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OVERVIEW

We are a cross-provincial heat service provider mainly operating in the “Three North” region. We were ranked No. 9 in terms of the aggregate actual heat service area in Shanxi Province, Gansu Province and Inner Mongolia Autonomous Region in 2022, according to the Frost & Sullivan Report. We are principally engaged in the provision of heat services to residential and non-residential heat service customers under concession rights. On top of our provision of heat services, which is considered as a public utility business, we also provide heat-related (i) engineering construction services; and (ii) EMC services. We have over a decade of operational experience since we started our operation in 2010.

As at the Latest Practicable Date, we held six concessions, of which five were in operation and one was under construction. During the Track Record Period, the majority of our revenue was derived from our provision of heat services relating to the five concessions in operation. In accordance with IFRIC 12 Service Concession Arrangements, during the Track Record Period, we recognised revenue for our provision of (i) heat services; and (ii) engineering construction services for our heat service projects under our concessions. For the years ended 31 December 2020, 2021 and 2022, revenue derived from our provision of heat services amounted to approximately RMB973.3 million, RMB1,035.2 million and RMB1,098.9 million, representing approximately 70.7%, 80.2% and 76.1% of our total revenue, respectively.

The “Three North” region generally experiences very cold weather during the winter especially the areas north of the Qinling Mountain-Huaihe River (秦嶺-淮河以北地區). According to the Frost & Sullivan Report, the total heat service area (measured in terms of GFA) in the PRC increased from 8.8 billion sq.m. in 2018 to 11.2 billion sq.m. in 2022. Such area is expected to increase to 14.5 billion sq.m. in 2027, representing a CAGR of 5.2% between 2022 and 2027. Such growth is mainly driven by an increase in demand for heat services resulting from urbanisation and an increase in the PRC’s population, as well as an increase in demand for heat services in the areas south of Qinling Mountain-Huaihe River (秦嶺-淮河以南地區).

Since our inception in 2010, we have established a leading position in the heat service industry in the “Three North” region. As at the Latest Practicable Date, we had operational presence in (i) Shanxi Province; (ii) Gansu Province; and (iii) Inner Mongolia Autonomous Region. As at 31 December 2020, 2021 and 2022, our total Concession Area (measured in terms of GFA) was approximately 362.3 million sq.m., 419.9 million sq.m. and 419.9 million sq.m.. As at the same dates, our total actual heat service area (measured in terms of GFA) was approximately 37.4 million sq.m., 39.8 million sq.m. and 41.9 million sq.m., respectively. As at the Latest Practicable Date, our total actual heat service area (measured in terms of GFA) was approximately 41.9 million sq.m., representing approximately 10.0% of our total Concession Area of approximately 419.9 million sq.m..

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In recent years, the PRC Government has encouraged the use of more diversified and clean heat sources in the heat service business and a series of government policies relating thereto has come into effect. For instance, the Plan for Winter Clean Heating in the Northern Region (2017-2021) (《北方地區冬季清潔取暖規劃(2017-2021)》) provides that coal-fired boilers with SO₂ emission exceeding the prescribed environment-friendly benchmark should be gradually replaced, and more environmentally friendly and energy efficient coal-fired boilers should be rolled out as replacement. The Measures of National Energy Administration for Adopting Renewable Energy According to Local Conditions for Heat Services (《國家能源局關於因地制宜做好可再生能源供暖相關工作的通知》) encourage heat service providers to utilise clean, low-carbon and renewable energy to produce heat for the provision of heat services. The 14th Five-Year Plan for Energy Conservation and Emission Reduction Comprehensive Work Plan (《關於印發“十四五”節能減排綜合工作方案的通知》) issued by the State Council in 2022 prescribes an “extremely low emission standard” (超低排放標準) and specifies the mission of the PRC Government to strengthen the environmental protection measures in the PRC. We are committed to proactively upgrade our heat source portfolio to support the aforementioned government initiatives. For details of our heat source portfolio, see “Heat sources” in this section. During the Track Record Period and up to the Latest Practicable Date, we relied on four types of heat sources for all of our heat service projects under concession rights. Our coal-fired boilers which we use in our Lanzhou New Area Project are more environmentally friendly and energy efficient, reaching an “extremely low emission standard” (超低排放標準) accredited by the Lanzhou New Area Ecology and Environment Bureau* (蘭州新區生態環境局).

We only provide heat services to our heat service customers during the heat service period prescribed by the relevant provincial and local laws and regulations. Such heat service period varies depending on different climate in different locations of the Concession Areas. For information relating to heat service periods, see “Heat services – Seasonality” in this section. Our heat service customers include residential and non-residential heat service customers. Our residential customers are residents of household units while our non-residential customers include property management companies, commercial operators, government institutions, educational institutions, airports, train stations and hospitals. During the Track Record Period, we maintained a broad customer base in relation to our heat services under our concessions. As at 31 December 2020, 2021 and 2022, we had approximately 265,800, 282,400 and 303,900 heat service customers, respectively.

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The following table sets out our revenue by type of service/product for the years indicated.

	For the year ended 31 December					
	2020		2021		2022	
	(RMB'000)	%	(RMB'000)	%	(RMB'000)	%
Heat services						
– Fees from customers for provision and distribution of heat	739,940	53.8	778,442	60.3	853,542	59.1
– Price subsidies from local government	167,908	12.1	182,500	14.2	161,676	11.2
– Pipeline connection fee	65,429	4.8	74,211	5.7	83,725	5.8
Sub-total	973,277	70.7	1,035,153	80.2	1,098,943	76.1
Engineering construction services	362,050	26.3	229,147	17.8	301,567	20.9
EMC services	4,157	0.3	3,972	0.3	3,002	0.2
Others ^(Note)	36,837	2.7	22,363	1.7	40,220	2.8
Total	1,376,321	100.0	1,290,635	100.0	1,443,732	100.0

Note: “Others” mainly include heat transmission services, the sale of heat services-related goods, and designing services.

Our revenue decreased from approximately RMB1,376.3 million for the year ended 31 December 2020 to approximately RMB1,290.6 million for the year ended 31 December 2021, and increased to approximately RMB1,443.7 million for the year ended 31 December 2022. Our net profit increased from approximately RMB98.3 million for the year ended 31 December 2020 to approximately RMB171.1 million for the year ended 31 December 2021. Our net profit decreased from approximately RMB171.1 million for the year ended 31 December 2021 to approximately RMB140.4 million for the year ended 31 December 2022.

OUR COMPETITIVE STRENGTHS

We believe that our competitive strengths as set out below set us apart from other heat service providers across the provinces where we operate.

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We operate under multiple concession rights and were ranked No. 9 in terms of the aggregate actual heat service area in Shanxi Province, Gansu Province and Inner Mongolia Autonomous Region in 2022

We specialise in providing heat services under concession rights. According to the Frost & Sullivan Report, heat service businesses in the PRC are regulated by the relevant local governments and housing and urban-rural development bureaux. Generally, heat service providers are required to obtain concession rights to operate their heat service projects. The ability to obtain concession rights and to manage large-scale heat service projects gives heat service providers an edge over other market players. Heat service providers with concession rights are generally entitled to operate their heat service projects in the heat service areas granted to them on an exclusive basis. According to the Frost & Sullivan Report, a successful candidate for a concession right, generally speaking, needs to have sufficient heat service experience and capital to fund the requisite upfront capital expenditures. Given our track record, we can demonstrate to our concession grantors that we were capable of offering heat services to heat service customers and had sufficient capital for the operation of heat service projects. We also can demonstrate that we (i) have stable and reliable heating resources; (ii) possess experience in the provision of heat services; (iii) have professional staff with heat service qualifications; and (iv) possess adequate technological capabilities.

Our concession rights give us the exclusive right to provide heat services in our Concession Area under concession rights in Taiyuan and Shuozhou of Shanxi Province, Lanzhou of Gansu Province, Hulunbuir of Inner Mongolia Autonomous Region and Xinmi of Henan Province. We believe that this enables us to benefit from the efforts of these provincial governments to increase urbanisation rates, improve quality of life, replace less environment-friendly boilers and upgrade heating technologies. As at 31 December 2022, we held concession rights to provide heat services in a total Concession Area of approximately 419.9 million sq.m., of which 291.0 million sq.m. was in Shanxi Province, 68.3 million sq.m. was in Gansu Province, 32.6 million sq.m. was in Henan Province and 28.0 million sq.m. was in Inner Mongolia Autonomous Region.

Pursuant to the relevant PRC laws and regulations, the Concession Agreements under which we have an exclusive right to operate our heat services business are generally subject to an effective term of 30 years. One of them, however, has an effective term of only 25 years according to the relevant local by-laws. We believe that our exclusive concession rights enable us to reach a large base of potential customers within our Concession Area on an exclusive basis in the short to medium term. As at 31 December 2022, our total actual heat service area covered only approximately 10.0% of our total Concession Area under our concession rights. According to the 14th Five-Year Plan (2021-2025) for National Economic and Social Development and the Long-Range Objectives Through the Year 2035 (《國民經濟和社會發展第十四個五年規劃和2035年遠景目標綱要》) jointly issued by the Central Committee of the Communist Party of China* (中國共產黨中央委員會) and the State Council, China's urbanisation rate is expected to increase by approximately 5.0% between 2021 and 2025. An increase in urban population is expected to result in an increased demand for heat services. We expect that our unutilised Concession Area presents great potential for our business expansion in the foreseeable future.

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Our Concession Area is mostly located within key development zones and newly developed urban zones, both of which are expected to see future economic growth. In line with the relevant provincial government’s focus on vitalising the economy in these zones, our business operation is likely to benefit from all development in such areas. For example, Shanxi Transformation and Comprehensive Reform Demonstration Zone* (山西轉型綜合改革示範區) occupies an area of approximately 600.0 million sq.m. and covers eight industry-university-research zones located in Taiyuan. Shanxi Transformation and Comprehensive Reform Demonstration Zone* (山西轉型綜合改革示範區) is the first transformation and comprehensive reform demonstration area in the PRC. We expect that our actual heat service area in Shanxi Transformation and Comprehensive Reform Demonstration Zone* (山西轉型綜合改革示範區) will increase to approximately 49.0 million sq.m. by 2030, based on the current proposed development of Xiaohu Industrial Park, which is a core part of the development zone.

We are a cross-provincial heat service provider capable of managing multiple heat service projects in different provinces of the PRC

We commenced our provision of heat services operation in 2010 when we established our presence in Shanxi Province. We subsequently expanded our business to Inner Mongolia Autonomous Region and Gansu Province in 2013 and 2014, respectively. We successfully obtained a concession right to provide heat services in Xinmi of Henan Province in December 2021. As at the Latest Practicable Date, we had reached the final stages of our preparation to provide heat services in Xinmi. We expect that our provision of heat services in Xinmi of Henan Province will commence from the 2023/2024 heat service period in or around November 2023. For the details of our heat service projects, see “Heat services – Heat service projects under concession operation” in this section. Further, as at the Latest Practicable Date, we had won (through open bidding) the concession to provide our heat services in Bautou in Inner Mongolia Autonomous Region, and were in the process of entering into a concession agreement with the relevant concession grantor.

With over a decade of operational experience, we believe that we have developed strong capabilities in terms of systematic regional expansion, management and operation to support our overall operation. According to the Frost & Sullivan Report, the heat services market in the PRC is fragmented with a large number of market players comprising both regional and cross-provincial heat service providers. We were ranked No. 9 in terms of the aggregate actual heat service area in Shanxi Province, Gansu Province and Inner Mongolia Autonomous Region in 2022 (out of which we were the second largest cross-provincial heat services provider), according to the Frost & Sullivan Report. Our heat services management platform, which includes a heat production monitoring system and heat transmission monitoring system, enables us to control, streamline and manage our operations in multiple locations effectively. We believe that our cross-provincial operation benefits from multiple government initiatives such as price subsidies will enable us to achieve cost efficiency in all key stages throughout our operation. We also believe that our cross-provincial market presence enables us to reduce the risk or impact to us in the unlikely event of any of our concession rights being adversely affected.

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Our existing concession rights predominantly cover the “Three North” region. We are however well-positioned to enter, and have demonstrated that we are indeed capable of successfully entering the heat service market in other parts of northern China by virtue of our existing cross-provincial operation. We believe that our current business success can be replicated in and expanded to other regions in China.

We are able to utilise diversified heat sources, providing clean and quality heat services

Due to geographical and climatic factors, heat is a basic necessity for people living in northern China. We believe that clean and high-quality heat services should be accessible to the entire population in northern China. Our mission is to improve people’s living conditions and change their lifestyles. Such mission echoes the PRC Government’s continuous implementation of projects aimed at improving the living standard of the nationwide population (民生工程).

We derive heat used in our heat services business from multiple sources. During the Track Record Period and up to the Latest Practicable Date, our heat sources included (i) heat procured from cogeneration plants; (ii) heat produced by coal-fired boilers; (iii) residual heat collected at plants; and (iv) geothermal heat. Driven by the demand for sustainable development, the PRC Government is committed to using clean and renewable energy to reduce environmental pollution. In October 2013, Shentou Second Power Station was accredited as a Power Top Plant by Power Magazine, a reputable authority in the power generation industry, for its achievement on improved energy conservation and reduced emissions. We have applied the same absorption heat pump technology used at Shentou Second Power Station to our other projects to the extent that we can. Our PRC Legal Advisers advised that as at the Latest Practicable Date, we were in compliance with all the relevant national environmental protection requirements in all material aspects. For more details of our heat sources, see “Heat sources” in this section.

Supported by our advanced heat service technologies and diversified heat sources, we believe that we are capable of applying clean and suitable heat solutions for our heat service projects. When selecting heat sources, we take a holistic approach and would consider, amongst other things, local circumstances in different regions, the actual needs of our heat service customers, availability of different heat sources, and economic and commercial considerations.

We possess in-house research and development capabilities, which allow us to improve the efficiency of our heat service operation with a view to maintaining and improving our market position

We possess technologies relating to our provision of heat services. With our technological capabilities, we believe that we are well positioned to gain entry into new markets. Our intellectual property rights in relation to these technologies are crucial to our business operation and success. As at the Latest Practicable Date, we had five patents registered with the China National Intellectual Property Administration which relate to heat service systems during the cogeneration process. We believe that such systems are considered to be leading

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technologies in the industry. For the details of our intellectual property rights, see “Statutory and general information – Further information about our business – Intellectual property rights” as set out in Appendix VII to this document.

We have continuously invested in research and development. Our corporate slogan is “learning leads to advancement, innovation leads to eternity” (學習才能進取,創造方為永恆). For the years ended 31 December 2020, 2021 and 2022, our research and development expenses were approximately RMB4.7 million, RMB7.7 million and RMB8.2 million, representing approximately 0.4%, 0.8% and 0.7% of our total costs of sales during the same years, respectively. As at 31 December 2022, our research and development team comprised 20 employees, all of whom are degree holders with relevant experience in heat service-related design and technology. We have established a research and development centre in Taiyuan of Shanxi Province. Since 2018, this centre has been dedicated to enhancing our research and development capabilities, strengthening our research and application of new energy heat service technologies, and promoting innovation.

We have an integrated digitalised heat services management platform which controls our cross-provincial operation and enhances our operational efficiency

Our heat services management platform is an integrated digitalised platform which allows us to continuously access real-time information relating to our heat services operation, and feeding the same in digital form for processing, thereby allowing us to efficiently and optimally manage our heat services business and to provide our services to our heat service customers. Such platform mainly consists of (i) a heat production monitoring system which monitors the heat production process and the operation of our heat service facilities; (ii) a heat transmission monitoring system which monitors the heat transmission process; and (iii) a customer service system which allows us to respond to our customers’ requests and concerns in a timely manner. Over the years, we have significantly invested in the research and development of various heating technologies, as well as the optimisation of our heat services management platform. We believe that our heat services management platform enables us to achieve our energy-saving targets and business efficiency, and enables our heat service customers to directly control their needs. As at the Latest Practicable Date, we were operating our heat services business through this integrated system in most of our actual heat service area. For more information, see “Heat services management platform” in this section.

We have an experienced and committed management team

Our management team has in-depth knowledge of the heat service industry and is committed to ensuring that our business operation is running efficiently and effectively while controlling quality. Mr. Geng Ming (耿鳴先生), the Chairman of our Board and an executive Director, has been responsible for overseeing our daily heat service operation since our establishment. Mr. Geng has extensive experience in corporate management in the energy sector. Mr. Li Baoshan (李寶山先生), an executive Director and the general manager of our Company, has been serving our Group for more than a decade and has over 19 years of experiences in the energy resource sector. Mr. Miao Wenbin (繆文彬先生), our non-executive Director, has extensive experience in investment, sales and public relationship in various companies. For more information relating to our management team, see “Directors, supervisors and senior management” in this document.

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OUR STRATEGIES

Our core business objective is to consolidate and improve our position in the PRC’s heat service industry. In line with this objective, we intend to leverage our competitive strengths and implement the following strategies.

Bolster our business presence in the “Three North” region and enlarge our customer base

We intend to ride on our established presence, network and experience in the heat service industry in the “Three North” region, as well as our technological capabilities, to bolster our business presence in the region.

As at 31 December 2020, 2021 and 2022, our total Concession Area under our Concession Agreements was approximately 362.3 million sq.m., 419.9 million sq.m. and 419.9 million sq.m.. As at the same dates, our total actual heat service area (measured in terms of GFA) was approximately 37.4 million sq.m., 39.8 million sq.m. and 41.9 million sq.m., respectively. Our total actual heat service area as at 31 December 2022 accounted for only approximately 10.0% of our total Concession Area under our Concession Agreements as at the same date. There is therefore a lot of scope for us to further expand our actual heat service area and reach a wider base of customers. Within our Concession Area, we plan to keep pace with local urban developments to grow the business which is in line with the needs of the customers in our actual heat service area. According to the Frost & Sullivan Report, the heat service industry in the PRC is expected to experience steady growth and continuous development, the total heat service area (measured in terms of GFA) in PRC is expected to increase from 11.2 billion sq.m. in 2022 to 14.5 billion sq.m. in 2027, representing an expected CAGR of 5.2% between 2022 and 2027. In line with local urbanisation and economic development in the areas which we operate and the anticipated expansion of our actual heat service area within the next few years, we plan to enhance our heat service capacity so that we can continue to provide stable heat services to our new and existing heat service customers.

In particular, according to “14th Five-Year” Lanzhou Economic Circle Development Plan (《“十四五”蘭州經濟圈發展規劃》”) published by the People’s Government of Gansu Province (甘肅省人民政府) in October 2021, construction activities of public utility infrastructure in Lanzhou New Area (蘭州新區) is expected to see a significant increase along with the urbanisation and economic reform in the following five years. During the Track Record Period, heat sources for Lanzhou New Area Project included (i) heat produced by coal-fired boilers, and (ii) residual heat collected at plants. With the steady expansion of our actual heat service area in Lanzhou of Gansu Province, we estimate that our existing heat sources for Lanzhou will not be able to meet the increasing demand for our heat services. We applied and were approved by Lanzhou New Area Economy Development Bureau* (蘭州新區經濟發展局) in March 2020 to construct a new peak-shaving boiler with a capacity of 116 MW and corresponding buildings in our heat source peak-shaving station for our Lanzhou New Area Project to meet the increasing demands for our heat services in Lanzhou of Gansu Province. According to the construction plan of the peak-shaving station, there will be six peak-shaving boilers and corresponding buildings in total. During the Track Record Period and as at the Latest Practicable Date, three peaking-shaving boilers and the corresponding buildings were in operation in our peak-shaving station. The new peak-shaving boiler will be a coal-fired one and will be operated to produce heat for our Lanzhou New Area Project. For more information related to our coal-fired boilers, see “Heat sources – Heat produced by our coal-fired boilers” in this section. Construction of the peak-shaving station (which included the new peak-shaving

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boiler and the building where it is located) has commenced in June 2022. It is expected that the construction and construction acceptance check of the constructed building where the new peak-shaving boiler is located will be completed prior to the commencement of 2023/2024 heat service period. The new peak-shaving boiler will be put into use upon the completion of construction acceptance check to meet the demand for heat services. It is expected that the new peak-shaving station will be able to reach an “extremely low emission standard” (超低排放標準) accredited by the Lanzhou New Area Ecology and Environment Bureau* (蘭州新區生態環境局). The total expenditures are expected to be approximately RMB151.6 million. We plan to fund such construction with [REDACTED] from the [REDACTED] of approximately RMB[REDACTED] million and the remaining of approximately RMB[REDACTED] will be funded by our internal resources. For details, see “Future plans and [REDACTED]” in this document. According to the Frost & Sullivan Report, the “Three North” region covered most of northern China and accounted for approximately 26% of the China’s population in 2022. We expect that China’s steady population growth, together with its corresponding urban development, will drive the need for heat services in the “Three North” region in the future.

