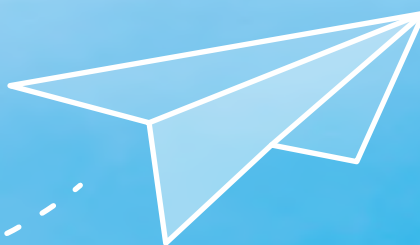




Stock Code: 00384.HK

CHINA GAS HOLDINGS LIMITED
中國燃氣控股有限公司*



EMBRACING A SUSTAINABLE LIFE

BRIGHTENING OUR FUTURE

2018/19
SUSTAINABILITY
REPORT

* For identification purpose only



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This report is the third sustainability report (the “Report”) issued by China Gas Holdings Limited (stock code: 384.HK) (the “Company”) and its subsidiaries (collectively the “Group” or “China Gas”). China Gas has engaged AECOM Asia

Company Limited (the “Consultant”), an independent professional consultant, in the preparation of this Report. The Report outlines the Group’s efforts and achievements in sustainability matters over the past year in a transparent and open manner, and at the same time demonstrates the Group’s strategies and commitment in sustainable development. The Group publishes sustainability reports annually to the public to continuously enhance the transparency of information disclosure.

About This Report



SCOPE OF THE REPORT

This Report reflects the sustainability performance of China Gas’s headquarters and all subsidiaries under the operational control of the Group from 1 April 2018 to 31 March 2019 (“Reporting Period” or “FY2018/19”). Detailed contents are formulated with reference to materiality assessment, stakeholder engagement and other relevant disclosure guidelines. For details of the Group’s business development and consolidated financial statements, please refer to the Group’s 2018/19 Annual Report. Unless otherwise specified, the data of contractors and subcontractors is not reflected in the Report.



REPORTING GUIDELINES

The Report is prepared in accordance with the *Global Reporting Initiative ("GRI") Standards: Comprehensive option, its Oil and Gas Sector Disclosures* as well as the *Environmental, Social and Governance ("ESG") Reporting Guide* published by The Stock Exchange of Hong Kong Limited (the "SEHK"). The Report is also prepared with reference to the *Guidelines on Corporate Social Responsibility Reporting for Chinese Enterprises (CASS-CSR3.0)* of the Chinese Academy of Social Sciences and the Sustainable Development Goals ("SDGs") of the United Nations. With this move, the Group hopes to cover material issues in a more comprehensive manner, and to demonstrate the Group's determination in adopting the best international practices. A complete index is set out in the last chapter of this Report for reference.

INFORMATION COLLECTION AND REPORTING

Information contained herein is collected from the documents and statistics provided by the various departments of the Group, and summary of the monitoring, management and operational information rendered by the relevant departments and subsidiaries according to the relevant system of the Group. Certain amounts and numbers in this Report have been rounded. To ensure that such information is as accurate and reliable as possible, the Group has established an internal regulatory mechanism and a review process. The reporting content has also been reviewed by the senior management of the Company, and approved by the board of directors of the Company (the "Board").

HOW TO ACCESS

The Report is available in both English and Chinese electronic versions and has been uploaded onto the websites of HKEXnews (www.hkexnews.hk) and the Company (www.chinagasholdings.com.hk). If there is any inconsistency or discrepancy between the Chinese and English versions, the Chinese version shall prevail; if there is any inconsistency or discrepancy between this Report and the Annual Report of the Company, the Annual Report shall prevail.

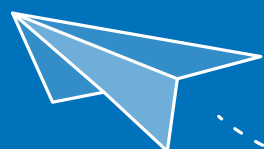
FEEDBACK

Your valuable feedback on both the content and the format of this Report motivates China Gas's improvement. Please help us in improving our environment, social and corporate governance performance by sending us your comments to investor@chinagasholdings.com.hk.



investor@chinagasholdings.com.hk

As the new round of energy revolution is profoundly changing the world's energy structure, China Gas is actively achieving sustainable development to ensure better energy supply. Publishing the Report reflects the Group's efforts to provide stable, economic, clean and safe energy while working closely with the society and environment to create a long-term and stable corporate value.



Message from the Executive Chairman

China Gas looks towards to the social, economic and environmental opportunities and challenges from all around the world, and is committed to promoting the sustainable development goals adopted at the United Nations Sustainable Development Summit in 2015. By continuously promoting the broad application of clean natural gas as energy source and further optimising the urban energy structure, the Group's business development has not only become a continuous boost to the long-term growth of society and economy, but also creates employment, drives industry development and promotes the development of advanced technologies and products. We also take into full account the impacts of our project operations on the surrounding environment and the community, demonstrating the Group's commitment to climate change and environmental protection through high standards of corporate governance and risk management.

As a responsible clean energy operator, the Group actively responds to the "coal-to-gas conversion" policies and the "blue sky project" formulated by the government, using natural gas to replace highly polluted and highly energy-intensive fuel sources such as coal. By continuously strengthening the advantages of developing our natural gas principal business, expanding the LPG industry value chain through new business models and developing other new businesses, the Group also actively pursues in-depth development of energy cascade utilisation to achieve the enhancement of integrated energy efficiency. At the same time, we have cooperated with provincial and municipal governments on atmospheric environmental governance and entered into strategic cooperation framework agreements with them, aiming to combine the advantages and resources of each other to accelerate project construction and increase natural gas utilisation in cities, towns and villages.

China Gas adheres to its "people-oriented" principle to enhance the strength of employees through initiatives such as cultural promotion, system building, and business training. Through building a diversified career development platform for employees, as well as providing a good working environment, competitive compensation and benefits, comprehensive career development training and a variety of living spaces for amateur activities, employees are able to achieve their goals in the Company. The Group has also received the award of "Shenzhen's Top 30 Best Employers" at the 2018 China Best Employer Award with its good reputation and outstanding performance as an influential brand, fully demonstrating the strength of China Gas.



“ As a responsible clean energy operator, the Group actively responds to the “coal-to-gas conversion” policies and the “blue sky project” formulated by the government, using natural gas to replace highly polluted and highly energy-intensive fuel sources such as coal. ”

“Converging in harmony and benefiting the society” is the mission of China Gas as both the participant and witness of public welfare. Therefore, we actively promote activities such as educational assistance, disaster relief and poverty alleviation to give back to the community. Through establishing China Gas Charity Foundation Limited (the “Foundation”), we have partnered with Guangxi Green Sand Environmental Protection Fund to promote environmental business hand in hand, including organising activities such as tree planting and caring for orphans and disabled children. Through the “keeping mum project”, the Left-Behind Children Centre that we donated for construction in a poverty and old area has spread love and care to all the left-behind children. Moreover, the sales of caring agricultural products and the formation of volunteer service team have been accomplished through China Gas’s “Zhongran Smart Living E-commerce Platform”, carrying on the social responsibilities to convey the love and corporate philosophy of China Gas.

Recognitions from the industry and the society have reflected the success of China Gas’s efforts to provide natural gas for many residential, industrial and commercial users. The Group is honoured to be included in Hang Seng China Enterprises Index and shortlisted in the 2018 Top 50 Listed Companies in Asia. The Group also received eight awards in the “2018 All-Asia (ex-Japan) Executive Team Most Honored Companies Award” organised by the *Institutional Investor*, won the “2018 Golden Hong Kong Stock Most Valuable Public Utilities and Infrastructure Company”, and ranked first in the “Golden Wing Award” for the most valuable Hong Kong listed companies by *Securities Times*. These awards fully demonstrate the market’s strong confidence in China Gas’s outstanding performance in corporate governance and business growth.

Looking into the future, China Gas will adapt to the ever-changing energy industry, give new impetus to the energy industry chain, continuously improve its status in the industry and international competitiveness, and promote a healthy and sustainable development of the energy business. We strive to build China Gas into the best comprehensive energy service provider, integrating piped natural gas, liquefied petroleum gas, gas for vehicles and vessels, and distributed energy, and leading the industry to the green benchmark. Applying the overall rationale of “scaled production of low-carbon energy, substitution of clean energy for traditional energy, diversification of energy supply, efficient boost of terminal energy consumption, smart transformation of energy system”, the Group aims to provide “smart” energy for the society and the public, to facilitate green-related initiatives in national economic development, as well as to create maximised value for the society, employees and shareholders.

Mr. LIU Ming Hui

Executive Chairman, Managing Director and President

About China Gas

GROUP PROFILE

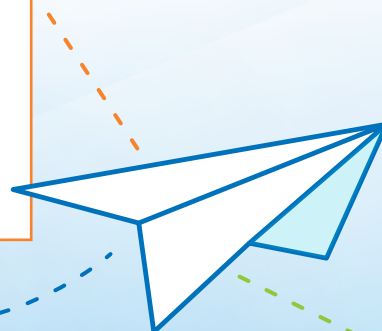
China Gas has been developing city gas projects since 2002, and is primarily engaged in the investment, construction and operation of city and town gas pipeline infrastructure facilities, gas terminals, storage and transportation facilities and gas logistics systems, transmission of natural gas and liquefied petroleum gas (“LPG”) to residential, industrial and commercial users, construction and operation of compressed natural gas (“CNG”)/liquefied natural gas (“LNG”) refilling stations as well as development and application of technologies relating to natural gas and LPG in China.

As at 31 March 2019, the Group cumulatively secured a total of 542 piped gas projects with concession rights in 26 provinces, municipalities and autonomous regions in China. The Group also owns 17 natural gas long distance transmission pipeline projects, 575 CNG/LNG refilling stations for vehicles, one coal bed methane exploration project, 100 LPG distribution projects and 68 comprehensive energy supply projects with multi-energy complementation. The number of population covered by all the Group’s gas projects increased to 150 million.

OUR MISSION

Converging in harmony

Fully converging and configuring all capital resources enable China Gas to effectively achieve outstanding development and expand into the blue oceans, comprehensively building a new business ecosystem of China Gas. On the basis of “successful cooperation between people and enterprise”, we will convey our characteristics, spirits and core values to the society, thereby reaching our corporate goal of “century of China Gas”.

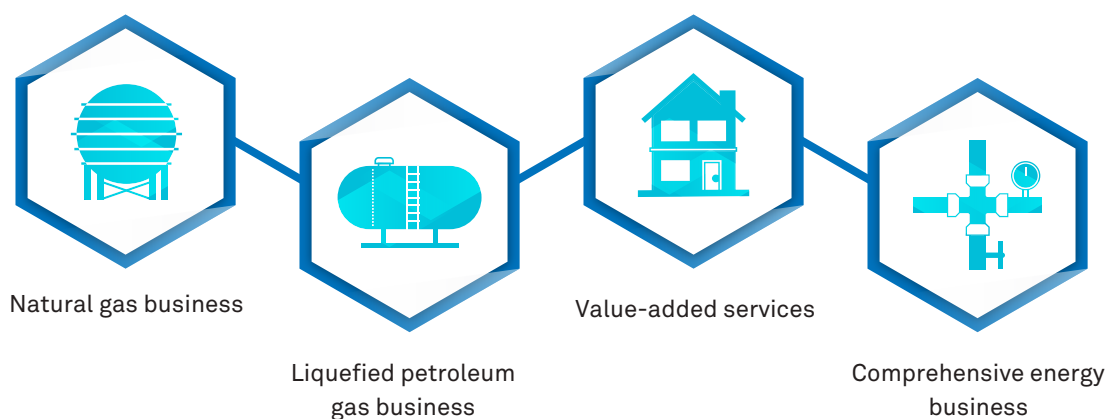


Benefiting the society

China Gas provides a full range of clean and convenient energy. China Gas provides innovative public utilities services from urban communities to rural communities and corresponding smart commercial services. We enhance the efficacy and efficiency of the transformation of social public utilities resources to improve the quality of life, and promote regional economic development, fulfills civic responsibility to strive for the well-being of the public.

BUSINESS OVERVIEW

Under the trend of national energy reform, we continue to carry out transformation and upgrading, and accelerate the creation of new market areas for business growth, forming a new business structure consisting of four major businesses – natural gas, liquefied petroleum gas, value-added services, and comprehensive energy.



Natural Gas Business

Construction of Natural Gas Pipelines and User Connection

City gas pipeline networks are the foundation of gas supply for business operation. The Group constructs urban arterial and branch gas pipeline networks to connect natural gas pipelines with its residential, industrial and commercial users, from whom connection fees and gas usage fees are charged. As at 31 March 2019, gas transmission pipeline networks with a total length of 296,797 km were constructed by the Group.



BUSINESS OVERVIEW *(Continued)*

Natural Gas Business *(Continued)*

Construction of Natural Gas Pipelines and User Connection *(Continued)*

As at 31 March 2019

Total number of piped gas projects with concession rights

► **542**

Number of natural gas long-distance pipeline projects

► **17**

Total length of gas transmission pipeline network

► **296,797 km**

Total number of residential users

► **29,678,157**

(of which 26,137,411 were connected under city gas projects and 3,540,746 were connected under "replacement of coal with gas" projects in North China)

Total number of industrial users

► **12,407**

Total number of commercial users

► **199,637**

Number of CNG/LNG refilling stations for vehicles

► **575**

FY2018/19

Number of new piped gas projects with concession rights

► **47**

Length of gas transmission pipeline network newly built

► **124,257 km**

Number of new industrial users

► **2,686**

Number of new residential users

► **5,107,836**

(of which 2,716,223 were connected in city gas projects and 2,391,613 were connected in township "replacement of coal with gas" in North China)

Number of new commercial users

► **30,673**

BUSINESS OVERVIEW *(Continued)*

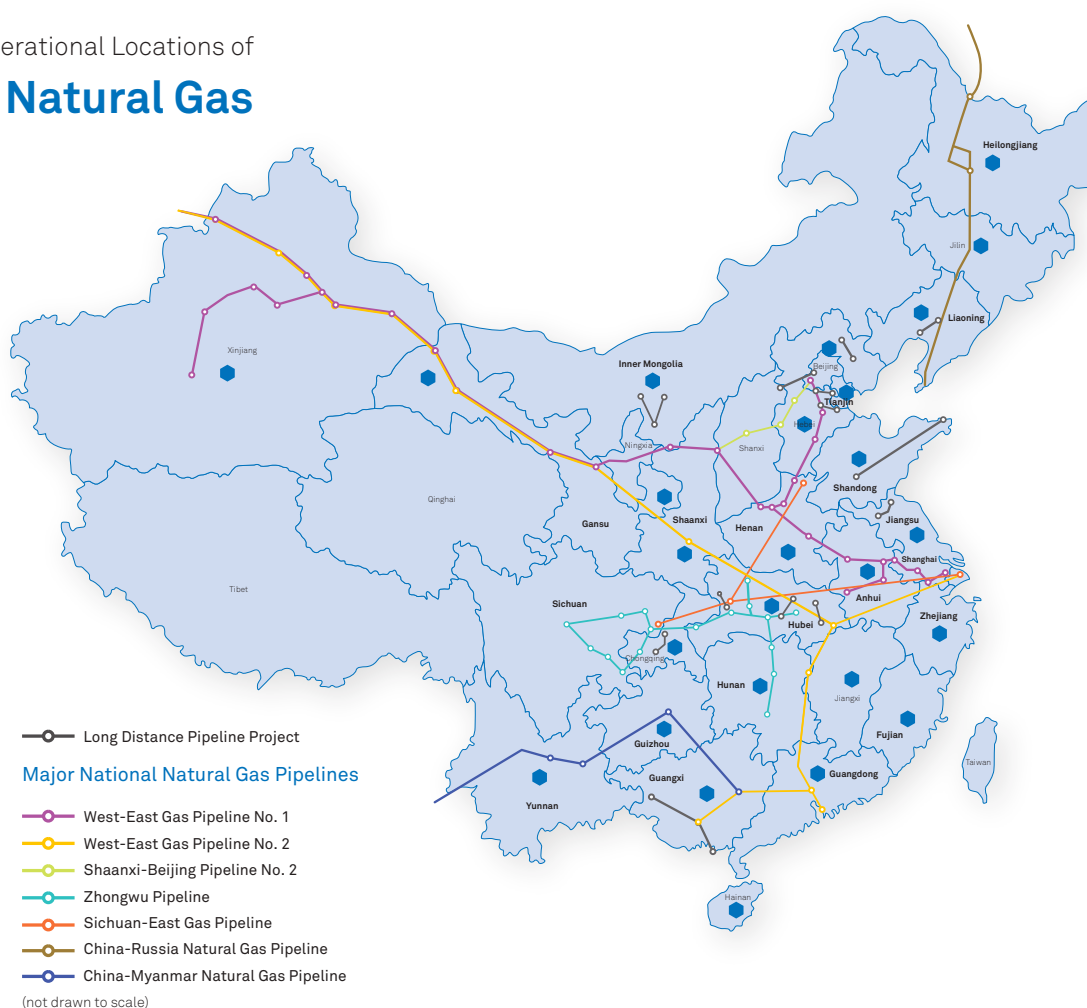
Natural Gas Business *(Continued)*

Sales of Natural Gas

During the reporting period, the Group sold a total of 24.66 billion m³ of natural gas, representing a year-on-year increase of 32.1%. Natural gas was mainly sold through networks of gas pipelines laid in cities and townships, trading business and direct-supply channels. City gas projects recorded sales of gas in 14.74 billion m³ (among which piped gas in townships: 605 million m³), representing a year-on-year increase of 25.1%. Trading business and direct-supply channels realised 9.91 billion m³, representing a year-on-year increase of 44.2%.

Operational Locations of

Natural Gas



BUSINESS OVERVIEW *(Continued)*

Liquefied Petroleum Gas Business

The Group currently owns eight LPG terminals and 100 LPG distribution projects, with distribution operations in 19 provinces in China. It has been positioned as the largest vertically integrated LPG business operation service provider in the country.

With LPG becoming popular among suburban and rural areas, with industrial and commercial LPG demand growing steadily over the long term, and particularly with LPG developing rapidly as a form of raw material in petrochemical synthesis and deep-processing sectors, China's LPG industry has experienced an unprecedented opportunity for its development since the end of 2014. The Group will fully utilise its existing LPG terminals, storage facilities and fleets of vehicles and vessels to boost overseas and domestic purchases of LPG and gradually increase the utilisation rate of midstream LPG assets. The Group will exercise unified procurement of LPG in its downstream retail business, with a view to utilising the advantage of its integrated upstream and downstream activities to lay out a proper deployment over its gas source procurement, storage resources and market coverage and reach an effective synergy between wholesale and retail segments, thereby maximising profit margin of the whole supply chain. The Group will also make use of its huge city gas network and resources across the country to assist LPG distribution business to expand from the south of China to provinces and cities nationwide.



BUSINESS OVERVIEW *(Continued)*

Liquefied Petroleum Gas Business *(Continued)*

As at 31 March 2019, the Group owned

Number of LPG terminals

► 8

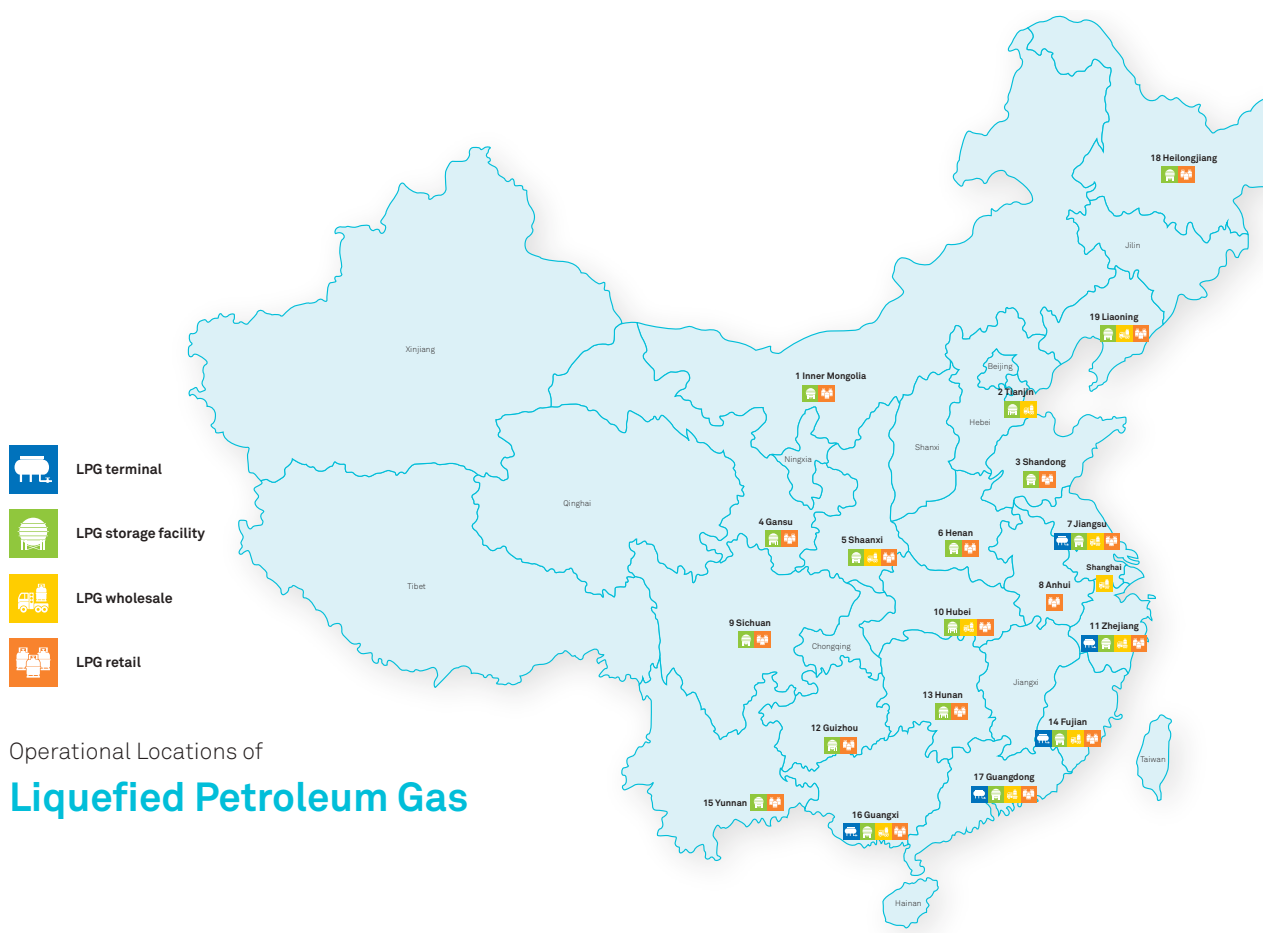
Number of LPG distribution projects

► 100

FY2018/19

LPG sales volume

► 3,993,377 tonnes



Operational Locations of
Liquefied Petroleum Gas

BUSINESS OVERVIEW *(Continued)*

Value-Added Services for End Users

With ever increasing penetration rate, our customer base has been expanding rapidly. More than 35 million residential, industrial and commercial users are currently enjoying natural gas and LPG provided by the Group. Potential added-value of the Group's customer network is huge. Accordingly, the Group will strive to enrich its value-added services and edge up its marketing efforts so as to increase the percentage of its income from value-added service business in its overall operating income, transform itself from a mere gas product provider to a provider of comprehensive energy and excellent customer services, and further improve profitability and overall competitiveness of its service network. The Group developed various new value-added business around its gas sales business, including the promotion of gas appliances under the brand of "Gasbo", comprehensive gas insurance agency service, maintenance and renovation, and sales of gas corrugated pipes and gas alarms. The value-added services recorded significant growth during the financial year. Sales of wall-mounted gas heaters and kitchen gas appliances series under the brand of "Gasbo" reached 830,000 units, representing a year-on-year growth of 84.4%, making the Group a leading manufacturer and distributor of wall-mounted gas heaters and kitchen appliances in China.

