



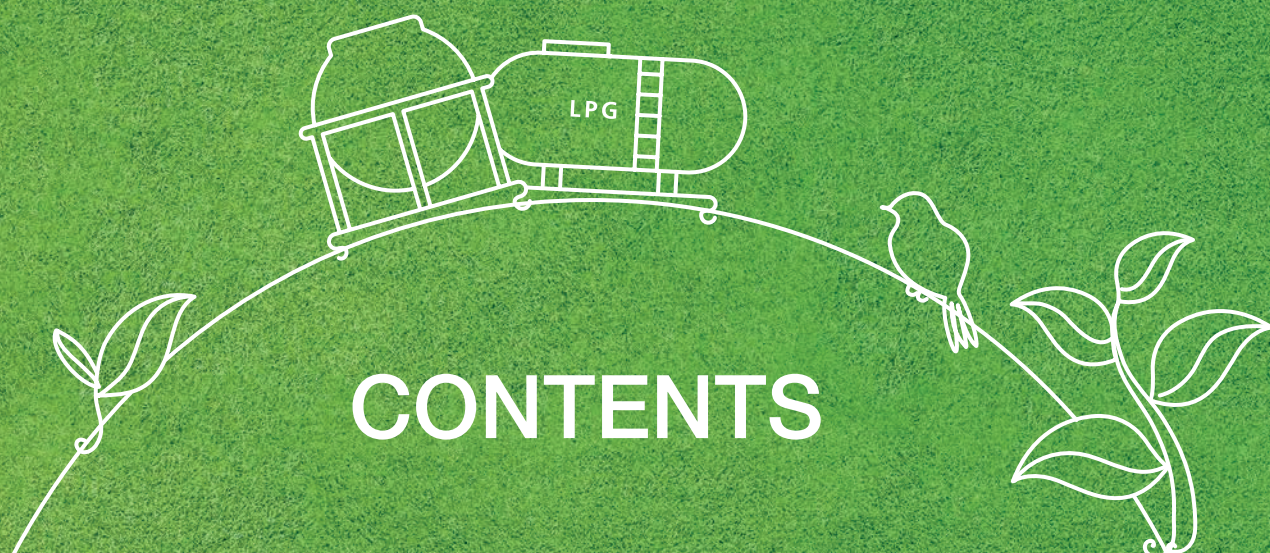
**CHINA GAS**  
**中國燃氣**

Stock Code : 00384.HK

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



\* For identification purpose only



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# ABOUT THIS REPORT

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## ABOUT THIS REPORT

This report is the fourth sustainability report (the “Report”) issued by China Gas Holdings Limited (stock code: 384) (the “Company”) and its subsidiaries (collectively the “Group” or “China Gas”). China Gas has engaged an independent professional consultant, AECOM Asia Company Limited (the “Independent Consultant”), in the preparation of this Report. This Report outlines the Group’s efforts and achievements regarding the sustainability matters over the past year in an open and transparent manner, and at the same time demonstrates the Group’s strategies and commitment along the path towards sustainability. The Group publishes a sustainability report annually to the public to continuously enhance the transparency of information disclosure.

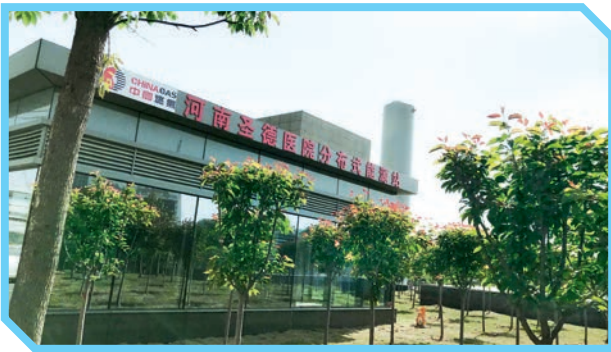
## SCOPE OF THE REPORT

This Report reflects the sustainability performance of China Gas’s headquarters and all subsidiaries under the operational control of the Group from 1 April 2019 to 31 March 2020 (“Reporting Period” or “FY2019/20”). 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 Company’s *2019/20 Annual Report* (“Annual Report”). Unless otherwise specified, the data of contractors and subcontractors is not reflected in this Report.

## REPORTING GUIDELINES

This Report is prepared in accordance with the Global Reporting Initiative (“GRI”) Standards: Comprehensive option, *GRI 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”). This Report is also prepared with reference to the *Guidelines on Corporate Social Responsibility Reporting for Chinese Enterprises* (CASS-CSR4.0) of the Chinese Academy of Social Sciences and the Sustainable Development Goals (“SDG”) 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. The summary of the monitoring, management and operational information is also rendered by the relevant departments and subsidiaries in accordance with the relevant systems 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 content of this Report has also been reviewed by the senior management and the sustainability committee of the Company ("Sustainability Committee"), and approved by the board of directors of the Company (the "Board").

## HOW TO ACCESS

This Report is available in both English and Chinese electronic versions and has been uploaded onto the following websites: HKEXnews ([www.hkexnews.hk](http://www.hkexnews.hk)) and the Company ([www.chinagasholdings.com.hk](http://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, 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 your comments to [investor@chinagasholdings.com.hk](mailto:investor@chinagasholdings.com.hk).





# MESSAGE FROM THE CHAIRMAN

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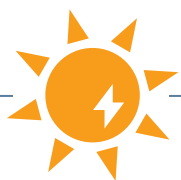
In the past year, facing the challenges of economic slowdown with unforeseen changes in the global market that is full of both opportunities and challenges, China Gas's staff members have been united and actively responded to the industry and market changes by adopting the "cost reduction, efficiency enhancement, transformation and development" principle to encourage business improvements and enhance competitiveness. While depicting our efforts to provide stable, profitable, clean and safe energy, the Group also adheres to the corporate mission of "Converging in Harmony and Benefiting the Society" in order to promote sustainable development in the four major areas: "Undertaking Responsibilities", "Embracing Environmental Protection", "Joining Hands with Employees" and "Caring for the Community".

**Undertaking Responsibilities** — As a large-scale cross-regional integrated energy service provider in China, we promptly grasp the development opportunities brought by national policies and market demand, and are determined to expand our market share, ensure stable gas supply, provide high-quality clean energy, alleviate air pollution problems and improve people's living standards. At the same time, we also uphold the core values in sustainable development and use these as the guidelines for investment decision-making and operation. We also adhere to the operating principles of integrity and compliance, and promote sustained and steady growth in business performance through continuous improvement of risk control management capabilities, safe operation standards and customer service system.

**Embracing Environmental Protection** — As a responsible clean energy operator, the Group actively responds to the "blue sky project" formulated by the government by engaging in the development of natural gas business, promoting the replacement of coal with gas initiatives in rural areas and the construction of beautiful villages, further innovating and expanding the liquefied petroleum gas ("LPG") industry chain. We also provide integrated clean energy solutions such as various types and forms of distributed energy, centralised heating and photovoltaic power generation services in various markets and regions. We are committed to the overall rationale of "mass utilisation of low-carbon energy, cleaner use of traditional fuel, diverse energy supply, highly efficient energy consumption and smart energy system" to provide "smart" energy for the society and the public and contribute to "defending the blue sky".

**Joining Hands with Employees** — Having an excellent team of employees is the key to a successful enterprise. Adhering to our principle of "People-oriented and Strive for Excellence", we are committed to becoming an outstanding employer, and strive to implement corporate culture with our employees and become a role model for the industry. We continue to build a diversified career development platform for employees and provide a good working environment, competitive remuneration and benefits, comprehensive career development training and a variety of open space for recreational and leisure activities for employees to fully unleash their potentials.

**Caring for the Community** — China Gas has pledged to take up social responsibilities and connect with the community. Through establishing China Gas Charity Foundation Limited (the "Foundation"), we actively carry out charitable activities to help vulnerable groups, particularly in educational and medical sponsorship, disaster relief, poverty alleviation and established a volunteer service team within the Group to promote "Converging in Harmony and Benefiting the Society".



In 2020, in order to further improve the management of sustainable development of the Group, we have established the Sustainability Committee to continuously enhance the Group's performance in sustainable development. The Sustainability Committee is led by myself as the chairman and Mr. Zhu Weiwei, the Company's executive director and managing vice president, as the vice chairman of the Sustainability Committee. We will continue to improve the Group's management system pertaining sustainability and strive to accelerating the Group's progress towards sustainable development. Please refer to "Sustainable Corporate Governance" of this Report for further information on the Sustainability Committee.



Looking into the future, China Gas will continue to adhere to the development concepts of innovation, coordination, green, open and sharing in fulfilling our economic, environmental and social responsibilities, while fully supporting the SDGs of the United Nations and creating maximum value to stakeholders.

Mr. Liu Ming Hui

*Executive Chairman, Managing Director and President*



### 3 SPECIAL TOPIC: FIGHT AGAINST PANDEMIC

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At the beginning of 2020, COVID-19 was severe and the entire nation was engaged in the fight against the COVID-19 pandemic. To address the sudden outbreak of the pandemic, the Group immediately launched its emergency response mechanism, under which a dedicated leading team led by Mr. Liu Ming Hui, executive chairman, managing director and president of the Group, was set up. By making use of instant communication tools, an online command centre was established for giving orders and directions to the entire Group on battling the pandemic and safeguarding gas supply. Measures taken have significantly enhanced timeliness and accuracy of information circulation. As a utility company, the Group is deeply aware of its responsibilities and duties. All project management, as well as the management in the headquarters, gave up their vacation and returned to work during Chinese New Year, entering into a “combat” mode by strengthening manpower at all levels. Facing the lethal virus, over 50,000 employees of the Group were engaged in a vigorous effort to prevent and control the pandemic, fighting against the steep odds with no hesitation.

Subject to the premises of carrying out self-protection work against pandemic actively and effectively, we persisted in production and ensured the continuous gas supply in the locations, and there was no single case of interruption of gas supply. Meanwhile, through fully utilising our competitive advantage with community grids, we launched initiatives on poverty alleviation and addressed the problem of unsaleable agricultural products in epidemic areas, which realised China Gas’s mission and responsibility of “Converging in Harmony and Benefiting the Society”.

In addition, China Gas issued the “Proposal for Anti-Epidemic and Resumption of Work” (“the Proposal”). Through the Proposal, the Group advocated that under the gradual resumption of work across the country, employees should remain determined to serve the public, actively communicate and co-operate with the government, and implement adequate anti-epidemic measures.

#### LAUNCH OF “BATTLE THE PANDEMIC AND SAFEGUARD PEOPLE’S LIVELIHOOD” INITIATIVES

In Hubei Province, “fighters” of China Gas demonstrated great courage and a strong sense of responsibility. Soon after the pandemic outbreak, various provinces and cities in China activated level I public health emergency response and imposed strict lockdown measures that disrupted the liquefied natural gas (“LNG”) logistics chain. As a result, various provinces in Central China faced tremendous challenges in securing LNG supply. Under such harsh operating environment, the Group instructed Zhongran Hongtu Logistics Company Limited (“Hongtu Logistics”), a subsidiary undertaking LNG transportation business, to take every possible measure and overcome all difficulties to “continue supplying gas to all households while strictly upholding service quality”, in such a way as to ensure gas supply to Hubei Province. During the peak of the outbreak, the Group undertook the distribution of more than half of the LNG supply in Hubei Province, supplying over 200 million m<sup>3</sup> of LNG to the worst-affected areas. In particular, we guaranteed constant gas supply to the key anti-epidemic hospitals in Shiyan, Huanggang, Wuxue and other areas in Hubei Province. As of the end of the financial year, the Group’s project companies in Hubei Province supplied gas to a total of 68 key anti-epidemic hospitals in the province to ensure the normal operation of the healthcare system, which is essential to life-saving. These endeavours have testified to China Gas’ unbending commitment to social responsibility.



In Wuhan, China Gas employees worked around the clock to deliver LPG to each and every household under the windy and snowy weather. China Gas Wumei Panva Limited\* (中燃武煤百江公司), a subsidiary of the Group and the sole LPG supplier designated by the Wuhan Municipal Government to secure LPG supply, delivered cylinders of “life-saving” LPG to over 400,000 households in the city as well as frontline medical units such as Leishenshan Hospital, makeshift hospitals and quarantine hospitals during the peak of the outbreak. LPG supplied to users accumulated to 140,000 tonnes during that period. Apart from ensuring LPG delivery, China Gas Wumei Panva Limited also undertook responsibility to secure emergency transportation as part of the assistance to the

government in Wuhan. From the Group’s LPG import terminal at Xiaomen Island, Zhejiang, China Gas fleet fully loaded with imported high-quality LPG sailed up the Yangtze River to aid Wuhan, which has thus paved the only waterway for transporting LPG to Hubei Province during the outbreak. A total of 5,200 tonnes of LPG were delivered to Wuhan by the Group through the waterway during the outbreak. The move has demonstrated China Gas’s strong sense of social responsibility.

\* For identification purpose only

### 3 SPECIAL TOPIC: FIGHT AGAINST PANDEMIC

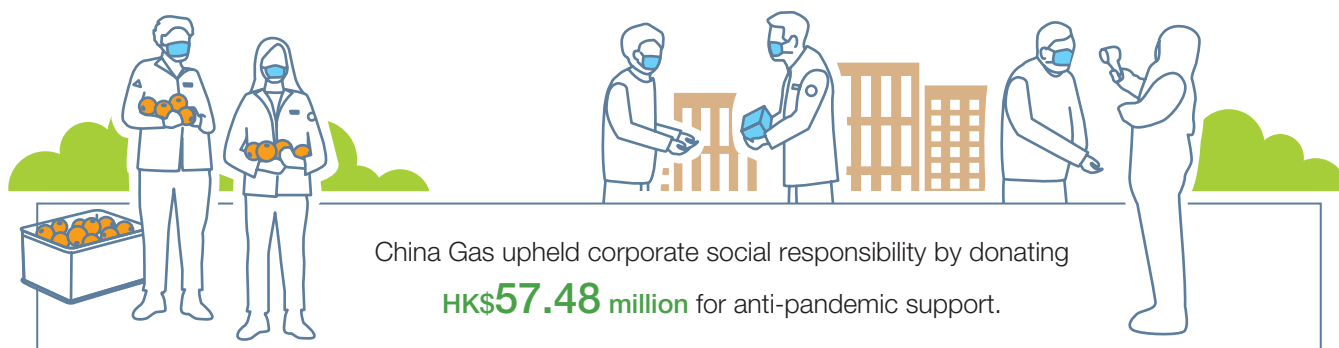
#### LAUNCH OF “BATTLE THE PANDEMIC AND SAFEGUARD PEOPLE’S LIVELIHOOD” INITIATIVES (Continued)

Besides, the Group utilised its Yipin Smart Living “New Retail Social Platform” and community grid officials, to provide residents with ordering and free delivery services of daily necessities, and collaborated with farmers and commercial merchants from Hubei to carry out precise poverty alleviation. The Group also utilised its community grids to organise a number of dedicated online-to-offline community sales activities for agricultural by-products from Hubei. Meanwhile, in response to the government’s and the Group’s call for “assisting farmers”. China Gas’s project company, Yulin Zhongran, allocated employees to conduct market research on radishes and look for restaurants and factories of radish products and sour seasonings that have resumed to normal operation in the city. The company also helped promote radishes by hosting “Radish Relay” through WeChat, Solitaire, WeChat Moments and China Gas Smart Living Grid Platform to help farmers overcome difficulties.



In this nationwide endeavour, the Group’s staff members selflessly engaged in “taking concerted actions to battle the pandemic and safeguard people’s livelihood”, the charitable initiative during the fight against the pandemic. The Group effectively secured supplies for cities and townships nearby to satisfy the urgent needs of its customers. Protection gears and basic necessities such as staple food and vegetables were delivered to hundreds of thousands families in 27 provinces and autonomous regions, and more than 500 cities were supported by community-based services provided by China Gas. Through such efforts made, the plight of the citizens was alleviated and the sales of slow-selling agricultural products were boosted. Thus, our actions had played an important role in maintaining social stability during a critical stage. The Group donated a total of HK\$57.48 million in cash and goods to areas badly hit by the virus to help them fight the pandemic and overcome difficulties. The move has demonstrated China Gas’ strong sense of social responsibility.

During the period of the fight against pandemic, China Gas received wide recognitions from the society on its outstanding performance. Our anti-epidemic efforts were reported by main national-level media in China, including People’s Daily, Xinhuanet, Guangming Daily, CCTV, China Net, China News, China Construction News, China Reform News, China Business Journal, etc.



*Mr. Liu Ming Hui, executive chairman, managing director and president of China Gas made a request to all employees of the Group, that:*

“The service quality of China Gas cannot be degraded amid the disaster. Despite challenges, we shall forge ahead in the face of difficulties.”



## 4 ABOUT CHINA GAS

As one of the largest regional energy service companies in China, 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 LPG to residential, industrial and commercial users, construction and operation of compressed natural gas (“CNG”)/LNG refilling stations as well as development and application of technologies relating to natural gas and LPG in China.

As at 31 March 2020, the Group cumulatively secured a total of 604 piped gas projects with concession rights in 29 provinces, municipalities and autonomous regions in China. The Group also owns 17 natural gas long distance transmission pipeline projects, 556 CNG/LNG refilling stations for vehicles and vessels, one coal bed methane exploration project, 113 LPG distribution projects and 102 integrated energy supply projects with multi-energy complementation. The number of connectable urban population covered by all the Group’s gas projects increased to 137 million.

### OUR MISSION



#### Converging in Harmony

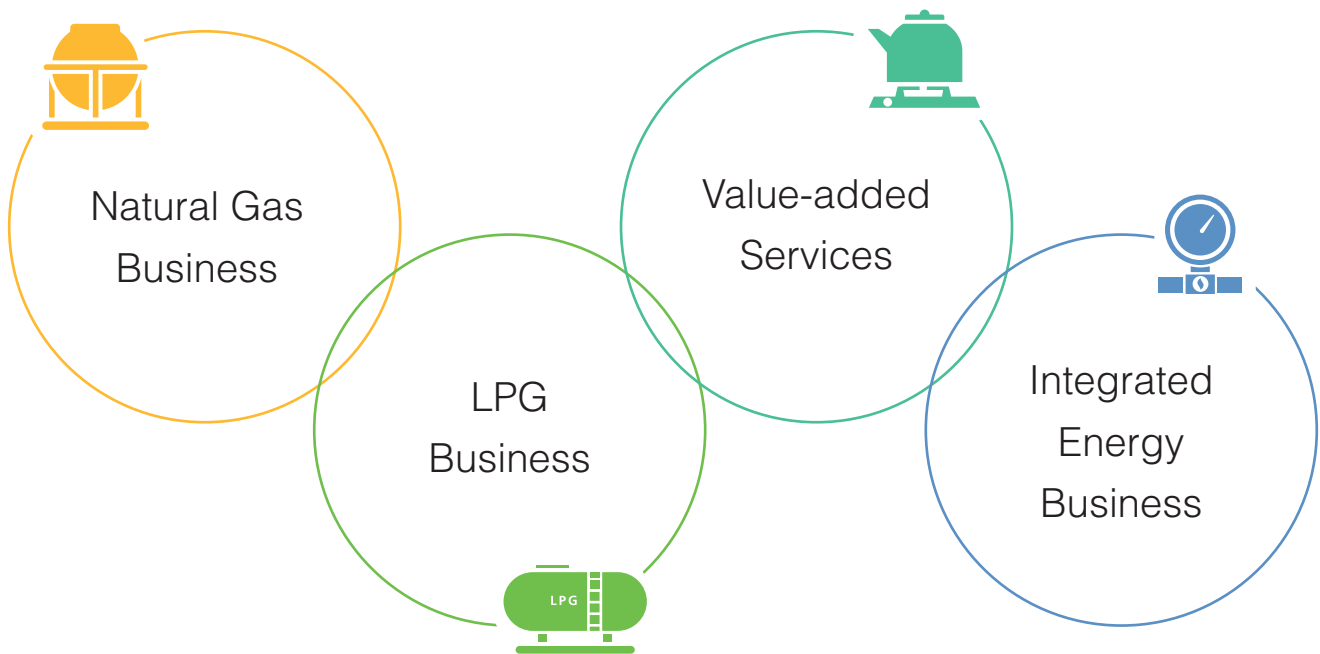
Fully converging and configuring all capital resources enable China Gas to effectively achieve outstanding development and expand into the blue oceans, comprehensively building a new business ecosystem of China Gas. On the basis of “successful cooperation between people and enterprise”, we will continue to convey our characteristics, spirits and core values to society, and ultimately strive to reach our corporate goal towards a “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 stemming 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, promote regional economic development, and to fulfil civic responsibility by ensuring the well-being of the public is taken care of.

### BUSINESS OVERVIEW



### Natural Gas Business

We endeavor to provide premium services with on-going clean energy innovations in order to improve the environment and enhance one's standard of living. As a green and clean low-carbon energy source with high quality and high efficiency, natural gas continues to invigorate the global economic development and facilitate the transition of human society from industrial civilisation to ecological civilisation. Owning 604 piped gas projects with concession rights, the Group has the largest number of projects in China.

### Construction of Natural Gas Pipeline Network 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.



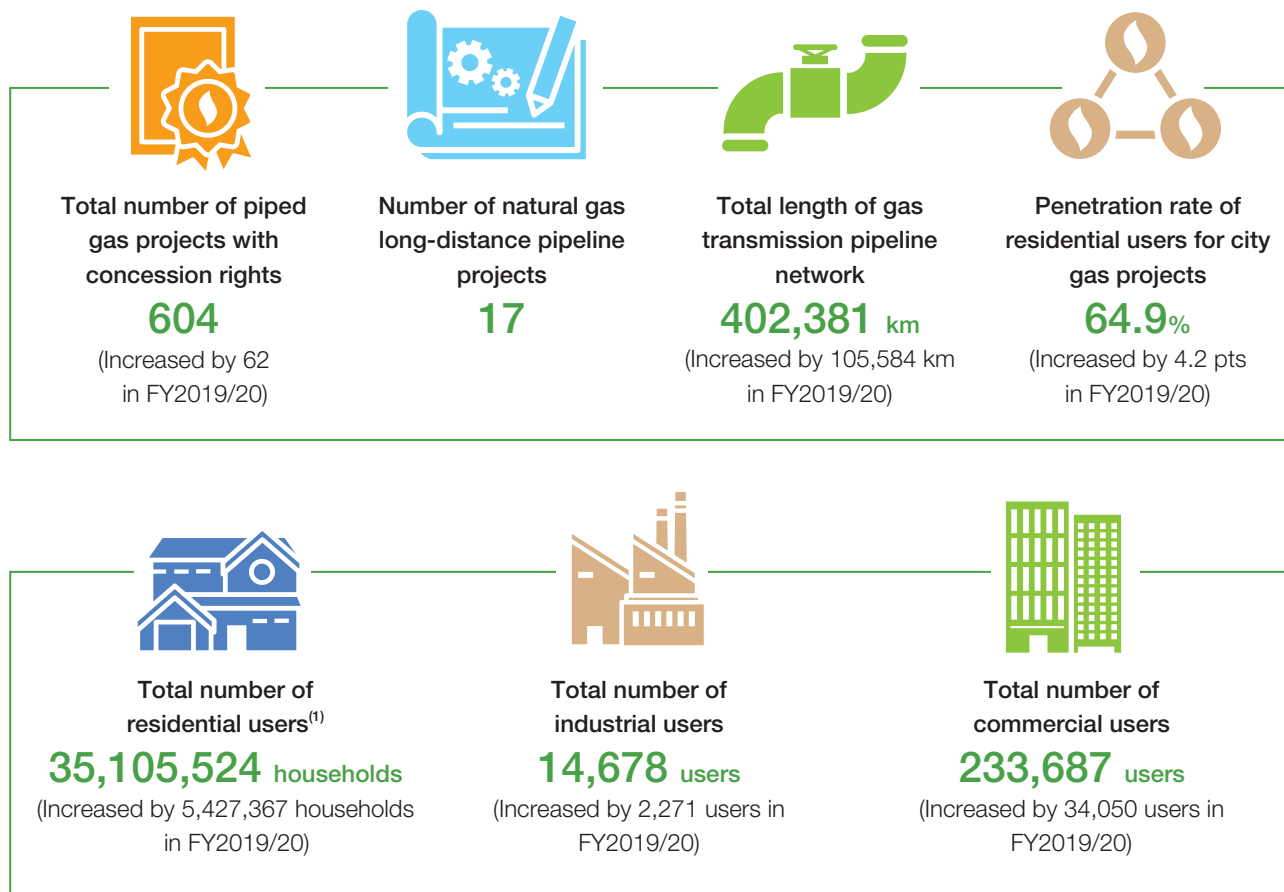
## 4 ABOUT CHINA GAS

### BUSINESS OVERVIEW (Continued)

#### Natural Gas Business (Continued)

#### Construction of Natural Gas Pipeline Network and User Connection (Continued)

As at 31 March 2020



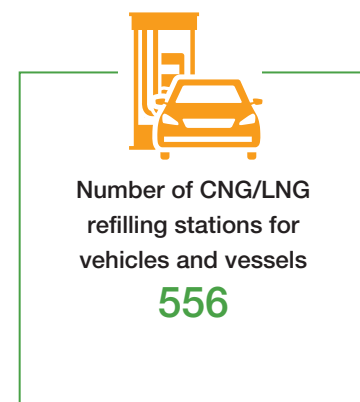
#### CNG/LNG Refilling Stations for Vehicles and Vessels

As at 31 March 2020

To promote the construction and development of clean energy business, China Gas owns more than 556 vehicle refilling stations, either in operation or under construction. The Group made continuous outstanding breakthroughs in industry research, business model, pipeline expansion and network construction. The Group has also successively entered into industry strategic alliances with leading domestic automotive and equipment manufacturers, and established close cooperative ties with leading domestic LNG suppliers to secure gas supply for vehicle gas projects, and further accelerate the construction of the provincial clean energy investment platform and ensure the rapid development of gas projects for vehicles and vessels.

