



CHINA GEOTHERMAL
INDUSTRY DEVELOPMENT
GROUP LIMITED
2019 ENVIRONMENTAL,
SOCIAL AND
GOVERNANCE REPORT

2019

年度
環境、社會
及管治報告



中國地熱能產業發展集團有限公司

CHINA GEOTHERMAL INDUSTRY DEVELOPMENT GROUP LIMITED

在開曼群島註冊成立之有限公司

股份代號：8128

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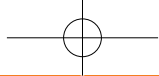
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2019 Environmental, Social and Governance Report

I. About this Report

This Report is the fourth Environmental, Social and Governance report (the “Report”) of China Geothermal Industry Development Group Ltd. (the “Company”) together with its subsidiaries (the “Group” or “we”). This report presents information regarding our management approach, strategies, goals and progress on environmental, social and governance issues. This report has been prepared in both Chinese and English and has been published on the websites of The Stock Exchange of Hong Kong Limited and the Company. If there is any discrepancy between the Chinese and English versions, the Chinese version shall prevail.

> Scope Covered

This report focused on the Group's operations related to the principle business of the development and utilization of geothermal energy as alternative energy for building heating (cooling) and also covered the headquarters of Hong Kong and business headquarters in Beijing. This report covering the period from 1 January 2019 to 31 December 2019. At present, some domestic operating units outside Beijing, China, are not included in this report for the time being which was mainly because some operating units only accounted for a relatively small portion of our overall business. The Company will continue to strengthen the disclosure and will develop a plan to cover the scope of the report to these operating units.

> Compilation basis

This report is prepared in accordance with the relevant provisions of the “Environmental, Social and Governance Reporting Guidelines” in Appendix 20 of the Rules Governing the Listing of Securities on the Stock Exchange, and with consideration of the key concerns of the Company's stakeholders and the Company's business characteristics.

> Approval and Release

This report was approved by the board of directors and was released on 30 June 2020.



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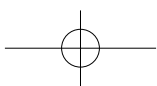
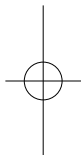
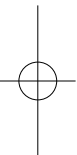
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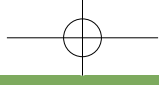
If you have any comments or questions about the contents of this report, please feel free to contact us by the following means:

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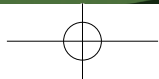
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II. Company Overview

China Geothermal Industry Development Group Limited (hereinafter referred as "the Company") is the sole listed company in Hong Kong engaged in the research and promotion of the development and utilization of geothermal energy as alternative energy for building heating (cooling). The Company through Ever Source Science & Technology Development Group Co., Ltd (hereinafter referred to as "HYY Company" or "HYY Group"), the industrial operation headquarters in Beijing, is committed to the industrialization development of the original technology which can accelerate the all-around upgrade and transformation of the traditional heating industry with combustion, emissions and pollution to an emerging industry of combustion-free integrated heating and cooling system with shallow geothermal energy.

HYY Company is a high-tech enterprise incorporated in the technology park in Haidian District, Beijing in 2000. It mainly focuses in the field of energy and environmental science and is dedicated to the research and development of new renewable energy as well as engaging in research, design, production and comprehensive technical services of the promotion and development of the utilization of shallow geothermal energy.

HYY Company takes the original "single-well circulation heat exchange geothermal energy collection technology" as its core, realizes the industrialization development of original technology and owns the industrial chain operating unit integrated with technology research and development, design consultation, equipment manufacturing, engineering construction, energy contract management and system maintenance which can provide regional energy planning in different regions and provide a complete solution for heating (cooling) energy for all types of buildings, thus realizing the regional development of industrial parks of integrated heating/cooling with geothermal energy. With the support of integrated heating/cooling industrial park, research and development of collection of shallow geothermal energy and production of corresponding full set equipment can be strengthened for the different regions and climate conditions, hence achieving safe, sustainable, reliable and rapid development of regional heating with geothermal energy and ensuring to realize the strategic goal for promotion of non-combustion regional heating and striving to become the most competitive company in the field of promotion of geothermal energy as alternative heating(cooling) energy.



III. Stakeholders' Participation and Materiality Assessment

The Company believes that the participation of all stakeholders is of paramount importance to the Company's sustainable development. Therefore, we attach great importance to the needs and opinions of our stakeholders and strive to maintain multi-directional, continuous and frank communication with stakeholders through different channels and responded positively.