Comprehensive Energy Business

Driven by the progress made in implementing environmental protection policies, the changes in energy consumption structure and transformation in consumption patterns, China's energy industry is witnessing an unprecedented wave of transformational changes towards making energy clean, diversifying energy consumption and integrating energy supply. Over the years, the Group has been committed to pushing forward with the extensive deployment of such new business as natural gas-fired distributed energy resources, photovoltaic power generation, distribution and sale of electricity, as well as central heating in China, on the basis of the huge market and large customer base gained by its gas projects. It seeks to carry out integrated utilisation of energy resources with years of cumulative experience in market development and technical innovation, in an effort to provide customers with highly efficient integrated energy resources that address their needs for gas, heating, electricity and cooling.

BUSINESS OVERVIEW *(Continued)*

Comprehensive Energy Business *(Continued)*

As at 31 March 2019

Number of comprehensive energy supply projects

► **68** under operation





UNDERTAKING **RESPONSIBILITY** AND MARCHING FORWARD WITH COURAGE

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Engaging with Stakeholders

21

Establishing Sustainable Corporate
Governance

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Providing Safe, Quality and
Innovative Services

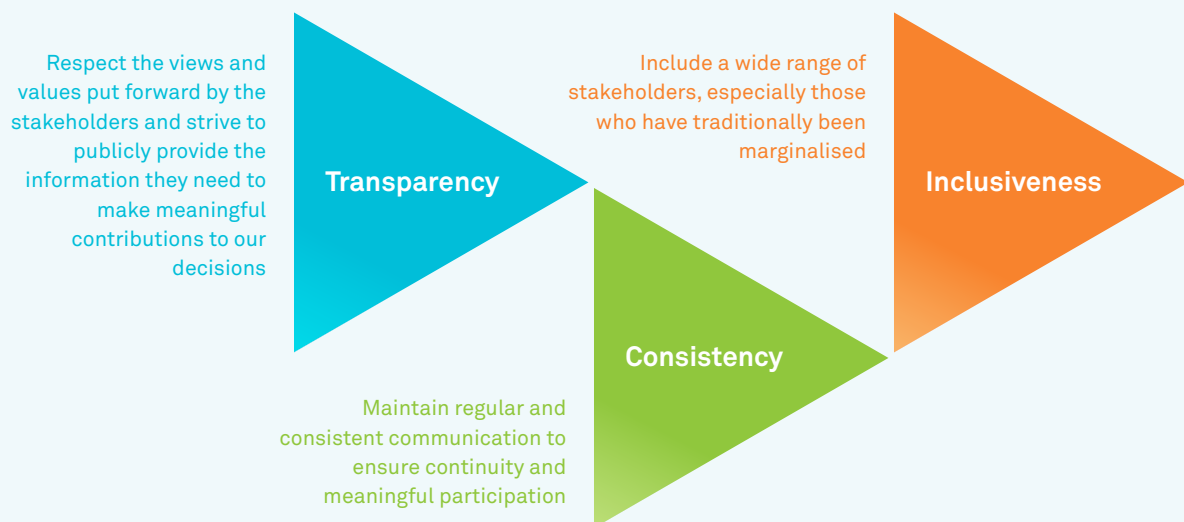
Engaging with Stakeholders

For China Gas, stakeholders are not only the beneficiaries of corporate business, but also the planners of corporate development. Close liaison with the stakeholders enables China Gas to take into account the interests of all parties in the development of corporate sustainability blueprints, thereby establishing a viable and comprehensive development strategy.

PROMOTING STAKEHOLDER ENGAGEMENT

The major stakeholders of China Gas are the groups that have the greatest impact on the business or are most affected by the activities of the Group, including employees, management teams and directors within the organisation, as well as external customers, business partners, investors, creditors, regulatory authorities and various community groups. As the Group's business has varying degrees of impact on different stakeholder groups, the Group maintains communication with stakeholders through multiple channels to listen to a wider range of voices.

The Group's three major principles of stakeholder engagement strategy:



We have adopted a positive communication strategy for external stakeholders to proactively disclose relevant environmental and social information to the affected groups. For example, our project companies are required to develop a stakeholder engagement plan in accordance with the environmental impact assessment report and the relevant requirements as stipulated in the *Safeguard Policy Statement* of the Asian Development Bank ("ADB"), and regularly publish environmental and social information of the project to local communities and governments during project development, allowing the local residents and government keep abreast of the project development.

Engaging with Stakeholders

PROMOTING STAKEHOLDER ENGAGEMENT *(Continued)*

The Group's principal channels of communication with stakeholders are as follows:



China Gas's stakeholder communication process is committed to constructive and interactive communication, with the goal of consolidating close relationships and building mutual trust. The Group also regularly evaluates the effectiveness of each engagement activity and explores areas for improvement.

MATERIALITY ASSESSMENT

China Gas conducts a comprehensive materiality assessment every year, with a view to identifying the economic, environmental and social topics of greatest concern to China Gas and the stakeholders, enabling us to sharpen the focus of our sustainability reports and allocate resources based on the assessment.

The major steps of the materiality assessment in FY2018/19 are outlined as follows:

1. Identifying sustainable development topics

With the help of the Consultant, China Gas conducted a comprehensive review and revision on the list of topics related to sustainable development of the Group to ensure they fully cover the nature of the Group's businesses and take into account the topics raised in previous communications with stakeholders. The Group has identified about 30 topics that are most relevant to its business and impact. These topics – spanning the four realms of “economy”, “environment”, “employees/customers” and “society” – have provided the basis for communication with internal and external stakeholders.

2. Conducting materiality analysis

China Gas invited internal and external stakeholders to actively participate in the identification of material topics. With the help of the Consultant, China Gas organised interviews with internal stakeholders and conducted questionnaires, with an aim to collecting and analysing stakeholders' ratings of the relevant sustainable development topics and expectations for this Report through a fair and balanced approach.



Questionnaires

Identify essential material topics, collect feedbacks from various stakeholders and develop sustainable development strategies



Interview

In-depth discussion of the opportunities and challenges brought by the sustainable development of the Group

MATERIALITY ASSESSMENT *(Continued)*

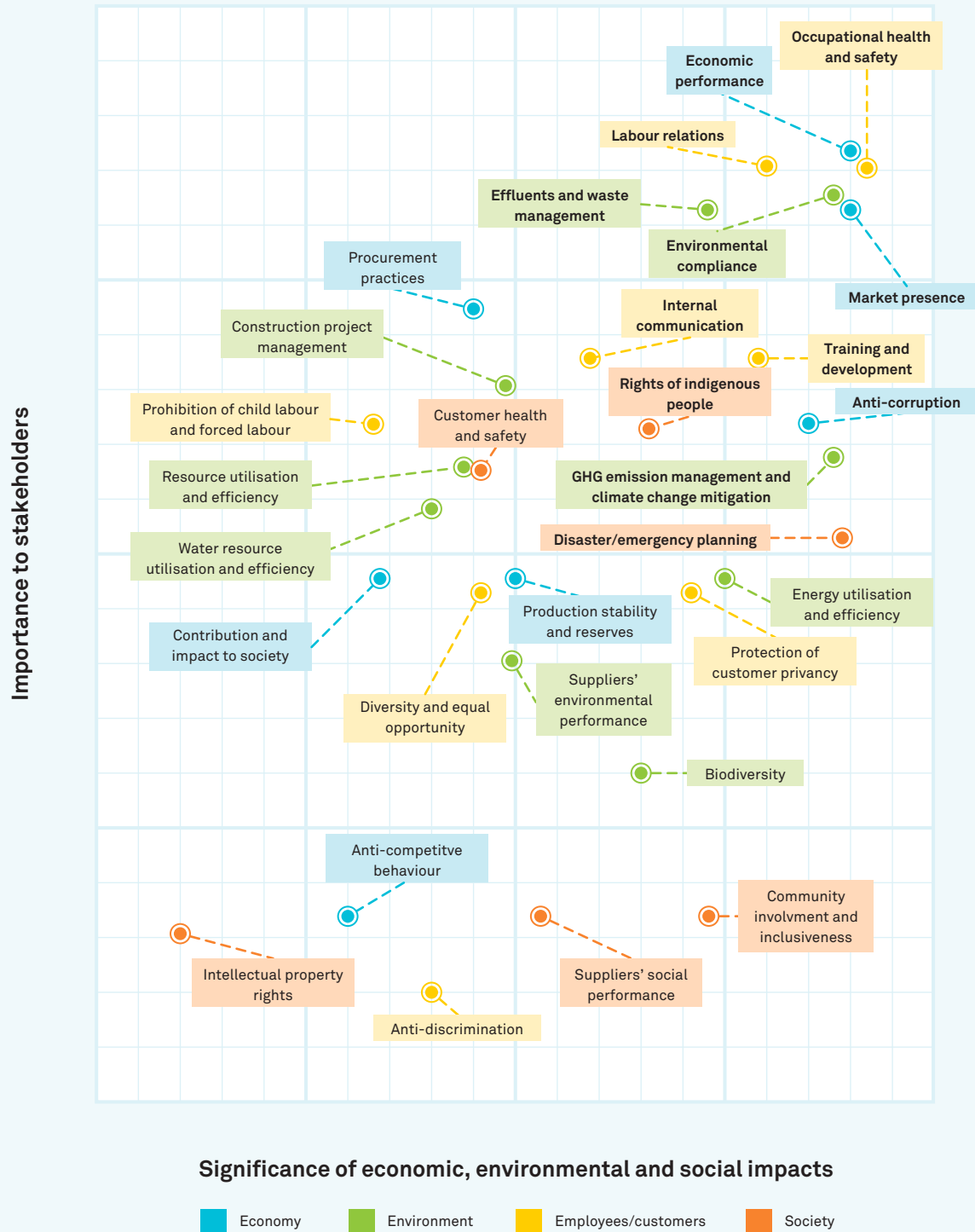
Topics of Highest Concern for Each Stakeholder Group



MATERIALITY ASSESSMENT *(Continued)*

Materiality Matrix

The Consultant conducted a materiality analysis based on the results to identify the most critical topics and present the topics in a matrix. The most important topics to the stakeholders and to the Group are reframed into GRI standards for ease of reporting and are the focus of disclosure for this Report.



Engaging with Stakeholders

MATERIALITY ASSESSMENT *(Continued)*

Material Topics

Material Topics	Impact & Scope						GRI Standards
	Shareholders, investors, creditors and financial analysts	Employees	Government and regulatory authorities	Community groups	Customers	Business partners and suppliers	
1. Occupational health and safety							GRI 403 Occupational health and safety
2. Economic performance							GRI 201 Economic performance
3. Market presence							GRI 202 Market presence
4. Environmental compliance							GRI 307 Environmental compliance
5. Labour relations							GRI 402 Labour/management relations
6. Effluents and waste management							GRI 306 Effluents and waste
7. Training and development							GRI 404 Training and education
8. GHG emission management and climate change mitigation							GRI 305 Emissions
9. Anti-corruption							GRI 205 Anti-corruption
10. Disaster/emergency planning							Not applicable
11. Rights of the indigenous people							GRI 411 Rights of indigenous peoples
12. Internal communication							Not applicable

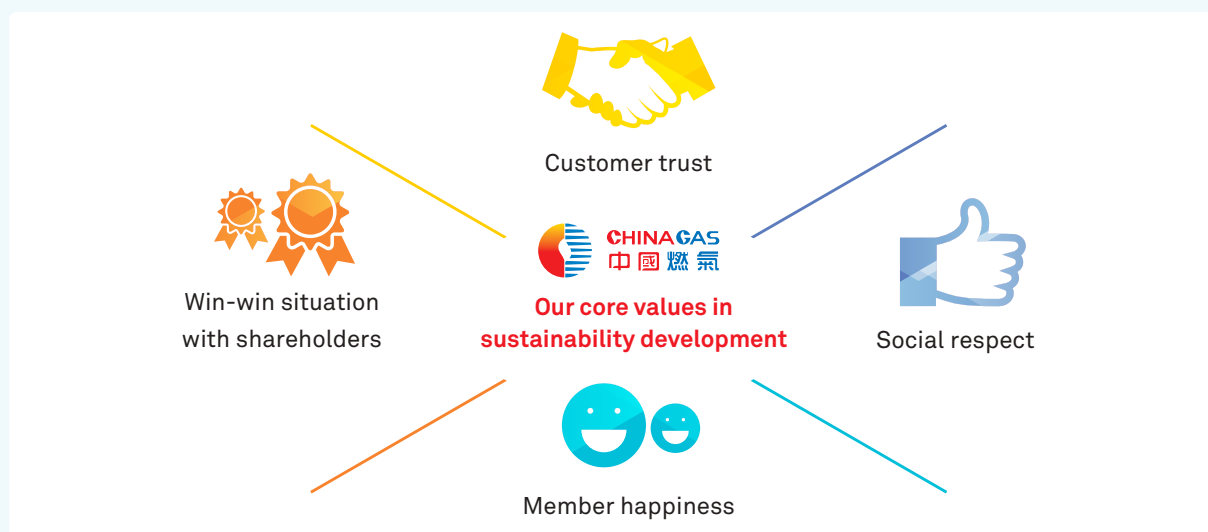
3. Verifying material topics

Senior management of the Group verified the prioritised material topics and their coverage, boundaries and completeness to ensure their significance to the Group.

Establishing Sustainable Corporate Governance

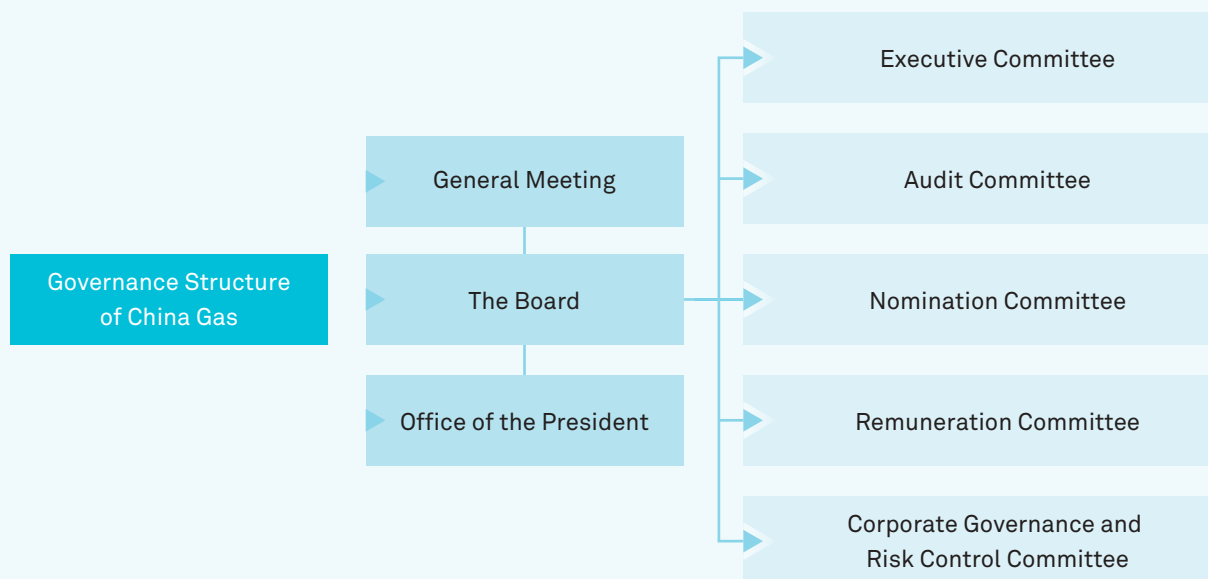
SUSTAINABILITY DEVELOPMENT STRATEGY

Adhering to the corporate mission of “converging in harmony and benefiting the society”, China Gas advocates green, low-carbon, recyclable and sustainable operation, and is determined to build a long-term foundation and continue to create well-being for the public. We will uphold the core values in sustainable development and use these as the guidelines for investment decision-making and operation, and continuously enhance our core competitiveness and sustainable development capabilities to create maximum value for our stakeholders.



CORPORATE GOVERNANCE

The Board is responsible for the sustainable development of the Group, formulates long-term strategic planning and annual work plan, and makes decision on, plan for, and provides guidance on critical issues relating to social responsibilities. The Board has five committees, including Executive Committee, Audit Committee, Nomination Committee, Remuneration Committee, and Corporate Governance and Risk Control Committee to discuss relevant issues and drive the relevant work.



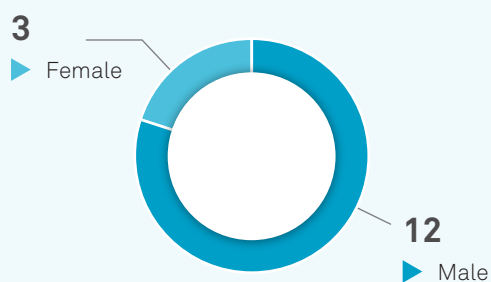
CORPORATE GOVERNANCE *(Continued)*

Board Diversity

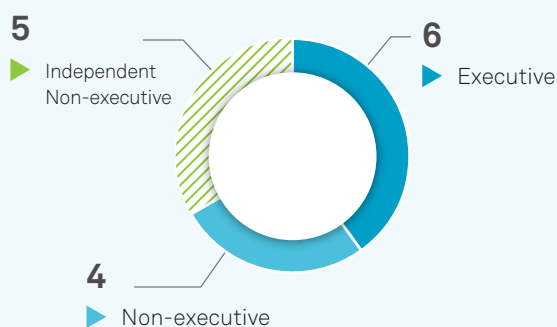
Since 2013, the Group has adopted a board diversity policy to ensure the Board has the applicable skills, experience and diverse viewpoints for the Group's business. The diverse background of the board members ensures that shareholders receive fair and impartial rights and benefits, ensuring that each decision made has considered the interests of all parties.

Composition of the board (as at 31 March 2019)

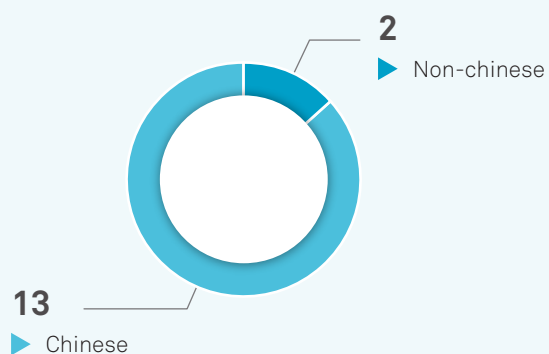
By gender



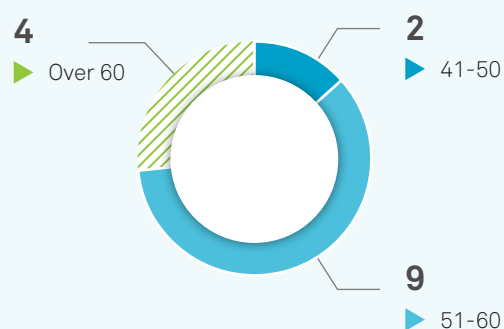
By designation



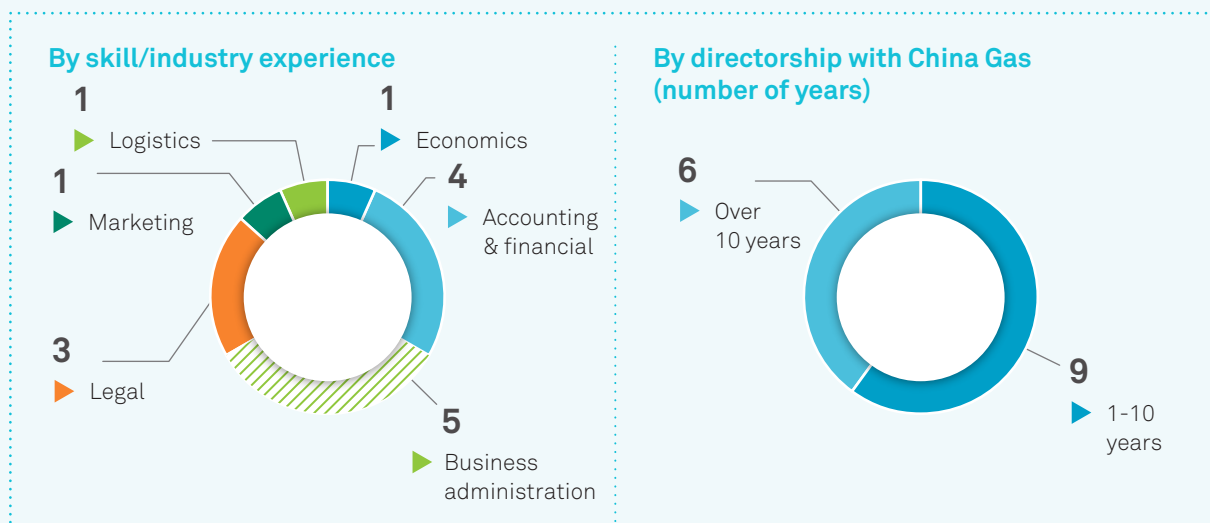
By ethnicity



By age



CORPORATE GOVERNANCE *(Continued)*



For details of the corporate governance of the Group, please refer to the 2018/19 Annual Report.

Regional Management and Control Mode

China Gas has implemented a management and control mode of “headquarters, regional management centres, and branch and subsidiary of core project companies”, which aims to decentralise the management focus, move the management platform forward, and allow for gradual authorisation by grading, thus promoting the transformation of the function of the headquarters from “management” to “service”. Through the strategic leadership of the headquarters, management at the regional level and dedication from project companies, we are able to maximise the creativity and vitality of front-line staffs, allowing the management system to be in line with the Group’s rapid development. To promote the development strategy of replacement of coal with gas, we issued effective policies such as the *China Gas Level-based Authorisation System of New Business including Replacement of Coal with Gas in Rural Areas* and the *China Gas Scheme for Further Improving Management and Control Mode of New Business including Replacement of Coal with Gas in Rural Areas*, to further control the Group’s corporate governance.



Headquarters

Responsible for formulating strategies, policies, systems and standards, controlling decisions and budget as well as supervision and control



Regional management centres

As an extension of the headquarters’ management arm, undertaking and implementing important management functions of the Group



Core project companies and its branches and subsidiaries

As a profit center and operating entity, it is subjected to supervision and management of the Group headquarters and regional management centres while enhancing its self-management and increasing profitability of various business at the same time

Establishing Sustainable Corporate Governance

CORPORATE GOVERNANCE *(Continued)*

Regional Management and Control Mode *(Continued)*



RISK MANAGEMENT

China Gas is committed to implementing an effective and sound risk management and internal control system to protect the interests of shareholders and the assets of the Group, thereby safeguarding the development of the Group.