Expand our national footprint and increase our market share

We plan to expand our national footprint. The heat service market in the PRC has been undergoing ongoing changes in various years and we are continuously seeing the entry of new participants. Provincial and local heat service providers are expected to compete with market players from other provinces and cities. The heat service business is not accessible to all and has various entry barriers, including but not limited to the significant amount of initial investment required for the construction of pipeline systems, technologies and qualifications, according to the Frost & Sullivan Report. This presents significant opportunities to cross-provincial heat service providers like us with an established track record of successful cross-provincial operations and performance and expansion. We intend to proactively capture market opportunities and expand our current geographical coverage.

During the Track Record Period, we succeeded in securing a Concession Agreement for the provision of heat services in Xinmi of Henan Province, which is outside the “Three North” region. We expect that our provision of heat services in Xinmi will commence from the 2023/2024 heat service period in or around November 2023. We are required to invest in, build, arrange for the development of the infrastructure assets (i.e. heat service facilities) required for the provision of heat services in Xinmi of Henan Province. The Xinmi Project will have a concession period of 30 years as stipulated in the Xinmi Concession Agreement. According to the Overall Xinmi City Urban-rural Development (2018-2035) (新密市城鄉總體規劃 (2018-2035)), the government has designated a target that 90% of the administrative area in Xinmi shall have access to heat services by 2035. We expect we can fully utilise our total Concession Area in Xinmi of Henan Province and expand our heat service accordingly. The preparation work of the Xinmi Project in two areas according to the local urban developments mainly includes (i) procurement of pipelines, devices and equipment, and (ii) construction of heat service facilities for heat transmission. The total expenditures for the preparation work up to 31 December 2027 are expected to be approximately RMB[456.9] million. We plan to fund such construction with [REDACTED] from the [REDACTED] of approximately RMB[REDACTED] million and the remaining of approximately RMB[REDACTED] will be funded by our internal resources. For details, see “Future plans and [REDACTED]” in this document.

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We will leverage our experience in acquiring such project to tap into other heat service markets when opportunities arise. We have established a business development team which closely monitors market dynamics, collects and analyses information relating to heat service demand in different regions, designs and executes our market entry strategy and conducts negotiation with prospective concession grantors. We believe that there will be high demand for heat services in the future and we expect that demand for our heat services will increase when we enter into new markets. We believe that we will be able to expand our national footprint and substantially increase our market share in the heat services industry in the future.

Continue to retain and recruit talented professionals for our business and management teams

We believe that having high quality personnel is the key to our success and future development. We believe that we already have a dedicated and experienced management team and responsible and diligent employees to assist us in our business expansion. We plan to continue to retain and recruit more talented professionals. We will also seek to provide more opportunities to our supporting staff for their career development. We plan to achieve gender diversity at workforce level by recruiting more female employees. Internally, we will nurture our own female employees to management level. Safety and innovation are our priorities. We will continue to provide our employees with professional training and professional development programmes covering these areas and further align employees' interests with ours.

OUR BUSINESS MODEL

We were ranked No. 9 in terms of the aggregate actual heat service area in Shanxi Province, Gansu Province and Inner Mongolia Autonomous Region in 2022, according to the Frost & Sullivan Report. We are principally engaged in the provision of heat services to residential and non-residential heat service customers. Our non-residential heat service customers include commercial operators, government institutions, educational institutions, airports, train stations and hospitals. As at the Latest Practicable Date, our total Concession Area and our total actual heat service area was approximately 419.9 million sq.m. and 41.9 million sq.m., respectively.

On top of our provision of heat services, we also provide heat-related (i) engineering construction services; and (ii) EMC services.

BOT model

During the Track Record Period, the majority of the revenue from our provision of heat services and engineering construction services was derived from Concession Agreements, all of which are structured in the form of a BOT model. Pursuant to the BOT model, our concession grantors contracted with and granted to us the exclusive rights to invest in, build, and arrange for the development and operation of the infrastructure assets (i.e. heat service facilities) required for our provision of heat services. During the concession period, we are

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entitled to operate and generate revenue from such infrastructure assets through the operation of our heat services business. Upon expiry of the concession period, all heat service-related assets in use by us will be transferred to the relevant concession grantor or parties designated by the concession grantor. The compensation payable (if any) by the concession grantor to us for such transfer of assets will be determined on the relevant terms thereunder.

EMC Services

We provided energy-conservation service to an energy consuming enterprise to achieve certain energy saving goals. Under the EMC, we are responsible for installing certain equipment and machinery for the purpose of energy saving. We are also responsible for operating and managing the residual heat collection facilities. In return, we are entitled to a share of profit accrued from energy conserved as a result of our energy-conservation services provided.

HEAT SERVICES

The “Three North” region experiences very cold weather during the winter, especially the areas north of the Qinling Mountain-Huaihe River (秦嶺-淮河以北地區). Our heat service operation in such region has enabled us to generate steady revenue and cash flow over the years. During the Track Record Period and up to the Latest Practicable Date, we had six heat service projects under concession rights within our Concession Area. Our heat service projects in operation were located in Taiyuan and Shuozhou of Shanxi Province, Lanzhou of Gansu Province and Hulunbuir of Inner Mongolia Autonomous Region. We also had a heat service project under construction in Xinmi of Henan Province. For the years ended 31 December 2020, 2021 and 2022, revenue generated from our heat services was approximately RMB973.3 million, RMB1,035.2 million and RMB1,098.9 million, representing approximately 70.7%, 80.2% and 76.1% of our total revenue, respectively.

According to the Frost & Sullivan Report, the “Three North” region in which we operate covers most of northern China and the “Three North” region accounted for approximately 26.2% of the population of China in 2021. In light of our business presence and the high demand for heat services in the “Three North” region, we plan to continue to strengthen our market position and expand our market share in this area in the foreseeable future. See “Our strategies – Bolster our business presence in the “Three North” region and enlarge our customer base” in this section for details. In December 2021, we obtained a concession to operate a heat service project in Xinmi of Henan Province which is outside of the “Three North” region. We expect that our heat service operation in Xinmi will commence from the 2023/2024 heat service period in or around November 2023. To facilitate our nationwide expansion plans, our business development team actively pursues new opportunities in the heat service industry in the areas south of Qinling Mountain River (秦嶺-淮河以南地區), particularly in southwest, central and eastern China.

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Heat service projects under concession operation

During the Track Record Period and up to the Latest Practicable Date, we were a party to six Concession Agreements and had six heat service projects at different stages under concession rights within our Concession Area. As at the Latest Practicable Date, three of our heat service projects were in Shanxi Province, one was in Gansu Province, one was in Inner Mongolia Autonomous Region and one was a project under construction in Henan Province.

As at 31 December 2022, we had an aggregate Concession Area of approximately 419.9 million sq.m., of which 291.0 million sq.m. was in Shanxi Province, 68.3 million sq.m. was in Gansu Province, 28.0 million sq.m. was in Inner Mongolia Autonomous Region and 32.6 million sq.m. was in Henan Province. As at the same date, our total actual heat service area was approximately 41.9 million sq.m., which comprised 25.2 million sq.m. in Shanxi Province, 8.5 million sq.m. in Gansu Province and 8.2 million sq.m. in Inner Mongolia Autonomous Region. As at the Latest Practicable Date, we had reached the final stages of our preparation to provide heat services in Xinmi. We expect that our provision of heat services in Xinmi of Henan Province will commence from the 2023/2024 heat service period in or around November 2023.

Under our concession rights, we can operate our heat services business in accordance with the terms of the Concession Agreement in our Concession Area. Being a concession grantee, we can make long-term investments for the purpose of our heat service operation knowing that we have the exclusive right to operate and benefit from such investments for a fixed term.

The heat service industry in the PRC is expected to experience steady growth and continuous development. According to the Frost & Sullivan Report, total heat services area in China is expected to increase to 14.5 billion sq.m. in 2027, with a CAGR of 5.2% from 2022 to 2027, as a result of the increasing demand for the heat services mainly brought by the rapid growth in urbanisation rate and the increasing penetration of the heat services in China. The total heat services area in Shanxi Province is expected to increase to 1,022.6 million sq.m. in 2027, with a CAGR of 4.6% from 2022 to 2027; the total heat services area in Gansu Province is expected to increase to 410.9 million sq.m. in 2027, with a CAGR of 6.3% from 2022 to 2027; and the total heat services area in Inner Mongolia Autonomous Region increased to 723.9 million sq.m. in 2027, with a CAGR of 1.7% from 2022 to 2027. For further detailed analysis, see "Industry overview – Overview of the heat services industry in the PRC" in this document. Our Concession Agreements give us the exclusive right to provide heat services in our Concession Area within the concession period. In light of a positive outlook of the heat service industry in the locations in the PRC where we have Concession Agreement, the anticipated expansion of our actual heat service area within our existing Concession Area is expected to be in line with the respective development of heat services industry in the locations we operate. Given our track record that we have demonstrated our ability to provide stable and reliable heat services, our Directors are of the view that we can expand our actual heat service area in accordance with the anticipated local development in the locations where we operate in the future.

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The following table summarises some of the details pertaining to our heat service projects under concession rights as at the Latest Practicable Date.

Location	Project name	Concession period	Concession Area (sq.m.)	Actual heat service area			Heat source	Peak-shaving heat source	Operating facilities	Status
				As at 31 December		2022 (sq.m.)				
				2020 (sq.m.)	2021 (sq.m.)					
Shanxi Province										
Taiyuan	Taiyuan Project	21 November 2012 – 20 November 2037	50,000,000 (adjusted)	5,430,000	5,688,000	6,700,000	Heat procured from cogeneration plants	Gas-fuelled boiler generated heat	Self-constructed	In operation
Taiyuan	Shanxi Demonstration Zone Project	18 September 2018 - 18 September 2048	200,000,000	205,000	391,500	352,400	Geothermal heat	Gas-fuelled boiler generated heat	Self-constructed	In operation
Shuozhou	Shuozhou Project	18 January 2012 – 18 January 2042	41,000,000	17,852,100	18,115,000	18,117,400	Heat procured from cogeneration plants and residual heat collected at cogeneration plants	Gas-fuelled boiler generated heat	Self-constructed and leased from other heat service providers in Shuozhou of Shanxi Province	In operation
Gansu Province										
Lanzhou	Lanzhou New Area Project	29 June 2013 – 30 June 2043	68,330,000	5,920,000	7,030,000	8,490,000	Heat produced by coal-fired boilers, and residual heat collected at plants	Gas-fuelled boiler generated heat	Self-constructed	In operation
Inner Mongolia Autonomous Region										
Hulunbuir	Hulunbuir Project	20 September 2013 - 19 September 2043	27,951,500	7,970,000	8,540,000	8,210,000	Heat procured from cogeneration plants	Oil-fuelled boiler generated heat	Self-constructed	In operation
Henan Province										
Xinmi	Xinmi Project ^(Note)	7 December 2021 - 6 December 2051	32,610,000	-	-	-	Heat procured from cogeneration plants	-	Self-constructed and acquired	Under construction

Note:

As at the Latest Practicable Date, we had reached the final stages of our preparation to provide heat services in Xinmi. We expect that our provision of heat services in Xinmi will commence from the 2023/2024 heat service period in or around November 2023.

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Reduction of the size of the Concession Boundary Area for our Taiyuan Project and the possible transfer of the heat facilities in relation to the Subject Area which is currently under negotiation

In 2017, Taiyuan City Bureau of Municipal Affairs Administration* (太原市城鄉管理局) (formerly known as 太原市城鄉管理委員會) (the “**Taiyuan Administration**”) issued the Proposal of City-wide Heat Services Coverage in Taiyuan (2017) (《2017年太原市清潔供熱全面覆蓋實施方案》) and the Notice of Constructing Primary and Secondary Urban Underground Pipelines in 2017 (《關於下達2017年第一批城市主次幹道項目建設任務計劃的通知》) (the “**Local Authorities’ Plans**”). According to the Local Authorities’ Plans, we, as the concession grantee for the Taiyuan Project, were required to construct, amongst others, certain additional urban underground pipelines and back-up systems in certain part of the Concession Boundary Area for our Taiyuan Project.

In view of the previously unplanned capital expenditures which would be required for the aforementioned construction works, and after negotiations with the Taiyuan Administration, we proposed to the Taiyuan Administration in June 2017 to reduce the original Concession Boundary Area for our Taiyuan Project (the “**Reduction**”) by way of a written application which was approved by the People’s Government of Taiyuan City in August 2017, and the size of the Concession Boundary Area for our Taiyuan Project was then reduced by 86.0 million sq.m. (the “**Subject Area**”). According to our unaudited management accounts, revenue from the provision of our heat services in the Subject Area for the years ended 31 December 2016 and 2017 was only approximately RMB10.3 million and approximately RMB15.2 million, representing only 2.2% and 2.4% of the total revenue of our Group, and representing only 10.6% and 11.1% of our total revenue from the Taiyuan Project during the same period, respectively. Subsequent to the end of the 2016-2017 heat service period, we ceased to provide any heat services in the Subject Area and have not recorded any revenue in respect of the Subject Area, and all our heat service facilities in the Subject Area have been operated by a new operator since then. At the end of August 2017, the carrying value of the concession relating to the Subject Area amounted to approximately RMB71.4 million (with original cost and accumulated amortisation of RMB81.9 million and RMB10.5 million, respectively). Since our Group can no longer generate any future economic benefits from the concession relating to the Subject Area, in August 2017, our Group decided to accelerate the amortisation for the concession relating to the Subject Area and the carrying value of which became zero after such accelerated amortisation took place.

We are currently still under negotiation with the Taiyuan Administration in its capacity as the grantor for the transfer of all our heat service facilities in the Subject Area and its consideration thereto and no agreement had yet been reached between us and the grantor or the new operator on the transfer and the amount of consideration (if any) as at the Latest Practicable Date. There is no certainty as to whether and when the parties will reach such an agreement. Further, there is no certainty as to the amount of the consideration to be determined in any such agreement (if any) which may become payable to us. Currently, the legal rights and obligations associated with the heat service facilities in the Subject Area still remain with us since there is no legally binding agreement in place which governs the transfer of the related heat service facilities. In the event that no agreement can be reached between the relevant parties, the possible transfer will not take place and we will not receive any consideration.

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Regardless of whether a legally binding agreement in relation to the possible transfer can be reached, we will not record any revenue from the Subject Area as the heat service facilities in the Subject Area have been operated by the then new operator since the end of the 2016-2017 heat service period. As advised by our PRC Legal Advisers, in the event that the possible transfer does not materialise, the legal rights and obligations associated with the heat service facilities in the Subject Area will still remain with us; the enforceability and the validity of the remaining scope of the Taiyuan Concession Agreement will not be affected; and the Taiyuan Concession Agreement will not be terminated before its expiration due to such possible transfer.

During an interview with the Taiyuan Administration, it was confirmed that (i) the Reduction did not occur as a result of any breach of the relevant provisions as stipulated in, nor did it constitute any breach of, the Taiyuan Concession Agreement; (ii) the Reduction was a one-off event and there will be no further reduction of our Concession Area of the Taiyuan Project in the foreseeable future; (iii) our heat service operation has remained stable in our current Concession Area of the Taiyuan Project; (iv) we are a competent heat service provider in Taiyuan City, and the Reduction was not due to our incompetency to carry out heat service operation; and (v) since we own the heat service facilities in the Subject Area, we have been negotiating with the Taiyuan Administration in respect of the transfer of these facilities, nonetheless, no agreement had yet been entered into as at the Latest Practicable Date. Our PRC Legal Advisers have advised that the Reduction did not affect the enforceability and the validity of the remaining scope of the Taiyuan Concession Agreement, and that the Taiyuan Concession Agreement will not be terminated before its expiration due to such Reduction. As further advised by our PRC Legal Advisers, the Taiyuan Administration is the relevant competent authority which supervises all heat service operation in Taiyuan City and the officer being interviewed had the appropriate authority to provide the above confirmations.

Operation of Lanzhou New Area Project

During the one-year effective period of the Interim Measures for the Administration of Urban Heat Services and Use in Lanzhou New Area (《蘭州新區城市供熱用熱管理暫行辦法》) (“**Lanzhou Interim Measures**”) implemented on 1 August 2018, we operated the Lanzhou New Area Project without a heat service operation licence as the Lanzhou Bureau did not have any established system granting heat service operation licenses for the provision of heat services. Nevertheless, since the implementation of the Administrative Measures for Urban Heat Services and Use in Lanzhou New Area (《蘭州新區城市供熱用熱管理辦法》) (the “**Lanzhou Administrative Measures**”) on 1 January 2022, heat service enterprises can conduct heat service operations with either a heat service operation licence or under a concession right. As advised by our PRC Legal Advisers, since we entered into a concession agreement in relation to our operation of Lanzhou New Area Project, we were therefore no longer required to obtain a heat service operation licence, and were in compliance with the Lanzhou Administrative Measures in all material aspects as at the Latest Practicable Date. Our PRC Legal Advisers further advised that the Lanzhou New Area Concession Agreement remains to be legally binding and will not be terminated before its expiration despite our historical lack of heat service operation license during the effective period of the Lanzhou Interim Measures.

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The grant of the concession rights for our Lanzhou New Area Project and the Hulunbuir Project without market competition mechanisms

All of our concession operations are subject to the *Measures for the Administration on the Concession of Municipal Public Utilities* (《市政公用事業特許經營管理辦法》), which was first promulgated on 19 March 2004 and implemented on 1 May 2004 (the “**2004 Concession Measures**”). The 2004 Concession Measures provide that the government concession grantors would select investors or operators of local public utility projects through market competitive mechanisms. For our Lanzhou New Area Project and Hulunbuir Project, the relevant government concession grantors initially granted us concession rights even though these grantors did not implement any market competitive mechanisms. The government concession grantors in relation to our Lanzhou New Area Project and Hulunbuir Project subsequently hosted the requisite public tendering with all necessary procedures as stipulated in the 2004 Concession Measures to ensure that the requirement under the 2004 Concession Measures is satisfied. Our PRC Legal Advisers advised that (i) the grant of the concession rights for our Lanzhou New Area Project and the Hulunbuir Project without market competitive mechanisms did not affect the enforceability and the validity of the relevant Concession Agreements as the public tenderings were subsequently held and the enforceability and the validity of the relevant Concession Agreements had been confirmed by the respective competent authority which regulates the local heat services industry; (ii) the Lanzhou New Area Concession Agreement and Hulunbuir Concession Agreement are legally binding and will not be terminated before its expiration despite the absence of market competitive mechanisms; and (iii) the 2004 Concession Measures provided no penalty clause on the grantees for obtaining concessions from the relevant government concession grantors without going through market competitive mechanisms.

Our heat service operation in the VE Park Area (as defined below)

In August 2017, to ensure the continuous provision of heat services to Lanzhou New Area Vocational Education Park* (蘭州新區職業教育園區) (the “**VE Park Area**”), Lanzhou Bureau (being the competent authority to regulate the heat services industry in general, and our heat service operation in Lanzhou New Area District of Gansu Province) requested us to provide our heat services to VE Park Area which did not fall within the scope of our concession rights in respect of the Lanzhou New Area Project. The actual heat service area under this arrangement was approximately 580,000 sq.m. as at 22 June 2018. In April 2020, the Lanzhou Bureau requested us to cease our provision of heat services in the VE Park Area. For each of the years ended 31 December 2018, 2019 and 2020, revenue generated from our heat services business in the VE Park Area was approximately RMB49.6 million, RMB61.5 million and RMB39.8 million, respectively. Since the cessation of our heat services business in the VE Park Area, we have not recorded any relevant revenue therefrom.