Stakeholder	Focal point	Communication method
Government departments	Compliance of rules and regulations	Participate in government meetings and receive policy documents
	Social support	Participate in the declaration of government-supported project, etc.
	Environmental impact	Accept inspections by regulatory authorities and achieve energy conservation and emission reduction
Investors/ Shareholders	Compliance management	Shareholders' meetings, HKEX announcement
	Market and economic benefits	Financial report, annual report etc.
Customers	Product advantages and innovation	Network promotion and display for potential customers, etc.
	Product quality and benefits	Pre-sales, sales, after-sale services
	Client feedback	Spring and Autumn maintenance, satisfaction survey, etc.
	Protection of customer interests	Customer Service Center, 24-hour hotline
Suppliers	Transparent procurement	Develop a qualified procurement list and publish demand information
	Equal competition	Choose qualified suppliers
	Mutual benefit and win-win	Procurement by price comparison
Constructors	Project scale	Project tender notice, etc.
	Work safety	Contracts, safety agreements, regular inspection etc.
	Environmental requirements	Civilized construction requirements, training
Employees	Employee rights and benefits	Staff representative conference, Employee handbook
	Remuneration system	Publication and execution of remuneration system
	Training and Development	Various forms of training and promotion

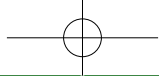
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► Materiality Assessment

In order to identify the issues that stakeholders are most concerned about and to allow stakeholders to comment on our sustainability performance, we conducted materiality assessment by way of questionnaire survey, inviting internal and external stakeholders to comment on the importance of relevant ESG issues to the business operations and stakeholders, among which cover labour treatment, environmental protection, operation practices and products and services etc. After analyzing the collected responses, the Group has consolidated the results and evaluated the three most important issues among the various ESG issues.

Labour treatment	Environmental protection
<ul style="list-style-type: none"> • Equal employment opportunity 	<ul style="list-style-type: none"> • Saving energy and water
<ul style="list-style-type: none"> • Occupational safety and health 	<ul style="list-style-type: none"> • Hazardous and non-hazardous waste treatment
<ul style="list-style-type: none"> • Staff welfare 	<ul style="list-style-type: none"> • Greenhouse gas emissions
Operation practices	Products and services
<ul style="list-style-type: none"> • Supplier management 	<ul style="list-style-type: none"> • Quality and safety of the products
<ul style="list-style-type: none"> • Anti-corruption 	<ul style="list-style-type: none"> • Customers' opinion and complaints
<ul style="list-style-type: none"> • Disaster contingency plans 	<ul style="list-style-type: none"> • After-sale service

Stakeholder participation is an important analysis process, which helps the Group to further understand the issues that are significant to its operations and enables the Group to allocate resources to enhance its sustainability performance. We will continue to communicate and cooperate with various stakeholders to ensure that the relevant action are effectively followed through and implemented.



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IV. Environmental

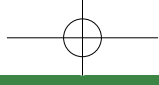
The core concept of the Group: Maintaining ecology protection responsibility awareness. It is always our responsibilities and conscience to seek for a harmonious co-existence of human and nature, improve ecological environment, promote social progress to provide quality life for the general public.

► Green Industry

The Group is committed to the promotion of geothermal energy as an alternative energy for heating (cooling) and has formed five major segments, namely intelligent heating (cooling) system engineering construction, supply of renewable energy (shallow geothermal energy), intelligent manufacturing (heating heat pump), planning and design, operation and maintenance of intelligent heating (cooling) system. Utilization of shallow geothermal energy as an alternative energy for northern heating, there is no combustion and zero emissions in the heating area.

The progress of shallow geothermal energy collection technology has always been focused on the goal of improving collection efficiency and safety. After many years of research, HYY Group launched in 2000 its original world leading single-well circulation heat exchange geothermal energy collection technology. The technology, with characteristic of zero pollution, zero emission and wide adaptability, does not consume or pollute water, disrupt the natural distribution of groundwater, or cause potential geological hazards and other issues, and can be applied to different geological conditions for shallow geothermal energy collection, solving the international problem of hazards to the underground caused by the conventional exploitation of shallow geothermal energy.

After years of development, HYY Group's shallow geothermal heating (cooling) project has been radiated from Beijing to all areas except Hainan, Hong Kong, Macao and Taiwan, with a total operation area of more than 20 million square meters. It is used in many buildings such as Xiong'an Civic Center, National Grand Theater, National Administration College, All-China Federation of Industry and Commerce, Huangyuan Hotel, Haidian Foreign Language Experimental School, Zhongguancun No. 3 Elementary School, Tongjiafen, Xizha Village, APEC International Conference Center, Beijing Olympic Tennis Stadium,



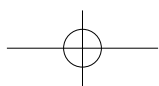
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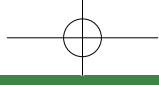
etc. In addition, the technology has been also exported to Chase County School, Hershey School, St. Joseph's Nursing Home and other projects in the United States, and won awards locally.

HYY Group has designed heating solutions featuring a distributed heat source delivery mode for different scales of application scenarios, including the geothermal energy heat pump environmental system, distributed geothermal energy heating/cooling station and geothermal energy heating devices. Inheriting China's thrifty tradition, the geothermal energy heating device is designed for more decentralized buildings, suitable for northern China's rural areas. The system is a clean self-heating solution, with the features of remote start and stop, turn on and off, and separate heating. The system can solve the differentiated heating needs with low energy consumption, heating, cooling and providing domestic hot water for households with a building of 50-2000 square meters.