The Group's *Comprehensive Risk Management System* has detailed provisions on the organisational risk management system, risk management process, internal control system, risk reporting mechanism, risk management information system, risk management cultural risk, and risk supervision and assessment; while the *Risk Management Guidelines* provides further guidance on the corporate internal control system, standardising the business process and accountability of all levels of the Group. We have also targeted the various risks in the construction process and formulated the *China Gas Construction Risk Management and Control Guidelines*, with an aim to remind the Group's construction personnel to recognise the prevalence of risks and identify the risk characteristics to ensure construction project is carried out in a standardised and safe manner, effectively preventing construction risks and gradually improving the risk control awareness of construction personnel.

Moreover, China Gas has set up a "Social Responsibility Taskforce", which is comprised of the Group's senior management and employees from key departments, including the Audit and Supervision Department, Legal Affairs and Risk Control Department and Safety Supervision Department, to assess the risks faced by the Group. To promote and carry out internal risk self-assessments, project companies also set up risk teams to supervise and review the existing risk management system, thus ensuring the effectiveness of the management system.

China Gas continuously undertakes to incorporate effective and sustainable corporate governance and internal control measures into its development strategy and risk management system through self-examination and professional advice from independent third parties.

RISK MANAGEMENT *(Continued)*

Elements of Risk Management

Investigation and research on replacement of coal with gas ("RCG") services to ensure new business compliance	Implementation of comprehensive risk management system
The RCG business is an important task for the Group to undertake its national mission and also a new driving force for the Group's development. The Group's Legal and Risk Control Department has repeatedly visited the worksite, and carries out research and study on the national policies and regulations to formulate the <i>Quality Certificate and Legal Document Guidelines for RCG Project Companies</i> , ensuring our RCG business is in compliance with regulations.	The Group's comprehensive risk management system has been in operation since 2017. The system includes 4 sub-modules: risk management, internal control management, risk warning and risk reporting.
Setting up public hotline, Creating wechat group, and promoting the formation of risk culture	Risk management training
To promote the formation of risk culture, the Legal and Risk Control Department has created the "China Gas Risk Control" WeChat group, and has published more than 100 documents relating to legal knowledge and risk cases.	The Group has organised trainings for the legal personnel, seminars on classic cases and other activities to raise awareness on risk management.

CORPORATE CODE OF CONDUCT

Anti-corruption

The *Anti-corruption Law of the PRC* and Hong Kong's *Prevention of Bribery Ordinance* aim to maintain social integrity and fairness, and protect the legal rights of service providers and customers. The Group firmly believes that misconducts such as corruption and bribery have significant negative impacts to the business development. Therefore, the Group strictly complies with relevant anti-corruption laws and regulations to maintain a good reputation and enhance its competitiveness.

To strengthen corporate governance through prevention and monitoring, China Gas has established the *Internal Audit Supervision and Management System*, *Internal Supervision and Reporting Management System*, *Upright and Diligent Handbook*, and *Engineering Materials Supplier Management System*. Our *Employees' Code of Conduct* states that all employees are prohibited from obtaining money from others or seeking gains from relatives and friends by taking advantage of their positions and duties, demonstrating our firm opposition on corruption, accepting or offering bribes.

We have also organised training and dissemination pertaining to the *Upright and Diligent Handbook*. Newly joined cadres in the Management Academy must also learn the handbook. During auditing and monitoring, if any violation of regulations is identified, the Group will impose penalties according to relevant provisions of *Employees' Rewards and Punishments Policy*. If necessary, violators will be handed over to judicial authorities by relevant departments of the Group. During the Reporting Period, there were three concluded legal cases regarding corrupt practices.

CORPORATE CODE OF CONDUCT *(Continued)*

Anti-corruption *(Continued)*

Total training hours on anti-corruption in FY2018/19 (hours)

	Male	Female	Total
Senior management	4,064	1,586	5,650
Middle-level management	12,262	6,270	18,532
General staff	67,815	31,548	99,363

Anti-competitive Behaviour

China Gas understands that stakeholders are concerned about prevention of anti-competitive behaviour, therefore we actively engaged in the prevention of anti-competitive behaviour in the market environment. The Group's *Employees' Code of Conduct* provides employees with guidance on anti-competitive behaviour and promotes employee integrity. In respect of bid invitation and bidding activities, the Group strictly follows national laws and regulations including the Law of the People's Republic of China ("PRC") against Unfair Competition, Law of the PRC on Bid Invitation and Bidding and Government Procurement Law of the PRC, and strictly prohibits illegal activities such as colluded bidding and bid rigging in the process.

Protection of Intellectual Property Rights

Under the *Employees' Code of Conduct*, all employees must respect and strictly prohibit copyright infringement and comply with all laws and regulations related to the protection of intellectual property rights. We also require suppliers and business partners to respect and defend the intellectual property of the Group.

SUPPLY CHAIN MANAGEMENT

FY2018/19

Supplier compliance rate reached

► **100%**

SUPPLY CHAIN MANAGEMENT *(Continued)*

Maintaining Fair Competition in the Supply Chain

The Group attaches great importance to the management of supply chain responsibility, and actively participate in the upstream and downstream markets to establish a benign competition platform for business partners with openness, order and win-win cooperation.

The Group's *Engineering Materials Supplier Management System* is the basis of the entire supply chain management, and supplier chain management is under the responsibility of the Group's Materials Procurement Department, including the preparation and revision of the *Engineering Materials Supplier Management System*, and providing guidance, supervision and monitoring of the supplier management system at the regional management centres and project companies.

The Group has a rigorous procurement process. All suppliers of important material must be registered in the China Gas Procurement Portals and go through inspection and passing the relevant approval process of the Group to become "eligible suppliers". Before engagement, we request all suppliers to obtain certifications for environmental management system and occupational health and safety management system to ensure that environment and social risks are properly controlled. Under the *Tendering Management System*, only the "eligible suppliers" within the China Gas Procurement Portals are eligible to participate in the annual tender invitation of the Group.

If a supplier uses fraudulent means to access China Gas Procurement Portals, involves in bid rigging, stringing or malicious bidding during the tendering process, as well as violating contractual requirements or national laws and regulations, the Group will blacklist and prohibit the supplier from participating in any tendering or procurement activities organised by the Group and its subsidiaries.

As at 31 March 2019, 226 suppliers (all located in Mainland China) completed registration on China Gas Procurement Portals.

Supervision and Evaluation

Aside from a fair qualification system, the Group also attaches great importance to the regulation on suppliers, so as to evaluate the performance of suppliers in an impartial manner. China Gas Procurement Portals categorises suppliers into six different statuses, including "certification completed", "suspended", "locked", "removed", "disqualified", and "blacklisted". The Materials Procurement Department would select a certain number of "eligible suppliers" from time to time annually and conduct on-site investigations on them, in order to verify the continuity of management level, technical competence and so on.

SUPPLY CHAIN MANAGEMENT *(Continued)*

Guidance and Training

The Materials Procurement Department is responsible for providing guidance and training related to the Group's material procurement management and providing specialised support and training to key project companies. The Materials Procurement Department also uploads professional course materials to the Group's E-learning system for the project company personnel to learn in their own time. On the basis of the annual unified training of the Group, the Materials Procurement Department combines the characteristics of different project companies to strengthen the training for project companies, state-owned enterprises, newly merged and acquired companies, and also improves the standard of materials procurement management through in-person training.

The Materials Procurement Department regularly conducts training on the operation of the China Gas Procurement Portals for suppliers, as well as compile and issue operational guidelines and system manuals. The Materials Procurement Department is also responsible for providing guidance, training and requirements for the suppliers in relation to procurement management business. For the important material suppliers, we clarify our management requirement and integrity requirement of China Gas through annual supplier conferences. For the key suppliers, we formulate the Group's ERP system and conduct face to face training through bidding procurement trading platform, and provide professional courseware for suppliers to learn independently. Moreover, the Materials Procurement Department evaluates the performance of suppliers, and strengthens the management of interviews with suppliers of poor performance results, and continuously improves the level of supplier performance management through various methods such as interviews and email notifications.

Providing Safe, Quality and Innovative Services

SAFETY FIRST

China Gas has always placed safe production as our priority and adopted the safety management approach of “Safety First, Prevention Foremost, and Integrated Management”, ensuring gas safety through multiple channels and methods.

The *Work Safety Law of the PRC* commits to ensuring occupational safety and safe production, and requires manufacturing organisations and employers to provide a safe working environment and protect employees from occupational hazards. The PRC’s *Regulation on the Administration of Urban Gas* delineates that gas operators shall formulate emergency plans for gas safety accidents, assign emergency staff, provide necessary emergency facilities and equipment, establish sound gas safety evaluation and risk management system, and organise regular drilling activities. The *Social Insurance Law of the PRC* is formulated for the purpose of regulating insurances on sickness, occupational injury, maternity, medical care, retirement and death, and also clarifies the legal liabilities of the employer. Compliance with these laws and regulations is paramount as workplace safety is of critical importance to each and every employee of the Group. As a socially responsible enterprise, the Group complies with relevant health and safety laws and regulations to provide employees with a safe workplace and suitable insurance. During the Reporting Period, there was no confirmed case of non-compliance in relation to health and safety that would have a significant impact on the Group.

Robust Safety Management System

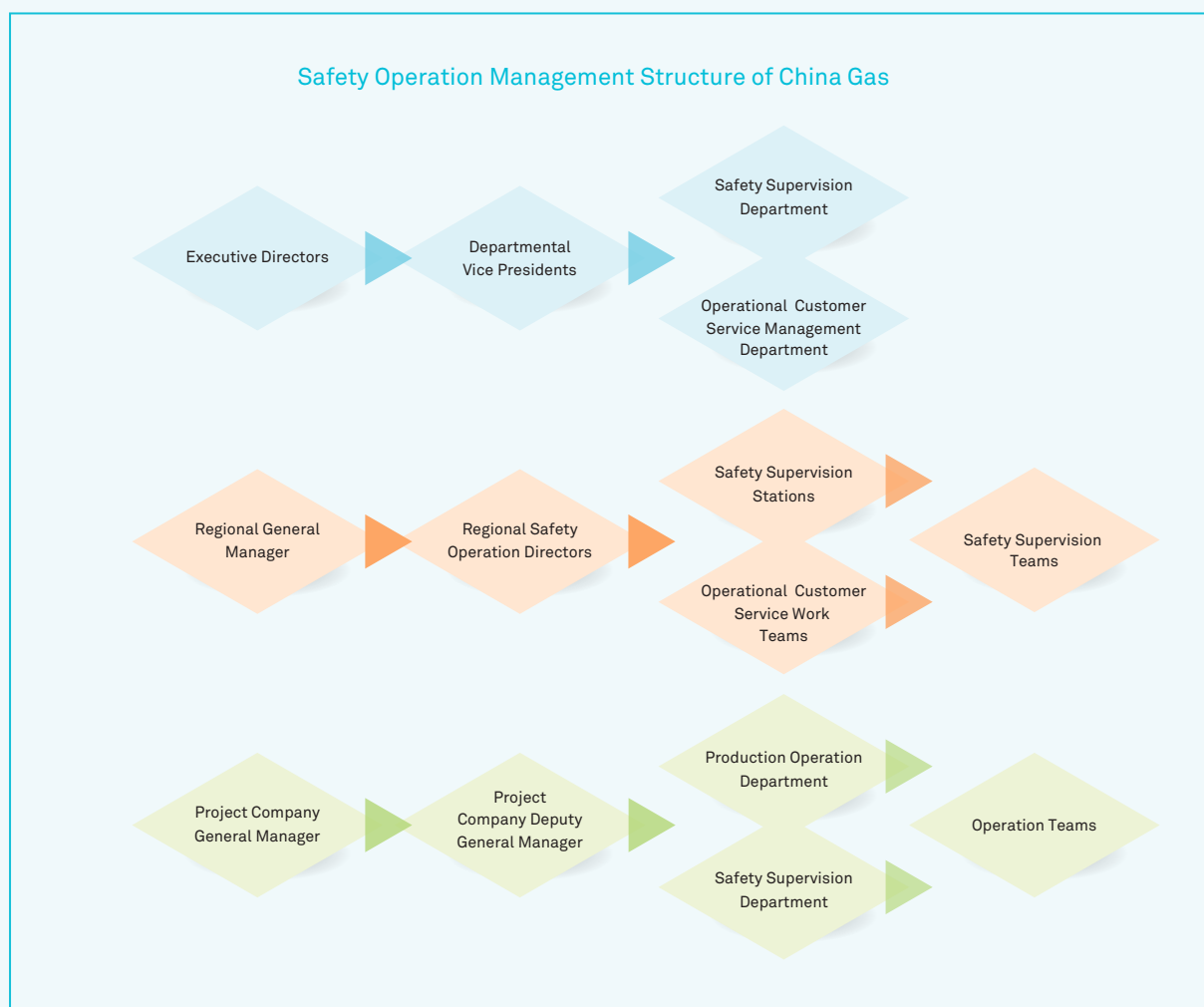
The Group has established a comprehensive *Safety Operation Management System*, ensuring the safety of employees, customers and the surrounding residents throughout different construction and operation stages.

SAFETY FIRST *(Continued)*

Robust Safety Management System *(Continued)*

Safety Operation Management Structure and Responsibility System

The Group's safety operation management structure is divided into three levels: headquarters, regional management centres and project companies. Each level has a dedicated Safety Supervision Department, Operational Customer Service Management Department and team. Management and staff at all levels have clear work safety responsibilities. All project companies must also sign the safety responsibility letters every fiscal year according to the corporate safety management targets, ensuring all departments, units and employees strictly implement the relevant targets, standards and measures.



SAFETY FIRST (Continued)

Robust Safety Management System (Continued)

Safety Management System and Standards

The Group has a complete and detailed set of safety operating procedures and guidelines, including 22 different guidelines, methods, procedures, standards or plans such as the *Guidelines for Inspection and Assessment of Safety Production Operations*, *Guidelines for Safety Supervision*, *Working Guidelines for EHS Management System*, *Integrated Treatment and Management Measures for Safety Incidents*, *Regulations on Long-distance Pipeline Gas Transmission and Distribution Management*, *Regulations on Township Gas Transmission and Distribution Management*, *Gas Facilities Operation and Maintenance Standards*, *Emergency Response Plan*, *Safety Operation Rules for Gas Transmission and Distribution*, and *Guidelines for Home Safety Inspection Management for Gas Users*.

For handling different working environments such as specialised operations, hot work, confined space operations, high-altitude operations, as well as the safety management of different products such as liquefied petroleum gas cylinders and dangerous chemicals, we have established dedicated safety operation management standards such as the *CNG Cylinder Station Safety Operation Management Standard*, *LNG Cylinder Station Safety Operation Management Standard*, *LPG Safety Operation Management Standard*, and *CNG, LNG and L-CNG Gas Station Safety Operation Management Standard*.

Safety Measures



Duties of the Operational Customer Service Management Department



The Group's Operational Customer Service Management Department has four main duties including "standardisation of transmission and distribution", "integration of scheduling systems", "rectification and management of transmission loss" and "cost control", with an aim to eliminating all safety incidents.

Safety Emergency Plan



Each project company has prepared an emergency plan to provide clear guidance for employees handling incidents occurred at gas pipeline network or gas stations, covering the formation of emergency commander and rescue team, and their responsibilities and division of work, as well as a summary of repairing equipment and safety equipment.

Safety Equipment



All project companies are equipped with warning signs, fire services equipment, explosion-proof equipment, lightning protection equipment, and protective equipment in hazardous locations such as gas stations, construction sites, and warehouses.

Safety Incident Management



Regardless of the amount of loss and liability, project companies must report each safety incident within 24 hours. Major accidents involving explosions and casualties must be reported to headquarters and regional management centres within one hour.

Safety Education and Training



The Group actively conducts safety education and training for all staff and customers to regulate employees' safety behaviours and improve the customers' emergency responsiveness and preparedness.



SAFETY FIRST (Continued)

Safety Production Month in FY2018/19

In May 2018, the Group's headquarters issued the *Notice on the Safety Production Month's Activities in 2018*, which required all regions and project companies to carry out safety production month's activities.

Safety production month's activities in FY2018/19

Number of emergency drills

▶ **311**

(Including more than 50 joint practices with local government)

Number of safety knowledge competitions or speech contests

▶ **95**

About 1,670 participants

Number of skills competitions

▶ **13**

Number of external gas safety promotion

▶ **655**

(Including 100 community visits)

Number of safety training organised

▶ **292**

About 8,000 participants

Number of safety-related publicity materials published

▶ **611,516**

Number of safety inspections

▶ **over 580**

(Including 173 full-scale safety inspections)

Number of other safety activities

▶ **over 100**

Launching Gas Safety Promotion

During the safety production month, each project company had gathered typical examples of accidents in the recent years with the theme of "life first, safe development", and used various forms such as exhibition boards and displays to educate the public and community residents about gas safety and protection of gas appliances, thereby increasing the public knowledge of natural gas. Many project companies also organised safety promotions along with the local government's safety inspection and fire services departments, including broadcasting knowledge contests and safety videos on TV stations, showing safety videos on mobile vehicles and at plaza, and conducting safety consultations, which had fostered a closer relationship with regulatory agencies.

SAFETY FIRST *(Continued)*

Safety Production Month in FY2018/19 *(Continued)*

Fujian region cooperating with Fujian Media to film the safety production month's activities

The Fujian region had invited Fujian Media's "Today's Fujian" to film the safety production month's activities. Through activities such as safety promotions, special inspections, trainings for industrial and commercial users and safety knowledge competitions, the Fujian region was able to spread out the idea of "converging in harmony and benefiting the society" and improve the reputation of China Gas in Fujian.

Yunnan project company organising safety production tour

The project company at Yunnan had carried out a safety production tour along with government agencies including the Anning City Housing Construction Bureau, Panlong District Housing Construction Bureau, Guandu District Housing Construction Bureau, and Guandu District Safety Administration and Supervision Bureau to promote user safety by visiting places such as companies, schools, institutions, communities, villages, families and public fields. More than 8,000 safety brochures and 50,000 leaflets were distributed during the promotion activities.

Conducting safety inspections to improve construction skills and service standards

Each project company had carried out various types of safety inspection with the theme of "all staff participation in safety inspection to eliminate hidden dangers with action" by categorising the indoor safety hazards and implementing 100% rectification requirement for first-level safety hazards. To strengthen the safety management of construction projects, construction safety inspections were carried out to monitor dangerous works such as working at high altitude, deep-pit and confined space, and carrying out hot work. Based on the inspection results, construction plans could then be revised accordingly to further improve construction safety.

South China region carrying out construction site safety skills competitions

Project companies in South China region had carried out safety skills competitions at the construction sites by conducting safety inspections during construction and implementing rectification measures when problems were identified. Such activities allowed the construction workers to better understand the importance of safe production and construction quality, and increased safety awareness at the construction sites. These activities also strengthened the employees' emphasis on the safety hazards at work, so that everyone could be a safety officer and put a stop to safety hazards in a timely manner.

Carrying out emergency drills to improve emergency management standards

Many project companies had taken the opportunity to work with the local government departments such as the liaison offices, safety administration and supervision bureaus, housing construction bureaus, fire services departments etc., conducting joint practices to improve coordination between the companies and government departments.

SAFETY FIRST *(Continued)*

Safety Production Month in FY2018/19 *(Continued)*

North China region conducting unscheduled emergency drills

The project companies in the North China region had carried out unscheduled (no specific location, time and subject and no advance notice) emergency drills in order to reflect the companies' emergency responsiveness. The drills simulated the gas leakage scenario to test the project company's alarm system, response time, customer service and operational cooperation. These drills had achieved good results and identified issues regarding the leakage alarm system. The project companies had learned a lot from the emergency drills, and the North China Regional Management Centre also used this experience as an example to promote emergency drills throughout the region.

Central China region launching emergency training for dangerous goods transportation and precautionary driving training

To improve the emergency responsiveness of dangerous goods drivers, the Central China region organised emergency trainings for accidents during transportation of dangerous goods and strengthened training for the transport vehicle drivers, including precautionary driving, knowledge of loading and unloading of dangerous goods, and emergency response procedure. A total of 449 participants from project companies and outsourced units had joined the training.

Workplace skill competition

The North China region organised skill competitions for different work positions including fire protection, pressure regulation, indoor meter installation, PE pipe welding, filter disassembly, etc. The competition had more than 200 participants, which had the most number of participating companies, participants and events ever since the establishment of the North China region.

In the Central China region, in order to improve the employees' capabilities, six project companies had conducted ten practical skill trainings, reaching a total of 155 participants.

Operation condor – safety operation training assessment

The Northeast region conducted operation condor – a safety operation training assessment at Jinzhou aiming to provide employee trainings in safety management, metering management, transmission and distribution management, scheduling management, equipment management, and maintenance and repair management, as well as combining on-site examination and final examination to assess the field operators and key management personnel and eventually they would be given a grade – excellent, pass or fail. This training promoted the skills and management standards of key personnel, laying a solid foundation of safe operation in the Northeast region.

SAFETY FIRST (Continued)

Occupational Health and Safety Statistics in FY2018/19

Rate of work-related injuries⁽¹⁾⁽²⁾

► **0.27**

Rate of work-related fatalities⁽³⁾

► **0.01**

Lost days due to work-related injuries

► **6,308**

Notes

- 1: Work-related injuries also include work-related fatalities and high-consequence work-related injuries.
- 2: Rate of work-related injuries = (Total number of work-related injuries/Total working hours) x 200,000.
- 3: Rate of work-related fatalities = (Total number of fatalities as a result of work-related injury/Total working hours) x 200,000.

ENSURING STABLE SUPPLY OF GAS

The PRC's *Regulation on the Administration of Urban Gas* mainly governs urban gas development planning and emergency protection, gas operation and service, use of gas, gas facilities protection, prevention and handling of gas safety accidents and relevant management activities. It is the Group's core value to abide by these rules in providing safe and reliable services. During the Reporting Period, there was no confirmed case of non-compliance in relation to product responsibility that would have a significant impact on the Group.

Rectification and Management of Transmission Loss

Gas leakage not only affects the corporate economic performance and generates carbon emissions, but may also cause severe safety accidents. China Gas implements a two-level transmission loss management mechanism, under which the Operational Customer Service Management Department of the headquarters is responsible for leading rectification work at all levels and conducting target-based assessments on transmission loss under an accountability system. The Group reviews and revises the *Rectification and Management Procedure for Transmission Loss* from time to time according to the Group's development, tackling transmission losses in four aspects: transmission loss in gas pipeline networks, transmission loss due to metering inaccuracies, transmission loss arising from data handling errors, and transmission loss due to gas theft.