In an interview with Lanzhou Bureau, it was confirmed that (i) our heat service operation in the VE Park Area was conducted upon their request in order to ensure the continuous provision of heat services to the VE Park Area at that time; (ii) no concession right was ever officially granted to any party in respect of the heat service operation in the VE Park Area, and

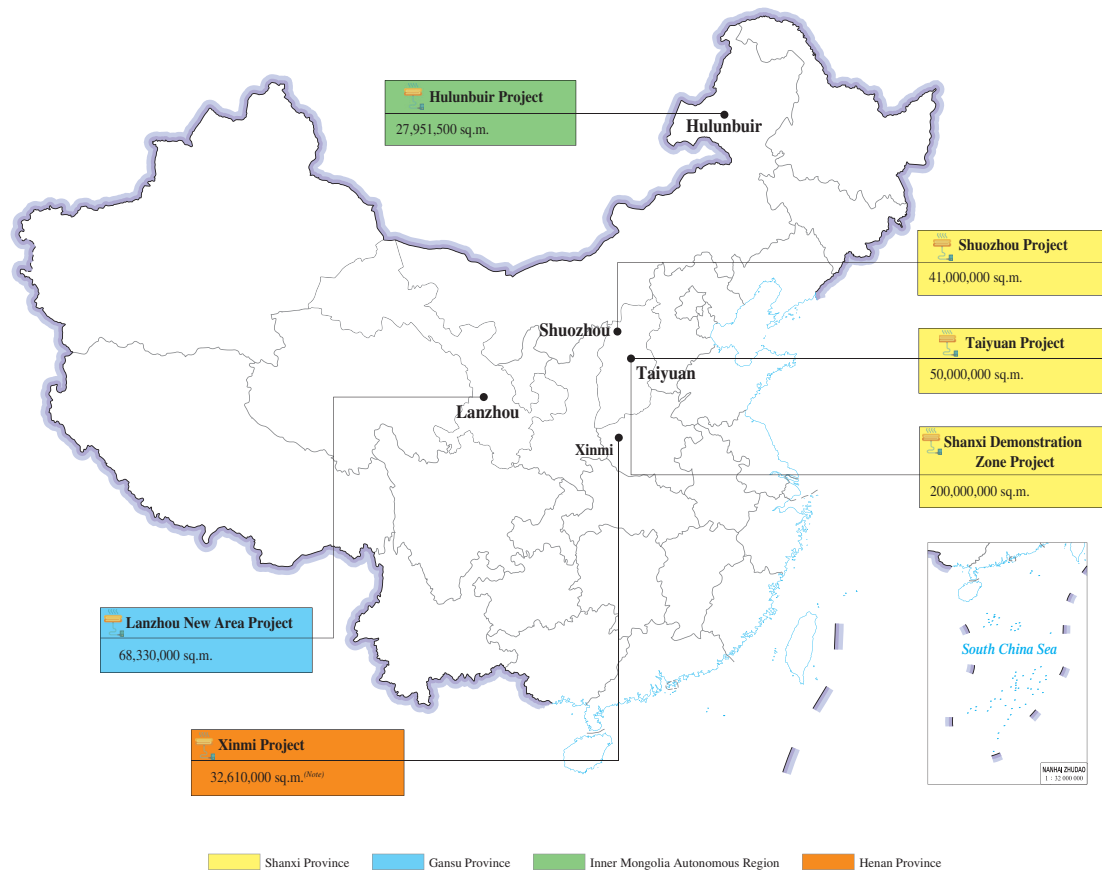
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our heat service operation in the VE Park Area did not infringe any other concession arrangements enforced during the relevant times; (iii) there was no objection to our heat service operation in the VE Park Area; (iv) the cessation of our heat service operation in the VE Park Area in April 2020 did not occur as a result of any breach of or non-compliance with the relevant laws and regulations by us; and (v) such operation did not require any concession right. As advised by our PRC Legal Advisers, Lanzhou Bureau is the relevant competent authority which supervises the heat service operation in Lanzhou New Area and the officer being interviewed was the competent person and had the appropriate authority to provide the above confirmations.

Our geographical presence

We possess the concession rights to provide our heat service in five cities in three provinces and one autonomous region in the PRC as at 31 December 2022 and up to the Latest Practicable Date. As at the Latest Practicable Date, our total Concession Area according to our Concession Agreements was approximately 419.9 million sq.m..

The map below illustrates the location of cities in which we had heat service projects under concessions and our respective Concession Area in such cities as at the Latest Practicable Date.



Note: We expect our provision of heat services in Xinmi of Henan Province to commence from the 2023/2024 heat service period in or around November 2023.

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Our existing concession rights predominantly cover the “Three North” region. As evinced by our track record of successfully tapping into the heat service market in other parts of northern China with our existing cross-provincial operation, we believe that we are well-positioned and sufficiently equipped to secure new concession agreements.

To enhance opportunities in securing new concession agreements, we are committed to keeping abreast of the latest developments of the heat service industry. We will also solidify our business presence by continually participating in negotiation and tender processes initiated by local governments should we consider such potential business opportunities feasible. Meanwhile, we are devoted to enhancing our heat service capacity by virtue of analysis, research and optimise our operational efficiency and customers’ recognition. As such, we are able to collect and analyse industry information in order to enter into different regions to secure potential new concession agreements and/or projects. Leveraging the extensive experience in strategic advisory and planning of our Directors and senior management team, including their long-term service in public offices in the PRC, we believe we possess the insight, vision and in-depth knowledge required to stay ahead with the latest local and national policies which can help effectively execute our growth strategy. In particular, Mr. Miao Wenbin (繆文彬先生), one of our non-executive Directors, who is primarily responsible for participating in strategic planning and advising on decision making of our Group, has served and is currently serving in several public offices including as council member of the APEC China Business Council (亞太經合組織(APEC)中國工商理事會), representative of Fifth Meeting of the 13th National People’s Congress of Jiangsu Province* (江蘇省第十三屆人民代表大會第五次會議) as held in January 2022 and co-chairman of Jiangsu Sushang Development Promotion Association* (江蘇省蘇商發展促進會). For further details of our Directors’ qualifications and experience, see “Directors, supervisors and senior management” in this document.

Seasonality

Our provision of heat services is affected by seasonality. The following table sets out the duration of heat service periods prescribed in the respective notices issued by the relevant local authorities for our heat service projects under concession rights for the 2021/2022 heat service period.

<u>City⁽²⁾</u>	<u>Relevant heat service project</u>	<u>Commencement date of the heat service period⁽¹⁾</u>	<u>End date (in the following year) of the heat service period⁽¹⁾</u>
Shanxi Province			
Taiyuan	Taiyuan Project and Shanxi Demonstration Zone Project	1 November 2021	31 March 2022
Shuozhou	Shuozhou Project	6 October 2021	20 April 2022

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City⁽²⁾	Relevant heat service project	Commencement date of the heat service period⁽¹⁾	End date (in the following year) of the heat service period⁽¹⁾
Gansu Province			
Lanzhou	Lanzhou New Area Project	10 October 2021	10 April 2022
Inner Mongolia Autonomous Region			
Hulunbuir	Hulunbuir Project	20 September 2021	10 May 2022

Notes:

- (1) The heat service period for each project is subject to adjustments with respect to the measures issued by the relevant local authorities responsible for the administration of heat services, taking into account various factors such as average temperature and overall weather conditions. For details, see “Risk factors – Risks relating to our business and industry – Our heat service operation is affected by seasonality” in this document.
- (2) We entered into the Xinmi Concession Agreement with the People’s Government of Xinmi City (新密市人民政府) in December 2021 and we expect that our provision of heat services in Xinmi will commence from the 2023/2024 heat service period in or around November 2023.

Key stages of our heat service operation under concession

The chart below sets out the key stages of our heat service operation under concession. These key stages include (i) preparation; (ii) feasibility study; (iii) grant of concession right; (iv) design, procurement and construction; (v) operation and maintenance; and (vi) transfer. The details of each key stage of our heat service operation under concession are elaborated below.



Preparation

We regularly conduct market surveys and regularly monitor and analyse relevant government announcements to identify locations where we can set up a heat service business. As securing heat sources is a prerequisite for any provision of heat services, we need to analyse the availability of heat sources in a particular location during this preparation stage, which, generally speaking, takes more than one month based on the experience of our Directors. We conduct extensive research and market surveys to identify suitable heat sources so that we can try to secure them as early as practicable.

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Feasibility study

Heat service projects under concessions are capital intensive and require significant upfront funding. Prior to committing to any potential heat service projects, we would conduct feasibility studies which, generally speaking, takes more than three months. These feasibility studies cover practical and commercial factors including, amongst others, (i) local heat service planning, policy, regulation and practice; (ii) the size of projected heat service areas and associated potential growth rate; (iii) types and extent of potential heat service customers; (iv) availability of heat sources and their production capacity; (v) expected timeframe and costs of construction; and (vi) expected investment payback period.

Grant of the concession right

We generally need to go through the procedures prescribed by the relevant local authorities and existing laws, regulations and local policies before we are granted the concession right. Each of the concession rights that we obtained in the past was through either competitive negotiation or competitive tender processes. We would sign the Concession Agreement with the concession grantor, which is the relevant local authority, in cases where we successfully obtained the concession rights. Generally speaking, it takes approximately one to two months for the concession grantor and us to go through these procedures subject to negotiation and communication between us and the grantor based on the experience of our Directors.

Design, procurement and construction

We usually engage experienced and qualified external design consultants and/or institutes for the design of our larger scale heat service projects to ensure that they are customised and satisfy our requirements and specifications. We also have in-house design capabilities for small and medium-sized heat service projects. Our design proposals usually include, amongst others, the following components: (i) project blueprints; (ii) conceptual designs for the prescribed technology and equipment; (iii) construction installation plans; and (iv) materials required for construction.

Upon obtaining the construction planning permit from relevant authorities, we would begin procuring equipment, instruments and all necessary parts needed for construction and commence operation of the heat service facilities.

Construction usually takes between three to six months, subject to, amongst other things, the actual scale of each construction. Unless otherwise agreed, we are usually responsible for the overall management of such construction. We would engage qualified external contractors for carrying out the construction. The qualified external contractors engaged by us would be responsible for constructing the facilities as well as installing and testing the relevant equipment, instruments and systems. We would only play a supervisory role, which we believe that it would allow us to better manage our construction costs. Upon completion of construction, we run pre-operation tests to ensure that the newly-constructed facilities meet certain quality standards and specifications which satisfy all relevant PRC laws and regulations.

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Operation and maintenance

Upon satisfactory checking and acceptance of our heat service facilities by the relevant authorities, we commence operation of our heat service projects in accordance with the terms of the relevant Concession Agreements. The concession period is between 25 and 30 years commencing on the effective date of each of our relevant Concession Agreements. We are also responsible for the maintenance of the relevant heat service facilities. For more information, see “Machinery, maintenance and repair” in this section.

Transfer

Generally speaking, all assets (including but not limited to primary distribution pipelines, equipment, heat service facilities and machinery) in relation to the heat service projects constructed by us are owned by us during the term of the concession. All heat service related assets in use (and, in some cases, under construction) will be transferred to the concession grantors (or in some cases, parties designated by the concession grantors) upon the expiry of the relevant concession term. The compensation payable (if any) by the concession grantors or parties designated by the concession grantors to us for such transfer of assets will be determined pursuant to the relevant terms thereunder. The entire transfer process may take approximately 12 months to be completed under the Concession Agreement.

Our Concession Agreements

As at the Latest Practicable Date, we had entered into six Concession Agreements in total. The details of the relevant heat service projects, the contracting parties, concession period, estimated Concession Boundary Area and Concession Area in respect of each of these agreements are as follows:

Concession No.	Concession Agreement	Heat service project	Concession grantor	Concession grantee	Concession period	Concession Boundary Area (sq.m.)	Concession Area (sq.m.)
1	Taiyuan Concession Agreement	Taiyuan Project	Taiyuan City Bureau of Municipal Affairs Administration* (太原市城鄉管理局) (formerly known as Taiyuan City Urban-Rural Management Committee* (太原市城鄉管理委員會)	Taiyuan Renewable Energy	21 November 2012 – 20 November 2037	27,000,000	50,000,000

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Concession No.	Concession Agreement	Heat service project	Concession grantor	Concession grantee	Concession period	Concession Boundary Area (sq.m.)	Concession Area (sq.m.)
2	Shanxi Demonstration Zone Concession Agreement	Shanxi Demonstration Zone Project	Management Committee of Shanxi Transformation and Comprehensive Reform Demonstration Zone* (山西轉型綜合改革示範區管理委員會)	Shanxi Demonstration Zone Heat Supply	18 September 2018 – 18 September 2048	213,040,000	200,000,000
3	Shuozhou Concession Agreement	Shuozhou Project	Shuozhou City Housing Urban-Rural Construction Administration Bureau* (朔州市住房保障和城鄉建設管理局)	Shanxi Shuangliang Renewable Energy	18 January 2012 – 18 January 2042	148,000,000	41,000,000
4	Lanzhou New Area Concession Agreement	Lanzhou New Area Project	Management Committee of Lanzhou New District of Gansu Province* (甘肅省蘭州新區管理委員會)	Lanzhou Shuangliang	29 June 2013 – 30 June 2043	1,313,000,000	68,330,000
5	Hulunbuir Concession Agreement	Hulunbuir Project	Hulunbuir City of Inner Mongolia Autonomous Region Housing Urban-Rural Construction Bureau* (內蒙古自治區呼倫貝爾市住房和城鄉建設局)	Hulunbuir Shuangliang	20 September 2013 – 19 September 2043	36,480,000	27,951,500
6	Xinmi Concession Agreement	Xinmi Project	The People's Governance of Xinmi City* (新密市人民政府).	Tech-Thermal (Zhengzhou)	7 December 2021 – 6 December 2051	472,414,000	32,610,000

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The key terms that are generally found in our Concession Agreements are summarised below.

Concession rights ^(Note)	We are entitled to exclusively invest, construct, operate, manage and maintain heat service facilities, provide heat services to customers and charge heat fees in the Concession Area within the agreed concession period and in the relevant Concession Area. Each of our concession grantors has undertaken that its granted concession right will not be unreasonably withdrawn or restricted, nor will it grant a new concession right to any third party to operate any heat services business within the Concession Area within our concession period.
Concession period	The concession period is between 25 and 30 years commencing on the effective date of each of our relevant Concession Agreements.
Management, repair and maintenance	During the concession period, we are responsible for managing, repairing and maintaining the heat service facilities owned by us. Under some of our Concession Agreements, we are entitled to charge reasonable fees for the repair of heat service facilities in the properties to which we provide heat services, provided that such repair is due to the reasons of the user of the heat.
Heat service safety	We are required to strictly comply with the relevant PRC laws and regulations on heat service safety and ensure that our heat service operation, services and facilities meet all national, provincial, municipal, and industrial safety standards. Our concession grantors may supervise or inspect our operations to ensure heat service safety. Furthermore, we may be required to develop and maintain safety management policies and establish a comprehensive emergency response mechanism in case of accidents and emergencies. We may also need to submit the assessment report in respect of the situation of facilities' operation to the government authority for record.

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Ownership	All assets constructed by us within the Concession Area are owned by us during the concession period. For more information, see "Heat distribution – Our heat service facilities" in this section.
Transfer of assets	All heat service-related assets in use (and, in some cases, under construction by us) shall be transferred to the concession grantors (or, in some cases, parties designated by the concession grantors) upon expiry of the term of the Concession Agreements. The compensation payable to us for such transfer of assets (if any) usually depends on the terms of the specific Concession Agreements. Under some of our Concession Agreements, we shall restore these assets to specified conditions before all heat service facilities are handed over to the transferees at the end of the concession periods.
Pricing	The heat rates which we charge to our heat service users shall follow the benchmark heat rate determined and approved by the local pricing authorities. Under some of our Concession Agreements, further adjustments to our heat rates shall be subject to the review of the local pricing authority.
Termination	The Concession Agreements shall terminate upon the expiration of the concession period or by the mutual agreement of the parties thereto prior to the expiry of the concession period.
Renewal	Upon the expiry of the Concession Agreement, the concession grantor has the right to select a new concession grantee in accordance with the applicable laws and regulations. If we perform well during the concession period, we shall have priority in re-obtaining the concession under the same conditions.

Note: Under the terms of the Shanxi Demonstration Zone Concession Agreement, we are allowed to utilise various clean energy and renewable energy sources, including but not limited to geothermal heat. In addition to the fees for supplying heat, we are also entitled to receive fees for off-site heat source construction, grants and subsidies for contracted energy management projects and income from CCER projects.

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Given our track record, we can demonstrate to our concession grantors that we were capable of offering stable and reliable heat services to heat service customers. We also can demonstrate that we (i) have stable and reliable heating resources; (ii) possess experience in the provision of heat services; (iii) have professional staff with heat service qualifications; and (iv) possess adequate technological capabilities. We believe we would not need to renew the Concession Agreements in the near future, as the concession periods of our Concession Agreements provide certainty of the sustainability of our business operation. Among the six Concession Agreements we had entered into as at the Latest Practicable Date, the earliest one to expire is our Taiyuan Concession Agreement, which will expire in November 2037, and the Concession Agreement with the latest expiration date of concession period is the Xinmi Concession Agreement, which will expire in December 2051. Further, we generally have the right of first refusal to be granted under our Concession Agreements, which enhance our opportunities in renewing our existing concession rights. We believe that these capabilities allow us to successfully extend and/or renew our existing concession agreements prior to the expiry of the relevant concession terms.

HEAT SOURCES

We have access to different heat sources and can provide stable and reliable heat services to our heat service customers. During the Track Record Period and up to the Latest Practicable Date, our heat sources included (i) heat procured from cogeneration plants, (ii) heat produced by our coal-fired boilers, (iii) residual heat collected at plants; and (iv) geothermal heat.

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The table below sets out the total amount of heat procured, produced, collected and extracted by our Group and the amount of the revenue and gross profit margin from provision and distribution of heat, price subsidies from local government and heat transmission services from each of the four heat sources during the Track Record Period.

	For the year ended 31 December											
	2020				2021				2022			
	Amount of heat	Revenue	% of Revenue	Gross profit/(loss) margin	Amount of heat	Revenue	% of Revenue	Gross profit/(loss) margin	Amount of heat	Revenue	% of Revenue	Gross profit/(loss) margin
	<i>GJ'000</i>	<i>RMB'000</i>			<i>GJ'000</i>	<i>RMB'000</i>			<i>GJ'000</i>	<i>RMB'000</i>		
Heat source procured from third party suppliers												
Heat procured from third-party cogeneration plants	18,641	650,825	70.3%	8.5%	18,239	719,520	73.8%	17.8%	19,155	730,864	71.6%	11.8%
Heat sources self-produced by our Group												
Heat produced by coal-fired boilers	2,288	167,081	18.1%	20.8%	2,058	151,606	15.5%	(0.8)%	2,097	185,303	18.2%	(0.04)%
Residual heat collected at cogeneration plants	3,377	95,204	10.3%	91.7%	2,794	89,754	9.2%	91.0%	2,746	82,226	8.1%	92.2%
Geothermal heat extracted from underground water	134	11,699	1.3%	(37.4)%	194	14,595	1.5%	(43.2)%	178	22,347	2.1%	(13.0)%
Total	24,440	924,809	100.0%	18.7%	23,285	975,475	100.0%	20.8%	24,176	1,020,740	100.0%	15.6%

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We use different heat sources for each of our heat service projects depending on a number of different factors, including local conditions, the sustainability of the project itself and financial considerations such as profitability of our Group. The selection and adoption of the most appropriate heat source to each of our heat service project primarily depends on local conditions of heat services in different locations. According to The Measures of National Energy Administration for Adopting Renewable Energy According to Local Conditions for Heat Services (《國家能源局關於因地制宜做好可再生能源供暖相關工作的通知》), heat service operators should take into consideration the local conditions when selecting heat sources and providing heat services. These local conditions include, amongst others, government initiatives and policies, division of natural and power resources in each province and city, and the proximity of heat service operators to heat sources. Our considerations include our relationship with local cogeneration plants, our access to coal suppliers, the feasibility of extracting geothermal heat and recycling residual heat with respect to selecting the most suitable heat source for each of our heat service projects. Although we take a holistic approach in the process of selecting and adopting the most appropriate heat source to each of our heat service project, sustainability is our primary concern as we are required to ensure stability of heat service according to our Concession Agreements. Therefore, we only adopt a heat source for a heat service project when we are certain that we have stable access to it and such heat source is the safest and most affordable one in the location in which we operate our heat service project. Before entering into our Concession Agreements, our feasibility studies generally allow us to ascertain that our operation of a heat service project adopting a particular heat source is profitable.