Clean self-heating projects empowered by HYY Group's geothermal energy heating devices are applied in Beijing, Hebei, Shanxi and other regions across the country, with a heating area of about two million square meters. HYY Group, depending on the local conditions and relying on the unique patented technology, has solidly promoted the construction of beautiful countryside, fundamentally changed the rural reality of "no warmth in winter, no coolness in summer and no hot water for life", and solved the environmental problem of "dirty and messy" rural heating in winter. HYY Group insists on combining the development of enterprise with the improvement of people's livelihood and unifying the national strategy with corporate responsibility to promote the use of shallow geothermal energy for clean self-heating practice in rural areas in North China, which effectively enhances the quality of life, improves the living environment of residents, and reduces the heating costs for residents. Hence, clean self-heating, which is convenient, clean and saves troubles, energy, and money, is established.

After the clean self-heating transformation of two million square meters of areas in villages and townships with shallow geothermal energy instead of coal powered heating, 55,000 tons of bulk coal is directly replaced in every heating season every year, reducing carbon dioxide emissions by 140,000 tons, sulfur dioxide emissions by 407 tons, nitrogen oxide emissions by 143 tons, and soot emissions by 570 tons. Compared with direct-thermal electric heating equipment, it can save 170 million kWh of electricity per heating season every year, directly replacing 58,000 tons of coal utilized in power plants, reducing carbon dioxide emissions by 136,000 tons, sulfur dioxide emissions by 73 tons, nitrogen oxide emissions by 67 tons, and soot emissions by 15 tons.





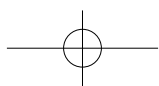
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► Green Construction

In adherence to low carbon operation to meet the purpose of emission reduction, the Company implements green construction to all projects. The Company is committed to reducing the impact of its operations on the environment and is in strict compliance with relevant laws and regulations such as the "Environmental Protection Law of the People's Republic of China", "Energy Conservation Law of the People's Republic of China", "Law of the People's Republic of China on Prevention and Control of Pollutant by Solid Waste", "Law of the People's Republic of China on Prevention and Control of Air Pollutant", "Preventive Rules on Water Pollutants of the People's Republic of China", "Soil Conservation Law of the People's Republic of China", etc., the Company also positively advocates green office mode, reinforces the employee's concept of energy conservation and environmental protection, and adopts measures in multiple aspects to meet the objectives of energy conservation and emission reduction.

To comply with the Group's environmental management system, we strictly implement all rules and policies of the owners and general contractor for civil engineering, conscientiously carry out ISO14001 international environment management standard and OHSAS18001 occupational health management system standards, strictly follow the "Green Construction Evaluation Standards for Construction Engineering", "Green Construction Guidelines" in carrying out the construction work, and establish different management methods in daily operations to ensure that the environmental impact of various activities is minimized, including "Machine Room Noise Control Measures", "Solid Waste Disposal Management Regulations", "Vehicle Parking Management Regulations" and "Environmental Management Plan", etc. Implementation of strict control of the construction process from five aspects: energy saving, land saving, water saving, material saving and environmental protection. Periodic meetings were held for the work of "civilized construction and environmental protection on construction site", to execute environmental protection management and inspection system for construction site, to formulate the Group's environmental guidelines, objectives and indexes, to provide corresponding resources to prevent pollution and realize harmony between construction and environment to further meet requirements of environmental management standard.

In project construction, the Group strictly handle all emissions in strict compliance with relevant construction provisions and standards so as to reduce impact on surrounding environment; some preventive measures generally adopted in general course of project construction are listed as below:



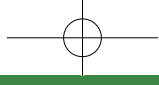
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Type	Emission Source	Name of Pollutants	Preventive Measures
Air pollutant	Construction period	Flying dust	The main roads on the construction site are hardened. Cover the exposed parts, spray water and reduce dust inside the construction area. It is strictly forbidden to temporarily and randomly dispose of earthwork. Closed transportation vehicles engaged in earthwork and transportation of construction waste shall be cleaned up at the exit of the project site.
	Construction period	Carbon dioxide, nitrous oxide	Use electric construction tools, not use fuel facilities as possible as it could to avoid pollutant discharge; when when fuel oil equipment cannot be avoided, adopt low-emission equipment which meets requirements of environmental protection.
	Commissioning period	Hydrofluorocarbons	Apply cooling medium with low global warming potential (GWP); all cooling medium shall be filled before the equipment delivery out of the factory to avoid leakage in filling operation on construction site.
Noise pollution	Construction period		Provide training to construction personnel for civilized construction, and strengthen the management of man-made noise. Strictly control the noise when using the equipment. During construction, it is necessary to carry out operations in accordance with construction operation noise control measures, and try to avoid carrying out construction work at night.
Water pollutant	Construction period Domestic sewage	CODCr BOD5 SS Ammonia nitrogen	After treatment, discharge the pollutant to municipal sewage pipe network through compliant sewage discharge facilities.
	Construction period Washing wastewater	SS	Disallow external discharge, set up temporary sedimentation tank, recycle it for reducing dust and suppressing dust after treatment.