Note:

1. City gas projects and "replacement of coal with gas" projects were included.



## BUSINESS OVERVIEW (Continued)

### Natural Gas Business (Continued)

#### Township “Replacement of Coal with Gas”

Since 2017, China Gas has actively responded to the central government’s policies and promote the implementation of the township “replacement of coal with gas” projects. To provide clean natural gas for residents in towns and villages in North China, the Group has rapidly dedicated itself to facilitating the development of the township “replacement of coal with gas” projects through maintaining high standard, high quality and high efficiency of construction projects and gas supply. In addition, the Group has successively established strategic cooperations with many provinces and cities in China to jointly facilitate the construction of beautiful villages and implement “township gasification” to promote the revitalisation strategy of villages in various regions.

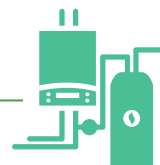
As at 31 March 2020



Accumulated number of residential users  
contracted for township “replacement  
of coal with gas” initiatives

**>9 million households**

(Increased by approximately 2 million  
households in FY2019/20)



Accumulated number of township residential  
users completed gas pipeline connections

**6,236,441 households**

(Increased by 2,695,695 households  
in FY2019/20)





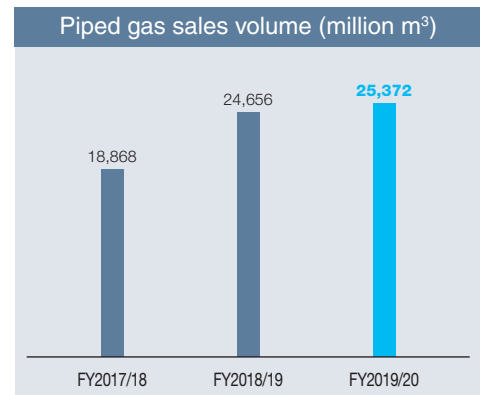
## 4 ABOUT CHINA GAS

### BUSINESS OVERVIEW (Continued)

#### Natural Gas Business (Continued)

##### Sales of Natural Gas

From January to March 2020, the growth of natural gas consumption of non-resident users declined year-on-year due to the COVID-19 pandemic, dampening the Group's total sales volume of natural gas for the year. During the Reporting Period, the Group's total natural gas sales volume increased by 2.9% year-on-year to 25.37 billion m<sup>3</sup>. Natural gas was mainly sold through networks of gas pipelines laid in cities and townships, trading business and direct-supply pipelines. Gas sales volume attributable by city gas pipelines recorded 15.63 billion m<sup>3</sup>, representing a year-on-year increase of 6.0%. Trading segment and direct-supply pipeline business recorded 9.74 billion m<sup>3</sup> in gas sale volume, representing a year-on-year decrease of 1.7%.



### Operational Locations of Natural Gas



—○— Long Distance Pipeline Project

#### Major National Natural Gas Pipelines

- West-East Gas Pipeline No. 1
- West-East Gas Pipeline No. 2
- Shaanxi-Beijing Pipeline No. 2
- Zhongwu Pipeline
- Sichuan-East Gas Pipeline
- China-Russia Natural Gas Pipeline
- China-Myanmar Natural Gas Pipeline

(not drawn to scale)



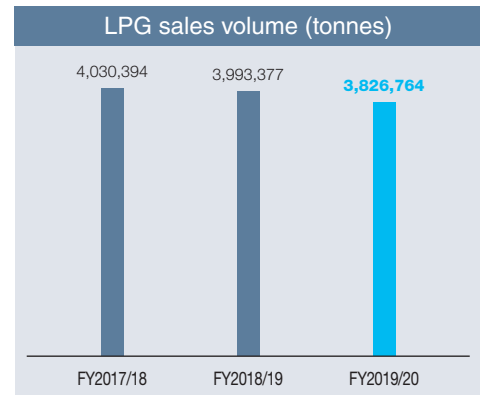
## 4 ABOUT CHINA GAS

### BUSINESS OVERVIEW (Continued)

#### LPG Business

LPG is a by-product of oil fields and refineries. Its main components are propane and butane, which can be not only used as fuels, but also as an industrial raw material for the production of petrochemical products such as ethylene, propylene, gasoline, which are widely applied to our lives.

As the largest integrated LPG operation service provider in China, the Group has a comprehensive industrial chain covering LPG import, ocean transportation, terminals, warehousing, international and domestic trading, domestic shipping and land logistics, refilling and retail. Our products and services are applied in many fields such as civil, commercial and industrial areas.



As at 31 March 2020



Accumulated number of LPG terminals

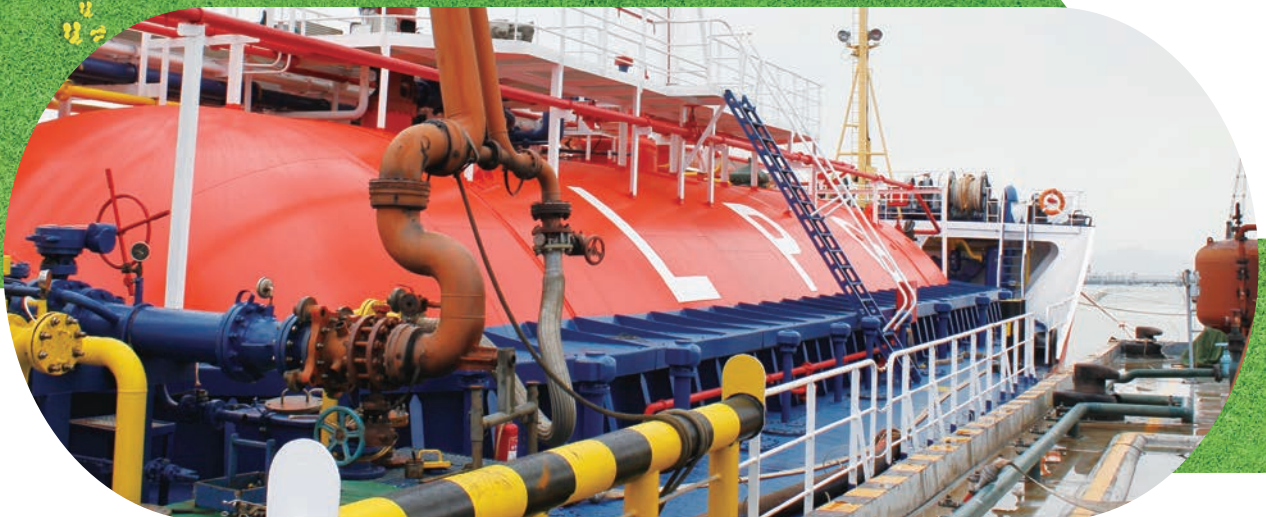
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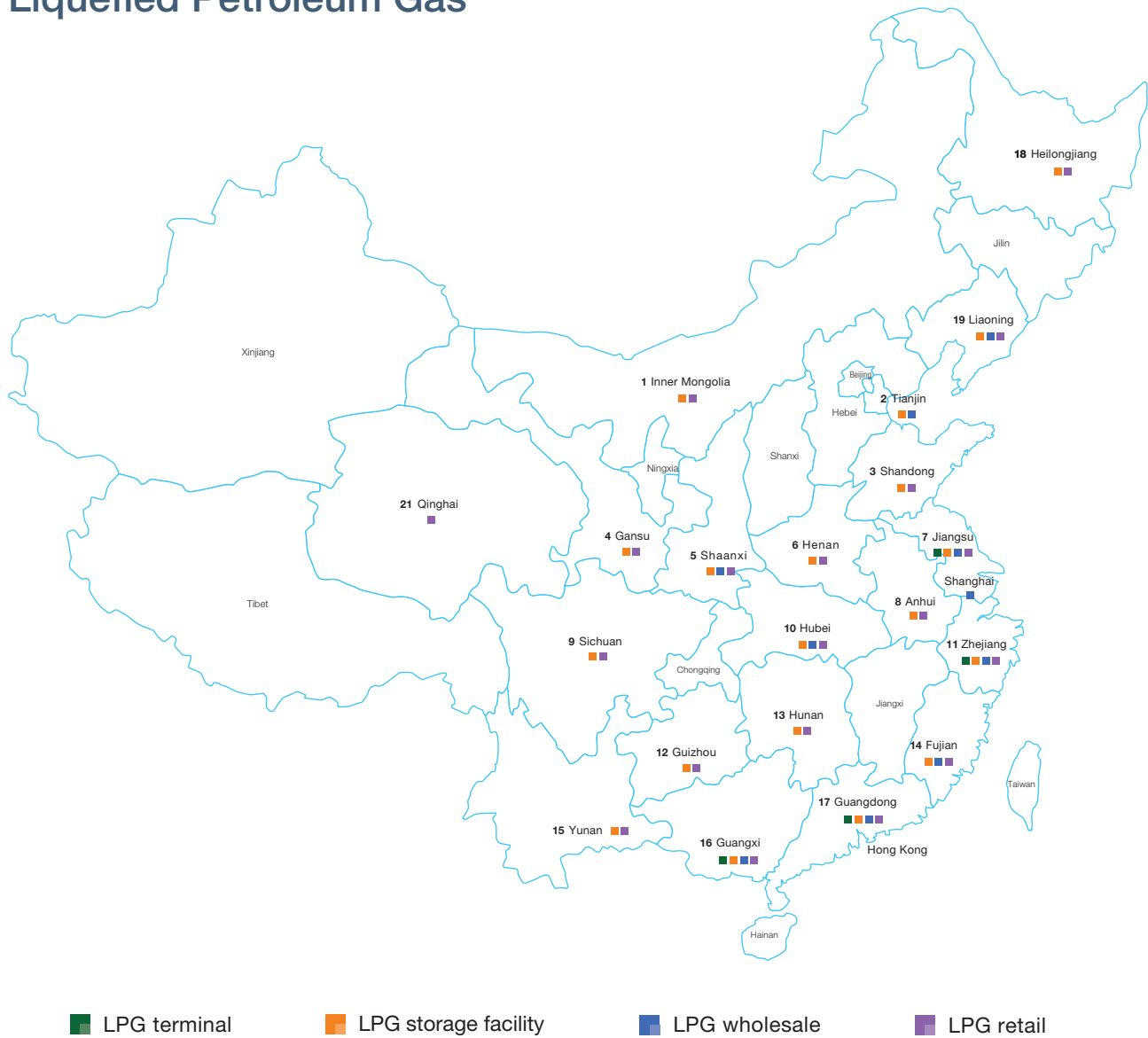
Accumulated number of LPG distribution projects

113

(Increased by 13 in FY2019/20)



### Operational Locations of Liquefied Petroleum Gas





# 4 ABOUT CHINA GAS

## BUSINESS OVERVIEW (Continued)

### Value-added Services

The Group has created an e-commerce portal and platform, which targets families, communities, industrial and commercial customers with the aim of providing a more convenient internet marketing platform for the sales of gas, gas-related products and services. Currently, the Group provides natural gas and LPG services to more than 40 million residential, industrial and commercial users, and therefore, such favorable prerequisite has provided us with an amazing potential for enlisting value-added products. Accordingly, the Group will strive to gradually increase the percentage of its income derived from a value-added business in its overall revenue by diversifying its value-added services and edging up its marketing efforts, with the prime aim of increasing the profitability and competitiveness of its service network. The Group's value-added services includes the sales of wall-mounted gas heaters and kitchen gas appliances under the brand of "Gasbo", kitchen electronic appliances, smart home devices, provision of comprehensive gas insurance agency services, gas corrugated pipes, gas alarms, water purifiers, fast-moving consumer goods, etc.

As at 31 March 2020



Sales volume of wall-mounted gas heaters and the series of kitchen gas appliances under the brand of "Gasbo" reached **1,240,000** units  
(Increased by 49.4% in FY2019/20)



## BUSINESS OVERVIEW (Continued)

### Integrated Energy Business

Driven by the progress made in implementing environmental protection policies, the changes in energy consumption structure and the transformation in consumption patterns, China's energy industry is witnessing an unprecedented wave of significant 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, from 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. China Gas 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.

As at 31 March 2020



Accumulated number of integrated energy projects in operation

**102**

(Increased by 34 in FY2019/20)





# UNDERTAKING RESPONSIBILITIES AND CREATING VALUE

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- 19 Stakeholder Engagement
- 25 Sustainable Corporate Governance
- 34 Quality Service and Safety First





## 5 STAKEHOLDER ENGAGEMENT

China Gas believes that the success of an enterprise depends on maintaining a close and meaningful relationship with its stakeholders.

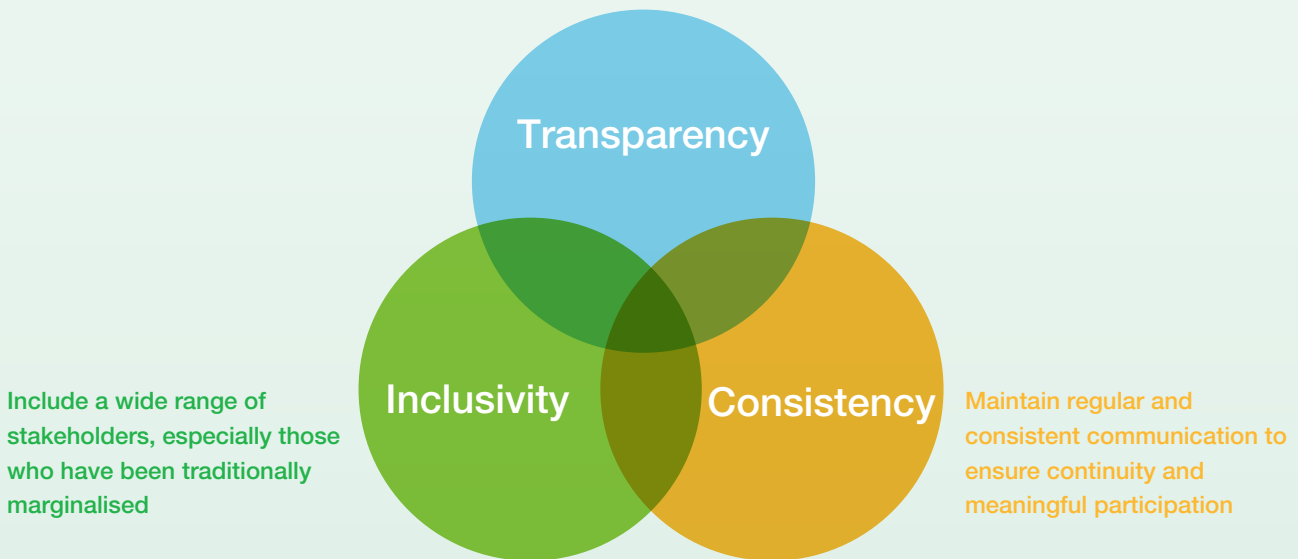
The main stakeholders of China Gas include shareholders, investors, creditors, financial analysts, employees, government and regulatory authorities, community groups, customers, business partners and suppliers, etc. Regular engagement with the stakeholders allows us to take into account the interests of all parties in the development of corporate sustainability blueprints such that a viable and comprehensive development strategy is established.

### STRATEGIES TO PROMOTE STAKEHOLDER ENGAGEMENT

The Group is determined to establish long-term relationships with stakeholders. Therefore, we maintain constructive communications with stakeholders through multiple channels in order to earn the best long-term benefits for our business and stakeholders.

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

Respect the views and values raised by the stakeholders, and strive to provide the information they need publicly in order to make meaningful contributions to our decisions



We adopt a proactive communication strategy with external stakeholders to disclose relevant environmental and social information to the affected groups, and thus in return, receive their support. For example, our project companies are required to formulate 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 projects to local communities and governments during the development of the projects, allowing the local residents and the government to keep abreast of the project development. For stakeholders who are less affected, our engagement policy is more specific, which usually involves direct communication with the stakeholders. The Group also regularly evaluates the effectiveness of each engagement activity and explores areas for improvement.



## 5 STAKEHOLDER ENGAGEMENT

### STRATEGIES TO PROMOTE STAKEHOLDER ENGAGEMENT (Continued)

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



#### Shareholders, investors, creditors and financial analysts

- General meetings
- Annual reports, interim reports, announcements and circulars
- Investor roadshows
- Investors/analysts/creditors meetings
- Project visits for investors/analysts/creditors
- Telephone/emails



#### Employees

- Work/project meetings
- Training programmes
- Employees' congress
- Internal publications
- Team building activities
- Face-to-face meetings
- Complaint mailbox



#### Government and regulatory authorities

- Research and meetings on special topics
- Environmental impact assessment reports
- Environment monitoring reports
- Daily report and communication
- Industry association activities
- Relevant forums and exchange activities
- Site inspections
- Telephone/emails



#### Business partners and suppliers

- Supplier conferences
- WeChat and QQ
- Supplier training programmes
- Strategic cooperation plans
- Supplier performance communication meetings
- Telephone/emails



#### Customers

- Telephone service hotlines
- Community service stations
- Electronic customer service system
- Customer satisfaction survey



#### Community groups

- Press release/announcements
- Community publicity activities
- Safety and science activities
- Social welfare volunteering activities
- Site inspections/visits
- Stakeholder engagement plans



## 5 STAKEHOLDER ENGAGEMENT

### MATERIALITY ASSESSMENT

We conduct a comprehensive materiality assessment annually to identify the economic, environmental and social issues that are of greatest concern to China Gas and its stakeholders, thereby guiding us to improve the Group's sustainable development strategies and sharpening the focus regarding our sustainability reports.

The major steps of the materiality assessment in FY2019/20 are outlined as follows:



#### Step 1

##### Identifying sustainable development topics

With the help of the Independent Consultant, China Gas conducted a comprehensive review and revision on the list of topics related to sustainable development of the Group. The review and revision ensures that the Group fully prioritises and reflects the nature of the Group's businesses and takes into account previous discussions with stakeholders. The Group has identified about 30 topics that are most relevant to its businesses and impact. These topics span the four realms from "economy", "environment," "employees/customers" to "society", which provided the basis for communication with internal and external stakeholders.

#### Step 2

China Gas invited internal and external stakeholders to directly participate in the identification of material topics. With the help of the Independent Consultant, questionnaires were conducted to collect and analyse stakeholders' ratings on the importance of the relevant sustainable development topics and expectations for this Report through a fair and balanced approach.



##### Conducting materiality assessment



#### Step 3

##### Verifying material topics

Senior management of the Group have verified and prioritised ten material topics and their coverage and boundaries, in order to ensure that they are significant to the Group.

## 5 STAKEHOLDER ENGAGEMENT

### MATERIALITY ASSESSMENT (Continued)

#### Topics of Highest Concern for Each Stakeholder Group

##### Shareholders, investors, creditors and financial analysts

- Economic performance
- Market presence
- Anti-corruption
- Availability of gas



##### Employees



- Employee welfare
- Occupational health and safety
- Diversity and equal opportunity
- Training and development

##### Government and regulatory authorities

- Environmental compliance
- Greenhouse gas emission management and climate change mitigation
- Disaster/emergency planning and response
- Anti-corruption



##### Business partners and suppliers



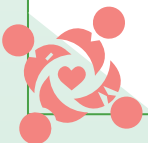
- Procurement practices
- Suppliers' environmental performance
- Suppliers' social performance

##### Customers

- Availability of gas
- Customer health and safety
- Product service and information



##### Community groups



- Economic contribution and impact on society
- Community involvement and inclusiveness
- Environmental compliance



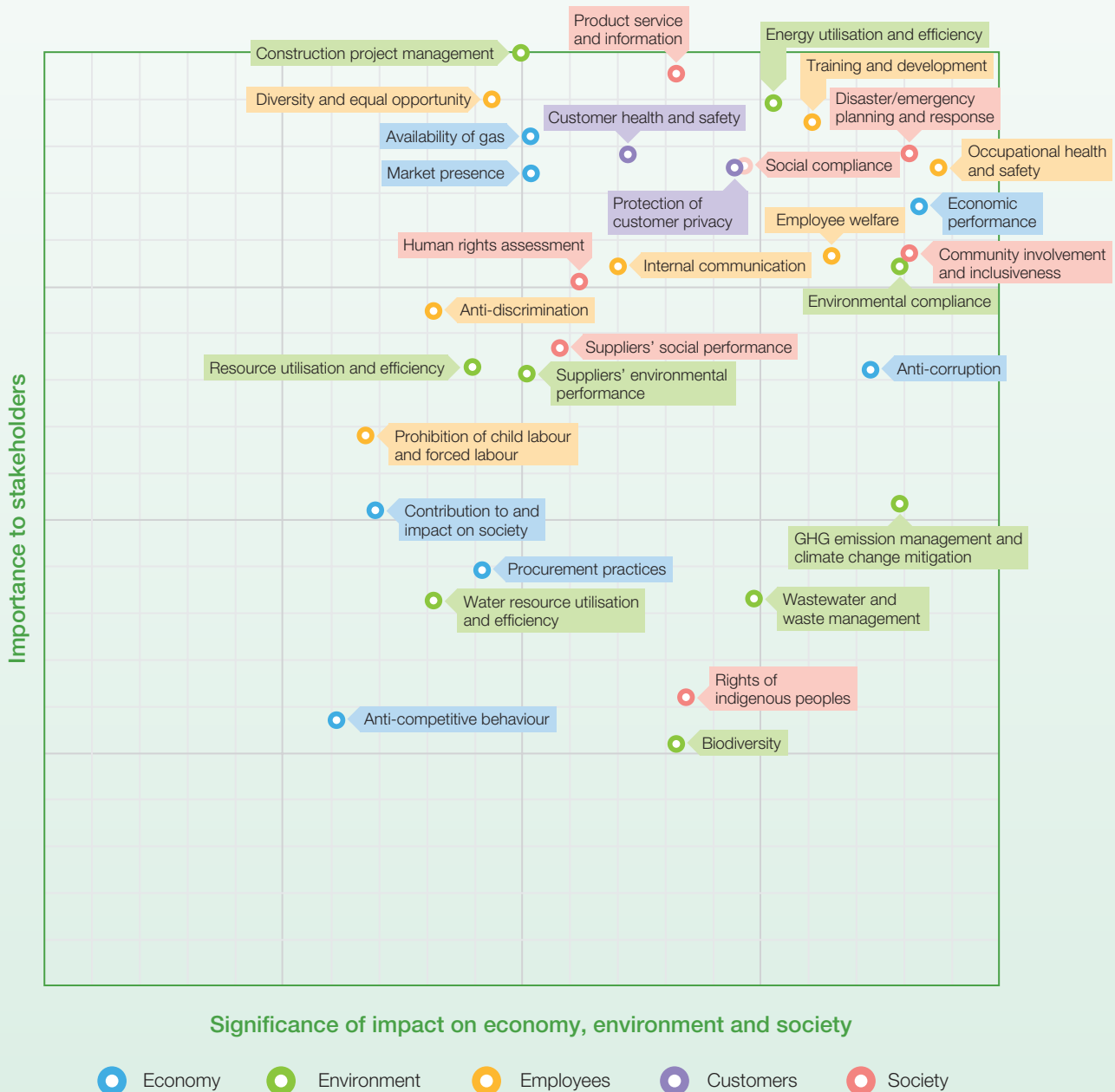


## 5 STAKEHOLDER ENGAGEMENT

### MATERIALITY ASSESSMENT (Continued)

#### Materiality Matrix

A materiality analysis was conducted by the Independent Consultant to identify the most critical topics based on the results of the stakeholder questionnaires, and the topics are present in a matrix. The key topics to the stakeholders and to the Group have been converted to GRI Standards which facilitates reporting, and are the focus of disclosure in this Report.



## 5 STAKEHOLDER ENGAGEMENT

### MATERIALITY ASSESSMENT (Continued)

#### Material Topics and Corresponding Impact and Scope

Material topics	GRI Standards	Impact and scope					
		Shareholders, investors, creditors and financial analysts	Employees	Government and regulatory authorities	Business partners and suppliers	Customers	Community groups
1 Occupational health and safety	GRI 403	○	○	○			
2 Disaster/emergency planning and response	N/A	○	○	○	○	○	○
3 Economic performance	GRI 201	○	○	○	○	○	○
4 Training and development	GRI 404	○	○	○	○		○
5 Energy utilisation and efficiency	GRI 302	○	○	○	○	○	
6 Community involvement and inclusiveness	GRI 413	○	○		○	○	
7 Environmental compliance	GRI 307	○	○	○	○		○
8 Product service and information	GRI 417	○	○		○		○
9 Social compliance	GRI 419	○	○		○		
10 Employee welfare	GRI 401	○	○		○		

## SUSTAINABLE DEVELOPMENT STRATEGIES

Adhering to the corporate mission of “Converging in Harmony and Benefiting the Society”, China Gas advocates for a green, low-carbon, recyclable and sustainable mode of operation, and is determined to build a long-term foundation and continuous well-being for the public.

China Gas adheres to the core values of sustainable development and uses them as principal guidelines for investment decisions and operations. We operate our business in a responsible and transparent manner, continuously enhancing our core competitiveness and sustainable development capabilities to create maximum value for our shareholders, customers, employees and society.



## SUSTAINABLE DEVELOPMENT MANAGEMENT

As the highest authority of the Group's governance structure, the Board is the decision-making body of the Group's sustainable development work. The Board is responsible for the Group's overall strategic planning, from reviewing annual work plans, to making decisions and providing guidance on critical issues relating to social responsibilities.