Despite the PRC Government’s efforts to reduce pollutants from energy consumption nationwide, haze pollution in northern China is still an ongoing environmental issue. The PRC Government generally promotes the use of diversified and clean heat sources in the heat services business. In 2020, China announced its plan of achieving carbon peaking by 2030 and achieving carbon neutrality by 2060. In line with the implementation of carbon peaking and carbon neutrality objectives, the PRC Government encourages municipal governments to develop different ways of clean heating according to local conditions and accelerates the replacement of small-scale coal-fired boilers which have higher carbon emission for large-scale coal-fired boilers generating heat using cleaner energy. This promotes the transition from high carbon emission coal-fired heat generation to low-carbon emission heat generation, and to develop renewable energy sources such as geothermal, industrial waste heat and solar thermal energy. During the Track Record Period and up to the Latest Practicable Date, we relied on four types of heat sources for all of our heat service projects under concession rights. The coal-fired boilers which we use for our Lanzhou New Area Project reach an “extremely low emission standard” (超低排放標準) accredited by the Lanzhou New Area Ecology and Environment Bureau* (蘭州新區生態環境局), which follows the national emission requirements in accordance with the Technical Specifications for Flue Gas Extremely-low Emission Engineering of Coal-fired Power Plant (Standard: HJ 2053-2018) (燃煤電廠超低排放煙氣治理工程技術規範(標準號:HJ 2053-2018)) (the “**Technical Specifications**”). In accordance with the Technical Specifications, under the same condition that the standard reference oxygen volume (基準氧含量) is set as 6.0%, emission can be classified as “extremely low emission” (超低排放) if the emission mass concentration of each of particular matter, SO₂

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and NOx is lower than 10 mg/m³, 35 mg/m³ and 50 mg/m³, respectively (the “**Emission Limit**”). The Lanzhou New Area Ecology and Environment Bureau* (蘭州新區生態環境局) has measured and announced that the emission of all of our coal-fired boilers are within the Emission Limit. In terms of the measurement, the Lanzhou New Area Ecology and Environmental Bureau* (蘭州新區生態環境局) conducted a series of on-site environmental supervision inspection (環保監督性檢測) on the operation of our coal-fired boilers and instructed Independent Third Party technicians to measure the emissions in accordance with the Technical Specifications. A preliminary opinion had been issued certifying that the actual emission mass concentration of each of particular matter, SO₂ and NOx of our coal-fired boilers was within the Emission Limit. Based on such opinion, we also obtained a qualified inspection opinion from the environmental specialists of the Lanzhou New Area Ecology and Environmental Bureau* (蘭州新區生態環境局), which certified that the coal-fired boilers which we use for our Lanzhou New Area Project are environmentally friendly and energy efficient. According to the Frost & Sullivan Report, our Group’s performance in achieving the Emission Limit set out under the Technical Specifications reaches the standard achieved by other major leading players of the heat services industry.

Heat procured from cogeneration plants

During the Track Record Period and up to the Latest Practicable Date, there were cogeneration plants connected to our primary distribution pipelines at Taiyuan Project, Shuzhou Project and Hulunbuir Project. The table below sets out the identities and their respective owners, principal business activities and scale of operations of each of our cogeneration plants from which we procured heat during the Track Record Period.

No.	Name of cogeneration plant	Owner	Identity of owner	Relationship with us	Principal business activities	Scale of operation
1	Shuzhou Project Cogeneration Plant #1 (朔州項目熱電廠#1)	Shuzhou Thermal Power Branch of Huadian International Power Co., Ltd.* (華電國際電力股份有限公司朔州熱電分公司)	Owned as to 46.81% by China Huadian Group Company Limited* (中國華電集團有限公司) through Huadian International Electric Joint Stock Company* (華電國際電力股份有限公司)	Independent Third Party	Electricity generation	Headquartered in Shanxi Province with provincial operation and approximately 400 staff

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No.	Name of cogeneration plant	Owner	Identity of owner	Relationship with us	Principal business activities	Scale of operation
2	Shuozhou Project Cogeneration Plant #2 (朔州項目熱電廠#2)	State Energy Group Shanxi Shentou No. 2 Power Plant Co., Ltd.* ("Shanxi Shentou") (國家能源集團山西神頭第二發電廠有限公司)	Wholly owned by State Energy Group Shanxi Electric Power Company Limited* (國家能源集團山西電力有限公司)	Independent Third Party	Electricity generation	Headquartered in Shanxi Province with provincial operation and more than 1,000 staff
3	Shuozhou Project Cogeneration Plant #3 (朔州項目熱電廠#3)	Jinneng Holding Power Group Shuozhou Thermal Power Group Co., Ltd.* (晉能控股電力集團朔州熱電有限公司)	Owned as to approximately 64.05% by Jinneng Holding Group Company Limited* (晉能控股集團有限公司), a SOE primarily engaged in sales of coal and mineral extraction business	Independent Third Party	Sales of coal and electricity generation	Headquartered in Shanxi Province with provincial operation and more than 400 staff
4	Shuozhou Project Cogeneration Plant #4 (朔州項目熱電廠#4)	Shanxi Datang International Shentou Power Generation Co., Ltd.* ("Shanxi Datang") (山西大唐國際神頭發電有限責任公司)	Owned as to 60% by Datang International Power Generation Co., Ltd., a company listed in the Hong Kong Stock Exchange (stock code: 991)	Independent Third Party	Electric power production	Headquartered in Shanxi Province with provincial operation and more than 200 staff
5	Taiyuan Project Cogeneration Plant* (太原項目熱電廠)	N/A ^(Note)	N/A ^(Note)	N/A ^(Note)	N/A ^(Note)	N/A ^(Note)

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No.	Name of cogeneration plant	Owner	Identity of owner	Relationship with us	Principal business activities	Scale of operation
6	Hulunbuir Project Cogeneration Plant/Guohua Plant* (呼倫貝爾項目熱電廠/國華電廠)	Hulunbuir City Construction Investment (Group) Co., Ltd.* (呼倫貝爾城市建設投資(集團)有限責任公司)	Owned as to 51% by National Power Investment Group Company Limited* (國家能源投資集團有限責任公司)	Independent Third Party	Wind and Electric Power production	Based in Hulunbuir of Inner Mongolia Autonomous Region and operating under the supervision of government administration bureau

Note: During the Track Record Period, we procured heat from Taiyuan Project Cogeneration Plant via a heat supply company in Taiyuan City, which is an Independent Third Party.

According to the Frost & Sullivan Report, power and heat cogeneration is the most commonly used method of heat production in the heat service industry in the PRC.

We maintain a good relationship with the cogeneration plants which supply to us to ensure that we get a stable and continuous supply of heat from them. We typically enter into heat procurement agreements with them for each heat supply period. The key terms that are generally found in our heat procurement agreements are set out below:

Purpose of heat usage	The procured heat can be used for industrial, residential and commercial heating purposes.
Heat supply period	The heat supply period begins in September of each year and ends in May of the following year. The heat supply period for each project is subject to adjustment with respect to the measures issued by the relevant local authority for the administration of heat supply and use.
Distribution coverage	The heat procurement agreement specifies the districts in which we provide heat services to our heat service customers.

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Ownership, right of use, maintenance and management of heating facilities	The operator of the cogeneration plant is usually responsible for the repair and management of the heating facilities. The heat procurement agreement usually specifies the boundary demarcating the extent of the cogeneration plants. We own the primary distribution pipelines extending from the boundary point. We are responsible for their maintenance and management.
Heat supply specifications	To ensure the quality and safety of our heat services, the heat procurement agreement stipulates certain specifications such as hot water flowing volume, gateway pressure, hot water discharge and return temperature and water loss rate.
Heat measurement	The cogeneration plant operators are responsible for the installation of measurement equipment for the purpose of monitoring the heat services' specifications. The measurement records mutually agreed upon form bases for clearing and settlements of heat supply. Both the cogeneration plants operators and us are required to keep heat measurement records. Any disputes with respect to the measurement records should be resolved by way of mutual negotiation.
Pricing, billing and payment	The heat procurement prices are subject to regulatory control. These prices usually consist of basic heat rates in term of GJ and fees charged for water loss. We are usually required to make prepayments either 10 days before the commencement of heat supply or 10 working days after the signing of the heat procurement agreements. The fees accrued in the previous month need to be fully settled in the following month. Both parties are required to confirm the actual monthly heat supply amount.

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Obligation and rights of cogeneration plant operators	The cogeneration plant operators are required to notify us: (i) if they are unable to meet our heat demands; (ii) if there is any maintenance and repair by the local authorities which would impact supply; and (iii) if there is any occurrence of events which might result in heat supply suspension. Upon the receipt of these notifications, we would try to come up with a contingency plan as soon as practicable including initiating our back-up heat sources to avoid heat shortage.
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Penalty	The local cogeneration plant operators may limit or suspend heat supply if we are unable to settle overdue payments. There are interest penalties on overdue payments.
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Taiyuan Renewable Energy has provided engineering construction services, involving the installation of condensing heat-recycling technology and recovery of waste heat into electricity system for two cogeneration plants in Shentou Second Power Station being Shanxi Datang and Shanxi Shentou. The salient terms of the arrangements between Taiyuan Renewable Energy and each of Shanxi Datang and Shanxi Shentou are as follows:

Pricing, being the government regulated procurement cost	RMB27.5/GJ (including tax) (from February 2012 to September 2016), RMB24.5/GJ (including tax) since September 2016
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Settlement price	RMB24.25/GJ (including tax) (from February 2012 to September 2016), RMB21.6/GJ (including tax) since September 2016
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Duration	A heat procurement agreement is entered into for each heat service period annually. The duration of heat procurement agreements generally aligns with the heat service period of the Shuozhou Project, which shall follow the heat service period prescribed by the measures adopted by the local authority for the administration of heat services and use.
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Settlement	<p>Taiyuan Renewable Energy is required to make a RMB5 million prepayment of heat procurement fee 10 days prior to the commencement of the heat service period for the third party suppliers to prepare for coal stock and production of heat before heat service period commences.</p> <p>Taiyuan Renewable Energy is required to settle the procurement amount of the previous month within 10 days since the start of the current month. It also needs to make prepayment for the current month based on 60% of the procurement amount of the previous month.</p>
Renewal	<p>There is no renewal clause in the heat procurement agreement entered into between Taiyuan Renewable Energy and the third party suppliers.</p>
Termination	<p>In the event that Taiyuan Renewable Energy does not settle the procurement cost within 10 days since the start of the month, the third party heat supplier is entitled to serve a cessation notice to Taiyuan Renewable Energy. After five days of the cessation notice, the third party heat supplier can cease the heat supply and terminate the agreement.</p> <p>Taiyuan Renewable Energy shall not transfer any or part of its contractual obligations to other third party. Shall such occurs, the third party heat supplier remains the rights to terminate the agreement and to seek damages for breach of contract.</p>

According to the approval letters issued by Shanxi Provincial Reform and Development Commission (山西省發展和改革委員會) to Shanxi Datang and Shanxi Shentou in April 2016 effective from the date of issuance, the price of heat of Shanxi Datang and Shanxi Shentou shall be within RMB27.5/GJ, being the then government regulated procurement price, which shall be mutually agreed between both parties after commercial negotiation. During the Track Record Period, the settlement price of heat was mutually agreed at RMB21.6/GJ, and such pricing arrangement complied with the aforementioned approval letters. Based on confirmations from Shanxi Datang and Shanxi Shentou, it was confirmed that they have respectively reported to and obtained approval from competent pricing authorities with respect to the pricing arrangement and both Shanxi Datang and Shanxi Shentou consistently complied with the policy on government regulated procurement pricing, and have not been required or ordered to rectify or penalised by relevant government authorities in respect of such pricing arrangement. Based on the above, as advised by our PRC Legal Advisers, the pricing arrangement between Taiyuan Renewable Energy and the third party heat suppliers was in full compliance with the applicable PRC laws and regulations.

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None of our current heat procurement agreements prescribe any procurement quota or minimum heat procurement amount. We consider that all heat procured by us is fully utilised and consumed once it has been distributed to the users' units, properties and premises to which we provide heat services through our distribution pipelines. For the total amount of heat procured by our Group and the relevant financial information of our heat sources during the Track Record Period, see "Heat sources" above.

Heat procurement price is subject to regulatory control. The price determined and prescribed by the local government and pricing bureau is binding on us. For the years ended 31 December 2020, 2021 and 2022, the average heat procurement price (without VAT) was approximately RMB22.9/GJ, RMB23.7/GJ and RMB23.4/GJ. For the same periods, our heat procurement cost was approximately RMB369.3 million, RMB368.2 million and RMB398.9 million, representing approximately 34.0%, 37.7% and 34.8% of our total cost of sales for the same years, respectively.

Each of the cogeneration plants from which we procure heat is equipped with multiple power generators. Each of these generators can provide back up in case of any heat service disruption or in the event of technical irregularities and/or emergencies of any other generators. These cogeneration plants form an integrated heat service system which is crucial to our continuous heat service. During the Track Record Period and up to the Latest Practicable Date, we did not experience any major heat service suspension due to the disruption caused by cogeneration plants.

Heat produced by our coal-fired boilers

We currently possess three coal-fired boilers which we use to produce heat for our Lanzhou New Area Project. The Ministry of Ecology and Environment of the PRC (中華人民共和國生態環境部) has prescribed certain mandatory standards, including dust, SO₂ and NO_x emission density, for the purpose of differentiating and accrediting coal-fired boilers from sub-standard coal-fired boilers. Lanzhou New Area Ecology and Environment Bureau* (蘭州新區生態環境局) has certified that all of our coal-fired boilers meet the extra-low emission standard (超低排放標準) and we comply with all relevant pollutant emission limits. Following the promulgation of the Plan for Winter Clean Heating in the Northern Region (2017-2021) (《北方地區冬季清潔取暖規劃(2017-2021)》), we do not use coal-fired boilers which do not meet the requisite standards to produce heat for our Lanzhou New Area Project.

Coal is the primary raw material used for heat production through our coal-fired boilers. For the years ended 31 December 2020, 2021 and 2022, the total amount of coal purchased by us was approximately 0.1 million tons, 0.1 million tons and 0.1 million tons. For the same years, total cost of procurement of coal consumed was approximately RMB60.8 million, RMB74.4 million and RMB109.4 million, representing approximately 5.6%, 7.6% and 9.5% of our total cost of sales, respectively. For the year ended 31 December 2021, our total cost of procurement of coal consumed increased by approximately RMB13.6 million as compared to the year ended 31 December 2020, representing an increase of approximately 22.4%. Such increase in total cost of procurement of coal consumed for our heat services was mainly

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attributable to the increase in the unit procurement price of coal during 2021, which was in line with the overall increase in price of coal in the PRC. According to the Frost & Sullivan Report, the price of coal in China experienced a notable increase in 2021 and 2022, where the Coal Price Index increased from 163 to 220 in 2021, and further increased to 241 in 2022, as affected by increased international coal price and insufficient domestic supply. During the Track Record Period, we procured coal from Independent Third Party coal suppliers based in the PRC. For the years ended 31 December 2020, 2021 and 2022, we contracted with two, seven and five coal suppliers, respectively. By maintaining a list of coal suppliers, we believe that we are able to procure coal from alternative coal suppliers when necessary and without any restriction. We did not enter into any long-term agreements or framework agreements with our coal suppliers during the Track Record Period.

Our procurement price is affected by fluctuations in the price of coal. We are required to follow the benchmark heat rate determined and approved by the local pricing authorities. In the case that our coal procurement costs increase (which is beyond our control) and the heat rate at which we charge our heat service users cannot be adequately adjusted (due to restrictive laws), we will not be able to transfer the increased coal procurement costs to our heat service customers in the Lanzhou New Area Project. For more information, see "Risk factors – Risks relating to our business and industry – Fluctuation in coal procurement cost may materially and adversely affect our profitability" in this document.

Residual heat collected at plants

During the Track Record Period and up to the Latest Practicable Date, we also used residual heat collected from a cogeneration plant and a coal-fired power plant as a heat source for our Shuozhou Project and our Lanzhou New Area Project, respectively. We apply absorption heat pump technologies in the collection of residual heat for both projects. Our residual heat collection and utilisation system, which mainly comprises lithium bromide absorption heat pumps (溴化鋰吸收式熱泵), is used to collect any residual heat which is released by steam turbines during the power generation process at the cogeneration plant or the coal-fired power plant. The collected heat is then transferred to circulating water through a steam-water heat exchanger for secondary heating in order to meet the prerequisite temperature requirement for the purpose of our heat services.

In addition, we have built an origin station with a set of collection devices and equipment (氣水換熱站/首站) for our Shuozhou Project. This station combines our absorption heat pump technologies with the readily available steam and condensation water supply found in the cogeneration plant for our Shuozhou Project. This approach demonstrated our ability to achieve energy efficiency and reduce regional emissions, qualifying the Shentou Second Power Station as a Power Top Plant in October 2013.

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The following table sets out the details of the residual heat collection process.

	For the year ended 31 December		
	2020	2021	2022
Total number of lithium bromide absorption heat pumps	6	6	6
– Type A	2	2	2
– Type B	2	2	2
– Type C	2	2	2
Respective capacity of lithium bromide absorption heat pumps			
– Type A (MW)	158	158	158
– Type B (MW)	75	75	75
– Type C (MW)	7.5	7.5	7.5
Maximum heat production amount (million GJ) ^(Note)			
– Type A	4.7	4.7	4.7
– Type B	2.2	2.2	2.2
– Type C	0.2	0.2	0.2
Actual heat service area covered (million sq.m.)	23.8	25.1	26.6

Note: The maximum heat production amount is calculated based on the number of heat pumps for each year multiplied by the respective capacity of each type of heat pumps multiplied by 24 x 60 x 60 working seconds per day multiplied by 173 working days for the years ended 31 December 2020, 2021 and 2022, respectively. The number of working days refers to the heat service period for each year for our Shuozhou Project, which is the longest heat service period among our Shuozhou Project and Lanzhou New Area Project where we used residual heat collected from a cogeneration plant and a coal-fired power plant as a heat source during the Track Record Period.

Geothermal heat

The use of geothermal heat has been prevalent in the heat service industry in the PRC in recent years. Geothermal heat is classified as a low-carbon (green) energy (綠色低碳能源) by the National Energy Administration* (國家能源局). In accordance with the Measures of National Energy Administration for Adopting Renewable Energy According to Local Conditions for Heat Services (《國家能源局關於因地制宜做好可再生能源供暖相關工作的通知》), the use of geothermal heat is encouraged as a heat source for the provision of heat services in response to the PRC Government’s mission to reduce carbon emission, and with a view to combating climate change.

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During the Track Record Period and up to the Latest Practicable Date, we utilised geothermal heat as a heat source at our Shanxi Demonstration Zone Project. The production of geothermal heat requires the use of two medium-deep geothermal wells, namely a production well (生產井) and a backfill well (回灌井). We used our own drilling technology to drill these wells. During the heat extraction process, submersible pumps (潛水泵) linked to the production well (生產井) transfer geothermal water to the ground energy station. Inside the ground energy station, the step utilisation system maximises the extraction of heat from the transferred geothermal water. The geothermal water is then returned to the refilling well (回灌井). The entire process is carried out within a closed-loop cycle system (閉環系統).

Our heat production department and research and development team will jointly explore other ways to broaden our heat sources by applying other renewable energy to our heat services projects.

For the years ended 31 December 2020, 2021 and 2022, fees from customers for our provision and distribution of heat in respect of Shanxi Demonstration Zone Project amounted to approximately RMB7.4 million, RMB9.9 million and RMB17.3 million, representing only 0.5%, 0.8% and 1.2% of our total revenue for the same years, respectively.

During the Track Record Period and up to the Latest Practicable Date, we failed to obtain the mining permit for extracting geothermal heat as required under the relevant laws and regulations. For further details, please see “Regulatory compliance – Non-compliance incidents – (3) Failure to obtain mining permit for extracting geothermal heat” in this section.

Peak-shaving boilers

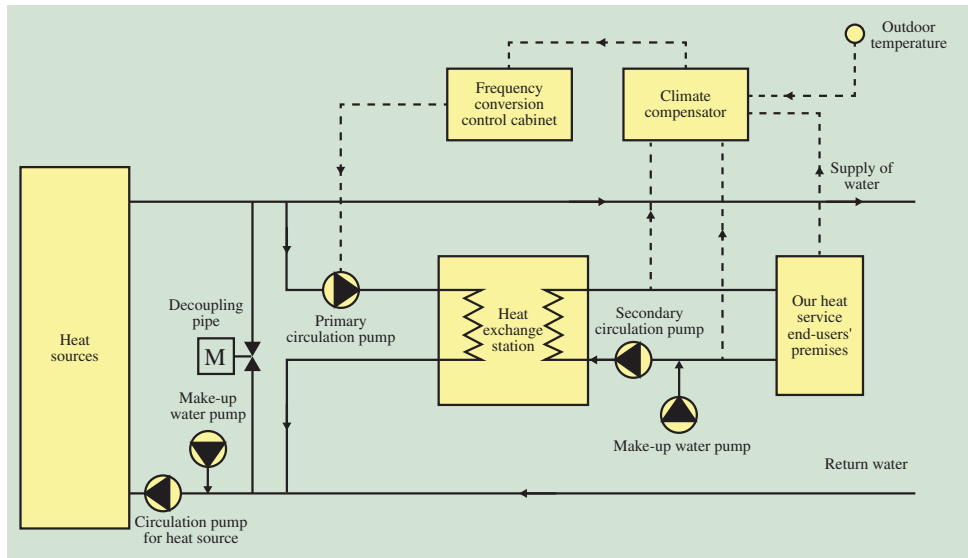
In order to ensure the reliability and continuation of our heat services during the heat service period, we maintain peak-shaving boilers of a sufficient quality as back-up heat sources in the event of heat supply shortage, unexpected incidents, sudden demand, suspension or disruption. The production capacity of each peak-shaving boiler meets the minimum requirement stipulated in the Measures for the Administration of Cogeneration (《熱電聯產管理辦法》). During the Track Record Period and up to the Latest Practicable Date, we did not experience any operational incidents which required the deployment of the peak-shaving boilers.