Rectification of transmission loss due to metering inaccuracies

- Establish a robust metering management system
- Strengthen maintenance and weekly inspection of flowmeters
- Strengthen management on flowmeter selection
- Carry out special flowmeter rectification activities
- Provide dedicated meters to rural village users

Rectification of transmission loss due to gas theft

- Take practical measures to prevent gas theft
- Step up our inspection efforts to combat gas theft

ENSURING STABLE SUPPLY OF GAS *(Continued)*

Rectification and Management of Transmission Loss *(Continued)*

Rectification of transmission loss in gas pipeline networks	<ul style="list-style-type: none">• Establish robust scheduling and inspection systems to ensure tightness and safety of the gas transmission and distribution system• Establish a robust leakage detection and prevention mechanism to control the leakage rate at seal points of the gas transmission and distribution system• Establish a robust emergency repair mechanism to control gas leakage and unexpected incidents in the gas transmission and distribution system• Refine pipe replacement scheme to strictly control the amount of gas escaped during construction
Rectification of transmission loss arising from data handling errors	<ul style="list-style-type: none">• Conduct in-depth audits, user verifications, and meter and leakage inspections• Enhance efforts in internal inspections to improve meter recording accuracy• Perform monthly meter reading for wall-mounted heater users during warm seasons• Standardise billing practices for domestic prepaid users• Conduct operational safety checks of gas facilities by customer management officers• Arrange maintenance staff to carry out timely repair and rectification works when potential hazard is identified

To further improve metering management and transmission loss rectification measures, the Operational Customer Service Management Department at the headquarters issued [2018] No. 118 *Notice on Promoting the Application of Internet of Things Tables and Deepening the Special Rectification Activities of Flow Meters*. The aim is to use scientific and technological means to rectify the loss and continue to carry out special rectification activities for the meter.

ENSURING STABLE SUPPLY OF GAS *(Continued)*

Leakage Detection and Prevention Mechanism

The Group's *Management Guidelines for Gas Pipeline Network Inspection* clearly sets out contents and monitoring standards for gas pipeline network inspections. Each project company has also developed robust pipeline inspection systems to grasp information of the gas transmission and distribution system in a complete, timely and accurate manner. These systems can help us instantly locate the breakdown points and confirm impacts on users when issues arise, so that immediate repairs can be made. In the event of emergency repairs, the system can assist the dispatch center to make rapid decisions on valve closure in different segments. On-site emergency repairs staff can then quickly identify the valves that need to be shut off in accordance with work orders issued from the dispatch center. In case of valve failure or blockage, the dispatch center can be contacted in time and a secondary valve closure analysis can be performed in accordance with the site conditions. As a result, incidents in city gas pipeline networks can be promptly responded and handled to minimise accidental losses to the greatest extent possible, and the repair time can be shortened.

Emergency Repair Mechanism

The Group has developed the *Operation and Maintenance Management Standards for Gas Facilities*, which sets out management standards on pipeline network maintenance, emergency repairs, natural gas spherical tanks maintenance, and safety valves maintenance, and also prepares emergency response plans and conducts drills. To enhance the efforts in preventing damages to pipeline networks caused by third-party construction activities, the Group improved measures to manage third-party damages to gas facilities in a standardised and institutionalised manner. In particular, the Group revised the *Management and Assessment Measures for Third-Party Construction Damage Incidents (Accidents) for Gas Facilities*, which was gradually promoted to the full implementation of the Group in a red header document format together with a specialised assessment file.

Pipeline Network Renovation Plan

During the Reporting Period, we further rectified projects with potential hazards. In particular, we conducted comprehensive cleaning of aged cast iron pipeline networks that pose safety risks due to their prolonged operation time. We have completed systematic analysis on the current status of the Group's grey cast iron pipeline networks and aged steel pipeline networks, classified them in accordance with priorities, and implemented renovation plans in the Northeastern region, Northwestern region and North China region.



The total length of aged pipeline network having been renovated reached

▶ **390.4** km

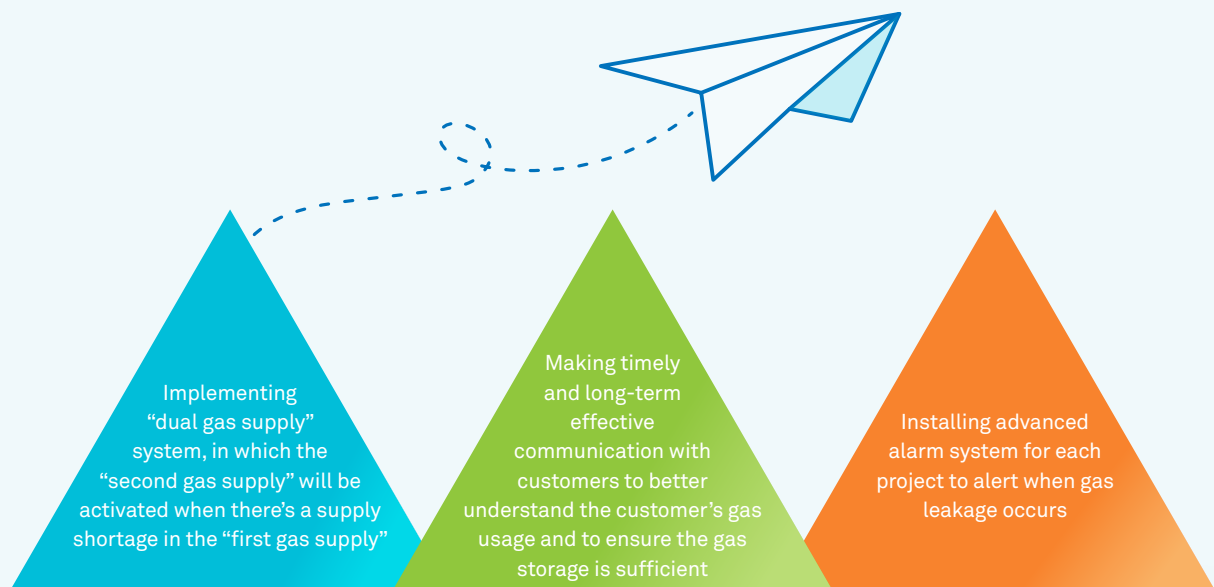
(As at 31 March 2019)

ENSURING STABLE SUPPLY OF GAS *(Continued)*

Responding to the Growing Demand for Natural Gas Supply

In recent years, the rapid increase in natural gas demand has brought certain challenges to provide a stable gas supply. The central government attaches great importance to the issue of natural gas supply and wishes to attract diversified natural gas imports for regulating the supply and demand of natural gas. To face the risk of gas shortage, China Gas is fully prepared by reporting gas usage plan to the upstream gas supply company based on the natural gas usage demand in the Northern region ever year in advance, including piped natural gas and LNG, thereby ensuring gas supply beforehand to avoid supply shortage. In Henan, we cooperated with different parties to set up Henan Natural Gas Storage and Transportation Company Limited, promoting the construction of natural gas storage facilities in Henan. Meanwhile, in Shandong, we invested RMB800 million in Shandong Oil and Gas Company Limited with projects including construction of gas storage and regulation facilities and refining of pipeline network, and also participated in the construction of LNG stations along the coastal areas of Shandong.

In terms of our operations, we have also implemented a variety of initiatives to ensure steady supply of natural gas during winter season.



IMPROVING SERVICE QUALITY

Customer Service System

With the strategy of “satisfaction from customers, recognition from societies, pride in employees” as our core value, China Gas is guided by the concept of “all-serving”, with a high level of service standards as the key, a robust service organisation as the safeguard, and effective communication service as the platform, thereby providing customers with active, thoughtful and efficient services.

China Gas has a wide range of customers, including residential, industrial and commercial users. In order to meet the needs of customers from different categories, regions and time zones, the Group revises and improves the service target value every year such that the service system is in line with the principle of “customer oriented, adapting to local conditions, highlighting key points, and continuous improvements”.

To enable customers to enjoy services with higher quality, the China Gas has built a three-tier management framework comprising of headquarters, regional management centres and project companies. Customer service centres are set up in project companies to provide customer service hotlines. The headquarters established eight guidelines on customer service operations management and seven technical guidelines on customer services, which clearly delineated the responsibilities at each level, so as to continuously improve customer service quality with a robust management mechanism.

The Group’s *Customer Service Management System* details the management structure, working procedure, daily management system, training system and assessment criteria of the Group’s customer service centre. The customer service centre aims to train each employee to become a “trustworthy natural gas expert”, thereby improving the quality of customer service and enhance the reputation of the Group. The *China Gas Employee Service Specification* also provides clarification on the requirements for different service positions. Each project company will continue to strengthen and improve the employee service specification to ensure its applicability, binding, cohesion, and progression, making it a service guide for all employees. In order to continuously improve the quality of service, the Group strengthened its home service and timely rate service. In FY2018/19, the Group’s on-time rate of maintenance, ignition and installation services reached over 95%. At the same time, we will promote online charging channels such as Bluetooth recharge device, scan code payment, business processing self-service terminals, and smart watches to meet the ever-increasing customer demand.

In addition, the Group has a dedicated team of lecturers to effectively train employees and to improve their service capabilities, ensuing employees transform the service targets and standards into real actions.

IMPROVING SERVICE QUALITY *(Continued)*

Protecting the Interests of Our Customers

The Group attaches great importance to the protection of customer data privacy and has established a dedicated policy to ensure that customer information are handled in a proper manner and to prevent information disclosure. For the customer data collected during the service process, the Group strictly enforces the account authorisation management requirements through the customer service information system to effectively protect customer information. The Group also promptly backs up customer information and stores in the bank's safe deposit boxes, and only allows dedicated staff to access. Relevant measures include:

1. In terms of networking hardware, we have adopted Huawei Cloud service to safeguard the security of back office with the use of firewall, DDOS, vulnerability scanner, etc.;
2. In terms of communication security, we have adopted HTTP to secure the communication between customers and server and to prevent third-party access;
3. In terms of data security, we have encrypted any highly confidential information which saved in the back office so as to avoid hack and steal;
4. In terms of management, the platform has established a comprehensive permission management system to ensure that every employee can only get access to the data and information which is within their responsibilities. Every employee has signed the confidentiality agreement and is not allowed to disclose customer information.

The Group has been developing new service monitoring channels and enhancing communication mechanisms through publication of performance pledges to the society, the launch of national service quality monitoring hotlines and the conduct of third-party customer satisfaction surveys. During the Reporting Period, all 327 complaints received by the Group's service quality monitoring hotline were properly handled, with complaint resolution and satisfaction rates reached 100%. The Group believes that, through close communication with customers, project companies can "Create Customer Satisfaction" at all levels of work.

INNOVATIVE SERVICES

Value-Added Services for End Users

In order to grasp the huge potential values brought by the customer network, the Group actively develops value-added services to further strengthen the profitability and competitiveness of the Group's service network, and to enhance the marketing and sales through enriching the scope of value-added services. With its diversified piped natural gas and liquefied petroleum gas service network and quality customer resources, China Gas actively promotes wall-mounted heaters, kitchen gas appliances, water purification products under its own brand of "Gasbo" and related value-added service business, thereby gradually expanding the portion of value-added service business in the Group's overall operating revenue, and driving the Group's transformation from a single gas product service provider into an integrated energy service provider with quality customer service.

In addition, the Group deployed and implemented a marketing plan of "business-driven value-added services for building a new business ecosystem", and worked towards reconstructing the traditional home living by launching the online "GasHome+" services and provided value-added services to bring about the internet home experience, thus exploring new opportunities for the market growth of the Group's value-added service business.



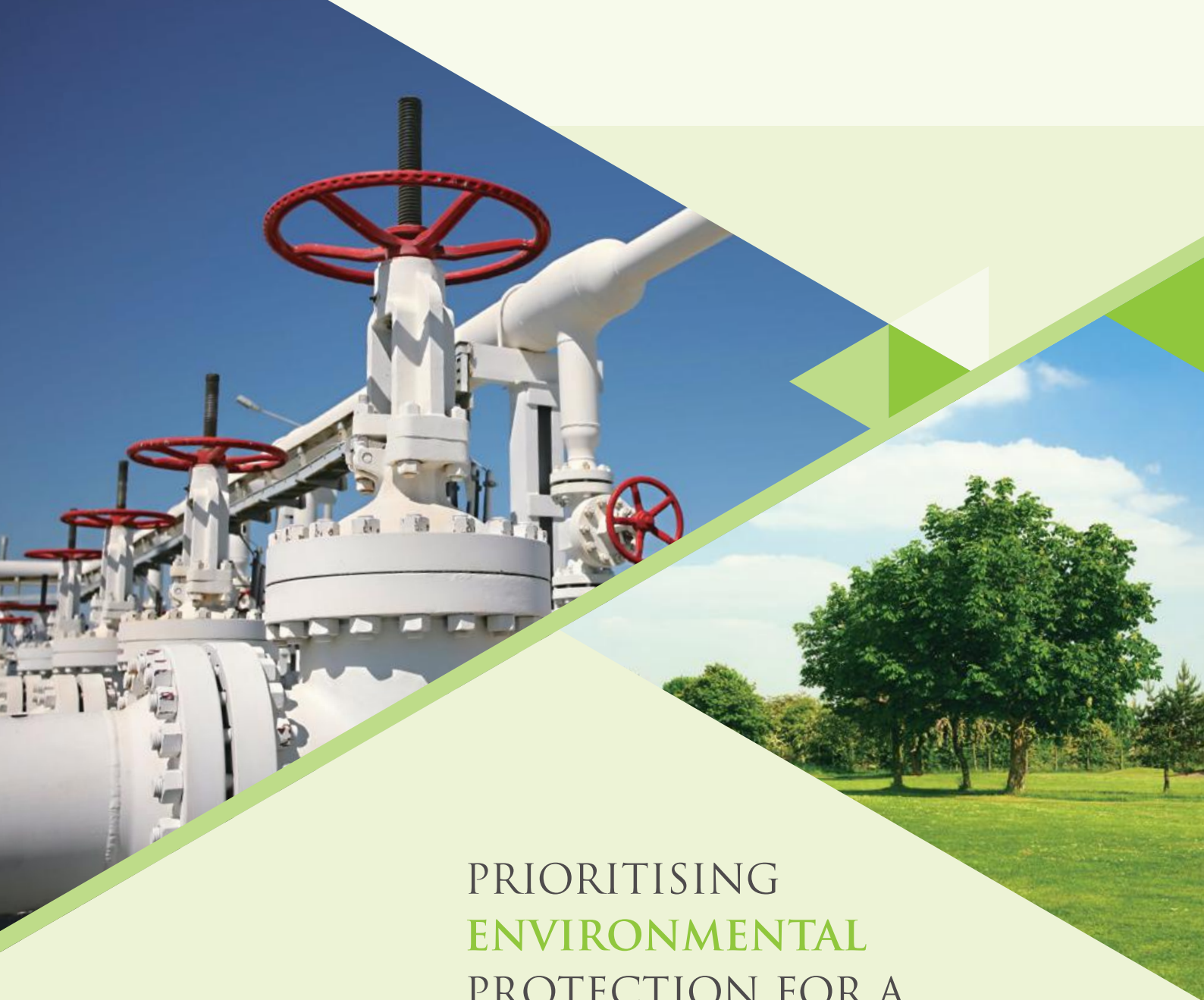
INNOVATIVE SERVICES *(Continued)*

Adjusting Direction Leading Revolution – Zhongran Smart Living

The Group has integrated online and offline sales effectively through the launch of Zhongran Smart Living APP by Zhongran Smart Living E-commerce Company Limited, in order to integrate resources via the E-commerce platform to provide one-stop smart living services to millions of users, including LPG ordering, gas payment and recharge, product sales, community services and household products O2O.

During the Reporting Period, Zhongran Smart Living continued to firmly implement the “one main business, one new core engine, two drivers and all forms of business operations” (112N) strategy, promoting online payment, inspection, meter reading and other value-added services through the Zhongran Smart Living APP, thus reducing the labour costs of the project companies, improving work efficiency and enhancing user experience. Zhongran Smart Living also established a dedicated team for developing online services by making use of the internet technology and the existing e-commerce platform and Zhongran Smart Living APP as the basis, and had launched a series of software products with satisfactory reviews from users.

At the same time, Zhongran Smart Living will keep up with the development of the latest trend, developing China Gas’s new retail e-commerce platform with APP, WeChat official account and software programs. The new retail e-commerce platform will serve the provision of gas services as a foundation, integrate the data of China Gas’s users, fully utilise the resources of China Gas’s businesses, communities, users, government and enterprises, and connect to the customer service system and ERP system. Through the help of big data technology, and application tools for membership and network management, an online and offline integrated value-added service can be achieved, promoting the development of value-added services.



PRIORITISING ENVIRONMENTAL PROTECTION FOR A NEW ERA

45

Creating Green Value

51

Appreciating Our Environment

Creating Green Value

ECONOMIC VALUE

	FY2018/19
	HK\$'000
Direct economic value generated	
Revenue	59,386,062
Other income	786,459
Share of results of associates	519,575
Share of results of joint ventures	1,132,056
Economic value distributed	
Staff costs	2,790,217
Other costs ⁽¹⁾	45,169,176
Finance costs	1,284,304
Dividends	1,776,864
Taxes ⁽²⁾	2,168,241
Profit attributable to non-controlling interest	760,185
Charitable donations	8,490
Economic value retained	
Retained for China Gas's sustainable operation and development	7,836,437

Notes

- 1: Represents other costs and other gains and losses but excludes depreciation and amortisation for the year.
 2: Represents current income tax but excludes deferred tax for FY2018/19.

PROCEED FIRMLY AND STEADILY IN EVERY OPPORTUNITY AND CHALLENGE

In 2018, under the background that energy crisis and climate change has become a international mainstream issue, energy replacement and green and low-carbon development became the common global mission. For the past 40 years since reform and opening-up. China, based on its own national conditions, leveraging its own comparative advantages, has actively assimilated into the global markets and actively promoted reforms and opening-up. Not only has China been able to maintain an impressive economic growth domestically, it has also significantly contributed to global economic development. China had become the world's largest energy producer and energy consumer, and had decisive influence on the world's energy landscape. It was an important force in the global energy structure adjustment. At the same time, we can also see that China was also facing an external environment with intensifying protectionism and unilateralism, and the downward pressure on the domestic economy is increasing. With the acceleration of industrialisation and urbanisation, energy demand continues to grow, and the construction of a stable, economic, clean and safe energy supply system faced huge challenges.

PROCEED FIRMLY AND STEADILY IN EVERY OPPORTUNITY AND CHALLENGE *(Continued)*

In response to the challenges, the government actively promotes energy structure reform and unveils a host of environmental protection policies to curtail air pollution and speeds up the progress of “replacement of coal with gas” initiative in key regions. A sustainable growth for natural gas segment has been enabled by a few favourable factors, including the integration of national pipeline network and the price marketisation of natural gas, as well as gradual introduction of industry supportive policies by the Chinese government. With the further encouragement of domestic development of natural gas at the main energy source, and given that Russia will be supplying natural gas to China by the end of 2019, the gas industry will face huge opportunities. The demand of natural gas will only increase and will enter a higher level of development. As one of the large-scale urban gas operators in China, the Group closely follows the national policies and the development trend, and has made consistent investment in the urban gas pipeline network so as to scale-up the replacement of coal with gas initiative in rural areas and the construction of beautiful countryside. The Group accelerates the pace of development of LPG wholesale and retail trading, LNG trading, thermoelectric, value-added services, distributed energy and other new businesses. Our “112N full-fledged industry development strategy” steers us to build an integrated energy ecosystem.

Looking into the future, in order to cope with macroeconomic slowdown and adjustment of industry policies, the Group will focus on “cost reduction with boosted efficiency, transformation and expansion” to promote business growth. Regarding natural gas business, the Group will continue to strengthen and optimise organisational structure, and drive organisational vitality through structural reform. The Group will further refine on operation and cost control, and press ahead with development of various businesses through marketisation and digitalisation. In addition, the Group will seize the opportunities provided by the national pipeline network reform, imported gas from Russia and the implementation of the China VI standard to materialise market expansion and rapid growth in operational efficiency. For LPG business, apart from “vertical integration” along the industry chain, the Group will intensify the “horizontal synergy” in the urban pipeline gas business covering both market expansion and resources procurement. The Group will continue to promote the vertical integration, and intensify expansion on the downstream market presence. The Group, by leveraging on its comparative advantages, will build the “4G” energy network and unleash the synergy due to the two-pronged development of natural gas segment and LPG segment. For value-added business, the Group will continue to focus on promoting Gasbo’s “New Retail” platform. By means of a customer-centric approach, grid network management and new retail system, the Group will continue to boost online and offline integration services that further enhance operation and services standards.

ALIGNING WITH SUSTAINABLE DEVELOPMENT GOALS OF UNITED NATIONS

China Gas follows the pulse of global economic, environmental and social development, and strives to promote the SDGs conceded at the Sustainable Development Summit of United Nations in 2015. Clean and efficient energy not only offers continuous support to long-term social and economic growth, but also creates job opportunities for industry development and promotes invention of advanced technology and products. In project operation, China Gas pays full attention to the impacts on the surrounding environment and communities. Our promise to combat climate change and protect the environment is also enacted through high standard of corporate governance and risk management.



SDG7

Ensure access to affordable, reliable, sustainable and modern energy for all

Targeting Downstream – Township “Replacement of Coal with Gas”

Phantom of air pollution has been elbowed to the south as winter air pollution became serious, and “red alert” occasions have become frequent in northern China. Therefore, in the beginning of 2017, the Group launched large-scale township “replacement of coal with gas” winter-heating initiative in the northern China through prudent investigation and study, scientific design, comprehensive planning, efficient construction and safe operation. The Group has also cooperated with provincial and municipal governments on environmental governance and entered into strategic cooperation agreements with them, aiming to leverage on mutual advantages and resources to accelerate project construction. Through effective organisation and cooperation, the utilisation rate of natural gas in cities and villages has been greatly improved, playing a major role in improving the air quality in northern China.

In FY2018/19, China continued to relentlessly promote township “replacement of coal with gas” initiatives at large-scale, with unprecedented intensity. Subsequent to the rolling out of major policies, including the *2017 Work Plan on Atmospheric Pollution Prevention and Control for Beijing-Tianjin-Hebei and Surrounding Areas*, the *Notification on the Pilot Scheme for Central Finance Subsidies to Support Clean Energy Winter Heating Programmes in Northern China* and the *Clean Energy Winter Heating Plan for Northern China (2017-2021)*, the State Council further unveiled the *Three-Year Action Plan for Winning a Battle for Defending the Blue Sky* in July 2018. As such, the State Council aimed to define the specific objectives for the governance of atmospheric air pollution for the forthcoming three years, along with the effort to extend the untreated coal control regions from “2+26” cities located along the air pollution transport channels to 40 cities lying across Beijing-Tianjin-Hebei region, the Fenhe-Weihe Plain and the Yangtze River Delta. The formulated measures on control of untreated coal included: a schedule that specifies the replacement of untreated coal for residential uses and winter heating shall be substantially completed in Beijing-Tianjin-Hebei and its peripheral areas, as well as the plain area in the Fenhe-Weihe Plain prior to the commencement of 2020 heating season; continued control of total coal consumption in key regions; enhanced control on coal-fired boilers and furnaces; substantial phasing out of coal-fired boilers with a capacity of 10 steam tonnes per hour and below, applying to cities of county level or above in the administrative hierarchy. While the introduction of these environmental protection policies provided directives and secured funding for the township “replacement of coal with gas” initiatives, they also actively encourage the use of natural gas in China and opened up incredible market potential in the aforesaid sector.