## 6 SUSTAINABLE CORPORATE GOVERNANCE

### SUSTAINABLE DEVELOPMENT MANAGEMENT (Continued)

#### Establishment of Sustainability Committee

In order to further improve the management and supervision of sustainable development, the Group has established the Sustainability Committee to enhance and monitor the Group's progress in sustainable development. The Sustainability Committee is led by Mr. Liu Ming Hui, the Company's executive chairman, managing director and president, as the chairman of the Sustainability Committee and Mr. Zhu Weiwei, the Company's executive director and managing vice president, as the vice chairman of the Sustainability Committee. The Sustainability Committee coordinates, implements and supervises sustainability-related work of the Group through the Sustainability Committee Leadership Group and the Sustainability Committee Office.

The Sustainability Committee Office comprises senior management and administrative staff of the Group. They represent different functional and operational departments, which includes the Audit and Supervision Department, Legal Affairs and Risk Control Department, Safety Supervision Department, Engineering Technology Department, Value-added Services Business Department, LPG Business Department, Thermoelectric Business Department, Operational Customer Service Department, Procurement Management Department, Corporate Management Planning and Information Department, Human Resources and Corporate Culture Department, Administration Department and Finance Department etc. These functional and operational departments collectively participate in the sustainable development of the Group, and the improvement surrounding the Group's environment, society and governance performance.



#### Sustainability Committee Leadership Group

##### Main responsibilities:

- Assist the Board in overall supervision and planning of the Group's sustainable development work
- Identify and review sustainability issues, risks and opportunities
- Review the Group's sustainable development policies and strategies
- Monitoring the annual review of the Group's sustainability performance
- Review and optimise the Group's sustainability management and structure
- Supervise and review the execution of the Sustainability Committee Office
- Arrange meetings to review the performance of the Group's sustainable development and reflect deficiencies



#### Sustainability Committee Office

##### Main responsibilities:

- Manage resource allocation and the coordination of inter-departmental work of sustainable development and handling problems
- Perform daily tasks of the Group's sustainable development including, but not limited to, enquiry, reporting, analysis, and audit of environmental and social data and information
- Daily communication with the Group's stakeholders
- Arrange meetings to discuss the work of sustainability reports and review the deficiencies
- Report the progress of the work of sustainability reports to the Sustainability Committee



## 6 SUSTAINABLE CORPORATE GOVERNANCE

### SUSTAINABLE DEVELOPMENT MANAGEMENT (Continued)

#### Regional Management and Control Mode

China Gas has implemented a management and control mode of “headquarters, regional management centres, and project companies”. In doing so, the management platform is able to utilise the practice of gradual authorisation by grading, and thus promotes the transformation of the function of the headquarters from “management” to “service” and increases management efficiency. 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.

##### Headquarters

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

##### Regional management centres

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

##### Project companies

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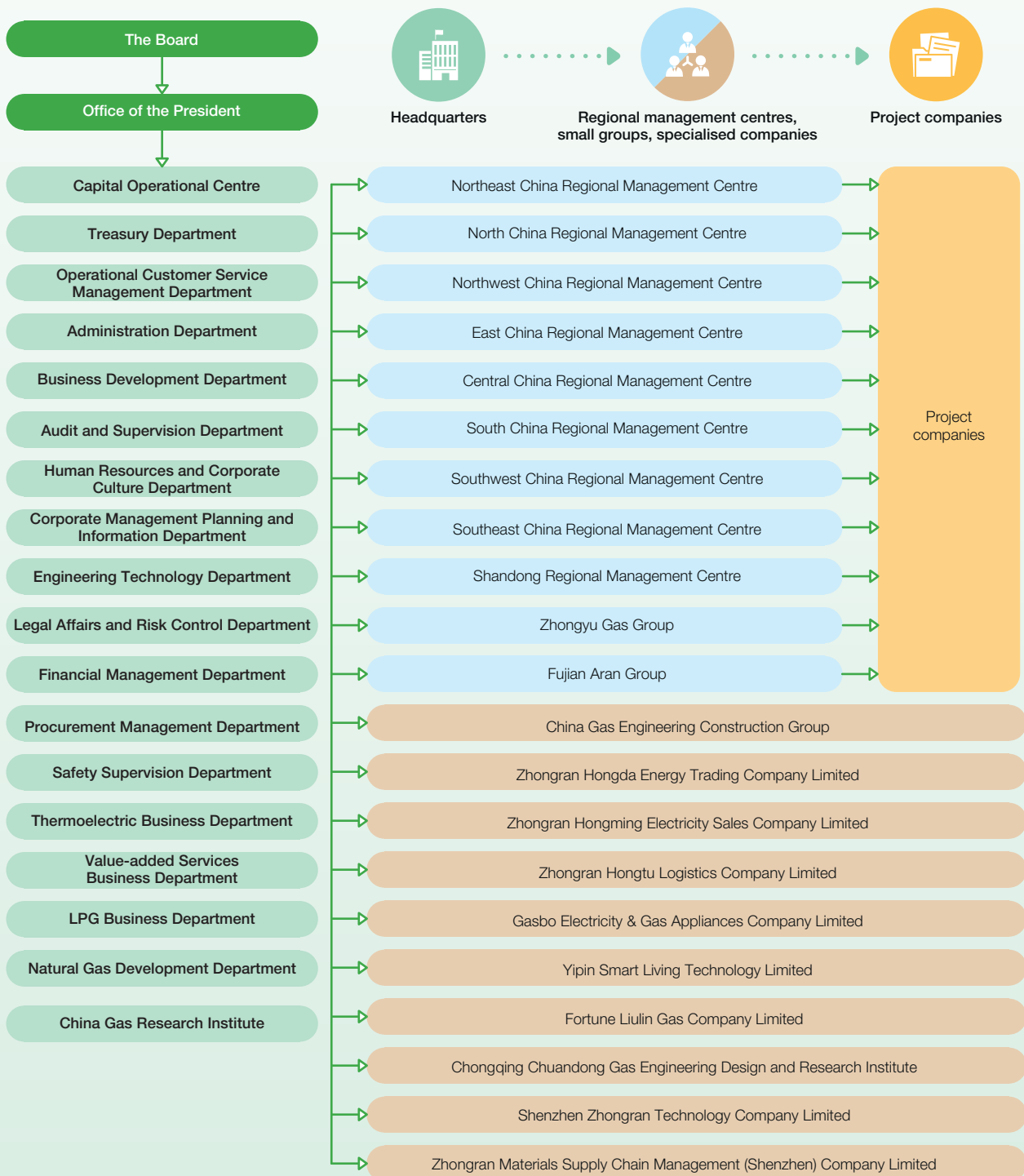
- As a profit centre and operating entity, it is subject to supervision and management of the Group’s headquarters and regional management centres while enhancing its self-management and increasing profitability of various businesses at the same time

## 6 SUSTAINABLE CORPORATE GOVERNANCE

### SUSTAINABLE DEVELOPMENT MANAGEMENT (Continued)

#### Regional Management and Control Mode (Continued)

##### Group Organisation Chart







## 6 SUSTAINABLE CORPORATE GOVERNANCE

### CORPORATE RISK MANAGEMENT

To ensure the long-term value for all stakeholders, China Gas regards risk management as its priority, and is committed to establishing a robust risk identification and management system, improving internal supervision and check-and-balance system, and enhancing risk prevention abilities.

The Group's *Comprehensive Risk Management System* provides detailed provisions on the organisational risk management system, risk management process, internal control system, risk reporting mechanism, risk management information system, risk management culture, and risk supervision and assessment. The *Risk Management Guidelines* further improves the corporate internal control system and regulates 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 *Engineering Construction Risk Management and Control Guidelines*, with an aim of reminding the Group's engineering construction personnel to not only recognise the prevalence of risks, but also to identify the risk characteristics to ensure construction projects are carried out in a regulated and safe manner, effectively preventing construction risks and gradually improving the risk control awareness of construction personnel.

The Group's Corporate Governance and Risk Control Committee is responsible for assisting the Board in monitoring corporate governance and risk control of the Group's business operations and financial management. Meanwhile, the Group also actively promotes and carries out internal risk self-assessments, and sets up full/part-time risk management personnel in project companies to ensure the risk management system is implemented effectively. A multi-level risk management structure can help the Group identify, assess, mitigate, report, and monitor various major risks of the Group and our project companies.

The Group persists in continuously improving corporate governance and internal control as it develops. We promise to incorporate effective and sustainable corporate governance and internal control measures into our corporate development strategies and risk management system through self-audit and reference to the professional opinions of independent third parties, and thus ensuring that the Group is moving towards a higher governance and internal control level.

## 6 SUSTAINABLE CORPORATE GOVERNANCE

### CORPORATE CODE OF CONDUCT

#### Anti-corruption

China Gas has established a series of policies and systems, including the *Internal Audit Supervision and Management System*, *Internal Supervision and Reporting Management System*, *Integrity and Diligent Handbook*, *Engineering Materials Supplier Management System* and *Anti-corruption Work Regulations (trial)*, etc., to prevent bribery, extortion, fraud and money laundering. All employees should strictly abide by the *Employees' Code of Conduct*, and must not accept or seek any gains from customers, suppliers, subcontractors, or other persons who have dealings with the Group's business. To ensure efficient management of corporate operations, the Group has established procedures for reporting, investigating and handling suspected misconduct.

We have also organised strong instructional, targeted and practical training in response to the content of the *Integrity and Diligent Handbook* in the project companies of each region. The newly recruited 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 Regulations*. If necessary, violators will be handed over to judicial authorities by relevant departments of the Group. During the Reporting Period, there were three concluded litigation cases regarding corrupt practices.

During the Reporting Period, the Group carried out the following anti-corruption work:

#### Organise anti-corruption training and visit anti-corruption education hubs

11 themed educational trainings on anti-corruption and honest advocacy were conducted for various business sectors including the engineering system, financial system, supply chain system, value-added services business department, specialised companies, project companies and backup cadres, these educational training opportunities served as a reminder for leading cadres and key personnel to perform their duties with integrity. At the same time, in combination with the activities of the Group's fifth litigation skills competition, three anti-corruption and honest advocacy training sessions were held for over 350 key leading cadres of the nine major project companies in three regions, namely in Northeast China, East China and Southwest China. Visits to the Harbin Liming Prison, Nanjing Prison and Nanning Prison were also organised.

#### Take multiple measures to promote anti-corruption

Ten excellent anti-corruption slogans were selected, including "Pride on Honesty, Shame on Corruption, Standard on Diligence, Warning on Laziness", "Promoting Anti-Corruption, Integrity Applies to All" for production of internal publicity posters of *Anti-corruption In Action* regarding criminal case studies. Posters and slogans were issued to all units and placed in prominent locations such that the majority of employees are able to view them easily and be vigilant. In addition, the Group's anti-corruption and anti-malfeasance policies are continuously circulated to employees through daily WeChat group posts for employees' daily self-reflection.

#### Eliminate vice and exalt virtue, promote anti-corruption warning articles

Reflection articles on corruption cases were issued by the Group with analysis and comments from different angles, allowing employees to have a deep and thorough understanding of the corruption cases surrounding them and be deterred by such cases. A total of 33 anti-corruption warning articles were written.

## 6 SUSTAINABLE CORPORATE GOVERNANCE

### CORPORATE CODE OF CONDUCT (Continued)

#### Anti-corruption (Continued)

Total training hours on anti-corruption (hours)	FY2019/20	FY2018/19 (restated)
Senior management	2,233	2,165
Middle-level management	2,271	2,776
General staff	12,455	9,298



#### Participation in the “2019 Member Representative Conference & Enterprise Anti-fraud Alliance Experience Sharing Conference”

In October 2019, the Group’s anti-corruption office and finance directors of some regional management centres participated in the “2019 Member Representative Conference & Enterprise Anti-fraud Alliance Experience Sharing Conference”. At the conference, various experts gave lectures on the difficulties, key points and countermeasures of enterprise fraud prevention, shared past successful cases and insightful discussions on topics that include the development of anti-fraud talents and teams, corporate anti-fraud systems and organisational structures. China Gas and other companies continue to learn from one another, broaden their views and foster a shared platform for anti-corruption regarding future endeavours.



## 6 SUSTAINABLE CORPORATE GOVERNANCE

### CORPORATE CODE OF CONDUCT (Continued)

#### Anti-competitive Behaviour Prevention

China Gas fully understands that stakeholders concern about the prevention of anti-competitive behaviour. The Group actively engages in anti-competitive behaviour guidelines in the market environment. The Group's *Employees' Code of Conduct* provides employees with guidelines on anti-competitive behaviour and promotes employee integrity and conduct 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, Bidding and Government Procurement Law of the PRC*, and strictly prohibits illegal activities such as colluded bidding and bid rigging in the process. The Group will continue to uphold the values of equality and respect, while abiding by business ethics and maintaining market order in its business operations.

#### Protection of Intellectual Property Rights

Under the *Employees' Code of Conduct*, all employees must respect copyright and are strictly prohibited from 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 intellectual properties of the Group.

### SUPPLY CHAIN MANAGEMENT

#### Maintaining Fair Competition in the Supply Chain

The Group attaches great importance to supply chain management, and actively participates in the upstream and downstream markets to establish a benign competition platform for business partners through transparency and win-win cooperation. We adhere to the principles of openness, fairness and impartiality, and clearly stipulate the terms of integrity and compliance when signing contracts with suppliers. We strictly require the personnel of both parties to comply with regulations, advocate integrity management, and oppose commercial fraud.

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

The Group has a strict procurement procedures. All suppliers of important materials must be registered in the China Gas Bidding and Procurement Platform, and go through inspection and pass the relevant approval process of the Group to become "eligible suppliers". We request all suppliers to obtain certifications for environmental management system and occupational health and safety management system before we can start a cooperative relationship. Under the *Tendering Management System*, only the "eligible suppliers" within the China Gas Bidding and Procurement Platform are eligible to participate in the annual or quarterly tender invitation of the Group.

The Group continues to implement responsible procurement to ensure that suppliers comply with relevant laws and regulations in their operations. If a supplier uses either fraudulent means to access China Gas Bidding and Procurement Platform, or is involved in bid rigging, colluded or malicious bidding during the tendering process, or 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.



## 6 SUSTAINABLE CORPORATE GOVERNANCE

### SUPPLY CHAIN MANAGEMENT (Continued)

#### Maintaining Fair Competition in the Supply Chain (Continued)

As at 31 March 2020, 252 suppliers (all located in Mainland China) completed registration on China Gas Bidding and Procurement Platform.

#### Supervision and Evaluation

The Group attaches great importance to the supervision on suppliers and implements a fair entrance system, so as to evaluate the performance of suppliers in an impartial manner. Our procurement portals categorise suppliers into three different statuses, including “certification completed,” “suspended” and “blacklisted”. The Procurement Management 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.

#### Guidance and Training

China Gas Materials Supply Chain Company is responsible for providing guidance and training related to the Group's material procurement management, as well as specialised support and training to key project companies. China Gas Materials Supply Chain Company combines the characteristics of different project companies, and strengthens the training for project companies, former state-owned enterprises, newly merged and acquired companies through in-person training, and improves the standard of materials procurement management. The Group also uploads professional course materials to the Group's E-learning system for the project company personnel to learn in their own time. In addition, we regularly conduct training for suppliers on the operation of the China Gas Bidding and Procurement Platform and Enterprise Resource Planning (ERP) system, and compile and issue operational guidelines and system manuals.

## 7 QUALITY SERVICE AND SAFETY FIRST

### ENSURING OPERATIONAL SAFETY

China Gas has always placed safe production as the top priority of corporate development. We understand that the safety requirements of the gas industry are extremely high, and we must always be alert to all kinds of hidden dangers. As such, the Group has adopted the safety management approach of “Safety First, Prevention Foremost, and Integrated Management”, to ensure gas safety through multiple channels and methods, and to strengthen our guarantee of safe operation.

The *Work Safety Law of the PRC* aims to maintain labour safety and safe production, and requires manufacturing organisations and employers to provide a safe working environment that protects employees from occupational hazards. The *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* regulates insurances on sickness, occupational injury, maternity, medical care, retirement, and death, and also clarifies the legal responsibilities of employers. As a socially responsible enterprise, the Group complies with relevant health and safety laws and regulations and provides employees with a safe workplace and suitable insurance. During the Reporting Period, there was no confirmed case of violation in relation to health and safety that would have a significant impact on the Group.

#### Safety Management Policy

The Group has established a comprehensive *Safety Management System* to ensure the safety of employees, customers and surrounding residents throughout different construction and operation stages. We also have detailed safety management guidelines, including the *Guidelines for Safety Supervision*, *Working Guidelines for EHS Management System*, *Integrated Treatment and Management Measures for Safety Incidents*, *Emergency Response Plan*, such specialised safety management standards etc.

#### Operational Management System

The Group’s Operational Customer Service 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 of eliminating all safety incidents.

The Group has established an *Operational Management System* which is applicable to the Group’s development, in order to standardise the operations of our frontline staff. We also have detailed operating procedures and working guidelines, including *Regulations on Long-distance Pipeline and Township Gas Transmission and Distribution Management*, *Regulations on Facilities Management*, *Regulations on Township Gas Scheduling Management*, *CNG Gas Stations’ Production and Operation Management Standards*, *Production and Operation Emergency Repair Maintenance Management System*, *Gas Facilities’ Operation and Maintenance Standards*, and *Guidelines for Home Safety Inspection Management for Gas Users* etc. In order to prevent emergency incidents, we have established an Emergency Response Plan for strengthening our response to emergency incidents. For handling different working environments such as specialised operations, hot operations, confined space operations, high-altitude operations, as well as LPG operations, the Operational Customer Service Management Department has established the *Regulations Pressure Tapping of Steel Pipeline at High and Medium Pressure* and the *Regulations on Dangerous Operations Management in Gas Transmission and Distribution System*, in order to ensure safe operations.



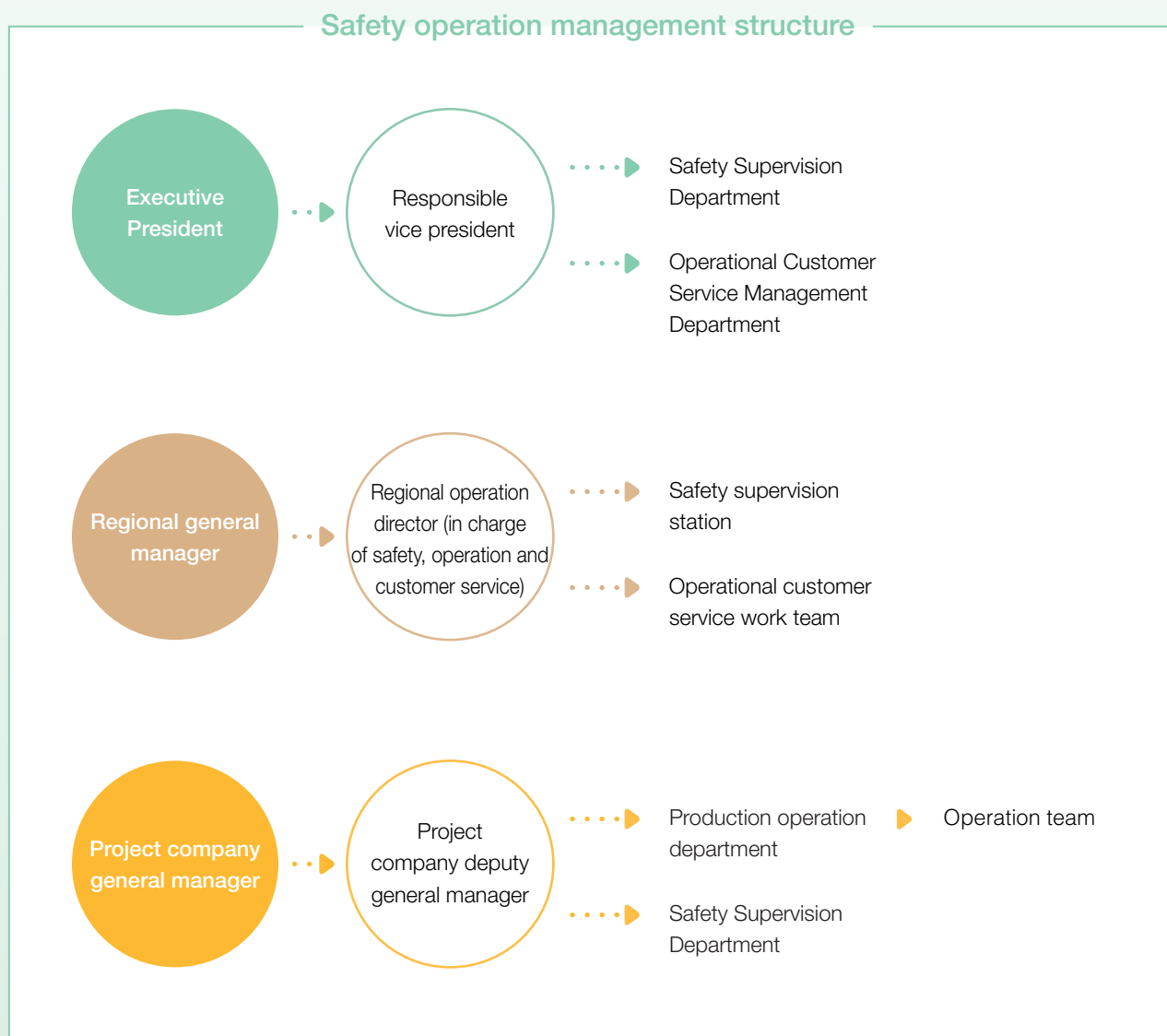


## 7 QUALITY SERVICE AND SAFETY FIRST

### ENSURING OPERATIONAL SAFETY (Continued)

#### Safety Operation Management Structure

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 financial year according to the corporate safety management targets, ensuring that all departments, units and employees strictly implement the relevant targets, standards and measures. The operation team provides feedbacks on safety issues to the safety supervision department regularly for the continuous revision and implementation of the occupational health and management system.



## 7 QUALITY SERVICE AND SAFETY FIRST

### ENSURING OPERATIONAL SAFETY (Continued)

#### Safety Measures



#### Duties of Safety Supervision Department



The Safety Supervision Department of the Group's headquarters acts according to the Group's overall requirement on "supervision, inspection, assessment, training, guidance and service", and is responsible for the Group's safety production and supervision management. Through establishing "the Group – Regional (business departments and specialised companies) – Project Companies", a three-tier supervision system, safety inspection and comprehensive safety evaluation works have been launched. It supervises each unit to adhere to the principle of "management of safety is essential when managing industries, businesses and productions, and supervisors hold accountability" to implement accountability, enhance the Group's safety management standards, and to curtail the occurrence of significant incidents.

#### Safety emergency plan



Each project company has prepared emergency plans to provide clear guidelines for employees on handling incidents that would occur at gas pipeline network or gas stations. The contents cover the formation of emergency commander and rescue team, their responsibilities and division of work, and 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 liabilities, 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 customers' emergency response capabilities. Topics such as safety management trainings on construction, case studies on toxic gas leakage incidents, explosive and fire hazard incidents, and standards on safety production for urban gas companies were covered in various safety trainings provided by us.



## 7 QUALITY SERVICE AND SAFETY FIRST

### ENSURING OPERATIONAL SAFETY (Continued)

#### Safety Production Month

In May 2019, the Group's headquarters issued the *Notice on the Safety Production Month's Activities in 2019*, which required all regions and project companies to carry out the theme of "Preventing Risk, Eliminating Hazards and Avoiding Accidents" and goals to prevent and resolve major risks, eliminate potential safety hazards in time, and effectively avoid production safety accidents.

#### Activities of Safety Production Month in FY2019/20



**592** emergency drills



**186** safety knowledge competitions or speech contests



**1,496** construction safety inspections



**1,452** external gas safety promotions



**1,114** safety trainings  
(about 32,955 participants)



Over **800,000** safety promotional materials distributed



Number of home safety inspections  
**1.269** million households



Over **8,200** safety hazards eliminated<sup>(1)</sup>

Note:

1. Major safety hazards included vehicles accidents, explosion and fires, accidents in confined spaces and chemical exposures, etc.

## 7 QUALITY SERVICE AND SAFETY FIRST

### ENSURING OPERATIONAL SAFETY (Continued)

#### Safety Production Month (Continued)

##### Launching gas safety promotion

During the safety production month, the Group's project companies gathered typical examples of accident cases in the recent years, and displayed them to employees and community residents through various forms such as exhibition boards and displays. These particular displays reinforced the safe use of gas and helped enhance the public and community residents' understanding regarding the safety precautions and use of gas.

Many project companies also collaborated together to organise safety promotions with the local government's safety inspection and fire services departments. These safety promotions consisted of broadcasting knowledge contests and safety videos on TV stations, exhibiting safety videos on mobile vehicles and at plazas, and conducting safety consultations.



##### Wuhu Zhongran participated in the safety production month

On 16 June 2019, the Group's project company, Wuhu Zhongran, participated in the safety production month held by the City Safety Production Committee. Safety policies, regulations and knowledge were promoted through on-site Q&A sessions, displays, and safety knowledge contests, which attracted the active participation of the general public.



##### Hohhot Zhongran organised community exchange activities

On 6 November 2019, the Group's project company, Hohhot Zhongran, invited more than 20 community resident representatives and local reporters to visit the natural gas Jinchuanmen station, the natural gas refilling station, the gas installation and maintenance operation practice room, and the pipe network planning room in order to learn about gas through close and visual contact with gas transmission and distribution facilities, gas emergency repair equipment, as well as face-to-face communication and interaction with the Hohhot Zhongran company.