HEAT DISTRIBUTION

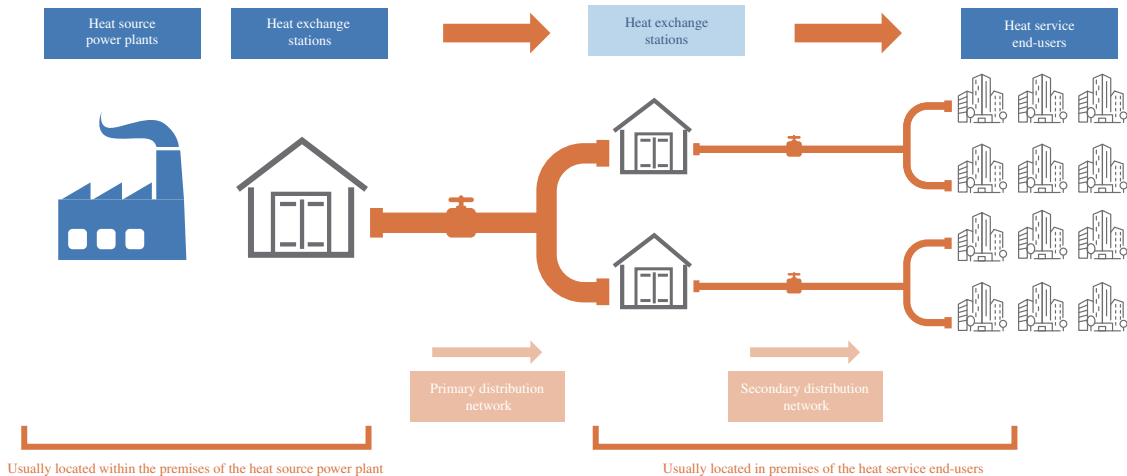
Our heat distribution network comprises two component networks, being the primary distribution network and the secondary distribution network. The primary distribution network facilitates heat transmission from our heat sources to the heat exchange stations (換熱站). We own the proprietary rights to primary distribution network constructed by us. The secondary distribution network is responsible for heat transmission from the heat exchange stations to the premises to which we provide heat services. We do not own the proprietary rights to the secondary distribution network, unless it is constructed by us. Nonetheless, we are required to maintain and manage the secondary distribution pipelines owned by our heat service customers

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according to the Concession Agreements and/or in response to the customers' requests to ensure the stability and quality of our heat services. Heat exchange stations connect our primary distribution networks to the secondary distribution networks which are installed on the premises of our heat service customers. Heated water of a high temperature flows through primary distribution pipelines from our heat sources to the heat exchange stations. Powered by heat exchangers (換熱器) installed in the heat exchange stations, the high-temperature water in the primary distribution pipelines cools off when heat is transmitted into the secondary distribution network and eventually reaches the premises to which we provide heat services. The water flowing in between the primary distribution network and secondary distribution network is recycled for cooling purposes. The diagram below sets out a flow chart of our heat distribution network:



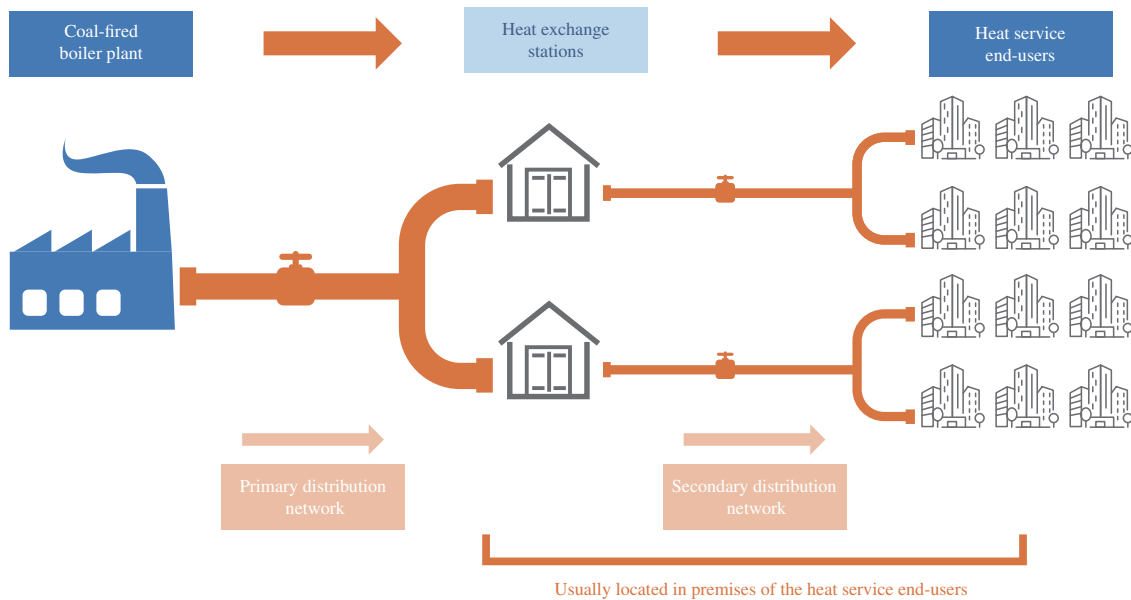
Heat procured at cogeneration plants and geothermal heat plant



Note: During the Track Record Period and up to the Latest Practicable Date, we used heat procured from our geothermal heat plant at our Shanxi Demonstration Zone Project and cogeneration plants at Taiyuan Project, Shuozhou Project and Hulunbuir Project. See “- heat sources” above for details regarding the use of heat sources for our heat service projects.

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Heat from coal-fired boilers



Note: During the Track Record Period and up to the Latest Practicable Date, we used coal-fired boilers to produce heat for the Lanzhou New Area Project. See “– heat sources” above for details regarding the use of heat sources for our heat service projects.

Our heat service facilities

We provide our heat services through our heat service facilities. We own our heat service facilities and are responsible for their maintenance. For our heat service operation, in the event that any of our Concession Agreements are terminated prior to or not renewed upon the expiry of their respective concession period, we are required to transfer our heat service facilities to the concession grantor or parties designated by the concession grantor.

Primary distribution pipelines



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As at the Latest Practicable Date, we owned and operated our primary distribution pipelines with an aggregate length of approximately 546.9 km. As safety is our priority, we regularly conduct safety inspections of our primary distribution pipelines to ensure that heat is safely transmitted to the heat exchange stations. Our primary distribution pipelines have an average useful life of approximately 30 years.

Heat exchange stations



Heat exchange stations are constructed for heat transmission from primary distribution networks to secondary distribution networks. These stations are equipped with heat exchangers, circulation pumps, make-up water pumps, valves, instruments, meters, strainers, water tanks, electric power distribution cabinets, control cabinets and water treatment equipment.

We have purchased insurance covering the heat exchange equipment and machinery at the heat exchange stations to mitigate the risks and consequences of damages, destruction and loss relating thereto. Under the Measures of City Yellow Line Management (《城市黃線管理辦法》) and the Standard for Urban Residential Area Planning and Design (《城市居住區規劃設計標準》), heat exchange equipment including heat exchange stations cannot be demolished or moved without proper authorisation. We believe that our equipment installed in the heat exchange stations are secured.

As at the Latest Practicable Date, we were using 465 heat exchange stations in Taiyuan and Shuozhou of Shanxi Province, Lanzhou of Gansu Province and Hulunbuir of Inner Mongolia Autonomous Region. It may be possible that there may be title defects relating to these heat exchange stations. For details, see “Properties – Heat exchange stations for our heat service operation” in this section.

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Heat service customers

During the Track Record Period and up to the Latest Practicable Date, our heat service customers included both residential and non-residential heat service customers. Our residential heat service customers were the residents of household units. Non-residential customers included property management companies, commercial operators, government institutions, educational institutions, airports, train stations and hospitals. The aforementioned property management companies paid heat service fees for our provision of heat services to the areas managed by them, usually occupied by residents.

During the Track Record Period, our provision of heat services to residential heat service customers accounted for the majority of our revenue from the provision and distribution of heat. For the years ended 31 December 2020, 2021 and 2022, revenue from our provision and distribution of heat was approximately RMB739.9 million, RMB778.4 million and RMB853.5 million, representing approximately 53.8%, 60.3% and 59.1% of our total revenue, respectively. As at 31 December 2020, 2021 and 2022, we had approximately 265,800, 282,400 and 303,900 heat service customers, respectively.

The following table sets out the number of our heat service customers and actual heat service area by residential and non-residential heat service customers as at the dates indicated.

	As at 31 December					
	2020		2021		2022	
	Number of heat service customers	Actual heat service area (million sq.m.) ⁽¹⁾	Number of heat service customers	Actual heat service area (million sq.m.) ⁽¹⁾	Number of heat service customers	Actual heat service area (million sq.m.) ⁽¹⁾
Shanxi Province						
Residential	149,500	17.0	153,800	17.5	155,400	18.1
Non-residential	9,000	6.5	8,800	6.7	7,900	7.1
Sub-total	158,500	23.5	162,600	24.2	163,300	25.2
Gansu Province						
Residential	40,500	4.1	50,300	5.2	61,400	6.5
Non-residential	1,900	1.8	2,000	1.9	5,900	2.0
Sub-total	42,400	5.9	52,300	7.1	67,300	8.5

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	As at 31 December					
	2020		2021		2022	
	Number of heat service customers	Actual heat service area (million sq.m.) ⁽¹⁾	Number of heat service customers	Actual heat service area (million sq.m.) ⁽¹⁾	Number of heat service customers	Actual heat service area (million sq.m.) ⁽¹⁾
Inner Mongolia Autonomous Region						
Residential	60,700	4.9	63,100	5.2	68,400	5.6
Non-residential	4,200	3.1	4,400	3.3	4,900	2.6
Sub-total	<u>64,900</u>	<u>8.0</u>	<u>67,500</u>	<u>8.5</u>	<u>73,300</u>	<u>8.2</u>
Total	<u><u>265,800</u></u>	<u><u>37.4</u></u>	<u><u>282,400</u></u>	<u><u>39.8</u></u>	<u><u>303,900</u></u>	<u><u>41.9</u></u>

Note:

- (1) Actual heat service area is calculated according to the aggregate GFA stipulated in the property ownership certificates.

The table below sets out our revenue generated from customers for our provision and distribution of heat by customer type for the years indicated.

	For the year ended 31 December					
	2020		2021		2022	
	RMB'000	%	RMB'000	%	RMB'000	%
Residential	433,627	58.6	484,139	62.2	519,806	60.9
Non-residential	306,313	41.4	294,303	37.8	333,736	39.1
Total	<u><u>739,940</u></u>	<u><u>100.0</u></u>	<u><u>778,442</u></u>	<u><u>100.0</u></u>	<u><u>853,542</u></u>	<u><u>100.0</u></u>

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The table below sets out our revenue generated from our fees from customers for our provision and distribution of heat by location and price subsidies from local government in Shuozhou for the years indicated.

	For the year ended 31 December					
	2020		2021		2022	
	<i>RMB'000</i>	%	<i>RMB'000</i>	%	<i>RMB'000</i>	%
Shanxi Province						
Taiyuan	113,549	12.5	132,462	13.8	153,031	15.1
Shuozhou	435,513	48.0	466,224	48.5	453,996	44.7
Gansu Province						
Lanzhou	166,929	18.4	151,411	15.8	185,108	18.2
Inner Mongolia Autonomous Region						
Hulunbuir	187,376	20.6	203,100	21.1	217,803	21.5
Others	4,481	0.5	7,745	0.8	5,280	0.5
Total	907,848	100.0	960,942	100.0	1,015,218	100.0

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The following table sets out our actual heat service area, monthly heat rates and revenue generated from our provision and distribution of heat by heat service project under concession and in operation for the heat service periods indicated:

	Heat service period											
	2019/2020				2020/2021				2021/2022			
	Effective actual heat service area ⁽²⁾	Number of heat service months	Monthly heat rate (inclusive of VAT) ⁽¹⁾⁽³⁾	Revenue for the year ended 31 December 2019 (exclusive of VAT) ⁽¹⁾⁽³⁾	Effective actual heat service area ⁽²⁾	Number of heat service months	Monthly heat rate (inclusive of VAT) ⁽¹⁾⁽³⁾	Revenue for the year ended 31 December 2020 (exclusive of VAT) ⁽¹⁾⁽³⁾	Effective actual heat service area ⁽²⁾	Number of heat service months	Monthly heat rate (inclusive of VAT) ⁽¹⁾⁽³⁾	Revenue for the year ended 31 December 2021 (exclusive of VAT) ⁽¹⁾⁽³⁾
(sq.m. '000)		(RMB per sq.m.)	(RMB '000)	(sq.m. '000)		(RMB per sq.m.)	(RMB '000)	(sq.m. '000)		(RMB per sq.m.)	(RMB '000)	
Taiyuan Project												
Residential	3,733	5.0	22,780	44,781	4,733	5.0	35,097	56,559	5,017	5.0	42,243	59,533
Non-residential	655	5.0	11,345	16,925	675	5.0	9,375	13,832	713	5.0	9,911	14,623
Shanxi												
Demonstration Zone Project												
Residential	55	5.0	393	587	57	5.0	413	609	67	5.0	460	747
Non-residential	110	5.0	2,269	3,386	217	5.0	2,986	4,405	417	5.0	4,442	9,989
Shouzhou Project												
Residential	11,233	5.5	68,439	74,391	12,772	5.5	79,096	83,308	12,046	5.5	74,659	78,507
Non-residential	5,415	5.5	62,849	68,314	4,561	5.5	45,805	64,672	5,600	5.5	61,085	74,546
Lanzhou New Area Project												
Residential	3,356	5.7	28,950	41,075	4,162	5.7	37,519	53,557	5,420	5.7	44,123	62,788
Non-residential	3,224	5.7	45,196	65,039	1,727	5.7	23,296	32,395	1,702	5.7	21,336	32,051
Hulunbuir Project												
Residential	4,568	7.3	49,104	66,341	4,771	7.3	54,328	69,054	5,102	7.3	58,353	73,573
Non-residential	1,980	7.3	27,482	35,296	2,271	7.3	31,412	40,035	2,541	7.3	35,658	45,274

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Notes:

- (1) Revenue for each heat service period is calculated using the below formula:

$$\text{Revenue} = \text{effective actual heat service area} \times \text{monthly heat rate} \times \text{number of months in the heat service period} - \text{VAT}$$

- (2) Effective actual heat service area for each project is the weighted average of the actual heat service area for that project over the heat service period. Actual heat service area may fluctuate over the heat service period, for example, (i) some properties may be delivered during the heat service period; and (ii) during the heat service period, we may terminate heat supply for properties that have been vacant for a certain period of time.
- (3) Since each heat service period crosses across two financial year, revenue generated from each heat service period is allocated on a straight-line basis to those two financial years based on the number of heat service days in each financial year.

For new properties connecting to our heat distribution network, the heat rate charged by us is based on the gross floor area stipulated on their blueprints, land use rights certificates or our independent survey in the absence of other documentation evidences.

We do not enter into heat service agreements with each and every one of our heat service customers. For the heat service customers with whom we do enter into heat service agreements, the key terms that are generally found in our heat service agreements with them are set out below:

Address and heat service area	The heat service agreements specify the heat service customer's address and heat service area, which is determined by the gross floor area stipulated in the relevant property ownership certificate.
Heat service period	Our heat service period shall follow the heat service period prescribed by the measures adopted by the relevant local authority for the administration of heat services and use.
Quality	Our provision of heat services shall be on a continuous and stable basis and is subject to the applicable laws, regulations and heating measures promulgated and amended by the relevant authorities from time to time.

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Heat rate and settlement	The heat rate charged to our heat service customers shall generally follow the benchmark heat rate determined and approved by the local pricing authorities. We usually require our heat service customers to make full prepayment of heat service fees prior to the commencement of the heat service period. Under some of our heat service agreements, late payment penalty fees may apply if our heat service customers fail to make such full prepayment. Heat fees are usually calculated based on heat service area instead of actual consumption of heat.
Our rights and obligations	We have the right to inspect and monitor heat service conditions and operation of the units, properties and premises to which we provide heat services, and the equipment, devices and other relevant parts therein, to ensure our supply service quality. We are also entitled to request the cessation of any unauthorised usage of heat and rectify violation of the relevant procedures which causes imbalance in our heat services. We are required to patrol and inspect heat service facilities regularly to ensure heat service safety. We are also required to provide notification in advance if the heat services the interrupted due to certain unexpected situations (i.e., force majeure events), and ensure that the heat services can be resumed as soon as possible.
Rights and obligations	Customers are responsible for the maintenance and repair of their own heat service equipment and relevant parts.
Amendment of agreement	Under some of our heat service agreements, heat service customers may apply for amendments to the heat service agreements with us, such as change of usage, suspension or termination of heat services and address.
Breach of agreement	Heat service customers are responsible for any overdue payment owed to us and we may restrict or suspend our heat service if they fail to make the payment timely according to the heat service agreements. On the other hand, under some of our heat service agreements, we undertake the liability of breach of heat service agreements by refunding the heat fees.

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Heat service customer satisfaction

We are dedicated to providing comprehensive and quality customer services to accommodate our heat service customers’ needs. Our heat services management platform improves heat service end-user’s services and ensures their satisfaction. For more information, see “Heat services management platform” in this section. We have taken adequate and immediate measures in response to these complaints to ensure that problems identified can be properly resolved.

Pricing

Heat rate for heat service users

According to the PRC Pricing Law, the PRC Government may direct, guide or determine the prices of public utilities. It is stipulated in the Interim Measures that heat rates shall be set by a pricing authority, being the relevant provincial people’s government or authorised municipal or county people’s government, with reference to heat procurement costs, related tax and the profit expected to be made by the service providers. Heating enterprises (entities) that satisfy either one of the below requirements can submit price adjustment application to the pricing authorities in writing: (1) heat rates are insufficient to cover the cost of heating, resulting in operating losses; or (2) fuel price changed by more than 10%.

The table below sets out the monthly heat rates charged by us on different types of heat service users by project during the Track Record Period:

Location	Monthly heat rate for residential heat service users	Monthly heat rate for non-residential heat service users
	<i>(RMB per sq.m.)⁽¹⁾</i>	<i>(RMB per sq.m.)⁽¹⁾</i>
Shanxi Province		
Taiyuan Project	3.6	7.5
Shanxi Demonstration Zone Project	3.6	7.5
Shuozhou Project	2.52	4.8
Gansu Province		
Lanzhou New Area Project	5.0/5.8 ⁽²⁾	7.0 to 9.2/ 8.0 to 10.2 ⁽³⁾⁽⁴⁾
Inner Mongolia Autonomous Region		
Hulunbuir Project	3.5	4.8

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Notes:

- (1) The prices include VAT.
- (2) The monthly heat rate for residential heat service users for our Lanzhou New Area Project was RMB5.0 per sq.m for the 2019/2020, 2020/2021 and 2021/2022 heat service periods, and was raised to RMB5.8 per sq.m. effective from the beginning of the 2022/2023 heat service period pursuant to the notice issued by the Lanzhou New Area Economic Development Bureau (Statistics Bureau)* (蘭州新區經濟發展局(統計局)) in November 2022. Such monthly heat rate adjustment was made following a cost review and price hearing by the same bureau in response to increases in the cost of heat procurement in recent years.
- (3) During the Track Record Period, the monthly heat rates charged by us in our Lanzhou New Area Project varied depending on the type of non-residential heat service users in Lanzhou. Non-residential heat service users included commercial heat service users, industrial heat service users, and public utilities, catering and accommodation service providers.
- (4) The monthly heat rates for non-residential heat service users for our Lanzhou New Area Project ranged from RMB7.0 per sq.m to RMB9.2 per sq.m for the 2019/2020, 2020/2021 and 2021/2022 heat service periods, and were raised to the range from RMB8.0 per sq.m. to RMB10.2 per sq.m. effective from the beginning of the 2022/2023 heat service period pursuant to the notice issued by the Lanzhou New Area Economic Development Bureau (Statistics Bureau)* (蘭州新區經濟發展局(統計局)) in November 2022. Such monthly heat rate adjustment was made following a cost review and price hearing by the same bureau in response to increases in the cost of heat procurement in recent years.