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Type	Emission Source	Name of Pollutants	Preventive Measures
Solid waste	Construction period Solid waste	Construction solid waste	Classify solid waste for stacking and authorize qualified disposal unit to gather and dispose the solid wastes on the basis of classification, don't abandon them randomly. Hazardous solid waste is classified and closed for storage, and entrusted to the sanitation department for unified treatment. Strengthen the recycling of construction waste.
		Waste mud	Set up mud pit, periodically hand the waste mud to environmental sanitation department for clearing. Reasonably dispose it rather than abandon it randomly.
		Domestic garbage	Gather domestic garbage on the basis of classification, hand them to environmental sanitation department for treatment, reasonably dispose it rather than abandon it randomly.
Noise	Construction machinery and equipment		Reasonably plan construction time, formulate construction plan, select low-noise equipment and implement operation in an closed environment.

During the process of operation, we will generate a number of direct or indirect gas emissions. The direct gas emissions mainly come from the diesel fuel used for generators and drilling rigs in the construction process and the use of refrigerants in the provision of maintenance services. The refrigerants we use are all environmentally friendly. The indirect air emissions mainly come from the purchased power, official vehicle fuel, office paper and water.



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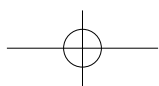
► Green office

For a long term, the Company has properly implemented purchase, use, storage, repair, allocation, stocktaking, disposal and recovery of fixed asset through fixed asset efficiency management plan, which greatly enhances utilization efficiency of fixed assets in the office and reduces resource consumption. In the course of daily work, we advocate the employees to improve utilization efficiency of office articles, reduce and re-utilize wastes, recycle resources, repair articles; fully utilize office automation (OA) and weChat management system, solve problems and circulate documents online, simplify documentation so as to improving the flow of official documents.

The Company persists to start from small things in energy conservation and emission reduction. The Company uses power saving fluorescent lamps in all offices and lighting will be used in accordance with the actual situation. In addition, lamps are off when people leave. In respect of use of electric appliances, unused electric appliance will be shut off in time to avoid putting them on standby mode for a long time so as to reduce wasting. Electric appliance with high electricity consumption will be managed rationally, such as air-conditioner will rationally be adjusted to proper temperature in accordance with the weather condition to avoid energy wasting. We encourage employees to save paper in daily work, try to print on both sides of the paper and reuse the single-sided printing paper; enhance employees' knowledge on water conservation, increase water-saving awareness, and ensure that the faucet is closed when not in use so as to carrying out low-carbon life, encourage employees to use public transportation to reduce exhaust emissions and to bring their own tableware in order to avoid using disposable tableware at lunch.

We have planted a large number of trees in the Beijing office park. We also encourage our staff to plant small potted plants indoors to help reduce emissions and enhance air quality. They can also beautify the working environment.

In 2019, the Hong Kong office obtained the "Hong Kong Green Institution" certification, and formulated relevant energy-saving and waste-reduction measures. It committed to material saving, energy saving and waste reduction in the office environment, and assumed more environmental responsibility from the perspective of the Company.



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KEY PERFORMANCE INDICATORS

A. Environmental					
A1.1	Emissions		Unit	2019	2018
	NOx		Kg	275.3	231.5
	SOx		Kg	0.4	0.3
	PM		Kg	25.5	21.5
A1.2	Greenhouse gas emissions				
	Scope 1 (Diesel, natural gas, gasoline, refrigerant *)		Tonnes of CO ₂ e	4,430.9	6,132.1
	Scope 2 (Electricity)		Tonnes of CO ₂ e	861.2	768.6
A1.3	Hazardous waste produced				
	Batteries		Pieces	51	41
	Fluorescent Tubes		Pieces	7	8
	Empty Ink Cartridges (Recycled)		Pieces	30	25
A1.4	Non-hazardous waste produced				
	General Solid Waste ⁹ (Landfilled)	Total	Tonnes	41.4	39.3
		Intensity	Tonnes/ HK\$'000 income	0.0001	0.0001
	Paper	Total	Kg	1,576.9	1,514.5
		Intensity	Kg/ HK\$'000 income	0.0046	0.0038
A2.1	Direct and indirect energy consumption by type				
	Diesel	Total	Liter	126,956	380,985
		Intensity	Liter/ HK\$'000 income	0.3674	0.9601
	Gasoline	Total	Liter	29,386	20,577
		Intensity	Liter/ HK\$'000 income	0.085	0.0519
	Natural gas	Total	M ³	2,758	5,800
		Intensity	M ³ / HK\$'000 income	0.008	0.0146

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	Total Indirect Energy Consumption (Purchased Electricity)	Total	kWh	1,108,025	870,845
		Intensity	kWh/ HK\$'000 income	3.2063	2.1947
A2.2	Water consumption#				
		Total	Tonnes	5,297.8	19,169
		Intensity	Tonnes/ HK\$'000 income	0.0153	0.0483

** Refrigerants are used in the routine maintenance services provided by the company.*

#Due to the water consumed of the leased office in Hong Kong is controlled by the building management company and there is no water meter installed. Therefore, the water consumption data cannot be provided.

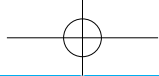
In 2019, due to some projects of the Company located in areas with long distance resulting in the increase of mileage of the Company's vehicles, the emission of exhaust gas in 2019 increased slightly compared with that of 2018.