## 7 QUALITY SERVICE AND SAFETY FIRST

### ENSURING OPERATIONAL SAFETY (Continued)

#### Safety Production Month (Continued)

##### Carrying out emergency drills to improve emergency management standards

Numerous project companies of the Group have worked together with the local government departments, including liaison offices, safety administration and supervision bureaus, housing and urban-rural development bureaus and fire bureaus, to collectively organise emergency drills for industrial user pipeline leakage and fires, emergency response and rescue drills for commercial complex gas leakage and fires, emergency response drills for station fire-fighting, anti-terrorism and other special drills. These drills have achieved great results as employees have become more familiar with the emergency rescue plan, and have had their emergency response capabilities and reactions assessed.

##### Strengthening risk control of dangerous goods vehicles

Numerous project companies of the Group have carried out risk control measures for dangerous goods vehicles and transportation in order to improve the emergency response capabilities of dangerous goods vehicle drivers.

During the risk control activities, each project company strengthened the training of dangerous goods transportation for their drivers and carriers, with specific attention to defensive driving, theories of loading and unloading of dangerous goods, and emergency response for accidents. A rotational training system for drivers was also established to enhance their knowledge, and emergency rescue drills were organised for drivers.

#### Wumei Panva held a large-scale emergency drill for dangerous goods transportation

On 26 June 2019, nearly 100 employees from Wumei Panva, the Group's project company, including dangerous goods vehicle drivers and carriers and management personnel from the dangerous goods segment, participated in the emergency drill for dangerous goods transportation. The drill involved several sections, including the usage of conventional steel fire extinguishers and fire drills for tanker truck and gas cylinder trucks. Most notably, this fire emergency drill has set two records since the establishment of the project company, namely the largest number of participants in one event and the most comprehensive drill to date.

#### Safety knowledge competitions

A number of project companies organised safety knowledge competitions to enhance employee awareness on safety measures and to foster a unique and safe environment.



#### Nanning Zhongran's safety knowledge competition

On 26 June 2019, our project company, Nanning Zhongran, organised a safety knowledge competition. Six teams from 11 different departments, with more than a total of 50 participants were part of this competition. The competition enhanced the necessary collaboration skills between employees, and also increased their awareness regarding safety production.

## 7 QUALITY SERVICE AND SAFETY FIRST

### ENSURING OPERATIONAL SAFETY (Continued)

#### Occupational Health and Safety Statistics in FY2019/20



#### Notes:

1. Work-related injuries 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. High-consequence work-related injuries (excluding fatalities) refer to those work-related injuries which caused the workers to fail or have difficulty recovering to their pre-injury state within six months.
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.

### 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 services, 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.



## 7 QUALITY SERVICE AND SAFETY FIRST

### ENSURING STABLE SUPPLY OF GAS (Continued)

#### Rectification and Management of Transmission Loss

Rectification and management of transmission loss is the foundation of ensuring a stable gas supply. 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 has implemented the *Rectification and Management Procedure for Transmission Loss* since 2016, 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. We have also issued the *Regulations on the Batch Selection of Gas Meters for Rural Residents*, *Regulations on the Batch Selection of Gas Meters for Urban Residents* and *Regulations on the Selection of Non-civil Gas Meters* in 2019 to strengthen the selection management of gas meters for various users. During the Reporting Period, the Group continued to combat gas theft and strengthen the management of data handling in order to further reduce the transmission lost rate.

	<b>Rectification of transmission loss due to metering inaccuracies</b> <ul style="list-style-type: none"> <li>Establish a robust metering management system</li> <li>Strengthen maintenance and weekly inspection of flowmeters</li> <li>Strengthen management on flowmeter selection</li> <li>Continue to carry out specific flowmeter rectification activities</li> <li>Provide dedicated meters to village users</li> </ul>	<b>Rectification of transmission loss due to gas theft</b> <ul style="list-style-type: none"> <li>Take practical measures to prevent gas theft</li> <li>Increase inspection efforts to combat gas theft</li> </ul>
	<b>Rectification of transmission loss in gas pipeline networks</b> <ul style="list-style-type: none"> <li>Establish robust scheduling and inspection systems to ensure tightness and safety of the gas transmission and distribution system</li> <li>Establish a robust leakage detection and prevention mechanism to control the leakage rate at seal points of the gas transmission and distribution system</li> <li>Establish a robust emergency repair and maintenance mechanism to control gas leakage and unexpected incidents in gas transmission and distribution system</li> <li>Optimise pipe replacement scheme to strictly control the amount of gas escaped during construction</li> </ul>	<b>Rectification of transmission loss arising from data handling errors</b> <ul style="list-style-type: none"> <li>Standardise the settlement of the sales volume of civil prepaid households and carry out the evaluation of the remaining volume</li> <li>Increase efforts in internal inspections to improve meter recording accuracy</li> <li>Perform monthly meter reading for wall-mounted heater users during warm seasons</li> <li>Standardise billing practices for domestic prepaid users</li> <li>Conduct operational safety checks of gas facilities by customer management officers</li> <li>Identify hidden safety hazards and promptly arrange maintenance staff to carry out repair and rectification works</li> </ul>

## 7 QUALITY SERVICE AND SAFETY FIRST

### ENSURING STABLE SUPPLY OF GAS (Continued)

#### Leakage Detection and Prevention Mechanism

The Group's *Management Guidelines for Gas Pipeline Network Inspection* clearly sets out the contents and standards for gas pipeline network inspection and monitoring. Each project company has also developed a robust pipeline inspection system to grasp information of the gas transmission and distribution system in a complete, timely and accurate manner. These systems can help us instantly locate faults and ascertain the impacts on users when issues arise, such that immediate repairs can be made. In the event of emergency repairs, the system can assist the dispatch centre to make rapid decisions on the valve closures of different segments. On-site emergency repairs staff can then effectively identify the valves to be shut off under work orders issued from the dispatch centre. In the case of valve failure or blockage, the dispatch centre can also 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 not only to minimise accidental losses to the greatest extent possible, but also shorten the repair time required.

#### Emergency Repair Mechanism

The Group has developed the *Operation and Maintenance Management Standards for Gas Facilities* which sets out the management standards ranging from pipeline network maintenance, emergency repairs, natural gas spherical tanks maintenance safety valves maintenance, and preparation for emergency response plans and conduct drills. To increase the efforts in preventing damages to pipeline networks caused by third-party construction activities, the Group implemented the *Management and Assessment Measures for Third-Party Construction Damage Incidents (Accidents) for Gas Facilities* to manage third-party damages to gas facilities in a standardised and institutionalised manner.

##### Emergency repair at Hohhot Zhongran

On 19 March 2020, an underground sewage leakage occurred in Hohhot, China caused the road surface to collapse and gave rise to a great safety hazard due to the potential breakage and leakage of gas pipelines at any time. The inspectors of Hohhot Zhongran, our project company, immediately reported the situation, and the production department quickly organised the implementation of pipeline network protection and emergency response, and coordinated with the dispatch centre, the emergency centre and other relevant departments to carry out emergency pipeline network protection work. After 22 hours of intensive work, the gas pipeline protection task was completed, and no natural gas was leaked during the entire process, successfully avoiding a major safety hazard.

#### 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 refurbished pipeline network reached

**278.69** km

(As at 31 March 2020)





## 7 QUALITY SERVICE AND SAFETY FIRST

### ENSURING STABLE SUPPLY OF GAS (Continued)

#### Establishment of Gas Operation System

The Group is currently building an integrated operation and management platform (“OMP”) that can realise the dynamic management of the production and operation of existing businesses such as city gas, rural gas, gas station business, thermoelectric and LPG businesses, and prepare room for new businesses in the future.

The construction of the Group’s gas OMP has fundamentally solved the problems surrounding resource wastage, data scattering, and the difficulties in linking business systems. OMP makes full use of next-generation information technologies such as cloud computing, big data, Internet of Things, geographic information in order to carry out the construction of data standards and safety assurance systems, while also coordinating the Group’s gas monitoring data, business data, geographic information and other important gas data resources for interconnection and the co-construction and sharing of gas data and resources. OMP has built a completely comprehensive and integrated gas management and control system framework, forming a business operation model for the connection, processing, analysis and visualisation of gas big data of data security. OMP has also upgraded and improved the gas supervising control and data acquisition (SCADA) system, the station automatic control system, the video monitoring system, the geographic information system (GIS), the GPS line patrol system and the production and operation management system. Furthermore, OMP has also realised the simultaneous two-level business system that runs across platforms, providing scientific, efficient and accurate decision-making, monitoring and early warning, and support capabilities of the dispatch centre.

### IMPROVING SERVICE QUALITY

With the strategic objective of “Customer Satisfaction, Social Recognition, and Employee Pride” as one of our core values, China Gas is guided by the concept of an “all-serving” attitude to provide customers with active, thoughtful and efficient services. 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”.

#### Customer Service System

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 in order to ensure customers can enjoy high-quality services. At the headquarters’ level, we have established eight guidelines on customer service operations management and seven technical guidelines on customer services, which outlines the responsibilities at each level. While on the level of project companies, customer service centres and customer service hotlines are set up in each project company so as to continuously improve customer service quality with a robust management mechanism.

Customer service personnel are required to follow the requirements for different service positions as described in the *China Gas Employee Service Specification*. We respond to customers’ needs promptly and improve the quality of customer service, in order to enhance and maintain the reputation of the Group’s brand. In addition, the Group has a dedicated team of professional part-time lecturers to effectively train employees and to improve their service capabilities, ensuring that employees transform the service targets and standards into concrete actions.


## 7 QUALITY SERVICE AND SAFETY FIRST

### IMPROVING SERVICE QUALITY (Continued)

#### Protecting the Interests of Customers

The Group attaches great importance to the protection of customer data privacy. For the customer data collected during the service process, the Group strictly enforces the account authorisation management requirements through the customer service information system in order to effectively protect customer information. The Group also promptly backs up customers' key information and stores them in the bank's safety deposit boxes which are only accessible by dedicated and trust-worthy staff.

#### Customer Service Information System

	<b>Networking hardware</b>	<b>Communication security</b>
	<p>The utilisation of Huawei's cloud service products to safeguard the security of backoffice through the use of firewalls, advanced anti-DDoS, vulnerability scanner, etc.</p>	<p>Adopted HTTPS security protocol to secure the communication between customers and the server to prevent data from being obtained and cracked by a third party</p>
	<b>Data security</b>	<b>Management</b>
	<p>The encryption of highly confidential information during background saving to avoid any hacking or stealing.</p>	<p>The platform has established a comprehensive permission management system to ensure that each employee can only get access to the data and information which is within his responsibilities. Every employee has signed the confidentiality agreement and is not allowed to disclose customer information.</p>
	<b>Customer lifecycle management</b>	<b>Customer Relationship Management ("CRM") system</b>
	<p>The Group has built a new customer relationship management system that integrates the market, customer service, value-added services and request calling to enhance customer and efficient management, and also provide a basis for scientific decision-making.</p>	<p>After undergoing successful pilots, the Group's CRM system has now entered the stage of comprehensive promotion, providing a powerful tool for enhancing customer satisfaction and loyalty.</p>



## 7 QUALITY SERVICE AND SAFETY FIRST

### IMPROVING SERVICE QUALITY (Continued)

#### Customer Complaint Handling Principles

The opinions of customers are crucial to the business development of the Group. As such, we are committed to listen to our customers' opinions through different communication methods. The Group fulfils its commitment in providing quality services by formulating customer service regulations and operating procedures. We have established the *Customer Complaint Handling Principles* for handling related complaints effectively. The customer service team will follow up the cases as soon as possible within a reasonable time based on the nature of complaints, and will offer suggestions and solutions in order to uphold the service attitude of "Sincere, Proactive, Enthusiastic, and Long-lasting".

#### Integrity

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##### Focus on commitments, contracts and promises

Deal with problems and arising issues in an open and transparent manner. Promises made will also be upheld to the highest degree.

#### Timely

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##### Timely and effective problem solving

Communicate effectively, give feedback and resolve problems in a professional and coherent manner.

#### Professional

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##### Professional personnel and image

Equip ourselves with professional standards, be considerate to customers, handle problems comprehensively, and maintain the corporate image.

During the Reporting Period, all 240 complaints received by the Group's service quality monitoring hotline regarding installations, maintenance, safety inspection, etc., were properly handled, with complaint resolution and satisfaction rates reached 100%.

## 7 QUALITY SERVICE AND SAFETY FIRST

### IMPROVING SERVICE QUALITY (Continued)

#### Product Quality Inspection

The Group has set up strict quality inspections and product recycling procedures for its brand “Gasbo” and its products. Once a product is launched in the market, quality supervision is carried out through occasional production line quality inspections, quality inspections of finished products, defect rate control, and statistical analysis of after-sales service data. In terms of after-sales service, the Group has also established a comprehensive information feedback mechanism to collect product after-sales information and conduct quality analysis to identify the cause of a problem, and to formulate improvement measures with suppliers.

Our quality assurance engineers will visit factories and conduct on-site product sampling and inspection tests. The results will be compared with the standards of the *Guidance on Inspection Work* to determine whether the batch of products are up to standard. If the products are qualified, a *Product Inspection and Shipping Notice* will be issued so that the batch can be transferred to the warehouse and be shipped off. If the products fail to meet the standards, the Group will immediately notify the manufacturers of the unqualified situation, quantity and severity of the related batch of products.

#### Incoming material inspection

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Upon arrival of the material(s), the incoming material inspection will be carried out according to the *Incoming Inspection System* with a sample size as required by the *Incoming Materials Sampling, Inspection and Acceptance Plan*. Materials will only be accepted to the warehouse once it is deemed qualified.

#### On-site inspection

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Inspectors inspect every element of the company's products in accordance with the *On-site Inspection System*. The inspection will examine the production process to the storage of finished products, including workers, machines, materials, methods, and environment.

#### Finished product inspection

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Finished products will be inspected according to the *Finished Products Inspection System* with a sampling size as required by the *Guidance on Finished Products Inspection Work for Wall-mounted Boilers*. Products will only be accepted to the finished products warehouse once they are deemed qualified.





## 7 QUALITY SERVICE AND SAFETY FIRST

### INNOVATIVE SERVICES

#### Value-added Services for End Users

With the ever-increasing penetration rate, the Group's customer base has been rapidly expanding. Currently, as China Gas provides natural gas and LPG services to more than 40 million residential, industrial and commercial users, the potential values of their customer network would be huge. Therefore, the Group aims to quickly expand the market share of their value-added services in order to enhance the overall profitability and overall competitiveness of their service network through enriching value-added services, edging up marketing efforts, consolidating sales channel, and innovating sales model. With their huge pipeline of natural gas and LPG service network and quality customer resources, China Gas actively promotes wall-mounted heaters and kitchen gas appliances, under their brand "Gasbo", a smart home product line, provision of comprehensive gas insurance agency services, and sales of gas corrugated pipes, gas alarms, water purification products and other related value-added service business. In doing so, China Gas has gradually expanded the portion of value-added service business for the Group's overall operating revenue, driving the Group's transformation from a single gas product service provider into an integrated energy service provider with quality customer service.

The Group also launched the Smart Living New Retail Platform to improve the quality and efficiency of its services through the online sales gas services, value-added business products, and the trial of offline grid services. During the Reporting Period, we continued to promote online-to-offline integrated services. With the help of artificial intelligence, big data and other advanced technologies, accurate information matching is achieved online; while the one-to-one grid officials could respond to customer needs accurately and quickly, promoting the integration of gas payment and value-added services offline. During the Reporting Period, all value-added services have achieved substantial growth: the sale volumes of wall-mounted gas heaters and kitchen appliances series under the brand "Gasbo" reached 1,240,000 units, with a year-on-year increase of 49.4%, allowing us to become the leading manufacturer and distributor of wall-mounted heaters and kitchen gas appliances in China.



#### Adjusting direction and leading innovation

The Group has integrated online-to-offline sales effectively through the launch of Yipin Smart Living's new retail e-commerce platform, and provide one-stop smart living services, including products sales, community services, household services, gas payment and LPG ordering etc., to millions of users through integrating various resources at the new retail platform.

# EMBRACING ENVIRONMENTAL PROTECTION FOR A GREEN ERA

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**49** Proactively Create Green Value

**57** Love the Planet and Nurture the Environment



## 8 PROACTIVELY CREATE GREEN VALUE

### ECONOMIC VALUE

FY2019/20



Revenue (HK\$'000)  
**59,539,681**

As at 31 March 2020



Total assets (HK\$'000)  
**112,066,808**

### FACING CHALLENGES AND FOCUSING ON OPPORTUNITIES

In 2019, global economic growth has been weakened due to factors such as continued international trade conflicts and the COVID-19 pandemic. In order to address the challenges, China promptly issued macro-control policies to promote the transition and upgrade of industrial structure and to ensure the stability of the overall economic situation. At the same time, the reform of energy structure has been strengthened and the efforts to control environmental protection has been increased with the promotion of environmental protection and natural gas reforming policies such as “replacement of coal with gas”. The introduction of these protection policies have brought opportunities for the rapid and steady development of the Group.

In addition, the northern section of the China-Russia east-route natural gas pipeline has been completed and was put into operation in December 2019. The Group has many pipeline gas projects in the Northeast and the Beijing-Tianjin-Hebei region that will benefit directly from the imported gas from Russia. Not only can the Group greatly increase the gas supply for regional projects, it will also further optimise the regional gas source structure and form a diversified supply, greatly enhancing the natural gas supply capacity of the Group and the overall profitability of local project companies.

## 8 PROACTIVELY CREATE GREEN VALUE

### FACING CHALLENGES AND FOCUSING ON OPPORTUNITIES (Continued)

#### Development Opportunities for the Sustainable Development of the Natural Gas Industry brought by National Policies

March 2019

The Ministry of Ecology and Environment of the PRC issued the notice of *Key Points of the National Air Pollution Control Work for 2019*.

.....► Requirements include strengthening governance, regulating industry standards and energy structure optimisation, and starting from four aspects: air pollution, transportation, fuel and industry

March 2019

The Central Comprehensively Deepening Reforms Commission reviewed and adopted the *Implementation Opinions on the Reform of Oil and Gas Pipeline Network Operation Mechanism* which requires the establishment of oil and gas pipeline network companies with state-owned capital holdings and diversified investment entities.

.....► To promote the formation of an oil and gas market system, with oil and gas resources supplied by many companies. Through multiple channels in the upstream, an efficiently centralised pipeline network for gathering and transferring in the midstream, and a sales market with perfect competition in the downstream will enhance the efficiency of oil and gas resources allocation and ensure the safe and stable supply of oil and gas resources

May 2019

The National Development and Reform Commission ("NDRC"), the National Energy Administration, the Ministry of Housing and Urban-Rural Development, and the State Administration for Market Supervision jointly issued the *Measures for the Supervision and Administration of Fair Opening of Oil and Gas Pipelines Network Facilities*.

.....► Further reform on the mechanism by improving the utilisation efficiency of the oil and gas pipeline network facilities and an increase in the oil and gas market liberalisation

July 2019

The NDRC, the Ministry of Housing and Urban-Rural Development, and the State Administration for Market Supervision issued the *Guidance on the Regulation of Installation Charges for Urban Gas Projects*.

.....► Regulate installation practice of urban gas projects

September 2019

The State Council of the PRC issued the *Program of Building National Strength in Transportation*.

.....► Requirements on optimising the structure of transportation energy, promoting the application of new and clean energy, and facilitating the reduction on energy and emission of road freight transportation



## 8 PROACTIVELY CREATE GREEN VALUE

### ALIGNING WITH SDG OF THE UNITED NATIONS

The Group adheres to the development concepts of innovation, coordination, green, openness and the sharing of ideas for the alignment of our businesses with the SDG of the United Nations. As a large-scale urban gas operator in China, the Group is committed to becoming a high-quality supplier of clean energy and a promoter of low-carbon transformation. The Group will also be fully considerate on the impacts on the surrounding environment and communities from its project operations, and perform high standard corporate governance and risk management in order to fulfil the major responsibilities on the economy, environment and the society, as well as its commitment to responding to climate change and environmental protection.



#### SDG7

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

## 8 PROACTIVELY CREATE GREEN VALUE

### ALIGNING WITH SDG OF THE UNITED NATIONS (Continued)

The Group implements the “three-leap” strategic breakthrough plan to create a clean energy supply chain by integrating various business sectors.



Achieve full coverage of city gas supply through “cross-region”, “cross-method” and “cross-category” to promote the wide application of various clean energy sources.

The Group continues to promote “replacement of coal with gas” projects in towns and villages and intensifies the development of the township “replacement of coal with gas” market. We endeavour to bring forth high-standards, high-quality and highly efficient facilities and gas source supplies to allow rural residents in North China to have access to clean natural gas, thus contribute to the environment protection and improvement on people’s quality of life. The Group will continue to expand the gas market in rural villages by establishing a comprehensive development mechanism in rural villages and to create a “gas ecosystem” in rural villages.

As at 31 March 2020, the Group’s accumulated residential users contracted for the township “replacement of coal with gas” campaign amounted to more than 9 million households in total, completed gas pipeline connections for township residential users amounted to 2.69 million households, providing 1 billion m<sup>3</sup> of natural gas to rural residents for winter. The Group has established strategic partnerships with Tianjin municipality and Hebei, Shandong, Shanxi, Henan, Shaanxi, Anhui, Yunnan, Hainan, Heilongjiang, Hubei, Jilin, Guizhou, Sichuan and Hunan provinces to invest in projects such as township “replacement of coal with gas”, conversion of coal boilers to natural gas boilers, natural gas for vehicles, distributed energy, gas storage facilities, gas pipeline network and “beautiful villages” in 213 counties and districts in China.

In addition, based on the huge market and the large customer base gained by its gas projects, the Group has been committed to pushing forward with the extensive application and deployment of new business: natural gas-fired distributed energy, photovoltaic power generation, distribution and sale of electricity, charging station and centralised heating in China. We also utilise our long-term accumulated experience in market development and technological innovation to actively explore integrated energy utilisation solutions and provide customers with highly efficient and clean integrated energy to meet their needs for gas, heating, electricity and cooling. In addition, the Group also vigorously promotes “warming homes” project through its huge gas distribution network, adopting new technologies and new products, developing the distributed heating market, and promoting the boiler EPC business.

## ALIGNING WITH SDG OF THE UNITED NATIONS (Continued)



SDG13

Take urgent action to combat climate change and its impacts

**13.1**

Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries

Responding to the climate disasters and crisis caused by global warming, by limiting combustion of untreated coal, replacing coal with electricity, gas and renewable energy, these are some of the crucial and suitable ways to effectively reduce greenhouse gases in the country. During this process, China Gas, with its main businesses in the natural gas sector, will play an important role in transition and promotion.

Natural gas, as an energy with rich storage resources across the globe, has multiple advantages in terms of efficiency, environmental sustainability and energy safety. Therefore, the use of natural gas to replace traditional coal fuel, heavy oil and other highly polluting fuels is one of the effective methods to effectively reduce air pollutants and carbon dioxide equivalent emissions, and presenting a successful way to relieve the current air pollution problem. In terms of fuel for vehicles and vessels, natural gas is recognised as an ideal clean alternative fuel. Compared with other fossil fuels, the combustion of natural gas only produces 23% of nitrogen oxides, 50% of carbon dioxide and nearly zero sulphur dioxide emissions, thus the environmental benefits are very significant.

According to the information published by the NDRC, the consumption of natural gas in 2019 is 306.7 billion m<sup>3</sup>, representing a year-over-year increase of 9.4%, which only accounted for 8.3% of the primary energy consumption in China, and was significantly lower than the global average of 23%. Given that natural gas accounted for only approximately 10% in the field of industrial fuel consumption, which is much lower than the 40%–50% level in countries such as Europe and America, this shows that the development potential of the business is huge. As the current largest energy consumption country in the world, China's economy has experienced a long-term rapid development. In the past, China's energy strategy mostly focused on coal and oil, however energy-related problems such as air pollution and energy efficiency have become increasingly prominent today. Natural gas can not only increase the energy supply options for countries that consume a lot of energy, but also has outstanding efficiency and environmental advantages. In this way, natural gas is a wise and rational choice for the diversified energy structure in China, and shall gradually become one of the major energy sources in China under the guidance of the national policies.

In the past three years, the Group completed gas pipeline installation for an accumulated number of 6.23 million households under the township “replacement of coal with gas” campaign, and there were 2.69 million of newly added households during the Reporting Period. Hard work has brought gratifying results. Using Beijing as an example, the average PM<sub>2.5</sub> level in Beijing hit another low record in 2019, representing a year-on-year decrease of 17.6%. In addition, the annual average concentration of sulphur dioxide (SO<sub>2</sub>), nitrogen dioxide (NO<sub>2</sub>) and respirable suspended particulates (PM<sub>10</sub>) in Beijing also reached the national Grade II standard. Only four days of severe pollution was recorded. Moreover, zero days were recorded with extremely severe pollution during the year for the first time. According to certain estimations, since the “replacement of coal with gas” campaign at industrial level and the township “replacement of coal with gas” campaign are both governance efforts to discourage the deployment of untreated coal, they both contribute to 40% of air quality improvements, and have distinctively improved the air quality in North China.

## 8 PROACTIVELY CREATE GREEN VALUE

### ALIGNING WITH SDG OF THE UNITED NATIONS (Continued)



#### SDG17

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

#### 17.8

Fully operationalise the technology bank and science, technology and innovation capacity-building mechanism for least developed countries by 2017 and enhance the use of enabling technology, in particular information and communications technology

China Gas has been actively carrying out strategic cooperation with governmental departments and industry companies in different regions. Both parties have signed long-term strategic cooperation agreements, built shared experimental bases and established stable communication and exchange platforms in order to promote efficient implementation of the local energy projects and increase the utilisation rate of township natural gas. While achieving a mutually beneficial relationship, we win in the “battle for defending the blue sky,” and gain more economic and environmental benefits for the people and the community.