Where there is an increase in costs due to circumstances beyond our control, such as increases in our heat procurement costs, changes in laws, rules or government regulations or orders, or force majeure events, we may apply to the relevant pricing authority for an adjustment of our heat rates. The local pricing authority may as a result allow us to adjust the heat rates which we charge to our heat service users. However, if the local pricing authority does not approve our application for an adjustment of our heat rates, we may not be able to pass on the increase in our costs to our heat service users. Additionally, there is generally a time lag between the increase in our costs and the upward adjustment of our heat rates. As a result of the above, we may not be able to maintain our profitability, and our operating results may be adversely affected. In 2018, we applied to adjust upwards the heat rates for our Hulunbuir Project and our application was approved by Hailar District People’s Government* (海拉爾區人民政府) in August 2018 after a public consultation had been conducted. During the Track Record Period, we did not apply to the relevant pricing authority for an adjustment of our heat rates. For details of our risk exposure due to pricing, see “Risk factors – Risks relating to our business and industry – What we can charge for our heat services is subject to guided prices prescribed from time to time by the PRC Government at various levels and therefore our profitability may be materially and adversely affected if these pricing policies are not favourable to us” in this document. For a sensitivity analysis relating to the fluctuation in costs, see “Financial Information – Description of major components of our results of operation – cost of sales – sensitivity analysis” in this document.

Pipeline connection fee

We are entitled to charge a pipeline connection fee under our Concession Agreements and heat service agreements. The pipeline connection fee is one-off and mainly charged to real developers and property owners or occupants when their properties are first connected to our primary distribution pipelines. During the Track Record Period, we received pipeline connection fee in Shanxi Province, Gansu Province and Inner Mongolia Autonomous Region.

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The table below sets out the number of property developers and property owners or occupants from which we received pipeline connection fees for each of the year during the Track Record Period:

	For the year ended 31 December		
	2020	2021	2022
Property developers	74	68	23
Property owners or occupants	35	33	30
Total	109	101	53

For the years ended 31 December 2020, 2021 and 2022, revenue from pipeline connection fee was approximately RMB65.4 million, RMB74.2 million and RMB83.7 million, representing approximately 4.8% and 5.7% and 5.8% of our total revenue for the same periods respectively. The increase in the revenue from pipeline connection fee during the Track Record Period was mainly due to the increase in our actual heat services area resulting from the increased number of property developers and property owners or occupants connecting their properties to our primary distribution pipelines.

The table below sets out the range and average of the pipeline connection fee that we received from property developers and property owners or occupants during the Track Record Period.

	For the year ended 31 December		
	2020	2021	2022
	<i>(RMB per sq.m.)</i>	<i>(RMB per sq.m.)</i>	<i>(RMB per sq.m.)</i>
Range	51.0-85.6	51.0-85.6	59.8-77.0
Average	60.3	63.1	64.7

According to Frost & Sullivan, it is an established industry practice for heat service providers to charge pipeline connection fee in the heat service industry, and the pipeline connection fee charged by our Group during the Track Record Period was in line with the market rate.

As confirmed by our PRC Legal Advisers, during the Track Record Period and up to the Latest Practicable Date, all pipeline connection fees which we received were permitted to be charged by us under relevant Concession Agreements and heat services agreements, and we have complied with all applicable laws and regulations in relation to pricing of our heat services in all material aspects.

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Guo Ban Han No. 129 and its potential impact on our Group

On 23 December 2020, the Opinion on Sorting Out and Standardising the Charges for Urban Water, Electricity, Gas and Heat Supply Industry to Promote the High-quality Development of the Industry (Guo Ban Han [2020] No. 129) (《關於清理規範城鎮供水供電供氣供暖行業收費促進行業高質量發展意見》(國辦函[2020]129號)) (“**Guo Ban Han No. 129**”) was issued by the General Office of the State Council to local governments. It took effect from 1 March 2021 and provided that by 2025, among other things, (i) the right to charge for interface fees, centralised network construction fees, grid connection fees and other similar fees (including pipeline connection fees) by urban centralised heat service enterprises in northern heating areas from their users shall be cancelled if there is no legal and effective policy basis to charge these fees; (ii) such cancellation shall be gradually implemented by local governments in conjunction with the introduction of reasonable adjustments to the price of heat services and upon the establishment of a governmental subsidy mechanism; and (iii) the timing for implementation of such cancellation shall be determined by relevant local governments.

In 2021, each of the relevant pricing authorities of Shanxi Province, Gansu Province, Inner Mongolia Autonomous Region and Henan Province published corresponding guidance plans with a view to introducing and implementing the changes necessitated by Guo Ban Han No. 129. Each of these local guidance plans reiterated the principle that the actual cancellation, along with the implementation of reasonable price adjustments and subsidy mechanism, would as a guiding principle take place no later than the end of 2025. As at the Latest Practicable Date, our PRC Legal Advisers advised that they have not found through public enquiries that any of the local governments of Shanxi Province, Gansu Province, Inner Mongolia Autonomous Region and Henan Province have announced any detailed policies in relation to the complete cancellation of the right to charge the above-mentioned fees, or details of the corresponding price adjustments and governmental subsidy mechanisms that will be introduced. For details, see “Regulatory overview – Charges for interface fees, centralised network construction fees, grid connection fees and other similar fees” in this document.

Our PRC Legal Advisers have advised that the intention of Guo Ban Han No. 129 and the corresponding guidance plans published by the relevant pricing authorities of Shanxi Province, Gansu Province, Inner Mongolia Autonomous Region and Henan Province is to better regulate, amongst other things, charges relating to heat service prices to ensure that users are charged reasonably, and that heat service providers are appropriately compensated for their reasonable costs incurred in the course of the provision of heat services. According to interviews conducted with each of the Shanxi Province Development and Reform Commission (山西省發展和改革委員會), Lanzhou New Area Economic Development Bureau (蘭州新區經濟發展局), Hulunbuir Municipal Development and Reform Commission (呼倫貝爾市發展和改革委員會) and Xinmi Municipal Development and Reform Commission (新密市發展和改革委員會), being the relevant pricing authorities of Shanxi Province, Lanzhou New Area, Hulunbuir and Xinmi, respectively, it was confirmed that the actual cancellation of the right to charge the pipeline connection fees by the end of 2025 would be accompanied by the formulation and establishment of the corresponding mechanisms of price adjustments and subsidies, and that such cancellation would not take place without the establishment of such corresponding

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mechanisms. Our PRC Legal Advisers have confirmed that the Shanxi Province Development and Reform Commission, Lanzhou New Area Economic Development Bureau, Hulunbuir Municipal Development and Reform Commission and Xinmi Municipal Development and Reform Commission are the relevant competent authorities to be interviewed. Our PRC Legal Advisers have also advised that (a) according to Guo Ban Han No. 129, it was expressly stipulated that the actual cancellation of the right to charge the above-mentioned fees should be accompanied by the formulation and establishment of corresponding mechanisms of price adjustments and subsidies; and (b) based on the aforementioned interviews, it is anticipated that the new laws and regulations regarding the cancellation of the right to charge pipeline connection fees would be implemented such that any cessation of pipeline connection fees being charged would be accompanied by certain compensation whether in the form of price adjustment and/or subsidy. Based on the aforementioned government interviews and our PRC Legal Advisers' advice, our Directors are, therefore, of the view that the cancellation of pipeline connection fees will be offset by the reasonable adjustments to be made to heat service prices that heat service providers may charge, as well as the compensation in the form of government subsidies or grants.

Our PRC Legal Advisers have also advised that Guo Ban Han No. 129 and its related local laws and regulations currently in force do not provide for any circumstances that pipeline connection fees we have historically charged and received in relation to heat services we provided in Shanxi Province, Lanzhou New Area, Hulunbuir or Xinmi be refunded. Each of the Shanxi Province Development and Reform Commission (山西省發展和改革委員會), Lanzhou New Area Economic Development Bureau (蘭州新區經濟發展局), and Hulunbuir Municipal Development and Reform Commission (呼倫貝爾市發展和改革委員會) and Xinmi Municipal Development and Reform Commission (新密市發展和改革委員會), being the relevant pricing authorities of Shanxi Province, Lanzhou New Area, Hulunbuir and Xinmi, respectively, has also confirmed that pipeline connection fees we have historically charged and received in relation to heat services we provided in Shanxi Province, Lanzhou New Area, Hulunbuir or Xinmi would not be required to be refunded. Our PRC Legal Advisers have confirmed that the Shanxi Province Development and Reform Commission, Lanzhou New Area Economic Development Bureau, Hulunbuir Municipal Development and Reform Commission and Xinmi Municipal Development and Reform Commission (新密市發展和改革委員會) are the relevant competent authorities to be interviewed. Accordingly, we do not expect that we will need to refund any of the pipeline connection fees already received to date. Such pipeline connection fees received in advance have already been recognised as contract liabilities during the relevant reporting period, which would be recognised as revenue on a straight-line basis over the relevant remaining concession period. Therefore, we do not expect any material adverse impact to our revenue in the short run after the implementation of Guo Ban Hao No. 129 and the corresponding policies to be published by the relevant local authorities.

When Guo Ban Hao No. 129 and the corresponding policies in relation to the pipeline connection fees to be published by the relevant local authorities are fully implemented by the end of 2025, we may no longer be able to receive any new pipeline connection fees. However, the loss on revenue resulting from the cancellation of our right to charge pipeline connection fees will somehow be compensated by the adjustments of heat rates and the subsidies or grants

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under the governmental subsidy mechanisms to be formulated, or otherwise. We therefore do not expect the cancellation of such right pursuant to Guo Ban Han No. 129 will (taking a holistic view) have any material adverse impact on our overall financial position.

Please also see "Risk factors – Risks relating to our business and industry – Our heat rates may not be adjusted proportionally and/or we may not receive sufficient subsidy for our heat service operations to sufficiently cover the potential reduction in pipeline connection fee due to any change in its mechanism" in this document.

Payment and credit policy

All of our residential, commercial and industrial heat service customers are registered with us for the purpose of paying heat service related fees. The registration process includes opening of a user account. Our heat service customers are required to make payments of our heat services fees into their user accounts prior to the commencement of each heat service period. Payments for our heat services are then deducted from these user accounts. Revenue is recognised at the point in time when our heat service is provided, generally on the transmission of heat. It is the responsibility of our heat service customers to ensure that they have made proper payments of our heat service fees into their user accounts. We are entitled to impose late payment penalty fees and temporarily suspend our heat services if payment to us is not processed due to insufficient funds in their user accounts. We believe that our exposure to the risks relating to credit control is remote as we usually require our heat service customers to make full prepayments prior to the commencement of our heat services to them.

HEAT SERVICES MANAGEMENT PLATFORM

We are committed to improving people's living standards with the application of technology. We launched a heat services management platform in July 2019, which is now widely applied to our projects across all our actual heat service area. It is regularly maintained and upgraded.

Our heat services management platform is an integrated digitalised intra-group platform which mainly consists of (i) a heat production monitoring system which monitors the heat production process and the operation of our heat service facilities; (ii) a heat transmission monitoring system which monitors the heat transmission process; and (iii) a customer service system which allows us to respond to our customers' requests and concerns in a timely manner.

The customer service system collects certain information of our heat service customers, including their names and addresses. Such information is only used when we are required to contact our heat service customers in the case of an emergency. According to our internal procedures, access of our heat service customers' information require the approval of our senior management. Our Directors believe that we have adopted sufficient internal control procedures to prevent leakage of information of our heat service customers.

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Under the Cybersecurity Law of the PRC (《中華人民共和國網絡安全法》) (the “**Cybersecurity Law**”), network operators are required to protect their networks against disruption, damage or unauthorised access, and to prevent data leakage, theft or tampering. In addition, they will also be subject to specific rules depending on their classification under the multi-level network security protection scheme. With respect to personal information protection, the Cybersecurity Law requires network operators not to disclose, tamper with or damage personal information collected or generated in the business operation, and they are obligated to delete unlawfully collected information and to amend incorrect information.

In December 2021, the Cybersecurity Review Measures (2021)* (《網絡安全審查辦法》) were introduced. Under the Cybersecurity Review Measures (2021), online platform operators (amongst others) carrying out data processing activities that affect or may affect national security, are required to conduct a cybersecurity review. According to the Cybersecurity Review Measures (2021), an online platform operator who holds and controls more than one million users’ personal information needs to report to the Cybersecurity Review Office for a cybersecurity review if it intends to be listed abroad* (國外上市).

Separately, the Draft Regulations On Network Data Security Management were promulgated on 14 November 2021. Pursuant to the Draft Regulations On Network Data Security Management, the State will focus on the protection of personal information and important data and strictly protect core data. Data processors shall be responsible for the data security and shall fulfill their obligation of data security protection in data processing. Data processors shall take necessary measures such as backup, encryption and access control to protect data from disclosure, theft, tampering, destruction, loss and illegal use, respond to network security incidents, prevent illegal and criminal activities targeting and using data, and maintain the integrity, confidentiality and usability of data. It stipulates that data processors shall, in accordance with relevant national regulations, apply for cybersecurity review if they are, among others, seeking to be listed abroad and controlling personal information of more than one million users, or seeking to be listed in Hong Kong and affecting or may be affecting national security. As at the Latest Practicable Date, the Draft Regulations On Network Data Security Management had not been formally adopted.

We have been advised by our PRC Legal Advisers that as (i) we control, user information of less than one million; and (ii) we are currently not a critical information infrastructure operator and online platform operator, based on the Cybersecurity Review Measures (2021) and the preliminary framework of the Draft Regulations On Network Data Security Management, our [REDACTED] is not subject to the reporting requirement of the cybersecurity review office in relation to cybersecurity review.

Based on a written confirmation that we received from the Office of the Jiangyin Cybersecurity Affairs Commission* (江陰市委網絡安全和信息化委員會辦公室), being the relevant competent authority to provide such confirmation, it was confirmed that we are not a critical information infrastructure operator and/or online platform operator, hence, we are not subject to the Security Review Measures (2021). Based on the same confirmation, it was also confirmed that if the Draft Regulations On Network Data Security Management are formally issued in the future, such regulations will not apply to our business (provided that our business remains unchanged) and we will therefore not be required to apply for the cybersecurity review in order to be listed in Hong Kong.

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As at the Latest Practicable Date, based on the public search results found on the relevant websites, such as China Judgements Online, China’s Enforcement Information Disclosure website, website of each of Cyberspace Administration of China (中華人民共和國互聯網信息辦公室) and Ministry of Industry and Information Technology, we have not been subject to any review, inquiries or investigations by any regulatory authorities in the PRC with respect to cybersecurity and data protection and we have not been involved in any litigation or arbitration regarding cybersecurity or data protection. In addition, as at the Latest Practicable Date, we have not been involved in any investigations on cybersecurity review made by the Cyberspace Administration of China on such basis, and we have not received any inquiry, notice, warning, or sanctions in such respect.

As advised by our PRC Legal Advisers, the exact details of the Cybersecurity Review Measures (2021) and the current regulatory regime remains unclear, and the PRC government authorities may have wide discretion in the interpretation and enforcement of these laws. Our Directors and our PRC Legal Advisers therefore cannot preclude the possibility that new rules or regulations promulgated in the future will impose additional compliance requirements on our Group in relation to cybersecurity review. We have adhered to relevant laws and regulations with respect to cybersecurity and data protection from time to time. Our in-house lawyers will pay attention to the latest legal updates, including but not limited to, issuance of consultation papers which may affect the introduction of new laws and regulations in the future, that are related to our business operations. In the event that there are any legal updates that may affect our business operations, we shall update our internal control measures accordingly for ongoing legal compliance.

ENGINEERING CONSTRUCTION SERVICES

We provide engineering construction services for the construction of the heat service facilities to the concession grantors. For details of the concession grantors, see “Heat services – Our Concession Agreements” in this section. After entering into the relevant Concession Agreements, we have the right and obligation to invest in, build or arrange for the development of the heat service-related assets, including primary distribution pipelines, heat exchange stations and other heat service facilities required for our provision of heat services within our Concession Areas. Upon the expiration of our Concession Agreements, all heat service-related assets in use (and, in some cases, under construction) by us shall be transferred to the relevant concession grantor (or parties designated by the concession grantor). For details of the ownership and future transfer of our operational assets, see “Heat services – Our Concession Agreements” in this section.

For the years ended 31 December 2020, 2021 and 2022, revenue generated from our engineering construction services was approximately RMB362.1 million, RMB229.1 million and RMB301.6 million, representing approximately 26.3%, 17.8% and 20.9%, of our total revenue for the same years, respectively.

BUSINESS

The following table sets out our revenue generated from our engineering construction services by service type for the years indicated.

	For the year ended 31 December					
	2020		2021		2022	
	<i>RMB'000</i>	%	<i>RMB'000</i>	%	<i>RMB'000</i>	%
<i>Engineering construction services</i>						
– construction services for our concession operations	349,356	96.5	208,133	90.8	271,010	89.9
– construction services provided to customers	12,694	3.5	21,014	9.2	30,557	10.1
Total	362,050	100.0	229,147	100.0	301,567	100.0

Construction

We typically engage competent third-party contractors to construct the heat service facilities for our provision of engineering construction services, while we are responsible for managing and supervising the performance of such construction works. For details relating to our selection of third-party contractors, see “Business – Our suppliers – Contractors for the construction of primary distribution pipelines and heat service facilities – Selection and management of our contractors” in this document.

During the construction phase, we would have oversight of the progress, safety and quality of the construction works. Our quality control team is responsible for overseeing the quality of construction and any safety issues that may arise during the construction phase. Upon completion of construction, we will test, inspect and optimise the heat service facilities to ensure that the quality of these facilities meets the standards stipulated in the relevant agreements entered into with the local governments. During the Track Record Period, we did not detect any major quality or safety problems in relation to either the construction or the subsequent operation of the heat service facilities constructed by third party contractors.

During the Track Record Period, we procured and supplied the pipelines, as well as the devices and equipment for the heat exchange stations to the third party contractors for the construction of the heat service facilities. The third party contractors would provide all other raw materials and carry out the engineering construction works according to our pre-approved blueprints. It generally takes approximately six months to complete the construction work.

BUSINESS

Application of IFRIC 12

IFRIC 12 is applicable to our Concession Agreements and services provided thereunder. Under IFRIC 12, we recognise revenue for the construction of heat service facilities for our heat service projects. The construction services revenue for the initial establishment of the heat service facilities under our Concession Agreements is calculated according to the total construction costs plus a reasonable profit margin determined by an independent valuer, based on the prevailing market rate applicable to similar construction services. For details, see “Financial information – Critical accounting policies and estimates – Initial investment” in this document.

The initial consideration for the acquisition of our concession rights and the establishment of heat service facilities is accounted for as an intangible asset. An intangible asset (operating concession) is recognised to the extent that the right to charge our customers is dependent upon the usage or amount of our heat services rendered, which is not an unconditional right to receive cash.

During the initial construction of heat service facilities for our provision of heat services, we incurred significant cash outflow for the cost of the construction. At the same time, we recognised non-cash revenue in respect of our engineering construction services. However, we would not receive any payment in cash from the relevant government authorities for such engineering construction services.

After the completion of the initial construction of the heat service facilities, we would commence the provision of heat services and the actual cash inflow would be received when we charged our heat service customers for our heat services over the remaining concession period.

PROVISION OF EMC SERVICES

An EMC is an energy-conservation service contract under which an energy saving service provider provides energy-conservation services (such as, and in our case, energy conservation through the collection and utilisation of residual heat from recycling water) to an energy consuming enterprise to achieve certain energy saving goals. In these contracts, the energy saving service provider of the energy-conservation services is entitled to a share of the profit accrued from energy conserved as a result of the energy conservation services provided.

According to the Frost & Sullivan Report, the EMC market in the PRC has developed rapidly since the promulgation of the “12th Five-Year Plan” (《中華人民共和國國民經濟和社會發展第十二個五年規劃綱要》) in 2012. In line with the development of the electricity and heat service industries in northern China, an increasing number of energy-related enterprises in this region are opting for EMC services as a way to fulfil their environmental protection objectives. Additionally, with a view to promoting the EMC business, the PRC Government has promulgated a series of regulations and policies which offer preferential tax treatments for companies providing energy conservation services.