ALIGNING WITH UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS

(Continued)

Targeting Downstream – Township “Replacement of Coal with Gas” *(Continued)*

As at 31 March 2019, the Group’s cumulative contracted residential users for township “replacement of coal with gas” initiative amounted to more than 7 million household units in total, completed gas pipeline connections for township residential users amounted to 3,540,746 units, providing 605 million m³ of natural gas to rural residents for winter heating. This implies that the Group has contributed more than half in aggregate to the annual target proposed at the national environment conference in 2018, where the target set for the replacement of coal with gas/electricity was 4 million household units for the northern region. This is evident that our hard work has turned into encouraging outcomes. Using the Capital, Beijing, as an example, the average concentration of PM2.5 in Beijing continued to decline in 2018, representing a year-on-year decrease of 12.1%, while the number of days of severe pollution sank to 15 days. In addition, the annual average concentration of sulphur dioxide and nitrogen dioxide recorded in the capital also reduced by 25.0% and 8.7% from 2017, respectively. According to estimations, since “coal-to-gas replacement” initiatives at industrial level and township “replacement of coal with gas” initiatives are both governance effort to discourage the deployment of untreated coal, they altogether contributed to a 40% plummet of pollution level of PM2.5, and distinctively improved the air quality in northern China.

So far, the Group has established strategic partnerships with Tianjin municipality, Hebei, Shandong, Shanxi, Henan, Shaanxi, Anhui, Yunnan, Hainan and Heilongjiang provinces respectively, and implemented projects in more than 239 cities, counties or districts, such as township “replacement of coal with gas”, conversion of coal-fired boilers to gas-fired boilers, gas for vehicles, distributed energy resources, gas storage facilities, gas pipeline network and “beautiful villages”.

Benefiting from the country’s effective implementation of natural gas utilisation policies such as industrial and commercial “coal-to-gas replacement” and township “replacement of coal with gas” in northern China, the demand of natural gas in China is growing rapidly. Therefore, the Group combined the urban gas, gas for vehicles and vessels, LPG business, LPG trading, distributed energy and value-added business through implementing the “Three-Leap” strategic breakthrough plan. By adopting the “cross-region”, “cross-method”, “cross-category” development models, different business segments have created synergistic effects and achieved full coverage of gas supply in cities and towns, giving a positive thrust to the nation-wide application of various clean energies.



SDG13

Take urgent action to combat climate change and its impacts

ALIGNING WITH UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS

(Continued)

Creating a Clean Energy Supply Chain

Air pollution and smog have seriously affected daily lives and health of the public. China Gas understands the importance of its role in tackling climate change as an energy service company. Through synergies of various business segments, we help build a clean energy supply chain that reduces greenhouse gas emissions and protects the environment.

Natural gas, a green and clean energy, is technologically mature in terms of production, storage and transportation comparing with solar energy, wind energy and biomass energy. Its economic potential and feasibility are far greater than other new energies. Therefore, replacing traditional polluting fuels such as coal and heavy oil with natural gas can effectively reduce air pollutants and carbon dioxide equivalent emissions, presenting an effective way to relieve the current air pollution problems.

In 2018, our country rolled several environmental protection policies with stepped up effort to steer ahead with atmospheric pollution prevention and control endeavours. It also vigorously pressed ahead with “coal-to-gas replacement” in key areas to ensure that the coverage of natural gas was gradually expanding in rural areas. Remarkable progress was recorded in the building of supply guarantee system. Due to the effective conservation of gas source, the tightened gas supply in winter was alleviated. Natural gas consumption continued to substantiate high-speed growth in China. According to the statistics published by the National Bureau of Statistics, the apparent consumption of natural gas in China reached 280.3 billion m³ in 2018, representing year-on-year growth of 18.1%, amongst which, the imported volume of natural gas hit a record high that it exceeded 90 million tonnes. Meanwhile, the pace for the marketisation for domestic natural gas prices gathered momentum. In June 2018, the gate prices of residents and non-residents were synchronised as the upstream and downstream price linkage mechanism executed, eliciting emerging opportunities for the continued growth of the natural gas market.

In the overall picture of national gas supply, a preliminary supply landscape, featured by “gas transmission from west to east, from north to south and from offshore to onshore with nearby supply” started to take shape. The network of natural gas trunk pipeline spreads across all provinces except Tibet. According to the *13th Five-Year Plan for Energy Development*, the *13th Five-Year Plan for Natural Gas Development* and the *Medium and Long-term Oil and Gas Pipeline Network Plan*, our country intends to build trunk pipelines and ancillary pipelines for natural gas reaching 40,000 km in total during the period of the 13th Five-Year Plan. The total length of the pipelines will be further extended to 104,000 km by 2020, with an annual gas transmission capacity reaching above 400 billion m³ and the total length climbed to 163,000 km by 2025. A nationwide natural gas network will be laid as “trunk lines and the branches interconnect and every region forms a local network”. In the future, with the further refinement in the national pipeline network and gas storage facilities, the shortage of gas sources will be effectively accommodated. Natural gas industry in China, by then, will be ushered into a new phase of comprehensive development.

ALIGNING WITH UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS

(Continued)

Creating a Clean Energy Supply Chain *(Continued)*

In addition, with the advancement of environmental protection policies, as well as changes in the energy structure and consumption patterns, the energy industry in China is undergoing an unprecedented transformation, i.e. use of clean energy, diversification of energy use and integration of energy supply. The Group has been capitalising on its strength generated by the huge market and large customer base of its gas projects to be engaged in facilitating extensive deployment of new business in China, such as gas-fired distributed energy, photovoltaic power generation, distribution and sale of electricity, electric-vehicle charging facilities and centralised heating. The Group seeks to carry out integrated utilisation of energy resources with years of cumulative experience in market development and technical innovation, in an effort to provide customers with highly efficient integrated energy resources that address their needs for gas, heating, electricity and cooling.



SDG17

Strengthen the means of implementation and revitalise the global partnership for sustainable development

Through active cooperation with provincial and municipal governments on environmental governance and developing strategic cooperation framework agreements with them, the Group aims to combine the advantages and resources of each other to accelerate project development for promoting natural gas utilisation in cities, towns and villages.

China Gas Cooperates with Multiple Parties to Form a Provincial Natural Gas Storage and Transportation Company

On 16 October 2018, the signing ceremony of the quadripartite cooperation agreement cum opening ceremony for Henan Natural Gas Storage and Transportation Co., Ltd was held in Zhengzhou, signifying a clear plan and platform for the construction of natural gas storage facilities in Henan Province.

To facilitate the construction of natural gas storage facilities in Henan Province and rectify the issue of limited gas storage capacity, Zhongran Hongda Energy Trading Co., Ltd, Henan Investment Group Co., Ltd, China National Offshore Oil and Gas Group Co., Ltd, and Henan Energy and Chemical Group Co., Ltd jointly established Henan Natural Gas Storage and Transportation Co., Ltd according to the arrangement under the provincial government, to undertake the mission of natural gas storage capacity development in Henan Province. By leasing a 3 million m³ salt-cavern gas storage located at Ye County, Pindingshan from PetroChina Co., Ltd and a 4 million m³ Wen 23 underground gas storage located at Puyang from China Petroleum and Chemical Corporation, development of a large-scale LNG storage tank through joint-venture, as well as planning of 6 regional gas storage centres in Zhengzhou and Luoyang, the total gas storage capacity developed for Henan Province would be approximately 1 billion m³, thus effectively solving the province's emergency peak-shaving problems and fulfilling the gas storage target.

According to the plan, the natural gas storage capacity of Henan Province will reach 1 billion m³ by the end of 2020, providing a resolution to the livelihood-related gas shortage problem in Henan.

Appreciating Our Environment

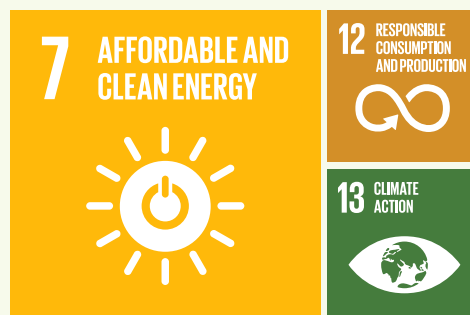
MANAGEMENT APPROACH

China Gas pledges itself to commit to safeguarding the environment.

China Gas strictly follows relevant environmental laws and regulations including the *Environmental Protection Law of the PRC*, *Law of the PRC on Environmental Impact Assessment*, *Atmospheric Pollution Prevention and Control Law of the PRC*, *Water Pollution Prevention and Control Law of the PRC*, *Soil Pollution Prevention and Control Law of the PRC*, and *Law of the PRC on the Prevention and Control of Environmental Pollution by Solid Waste*, continuously strengthens and standardises energy management and environmental protection works through establishing and improving various energy conservation and environmental protection systems, commits to reducing the potential impacts of production and operations on the ecological environment and biodiversity, as well as actively preventing and striving to mitigate the environmental impacts brought by its operation and business activities.

We understand that it is important to meet these statutory obligations as violation of any of applicable environmental laws and regulations may result in penalties, suspension of operation, and/or legal action against the Group by regulatory authorities. During the Reporting Period, there was no administrative penalty imposed on China Gas with regards to violation of environmental laws and regulations that would have a significant impact on the Group.

The Group has developed the *Environmental and Social Management System*, setting up the framework of environmental and social policies to ensure our operations comply with applicable PRC environmental laws and regulations and meet the environmental and social safeguard requirements as stipulated in the *Safeguard Policy Statement* of the ADB. The system covers air and greenhouse gas emissions, discharges into water and land, and generation and handling of hazardous and non-hazardous waste. The Group has also set up *Environmental Management System* in accordance with ISO 14001 standard and prepared guidelines on environmental protection, occupational health and safe production issues. All business units and subsidiaries of the Group are required to implement the relevant policies.



Appreciating Our Environment

PROTECTING THE ENVIRONMENT AND NATURAL RESOURCES

With China's stable macroeconomic development, effective implementation of environmental policies such as coal-to-gas conversion, and the people's increasing awareness of livable environment and health, the energy structure is leaning towards clean, decarbonised, safe and efficient development. The market demand for clean energy such as natural gas and liquefied petroleum gas will remain a steady growth and play a prominent role in the global energy transformation.

As one of China's largest cross-regional energy service providers, China Gas consistently implements the low-carbon development strategy proposed by the government, actively cooperates with provincial and municipal governments on atmospheric environmental governance and enters into strategic cooperation framework agreements with them, aiming to combine the advantages and resources of each other to accelerate project construction and increase natural gas utilisation in cities, towns and villages, thereby helping industrial and commercial organisations and residents to reduce air pollutants and greenhouse gas emissions through our business.

Prior to commencing construction projects, we follow the statutory procedures to carry out environmental impact assessment, and strictly implement the Group's *Environmental Impact Assessment Report Outline* and *China Gas Construction Risk Management and Control Guidelines* to identify potential environmental impacts and risks, which help us avoid, reduce and mitigate these impacts. The Group strictly abides by the laws, regulations and related requirements of environmental protection. During the reporting period, the Group did not violate relevant environmental laws and regulations.

Promote green construction

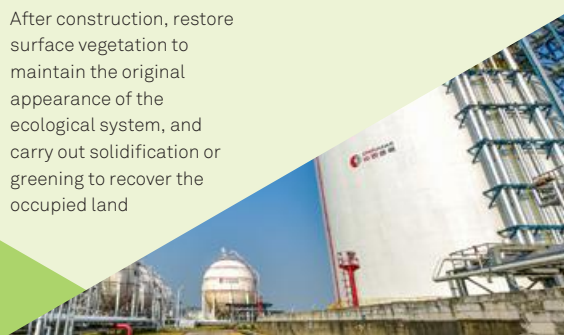
Before construction, carry out environmental assessment, promote civilised construction, and adopt mitigation measures such as geomembrane cover



During construction, use atomising sprayer to reduce dust pollution, implement environmental protection measures to minimise land usage and damage to vegetation



After construction, restore surface vegetation to maintain the original appearance of the ecological system, and carry out solidification or greening to recover the occupied land



Appreciating Our Environment

PROTECTING THE ENVIRONMENT AND NATURAL RESOURCES *(Continued)*

Advocate green office operations



- ▶ Improve the company's management platform and information technology platform to achieve a paperless office
- ▶ Promote double-sided printing to reduce paper usage
- ▶ Adjust the air conditioning temperature according to room temperature to reduce office electricity usage
- ▶ Encourage employees to travel green
- ▶ Regular use of video conferencing to reduce business travels

Strengthen environmental protection



- ▶ Enhance promotion of environmental protection, actively organise and participate in environmental philanthropy activities, raise employees' awareness of ecological and environmental protection, and promote low-carbon lifestyle
- ▶ Actively build a communication platform with stakeholders such as governments, media and the public to promote environmental protection concepts

COUNTERING CLIMATE CHANGE AND MANAGING EMISSIONS

Compared with coal, the use of natural gas as the main energy source can effectively reduce atmospheric pollutants and greenhouse gas emissions, which would support environmental protection policies such as *Air Pollution Prevention and Control Action Plan*, *Three-Year Action Plan on Defending the Blue Sky*, and *Promoting the Use of Clean Energy in Winter Heating in North China (2017 – 2021)*.

To actively respond to the changes in national policies and market conditions, China Gas is committed to low-carbon development and geared efforts towards building a new ecosystem for China Gas's 4G (piped natural gas ("PNG"), CNG, LNG and LPG) energy network development, and continues to develop township "replacement of coal with gas" and "point to point gas supply", and speeds up the market planning of and investment in emerging business.

China Gas continues to adhere to the high emission standards, strictly implements emissions standards as stipulated in the *Integrated Emission Standard of Air Pollutants* (GB 16297-1996) and *Emission Standards of Air Pollutants for Boiler* (GB 13271-2014) to ensure all facilities and equipment are reliable and stable.

COUNTERING CLIMATE CHANGE AND MANAGING EMISSIONS *(Continued)*

Air Pollution Control Measures

- Use applicable gas transmission technology and select high-quality materials, and fully consider the adoption of seismic-resistant design for the pipeline and its ancillary facilities to ensure stable operation and prevent gas leakage
- Reduce venting and leakage, and set up a venting system at gas stations to discharge gas at a higher altitude through venting tube, thereby reducing the safety hazards and environmental pollution caused by venting of natural gas
- Implement comprehensive management to reduce gas leakage and safety incidents through systems and measures such as *Rectification and Management Procedure for Transmission Loss, Scheduling and Inspection System, Leakage Detection and Prevention Mechanism*, and *Emergency Repair Mechanism*

Air emissions in FY2018/19 ⁽¹⁾ (tonne)	
Nitrogen Oxides (NO _x)	164.74
Sulphur Dioxide (SO ₂)	247.11
Particulate Matter (PM)	23.53

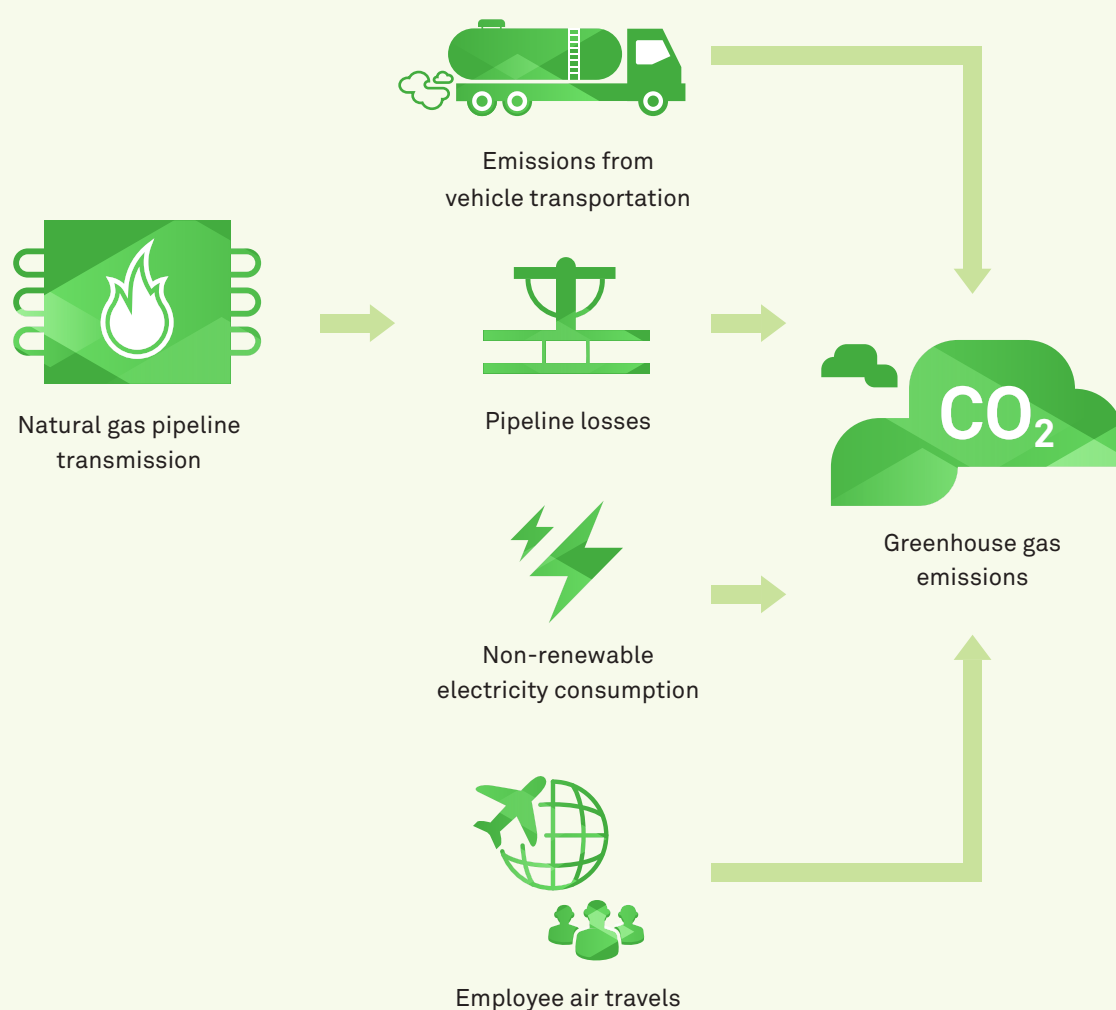
Notes

1. Air emissions are calculated by estimating the indirect air emissions from non-renewable electricity consumption with emission factors adopted from *The Clean Air Charter - A Business Guidebook* published by the Hong Kong General Chamber of Commerce and the Hong Kong Business Coalition on the Environment.

COUNTERING CLIMATE CHANGE AND MANAGING EMISSIONS *(Continued)*

Greenhouse Gas Monitoring and Control

To strengthen the management of carbon emissions, the Group estimated projects' greenhouse gas emissions with reference to the methodologies of the Clean Development Mechanism under the United Nations Framework Convention on Climate Change. Emissions included consumption of fossil fuels for operations, fugitive emissions released during transmission/transportation and storage of natural gas and LPG and purchased electricity consumption. The Group will continue to monitor the greenhouse gas emission data to establish a robust management plan in the future to reduce greenhouse gas emissions and strengthen the management of fossil fuel and energy consumption, and thus emission reduction can be more effective.



COUNTERING CLIMATE CHANGE AND MANAGING EMISSIONS *(Continued)*

Greenhouse Gas Monitoring and Control *(Continued)*

Greenhouse Gas Emissions in FY2018/19

Greenhouse gas (GHG)	Source(s)	Emissions
Scope 1: Direct Emissions (tCO₂e)	Consumption of fossil fuels for operations, fugitive emissions released during transmission/transportation and storage of natural gas and LPG	111,833.15
Scope 2: Energy Indirect Emissions (tCO₂e)	Consumption of non-renewable purchased electricity	77,776.57
Scope 3: Other Indirect Emissions (tCO₂e)	Employee air travels	44.44
Total GHG Emissions (tCO₂e)		189,654.16
GHG Intensity (kgCO₂e/GJ of energy sold)		0.19

RESOURCES UTILISATION AND WASTE REDUCTION

We are committed to adopting different measures to reduce the environmental impact of all aspects in the value chain, including the use of sustainable materials and minimising waste. For office environmental management, the Group continues to promote the *7S Office Environment Management System* to advocate the principle of frugality and conservation and build a resource-saving enterprise with employees. In terms of operational management, each project strictly complies with the Group's material use management objectives. About 99% of the materials used in the production of cylinders are recyclable materials (steel, brass), and only the remaining 1% are non-recyclable paint coatings.

Office green measure – office printing improvement programme

Since 2017, the Group has cooperated with Fuji Xerox to implement the *Office Printing Improvement Programme* to actively promote printing improvement measures and encourage employees to change their printing habits, thereby improving the efficiency of printing and reducing energy consumption. After one year of implementation, the cost of printing at China Gas headquarters was decreased by 5%. Report on printer usage is also released monthly to raise the double-sided printing rate.

RESOURCE UTILISATION AND WASTE REDUCTION *(Continued)*

Material Consumption Statistics in FY2018/19

Material consumed	Unit	Quantity
LPG cylinder	No.	422,453
Lubricant	tonne	123
Paper product / cardboard	tonne	1,769
Plastic	tonne	610
Wood board	tonne	7
Odorant	tonne	85

The non-hazardous waste generated during operations mainly includes domestic waste from offices, non-hazardous parts produced during the manufacturing and maintenance of gas appliances, as well as small amount of waste generated from cleaning of the gas transmission pipelines. Hazardous waste mainly include waste machinery oil, hazardous and expired chemicals and hazardous metals from the waste circuit boards of gas appliances. The Group strictly manages the generation and disposal of waste, non-hazardous waste is regularly collected and disposed of by the sanitation department while hazardous waste is handled by qualified collectors for proper disposal. The Group also closely monitors the usage of machinery oil and chemicals to reduce wastage and generation of hazardous waste.

Appreciating Our Environment

WATER SAVING

Water is an important and valuable natural resource. In accordance with the *7S Office Environmental Management System*, the Group is committed to the protection of water resources by strengthening water conservation, enhancing water recycling, and improving the utilisation of water resources. We have adopted water saving and conservation measures in projects and offices, including:

- install rainwater harvesting facilities
- utilise recirculating water for water-consuming equipment such as natural gas compressors, ice machines, and sprinkler systems to improve water efficiency
- install automatic sensor water taps in offices

During the Reporting Period, the Group's total water consumption was 1,664,769 tonnes. The water intensity was 2.09 kg/GJ of energy sold, which was decreased by about 43% compared with FY2017/18.

Water Withdrawal by Source (tonne)

Surface water	Groundwater	Municipal water suppliers or other water utilities	Total
61,284	38,363	1,565,121	1,664,768

Wastewater generated by the Group mainly includes wastewater produced from operations, cleaning of equipment and domestic sewage from employees. The Group strictly implements the national water pollution prevention policies and effluent discharge standards, adheres to the principle of “focusing on source control, strengthening monitoring methods, adopting centralised wastewater treatment, and improving emergency response system”, and takes proactive actions to prevent potential water pollution from happening. During the Reporting Period, the Group's total wastewater discharged was 832,384 tonnes.