#### Win-win cooperation with Qingdao government

On 12 November 2019, China Gas and the Qingdao Municipal Government held a ceremony for signing a strategic cooperation agreement in Qingdao. According to the strategic cooperation agreement signed by both parties, China Gas will fully utilise its advantages such as upstream gas sources, professional technical skills, engineering construction, operation management and construction investment, and raise project funds to complete the clean energy transformation in Qingdao. The Group will formulate diversified clean energy supplies, engineering construction plans and gas supply guarantee systems according to the existing situation of residents from rural villages in different areas of Qingdao City in order to ensure the continued stable supply of gas for users and provide supporting products and after-sales service.

The Qingdao Municipal Government regards China Gas as an important partner to promote the city's clean energy supply project. China Gas coordinates with districts and cities under accordance with laws and regulations to support the planning and implementation of construction work for the “heating with clean energy” and “replacement of coal with gas” projects. Through relevant requirements, China Gas also promotes the supply work of clean energy for rural villages in Qingdao, in order to complete the construction work of “town through town” and “village through village” natural gas pipeline projects.

This project will deepen multi-field and deep-level cooperation between the two parties, achieving a mutually beneficial situation that accelerates the implementation of the Group's projects, and promotes the transition and upgrade of energy, and high-quality development in Qingdao.





## 8 PROACTIVELY CREATE GREEN VALUE

### ALIGNING WITH SDG OF THE UNITED NATIONS (Continued)

#### Strategic cooperation agreement with Yichang City

On 23 March 2020, China Gas and Yichang City signed a strategic cooperation agreement to promote the economic and social development of Yichang. China Gas will invest RMB7.3 billion in Yichang in accordance with Yichang's livelihood and urban development needs. Seven major categories of gas industry chain and new energy projects will be built to help improving the quality of life of Yichang residents.

#### Seven types of projects that China Gas plans to invest in Yichang

- Three gorges regional headquarters and energy equipment manufacturing base
- Rural distributed energy micro-pipe network and its equipment manufacturing base
- Home warming programme and HVAC equipment manufacturing base
- Projects of charging stations for electric vehicles and bikes
- Zhongran Smart Living participation in the grid into grids, construction project for a "smart city" in Yichang. Gas users in Yichang will be divided according to the grid network, where each grid will consist of corresponding grid network leaders and personnel
- Gas project in Gezhou Dam
- Heating project for Yichang Bio-Industrial Park

## 8 PROACTIVELY CREATE GREEN VALUE

### ALIGNING WITH SDG OF THE UNITED NATIONS (Continued)

#### Cooperation with Zhumadian City to open a new page for energy project investment in Zhumadian

On 17 August 2019, China Gas and the People's Government of Zhumadian City Economic Development Zone signed a strategic cooperation agreement on investment and construction of a comprehensive energy project in China's (Zhumadian) International Agricultural Product Processing Industrial Park, which is located in the Zhumadian City Economic Development Zone.

China's (Zhumadian) International Agricultural Products Processing Industrial Park has a planned area of 61 square kilometres and is currently the only international agricultural product-processing industrial park in the country. This cooperation agreement mainly focuses on the comprehensive energy needs of various enterprises in the industrial park, such as gas, heating, LNG filling stations and new energy vehicle charging — opening up a new page for the investment of China Gas in Zhumadian energy projects.



#### Joining Hands with Peers for Future Planning

#### Strategic cooperation agreement for natural gas utilisation projects with Hefei Gas Group

On 22 August 2019, China Gas and Hefei Gas Group signed a strategic cooperation agreement for natural gas utilisation projects, and has launched a comprehensive cooperation in the fields of conventional gas usage, distributed energy, LNG receiving stations, vessels refuelling terminals, value-added business, gasification of towns, gas supporting projects for immigrants' resettlement. The strategic cooperation agreement aims to create a new structure for the gas market in Anhui Province.

#### Develop the downstream LNG market with Sinopec Gas Company

On 16 November 2019, China Gas and Sinopec Gas Company signed a strategic cooperation agreement, with plans to innovate the cooperation models and expand the scope and depth of cooperation on the basis of existing LNG purchase and sales cooperation. A regional joint venture is to be established for the development of the downstream LNG market.

## 9 LOVE THE PLANET AND NURTURE THE ENVIRONMENT

### MANAGEMENT APPROACH

China Gas always adheres to the philosophy that “clean waters and green mountains are as valuable as mountains of gold and silver” with the responsibility of actively protecting the environment.

The Group strictly follows the 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*, and continuously strengthens and standardises energy management and environmental protection practices through establishing and improving various energy conservation and environmental protection systems, in order to reduce the potential impacts brought by production and operations on biodiversity and the ecological environment. The Group also strives to prevent and mitigate the environmental impacts associated with its operations and business activities. The Group understands that it is important to meet these laws and regulations as the violation of any of these 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 in regards to the aforementioned environmental laws and regulations.

We are highly concerned about the environment and social impacts caused by the operating projects, and the Group has developed the *Environmental and Social Management System* to provide various frameworks for environmental and social policies in accordance to the *Safeguard Policy Statement* of the ADB as well as environmental laws and regulations of the PRC. The system covers air and greenhouse gas emissions, discharges into water and land and the handling of hazardous and non-hazardous waste. With reference to ISO 14001 standards, the Group has formulated *China Gas EHS Management System Work Guidelines* and *China Gas Environmental and Social Management System*, which integrate environmental protection, health and safety factors into various business areas. All business units and subsidiaries of the Group are required to implement the relevant policies.



### Five Environmental Aspects of China Gas



Protecting the environment  
and natural resources



Combating climate change  
and managing emissions



Utilising resources and  
managing waste



Saving water



Conserving biodiversity

## 9 LOVE THE PLANET AND NURTURE THE ENVIRONMENT

### PROTECTING THE ENVIRONMENT AND NATURAL RESOURCES



Along with the gradual marketisation of the natural gas industry, the effective implementation of environmental policies such as coal-to-gas conversion and the increasing environmental awareness of the public, China is striving to build a clean, low-carbon, safe and efficient energy structure. The market demand for clean energies such as natural gas and LPG 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 promotes the transformation towards green development by enhancing clean energy supply capabilities. In addition, China Gas actively cooperates with provincial and municipal governments on atmospheric environmental governance, entering into strategic cooperation framework agreements with the aim of accelerating project construction and increasing natural gas utilisation in cities, towns and villages. In doing so, China Gas helps industrial and commercial entities and residents reduce air pollutants and greenhouse gas emissions.

Prior to commencing construction projects, China Gas follows the statutory procedures to carry out environmental impact assessments, and strictly implements the Group's *Environmental Impact Assessment Report Outline* and *China Gas Construction Risk Management and Control Guidelines* to identify, reduce and mitigate potential environmental impacts and risks.

### DEVELOPMENT OF ENVIRONMENTAL AND SOCIAL MANAGEMENT SYSTEM

The Group has developed its *Environmental and Social Management System* in accordance with the *Safeguard Policy Statement* of ADB and the relevant applicable laws and regulations, which includes the following key elements:

#### Biodiversity Conservation

Avoid, minimise, or mitigate potentially adverse impacts and risks on natural habitats, critical habitats, protected areas and biodiversity. If these actions fail, as a last resort, China Gas will propose compensatory measures, such as biodiversity offset, to achieve a net gain or no net loss of the affected biodiversity.

#### Tangible and Intangible Cultural Resources Protection

To site and design the project to avoid significant damage to tangible and intangible cultural resources.

#### Pollution Prevention

Apply pollution prevention and control technologies and practices consistent with internationally recognised standards throughout the design, construction, and operation of the project, including:

- minimise or control the concentration and load of pollutants, and adopt resource-conserving and energy-efficient measures in accordance with clean production principles
- minimise or control the generation of hazardous and non-hazardous wastes and the release of hazardous materials resulting from project activities
- avoid the manufacture, trade, and use of hazardous substances and materials subject to international bans or phaseouts
- promote the reduction of project-related anthropogenic greenhouse gas emissions in a manner appropriate to the nature and scale of impacts of projects



## 9 LOVE THE PLANET AND NURTURE THE ENVIRONMENT

### PROTECTING THE ENVIRONMENT AND NATURAL RESOURCES (Continued)

#### Implementing Green Construction

##### Before construction

Carry out environmental assessment, promote civilised construction, and adopt mitigation measures such as geomembrane lining

##### During construction

Use water sprays to suppress dust emission, and implement various environmental protection measures to minimise land occupation and damage to vegetation

##### After construction

Restore surface vegetation with an aim to maintain the original ecology, and conduct solidification or greening works on the occupied land

#### Advocate Green Office Operations



##### Promote a paperless office

Enhance the electronic working platform, promote double-sided printing to reduce paper wastage



##### Adjust and control air conditioning

Reduce office electricity usage



##### Regular use of video conferencing

Reduce business travels

#### Strengthen the Promotion of Environmental Protection



Actively carry out environmental protection promotional activities within the Group to convey green ideas to employees, and encourage them to adopt a low-carbon lifestyle



Actively build a communication platform with stakeholders such as governments, media and the public to disseminate environmental protection concepts

## 9 LOVE THE PLANET AND NURTURE THE ENVIRONMENT

### COMBATING CLIMATE CHANGE AND MANAGING EMISSIONS

We realised that global warming has become more severe and poses an increasing threat to the society. The Group pays close attention and actively responds to the national 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)*.



The Group is committed to becoming a quality provider of clean energy, gearing its efforts towards building a new ecosystem for China Gas's 4G (piped natural gas ("PNG"), CNG, LNG and LPG) energy network development. The Group provides clean natural gas for township residents in North China, while also engaging in development and application of technologies related to natural gas and LPG.

China Gas strictly controls the air emissions of all operating projects and strictly implements emissions standards as stipulated in the *Integrated Emission Standard of Air Pollutants* (GB 16297–1996) and *Emission Standard of Air Pollutants for Boiler* (GB 13271–2014) to ensure all facilities and equipment are reliable and stable.

#### Air Pollution Control Measures

##### System and mechanism

Implement 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* to reduce gas leakage and safety incidents.

##### Gas transmission

Adopt appropriate gas transmission process and use high-quality materials. Fully integrate seismic-resistant considerations into the design of pipelines and their ancillary facilities in order to ensure stable operation and prevent gas leakage.

##### Operational control

Reduce venting and leakage, and set up vent systems at gas stations to discharge gas at height through vents to reduce the safety hazards and environmental pollution caused by the release of natural gas.

## 9 LOVE THE PLANET AND NURTURE THE ENVIRONMENT

### COMBATING CLIMATE CHANGE AND MANAGING EMISSIONS (Continued)

#### Natural gas burning in kiln technology and diesel-LNG dual-fuel technology

The opening ceremony of the 19<sup>th</sup> International LNG Conference (LNG2019), also known as the “Olympus of LNG”, was held at the Shanghai World Expo Exhibition & Convention Center on 2 April 2019. China Gas was invited to the exhibition.

China Gas exhibited its new and self-developed technologies including “natural gas burning in kiln technology” and “diesel-LNG dual-fuel technology” — both of which replace electricity and diesel with natural gas and LNG respectively, reducing environmental pollution via innovative technologies.



#### Natural gas burning in kiln technology

The traditional kiln firing technology is mainly used with wood-fired kiln and electric kiln. In March 2018, China Gas and Jianyang City, Fujian, the place known for kiln firing, co-operated to carry out application research on firing ceramics using natural gas. They sought firing methods that would reduce costs and protect the environment. After continuous analysis and research, firing test, and adjustment of parameters, the unique pattern of kiln firing has been successfully reproduced through the aforementioned new technology.

Since October 2018, China Gas has applied for four patents for the continual optimising and improving innovation of natural gas kilns, contributing to the realisation of automated, efficient and industrialised natural gas firing.



#### Diesel-LNG dual-fuel technology

An electronic system and fuel supply system are installed on the diesel engine without altering its structure, enabling co-combustion of both fuels in the internal combustion engine. The dual-fuel engine uses 10-40% of diesel as the pilot fuel, and natural gas replaces the remaining 60–90% of diesel, greatly reducing pollutant emissions from vessels, and contributing to the protection of the inland river environment.

#### Direct air emissions in FY2019/20<sup>(1)(2)</sup>

Nitrogen Oxides (NO <sub>x</sub> )	Sulphur Dioxide (SO <sub>2</sub> )	Particulate Matter (PM)
79.08 tonnes	27.15 tonnes	13.18 tonnes

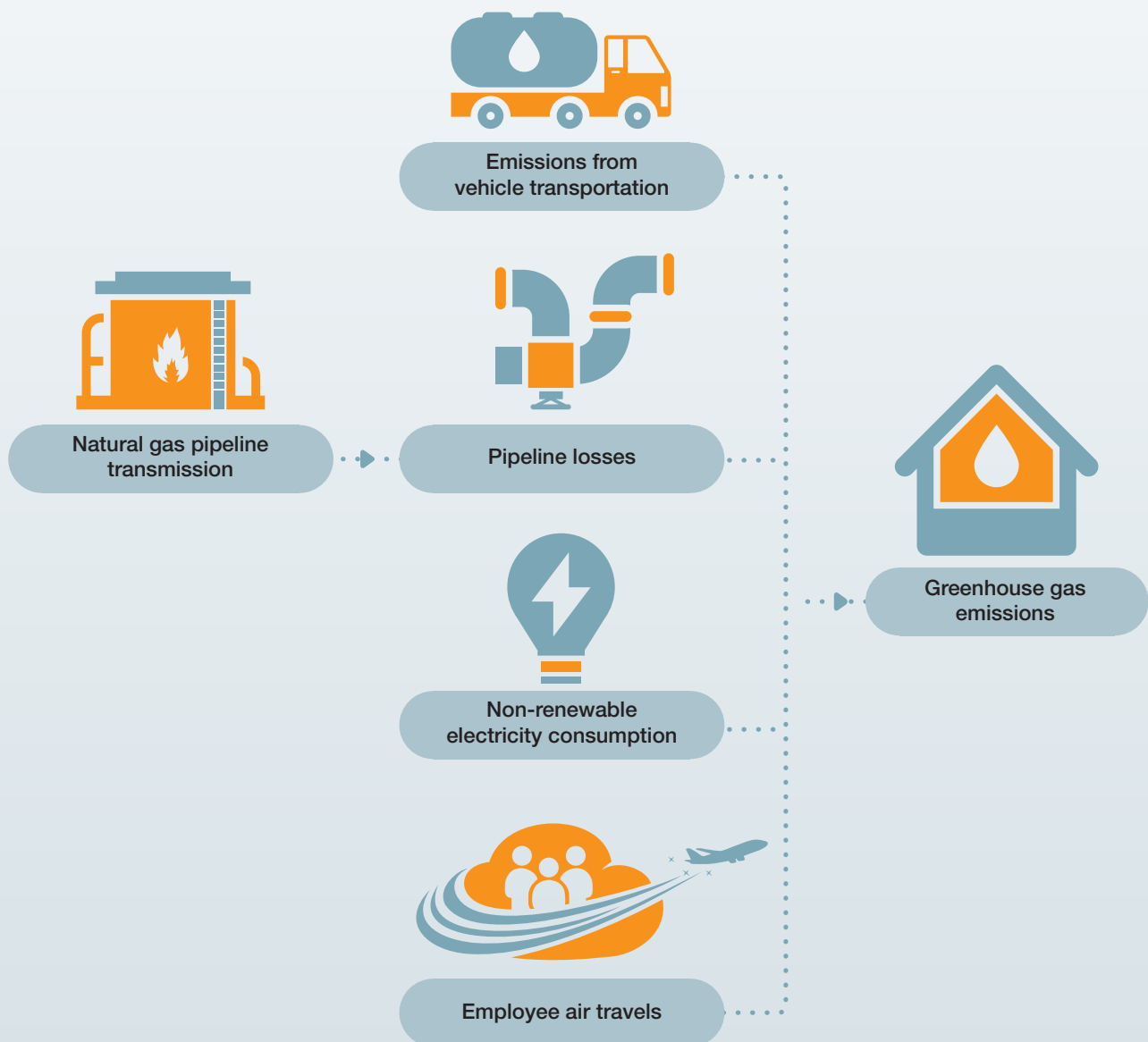
Notes:

1. In FY2019/20, the Group revised its reporting boundary to focus on disclosing its direct air emissions.
2. Direct air emissions include the pollutants generated from the gas-fired boiler and vehicle transportation.

## 9 LOVE THE PLANET AND NURTURE THE ENVIRONMENT

### GREENHOUSE GAS MONITORING AND CONTROL

To strengthen the monitoring and control of greenhouse gases, the Group estimated its projects' greenhouse gas emissions with reference to the methodologies of the Clean Development Mechanism under the *United Nations Framework Convention on Climate Change*. Emissions generated during the operation of the Group included consumption of fossil fuels for operations, fugitive emissions released during transmission/transportation and storage of natural gas and LPG and non-renewable electricity consumption. The Group will continue to monitor the greenhouse gas emission data and renew it annually. In the future, the Group will establish a robust management plan to reduce greenhouse gas emissions, strengthen the management of fossil fuel and energy consumption and enhance the effectiveness of their works on emissions reduction.








## 9 LOVE THE PLANET AND NURTURE THE ENVIRONMENT

### GREENHOUSE GAS MONITORING AND CONTROL (Continued)

#### Greenhouse Gas Emissions in FY2019/20

Greenhouse gas (GHG)	Source(s)		Emissions
Scope 1: Direct emissions (tCO <sub>2</sub> e)	Consumption of fossil fuels for operations, fugitive emissions released during transmission/transportation and storage of natural gas and LPG		118,000.50
Scope 2: Energy indirect emissions (tCO <sub>2</sub> e)	Consumption of non-renewable purchased electricity		91,166.40
Scope 3: Other indirect emissions (tCO <sub>2</sub> e)	Employee air travels		394.22
<b>Total GHG emissions (tCO<sub>2</sub>e)</b>			<b>209,561.13</b>
<b>GHG intensity (kgCO<sub>2</sub>e/GJ of energy sold)</b>			<b>0.21</b>

### UTILISING RESOURCES AND MANAGING WASTE

To make good use of limited precious resources in a sustainable manner and reduce the environmental impact of the value chain, the Group uses sustainable materials and minimises waste. The Group strictly manages the generation and disposal of waste in various projects, while closely monitoring the use of mechanical oils and chemicals to minimise wastage and the generation of hazardous waste.



Office environmental management	Operational management
The Group continues to promote the <i>7S Office Environmental Management System</i> to advocate the principle of frugality and conservation, and build a resource-saving enterprise with employees. The Group has cooperated with Fuji Xerox to implement the <i>Office Printing Improvement Programme</i> to actively promote printing improvement measures and encourage employees to change their printing habits, and thereby improve the efficiency of printing and reducing energy consumption.	Each project strictly complies with the Group's material use management objectives. About 99% of the materials used in the production of LPG cylinders are recyclable materials (steel, brass), and only the remaining 1% are non-recyclable paint coatings.

## 9 LOVE THE PLANET AND NURTURE THE ENVIRONMENT

### UTILISING RESOURCES AND MANAGING WASTE (Continued)

#### Material Consumption Statistics in FY2019/20

Material	Unit	Volume
LPG cylinder	No.	402,180.00
Lubricant	tonne	95.25
Antifreeze oil	barrel	256.00
Paper product/cardboard	tonne	1,978.98
Plastic	tonne	692.27
Wood board	tonne	5.58
Odourant	tonne	96.60

#### Waste Generation and Disposal



##### Non-hazardous waste

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



Non-hazardous waste is regularly collected and disposed by the sanitation department

Amount generated in FY2019/20

**17,323.06** tonnes



##### Hazardous waste

Mainly includes waste machinery oil, hazardous and expired chemicals and hazardous metals from the waste circuit boards of gas appliances



Hazardous waste is handled by qualified collectors for proper disposal

Amount generated in FY2019/20

**69.79** tonnes

## 9 LOVE THE PLANET AND NURTURE THE ENVIRONMENT

### SAVING WATER

The Group understands that water shortage is increasingly severe. Therefore, the Group is committed to the protection of water resources by reducing projects' water consumption, enhancing water recycling, and improving the utilisation of water resources.



We have adopted water saving and conservation measures in projects and offices, including:



Utilise recirculating water for water-consuming equipment such as natural gas compressors, ice machines, and sprinkler systems to improve water efficiency



Install rainwater harvesting facilities



Install automatic sensor water taps in offices

During the Reporting Period, the Group's total water consumption was 1,684,559.06 tonnes; the water intensity was 1.67 kg/GJ of energy sold, which was decreased by about 20% compared with FY2018/19.

#### Water Consumption by Source (tonne)

Municipal water suppliers or other water utilities	Groundwater	Surface water	Seawater	Total
1,473,050.75	126,777.91	83,730.40	1,000.00	1,684,559.06

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 1,071,995.76 tonnes.

## 9 LOVE THE PLANET AND NURTURE THE ENVIRONMENT

### SAVING WATER (Continued)

#### Wastewater Discharged by Destination (tonne)

Municipal water suppliers or other water utilities	Groundwater	Surface water	Total
896,540.05	108,686.85	66,768.86	1,071,995.76



#### Water Pollution Control Measures

- 1 Strengthen the works on 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.
- 2 Install seepage control measures at the wastewater treatment facilities, sewage tanks, and waste storage areas.
- 3 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 and severity of the pollution.

## 9 LOVE THE PLANET AND NURTURE THE ENVIRONMENT

### INCREASING ENERGY USAGE EFFICIENCY

China Gas is committed to saving energy and improving energy efficiency through reducing energy consumption. The energy consumed in our daily operations and transportation mainly include natural gas, LPG, petrol, diesel and purchased electricity.



In addition, in order to reduce the energy consumption of vehicles, 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 to support the development of sustainable transport.

During the Reporting Period, the Group's total direct energy consumption was 2,117,414.67 GJ, the energy intensity was maintained at 0.002 GJ/GJ of energy sold.

#### Direct Energy Consumption Statistics in FY2019/20

Fuel	Unit	Consumption
Petrol	tonne	2,682.60
Natural gas	m <sup>3</sup>	37,062,260.71 <sup>(1)</sup>
Diesel	tonne	3,605.80
LPG	tonne	69.40
Heavy oil	tonne	2,575.16
Kerosene	tonne	0.43
Energy	Unit	Consumption
Non-renewable electricity consumption	kWh	149,428,626.06
Renewable electricity consumption	kWh	253,056.20

Note:

1. Among them, 25,618,727 m<sup>3</sup> was consumed by project companies of distributed energy business for external heating.



## 9 LOVE THE PLANET AND NURTURE THE ENVIRONMENT

### CONSERVING BIODIVERSITY

Considering the fact that gas processing and distribution may interfere with land or wildlife habitats, mitigating the impact on biodiversity has become an important part of the Group's environmental management approach. 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.



According to the Group's *Environmental and Social Management System*, we adopt the following protection measures and design principles during project development.

#### Ecological Environmental Protection Measures

	<ul style="list-style-type: none"> <li>Where practical, the gas transmission pipelines should avoid passing through nature reserves, eco-functional areas, forest parks and forest areas to reduce damage to vegetation</li> </ul>
	<ul style="list-style-type: none"> <li>Ensure prudent planning for land permanently occupied by pipelines; construction should be in parallel and along the alignment of the road to reduce soil disturbance and damage to surface vegetation, and to avoid exposing land and soils to erosion</li> </ul>
	<ul style="list-style-type: none"> <li>If there are construction activities taking place, 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</li> </ul>
	<ul style="list-style-type: none"> <li>Strengthen the construction management and environmental awareness of workers, including information about the national protected species</li> </ul>
	<ul style="list-style-type: none"> <li>Where practical, restore the land to its original land use pattern after the completion of construction works if there are construction activities taking place, and adopt greening measure for planting trees and grass according to the climate conditions</li> </ul>


#### Biodiversity Conservation Measures

	<b>Protect the wild plants</b> <ul style="list-style-type: none"> <li>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</li> </ul>
	<b>Protect the wild animals</b> <ul style="list-style-type: none"> <li>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</li> </ul>
	<b>Environmental protection</b> <ul style="list-style-type: none"> <li>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</li> </ul>
	<b>Education on the awareness of protection</b> <ul style="list-style-type: none"> <li>Increase the public's awareness on the protection of wildlife and ecological environment</li> </ul>

## 9 LOVE THE PLANET AND NURTURE THE ENVIRONMENT

### CONSERVING BIODIVERSITY (Continued)

#### Green Design Principles

	<b>Planting principle</b>
	<ul style="list-style-type: none"><li>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 survival rate of green planting</li></ul>
	<b>Office greening</b>
	<ul style="list-style-type: none"><li>Target greening in the office areas by planting ornamental evergreen trees around the office buildings, setting up flower beds, and planning small gardens</li></ul>
	<b>Vegetation restoration</b>
	<ul style="list-style-type: none"><li>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 in order to enhance the stability of green planting</li></ul>

# JOINING HANDS WITH EMPLOYEES AND PROMOTING THE CULTURE OF CHINA GAS

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## 71 Care for Our Employees and Grow Together



## 10 CARE FOR OUR EMPLOYEES AND GROW TOGETHER

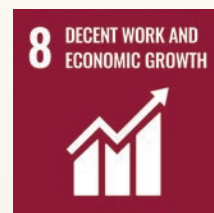
### MANAGEMENT APPROACH

China Gas prides itself in being people-oriented and strives to become an outstanding employer. China Gas places their corporate culture into practice with their employees.