Due to the outsourcing of some drilling projects of the Company to other construction teams, the diesel consumption of the drilling projects in 2019 was significantly reduced compared with that of 2018. Therefore, the total greenhouse gas emission within Scope 1 was significantly reduced compared with that of 2018.

As the replacement of food steam box in the canteen of the Company which is driven by electricity instead of natural gas, the consumption of natural gas in 2019 was greatly reduced compared with that in 2018. Besides, due to the increase in the total number of employees in 2019 compared with that of 2018 as well as addition of some electrical equipment in the Company's internal canteen, the electric power consumption by electrical appliances increased slightly compared with that of 2018. Based on the above data, the total greenhouse gas emission in Scope 2 was significantly lower than that of 2018.

As the number of employees increased in 2019 compared with that of 2018, the total amount of general solid waste and paper consumption increased accordingly.

In 2019, the water consumption of the Company decreased significantly due to the popularization of water conservation knowledge among employees, the promotion of water conservation awareness and the implementation of water conservation actions.



V. Social

(1) Employment and Labour Practices

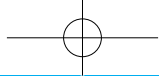
The core concept of the Group: Fully respect the employee's personal freedom, highly promote equality of personality; encourage a healthy competition of personal development, realize appointment of the employee on the basis of talent; advocate serious criticism and friendly forgiveness and establish error correction mechanism.

► Employment, remuneration and welfare

All employment of staff of the Company are complied with relevant local regulations and policies, including "Employment Ordinance", "Mandatory Provident Fund Schemes Ordinance" and "Occupational Safety and Health Ordinance", etc. for Hong Kong and the "Labor Law of the People's Republic of China", "Labor Contract Law of the People's Republic of China", etc. for Mainland China, as well as such internal rules and systems formulated in accordance with the law, such as the Administrative Measures for Human Resources, Staff Remuneration Management System, Administrative Measures for Expatriate Staff, Overtime Management System, Employee Leave System, etc. Strictly prohibited hiring of child labor and forced labor, guarantee all labor rights of the employees by law to ensure fair, just and open selection of talented employees.

All contract employees in service have signed the labor contracts with the Company. In the process of signing, renewal, termination and cessation of the labor contract, the Company strictly complies with statutory procedures and guarantees all relevant processes are conducted in a fair, open and just manner which is not affected by sex, race or other relevant diversified factors, to actually protect legal rights and interests of the labors. The Company makes efforts to provide equal employment chance to all qualified persons in irrespective of race, complexion, religion, original nationality, disability, sex, age, marital status, etc.

The Company decides salary standard with comprehensive consideration mainly on the basis of factors, such as the average market salary standard, the employee's position level, qualifications, skills, performance, etc.



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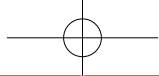
In accordance with provisions of the government, the Company purchases social insurance including pension, medical, unemployment, work-related injury and childbirth for contracted employees of the Group or its subsidiary companies in Mainland. The staff of the Hong Kong company has a mandatory provident fund scheme as required, and various medical and labour insurance schemes are also set up for staff.

Holidays Specified in Local Employment Place: the employee is entitled to specified paid statutory holiday, annual leave, martial leave, maternity leave, funeral leave, sick leave, work-related injury leave, leave for personal affairs, etc.

► Employees' health and safety

The Company attaches high importance to health and safety of the employee. Besides all medical insurances, work-related injury insurance specified by the State, it has established a safety management system through certification of OHSAS18001 occupational health and safety management system. On the basis of different working positions and natures, it implements safety preventive measures to the employees and periodically issues labor protective articles. In every summer, it dispenses high temperature allowance and heatstroke prevention drugs, etc to the employees who work in outdoor high-temperature environment, so as to assure health and safety of the employees, and periodically organizes employee physical examination. To guarantee a healthy and safe diet of the employees, it establishes a canteen and has obtained food safety and health permit according to requirements of food and safety standard in catering industry, and implements strict physical examination to workers in canteen to assure they work with health certificate.

The Company attaches high importance to production safety, complies and implements such laws and regulations as "Work Safety Law", "Fire Prevention Law" of the State; signs safety responsibility statements with each departments, emphasizes each department principal is first responsible person for safety and has formulated a whole set of the Safety Management System and appoints Safety Director for supervision and examination of all safety work. It periodically holds safety meetings and conducts safety examination, which effectively eliminates all safety accidents. Specific to particularity of the Company's business, in each engineering project, it shall sign the Safety Responsibility Statement, Safety Agreement with installation and construction enterprise, and assign special person for safety examination, irregular selective examination, etc. in the course of engineering construction, and make timely correction upon



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discovery of potential safety hazards to assure production safety first and people foremost. During the year, no safety incidents occurred.

► Development and training for employees

The Company enriches all professional strengths by introducing high-end talents, continuously reinforces talents reserve and constructs hierarchical talent teams, advances establishment of learning organization and reinforces the concept of lifelong learning; provides training specifically to the employees and fully transfers them for specific task so as to reinforce cultivation of project management talents and technical talents. In the process of attracting talents and stabilizing teams, we have adopted flexible employment mechanism, giving full play to the the Company's resource advantage, focuses cultivation on highly-educated young people, and promotes technical backbones who are young and promising as managers and project leader.