Water pollution control measures



- ▶ Closely monitor the collection and treatment of wastewater, conduct regular inspection of wastewater treatment facilities and sewage tanks to prevent leakage of process and domestic wastewater and prevent pollution to the surrounding waterbodies
- ▶ Install seepage control measures at the wastewater treatment facilities, sewage tanks, and garbage bins
- ▶ Set up emergency response plans for water sources to clarify the responsibilities of each department during emergency. Once a water pollution accident occurs, emergency response plans should be initiated immediately to identify and terminate the sources of pollution, and investigate the scale, extent and severity of the pollution

Appreciating Our Environment

WATER SAVING (Continued)

Water Discharged by Source (tonne)

Surface water	Municipal wastewater treatment plants or other wastewater treatment facilities	Total
21,654	810,730	832,384

INCREASING ENERGY USAGE EFFICIENCY

Resource consumed in the daily operations and transportation mainly include natural gas, LPG, petrol, diesel, electricity, etc. The Group upholds the energy-saving development model and strives to reduce energy consumption.

The Group is also committed to improving the environmental performance of its fleet vehicles to reduce its fuel consumption and support sustainable transportation. The Group formulated the *China Gas Vehicle Management System* to regulate the equipment, replacement and procurement management of various types of vehicles used by the subsidiaries of China Gas. When purchasing vehicles, economic vehicles with low emissions are prioritised. Vehicle expenses are also strictly monitored to reduce vehicle fuel consumption.

During the Reporting Period, the Group's total direct energy consumption was 1,667,892 GJ and the energy intensity was maintained at 0.002 GJ/GJ of energy sold.

Direct Energy Consumption Statistics in FY2018/19

Fuel consumption	Unit	FY2018/19
Gasoline	m ³	2,672
Natural gas	m ³	8,862,018
Diesel	tonne	9,758
Liquefied petroleum gas	tonne	5,407
Heavy oil	tonne	2,930
Fuel oil	tonne	3,223
Energy consumption		
Non-renewable electricity consumption	kWh	117,670,447
Renewable electricity consumption	kWh	246,710

BIODIVERSITY CONSERVATION

Gas processing and distribution may interfere with land or wildlife habitats, therefore mitigating the impact on biodiversity has become an important part of our environmental management policy. In addition to controlling the effects of air emissions, noise pollution and human disturbance on animals and plants, China Gas is committed to promoting biodiversity, particularly the natural habitats along the pipelines and sensitive areas with high ecological value, in order to fully protect the ecological environment around the project areas.

Ecological environmental protection measures



- ▶ Under the premise of ensuring construction quality, the construction of gas transmission pipelines should avoid passing through nature reserves, eco-functional areas, forest parks and forest areas as much as possible to reduce damage to vegetation
- ▶ Ensure prudent planning for land permanently occupied by pipelines and implement strict control of the construction areas; construction should be in parallel and along the longitudinal direction of the road to reduce soil disturbance and damage to surface vegetation, and to avoid exposing land and soils to erosion
- ▶ On-site construction machinery should be strictly controlled, and the scope of activities should be delineated; off-road vehicle driving and work are prohibited in order to keep the vegetation intact
- ▶ Strengthen the construction management and environmental awareness of construction workers, including information about the national protected species, and implement effective protective measures based on the characteristics of vegetations along the project boundary
- ▶ Restore the land to its original land use pattern after the completion of construction works, and adopt greening measure for planting trees and grasses according to the climate

Biodiversity conservation measures



- ▶ Strengthen the management of construction workers, and prevent destructive logging of wild plants (particularly attaching great importance to the nature reserve areas) which would cause ecological and environmental damage along the pipelines
- ▶ Increase the promotion of protecting wild animals, including advocating the roles of amphibians, reptiles and birds in the ecosystems, and prohibit construction workers from killing wild animals
- ▶ Strengthen the ecological protection in the project areas, especially in the forest areas by setting up signboards, to publicise the protection of wildlife and the ecological environment of its habitats, and increase the public's awareness on the protection of wildlife and ecological environment
- ▶ Strengthen the protection of water environment, avoid pollution or eutrophication in the waterbodies along the project areas and minimise impact on the habitat of aquatic species

BIODIVERSITY CONSERVATION *(Continued)*

Green design principle



- ▶ Under the principle of "right tree and right grass for the right place", the selection of tree and grass species should be based on detailed surveys of the topographic, soil and climate conditions in each region; utilise native species as the main species and introduce appropriate new species to ensure a high successful rate of green planting
- ▶ During restoration, in addition to selecting species that are suitable for the local environment, the restoration layout should also consider the interaction of multiple species based on the environmental characteristics along the project boundary, to improve the diversity of plant species and also minimise changes to the original species composition, thereby enhancing the stability of green planting
- ▶ Target greening in the office areas by planting ornamental evergreen trees around the office buildings, setting up flower beds, and planning small gardens to introduce a good sense of nature and space and make use of the open area for greening; different kinds of trees and flowers will also be used depending on the climate in the region, and strive to expand the greening area



ADOPT
“EMPLOYEE-ORIENTED”
PRINCIPLE TO
CONSTRUCT
A GOOD WORKPLACE

63

Caring for the Growth of Employees

Caring for the Growth of Employees

MANAGEMENT APPROACH

Adhering to the concept of “people-oriented, pursuit of excellence”, we strive to become an excellent employer, put our corporate culture into practice with our employees and act as a role model to the industry.

We strictly abide by labour-related laws and regulations such as the *Labour Law of the PRC* and *Labour Contract Law of the PRC*, respect the basic rights of employees and uphold the principle of equal employment. Discriminatory conducts in relation to gender, ethnicity, age, religion, health, marriage status, family status, etc. are forbidden in operation or recruitment process. We also prohibit the employment of child labour, forced labour and those who provide false identity.

China Gas highly values the rights and well-being of its employees, and commits to strictly comply with relevant employment and labour standards. During the Reporting Period, there was no administrative penalty imposed on China Gas with regards to labour security, child labour or forced labour that would have a significant impact on the Group.

With an aim to create a diversified and inclusive working environment, the Group's *Human Resources Management Manual* and *Recruitment Management System*, which advocates “three-ness” with respect to openness, fairness and righteousness, provide detailed guidelines relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity and diversity, anti-discrimination, training, other benefits and welfare, etc.

The Group also set up a Staff Care Committee to promote various welfare activities and organise diversified leisure activities.



TALENT PHILOSOPHY OF CHINA GAS

As one of China's largest cross regional energy service providers, China Gas always values talents as the top resource for the Group's development. We continuously build a broad career development platform for our employees and provide them with a good workplace, competitive remuneration and benefits, comprehensive career development training, and a variety of leisure activities, which enables the employees to achieve sustained and rapid personal growth as well as pursue their goals to the greatest extent.

The Group spares tremendous effort in creating an employer brand image with its own characteristics and stays align with the trend of the times. Through transformation and leverage on our capabilities, the Group will achieve more efficient and flexible human resources management.



China Gas was awarded China's Best Employer Award 2018 – Top 30 Enterprises in Shenzhen

On 10 January 2019, China Gas, with its good reputation and outstanding performance in the influence of employer brand, was awarded the China's Best Employer Award – Top 30 Enterprises at the Shenzhen award ceremony, which was the only energy enterprise in Shenzhen to receive this honor.

China Gas will continue to adhere to its mission of “converging in harmony and benefiting the society”, and strives to undertake the social responsibility as a corporate citizen, stand ready and dare to innovate so as to construct a better development environment and platform for outstanding talents.



Caring for the Growth of Employees

DIVERSIFIED TALENT TEAM

China Gas is devoted to offer a diversified and inclusive working environment to its employees. As at 31 March 2019, the Group had a total of 51,074 employees⁽¹⁾, 30% of which are female employees and ethnic minorities employees accounted for 8% of the total employees.

Notes

1. Among them, 51,048 employees are based in Mainland China and 26 employees are based in Hong Kong.



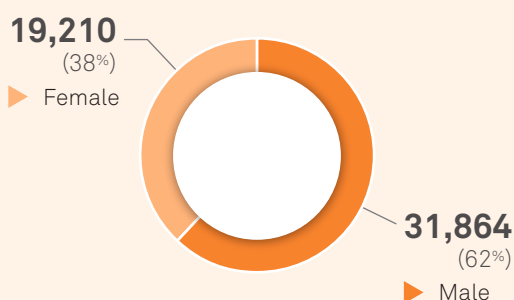
Total number of employees

► **51,074**

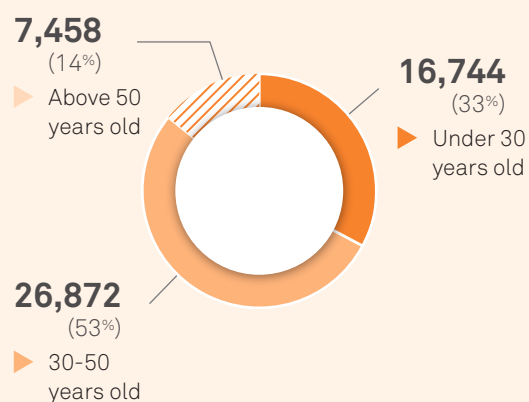
(As at 31 March 2019)

Employee statistics by gender, age, ranking and ethnicity

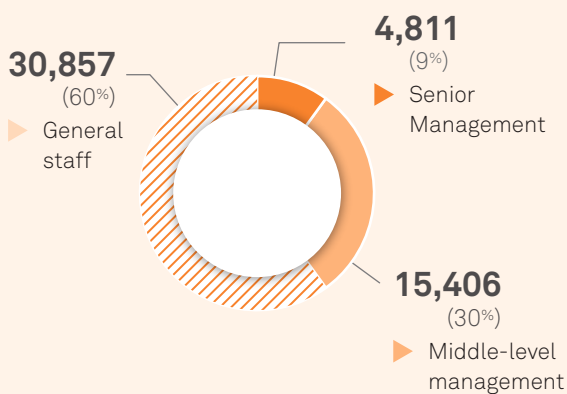
By gender



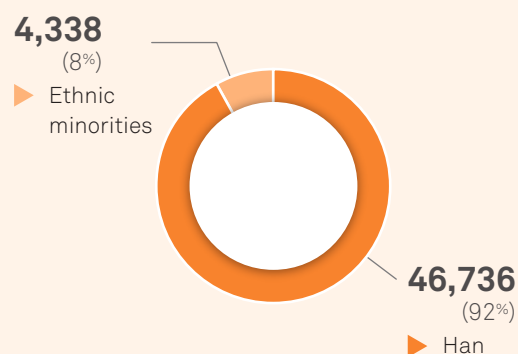
By age



By ranking⁽¹⁾



By ethnicity



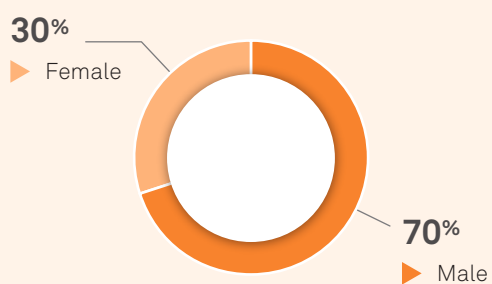
Notes

1. Due to rounding, the numbers do not add up to 100%.

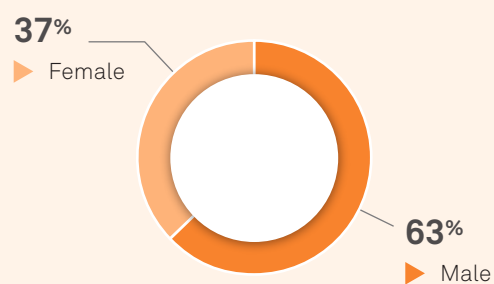
DIVERSIFIED TALENT TEAM *(Continued)*

Male to female ratios by ranking

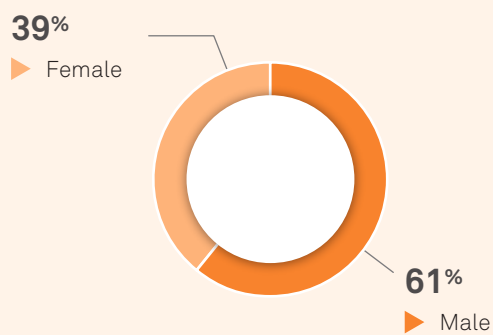
Senior management



Middle-level management

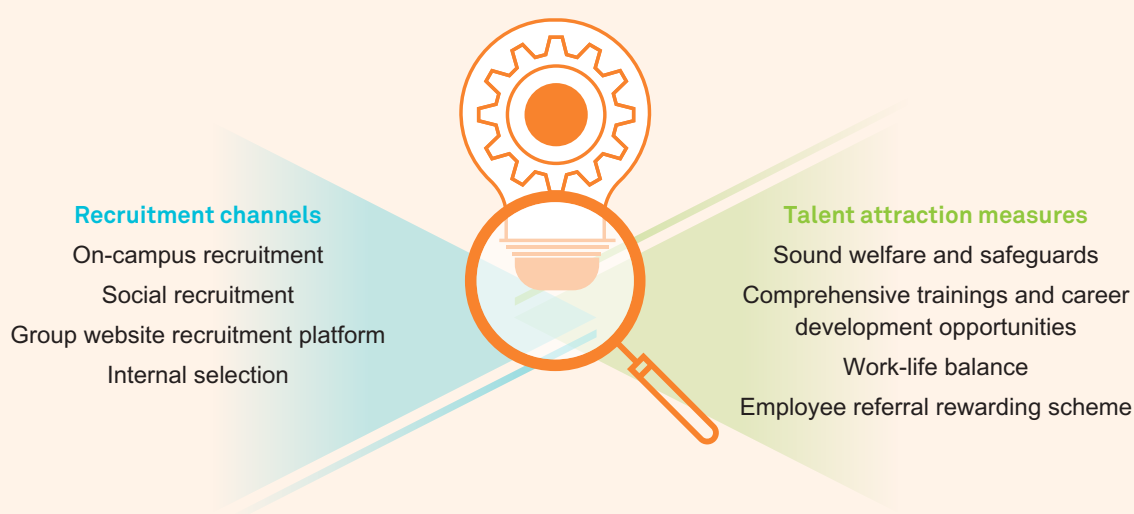


General staff

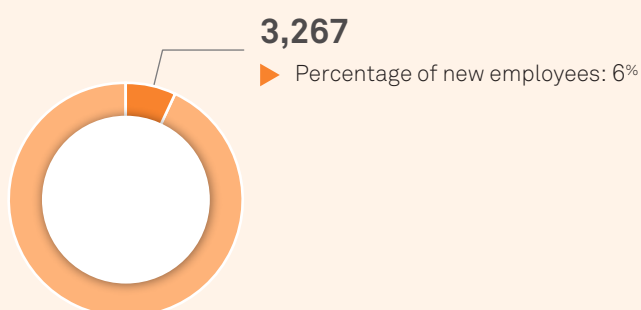


TALENT RECRUITMENT AND RETENTION

As an employer offering equal opportunities, we follow the Group's Human Resources Management Manual and Recruitment Management System and build the staff team based on the principle of "recruiting employees in an open, fair, equal and person-job fit manner". We attract outstanding talents from every sector through a variety of recruitment channels and actively cultivate a motivated working environment as well as encourage work-life balance to enhance the employees' sense of belonging. We also formulated Cadre Management Measure and prioritise promotion opportunities for internal staff with excellent performance before external recruitment, so as to provide our employees with excellent promotion opportunities.



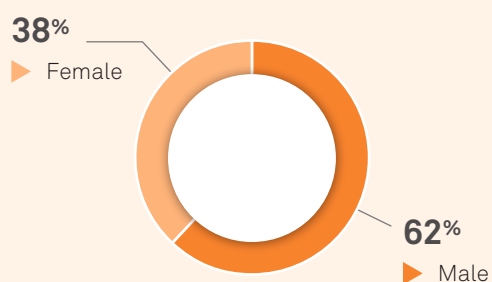
New employees in FY2018/19



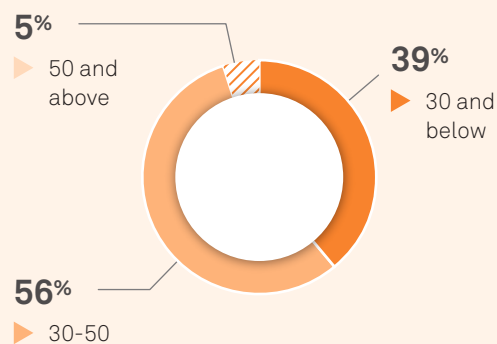
TALENT RECRUITMENT AND RETENTION *(Continued)*

New employees statistics by gender, age, ethnicity and geographical region

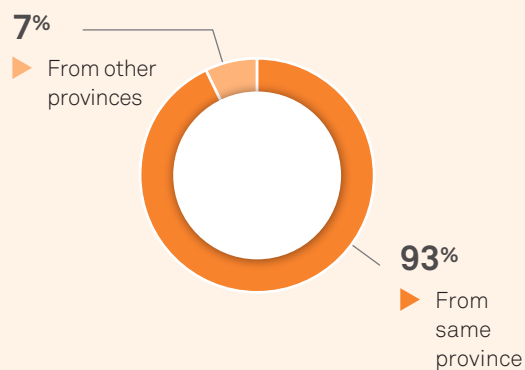
By gender



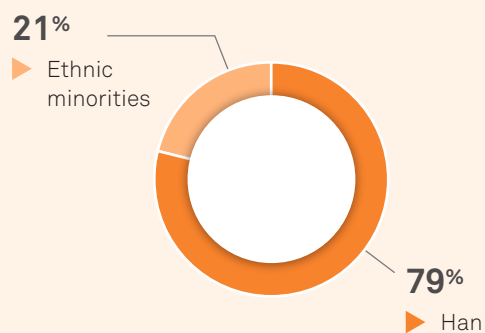
By age



By geographical region⁽¹⁾⁽²⁾



By ethnicity






Notes

1. Only includes new employees based in Mainland China.
2. Among the new employees in FY2018/19, 3,265 of them are based in Mainland China and 1 employee is based in Hong Kong.

BENEFITS AND PROTECTION

We provide comprehensive benefits and protections for employees, which includes competitive remuneration, rewards and subsidies, medical insurance, and various paid leaves. To further motivate employees' enthusiasm and creativity and to respect value contributions, the Group adopts an incentive remuneration system and establishes a remuneration management system based on the position, performance, and capability. Considering fairness, the Group sets salary standards by taking into account the regional differences and formulates salary standards accordingly in order to match the paid level of local labour power.

In addition, the Group strictly follows the requirements of national policies by providing employees with social insurances and housing allowances. The Group provides employee benefits in the form of per capita benefits packages, which is to self-design benefits that are compliant with local circumstances in accordance to the national and company's requirements. The Group provides beneficial subsidies and build a welfare system which gives employees happiness.

 Remuneration system <ul style="list-style-type: none">• Adjust payrolls according to different local policies on salary standards• Provide incentive performance-based pays	 Benefits and subsidies <ul style="list-style-type: none">• Provide length of service subsidy, festival allowance, physical examination allowance, withholding of supplementary commercial insurance premium, medical insurance, and meal allowance, etc.• Apart from basic salary and pension fund contributions, qualified employees will receive discretionary bonuses, rewards and stock options determined by the Group's financial performance and their individual performance	 Family-friendly employment <ul style="list-style-type: none">• Respect family responsibilities of employees, implement localised policies for staff and cadres, improve team stability and resource complementary
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Besides the *Labour Law of the PRC* and the *Labour Contract Law of the PRC*, we strictly follow the *Protection of Women's Rights and Interests*, *Special Rules on the Labour Protection of Female Employees*, etc. We pay close attention in providing female employees with good working environment and working conditions. Female employees are fully protected during maternity and lactation leave. We also achieve equal pay for men and women, and provide equal opportunities for career development for female employees, ensuring care for female employees.

Caring for the Growth of Employees

BENEFITS AND PROTECTION *(Continued)*

Ratio of remuneration of male to female by ranking in FY2018/19

Senior management

Male: Female

▶ **1:0.97**

Middle-level management

Male: Female

▶ **1:1.01**

General staff

Male: Female

▶ **1:0.99**

Employee maternity/paternity leave statistics in FY2018/19

Male

▶ **485**

Female

▶ **575**

Percentage of employees who returned to work after maternity/paternity leave ended in FY2018/19

Male

▶ **98%**

Female

▶ **88%**

TRAINING AND DEVELOPMENT PROGRAMME

We hope to pursue the goal of mutual growth in China Gas along with its employees. Therefore, each employee in different position is provided with training programmes when entering the Group. Such arrangement speeds up the cultivation of talents and provides the Group with sustained driving force in future development.

The Group's *Training and Management System* is made up of a three-tier management system, including the Group's headquarters, regional management centres and project companies. The system clearly outlines the operational guidelines for employee training, covering training organisation and distribution of duties, training classification and content, planning and budget, performance assessment and action remedial plans, etc. The efficient employee training system equips every employee with the necessary knowledge, skills, attitude and experience to accomplish the task, thus achieving a continuous improvement of employees' overall qualities.

The training content is designed according to the career growth stage of employees, varying from the basic training for newly recruited staff, the training for the transferred staff to the management skills training for senior management personnel. In response to the actual needs for different departments and functions, the Group provides all types of trainings in a targeted manner. In order to provide flexible and systematic learning opportunities to employees, each project company will prepare and implement training plans annually according to the training theme and business highlights of the Group headquarters as well as the regional management centres.

TRAINING AND DEVELOPMENT PROGRAMME *(Continued)*

Training Category: By the Career Growth Stage of Employees



FY2018/19

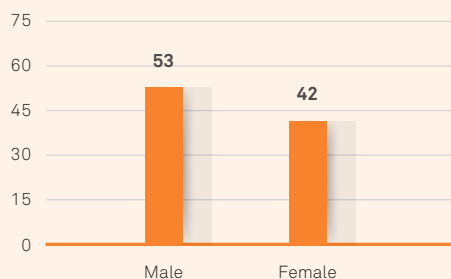
Total training hours
▶ **2,478,392**

Average training hours per employee
▶ **49**

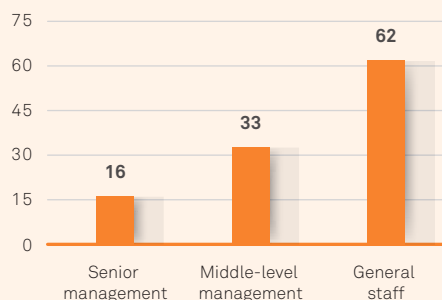
TRAINING AND DEVELOPMENT PROGRAMME (Continued)

Average training hours by gender and rank

By gender



By rank



In order to allow employees to broaden their horizons and expand their knowledge, China Gas regularly sends employees to conduct external training. The training forms include: short-term seminars, industry information exchanges, professional seminars, entrusted training, vocational qualification training, post-graduate qualifications or degree education, and local or foreign countries visiting, etc.

On top of that, China Gas has designed the *Measures for Curriculum Development and Management*, a comprehensive core curriculum system which covers 24 professional sectors, including finance, customer service, general management, safe production, with an aim to facilitate employees' overall development, improve their capabilities and work-related skills. To continuously improve personal capability, China Gas also built an "E-learning" training system and offline training projects to provide employees with online learning opportunities anytime and anywhere. Each professional course is matched with the relevant assessment criteria to validate the learning outcome of employees and ensure the application of learning results in practical work.