BUSINESS

In March 2017, we entered into an EMC with a power plant (the "**Power Plant**") pursuant to which we agreed to provide EMC services in an energy conservation project in relation to the collection of residual heat from recycling water (the "**Original EMC**"). We subsequently entered into a supplemental agreement with them (the "**Supplemental EMC**") on 15 December 2021 as the demand for residual heat by the Power Plant did not meet the demand originally anticipated, and revenue generated from the Original EMC was lowered than anticipated.

For the years ended 31 December 2020, 2021 and 2022, revenue generated from this EMC project was approximately RMB4.2 million, RMB4.0 million and RMB3.0 million, representing approximately 0.3%, 0.3% and 0.2% of our total revenue for the same years, respectively.

Key terms of the Original EMC (as supplemented by the Supplemental EMC)

The key terms of the Original EMC (as supplemented by the Supplemental EMC) are set out below:

Subject matter	Under the Original EMC, we are responsible for installing for the Power Plant certain equipment and machinery for the purpose of collecting residual heat. The equipment and machinery would be inspected by a qualified party selected by both parties before putting into use. We are also responsible for operating and managing the residual heat collection facilities
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Term	The agreed term as stated in the Original EMC was for 10 heat service periods starting from October 2017. The Supplemental EMC, extended the term to the end of the heat service period of 2033/2034 or when the aggregate amount of residual heat collected reaches 18 million GJ
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Sharing of revenue	We are entitled to a share of revenue based on a revenue-linked formula below:
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Amount of residual heat collected x unit price x sharing percentage

<i>Amount of residual heat collected</i>	Actual volume of residual heat collected, subject to the minimum residual heat collected in each heat service period
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BUSINESS

	<i>Unit price</i>	RMB30.44/GJ (excluding tax)
	<i>Sharing revenue</i>	We shall be entitled to 50% (as supplemented by the Supplemental EMC)
Minimum residual heat collected in each heat service period		As stipulated in the Supplemental EMC, the minimum residual heat to be collected in each heat service period shall be 1.242 million GJ. If the actual residual heat collected in any heat service period is less than 1.242 million GJ due to any issue for which the Power Plant should be responsible, 1.242 million GJ will be adopted for the calculation of the sharing of revenue and the total residual heat collected over the term of the contract
Operating expenses of the facilities		We are required to bear all operating expenses
Payment		The Power Plant is required to settle the sharing of revenue (plus the relevant tax) to us within 25 working days upon receipt of invoice on a monthly basis
Ownership and transfer		We own the assets (including but not limited to equipment and machinery) invested, purchased and installed by us during the term of the contract. All these assets will be transferred to the Power Plant upon the expiration of the EMC provided that all sums due to us have been fully settled
Early termination		The Power Plant is entitled to early terminate the EMC services by paying us a sum equal to the value at the relevant time of the EMC on its remaining term

Our Directors believe that we can fully utilise the potential of our EMC business. However, given our limited history and experience in operating under the EMC business model, we may encounter risks and difficulties in relation to our EMC business. For relevant information, see "Risk factors – Risks relating to our business and industry – Our EMC services were launched with limited history" in this document.

BUSINESS

OTHER BUSINESSES

During the Track Record Period, we also engaged in (i) the provision of heat transmission services to a number of customers; (ii) the sale of heat service facilities (including heat service equipment, devices and relevant parts) to operators who required such facilities for their business operation; and (iii) provision of designing services, which mainly consisted of indoor heat operation designing and consulting services, to some government authorities and commercial operators.

OUR SUPPLIERS

During the Track Record Period, in conducting our businesses, we procured (i) heat; (ii) equipment, machinery and relevant parts and components including pipes, heat exchangers and heat pumps, valves, bearings and frequency converters, and other materials such as steel, cables, tools and labour protection supplies; and (iii) services for the construction of primary distribution pipelines and heat service facilities. During the Track Record Period, we also leased certain heat service facilities from a local government for conducting our heat services. For the details of the leasing arrangements, see “Entity which is our customer and also a lessor of heat service facilities” in this section.

During the Track Record Period and up to the Latest Practicable Date, we did not experience any material lack of capacity, supply shortage, fluctuation in procurement price, delay or disruption in our operations relating to our suppliers or any material product claims attributable to our suppliers.

During the Track Record Period, our Group procured goods and services from certain suppliers who will become connected persons of our Group upon the [REDACTED]. Such goods and services included (i) heat service-related equipment, devices and materials; and (ii) accommodation, catering, reception and conference organisation services. For details, see “Connected transactions” in this document.

Suppliers of heat

During the Track Record Period and up to the Latest Practicable Date, we procured heat for our Taiyuan Project, Shuozhou Project and Hulunbuir Project from cogeneration plant operators in the PRC. We take into account several factors when selecting our preferred cogeneration plant operators, including but not limited to heat quality, price competitiveness and proximity to our primary distribution network for our operational efficiency. For details, see “Heat sources – Heat procured from cogeneration plants” in this section.

Suppliers of coal for our production of heat

During the Track Record Period and up to the Latest Practicable Date, we procured coal for our production of heat through coal-fired boilers for our Lanzhou New Area Project from suppliers in the PRC. We take into account several factors when selecting our preferred coal suppliers, including price competitiveness and proximity to our coal-fired boilers for heat production efficiency.

BUSINESS

Suppliers of equipment and machinery

During the Track Record Period and up to the Latest Practicable Date, we procured pipes, heat exchangers and heat pumps, valves, bearings and frequency converters, and other materials such as steel, cables and tools, from suppliers in the PRC. Our suppliers of equipment and machinery are mainly sourced through tenders and are required to go through selection processes according to our internal policies on the selection and management of suppliers. In particular, we take into account several factors in selecting our preferred suppliers, including but not limited to product quality, price competitiveness, relevant quality certifications and after-sales services offering. We will only accept the products of our equipment and machinery suppliers upon satisfactory quality inspection and receipt of the required quality proof. Generally, our suppliers are required to provide after-sales services and product warranty unless otherwise agreed.

Contractors for the construction of primary distribution pipelines and heat service facilities

For the years ended 31 December 2020, 2021 and 2022, we engaged 37, 26 and 18 contractors in the PRC who were engaged in engineering and construction business for the construction of heat service facilities such as primary distribution pipelines and heat exchange stations, respectively. Most of the contractors we engaged for our engineering construction services were Independent Third Parties. For information relating to our heat service facilities, see “Heat distribution – Our heat service facilities” in this section. Such construction works performed by the aforementioned contractors were generally for our provision of engineering construction services. For details of such services, see “Engineering construction services” in this section. For the years ended 31 December 2020, 2021 and 2022, our construction costs were approximately RMB315.5 million, RMB198.9 million and RMB261.8 million, representing approximately 29.1%, 20.4% and 22.8% of our total cost of sales, respectively.

Selection and management of our contractors

Key terms of the contracting agreements

In order to be selected by our Group, the contractors need to go through certain selection processes as required by our internal policies governing the selection and management of suppliers. We take into account several factors in selecting our contractors, including but not limited to construction capability, past experience, industry reputation, quality, price, skill and requisite qualifications and licences. Prospective contractors must first pass an initial qualification assessment which includes accreditation and certification. After the initial assessment, we will dispatch a personnel in our business services department and/or engineering department to conduct an on-site inspection on their qualifications. We only engage the contractors upon our satisfactory inspection and receipt of their qualification proof. We also require our contractors to provide service warranty and security deposits, unless otherwise agreed. It is our Group’s policy to select our contractors for the construction of pipelines and heat service facilities through competitive tender process or competitive negotiation.

BUSINESS

Our contracting agreements typically include the following key terms:

Term	The term of our contracting agreements varies depending on the duration of the relevant construction period, which is typically less than one year.
Performance	The constructed pipelines and heat service facilities delivered by our contractors are required to meet certain national standards stipulated in the relevant construction laws and heating measures.
Our rights and obligations	We should verify the qualifications and certifications of our contractors for them to carry out the construction works. In addition, we have both the right and obligation to supervise and evaluate the construction works of our contractors. Where necessary, we should provide support to our contractors in the performance of their obligations such as furnishing them with certain machinery and equipment, and granting them access to our premises. We are obligated to make timely payment of contracting fees in accordance with the payment schedules stipulated in the contracting agreements.
Contractor's obligations	Our contractors shall take all necessary safety measures to comply with all safety standards in the performance of their services. They are also responsible any damage to, or loss of, any person or property arising out of their own default in the course of providing their construction services.
Pricing	The contracting fees payable by us are determined on an arm's length basis and on normal commercial terms with reference to the duration of the construction period and the scale and complexity of the work carried out.

BUSINESS

Our top five suppliers

Purchases from our largest supplier in each of the years ended 31 December 2020, 2021 and 2022 amounted to approximately RMB100.6 million, RMB88.8 million and RMB89.3 million, respectively, representing approximately 10.1%, 10.2% and 8.8% of our total purchases for the respective years. Purchases from our top five suppliers in each of the years ended 31 December 2020, 2021 and 2022 in aggregate amounted to approximately RMB402.1 million, RMB337.2 million and RMB385.6 million, respectively, representing approximately 40.5%, 38.7% and 38.0% of our total purchases for the respective years. Our Directors confirm that, save for Shuangliang Eco-Energy, none of our Directors, their respective associates or any shareholder (who to the knowledge of our Directors owned 5% or more of our Shares) held any interest in any of our top five suppliers during the Track Record Period.

The following tables set out certain information with respect to our top five suppliers in each year during the Track Record Period.

Year ended 31 December 2020

Rank	Supplier	Relationship		Products purchased	Transaction amount	As a percentage of our total purchase		Payment method	Credit term	Approximate length of relationship with our Group
		with us	Business scope			total purchase	Payment method			
					(RMB'000)	(%)				
1	Shuozhou Thermal Power Branch of Huadian International Power Co., Ltd.* (華電國際電力股份有限公司朔州熱電分公司) (“Huadian International”)	Independent Third Party	Electricity generation	Heat	100,592	10.1	Bank transfer	10 days	Since 2013	
2	Hulunbair City Construction Investment (Group) Co., Ltd.* (呼倫貝爾城市建設投資(集團)有限責任公司) (“Hulunbair City Construction”)	Independent Third Party	City construction and public utility business	Heat	94,180	9.5	Bank transfer	15 days	Since 2013	

BUSINESS

Rank	Supplier	Relationship with us	Business scope	Products purchased	Transaction amount	As a	Payment method	Credit term	Approximate length of relationship with our Group
						percentage of our total purchase			
					(RMB'000)	(%)			
3	Taiyuan Tianxiang Thermal Insulation Co., Ltd* (太原天翔保温管有限公司)	Independent Third Party	Production, sales and maintenance of polyurethane direct buried insulation pipelines	Lagged pipes	76,231	7.7	Bank Transfer	Nil	Since 2014
4	Shanxi Shentou	Independent Third Party	Electricity generation	Heat	75,859	7.6	Bank transfer	10 days	Since 2011
5	Shanxi Datang	Independent Third Party	Construction and operation of coal-fired generating units, and provision of heat source and electricity generation	Heat	55,284	5.6	Bank transfer	10 days	Since 2012
Total					402,146	40.5			

BUSINESS

Year ended 31 December 2021

Rank	Supplier	Relationship with us	Business scope	Products purchased	Transaction amount	As a percentage of our total purchase	Payment method	Credit term	Approximate length of relationship with our Group
					(RMB'000)	(%)			
1	Hulunbair City Construction	Independent Third Party	City construction and public utility business	Heat	88,778	10.2	Bank transfer	15 days	Since 2013
2	Huadian International	Independent Third Party	Electricity generation	Heat	71,106	8.2	Bank transfer	10 days	Since 2013
3	Jinneng Holding Power Group Shuozhou Thermal Power Group Co., Ltd.* (晉能控股電力集團朔州熱電有限公司) (“Jinneng Holding”)	Independent Third Party	Sales of coal	Heat	65,716	7.5	Bank transfer	10 days	Since 2020
4	Shanxi Shentou	Independent Third Party	Electricity generation	Heat	62,253	7.1	Bank transfer	10 days	Since 2011
5	Shanxi Datang	Independent Third Party	Construction and operation of coal-fired generating units, and provision of heat source and electricity generation	Heat	49,390	5.7	Bank transfer	10 days	Since 2012
Total					<u>337,243</u>	<u>38.7</u>			

BUSINESS

Year ended 31 December 2022

Rank	Supplier	Relationship with us	Business scope	Products purchased	Transaction amount	As a percentage of our total purchase	Payment method	Credit term	Approximate length of relationship with our Group
					(RMB'000)	(%)			
1	Hulunbair City Construction	Independent Third Party	City construction and public utility business	Heat	89,330	8.8	Bank transfer	15 days	Since 2013
2	Jinneng Holding	Independent Third Party	Sales of coal	Heat	88,146	8.7	Bank transfer	10 days	Since 2020
3	Baiyin Youse Railway Transportation Logistics Co., Ltd.* (白銀有色鐵路運輸 物流有限責任 公司)	Independent Third Party	Logistic Service Provider	Coal	82,197	8.1	Bank transfer	7 days	Since 2021
4	Huadian International	Independent Third Party	Electricity generation	Heat	70,219	6.9	Bank transfer	10 days	Since 2013
5	Shanxi Shentou	Independent Third Party	Electricity generation	Heat	55,734	5.5	Bank transfer	10 days	Since 2011
		Total			<u>385,626</u>	<u>38.0</u>			

BUSINESS

Inventory control

Our inventories include raw materials such as coal and other supplies which mainly consist of pipeline components, valves and other relevant parts and components for our heat services. During the Track Record Period, we purchased coal for heat production by our coal-fired boilers in respect of our Lanzhou New Area Project. We typically purchase coal one to two months in advance of the actual production of heat. We usually maintain a minimum level of coal inventory which meets our heat generation needs for a period of up to two weeks. We determine the quantity of other relevant parts and components to purchase based on our level of existing inventory and estimated production requirements. We estimate such quantity based on our work schedule and sometimes make purchases on an as-needed basis.

Our Directors understand the importance of inventory management in maintaining our operational costs and risks at a low level. We monitor our inventory levels by taking into account production planning, projected demand, current inventory levels, prevailing market conditions, the availability of raw materials and supplies required by our operational needs operation needs and our exposure to changes in raw material prices as well as our internal resources. We also review and adjust our inventory control policy from time to time.

OUR CUSTOMERS

During the Track Record Period, our customers were principally derived from our Concession Agreements, and included the customers of our engineering construction services and provision of heat services (which are mainly occupants of the actual heat service areas under our Concession Agreements), as well as a civil engineering services provider as customer for our engineering construction services.

Our top five customers

Sales to our largest customer in each of the years ended 31 December 2020, 2021 and 2022 amounted to approximately RMB399.9 million, RMB201.1 million and RMB206.5 million, respectively, representing approximately 29.1%, 15.6% and 14.3% of our total revenue for the respective years. Sales to our top five customers in each of the years in aggregate amounted to approximately RMB520.4 million, RMB406.1 million and RMB428.0 million, respectively, representing approximately 37.8%, 31.4% and 29.6% of our total revenue for the respective years. Our Directors confirm that none of our Directors, their respective associates or any shareholder (who to the knowledge of our Directors owned 5% or more of our Shares) held any interest in any of our top five customers during the Track Record Period.

BUSINESS

The following tables set out certain information with respect to our top five customers in each year during the Track Record Period.

Year ended 31 December 2020

Rank	Customer	Relationship with us	Business scope	Products/ services sold/ provided by our Group	Revenue	As a percentage of our total revenue	Payment method	Credit term	Approximate length of relationship with our Group
					<i>(RMB'000)</i>	<i>(%)</i>			
1	Customer A ⁽²⁾	Independent Third Party	Government authority	Engineering construction services and price subsidies received therefrom	399,864 ⁽¹⁾	29.1	Bank transfer	Nil	Since 2012
2	Customer D ⁽⁵⁾	Independent Third Party	Government authority	Engineering construction services	56,230	4.1	N/A	N/A	Since 2013
3	Customer C ⁽⁴⁾	Independent Third Party	Government authority	Engineering construction services	25,195	1.8	N/A	N/A	Since 2013
4	Customer F ⁽⁷⁾	Independent Third Party	Educational institution	Provision and distribution of heat	19,561	1.4	Bank transfer	15 days	Since 2017
5	Customer B ⁽³⁾	Independent Third Party	Government authority	Engineering construction services	19,502	1.4	N/A	N/A	Since 2018
	Total				<u>520,352</u>	<u>37.8</u>			

BUSINESS

Year ended 31 December 2021

Rank	Customer	Relationship with us	Business scope	Products/ services sold/ provided by our Group	Revenue	As a percentage of our total revenue	Payment method	Credit term	Approximate length of relationship with our Group
					<i>(RMB'000)</i>	<i>(%)</i>			
1	Customer A ⁽²⁾	Independent Third Party	Government authority	Engineering construction services and heat services	201,099 ⁽¹⁾	15.6	Bank transfer	Nil	Since 2017
2	Customer D ⁽⁵⁾	Independent Third Party	Government authority	Engineering construction services	94,649	7.3	N/A	N/A	Since 2013
3	Customer B ⁽³⁾	Independent Third Party	Government authority	Engineering construction services	67,695	5.2	N/A	N/A	Since 2018
4	Customer G ⁽⁶⁾	Independent Third Party	Government authority	Engineering construction services	22,976	1.8	N/A	N/A	Since 2012
5	Customer E ⁽⁶⁾	Independent Third Party	Government authority	Engineering construction services	19,665	1.5	N/A	N/A	Since 2019
	Total				<u>406,084</u>	<u>31.4</u>			

BUSINESS

Year ended 31 December 2022

Rank	Customer	Relationship with us	Business scope	Products/ services sold/ provided by our Group	Revenue	As a percentage of our total revenue	Payment method	Credit term	Approximate length of relationship with our Group
					(RMB'000)	(%)			
1	Customer A ^(Note 2)	Independent Third Party	Government authority	Engineering construction services and price subsidies received therefrom	206,491 ⁽¹⁾	14.3	Bank transfer	Nil	Since 2012
2	Customer D ^(Note 5)	Independent Third Party	Government authority	Engineering construction services	139,085	9.6	N/A	N/A	Since 2013
3	Customer B ^(Note 3)	Independent Third Party	Government authority	Engineering construction services	39,338	2.7	N/A	N/A	Since 2018
4	Customer C ^(Note 8)	Independent Third Party	Government authority	Engineering construction services	28,727	2.0	N/A	N/A	Since 2012
5	Xinbang Construction Group Co., Ltd* (信邦建設集團有限公司)	Independent Third Party	Civil engineering service provider	Engineering construction services	14,344	1.0	Bank transfer	Nil	Since 2022 ⁽¹⁰⁾
		Total			<u>427,985</u>	<u>29.6</u>			

Notes:

- (1) During the Track Record Period, we received price subsidies for our provision of heat services under our Shuozhou Project. See “Financial information – Description of major components of our results of operations – Revenue – Heat services” in this document for details.
- (2) Customer A is a government association in charge of residential buildings and public infrastructure management in Shuozhou area.
- (3) Customer B is a public committee managing a specific area located in Shanxi Province. The area was founded in 2016 under the authorisation of the central government, seeking to strengthen local economic development.
- (4) Customer C is a public association in charge of residential buildings and public infrastructure management in Hulunbuir area.

BUSINESS

- (5) Customer D is a public association in charge of residential buildings and public infrastructure management in Lanzhou area.
- (6) Customer E is a public association in charge of residential buildings and public infrastructure management in Shuozhou area.
- (7) Customer F is a technical secondary school founded in 2016 in Lanzhou New Area, nurturing professionals in education field by providing relevant training.
- (8) Customer G is a public association in charge of residential buildings and public infrastructure management in Taiyuan area.
- (9) Customer H is a government association in Shanxi Province endeavoring to promote local economy in Yunzhou District of Datong City through developing economic strategies and enacting policies.
- (10) During the Track Record Period, Xinbang Construction Group Co., Ltd* (信邦建設集團有限公司) was both a customer and a supplier of the Group. See “– Engineering construction company which is our customer and also our supplier” below in this document for details.

Urban development company which is our customer and also our supplier

During the Track Record Period, an urban development company which is an Independent Third Party was both a customer and a supplier of our Group. Such company is a SOE primarily engaged in city development in Lanzhou of Gansu Province.

During the Track Record Period, the aforementioned urban development company was a commercial heat service customer of our Group. For the years ended 31 December 2020, 2021 and 2022, revenue from such company for the provision of our heat services was approximately RMB7.0 million, RMB8.9 million and RMB11.4 million, respectively, representing approximately 0.5%, 0.7% and 0.8% of our total revenue for the same years. Our gross profit generated from such company for the years ended 31 December 2020, 2021 and 2022 amounted to approximately RMB4.5 million, RMB3.9 million and RMB5.5 million, respectively, representing approximately 1.5%, 1.2% and 1.8% of our gross profit for the same years, respectively.