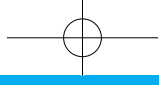
The Company cherishes every excellent talent, motivates talents to make continued progress by performance assessment, position competition, training selection, etc. encourages and supports each employee in career development. In principle, all employees who have been working on current positions for 6 consecutive months are qualified for applying for new working chances through "Internal Position Application Procedure". Department supervisor is responsible for supporting its department employee's career development, to provide backup force to its sustainable and stable development.

In adherence to the concept of joint development of the employee and the organization, the Company would continuously update knowledge structure of organization and employees, to make the employee suitable for its high-speed development. The Group also attaches high importance to employee training, and has established Hengyouyuan Vocational Training School. Besides training of professional technical talents, it also generally launches induction training, comprehensive training and professional training, etc. to the employees.

Induction training mainly covers: overview of the Group, employee handbook, rules and systems, basic knowledge of geothermal energy and safety education, etc. It is conducted by stages, in principle, all training contents shall be completed before the new employee is transferred to be a regular employee.

Comprehensive training mainly covers: overview of the situation and tasks, organizational structure, rules and regulations, strategic policy, corporate culture, special work, product knowledge, work experience, etc..

Professional training mainly covers: industrial standard, process specifications, design specifications,



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situations in technical field, solutions to puzzling questions, specific business process, etc.

Training modes mainly cover: classroom face-to-face teaching, network video teaching, self-study training, skill practice, field visit etc.

Key Training Performances in 2019 :

(1) Organized training for new employees, which mainly included company introduction, study of employee handbook, safety education, etc., and 25 persons passed the examination, with a pass rate of 100%.

(2) Organized health education training for all employees to correct their bad habits, improve their health consciousness and cultivate good working and living conditions.

(3) Organized fire safety knowledge, food safety and hygiene training, education and examinations, practical operation of firefighting facilities, escape drills and other related activities, attended by more than 450 people, with a pass rate of 100%.

(4) Organized pre-job training and review for engineering and construction professionals, technical workers and refrigeration installation and maintenance personnel, electricians, welders, as well as other special types of workers and relevant important posts to meet the Company's needs for production and work. 61 persons took the examination to obtain certification, and the proportion of certified staff was 80%.

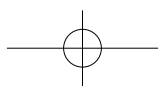


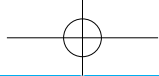
HYY Group organizes fire protection training for employees

► Labour standards

The Company has compiled the Employee Handbook in accordance with "Labor Law of the People's Republic of China", "Labor Contract Law of the People's Republic of China" and relevant laws and administrative regulations, local regulations in Beijing and combined actual situations which was released and implemented after it is passed by Congress of Workers and Staff through voting.

It is temporarily decided that Employee Handbook is revised as per democratic process every 3 years. In case of changes of national regulations, local policies and the Group's rules and systems, the Group may irregularly modify this Handbook to meet the said changes. It is an integral part of Labor Contract, applicable to all employees who have signed labor contracts with the Group and its





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subsidiaries, holding companies and branches.

This Handbook has summarized the Group's culture, policies and rules and systems, etc, to make all employees work in a safe, innovative and vital working environment for a long-term through mutual compliance and execution.

(2) Operating Practices

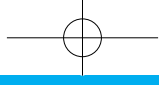
Honest and promise-keeping operation rules: the Company's survival depends on the customers, hence, the fundamental guarantee for the company's survival and development is to realize every commitment to the customers and partners.

► Supply Chain Management

The Group Company has professional companies for designing and producing heat pump heating and cooling devices (water, ground and low-temperature air source heat pump unit), providing installation, debugging and after-sales service for set engineering of cooling devices in order to provide one-stop comprehensive service to the customers.

Principle of sustainable procurement: to guarantee stable quality of the products, the Company stably provides top-quality engineering and service to the customers, and formulates a series of management measures for purchase of production materials: Purchase Management System, Price Management System of Procurement Department, Rules for Implementation of Material Quality Inspection, etc. On the basis of honesty and cooperation, win-win and mutual benefit, the Company has established a long-term partnership with multiple suppliers who are honest and trustworthy with qualifications, stable product quality, to provide sustainably stable support to development and utilization of superficial geothermal energy.

Management of Suppliers: the materials needed for producing the Company's products are diversified and are provided by many cooperated suppliers. To standardize supplier management, the Company has formulated the Management System for Qualified Suppliers of Procurement Department, Appraisal Specifications for Suppliers, in accordance with requirements of ISO9001 Quality Management System. The equipment, parts and materials used by the Company are provided by qualified suppliers approved by the Company. Qualified suppliers refer to those suppliers who have passed appraisal with



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legal operation permit, product quality, qualifications, production and supply capability, system quality management, etc. The Company prefers the enterprises which select environment friendly and energy saving products and pass environmental system certification as qualified suppliers.

► Product Responsibility

We are committed to designing and producing excellent products for users, and providing a series of products that can meet the needs of different customers. We provide top-quality service in the whole process including pre-sales, in-sales and after-sales. We launch activities along this guideline and has obtained a good effect.