We strictly abide by the *Labour Law of the PRC* and *Labour Contract Law of the PRC*, and comply with the principle of equal employment to comprehensively protect the basic rights of employees. We forbid all discriminatory conducts in relation to gender, ethnicity, age, religion, health, marriage status, family status, during operation or recruitment process. China Gas also prohibits the employment of child labour, forced labour and false identity applications. 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.

Openness, fairness and righteousness are the three principles advocated by the Group's human resources management guideline. With an aim to protect employees' rights, our *Human Resources Management Manual* and *Recruitment Management System* cover detailed guidelines relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity and diversity, anti-discrimination, training, and other benefits and welfare.

The Group also attaches great importance to employees' welfare. To create a harmonious and inclusive working environment, our Staff Care Committee organises various leisure activities from time to time and provides all-rounded welfare to our staff.



## 10 CARE FOR OUR EMPLOYEES AND GROW TOGETHER

### EXCELLENT TALENT TEAM

With an aim in maintaining sustainable development, the Group actively recruits talents to expand the professional team. As at 31 March 2020, the Group had a total of 59,462 employees, 36% of which were female employees, while ethnic minorities accounted for 7% of the total employees.



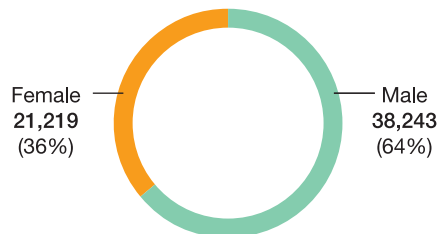
Total number of employees: **59,462<sup>(1)</sup>**  
(as at 31 March 2020)

Note:

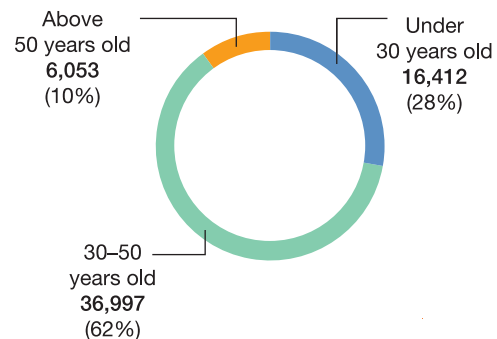
1. Among them, 59,436 employees are based in Mainland China and 26 employees are based in Hong Kong.

#### Employee statistics by gender, age, ranking and ethnicity

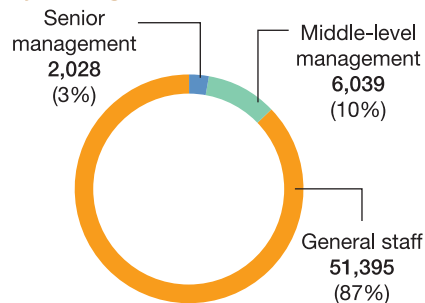
##### By gender



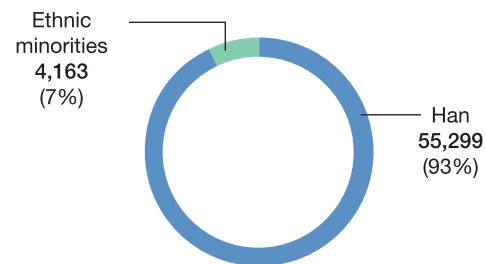
##### By age



##### By ranking



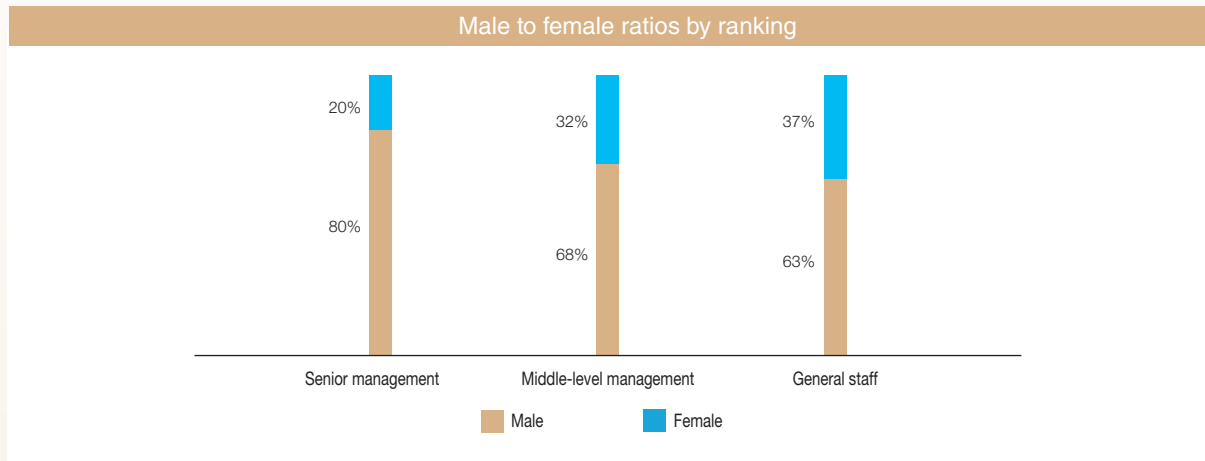
##### By ethnicity





## 10 CARE FOR OUR EMPLOYEES AND GROW TOGETHER

### EXCELLENT TALENT TEAM (Continued)



## 10 CARE FOR OUR EMPLOYEES AND GROW TOGETHER

### TALENT RECRUITMENT AND RETENTION

The Group has complied with the three principles of openness, fairness and righteousness in accordance with *Human Resources Management Manual* and *Recruitment Management System*, and has established an outstanding team of employees based on job-matching. In order to attract talents from different fields, we recruit through multiple channels and actively cultivate an encouraging working environment, and a work-life balance. In terms of promotion, we prioritise promotion opportunities for internal staff with excellent performance before external recruitment in accordance with the *Cadre Management Measures*.



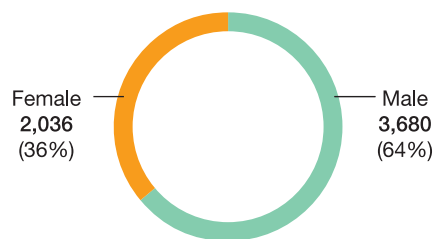
## 10 CARE FOR OUR EMPLOYEES AND GROW TOGETHER

### TALENT RECRUITMENT AND RETENTION (Continued)

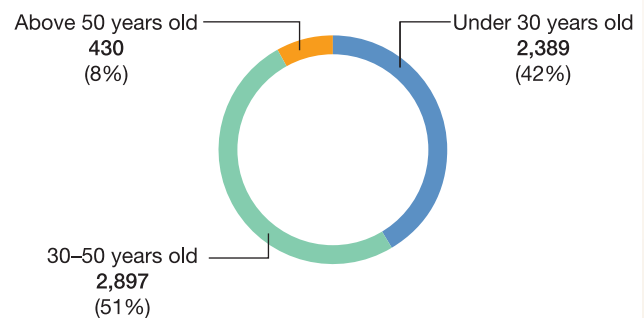
Total number of new employees in FY2019/20: 5,716

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

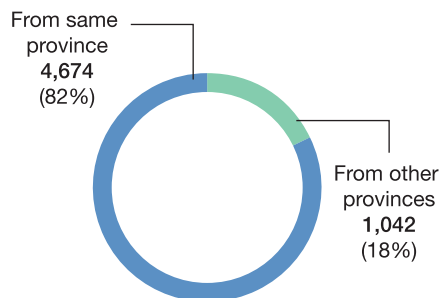
By gender



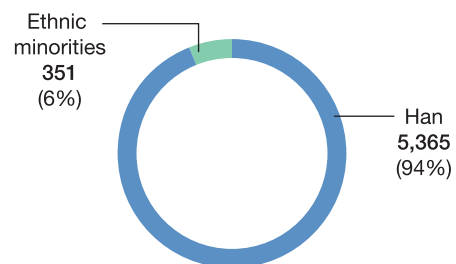
By age



By geographical region<sup>(1)</sup>



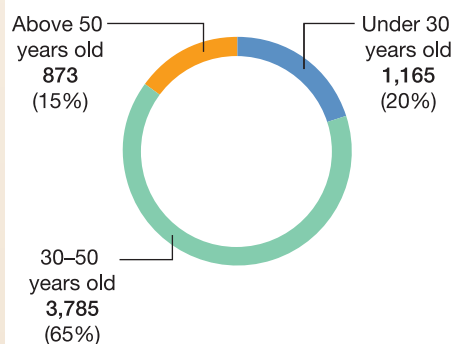
By ethnicity



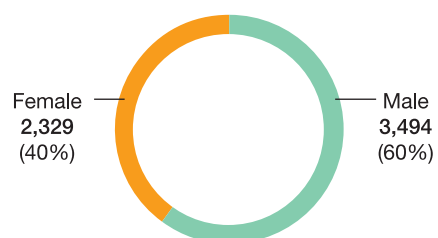
Employees turnover in FY2019/20: 5,823<sup>(2)</sup> Turnover rate: 9.79%

Employees turnover statistics by age and gender

By age



By gender



Notes:

1. All new employees in FY2019/20 are based in Mainland China.
2. All employees lost in FY2019/20 were based in Mainland China.

## 10 CARE FOR OUR EMPLOYEES AND GROW TOGETHER

### BENEFITS AND PROTECTION

To further motivate employees' enthusiasm and ambition, we adopt an incentive and encouraging remuneration system. The Group's remuneration management system is based on the position, performance, and capability, respecting employees' efforts and contribution. The Group also sets salary scales with due consideration of regional differences in salary standards, and is committed to let employees receive fair remuneration and benefits.

China Gas is committed to building a welfare system which not only ensures employees' satisfaction, but also maintains market competitiveness. The Group provides employees with social insurances and housing allowances in accordance with the requirements of national policies, as well as employee benefits in the form of per capita benefits, packages that are compliant with local circumstances and standards of the country and company's requirements.



#### Remuneration system

- Provide competitive remuneration, pension contribution and various paid leaves
- Provide employees with social insurance and housing provident fund
- Adjust payrolls according to different local policies on salary standards to demonstrate fairness
- Provide incentive performance-based pays



#### Benefits and subsidies

- Provide length of service subsidy, festival allowance, physical examination allowance, supplementary commercial insurance premium, medical insurance, meal allowance, etc.
- Qualified employees will receive discretionary bonuses, rewards and stock options based on the Group's financial performance and their individual performance



#### Family-friendly employment

- Respect family responsibilities of employees, implement localised policies for staff and cadres, improve team stability and resource complementarity

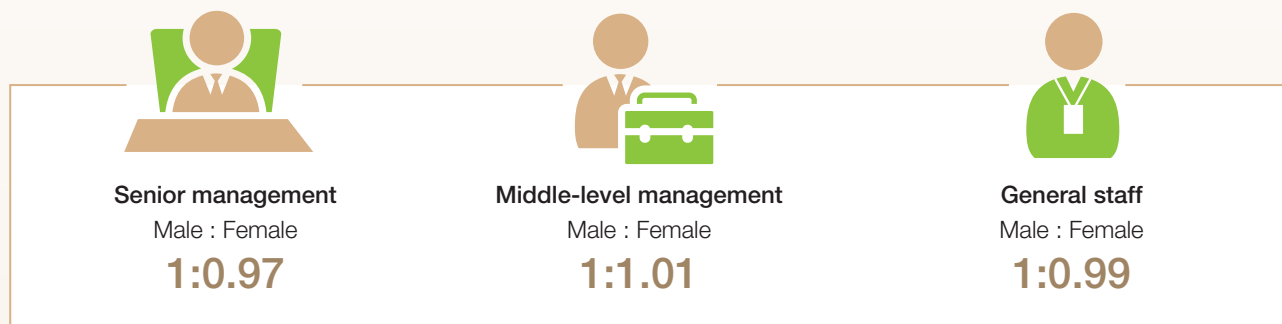
In terms of the protection of rights for female employees, we strictly comply with laws and regulations such as the *Protection of Women's Rights and Interests and Special Rules on the Labour Protection of Female Employees*, in order to achieve equal pay for men and women. Apart from providing female employees with a good working environment and working conditions, China Gas also provides women with equal opportunities for career development, and ensures that they are fully protected by the maternity and lactation leave regulations. China Gas reserves positions for employees on parental leave, and encourages them to re-join the company, and ensures their career development and remuneration are unaffected.



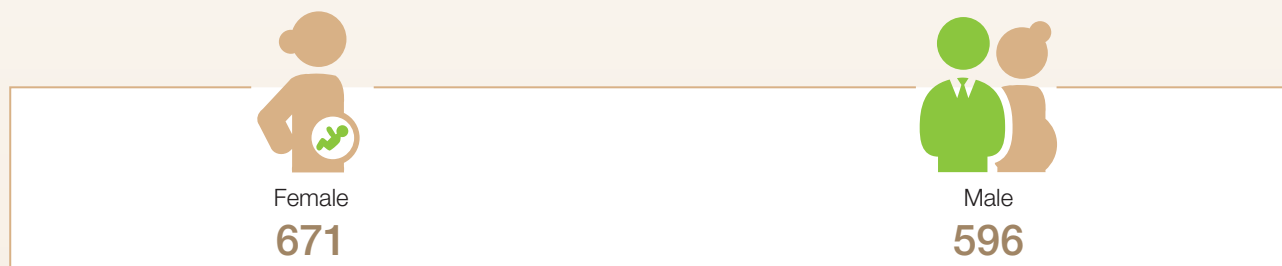
## 10 CARE FOR OUR EMPLOYEES AND GROW TOGETHER

### BENEFITS AND PROTECTION (Continued)

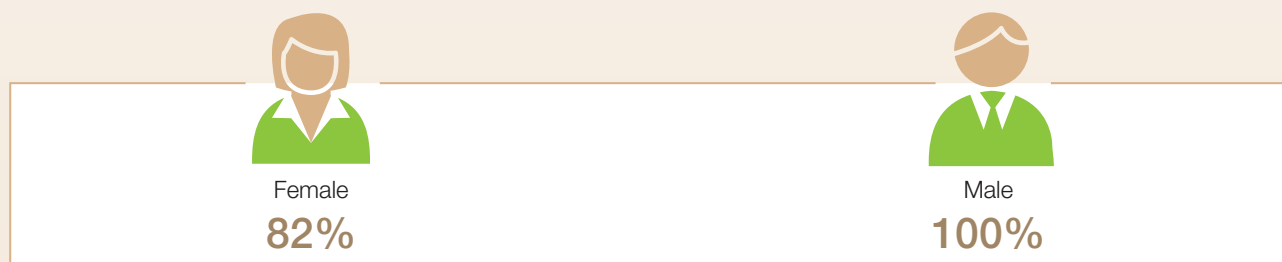
#### Ratio of remuneration of male to female by ranking in FY2019/20



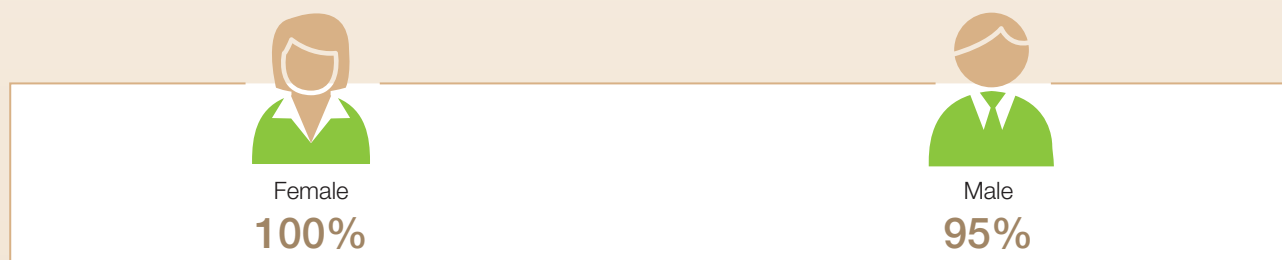
#### Employee maternity/paternity leave statistics in FY2019/20



#### Percentage of employees who returned to work after maternity/paternity leave ended in FY2019/20



#### Percentage of employees who returned to work after maternity/paternity leave ended in FY2018/19 and still employed by the end of FY2019/20





# 10 CARE FOR OUR EMPLOYEES AND GROW TOGETHER

## TRAINING AND DEVELOPMENT

We arrange relevant training to employees based on their position, ranking and interest. We hope our employees can grow together and share the prosperity with China Gas. 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 remedial action plans, etc.

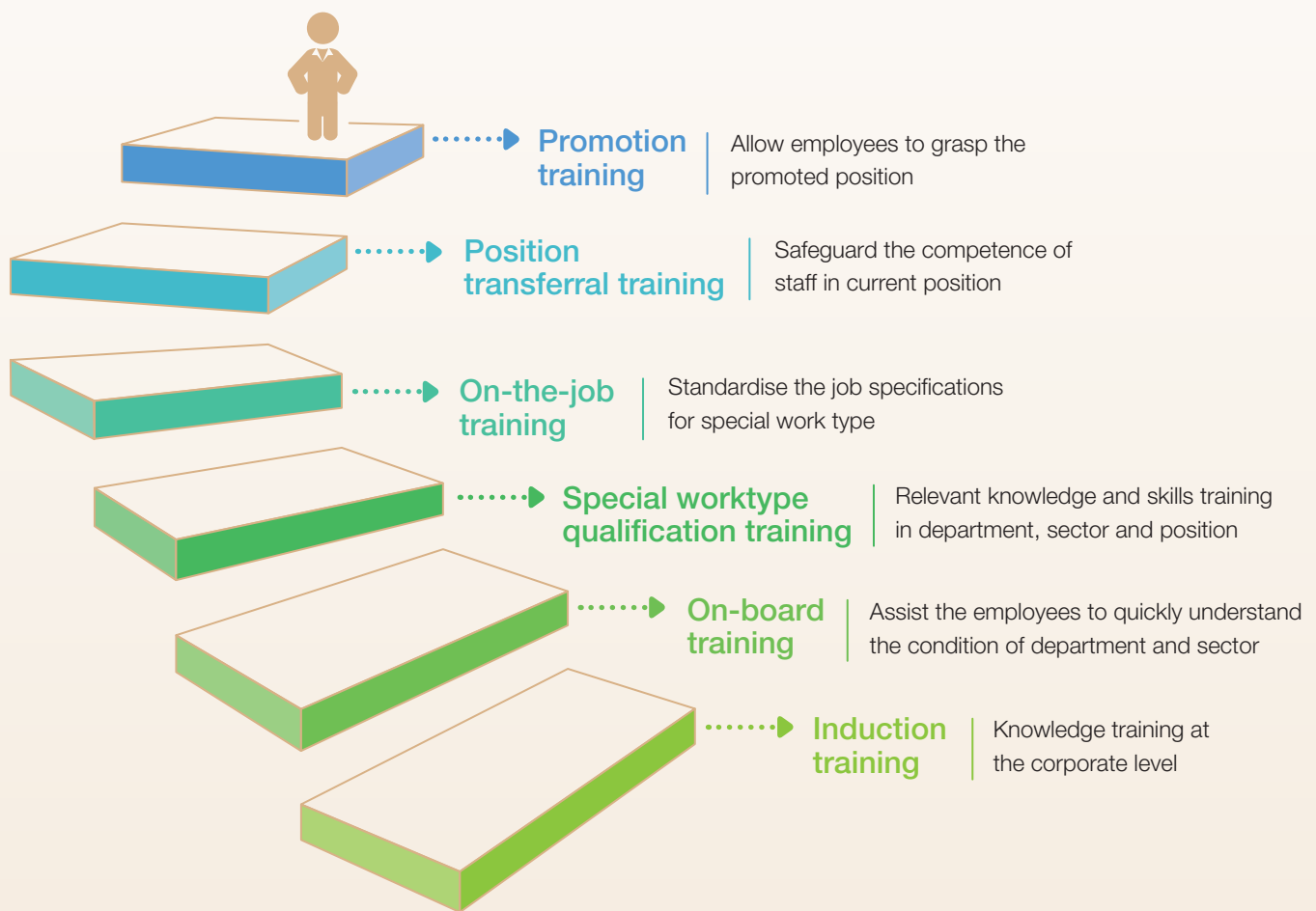
Training for new employees	Training for senior management
The Group provides each new employee with a training course corresponding to his or her position in order to accelerate the cultivation of talents. For example, the Group provides training to help newly graduated employees adapt to their new environment and roles.	The Group provides senior management with trainings on organisational strategies and formulation of strategies to strengthen its ability to lead and hire talents.
Value-added skills	
The Group actively provides targeted and practical training. The training content will vary according to the actual needs of different departments and functions. In order to allow employees to keep pace with the times and add value to themselves, China Gas provides technical trainings, which includes, but are not limited to language improvement, software application and communication skills development.	

Each project company formulates and executes training plans every year in accordance with the training themes and work priorities of the Group's headquarters and regional management centres to provide employees with flexible and systematic learning opportunities. Through an efficient employee training system, the Group strives to equip every employee with the knowledge, skills, attitudes and experience required for work in order to continuously improve the overall quality of employees. In addition, to ensure a sustainable development of the Group and its employees, the Group provides interdisciplinary and lifelong training such as workshops on enhancing problem solving skills and innovative thinking, as well as lifelong career planning to its employees.

## 10 CARE FOR OUR EMPLOYEES AND GROW TOGETHER

### TRAINING AND DEVELOPMENT (Continued)

#### Training Category: By the Career Growth Stage of Employees



FY2019/20

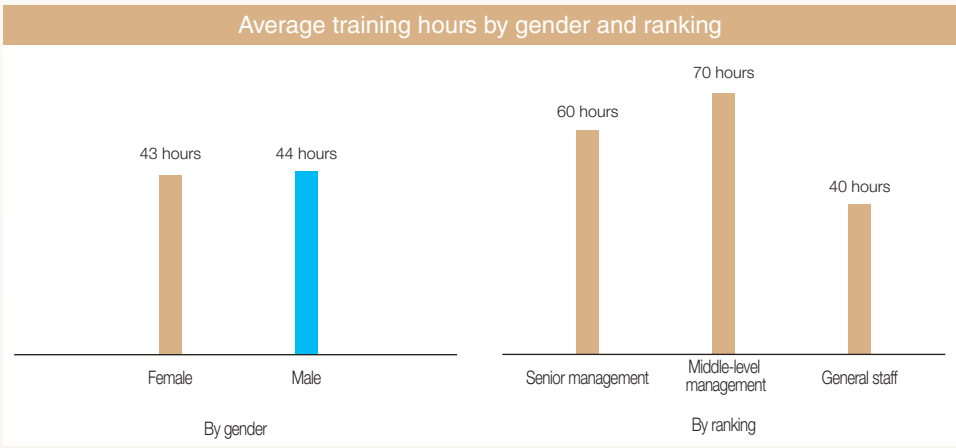


Total training hours  
**2,598,104**

Average training hours per employee  
**44**

# 10 CARE FOR OUR EMPLOYEES AND GROW TOGETHER

## TRAINING AND DEVELOPMENT (Continued)



### Employee Assessment and Evaluation

In order to further increase the allocation efficiency of human resources, China Gas conducts staff suitability assessments and comprehensive evaluations of all employees annually, including the Group's 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, while also strengthening the organisation and discipline in cadre deployment in order to form a stronger team.

## 10 CARE FOR OUR EMPLOYEES AND GROW TOGETHER

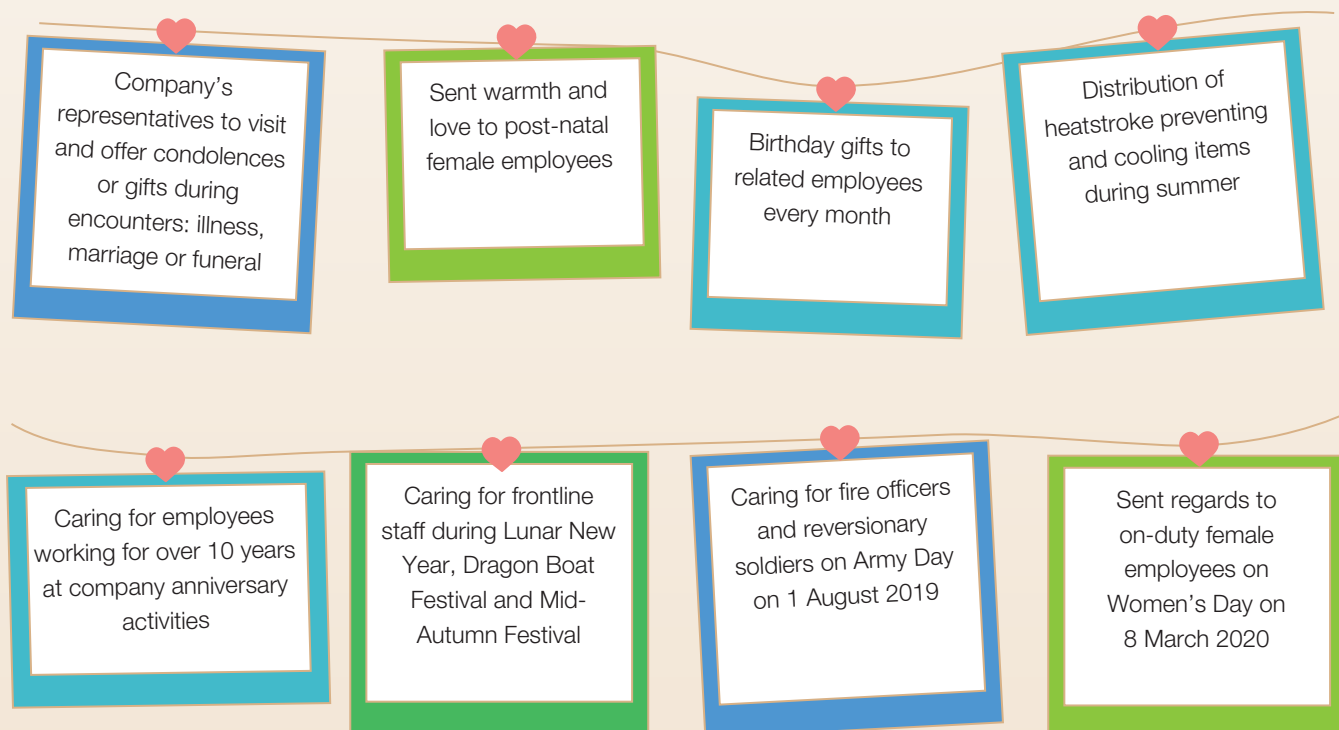
### CARING FOR EMPLOYEES

China Gas cares for the physical and mental health of its employees, actively helping employees and their families, and encouraging employees to spread love and warmth to those in need. We developed guidelines on employees' care such as *Guideline on China Gas Employees' Caring on Marriage, Death, Work-related Injuries and Serious Illnesses*, *China Gas Headquarters Employees Caring Scheme* and *Guideline on Application for China Gas Employee Caring Committee Assistance*, to ensure that the actual needs of their employees are addressed and cared for. In particular, employees who need medical attention and those from low-income families are provided with assistance and support in accordance to the *China Gas Caring Committee Protocol*.

