public Welfare	

Dear Readers,

Thanks for reading the 2018 Corporate Social Responsibility Report of COSCO SHIPPING Energy. Flaws and omissions are hard to avoid in the compilation of this report. We are looking forward to your valuable suggestions. Please give feedback to us for our further improvement.

Multiple Choice Questions (Please tick ☒ before the corresponding box)

1. Your general evaluation on this report:  
☐ Excellent ☐ Good ☐ Average ☐ Bad ☐ Worst
2. How about the response and disclosure of this report on the stakeholders' concerns?  
☐ Excellent ☐ Good ☐ Average ☐ Bad ☐ Worst
3. What do you think of our work on economic responsibility?  
☐ Excellent ☐ Good ☐ Average ☐ Bad ☐ Worst
4. What do you think of our work on client service?  
☐ Excellent ☐ Good ☐ Average ☐ Bad ☐ Worst
5. What do you think of our work on environmental responsibility?  
☐ Excellent ☐ Good ☐ Average ☐ Bad ☐ Worst
6. What do you think of our work in safety management?  
☐ Excellent ☐ Good ☐ Average ☐ Bad ☐ Worst
7. What do you think of our work on employee responsibilities?  
☐ Excellent ☐ Good ☐ Average ☐ Bad ☐ Worst
8. What do you think of our work on community responsibilities?  
☐ Excellent ☐ Good ☐ Average ☐ Bad ☐ Worst
9. Is the information, index, and data disclosed in this report clear, accurate, and complete?  
☐ Excellent ☐ Good ☐ Average ☐ Bad ☐ Worst
10. Are the contents and format design of this report easy to read?  
☐ Yes      ☐ No

Open Questions

1. What do you think is the part of this report that makes you most satisfied?
2. What's your advice for our future social responsibility reports?





This report is printed on environmentally-friendly paper.



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