To serve the customers better, the Company has set up 24-hour hotline service to accept requests of customers service, and give timely response of system failures reflected by the users in accordance with service agreements. At the same time, we have established client archives file to analyze service information. It has formulated all service standards and process, examine and track service course and quality to assure service quality meet requirements of standards and process. Based on the different natures of the clients, it customizes different service products, like: machine room on-duty service, energy saving operation service. Moreover, according to service agreements, it provides system overhauling in transition season (in every spring and autumn).

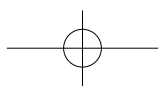
Protection of Intellectual Property Rights

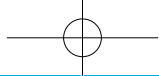
The superficial geothermal energy collection technology developed by the Company independently has obtained 35 invention patents and 9 new patents. The Group implements strict management measures to intellectual property and assures protection of its legal rights and equities with legal registration.

► Anti-corruption

Honesty and law observation, integrity and work for public interest is the base for enterprise to keep a foothold as well as occupational ethics which shall be practiced by each employee. The Company strictly implements relevant laws and regulations, policies of the State, combats corruption and upholds integrity, positively launches internal control management risk troubleshooting and prevention measures, and adopts "zero tolerance" attitude to such illegal acts as bribery, blackmailing, fraud, etc. There are no illegal and undisciplined events or any related lawsuit occurred during the year.

Specific to such links as purchasing by bid invitation which easily gives rise to corruption, the





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Company adopts strict monitoring measures, establishes bid invitation review group to assure fairness, publicity and justness in the course of bid invitation. The employees who work honestly, reject supplier's gifts or dinners, and persuade the suppliers not doing that would be rewarded accordingly.

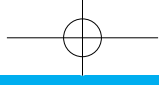
► Community Investment

(1) Cooperate with the community to train talents

The Company deeply implements the strategy of strengthening the enterprise by talents, focusing on the development of the enterprise's high-tech industry, taking the construction of academician expert workstations as the carrier, strengthening the cooperation with scientific research institutes and universities, fully utilizing the unique advantages of abundant resources of academicians in Beijing. The combination of the academician and his research team with the enterprise's technical innovation team, through the integration of comprehensive advantages such as scientific and technological resources, human resources, academic resources, and professional resources etc., it effectively displays high-end talents' role in development of major projects, cultivation of high-end talents, technology cooperation and exchange etc., advances aggregation of innovative elements into enterprise, prompt the enterprise to be a true entity for independent innovation, improves the enterprise's technical innovative capability and comprehensive competitiveness, to bring more cutting-edge and higher-end technology to the enterprise, to provide a forceful technical support to enterprise development.

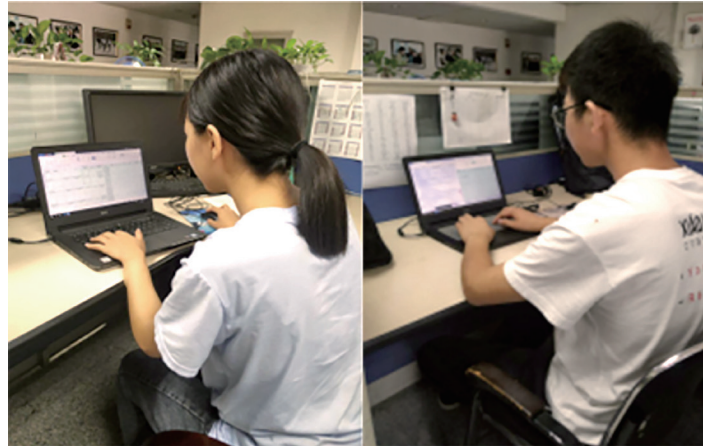
(2) Poverty Alleviation

In response to China Energy Conservation and Environmental Protection Group's "Hope Project for College Students", the Company sponsored two college students with difficulties: Geng Haili and Geng Yinghai, an elder sister and a younger brother from Songxian County, Henan Province. The Company undertook to pay the sister and brother's higher education costs up to the postgraduate level. In summer 2019, Mr. Xu Shengheng, Chairman of the Group, invited the sister and brother to a one month-long summer work-study program at the Group's headquarters for the second time. During the work-study process, they were able to complete basic tasks while gaining an in-depth understanding of the Company's basic operating procedures, departmental division of labour and management style. They said that the Group not only financed their higher education studies, but also provided them with internship opportunities at the Group, which opened up their horizons and enriched their vision at the same time. In the future, they would definitely deliver the philanthropic act to thousands of households,



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and pass on the touching and warmth in their lives.



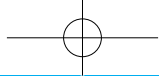
The siblings work hard in the office of HYY Group

(3) Active Response to the New Coronary Pneumonia Epidemic

At the end of January, Covid-19 broke out in China and spread rapidly. Since the outbreak, the CPC Central Committee and the State Council have attached great importance, and General Secretary Xi Jinping has given important instructions, stressing that Party committees and governments at all levels and relevant departments should put the safety and health of the people at the first place, develop thorough plans, organize all parties to carry out prevention and control, and resolutely curb the spread of the epidemic situation.