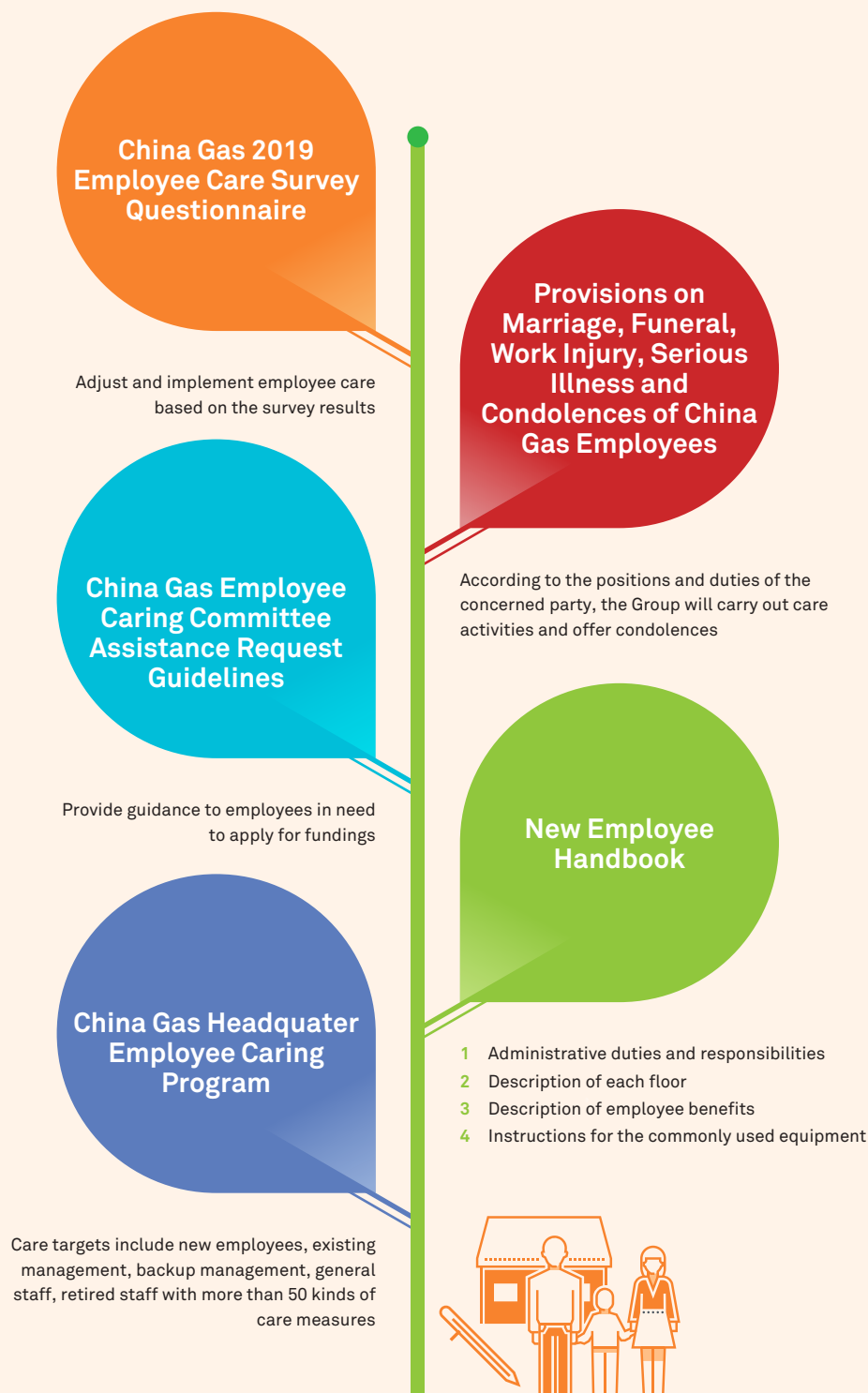
Employee Assessment and Evaluation

In order to further optimize the allocation of human resources, China Gas has carried out a staff suitability assessment annually by conducting a comprehensive evaluation of all employees including the group management through performance appraisal. In terms of cadre management, we continue to implement dynamic management, with the regionally-led recruitment, management and use of reserve cadres. At the same time, we strengthened the organization and discipline in cadre deployment, which provided a strong and powerful support for the Group.

CARING FOR EMPLOYEES

China Gas attaches great importance to caring for employees in all aspects by improving their awareness on health, caring for their physical and mental health, actively helping employees and their families, and encouraging employees to spread love and warmth to those in need.

FY2018/19 Employee Care Action



Caring for the Growth of Employees

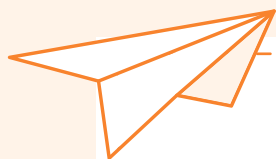
CARING FOR EMPLOYEES *(Continued)*

Promoting the Physical and Mental Health of Employees

To improve employees' awareness on health and care, the Group's Employee Caring Committee regularly invites experts to provide health seminars and activities to employees. In FY2018/19, three health seminars on cardiovascular health management, common nutrition problems and countermeasures, emotional management and psychological stress self-adjustment were organised. Quarterly consultation with Chinese medicine practitioners and shoulder and neck physiotherapy activities were also carried out to improve the overall health management of employees.

The Group provides free medical examination to its headquarters staff every December to provide care for the physical and mental health of employees. New family members' packages were introduced to allow family members to choose at a lower price to enjoy Group's medical examination plan, so that family members could save costs, and that the employees and family members could enjoy quality services. The 2018 medical examination data was sorted out and summarized to compile into *Health White Paper of China Gas Headquarters 2018*, providing analysis of employee health and making recommendations to prevent disease with high incidence rates.

In addition, the Employee Caring Committee launched a health management survey in August 2018 with over 6,000 of employees participated. We used the survey results to adjust the 2019 Health Management Plan, committed to providing care to our employees and their families.



Health Check Campaign

The Group's Employee Caring Committee launched a Health Check Campaign in Shenzhen headquarters from 20 to 24 August 2018. With the recommendation from Futian Subdistrict Committee of Futian, Shenzhen, we invited practitioners of Chinese medicine and physiotherapists from China Academy of Chinese Medical Sciences to conduct diagnosis and treatment to our employee and their families.

The Chinese medicine practitioners carried out treatment through pulse diagnosis, cupping therapy, acupuncture therapy, etc. tailored to employee's work environment and health status. They also promoted healthy living habits, disease prevention and Chinese medical sciences at the same time. Some of our employees' families had benefited from this campaign as well. We are pleased by the caring and patience attitude and the professionalism of the Chinese medicine practitioners.

Caring for the Growth of Employees

CARING FOR EMPLOYEES *(Continued)*

Enriching Employees' Living

The Group offers a caring and comfortable working environment to enhance enthusiasm and sense of belonging of our employees. We host a variety of leisure activities, such as sports fun day, birthday celebration, hiking, speaking contests, for our employees as relaxation and promote work-life balance. This allows positive interaction among the company, employees, and their families.

Jogging Competition 2018 – Healthy Lifestyle and Happy at Work

The Group's headquarters held the Jogging Competition 2018 at the picturesque Dongguan Daping Peak Forest Park on 21 July 2018 with participants totalling at 244 employees. This jogging activity has boosted up the Group's unity, health and upward moving elements and enhanced the cultural exchange and friendship among employees.

The Group has always attached great importance to the establishment of a healthy, positive and optimistic corporate culture, and actively advocates the establishment of a low-carbon, environmentally friendly and healthy lifestyle. This jogging competition, through a low-carbon, environmentally friendly and green fitness method, has further cultivated the spirit of competitiveness among employees, and drives the employees to work on their posts and make contributions to the development of the group.



The First Summer Camp for Our Employees' Children

The first summer camp for our employees' children has been successfully held with the support of the Group's leaders, Employee Caring Committee, and regional and project companies. The summer camp was attended by 258 participants from 121 families from the eight regions of the Group.

Family members experienced the hard work delivered by the employees and their responsibilities at work through activities in the camp. This summer camp has enhanced our employees' and their families' sense of belonging and brought about a caring culture in the Group.

Caring for the Growth of Employees

CARING FOR EMPLOYEES *(Continued)*

Communication and Inclusion

China Gas maintains a good communication channel with employees and learn their needs. The Group set up a “Listening” corner in our WeChat account “CG Home” for employees to express their concerns at work or in life and they are responded by a dedicated team. “CG Home” is an important communication tool besides from the internal OA forum and periodicals. We release the latest information of the Group, news about caring activities and corporate communications on this platform to facilitate mutual communication and allow knowledge sharing about the Group’s strategy and aims.

The Group has established a platform for grievances and whistle-blowing. According to the Group’s system on internal audit, the Internal Audit Department would investigate each case and report to the management and the complainant. This has allowed protection of rights and ensure cases are dealt in a transparent, fair and impartial manner. To improve communications between the management and employees, we have a “Letter Box to the President” and groups on WeChat to listen to their voices.

In addition, the annual “Elite Billboard” event, a showcase for outstanding employees of China Gas, aims to reward excellent employees and elite managers. Besides encouraging and rewarding employees, it strengthens team cohesion and the employees’ centripetal force to the group.

Caring and Assistance

China Gas cares about employee’s welfare. To cultivate a caring culture within the company, we offer assistance to low-income families and employees who need medical attention. In FY 2018/19, we have drafted the *Guideline on China Gas Employees’ Condolences on Marriage, Death, Work-related Injuries and Serious Illnesses (Trial)*, *China Gas Headquarters Employees Caring Scheme (Draft)* and *Guideline on Application for China Gas Employee Caring Committee Assistance*. In the same year, we have conducted a the China Gas Employee Caring Survey 2019 to identify employees’ needs.

Training had been provided on the *China Gas Caring Committee Protocol* to disseminate information on the requirements of the monetary assistance and how to apply for one. In FY2018/19, we have processed 9 applications and offered RMB320,000 to the employees in need.



COMMUNITY ORIENTED, BUILDING A HARMONIOUS COMMUNITY

78

Building a Harmonious Community

Building a Harmonious Community

MANAGEMENT APPROACH

We persist in fulfilling the social responsibility and to connect with the community, as well as commit to extend the culture of “Converging in Harmony and Benefiting the society”.

The Group's *Environmental and Social Management System* complies with ADB's relevant requirements. It incorporates social concerns into every phases of the projects and strives to achieve harmonious coexistence among business operation, local environment, and society. In addition, we actively engage in various charitable activities, including

disaster relief, sponsorship programme for students and patients, poverty alleviation, etc. We also established a volunteer group, spreading our love and corporate philosophy, and creating a caring platform for the community.



INCORPORATING SOCIAL CONCERNS INTO PROJECT INVESTMENT AND DEVELOPMENT

Incorporate social management provisions into the construction contracts to ensure the full compliance of contractors with the provisions

Avoid bidding on projects in socially sensitive areas

Avoid involuntary resettlement wherever possible; minimise involuntary resettlement if it is unavoidable

Screen and identify the impact of voluntary resettlement, and include the resettlement work as part of the project

Ensure that the affected people of the project are compensated and their livelihoods are restored or improved

**Social Policy
Guidance
Principles**

INCORPORATING SOCIAL CONCERNS INTO PROJECT INVESTMENT AND DEVELOPMENT *(Continued)*

The Group follows the guidance principles in the *Environmental and Social Management System*, avoids and minimises the disturbance to the living and life of community members during construction and operation, so as to promote social harmony and contribute to the sustainable development of the community.

In accordance with the involuntary resettlement and indigenous people safeguard requirements as set out in the *Safeguard Policy Statement* of ADB, the Group has formulated the procedures and set the responsibilities for controlling relevant risks and impacts. In order to identify groups affected by the project, the Group will conduct initial social impact assessment to assess the needs of each group at the early stage of the project cycle. The initial social assessment covers the identification of the main social aspects (e.g. involuntary resettlement, indigenous people, vulnerable groups).

At the project initiation stage, the Group will classify involuntary resettlement as an important consideration, taking into account economic, technological, ecological, and other social factors. Whenever possible, the Group will avoid involuntary resettlement. If it is unavoidable, we will explore all possible optimised proposals and alternatives to minimise the number of populations which suffer from resettlement, loss of land and income sources. Also, the Group strictly follows ADB's applicable specific requirements on compensation, assistance, benefit sharing, assessment of social impacts, resettlement planning, information disclosure, consultation, grievance redress mechanism, and monitoring and reporting, and ensures the affected groups can at least restore the livelihoods in pre-project levels. With the consideration on economic, social, and environment aspects, a good resettlement plan means great benefits. It does not only improve the quality and the impact of the project, but also facilitates a more equitable development. During the year, the Group did not have projects which require resettlement of residents. If there is a genuine need for resettlement in the future, the Group will make proper arrangements for the affected residents in accordance with established procedures, with an aim to achieve mutual growth of project activities and the surrounding communities.

During the design and the implementation of the project, we persist in paying fully respect to the own identity, dignity, human rights, lifestyle and cultural characteristics of the indigenous people, so as to ensure that the social and economic interests are consistent with their cultural traditions, to avoid adverse impacts caused by the project, and to ensure their participation on the project.

Consultation and Participation

During the discussion on resettlement plan and compensation plan, the Group will actively negotiate with the affected groups and carefully consider their demands. The Group will provide suitable lands, houses, basic facilities, and other compensations that are comparable with the pre-project conditions to the affected groups. The Group will follow ADB's requirements in encouraging affected groups and other stakeholders to actively participate in consultation.

INCORPORATING SOCIAL CONCERNS INTO PROJECT INVESTMENT AND DEVELOPMENT *(Continued)*

Consultation and Participation *(Continued)*

The Group adheres to the following principles during consultation:

Early initiation of the continual consultation mechanism	Meaningful consultation begins early in the project cycle and is carried out on a continual basis throughout the project cycle. The affected groups are adequately informed about the project's potential adverse impacts and proposed mitigation.
Timely disclosure of relevant and adequate information	The affected persons should have timely access to relevant information on the project, which includes: (1) nature of the project, (2) the scope of and reason for land acquisition, (3) the resettlement objectives and entitlement matrix, (4) the choices available regarding the future, (5) the right of the displaced to participate in resettlement planning and implementation, and (6) the grievance mechanisms to be put in place.
Avoiding intimidation or coercion	Consultation needs to occur freely and voluntarily where the affected persons can express their views without any external manipulation, interference, or threat of retribution, and must be conducted in an atmosphere of transparency.
Gender-inclusive, considering the needs of vulnerable groups¹	Ensuring consultation with women and vulnerable groups.

¹ The vulnerable are individuals or groups who may experience adverse impacts from a proposed project more severely than others because of their vulnerable status. Typically, those below poverty line, the landless or those without a title to land, the elderly, female headed households, women and children, and Indigenous Peoples.

In addition, the Group has followed the requirements in the *Safeguard Policy Statement* to set up comprehensive grievance redress mechanisms to receive and facilitate the resolution of affected persons' concerns and grievances. During the Reporting Period, the Group did not have any incidents of violations involving rights of indigenous peoples.

Building a Harmonious Community

MISSION PRIORITISING, CLEAR POSITIONING, BENEFITING SOCIETY THROUGH CHARITABLE ACTIVITIES

Upholding the mission of “converging in harmony and benefiting the society” and the philosophy of “not only be the participant of charitable activities, but also the promoter of It”, China Gas actively seeks opportunities to contribute to the society. In 2014, the Foundation was established by the Group and financed by substantial shareholders of China Gas, with an aim to carry out charitable activities to help vulnerable groups through a clear direction in mainland China and Hong Kong. The focus of the Foundation at this stage is to engage in disaster relief, sponsorship programme for students and patients, poverty alleviation, and other charitable affairs to help employees with difficulties and vulnerable groups in the society through practical actions, and to support various local governments’ public welfare affairs related to low-carbon, environmental protection, and education.

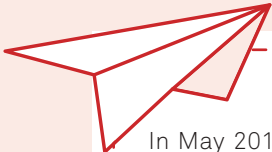


FY2018/19

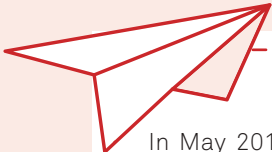
The Group has donated approximately

▶ **HK\$8,490,000**

Key Events



In May 2018, the Foundation paired up with Pingrong Village, Nanning City, Guangxi Province to carry out targeted poverty alleviation work and donated to Pingrong Village for its infrastructure development. Pingrong Village is a typical national poverty village. The donation will improve the housing facilities of local residents and improve their quality of life.



In May 2018, an earthquake of magnitude 5.7 occurred in Songyuan City, Jilin Province, which caused damage to many houses and affected the lives of local residents. In the same month, the Foundation made donation for the earthquake in Songyuan City, Jilin Province to support the local victims in restoring their normal lives as soon as possible, demonstrating the spirit of “one in trouble, all to help”.

Building a Harmonious Community

MISSION PRIORITISING, CLEAR POSITIONING, BENEFITING SOCIETY THROUGH CHARITABLE ACTIVITIES *(Continued)*

In December 2018, the Foundation participated in the construction and a series of optimisation activities of the school libraries in Hunan through “Reading·Dream Flying”. The Foundation donated and supported the Huangdong School of Guidong County to establish the “China Gas Charity Foundation Library”, hoping to improve the learning environment for the local students.

In January 2019, the Foundation made a donation to the Xiaogan Municipal Government of Hubei Province to establish the “Xiaogan City Huaiyin Education Award Foundation”, which mainly aims to reward excellent researchers, outstanding teachers and professional honorary teachers, outstanding students with family economic difficulties and three other aspects, in order to facilitate the overall improvement of the city’s education quality.

ENGAGING EVERYBODY IN VOLUNTARY ACTIVITIES

China Gas actively encourages and engages employees to participate in various voluntary activities, and continuously improves volunteers’ capabilities and awareness on public welfare services through trainings and targeted studying activities, promoting China Gas’ volunteer culture from top to bottom. During the reporting period, we optimised the application procedures and relevant policies for project companies to participate in volunteering services, calling out all employees to join the volunteer groups during their leisure time.



FY2018/19



Volunteers participated

269



Hours of
voluntary work

644.5



People benefited

701

ENGAGING EVERYBODY IN VOLUNTARY ACTIVITIES *(Continued)*

Rekindling hope and spreading love – journey in the dark

In August 2018, the volunteers from the Foundation in Hong Kong headquarters led a group of children from the Hong Kong Family Welfare Society to the Dialogue in the Dark Exhibition Centre located in Mei Foo and carried out a special dark tour. Following the voice of the visually impaired tour guides in a pitch-black environment, the participants experienced the daily lives of people with visual impairment, which leaving the participants with deep impressions. Through the event, the participants learned to cherish what they have. In the era of electronic products, it is more important to take good care of our eyes and vision.



ENGAGING EVERYBODY IN VOLUNTARY ACTIVITIES *(Continued)*

Spreading care and love – blood donation event

In August 2018, China Gas organised its eighth blood donation event. Since 2011, the Group has been consecutively holding blood donation events every year. The Group's eight regional management centres and project companies actively responded to the call from the Group headquarters in organising blood donation activities, to spread the love of China Gas throughout the country. We hope to spread care and love through blood donation and to motivate more people to participate in charitable activities.



ENGAGING EVERYBODY IN VOLUNTARY ACTIVITIES *(Continued)*

China Gas supported the Hong Kong Community Chest's Walk for Millions event

The Foundation participated in the Community Chest 50th Anniversary Walk for Millions, which was held on 6 January 2019 at Hong Kong's new infrastructure development, Central-Wan Chai Bypass. Over 210 teams from business sectors and community organisations enrolled in the event to raise funds for family and child welfare services. The China Gas team, led by Ms. Li Ching, the Chairperson of the Foundation, actively participated in the walk.

The Community Chest's Walk for Millions is one of the largest charitable walk-funding events in Hong Kong. This year, the walk took on a new route – from Edinburgh Place in Central via the Central-Wan Chai Bypass to the finish point at Oil Street at North Point. Many colleagues felt excited for the newly established tunnel in Hong Kong. Colleagues from Shenzhen had also deepened their understanding on development of Hong Kong.



ENGAGING EVERYBODY IN VOLUNTARY ACTIVITIES *(Continued)*

Elderly Caring Event

China Gas's Hong Kong headquarters had carried out multiple elderly caring events during FY2018/19, including visiting lone senior citizens as well as organising entertaining activities for elderly. In the future, the Group hopes to establish a long-lasting elderly caring plan, which aims to provide happiness to the daily lives of the elderly.



Sustainability Overview

ECONOMIC PERFORMANCE

	For the year ended March 31	
	FY2018/19	FY2017/18 ⁽²⁾
Direct Economic Value Generated		
Revenue	59,386,062	52,831,958
Other income	786,459	563,903
Share of results of associates	519,575	496,822
Share of results of joint ventures	1,132,056	758,313
Economic Value Distributed		
Staff costs	2,790,217	2,889,505
Other costs ⁽¹⁾	45,169,176	40,530,040
Finance costs	1,284,304	807,781
Dividends	1,776,864	1,391,185
Taxes ⁽²⁾	2,168,241	2,022,350
Profit attributable to non-controlling interest	760,185	573,901
Charitable donations	8,490	5,299
Economic Value Retained		
Retained for China Gas's sustainable operation and development	7,836,437	6,522,574

Unit: HK\$'000

Notes

- 1: Represents other costs and other gains and losses but excludes depreciation and amortization for the year.
- 2: Represents current income tax but excludes deferred tax.
- 3: Economic performance data for FY2017/18 are restated.

OPERATIONAL PERFORMANCE

	Unit	FY2018/19	FY2017/18
Number of piped gas projects with concession rights	number	542	495
Number of natural gas long distance transmission pipelines	number	17	14
Total length of natural gas pipelines	km	296,797	172,540
Number of CNG/LNG refilling stations	number	575	580
Number of LPG distribution projects	number	100	100
Total natural gas sales volume	m ³	24,656,400,000	18,659,299,000
Total LPG sales volume	tonne	3,993,377	4,030,394
Number of comprehensive energy supply projects	number	68	19
Percentage of total Gasbo products sold or shipped subject to recalls for safety and health reasons	%	0.50	Data not available

SUPPLIERS OVERVIEW

	Unit	FY2018/19	FY2017/18
Cumulative total number of suppliers completed registration on China Gas Procurement Portals	number	226	251
Supplier compliance rate	%	100	100

ENVIRONMENTAL PERFORMANCE

	Unit	FY2018/19	FY2017/18
Greenhouse gas (GHG) emissions⁽¹⁾			
Scope 1 (direct emissions)	tCO ₂ e	111,833.15	117,233.24
Scope 2 (energy indirect emissions)	tCO ₂ e	77,776.57	82,494.55
Scope 3 (other indirect emissions)	tCO ₂ e	44.44	–
Total GHG emissions	tCO ₂ e	189,654.16	199,727.79
GHG intensity	kgCO ₂ e/GJ of energy sold	0.19	0.25
Air emissions			
PM	tonne	23.53	24.59
SO ₂	tonne	247.11	258.22
NO _x	tonne	164.74	172.14
Direct energy consumption⁽¹⁾			
Coal	tonne	–	210.90
Petrol	m ³	2,671.90	4,458.33
Natural gas	m ³	8,862,017.50	17,764,637.84
LPG	tonne	5,407.00	60.00
Diesel	m ³	9,757.56	5,216.49
Heavy oil	tonne	2,929.70	4,799.72
Fuel oil	tonne	3,223.34	–
Electricity (non-renewable energy)	kWh	117,670,446.86	123,864,670.80
Electricity (renewable energy)	kWh	246,709.58	101.00
Total energy consumption ⁽²⁾	GJ	1,667,892.44	1,551,193.68
Energy consumption intensity	GJ/GJ of energy sold	0.002	0.002
Material use⁽¹⁾			
LPG cylinder	number	422,453.00	365,665.00
Lubricant	tonne	123.13	5.00
Paper/cardboard	tonne	1,769.48	–
Plastic	tonne	610.04	–
Wood board	tonne	7.20	–
Odorant	tonne	85.00	55.00
Water consumption			
Total water consumption	tonne	1,664,768.80	2,485,680.00
Water consumption intensity	kg/GJ of energy sold	2.09	3.68

ENVIRONMENTAL PERFORMANCE *(Continued)*

	Unit	FY2018/19	FY2017/18
Wastewater and waste			
Total wastewater discharged	tonne	832,383.90	665,859.76
Non-hazardous waste produced	tonne	14,580.61	11,944.00
Intensity of non-hazardous waste produced	tonne/ employee	0.29	0.28
Environmental compliance			
Environmental regulatory non-compliances	number	0	0

Notes

- 1: Environmental performance data for FY2017/18 are restated.
- 2: Energy consumption is calculated based on the conversion factors provided in *China Energy Statistical Yearbook 2017*.