#### Spark enthusiasm to learn, spread love and care among employees, help dreams come true

During the Reporting Period, the Foundation launched its first "Spark Enthusiasm to Learn" activity for children of employees with difficulties in pursuing further education. This is an embodiment of the corporate culture of "Internal Care" which aims to enhance belonging and understanding. At the same time, the Group hopes that this initiative can foster a learning environment that is exceptional, effective, and paves path to the children's success. The "Spark Enthusiasm to Learn" also handed out a total of RMB100,000 scholarship prizes to 20 students that have had outstanding results and were from low socio-economic backgrounds.

During the Reporting Period, we launched multiple care activities to spread the Group's love:



## 10 CARE FOR OUR EMPLOYEES AND GROW TOGETHER

### CARING FOR EMPLOYEES (Continued)



#### Caring for cadre employees and frontline construction team at Mid-Autumn Festival

At the Mid-Autumn Festival in 2019, Wang Dekai, Executive General Manager of Shandong Region, visited the Heze platform. During the visit, four project companies in Mudan District, Shan County, Dong Minghong Hao and Zaozhuang City were visited. Festive items and blessings were sent to all cadres and the frontline construction teams.

#### Caring for frontline cadres of gas supply

On 7 February 2020, Party Secretary of the Company and Chairman Chen Yun Fei, and Zhu Dazhen, Leader of Discipline Inspection and Supervision Team in China Gas, and Deputy General Managers Zhang Changsheng and Yun Chen, as well as Qi Baohua, Chairman of the corporate union — led teams to visit the cadres who joined the frontline positions of gas supply since the period of epidemic prevention and control. Items such as self-heating rice, instant noodles and dumplings were sent to them. The Group sincerely appreciates the cadres' works, and ensured that the cadres would continue to carry out self-protection adequately, serve the districts of epidemic prevention properly and ensure the stable operation of natural gas supply.



## 10 CARE FOR OUR EMPLOYEES AND GROW TOGETHER

### CARING FOR EMPLOYEES (Continued)

#### Ensure Two-way Communication

China Gas maintains communication with its employees through establishing a sound communication mechanism, to deepen the understanding of the needs of its employees. The Group has established a column for suggestions on the OA platform, allowing its employees to contribute their suggestions and opinions on corporate management and sustainable development. Concurrently, a forum for an exchange of ideas and advice has also been established, allowing employees to express their confusion or difficulties faced at work and in their daily lives. Eventually, the Group's professional departments will answer and reply accordingly. Through the Group's internal media such as their WeChat account "CG Home" and broadcasted programme "New Vision with a Blue Flame", the latest news feed on operations and management, strategies and targets are published promptly. China Gas widely promotes their e-working culture in various locations and establishes sound activities, which allow employees to understand more about the development and targets of the Group, fostering a harmonious relationship between China Gas and its employees.

The Group has also established a platform for grievances and whistleblowing. 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 ensures cases are dealt with in a transparent, fair and impartial manner. In valuing the opinions of its employees, China Gas has a "Letter Box to the President" and WeChat groups where they can voice out their opinions. China Gas also strives to improve communications between the management and its employees.

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' devotion towards the Group.

During the Reporting Period, the Group carried out a "Headquarters' Administration Management Department Satisfaction Survey", in which 1,156 employees participated. The aim is to have a clearer understanding of employees' opinions on the Group's management, situation of system execution, communication and collaboration capabilities, employee care and the fostering of a good working environment. The Group actively considers incorporating employees' suggestions into the company's operation in order to ensure that a better working environment is instilled for the future.



## 10 CARE FOR OUR EMPLOYEES AND GROW TOGETHER

### CARING FOR EMPLOYEES (Continued)

#### Promoting Physical and Mental Health of Employees

In addition to providing assistance to employees in times of difficulties and personal issues, the Group also attaches importance to raising employees' awareness of self-care and health-related issues. Our Employee Care Committee regularly invites experts to provide employees with various health and safety awareness lectures and activities, free body checks and insurances to employees in need, and is committed to take practical care and action of the physical and mental health of employees and their families.



##### Health seminars

- Seminars on epidemic prevention knowledge and psychological counselling
- Cancer prevention, male and female health seminars
- Mental health seminars
- Seminars on diet, exercise and sleep health



##### Safety knowledge

- Seminars and contests on fire safety knowledge, notification of the Group's recent incidents, lessons from three anti-violation cases and organising fire drills
- Safety knowledge competitions, theoretical exams, on-site scenario simulation for value-added services' daily operation
- Seminars on emergency care and health knowledge



##### Body checks

- Occupational health check, including blood pressure measurement, acupuncture massage, massage, scraping, cervical spine and lumbar physiotherapy, meridian dredge, etc.
- Body checks

#### Enriching Employees' Living

We hope that the Group is not merely a platform for employees' career development but also a place where they can enjoy life. Therefore, we actively organise and support various employee activities to enhance the sense of belonging of our employees. Our Staff Care Committee regularly organises a variety of leisure activities, such as summer camps, fun sports day, jogging competitions, outdoor development activities, drawing activities, and public welfare classes, with an aim to promote employees' physical and mental health, while also enabling them to work energetically.

## 10 CARE FOR OUR EMPLOYEES AND GROW TOGETHER

### CARING FOR EMPLOYEES (Continued)

#### Enriching Employees' Living (Continued)

##### 2019 Headquarters' Fun Sports Day

On 30 November 2019, 680 employees and families gathered at the Mission Hills Sports & Eco Park to participate in 2019 Headquarters' Fun Sports Day. The Sports Day was a grand event that showcased the spirits of employees, and was an important activity to comprehensively deepen cultural awareness, to exercise and to collaborate with one another in a happy and healthy environment, which played a positive role in promoting the cohesion, competitiveness and execution of the Group's employees.



##### 2019 Summer Camp in North China

In order to care for our employees' lives and create a good corporate culture atmosphere, the Foundation and Staff Care Committee, in collaboration with the North China region, held a 3-day Summer Camp in September 2019.

During the camp, the staff broadcasted the promotional video of China Gas and animation of gas safety knowledge, which not only let the children understand the Group's culture, but also let them learn about the gas safety. The children felt amazed and were sincerely proud of their parents' work and the fact that they are employees of China Gas. Participants also visited Tangxian Bethune and Kedihua Memorial Hall to learn about the glorious life tracks of these two internationalist fighters.

##### 2019 Headquarters' Jogging Competition

On 2 November 2019, 312 employees from China Gas's headquarters participated in the 2019 Jogging Competition at Taojinshan Green Path, which is located at "Mount Yangtai-Wutong Mountain-Pingshan River Ecological Corridor". The purpose of this event was to let employees exercise and relax through low-carbon, environmentally friendly and green fitness methods. Employees from various departments gathered together to walk a total of 4.28km in the spirit of "Friendship First, Competition Second".



# CARING FOR THE COMMUNITY AND SHARING PROSPERITY WITH ALL

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**87** Spare No Effort in Giving Back to the Community







## 11 SPARE NO EFFORT IN GIVING BACK TO THE COMMUNITY

### MANAGEMENT APPROACH

China Gas has always adhered to its mission of “Converging in Harmony and Benefiting the Society” and is committed to understanding and responding to the needs of the communities where it is located.

The Group’s *Environmental and Social Management System* complies with ADB’s relevant requirements and incorporates social concerns into every phase of project development in order to promote social harmony. In addition, the group also established the Foundation and a volunteer service team involving various charitable activities that includes but is not limited to disaster relief, educational and medical sponsorship and poverty alleviation.



### INCORPORATING SOCIAL CONCERNS INTO PROJECT INVESTMENT AND DEVELOPMENT

In order to avoid and minimise the disturbance to the lives and livelihoods of community members during project construction and operation, China Gas follows the guidance principles in the *Environmental and Social Management System*. China Gas strives to achieve a harmonious coexistence among business operations and their surroundings in order to contribute to sustainable development.





## 11 SPARE NO EFFORT IN GIVING BACK TO THE COMMUNITY

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

In order to identify the groups affected by the projects, the Group will conduct initial social impact assessments to examine the needs of each group (e.g. affected households, indigenous peoples and other vulnerable groups) at the early stage of the project cycle, and strictly control relevant risks and impacts in accordance with the resettlement and indigenous peoples safeguard requirements as set out in the *Safeguard Policy Statement* of ADB.

The Group will avoid resettlement as far as possible. In cases where it is unavoidable, the Group will explore all possible optimised proposals and alternatives to minimise the number of peoples and the extent of their suffering from resettlement, loss of land and income sources. During the design and the implementation of the projects, we persist in paying fully respect to the identity, dignity, human rights, lifestyle and cultural characteristics of indigenous peoples in order to ensure that the social and economic interests are consistent with their cultural traditions. If we identify any unavoidable impacts to the community at the early stage of the project, we will strictly follow ADB's applicable specific requirements on compensation, assistance, benefit sharing, assessment of social impacts, resettlement planning, information disclosure, consultation, grievance redress mechanism, monitoring and reporting in order to ensure that the affected groups can hopefully restore their pre-project livelihoods.

During the Reporting Period, the Group did not have projects which involved the resettlement of residents, or any incidents of violations involving the rights of indigenous peoples.

#### Effective Consultation and Participation

For projects that may cause resettlement or negative impacts to indigenous communities, the Group will conduct communication and consultation with affected groups in the early stage of the project. The Group will also carry out effective consultations in accordance with the requirements of ADB, carefully consider the demands of the affected groups, minimise and mitigate negative impacts, and compensate for the impacts according to the law. The Group's projects have also set up comprehensive grievance redress mechanisms to receive and facilitate the resolution of affected persons' concerns and grievances.



## 11 SPARE NO EFFORT IN GIVING BACK TO THE COMMUNITY

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

#### Effective Consultation and Participation (Continued)

##### Continual consultation

Meaningful consultation begins early in the project cycle and is carried out on a continual basis throughout the project cycle, and often conducted in local dialects. The affected persons are adequately informed about the project's potential adverse impacts and proposed mitigation measures.

##### Timely disclosure of relevant and adequate information

Affected persons should have access to relevant project information such as the nature of the project, the scope of and reason for land acquisition, the resettlement objectives and entitlement matrix, available choices regarding the future life, rights of the displaced people to participate in resettlement planning and implementation, and the grievance mechanisms.

##### No intimidation or coercion

Consultation needs to occur freely and voluntarily where the affected persons can freely express their views without any external manipulation, interference, or threat of retribution.

##### Gender-inclusivity and considering the needs of vulnerable groups

Ensure the participation and consultation of women and vulnerable groups, and take their concerns into account.

### BENEFITING COMMUNITIES THROUGH CHARITABLE ACTIVITIES

Upholding the mission of “Converging in Harmony and Benefiting the Society” China Gas actively seeks opportunities to be the promoter and participant of charitable activities. In 2014, the Foundation was established by the Group and financed by substantial shareholders of China Gas, to undertake a social responsibility through carrying out charitable activities to help vulnerable groups. In 2019, adhering to the principle of “Loving the Communities, Caring for the Colleagues,” the Group also actively engaged in charitable activities that included educational and medical sponsorship, disaster relief and poverty alleviation, etc.

## 11 SPARE NO EFFORT IN GIVING BACK TO THE COMMUNITY

### BENEFITING COMMUNITIES THROUGH CHARITABLE ACTIVITIES (Continued)

#### Collective Engagement in Voluntary Activities

China Gas actively participates in charity events and upholds the belief that “It is not a charity work unless everybody is engaged”. As a result, a volunteer service team was established to help promote volunteering norms among employees and enhance a sense of belonging to employees. The Group also improves employee’s service capabilities and public awareness through rigorous training.

##### Sharing love and care through blood donation

On 8 August 2019, the Xinyang Business Management Center contacted the blood centre in the city centre to organise a blood donation event. The vast number of employees enthusiastically revealed their love and dedication to the cause by donating blood. A total of 57 employees donated 22,000 ml of blood, and built a heart-to-heart red bridge with strangers.



##### China Gas respect elderly day with friendship and love

On 1 June 2019, 17 volunteers from our Hong Kong headquarters hosted an elderly day in St. James’ Settlement in Wanchai, Hong Kong. Singers and donors were invited to perform and interact with elderlies, and everyone had an enjoyable Dragon Boat Festival. Our volunteer colleagues also prepared blessing bags for the elderly. A 101-year-old woman praised and said, “I am very happy today, thank you!”.



##### Rekindling hope and spreading love 2019—shrimp fishing day

On 30 June 2019, 15 volunteers from the Group’s Hong Kong headquarters hosted a shrimp fishing event at Hallo Land in Kwun Tong for the Hong Kong Family Welfare Society (Yau Tong Branch). The Group invited 20 single-parent children and their mother or father to join the joyful event. The participating parents and children were excited and engaged throughout the shrimp fishing event, and was an overall lovely environment to build and foster these relationships and connections.



##### Rekindling hope and spreading love 2019—bright and colorful Christmas event

On 23 December 2019, the Foundation and the Hong Kong Family Welfare Society (“HKFWS”) jointly organised the Rekindling Hope and Spreading Love 2019—Bright and Colorful Christmas Event. Volunteers from the Hong Kong Headquarters and more than 30 parents and children from the Foster Care Center of HKFWS came to the Jungle King Forest Kingdom Family Restaurant in Kwun Tong for a Christmas dinner. The event with its exchange of activities allowed many volunteers to learn about the hardships and rewarding moments encountered by foster families.



## 11 SPARE NO EFFORT IN GIVING BACK TO THE COMMUNITY

### BENEFITING COMMUNITIES THROUGH CHARITABLE ACTIVITIES (Continued)

#### Other Charitable Activities

##### Poverty alleviation

###### Establish women and children centre in Youjiang District, Baise City

To improve the living and economic standard, the Women and Children Centre Project was established in Youjiang District, Baise City. From here, the project facilitated mothers to stay home and take better care of their children, and allowed them, particularly those who are left behind at home or are living under poor conditions or orphans, to have a better learning environment. The Foundation has sponsored RMB 1 million in order to establish this Women and Children Centre Project.

The centre has a library, cooking rooms, meeting rooms, function rooms, nursery rooms and other activity rooms. The centre also regularly conducts educational interactive activities such as household training, counselling, parent-children activities. In October 2018, all 9 “children’s homes” were completed and put into use.

##### Promoting environmental awareness

###### Carry out “waste sorting science popularisation” activities

In November 2019, 108 community activities of “waste sorting science popularisation” was held at 8 street offices in Nanshan District. These community activities were guided by Shenzhen Association for Science and Technology, hosted by the Bao’an District Association for Science and Technology and fully sponsored by the Foundation.

The series of activities included “waste sorting” and “gas safety” by displaying waste sorting technologies and products from China Gas’s smart living new retail platform, community residents understood the importance of waste sorting the Group’s social responsibility as well as the production and research capabilities of advanced products of China Gas.

## 12 SUSTAINABILITY OVERVIEW

### ECONOMIC PERFORMANCE

	For the year ended March 31	
	FY2019/20	FY2018/19
<b>Direct economic value generated</b>		
Revenue	59,539,681	59,386,062
Other income	639,656	786,459
Share of results of associates	405,184	519,575
Share of results of joint ventures	570,798	1,132,056
<b>Economic value distributed</b>		
Staff costs	2,681,140	2,790,217
Other costs <sup>(1)</sup>	42,539,467	45,169,176
Finance costs	1,387,920	1,284,304
Dividends	2,400,637	1,776,864
Taxes <sup>(2)</sup>	2,283,092	2,168,241
Profit attributable to non-controlling interest	1,072,192	760,185
Charitable donations	57,476	8,490
<b>Economic value retained</b>		
Retained for China Gas's sustainable operation and development	8,733,395	7,866,675

Unit: HK\$'000

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 the year.





## 12 SUSTAINABILITY OVERVIEW

### OPERATIONAL PERFORMANCE

	Unit	FY2019/20	FY2018/19
Number of piped gas projects with concession rights	No.	604	542
Number of natural gas long distance transmission pipelines	No.	17	17
Total length of natural gas pipelines	km	402,381	296,797
Number of CNG/LNG refilling stations for vehicles and vessels	No.	556	575
Number of LPG distribution projects	No.	113	100
Total natural gas sales volume	m <sup>3</sup>	25,372,400,000	24,656,400,000
Total LPG sales volume	tonne	3,826,764	3,993,377
Number of comprehensive energy supply projects	No.	102	68

### SUPPLIERS OVERVIEW

	Unit	FY2019/20	FY2018/19
Cumulative total number of suppliers completed registration on China Gas Bidding and Procurement Platform	No.	252	226

## 12 SUSTAINABILITY OVERVIEW

### ENVIRONMENTAL PERFORMANCE

	Unit	FY2019/20	FY2018/19
<b>Greenhouse gas (GHG) emissions</b>			
Scope 1 (direct emissions)	tCO <sub>2</sub> e	<b>118,000.50</b>	111,833.15
Scope 2 (energy indirect emissions)	tCO <sub>2</sub> e	<b>91,166.40</b>	77,776.57
Scope 3 (other indirect emissions)	tCO <sub>2</sub> e	<b>394.22</b>	44.44
Total GHG emissions	tCO <sub>2</sub> e	<b>209,561.13</b>	189,654.16
GHG intensity	kgCO <sub>2</sub> e/GJ of energy sold	<b>0.21</b>	0.19
<b>Direct Air emissions<sup>(1)</sup></b>			
PM	tonne	<b>13.18</b>	Data not available
SO <sub>2</sub>	tonne	<b>27.15</b>	Data not available
NO <sub>x</sub>	tonne	<b>79.08</b>	Data not available
<b>Direct energy consumption</b>			
Petrol	tonne	<b>2,682.60</b>	2,000.99
Natural gas	m <sup>3</sup>	<b>37,062,260.71<sup>(2)</sup></b>	8,862,017.50
LPG	tonne	<b>69.40</b>	5,407.00
Diesel	tonne	<b>3,605.80</b>	9,757.56
Heavy oil	tonne	<b>2,575.16</b>	2,929.70
Fuel oil	tonne	—	3,223.34
Kerosene	tonne	<b>0.43</b>	—
Electricity (non-renewable energy)	kWh	<b>149,428,626.06</b>	117,670,446.86
Electricity (renewable energy)	kWh	<b>253,056.20</b>	246,709.58
Total energy consumption <sup>(3)</sup>	GJ	<b>2,117,414.67</b>	1,667,892.44
Energy consumption intensity	GJ/GJ of energy sold	<b>0.002</b>	0.002

Notes:

1. In FY2019/20, the Group revised its reporting boundary to focus on disclosing its direct air emissions.
2. Among them, 25,618,727 m<sup>3</sup> was consumed by project companies of distributed energy business for external heating.
3. Energy consumption is calculated based on the conversion factors provided in *China Energy Statistical Yearbook 2018*.

## 12 SUSTAINABILITY OVERVIEW

### ENVIRONMENTAL PERFORMANCE (Continued)

	Unit	FY2019/20	FY2018/19
<b>Material use</b>			
LPG cylinder	No.	402,180.00	422,453.00
Antifreeze oil	barrel	256.00	—
Lubricant	tonne	95.25	123.13
Paper product/cardboard	tonne	1,978.98	1,769.48
Plastic	tonne	692.27	610.04
Wood board	tonne	5.58	7.20
Odourant	tonne	96.60	85.00
<b>Water consumption</b>			
Total water consumption	tonne	1,684,559.06	1,664,768.80
Water consumption intensity	kg/GJ of energy sold	1.67	2.09
<b>Wastewater and waste</b>			
Total wastewater discharged	tonne	1,071,995.76	832,383.90
Non-hazardous waste produced	tonne	17,323.06	14,580.61
Intensity of non-hazardous waste produced	tonne/employee	0.29	0.29
Hazardous waste produced	tonne	69.79	Data not available
Intensity of hazardous waste produced	tonne/employee	0.001	Data not available
<b>Environmental compliance</b>			
Environmental regulatory non-compliances	No.	0	0

## 12 SUSTAINABILITY OVERVIEW

### EMPLOYMENT

	Unit	For the year ended March 31	
		FY2019/20	FY2018/19
Total number of employees		59,462	51,074
<b>By employment type</b>			
Full-time	people	59,462	Data not available
Part-time	people	0	Data not available
<b>By gender</b>			
Male	people	38,243	31,864
Female	people	21,219	19,210
<b>By age</b>			
Under 30 years old	people	16,412	16,744
30–50 years old	people	36,997	26,872
Above 50 years old	people	6,053	7,458
<b>By ranking<sup>(1)</sup></b>			
Senior management	people	2,028	1,547
Middle-level management	people	6,039	5,158
General staff	people	51,395	44,369
<b>By ethnicity</b>			
Han	people	55,299	46,736
Ethnic minorities	people	4,163	4,338
<b>Male to female ratios by ranking</b>			
<b>Senior management</b>			
Male	%	80	Data not available
Female	%	20	Data not available
<b>Middle-level management</b>			
Male	%	68	Data not available
Female	%	32	Data not available
<b>General staff</b>			
Male	%	63	Data not available
Female	%	37	Data not available

Notes:

- 1: After launching the Group's ERP system in FY2019/20, employee data exported from the system according is more accurate. The employee data by ranking in FY2018/19 has been restated to ensure the data consistency in previous years.

## 12 SUSTAINABILITY OVERVIEW

### HEALTH AND SAFETY, TRAINING AND DEVELOPMENT, AND LABOUR PRACTICES

	Unit	FY2019/20	FY2018/19
<b>Health and safety</b>			
Number of work-related injuries <sup>(1)</sup>	No.	126	137
High-consequence work-related injuries (excluding fatalities) <sup>(2)</sup>	No.	1	0
Number of work-related fatalities	No.	1	4
Number of occupational disease cases	No.	0	1
Number of disability injuries	No.	0	16
Rate of work-related injuries <sup>(3)</sup>	—	0.21	0.27
Rate of high-consequence work-related injuries (excluding fatalities) <sup>(4)</sup>	—	0.002	0
Rate of work-related fatalities <sup>(5)</sup>	—	0.002	0.01
Lost days due to work-related injury	day	621	6,308
Total working hours	hour	118,448,304	101,330,816
<b>Training and development</b>			
Employee training rate	%	100	100
Total training hours	hour	2,598,104	2,478,392
Average training hours per employee	hour	43.71	48.55
<b>Labour practices</b>			
Number of violation cases related to employment or labour regulations	No.	0	0
Number of violation cases related to child labour or forced labour	No.	0	0
Number of discrimination cases related to gender, ethnicity, age and health during recruitment	No.	0	0

Notes:

1. Work-related injuries include work-related fatalities and high-consequence work-related injuries.
2. High-consequence work-related injuries (excluding fatalities) refer to those work-related injuries which caused the workers to fail or have difficulty recovering to their pre-injury state within six 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.



## 12 SUSTAINABILITY OVERVIEW

### COMMUNITY INVESTMENT

	Unit	FY2019/20	FY2018/19
Participated volunteers	people	3,392,583 <sup>(1)</sup>	269
Hours of voluntary service	hour	1,682,647 <sup>(2)</sup>	644.5
People benefited	people	424,390 <sup>(3)</sup>	701
Charitable donations	HK\$	57,476,267.76	8,490,000

Notes:

1. Among them, 3,364,650 were volunteers participated in the charity action of "Battle the Pandemic, Safeguard People's Livelihood".
2. Among them, 841,162 were the hours of voluntary work for the charity action of "Battle the Pandemic, Safeguard People's Livelihood".
3. Among them, 315,432 were the people benefited by the charity action of "Battle the Pandemic, Safeguard People's Livelihood".