The area of central heating projects of HYY Group is about 20 million square meters. The cause of Ever Source not only concerns the production of enterprises and the guarantee of people's livelihood, but also relates to the fight against the epidemic and promotion of stability. Therefore, HYY Group is keenly aware of its heavy responsibilities in epidemic prevention and control and heating supply. In the face of the sudden outbreak, HYY Group attached great importance to rapid response, the Group's leadership team quickly convened an emergency meeting on epidemic prevention, all departments strengthened the overall planning, enhanced joint prevention and control, and actively and orderly started the work of epidemic prevention and control.

During the epidemic, the Group prepared the "Emergency Plan of Ever Source Science and Technology Development Group Co., Ltd. for Epidemic Prevention and Control" and the "Emergency Work Plan of Ever Source Science and Technology Development Group Co., Ltd. for Epidemic



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Prevention and Control", put forward the legal guidance for prevention and control, reliance on science, prevention-orientation, combined prevention and control, and strict implementation.

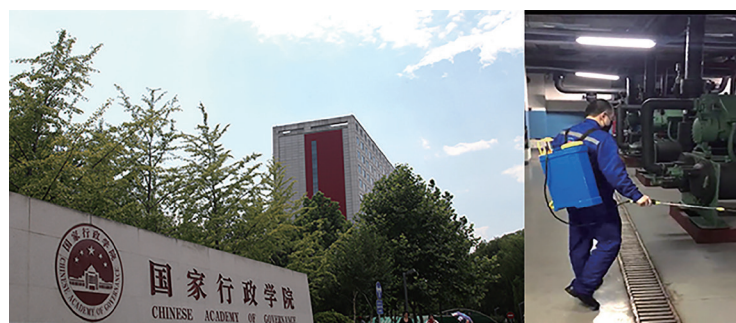
The Group leaders consulted traditional Chinese medicine experts and purchased TCM tea drinks based on the Covid-19 prevention prescriptions issued by Beijing Municipal Administration of Traditional Chinese Medicine and distributed them to the employees of the Group free of charge. At the beginning of March, HYY Group donated TCM sachets and TCM tea drinks as well as other epidemic prevention materials to Sijiqing elderly nursing home, Sibolian Company and other institutions, and comforted senior citizens in the elderly nursing home and local employees.

During the epidemic in severe condition, the maintenance team of the Group has always adhered to their posts in clean self-heating projects and central heating projects, strictly abided by and complied with local epidemic prevention standards, and ensure normal heating services to farmers and customers in rural areas.

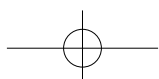
While epidemic situation in our country tends to be stable, HYY Group's steadfast and persistent campaign against the epidemic would continue. With the joint efforts of the Party organization leaders, Group leaders, industry experts, employees at all levels, the Group has ensured that no outbreak occurred to all staff, guaranteed normal operation of heating in all regions, and made utmost contributions to the social development as an enterprise.



HYY Group donated epidemic prevention materials to the Sijiqing Elderly Nursing Home



HYY Group project attendants sterilize the project rooms of National Academy of Governance and other projects



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KEY PERFORMANCE INDICATORS

B. SOCIAL			
	Indicator	Unit	2019
B1.1	Total workforce by gender		
	Male	No. of staff	446
	Female	No. of staff	134
	Total workforce by employment type		
	Full-time	No. of staff	456
	Part-time	No. of staff	124
	Total workforce by age group		
	Age below 30	No. of staff	35
	Age 30-39	No. of staff	117
	Age 40-49	No. of staff	142
	Age 50-59	No. of staff	232
	Age above 60	No. of staff	54
	Total workforce by geographical region		
P.R. China	No. of staff	548	
Hong Kong	No. of staff	32	
Total workforce by category			
Senior Management	No. of staff	20	
Middle Management	No. of staff	30	
Non-management	No. of staff	530	
B1.2	Employee turnover rate by gender		
	Male	%	10.76
	Female	%	17.91
	Employee turnover rate by age group		
	Age below 30	%	14.29
	Age 30-39	%	23.93
	Age 40-49	%	19.72
	Age 50-59	%	4.97
Age above 60	%	9.26	

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	Employee turnover rate by region		
	P.R. China	%	12.77
	Hong Kong	%	6.25
B2.1	Number and rate of work-related fatalities	%	0
B2.2	Lost days due to work injury	Day	0
B3.1	The percentage of employees trained by gender		
	Male	%	100
	Female	%	100
	The percentage of employees trained by employee category		
	Senior Management	%	100
	Middle Management	%	100
	Non-management	%	100
	The average training hours completed per employee by gender		
	Male	Hours	25
	Female	Hours	25
B3.2	The average training hours completed per employee by category		
	Senior Management	Hours	10
	Middle Management	Hours	13
	Non-management	Hours	25
B5.1	Number of suppliers by geographical region		
	P.R. China	No.	122
B6.1	Percentage of total products sold or delivered subject to recalls for safety and health reasons	%	0
B6.2	Number of products and service related complaints received	No.	0
B7.1	Number of concluded cases regarding corrupt practices brought against the Group and its employees	No.	0