EMPLOYMENT AND LABOUR PRACTICES

	Unit	FY2018/19	FY2017/18
Health and safety			
Number of work-related injuries ⁽¹⁾	number	137	216
High-consequence work-related injuries (excluding fatalities) ⁽²⁾	number	0	Data not available
Number of work-related fatalities	number	4	6
Number of occupational diseases	number	1	0
Number of disability injuries	number	16	24
Rate of work-related injuries ⁽³⁾	–	0.27	0.51
Rate of high-consequence work-related injuries (excluding fatalities) ⁽⁴⁾	–	0	Data not available
Fatality rate ⁽⁵⁾	–	0.01	0.01
Lost days due to work-related injuries	day	6,308	3,077
Total working hours	hour	101,330,816	85,315,368
Training and development			
Employee training rate	%	100	100
Average training hours per employee	hour	48.55	21.90
Labour practices			
Number of violation cases related to employment or labour regulations	number	0	0
Number of violation cases related to child labour or forced labour	number	0	0
Number of discrimination cases related to gender, ethnicity, age and health during recruitment	number	0	0

Notes

- 1: Work-related injuries also include work-related fatalities and high-consequence work-related injuries.
- 2: High-consequence work-related injuries (excluding fatalities) refer to work-related injuries that result in an injury from which the worker cannot, does not, or is not expected to recover fully to pre-injury health status within 6 months.
- 3: Rate of work-related injuries = (Total number of work-related injuries/Total working hours) x 200,000.
- 4: Rate of high-consequence work-related injuries (excluding fatalities) = (Total number of high-consequence work-related injuries (excluding fatalities)/Total working hours) x 200,000.
- 5: Rate of work-related fatalities = (Total number of fatalities as a result of work-related injury/Total working hours) x 200,000.

COMMUNITY INVESTMENT

	Unit	FY2018/19	FY2017/18
Participated volunteers	people	269	235
Hours of voluntary service	hour	644.5	1,016
People benefited	people	701	8,100

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STOCK EXCHANGE ESG REPORTING GUIDE CONTENT INDEX

Subject Areas, Aspects, General Disclosures and KPIs	Description	Relevant Chapter(s) or Other References/ Explanation
A. ENVIRONMENT		
Aspect A1: Emissions		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste.	Appreciating Our Environment
KPI A1.1	The types of emissions and respective emissions data.	Appreciating Our Environment, Sustainability Overview
KPI A1.2	Greenhouse gas emissions in total (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	Appreciating Our Environment, Sustainability Overview
KPI A1.3	Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	As our operation does not include the exploration and production of natural gas and LPG, only insignificant amount of hazardous waste is generated. Nonetheless, we are actively exploring approaches to keep a record of our hazardous waste generated.
KPI A1.4	Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	Sustainability Overview
KPI A1.5	Description of measures to mitigate emissions and results achieved.	Appreciating Our Environment
KPI A1.6	Description of how hazardous and non-hazardous wastes are handled, reduction initiatives and results achieved.	Appreciating Our Environment

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Subject Areas, Aspects, General Disclosures and KPIs	Description	Relevant Chapter(s) or Other References/ Explanation
Aspect A2: Use of Resources		
General Disclosure	Policies on the efficient use of resources, including energy, water and other raw materials.	Appreciating Our Environment
KPI 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).	Appreciating Our Environment, Sustainability Overview
KPI A2.2	Water consumption in total and intensity (e.g. per unit of production volume, per facility).	Appreciating Our Environment, Sustainability Overview
KPI A2.3	Description of energy use efficiency in initiatives and results achieved.	Appreciating Our Environment
KPI A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency initiatives and results achieved.	Appreciating Our Environment All water used by the Group were obtained with respective permits. There were no issues related to sourcing water that was fit for purpose.
KPI A2.5	Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced.	Appreciating Our Environment
Aspect A3: The Environment and Natural Resource		
General Disclosure	Policies on minimising the issuer's significant impact on the environment and natural resources.	Appreciating Our Environment
KPI A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	Appreciating Our Environment

Subject Areas, Aspects, General Disclosures and KPIs	Description	Relevant Chapter(s) or Other References/ Explanation
B. SOCIAL		
Employment and Labour Practices		
Topic B1: Employment		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare.	Caring for the Growth of Employees
KPI B1.1	Total work force by gender, employment type, age group and geographical region.	Caring for the Growth of Employees
KPI B1.2	Employee turnover rate by gender, age group and geographical region.	–
Aspect B2: Health and Safety		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to providing a safe working environment and protecting employees from occupational hazards.	Providing Safe, Quality and Innovative Services
KPI B2.1	Number and rate of work-related fatalities.	Providing Safe, Quality and Innovative Services; Sustainability Overview
KPI B2.2	Lost days due to work injury.	Providing Safe, Quality and Innovative Services; Sustainability Overview
KPI B2.3	Description of occupational health and safety measures adopted, how they are implemented and monitored.	Providing Safe, Quality and Innovative Services

Subject Areas, Aspects, General Disclosures and KPIs	Description	Relevant Chapter(s) or Other References/ Explanation
Aspect B3: Development and Training		
General Disclosure	Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities.	Caring for the Growth of Employees
KPI B3.1	The percentage of employees trained by gender and employee category (e.g. senior management, middle management).	Caring for the Growth of Employees
KPI B3.2	The average training hours completed per employee by gender and employee category.	Caring for the Growth of Employees
Aspect B4: Labour Standards		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to preventing child and forced labour.	Caring for the Growth of Employees
KPI B4.1	Description of measures to review employment practices to avoid child and forced labour.	The Group regularly reviews its employment practice to ensure compliance with applicable laws and regulations in preventing child and forced labour.
KPI B4.2	Description of steps taken to eliminate such practices when discovered.	The Group has zero tolerance towards such practice. Violations are subject to internal disciplinary actions or handled by relevant authorities.
Operating Practices		
Aspect B5: Supply Chain Management		
General Disclosure	Policies on managing environmental and social risks of the supply chain.	Establishing Sustainable Corporate Governance
KPI B5.1	Number of suppliers by geographical region.	Establishing Sustainable Corporate Governance
KPI B5.2	Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, how they are implemented and monitored.	Establishing Sustainable Corporate Governance

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Subject Areas, Aspects, General Disclosures and KPIs	Description	Relevant Chapter(s) or Other References/ Explanation
Aspect B6: Product Responsibility		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to health and safety, advertising, labelling and privacy matters relating to products and services provided and methods of redress.	Providing Safe, Quality and Innovative Services
KPI B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons.	Sustainability Overview
KPI B6.2	Number of products and service related complaints received and how they are dealt with.	Providing Safe, Quality and Innovative Services
KPI B6.3	Description of practices relating to observing and protecting intellectual property rights.	Establishing Sustainable Corporate Governance
KPI B6.4	Description of quality assurance process and recall procedures.	Providing Safe, Quality and Innovative Services
KPI B6.5	Description of consumer data protection and privacy policies, how they are implemented and monitored.	Providing Safe, Quality and Innovative Services
Aspect B7: Anti-corruption		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to bribery, extortion, fraud and money laundering.	Establishing Sustainable Corporate Governance
KPI 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.	Establishing Sustainable Corporate Governance
KPI B7.2	Description of preventive measures and whistle-blowing procedures, how they are implemented and monitored.	Establishing Sustainable Corporate Governance, Caring for Employees

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Subject Areas, Aspects, General Disclosures and KPIs	Description	Relevant Chapter(s) or Other References/ Explanation
Community		
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 in to consideration the communities' interests.	Building a Harmonious Community
KPI B8.1	Focus are as of contribution (e.g. education, environmental concerns, labour needs, health, culture, sport).	Building a Harmonious Community
KPI B8.2	Resources contributed (e.g. money or time) to the focus area.	Building a Harmonious Community

GRI STANDARDS & CASS-CSR3.0

Disclosure Number	Description	Relevant Chapter(s) or Other References/ Explanation	CASS-CSR3.0
GRI 101: FOUNDATION 2016			
GRI101 does not include any disclosures			
GRI 102: GENERAL DISCLOSURES 2016			
Organizational Profile			
102-1	Name of the organization	About This Report	P4.1
102-2	Activities, brands, products, and services	About China Gas	P4.2
102-3	Location of headquarters	About This Report	P4.1
102-4	Location of operations	About China Gas	P4.4
102-5	Ownership and legal form	About This Report	P4.1
102-6	Markets served	About China Gas	P4.4
102-7	Scale of the organization	About China Gas	P4.3
102-8	Information on employees and other workers	Caring for the Growth of Employees	P4.5, S2.1
102-9	Supply chain	Establishing Sustainable Corporate Governance	M3.5
102-10	Significant changes to the organization and its supply chain	Establishing Sustainable Corporate Governance	P4.7
102-11	Precautionary Principle or approach	Establishing Sustainable Corporate Governance	G1.1, G1.2, G2.4
102-12	External initiatives	Creating Green Value	G1.1, E1.3
102-13	Membership of associations	The Group is a member of China Gas Association.	P4.6
Strategy			
102-14	Statement from senior decision-maker	Message from the Executive Chairman	P3.2
102-15	Key impacts, risks, and opportunities	Creating Green Value	P3.2
Ethics and Integrity			
102-16	Values, principles, standards, and norms of behavior	About China Gas	G1.1, M3.2
102-17	Mechanisms for advice and concerns about ethics	Establishing Sustainable Corporate Governance	G2.2

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Disclosure Number	Description	Relevant Chapter(s) or Other References/ Explanation	CASS-CSR3.0
Governance			
102-18	Governance structure	Establishing Sustainable Corporate Governance	G2.1, G2.2, G2.3, G2.4
102-19	Delegating authority	Establishing Sustainable Corporate Governance	G2.3, G2.4
102-20	Executive-level responsibility for economic, environmental, and social topics	Establishing Sustainable Corporate Governance	G2.3, G2.4
102-21	Consulting stakeholders on economic, environmental, and social topics	Engaging with Stakeholders	G2.2, M1.1
102-22	Composition of the highest governance body and its committees	Establishing Sustainable Corporate Governance	G2.2, G2.3
102-23	Chair of the highest governance body	2018/19 Annual Report	
102-24	Nominating and selecting the highest governance body	2018/19 Annual Report	M1.1
102-25	Conflicts of interest	2018/19 Annual Report	
102-26	Role of highest governance body in setting purpose, values, and strategy	2018/19 Annual Report	G2.4
102-27	Collective knowledge of highest governance body	2018/19 Annual Report	M1.1
102-28	Evaluating the highest governance body's performance	2018/19 Annual Report	
102-29	Identifying and managing economic, environmental, and social impacts	Engaging with Stakeholders	G2.4
102-30	Effectiveness of risk management processes	Establishing Sustainable Corporate Governance, 2018/19 Annual Report	G2.4
102-31	Review of economic, environmental, and social topics	Engaging with Stakeholders	G2.4
102-32	Highest governance body's role in sustainability reporting	Engaging with Stakeholders	G2.4
102-33	Communicating critical concerns	Engaging with Stakeholders	G5.4, G5.5

Content Indexes

Disclosure Number	Description	Relevant Chapter(s) or Other References/ Explanation	CASS-CSR3.0
102-34	Nature and total number of critical concerns	2018/19 Annual Report	
102-35	Remuneration policies	2018/19 Annual Report	
102-36	Process for determining remuneration	2018/19 Annual Report	
102-37	Stakeholders' involvement in remuneration	2018/19 Annual Report	M1.1
102-38	Annual total compensation ratio	Ratio of the total remuneration of the highest-paid individual to the median total remuneration of all employees (excluding the highest-paid individual): 32.15:1.	
102-39	Percentage increase in annual total compensation ratio	Ratio of the annual percentage increase in total remuneration of the highest-paid individual to the median percentage increase in annual total remuneration of all employees (excluding the highest-paid individual): -0.13:1.	
Stakeholder Engagement			
102-40	List of stakeholder groups	Engaging with Stakeholders	G5.1
102-41	Collective bargaining agreements	Not Applicable	
102-42	Identifying and selecting stakeholders	Engaging with Stakeholders	G5.2
102-43	Approach to stakeholder engagement	Engaging with Stakeholders	P2.3
102-44	Key topics and concerns raised	Engaging with Stakeholders	G5.3

Content Indexes

Disclosure Number	Description	Relevant Chapter(s) or Other References/ Explanation	CASS-CSR3.0
Reporting Practice			
102-45	Entities included in the consolidated financial statements	2018/19 Annual Report	P1.2, P1.3, P4.3
102-46	Defining report content and topic Boundaries	Engaging with Stakeholders	P1.1, P2.2, G1.3
102-47	List of material topics	Engaging with Stakeholders	P2.2, G1.3
102-48	Restatements of information	Not applicable	P1.2, P1.3
102-49	Changes in reporting	About This Report	P1.2, P1.3
102-50	Reporting period	About This Report	P1.2, P1.3
102-51	Date of most recent report	About This Report	P1.2
102-52	Reporting cycle	About This Report	P1.2, P1.3
102-53	Contact point for questions regarding the report	About This Report	P1.5
102-54	Claims of reporting in accordance with the GRI Standards	About This Report	P1.1
102-55	GRI content index	Content Indexes	P1.1
102-56	External assurance	Not Applicable	P1.1

Content Indexes

Disclosure Number	Description	Relevant Chapter(s) or Other References/ Explanation	CASS-CSR3.0
GRI 200: ECONOMIC			
Economic Performance			
GRI 103: Management Approach 2016			
103-1	Explanation of the material topic and its Boundary	Engaging with Stakeholders	P1.3
103-2	The management approach and its components	Creating Green Value	P1.3
103-3	Evaluation of the management approach	Creating Green Value	P1.3
GRI 201: Economic Performance 2016			
201-1	Direct economic value generated and distributed	Sustainability Overview	M1.2, M1.3, M1.4, M1.5, S1.5
201-2	Financial implications and other risks and opportunities due to climate change	Creating Green Value	
201-3	Defined benefit plan obligations and other retirement plans	Caring for the Growth of Employees	
201-4	Financial assistance received from government	Government grants of HK\$376,678,000 were granted during the Reporting Period.	
Market Presence			
GRI 103: Management Approach 2016			
103-1	Explanation of the material topic and its Boundary	Engaging with Stakeholders	
103-2	The management approach and its components	Creating Green Value	
103-3	Evaluation of the management approach	Creating Green Value	
GRI 202: Market Presence 2016			
202-1	Ratios of standard entry level wage by gender compared to local minimum wage	The compensation of all of our employees is higher than the minimum wage rules.	
202-2	Proportion of senior management hired from the local community	Relevant data will be provided in next year's sustainability report.	S4.7

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Disclosure Number	Description	Relevant Chapter(s) or Other References/ Explanation	CASS-CSR3.0
Anti-corruption			
GRI 103: Management Approach 2016			
103-1	Explanation of the material topic and its Boundary	Engaging with Stakeholders	S1.3
103-2	The management approach and its components	Establishing Sustainable Corporate Governance	S1.3
103-3	Evaluation of the management approach	Establishing Sustainable Corporate Governance	S1.3
GRI 205: Anti-corruption 2016			
205-1	Operations assessed for risks related to corruption	Establishing Sustainable Corporate Governance	
205-2	Communication and training about anti-corruption policies and procedures	Establishing Sustainable Corporate Governance	
205-3	Confirmed incidents of corruption and actions taken	Establishing Sustainable Corporate Governance	
GRI 300: ENVIRONMENTAL			
Emissions			
GRI 103: Management Approach 2016			
103-1	Explanation of the material topic and its Boundary	Engaging with Stakeholders	E1.1, E2.1
103-2	The management approach and its components	Appreciating Our Environment	E1.1, E1.5, E2.1
103-3	Evaluation of the management approach	Appreciating Our Environment	E1.1, E1.5, E2.1
GRI 305: Emissions 2016			
305-1	Direct (Scope 1) GHG emissions	Appreciating Our Environment	E2.8
305-2	Energy indirect (Scope 2) GHG emissions	Appreciating Our Environment	E2.8
305-3	Other indirect (Scope 3) GHG emissions	Appreciating Our Environment	E2.8
305-4	GHG emissions intensity	Appreciating Our Environment	E2.8
305-5	Reduction of GHG emissions	Appreciating Our Environment	E2.8
305-6	Emissions of ozone-depleting substances (ODS)	Appreciating Our Environment	E2.8
305-7	Nitrogen oxides (NO _x), sulfur oxides (SO _x), and other significant air emissions	Appreciating Our Environment	E2.8

Disclosure Number	Description	Relevant Chapter(s) or Other References/ Explanation	CASS-CSR3.0
Effluents and Waste			
GRI 103: Management Approach 2016			
103-1	Explanation of the material topic and its Boundary	Engaging with Stakeholders	E1.1, E2.1, E2.11
103-2	The management approach and its components	Appreciating Our Environment	E1.1, E1.5, E2.1, E2.11, E2.18, E2.19
103-3	Evaluation of the management approach	Appreciating Our Environment	E1.1, E1.5, E2.1, E2.11, E2.18, E2.19
GRI 306: Effluents and Waste 2016			
306-1	Water discharge by quality and destination	Appreciating Our Environment	E2.10
306-2	Waste by type and disposal method	Appreciating Our Environment	E2.10, E2.12
306-3	Significant spills	Appreciating Our Environment	E2.12, E4.2
306-4	Transport of hazardous waste	Appreciating Our Environment	
306-5	Water bodies affected by water discharges and/or runoff	Our business operations will not adversely affect nearby water bodies.	E4.2
Oil and Gas Sector Disclosures			
OG5	Volume and disposal of formation or produced water	Our business operations do not involve formation water or produced water.	E2.10

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Disclosure Number	Description	Relevant Chapter(s) or Other References/ Explanation	CASS-CSR3.0
Environmental Compliance			
GRI 103: Management Approach 2016			
103-1	Explanation of the material topic and its Boundary	Engaging with Stakeholders	E1.1, E2.1
103-2	The management approach and its components	Appreciating Our Environment	E1.1, E1.5, E2.1
103-3	Evaluation of the management approach	Appreciating Our Environment	E1.1, E1.5, E2.1
GRI 307: Environmental Compliance 2016			
307-1	Non-compliance with environmental laws and regulations	Appreciating Our Environment	G4.4, E4.2
GRI 400: SOCIAL			
Labor/Management Relations			
GRI 103: Management Approach 2016			
103-1	Explanation of the material topic and its Boundary	Engaging with Stakeholders	S2.1
103-2	The management approach and its components	Caring for the Growth of Employees	S2.1, S2.3
103-3	Evaluation of the management approach	Caring for the Growth of Employees	S2.1, S2.3
GRI 402: Labor/Management Relations 2016			
402-1	Minimum notice periods regarding operational changes	Caring for the Growth of Employees	
Occupational Health and Safety			
GRI 103: Management Approach 2016			
103-1	Explanation of the material topic and its Boundary	Engaging with Stakeholders	S3.1
103-2	The management approach and its components	Providing Safe, Quality and Innovative Services	S3.1, S3.2
103-3	Evaluation of the management approach	Providing Safe, Quality and Innovative Services	S2.1, S2.16

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Disclosure Number	Description	Relevant Chapter(s) or Other References/ Explanation	CASS-CSR3.0
GRI 403: Occupational Health and Safety 2018			
403-1	Occupational health and safety management system	Providing Safe, Quality and Innovative Services	S2.17
403-2	Hazard identification, risk assessment, and incident investigation	Providing Safe, Quality and Innovative Services	S2.20, S2.21, S3.2
403-3	Occupational health services	Providing Safe, Quality and Innovative Services	S2.21, S2.22
403-4	Worker participation, consultation, and communication on occupational health and safety	Providing Safe, Quality and Innovative Services	S2.16
403-5	Worker training on occupational health and safety	Providing Safe, Quality and Innovative Services	S2.18, S3.3
403-6	Promotion of worker health	Providing Safe, Quality and Innovative Services	S2.18, S2.21, S3.5
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Providing Safe, Quality and Innovative Services	S2.17
403-8	Workers covered by an occupational health and safety management system	Providing Safe, Quality and Innovative Services	S2.16
403-9	Work-related injuries	Sustainability Overview	S2.17, S2.19, S2.20
403-10	Work-related ill health	Sustainability Overview	S2.17

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Disclosure Number	Description	Relevant Chapter(s) or Other References/ Explanation	CASS-CSR3.0
Training and Education			
GRI 103: Management Approach 2016			
103-1	Explanation of the material topic and its Boundary	Engaging with Stakeholders	S2.24, S2.25
103-2	The management approach and its components	Caring for the Growth of Employees	S2.24, S2.25
103-3	Evaluation of the management approach	Caring for the Growth of Employees	S2.24, S2.25
GRI 404: Training and Education 2016			
404-1	Average hours of training per year per employee	Sustainability Overview	S2.24
404-2	Programs for upgrading employee skills and transition assistance programs	Caring for the Growth of Employees	S2.24
404-3	Percentage of employees receiving regular performance and career development reviews	Caring for the Growth of Employees	S2.26
Rights of Indigenous Peoples			
GRI 103: Management Approach 2016			
103-1	Explanation of the material topic and its Boundary	Engaging with Stakeholders	S4.1, S4.3
103-2	The management approach and its components	Building a Harmonious Community	S4.1, S4.3
103-3	Evaluation of the management approach	Building a Harmonious Community	S4.1, S4.3
GRI 411: Rights of Indigenous Peoples 2016			
411-1	Incidents of violations involving rights of indigenous peoples	Building a Harmonious Community	
Oil and Gas Sector Disclosures			
OG9	Operations where indigenous communities are present or affected by activities and where specific engagement strategies are in place	Building a Harmonious Community	
OG12	Operations where involuntary resettlement took place	Building a Harmonious Community	



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