## SEHK ESG REPORTING GUIDE CONTENT INDEX

Subject Areas, Aspects, General Disclosures and KPIs	Description	Relevant Chapter(s) or Other References/Explanation	Page Number
<b>A. ENVIRONMENT</b>			
<b>Aspect A1: Emissions</b>			
General Disclosure	<p>Information on:</p> <p>(a) the policies; and</p> <p>(b) compliance with relevant laws and regulations that have a significant impact on the issuer</p> <p>relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste.</p>	<p>Love the Planet and Nurture the Environment</p> <p>The Group follows the requirements of the <i>China's Policies and Actions for Addressing Climate Change (2019)</i> published by the Ministry of Ecology and Environment of the PRC. China Gas strives to implement energy-saving measures and increase its energy efficiency during operations, continue to monitor and manage its greenhouse gas emissions, in order to minimise the carbon footprints of its projects.</p>	57–69
KPI A1.1	The types of emissions and respective emissions data.	Love the Planet and Nurture the Environment; Sustainability Overview	57–69, 94–95
KPI A1.2	Greenhouse gas emissions in total (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	Love the Planet and Nurture the Environment; Sustainability Overview	62–63, 94
KPI A1.3	Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	Love the Planet and Nurture the Environment; Sustainability Overview	63–64, 95
KPI A1.4	Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	Love the Planet and Nurture the Environment; Sustainability Overview	63–64, 95
KPI A1.5	Description of measures to mitigate emissions and results achieved.	<p>Love the Planet and Nurture the Environment</p> <p>We will continue to conduct detailed recording on emissions, in order to carry out meaningful comparisons in the future. We also strive to improve our environmental performance continuously.</p>	60–61, 94–95

## 13 CONTENT INDEXES

Subject Areas, Aspects, General Disclosures and KPIs	Description	Relevant Chapter(s) or Other References/Explanation	Page Number
KPI A1.6	Description of how hazardous and non-hazardous wastes are handled, reduction initiatives and results achieved.	Love the Planet and Nurture the Environment  We will continue to conduct detailed recording on hazardous and non-hazardous waste, in order to carry out meaningful comparisons in the future. We also strive to improve our environmental performance continuously.	63–64, 95
<b>Aspect A2: Use of Resources</b>			
General Disclosure	Policies on the efficient use of resources, including energy, water and other raw materials.	Love the Planet and Nurture the Environment	57–69
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).	Love the Planet and Nurture the Environment; Sustainability Overview	67, 94
KPI A2.2	Water consumption in total and intensity (e.g. per unit of production volume, per facility).	Love the Planet and Nurture the Environment; Sustainability Overview	65–66, 94
KPI A2.3	Description of energy use efficiency in initiatives and results achieved.	Love the Planet and Nurture the Environment  We will continue to conduct detailed recording on energy use, in order to carry out meaningful comparisons in the future. We also strive to improve our environmental performance continuously.	67, 94

Subject Areas, Aspects, General Disclosures and KPIs	Description	Relevant Chapter(s) or Other References/Explanation	Page Number
KPI A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency initiatives and results achieved.	<p>Love the Planet and Nurture the Environment</p> <p>All water used by the Group were obtained with respective permits. There were no issues related to sourcing water that was fit for purpose.</p> <p>We will continue to conduct detailed recording on water resources consumption, in order to carry out meaningful comparisons in the future. We also strive to improve our environmental performance continuously.</p>	65–66, 94
KPI A2.5	Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced.	The Group's main product does not involve packaging material usage.	
<b>Aspect A3: The Environment and Natural Resources</b>			
General Disclosure	Policies on minimising the issuer's significant impact on the environment and natural resources.	Love the Planet and Nurture the Environment	57–69
KPI A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	Love the Planet and Nurture the Environment	68–69

## 13 CONTENT INDEXES

Subject Areas, Aspects, General Disclosures and KPIs	Description	Relevant Chapter(s) or Other References/Explanation	Page Number
<b>B. SOCIAL</b>			
<b>Employment and Labour Practices</b>			
<b>Aspect B1: Employment</b>			
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	Care for Our Employees and Grow Together	71–85
KPI B1.1	Total work force by gender, employment type, age group and geographical region	Care for Our Employees and Grow Together; Sustainability Overview	72, 96
KPI B1.2	Employee turnover rate by gender, age group and geographical region	Care for Our Employees and Grow Together	75
<b>Aspect B2: Health and Safety</b>			
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.	Quality Service and Safety First	34–47
KPI B2.1	Number and rate of work-related fatalities.	Quality Service and Safety First; Sustainability Overview	40, 97
KPI B2.2	Lost days due to work injury	Quality Service and Safety First; Sustainability Overview	40, 97
KPI B2.3	Description of occupational health and safety measures adopted, how they are implemented and monitored.	Quality Service and Safety First	34–47

Subject Areas, Aspects, General Disclosures and KPIs	Description	Relevant Chapter(s) or Other References/Explanation	Page Number
<b>Aspect B3: Development and Training</b>			
General Disclosure	Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities.	Care for Our Employees and Grow Together	78–80
KPI B3.1	The percentage of employees trained by gender and employee category (e.g. senior management, middle management).	Sustainability Overview	97
KPI B3.2	The average training hours completed per employee by gender and employee category.	Care for Our Employees and Grow Together	80
<b>Aspect B4: Labour Standards</b>			
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.	Care for Our Employees and Grow Together	71–85
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.	—



## 13 CONTENT INDEXES

Subject Areas, Aspects, General Disclosures and KPIs	Description	Relevant Chapter(s) or Other References/Explanation	Page Number
Operating Practices			
<b>Aspect B5: Supply Chain Management</b>			
General Disclosure	Policies on managing environmental and social risks of the supply chain.	Quality Service and Safety First	32–33
KPI B5.1	Number of suppliers by geographical region.	Quality Service and Safety First; Sustainability Overview	33, 93
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.	Quality Service and Safety First	32–33
<b>Aspect B6: Product Responsibility</b>			
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.	Quality Service and Safety First  The Group has not identified material concerns in its operations regarding advertising and labelling matters, thus dedicated policies are not in place.  There are no laws and regulations that have a significant impact on the Group regarding health and safety, advertising, labelling and privacy matters relating to products and services provided by the Group.	41–47
KPI B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons.	The percentage of total Gasbo products sold or shipped subject to recalls for safety and health reasons in FY2019/20 was 0.06%.	—
KPI B6.2	Number of products and service related complaints received and how they are dealt with.	Quality Service and Safety First	45
KPI B6.3	Description of practices relating to observing and protecting intellectual property rights.	Sustainable Corporate Governance	32
KPI B6.4	Description of quality assurance process and recall procedures.	Quality Service and Safety First	42–46
KPI B6.5	Description of consumer data protection and privacy policies, how they are implemented and monitored.	Quality Service and Safety First	44

Subject Areas, Aspects, General Disclosures and KPIs	Description	Relevant Chapter(s) or Other References/Explanation	Page Number
<b>Aspect B7: Anti-corruption</b>			
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.	Sustainable Corporate Governance	30–31
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.	Sustainable Corporate Governance	30
KPI B7.2	Description of preventive measures and whistle-blowing procedures, how they are implemented and monitored.	Care for Our Employees and Grow Together	83
<b>Community</b>			
<b>Aspect B8: Community Investment</b>			
General Disclosure	Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities' interests.	Spare No Effort in Giving Back to the Community	87–91
KPI B8.1	Focus are as of contribution (e.g. education, environmental concerns, labour needs, health, culture, sport).	Spare No Effort in Giving Back to the Community	87–91
KPI B8.2	Resources contributed (e.g. money or time) to the focus area.	Spare No Effort in Giving Back to the Community; Sustainability Overview	98

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### GRI STANDARDS & CASS-CSR4.0

Disclosure Number	Description	Relevant Chapter(s) or Other References/Explanation	CASS-CSR4.0	Page Number
<b>GRI 101: FOUNDATION 2016</b>				
GRI 101 does not include any disclosures				
<b>GRI 102: GENERAL DISCLOSURES 2016</b>				
<b>Organizational Profile</b>				
102-1	Name of the organization	About this Report	P4.1	2
102-2	Activities, brands, products, and services	About China Gas	P4.2	8–17
102-3	Location of headquarters	About this Report  The Group's headquarters are located in Hong Kong and Shenzhen.	P4.1	2
102-4	Location of operations	About China Gas	P4.4	13
102-5	Ownership and legal form	About this Report	P4.1	2
102-6	Markets served	About China Gas; 2019/20 Annual Report	P4.4	8–17
102-7	Scale of the organization	About China Gas; 2019/20 Annual Report	P4.3	8–17
102-8	Information on employees and other workers	Care for Our Employees and Grow Together; Sustainability Overview	S2.1	71–85, 96
102-9	Supply chain	Sustainable Corporate Governance  Products provided by the Group's suppliers include equipment for CNG/LNG gas station, gas-fired boiler, steel pipelines, photovoltaic components and other equipment.	M3.1, M3.10	32–33
102-10	Significant changes to the organization and its supply chain	About China Gas; Sustainable Corporate Governance; 2019/20 Annual Report	P4.4	8–17, 32–33
102-11	Precautionary Principle or approach	Sustainable Corporate Governance; Quality Service and Safety First	G2.2, G2.3	25–33, 34–47
102-12	External initiatives	Proactively Create Green Value	G6.3	49–56
102-13	Membership of associations	The Group is a member of China Gas Association.	P6.3	—

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Disclosure Number	Description	Relevant Chapter(s) or Other References/Explanation	CASS-CSR4.0	Page Number
<b>Strategy</b>				
102-14	Statement from senior decisionmaker	Message from the Chairman	P2.2, P3.1	4–5
102-15	Key impacts, risks, and opportunities	Message from the Chairman; Proactively Create Green Value; 2019/20 Annual Report	P2.1, P.3.2	4–5, 49–56
<b>Ethics and Integrity</b>				
102-16	Values, principles, standards, and norms of behavior	About China Gas; Sustainable Corporate Governance	G1.1, G1.2	8–17, 25–33
102-17	Mechanisms for advice and concerns about ethics	Sustainable Corporate Governance	M1.1	25–33
<b>Governance</b>				
102-18	Governance structure	Sustainable Corporate Governance	G3.1, G3.2	25–33
102-19	Delegating authority	Sustainable Corporate Governance	G3.3	25–33
102-20	Executive-level responsibility for economic, environmental, and social topics	Sustainable Corporate Governance	G3.1, G3.2	25–33
102-21	Consulting stakeholders on economic, environmental, and social topics	Stakeholder Engagement	G6.2	19–24
102-22	Composition of the highest governance body and its committees	2019/20 Annual Report	P4.1	—
102-23	Chair of the highest governance body	2019/20 Annual Report	P4.1	—
102-24	Nominating and selecting the highest governance body	2019/20 Annual Report	M1.2	—
102-25	Conflicts of interest	2019/20 Annual Report	M1.1, M3.1	—
102-26	Role of highest governance body in setting purpose, values, and strategy	Sustainable Corporate Governance; 2019/20 Annual Report	G3.1, G3.2	25–33
102-27	Collective knowledge of highest governance body	2019/20 Annual Report		—
102-28	Evaluating the highest governance body's performance	2019/20 Annual Report		—
102-29	Identifying and managing economic, environmental, and social impacts	Stakeholder Engagement; Sustainable Corporate Governance	G2.1	19–24, 25–33

## 13 CONTENT INDEXES

Disclosure Number	Description	Relevant Chapter(s) or Other References/Explanation	CASS-CSR4.0	Page Number
102-30	Effectiveness of risk management processes	Sustainable Corporate Governance	G4.1	25–33
102-31	Review of economic, environmental, and social topics	Stakeholder Engagement; Sustainable Corporate Governance	G2.1	19–24, 25–33
102-32	Highest governance body's role in sustainability reporting	Stakeholder Engagement; Sustainable Corporate Governance	G3.1	19–24, 25–33
102-33	Communicating critical concerns	Stakeholder Engagement; Sustainable Corporate Governance	G6.1, G6.2	19–24, 25–33
102-34	Nature and total number of critical concerns	2019/20 Annual Report	G6.1	—
102-35	Remuneration policies	2019/20 Annual Report	S2.10	—
102-36	Process for determining remuneration	2019/20 Annual Report	S2.10	—
102-37	Stakeholders' involvement in remuneration	2019/20 Annual Report	G6.1, G6.2	—
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): 31.46:1	—	—
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): 0.98:1	—	—

### Stakeholder Engagement

102-40	List of stakeholder groups	Stakeholder Engagement	G5.1	19–24
102-41	Collective bargaining agreements	None of the Group's employees are covered by collective bargaining agreements.	—	—
102-42	Identifying and selecting stakeholders	Stakeholder Engagement	G6.1	19–24
102-43	Approach to stakeholder engagement	Stakeholder Engagement	G6.2	19–24
102-44	Key topics and concerns raised	Stakeholder Engagement	G2.1	19–24

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Disclosure Number	Description	Relevant Chapter(s) or Other References/Explanation	CASS-CSR4.0	Page Number
<b>Reporting Practice</b>				
102-45	Entities included in the consolidated financial statements	2019/20 Annual Report	P1.2	—
102-46	Defining report content and topic Boundaries	About this Report	P1.2	2
102-47	List of material topics	Stakeholder Engagement	P2.1	19–24
102-48	Restatements of information	After launching the Group's ERP system in FY2019/20, employee data exported from the system according is more accurate. The employee data by ranking in FY2018/19 has been restated to ensure the data consistency in previous years. The Group has also restated the total training hours on anti-corruption in FY2018/19.	P1.2	31, 96
102-49	Changes in reporting	<p>About this Report, Stakeholder Engagement</p> <p>Compared to last financial year, the newly added material topics in FY2019/20 include energy utilisation and efficiency, community involvement and inclusiveness, product service and information, social compliance and employee welfares. In addition, in order to include the consumption used by project companies of distributed energy business for external heating, the Group expanded the boundary for reporting energy consumption data.</p>	P1.2	2–3, 19–24
102-50	Reporting period	About this Report	P1.2	2
102-51	Date of most recent report	The report in last year was published through online disclosure on 17 September 2019.	P1.2	—
102-52	Reporting cycle	About this Report	P1.2	2
102-53	Contact point for questions regarding the report	About this Report	P1.2	3
102-54	Claims of reporting in accordance with the GRI Standards	About this Report	P1.3	2
102-55	GRI content index	Content Indexes	P1.3	106–116
102-56	External assurance	We will explore the possibility of seeking external assurance in our future reports.	P1.1	—



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### TOPIC-SPECIFIC DISCLOSURE

Disclosure Number	Description	Relevant Chapter(s) or Other References/Explanation	CASS-CSR4.0	Page Number
<b>GRI 200: ECONOMIC</b>				
Economic Performance				
<b>GRI 103: Management Approach 2016</b>				
103-1	Explanation of the material topic and its Boundary	Stakeholder Engagement; 2019/20 Annual Report	G2.1	19–24
103-2	The management approach and its components	Proactively Create Green Value; 2019/20 Annual Report	G2.1, M1.5	49–56
103-3	Evaluation of the management approach	Proactively Create Green Value; 2019/20 Annual Report	G2.1, M1.5	49–56
<b>GRI 201: Economic Performance 2016</b>				
201-1	Direct economic value generated and distributed	Proactively Create Green Value; Sustainability Overview; 2019/20 Annual Report	M1.5, M1.6, M1.7, S1.3	49–56, 92–98
201-2	Financial implications and other risks and opportunities due to climate change	Proactively Create Green Value  We acknowledge the impact brought about by climate change, including the threats posed by global warming. In the future, we will conduct more detailed analysis on the climate risks that exert impacts on our business operations.	E1.9	49–56
201-3	Defined benefit plan obligations and other retirement plans	Care for Our Employees and Grow Together; 2019/20 Annual Report	S2.10	76–77
201-4	Financial assistance received from government	2019/20 Annual Report	—	—

Disclosure Number	Description	Relevant Chapter(s) or Other References/Explanation	CASS-CSR4.0	Page Number
<b>GRI 300: ENVIRONMENT</b>				
<b>Energy</b>				
<b>GRI 103: Management Approach 2016</b>				
103-1	Explanation of the material topic and its Boundary	Stakeholder Engagement	G2.1	19–24
103-2	The management approach and its components	Love the Planet and Nurture the Environment	G2.1, E1.1, E2.3, E3.1	57–69
103-3	Evaluation of the management approach	Love the Planet and Nurture the Environment	G2.1, E1.1, E2.3	57–69
<b>GRI 302: Energy 2016</b>				
302-1	Energy consumption within the organization	<p>Love the Planet and Nurture the Environment</p> <p>The net energy consumption of the Group = non-renewable fuel consumed + renewable fuel consumed + electricity, heating, cooling, and steam purchased for consumption + self-generated electricity, heating, cooling, and steam, which are not consumed – electricity, heating, cooling, steam sold.</p> <p>During the Reporting Period, the net energy consumption of the Group was –1,009,861,207.28 GJ.</p>	E2.5	67, 94
302-2	Energy consumption outside the organization	<p>Love the Planet and Nurture the Environment</p> <p>The energy products sold by China Gas includes natural gas and LPG, which is the most significant indirect energy consumption of the Group. During the Reporting Period, the total sales of energy was 1,009,978,621.96 GJ.</p>	E2.5	67
302-3	Energy intensity	<p>Sustainability Overview</p> <p>All energy intensities calculated reflect energy consumption within organisation only.</p>	E2.5	94

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Disclosure Number	Description	Relevant Chapter(s) or Other References/Explanation	CASS-CSR4.0	Page Number
302-4	Reduction of energy consumption	We will continue to conduct detailed recording on energy use, in order to carry out meaningful comparisons in the future. We also strive to improve our environmental performance continuously.	E2.5	—
302-5	Reductions in energy requirements of products and services	We will continue to explore solutions on upgrading our energy efficiency.	E2.3, E2.4	—
<b>Oil and Gas Sector Disclosures</b>				
OG2	Total amount invested in renewable energy	In FY2019/20, the Group's total investment in renewable energy was approximately RMB8,625,900.	E1.8	—
OG3	Total amount of renewable energy generated by source	In FY2019/20, the Group's photovoltaic power generation projects generated a total of 5.197 million kWh of electricity.	E1.7, E2.8	—
<b>Environmental Compliance</b>				
<b>GRI 103: Management Approach 2016</b>				
103-1	Explanation of the material topic and its Boundary	Stakeholder Engagement	G2.1, E1.1	19–24
103-2	The management approach and its components	Love the Planet and Nurture the Environment	G2.1, E1.1	57–69
103-3	Evaluation of the management approach	Love the Planet and Nurture the Environment	G2.1, E1.1	57–69
<b>GRI 307: Environmental Compliance 2016</b>				
307-1	Non-compliance with environmental laws and regulations	Love the Planet and Nurture the Environment	M1.4	57–69
<b>GRI 400: SOCIAL</b>				
<b>Employment</b>				
<b>GRI 103: Management Approach 2016</b>				
103-1	Explanation of the material topic and its Boundary	Stakeholder Engagement	G2.1, S2.2	19–24
103-2	The management approach and its components	Care for Our Employees and Grow Together	G2.1, S2.2, S2.12	71–85
103-3	Evaluation of the management approach	Care for Our Employees and Grow Together	G2.1, S2.2, S2.12	71–85

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Disclosure Number	Description	Relevant Chapter(s) or Other References/Explanation	CASS-CSR4.0	Page Number
<b>GRI 401: Employment 2016</b>				
401-1	New employee hires and employee turnover	Care for Our Employees and Grow Together	S2.1, S2.20	75
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	Care for Our Employees and Grow Together	S2.10	76–77
401-3	Parental leave	Care for Our Employees and Grow Together		76–77
<b>Occupational Health and Safety</b>				
<b>GRI 103: Management Approach 2016</b>				
103-1	Explanation of the material topic and its Boundary	Stakeholder Engagement	G2.1	19–24
103-2	The management approach and its components	Quality Service and Safety First	G2.1, S3.1, S3.2	34–47
103-3	Evaluation of the management approach	Quality Service and Safety First	G2.1, S3.1, S3.2	34–47
<b>GRI 403: Occupational Health and Safety 2018</b>				
403-1	Occupational health and safety management system	Quality Service and Safety First	S3.1, S2.11	34–47
403-2	Hazard identification, risk assessment, and incident investigation	Quality Service and Safety First; Care for Our Employees and Grow Together	S2.11, S3.1, S3.2	34–47, 83
403-3	Occupational health services	Quality Service and Safety First; Care for Our Employees and Grow Together	S2.11, S3.1, S3.2	34–47, 84–85
403-4	Worker participation, consultation, and communication on occupational health and safety	Quality Service and Safety First; Care for Our Employees and Grow Together	S2.11, S3.1, S3.2	34–47, 84–85
403-5	Worker training on occupational health and safety	Quality Service and Safety First; Care for Our Employees and Grow Together	S3.3	34–47, 84–85
403-6	Promotion of worker health	Care for Our Employees and Grow Together	S2.11, S3.1, S3.2	84–85
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Quality Service and Safety First	S2.11, S2.17	34–47

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Disclosure Number	Description	Relevant Chapter(s) or Other References/Explanation	CASS-CSR4.0	Page Number
403-8	Workers covered by an occupational health and safety management system	Quality Service and Safety First  The Group's occupational health and safety management system cover 100% of employees and all contracted third-party workers onsite.	S3.1	34–47
403-9	Work-related injuries	Quality Service and Safety First; Sustainability Overview  We will discuss the possibility of disclosing the occupational health and safety data of the contractors in the report in future.	S3.6, S3.7	40, 97
403-10	Work-related ill health	Sustainability Overview  We will discuss the possibility of disclosing the occupational health and safety data of the contractors in the report in future.	S2.11	97

### Training and Education

#### GRI 103: Management Approach 2016

103-1	Explanation of the material topic and its Boundary	Stakeholder Engagement	G2.1	19–24
103-2	The management approach and its components	Care for Our Employees and Grow Together	G2.1, S2.14, S2.16	71–85
103-3	Evaluation of the management approach	Care for Our Employees and Grow Together	G2.1, S2.14, S2.16	71–85

#### GRI 404: Training and Education 2016

404-1	Average hours of training per year per employee	Sustainability Overview	S2.15	97
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Disclosure Number	Description	Relevant Chapter(s) or Other References/Explanation	CASS-CSR4.0	Page Number
404-2	Programs for upgrading employee skills and transition assistance programs	Care for Our Employees and Grow Together  The Group provides supportive services such as advisory and counselling supports regarding career prospect to its employees.	S2.16	78
404-3	Percentage of employees receiving regular performance and career development reviews	Care for Our Employees and Grow Together  During the Reporting Period, all of the employees gained constructive feedbacks and suggestion on their career planning through performance appraisal.	S2.15, S2.16	80

### Local Communities

#### GRI 103: Management Approach 2016

103-1	Explanation of the material topic and its Boundary	Sustainability Overview	G2.1	19–24
103-2	The management approach and its components	Spare No Effort in Giving Back to the Community	G2.1, S4.1, S4.5, S4.6, S4.10	87–91
103-3	Evaluation of the management approach	Spare No Effort in Giving Back to the Community	G2.1, S4.1, S4.5, S4.6, S4.10	87–91

#### GRI 413: Local Communities 2016

413-1	Operations with local community engagement, impact assessments, and development programs	Spare No Effort in Giving Back to the Community; Love the Planet and Nurture the Environment	S4.1, S4.5	87–91, 57–69
413-2	Operations with significant actual and potential negative impacts on local communities	There were no significant environmental and social impacts to the local community identified or considered at risk during the Reporting Period.	—	—



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Disclosure Number	Description	Relevant Chapter(s) or Other References/Explanation	CASS-CSR4.0	Page Number
<b>Oil and Gas Sector Disclosures</b>				
OG10	Number and description of significant disputes with local communities and indigenous peoples	No such incident occurred in FY2019/20.	S4.1, S4.5	—
OG11	Number of sites that have been decommissioned and sites that are in process of being decommissioned	During the Reporting Period, there were no sites being decommissioned and sites that were in process of being decommissioned	—	—
<b>Marketing and Labeling</b>				
<b>GRI 103: Management Approach 2016</b>				
103-1	Explanation of the material topic and its Boundary	Sustainability Overview	G2.1	19–24
103-2	The management approach and its components	Quality Service and Safety First	G2.1, M2.8	—
103-3	Evaluation of the management approach	Quality Service and Safety First	G2.1, M2.8	—
<b>GRI 417: Marketing and Labeling 2016</b>				
417-1	Requirements for product and service information and labeling	Products' information such as product specifications, parameters, sources of raw materials, guide on installation, and guide on safety use and disposal of products etc. are available in all of the Group's products under the brand of "Gasbo".	M2.8	—
417-2	Incidents of non-compliance concerning product and service information and labeling	No such incident occurred in FY2019/20.	M1.4, M2.8	—
417-3	Incidents of non-compliance concerning marketing communications	No such incident occurred in FY2019/20.	M1.4, M2.8	—

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Disclosure Number	Description	Relevant Chapter(s) or Other References/Explanation	CASS-CSR4.0	Page Number
<b>Socioeconomic Compliance</b>				
<b>GRI 103: Management Approach 2016</b>				
103-1	Explanation of the material topic and its Boundary	Sustainability Overview	G2.1	19–24
103-2	The management approach and its components	Spare No Effort in Giving Back to the Community	G2.1, M3.1	87–91
103-3	Evaluation of the management approach	Spare No Effort in Giving Back to the Community	G2.1, M3.1	87–91
<b>GRI 419: Socioeconomic Compliance 2016</b>				
419-1	Non-compliance with laws and regulations in the social and economic area	No such incident occurred in FY2019/20.	M1.4	—
<b>Disaster/Emergency Planning and Response</b>				
<b>GRI 103: Management Approach 2016</b>				
103-1	Explanation of the material topic and its Boundary	Quality Service and Safety First	G2.1	34–47
103-2	The management approach and its components	Quality Service and Safety First	S3.1, S3.2	34–47
103-3	Evaluation of the management approach	Quality Service and Safety First	S3.1, S3.2	34–47



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