During the Track Record Period, the aforementioned urban development company sold gas-fired boilers to us for our provision of heat services, being our primary business operation, in 2021. Our purchase amount in relation to gas-fired boilers from such company for the years ended 31 December 2020, 2021 and 2022 amounted to nil, RMB23.7 million and nil, representing approximately nil, 2.7% and nil of our total purchase for the same years, respectively.

Our Directors have confirmed that our trade payables to and our trade receivables from the aforementioned urban development company were settled separately, and the relevant sales and purchases were neither inter-connected nor inter-conditional with each other. Our Directors have also confirmed that all of the transactions involving such company were conducted in the ordinary course of business under normal commercial terms and on arm’s length basis. The terms of our transactions with such company were individually and separately negotiated with us and comparable to transaction terms with our other customers and suppliers. The prices of the transactions with such company were no less favourable than from our other customers and suppliers.

BUSINESS

Engineering construction company which is our customer and also our supplier

During the Track Record Period, an engineering construction company which is an Independent Third Party was both a customer and a supplier of the Group. Such a company is a private company primarily engaged in the provision of engineering construction services in the PRC.

During the Track Record Period, the aforementioned engineering construction company was an engineering construction services customer of our Group in 2022. For the years ended 31 December 2020, 2021 and 2022, revenue from such company for the provision of our heat services was approximately nil, nil and RMB14.3 million, respectively, representing approximately nil, nil and 1.0% of our total revenue for the same years. Our gross profit generated from such company for the years ended 31 December 2020, 2021 and 2022 amounted to approximately nil, nil and RMB2.2 million, respectively, representing approximately nil, nil and 0.7% of our gross profit for the same years, respectively.

During the Track Record Period, the aforementioned engineering construction company provided engineering construction services to us for our engineering construction services segment. Our purchase amount in relation to engineering construction services from such company for the years ended 31 December 2020, 2021 and 2022 amounted to RMB1.1 million, RMB11.1 million and RMB7.3 million, representing approximately 0.1%, 1.3% and 0.7% of our total purchase for the same years, respectively.

Our Directors have confirmed that our trade payables to and our trade receivables from the aforementioned engineering construction company were settled separately, and the relevant sales and purchases were neither inter-connected nor inter-conditional with each other. Our Directors have also confirmed that all of the transactions involving such company were conducted in the ordinary course of business under normal commercial terms and on arm's length basis. The terms of our transactions with such company were individually and separately negotiated with us and comparable to transaction terms with our other customers and suppliers. The prices of the transactions with such company were no less favourable than from our other customers and suppliers.

Government administration bureau which is our customer and also a lessor of heat service facilities

During the Track Record Period, a government administration bureau which is an Independent Third Party was both a customer and a lessor of heat service facilities of our Group. Such government administrative bureau is a government entity in Shuozhou of Shanxi Province.

During the Track Record Period, the aforementioned government administration bureau was an engineering construction customer of our Group. According to our engineering construction services agreement, we are entitled to receive consideration from such bureau. For the years ended 31 December 2020, 2021 and 2022, engineering construction services provided

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to such bureau amounted to approximately RMB12.7 million, RMB19.7 million and nil, respectively. There was no gross profit generated in these transactions since the transactional amounts represented actual expenses which had been/will be subsequently reimbursed by such bureau.

During the Track Record Period, the aforementioned government administrative bureau leased certain heat service facilities, including primary distribution pipelines and heat exchange stations, to us to operate our Shuozhou Project. According to the heat service facilities leasing arrangements, we shall pay RMB9.5 million to such bureau each year.

Our Directors have confirmed that our payables to the aforementioned government administrative bureau and rights to receive consideration from such bureau, assuming our engineering construction services were fully performed, were neither inter-connected nor inter-conditional with each other. Our Directors have also confirmed that the engineering construction services and leasing arrangements were conducted in the ordinary course of our concession operation under normal commercial terms and on arm's length basis. The terms of our engineering construction services and leasing arrangements were individually and separately negotiated between the government administrative bureau and us.

QUALITY CONTROL AND SAFETY MAINTENANCE

We highly emphasise heat service quality. We strictly comply with all government regulations prescribing heat service standards and safety and emergency response requirements. Pursuant to the relevant laws and regulations, for residential heat service users, day and night average in-room temperature (including that in living rooms and bedrooms) should not be lower than 18°C with heat services. We monitor each key stage involved in our provision of heat services, including heat production and heat distribution, to ensure conformity with all specific requirements according to the applicable regulations. As at the Latest Practicable Date, our quality control team consisted of 44 employees and they were primarily responsible for monitoring and adjusting equipment operation.

REPORTING AND EMERGENCY RESPONSE MECHANISM

To maintain a robust and stable system for our heat services business, we have adopted an effective emergency response mechanism to cope with any suspension of our heat services, damage to heat service facilities or other accidents arising from our heat services operation. With such mechanism, we are capable of minimising the risks associated with emergencies.

We have also adopted a comprehensive internal notification system, specifying different reporting procedures for different levels and scales of accidents. Any malfunction that affects the normal operation of our heat services must be notified to the dispatch centre within 20 minutes of such malfunction. The repair personnel must make a progress report to the supervisor every two hours during troubleshooting. We will notify the occupants of the relevant premises prior to the resumption of our heat services. In the case of serious malfunctions, the heat service department should be informed in a timely manner.

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We have different emergency responses for different kinds of failure in respect of our heat services. For a partial or full suspension of our heat services due to a breakdown of heating facilities, our engineering department will immediately organise a repair of the facilities, striving to resume heating as soon as possible. For our heat services in Hulunbuir of Inner Mongolia Autonomous Region, where the weather is extremely cold during the winter, Hulunbuir Shuangliang is equipped with emergency mobile heating vehicles which can provide heat services in emergency situations such as a temporary suspension of our heat services. For leakage in the distribution pipelines, emergency repair personnel will formulate repair plans and temporary operation plans for the relevant distribution pipelines or heat exchange stations, and implement the plans immediately upon approval. Accidental power shortage should be reported to the local power supply bureau or the electricity control department for inspections and repairs, and the standby generator should be put into operation immediately. For any failure of the water supply systems used by us for the distribution of heat from our heat sources to the heat exchange stations, and from the heat exchange stations to the premises to which we provide heat services, the repair work should be conducted by the water supply company or our repair personnel depending on the circumstance of such failure.

In addition, we have reserved personnel, resources and funds for our handling of heat service emergencies. Our customer service system enables emergency incidents to be conveniently reported to our customer service team, who will then report the relevant information to the relevant departments for their further handling. Each of our heat service operating subsidiaries and local branches are required to set up an emergency rescue team and maintain emergency rescue devices, such that our central despatch and command centre can coordinate and direct the emergency response actions of each subsidiary. Upon resolving an emergency incident, the emergency command office shall immediately organise on-site cleaning and production recovery work, followed by a comprehensive evaluation. The emergency command office shall carefully analyse the cause of the emergency incident, formulate and supervise the implementation of improvement measures and revise the existing emergency plan. The emergency command office is also responsible for dealing with the public relations aspect of emergency incidents. Each of our heat service related units shall conduct periodic emergency drills under specific requirements.

During the Track Record Period, we had fully discharged our obligations to report the occurrence of emergency events to the relevant authority and/or inform our heat service customers of the same according to all relevant laws and regulations, as the case may be, and we were not required to compensate any of our heat service customers due to heat service disruption or suspension. Our Directors have confirmed that we have not experienced any interruption or suspension of our heat services which had a material adverse impact on our business operation during the Track Record Period and up to the Latest Practicable Date.

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MACHINERY, MAINTENANCE AND REPAIR

Our major heat production equipment includes lithium bromide absorption heat pumps, electrically driven compression heat pumps, steam-to-water heat exchangers, water-to-water heat exchangers, coal-fired boilers and gas-fuelled boilers. Our heat distribution mainly relies on our primary distribution pipelines and the heat exchange systems. Each heat exchange system typically involves plate heat exchangers, circulation pumps, make-up water pumps, strainers, water tanks, electric power distribution cabinet and control cabinet. We obtain our heat production and distribution machinery and equipment through procurement, operational leases and finance leases.

We have a dedicated team to ensure normal heat production and distribution as well as emergency response. Our in-house maintenance personnel are typically responsible for routine and ordinary maintenance and repair works. However, maintenance and repair works which are complex in their nature and require specific expertise are undertaken by equipment manufacturers and construction contractors, if necessary.

Our major maintenance works are typically carried out outside of our heat service period every year. We maintain schedules and procedures for routine maintenance, inspection and repairs and our primary distribution pipelines are subject to maintenance and repair throughout the year. The maintenance and repair plan is formulated based on the conditions of the heat service facilities and equipment recorded in the previous heat service period.

Our total maintenance expenses for our heat service facilities for the years ended 31 December 2020, 2021 and 2022 were approximately RMB16.5 million, RMB13.2 million and RMB19.2 million, accounting for approximately 1.5%, 1.4% and 1.7% of our total cost of sales for the same years, respectively.

AWARDS, RECOGNITION AND ACCREDITATION

We obtained awards, recognition and accreditation from various government authorities or other organisations in relation to our business. The following accolades are important to our business operations.

<u>Time of grant</u>	<u>Award/accreditation</u>	<u>Awarding authority</u>	<u>Awarded entity</u>
December 2022	High and new technology Enterprise Certificate (高新技術企業證書)	Shanxi Provincial Department of Science and Technology, Shanxi Provincial Department of Finance, Shanxi Provincial Taxation Bureau of the State Taxation Administration (山西省科學技術廳、山西省財政廳、國家稅務總局山西省稅務局)	Shanxi Shuangliang New Energy

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<u>Time of grant</u>	<u>Award/accreditation</u>	<u>Awarding authority</u>	<u>Awarded entity</u>
October 2022	High and new technology Enterprise Certificate (高新技術企業證書)	Gansu Provincial Department of Science and Technology, Gansu Provincial Department of Finance, Gansu Provincial Taxation Bureau of the State Taxation Administration (甘肅省科學技術廳、甘肅省財政廳、國家稅務總局甘肅省稅務局)	Lanzhou Shuangliang
December 2021	High and new technology Enterprise Certificate (高新技術企業證書)	Shanxi Provincial Department of Science and Technology, Shanxi Provincial Department of Finance, Shanxi Provincial Taxation Bureau of the State Taxation Administration (山西省科學技術廳、山西省財政廳、國家稅務總局山西省稅務局)	Taiyuan Renewable Energy
December 2020	High and new technology Enterprise Certificate (高新技術企業證書)	Shanxi Provincial Department of Science and Technology, Shanxi Provincial Department of Finance, Shanxi Provincial Taxation Bureau of the State Taxation Administration (山西省科學技術廳、山西省財政廳、國家稅務總局山西省稅務局)	Shanxi Demonstration Zone Heat Supply
October 2019	Shanxi Province Professional and Innovative Small and Medium-sized Enterprises (山西省專精特新中小企業)	Shanxi Provincial Small Business Development and Promotion Bureau (山西省小企業發展促進局)	Taiyuan Renewable Energy
March 2017	2016 Safe Production Award – Advanced Collective (2016年度安全生產先進集體)	Work Safety Committee of Shanxi Shuozhou Economic Development Zone (山西朔州經濟開發區安全生產委員會)	Shuozhou Renewable Energy
December 2014	Honesty Enterprise (誠信企業)	Taiyuan Working Committee for the Identification of Small and Medium-sized Integrity Enterprises (太原市中小微誠信企業認定工作委員會)	Taiyuan Renewable Energy
March 2012	Excellent Foreign Investment Enterprise (外來投資優秀企業)	Shuozhou Investment Promotion Bureau (朔州招商引資局)	Shuozhou Renewable Energy

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COMPETITION

According to the Frost & Sullivan Report, the heat service market in the PRC is fragmented with a large number of market players. Currently, most market players in the heat services industry in China fall into three categories: specialised heat services providers, subsidiaries of power generation groups and property developers. The major players in the heat services industry in China are specialised heat services providers and most of the players are State-owned companies. In 2022, the total actual heat services area in China was 11,239.4 million sq.m. The majority of the top 10 players were State-owned companies. The aggregate heat services area of the top 10 companies accounted for more than 16.0% of the total actual heat services area in the PRC in 2022, with the tenth largest heat services provider having an actual heat services area of more than 100.0 million sq.m.. We were ranked No. 9 in terms of the aggregate actual heat service area in Shanxi Province, Gansu Province and Inner Mongolia Autonomous Region in 2022, according to the Frost & Sullivan Report. We believe that we have distinguished ourselves from our competitors through (i) potential of business growth with the areas covered by concession rights we obtained; (ii) cross-provincial business coverage; (iii) extensive experience in the use of clean heat sources; and (iv) our integrated and digitalised heat services management platform, which enable us to remain competitive in the future. See “Industry overview – Competitive analysis of the heat services industry in the PRC” in this document for further details on the markets in which we operate and for a discussion of our competition.

RESEARCH AND DEVELOPMENT

We emphasise on the patents, copyrights, technological know-how and other intellectual property required for our heat service operation in order to strengthen our leading position in the heat service industry and enhance our competitiveness further. Our research efforts are focused on improving our heat sources portfolio with a view to utilising more clean energy heat sources, as well as improving our heat services management platform to reduce costs and enhance our operational efficiency. We have a dedicated research and development team consisting of 20 employees with extensive industry experience in heat service related design and technology. We have established a research and development centre in Taiyuan of Shanxi to enhance our research and development capabilities, strengthen our research and application of new energy heat service technologies and promote innovation. We have also collaborated with leading research centres and educational institutions to develop innovative technologies. For details, see “Our competitive strengths” in this section.

Our research and development expenses were approximately RMB4.7 million, RMB7.7 million and RMB8.2 million for the years ended 31 December 2020, 2021 and 2022, representing 0.4%, 0.8% and 0.7% of our total cost of sales for the same periods, respectively. None of our research and development expenses were capitalised during the Track Record Period.

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The following table sets out a list of key personnel in our research and development team, which is located at our research and development headquarter in Taiyuan:

Name	Education	Relevant working experience
Mr. Chen Xibao (陳喜報先生)	Mr. Chen graduated from Zhengzhou College of Technology* (鄭州工學院) in June 1995. He majored in fine chemical engineering.	Mr. Chen has been serving our Group since December 2009. He is primarily responsible for research and analysis of market development. Mr. Chen is the person-in-charge of the Xinmi Project, and is responsible for the preparation works for the commencement of our provision of heat services in Xinmi from the 2023/2024 heat service period in or around November 2023. Mr. Chen is a member of our senior management. For details, see “Directors, supervisors and senior management – Senior management” in this document.
Mr. Ma Ningfu (馬寧甫先生)	Mr. Ma graduated from Southwest Jiaotong University (西南交通大學) in June 2006. He majored in telecommunication and software engineering science.	Mr. Ma has been working in Shanxi Shuangliang New Energy since January 2011. His responsibilities cover the research and development of our heat services management platform and digitalisation of our auto-control system in our heat service value chain.

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<u>Name</u>	<u>Education</u>	<u>Relevant working experience</u>
Mr. Zhang Liangliang (張亮亮先生)	Mr. Zhang graduated from Taiyuan University of Technology (太原理工大學) in July 2010. He majored in building environment and equipment engineering.	Mr. Zhang has been working in Shanxi Renewable Energy since July 2010. His responsibilities cover design and technology related works. He was involved in the development of the single well circulation geothermal heating system, of which Shanxi Renewable Energy obtained copyright registration on 11 April 2019 and obtained a utility patent registration on 14 January 2020.
Ms. Jia Jia (賈佳女士)	Ms. Jia graduated from Taiyuan University of Science and Technology (太原科技大學) in July 2007. She majored in computer science and technology.	Ms. Jia has been working in Shanxi Renewable Energy since August 2008. Her responsibilities cover design and technology related work. She was involved in the development of the combined heating system of geothermal heating and central heating, of which Shanxi Renewable Energy obtained a utility patent registration on 4 March 2019.
Mr. Wu Ruipeng (武瑞朋先生)	Mr. Wu graduated from Taiyuan University of Technology (太原理工大學) in July 2010. He majored in building environment and equipment engineering.	Mr. Wu has been working in Shanxi Renewable Energy since July 2010. His responsibilities cover design and technology related work. He was involved in the development of the integrated heating pipe network system based on multiple heating methods, of which Shanxi Renewable Energy obtained a utility patent registration on 19 May 2020.

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INTELLECTUAL PROPERTY

We place significant emphasis on developing our brand image alongside our cross-provincial operation and we therefore think intellectual property rights are crucial to our business. We currently possess a set of leading clean energy heat service technologies and a variety of other heating technologies. As at the Latest Practicable Date, we have registered eight domain names, eight trademarks and 25 copyrights. As at the same date, we also had 72 patents registered with CNIPA, five of which were for inventions relating to heat service systems during cogeneration process that are leading technologies in the industry. The others were for utility models relating to heat exchange operation and monitoring. In addition, we had two inventions and three utility models pending registration for patents. For details of our material intellectual properties, see "Statutory and general information – Further information about our business – Intellectual property rights" as set out in Appendix VII to this document.

We will continue to take a proactive approach and seek to maintain proper registration of our intellectual property rights. We also rely on trade secrets protection and contractual restrictions to safeguard our intellectual property rights. We closely monitor and collect information on any instances of infringement on our intellectual property rights, and we take legal action and cooperate with local authorities to protect our intellectual property rights where necessary.

During the Track Record Period and up to the Latest Practicable Date, we were not involved in any infringement of others' intellectual property rights or infringement of our intellectual property rights by others that would have a material adverse impact on our business and we were not involved in any proceedings involving infringement of intellectual property rights.

INSURANCE

As at the Latest Practicable Date, we maintained insurance policies which cover potential losses or damages in respect of our business operations. These insurance policies cover, among other things, properties, equipment and machinery, pipelines, vehicles, computers and other properties owned by us. The insurance coverage varies at entity level to accord with local and industry practise. Based on our past experience and understanding of the prevailing industry practise in the locations where we operate, we believe the coverage of such property insurance is adequate to cover any material property damages and is in line with the industry norm. As we are expanding our business and we may face potential risk exposure due to the change of regulatory schemes, we may be subject to certain losses and/or claims. For details, see "Risk factors – Risks relating to our business and industry – Our insurance coverage may not extensively cover the risks related to our business" in this document.

We are required to maintain mandatory social security insurance policies for our employees in the PRC pursuant to applicable PRC laws. See "Employees" in this section for further details. In addition, we expect that we will maintain directors' and officers' liability insurances for the executive Directors and executive officers of our Company after the [REDACTED].

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With the expansion of our business and potential new risk exposure, we may procure further insurance policies as our Directors deem appropriate. During the Track Record Period and up to the Latest Practicable Date, we did not experience any material business interruptions or material insurance claims.

EMPLOYEES

As at the Latest Practicable Date, we had a total of 887 employees, amongst which over 57.2% had working experience of more than five years in heat service operation and approximately 29.1% held professional title certificates in the areas such as engineering, accounting and administration. Our employees are located across Jiangsu Province, Shanxi Province, Gansu Province, Inner Mongolia Autonomous Region and Henan Province in the PRC. For the years ended 31 December 2020, 2021 and 2022, our employee benefit expenses were approximately RMB77.4 million, RMB90.0 million and RMB91.6 million, respectively.

During the Track Record Period and up to the Latest Practicable Date, our employees did not negotiate their terms of employment through any labour union or by way of collective bargaining agreements nor did we have any material disputes with our employees, or experience any strike, labour disputes or industrial actions that may have a material adverse effect on our business, financial position and results of operations. We believe that our senior management has maintained a good relationship with our staff members.

The tables below set out breakdowns of employees by function, location and gender, and the corresponding percentage of our total employees, as at the Latest Practicable Date:

Function	Number of employees	Percentage of our total employees
		(%)
Management	8	0.9
Heat service operation and customer services	711	80.2
Technical support	21	2.4
Procurement	9	1.0
Operating and machinery control	16	1.8
Business advisory	8	0.9
Finance	35	3.9
Administration	79	8.9
Total	887	100.0

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Location	Number of employees	Percentage of our total employees
		(%)
Shanxi Province	581	65.5
Gansu Province	186	21.0
Inner Mongolia Autonomous Region	89	10.0
Henan Province	20	2.3
Jiangsu Province	11	1.2
Total	<u>887</u>	<u>100.0</u>

Gender	Number of employees	Percentage of our total employees
		(%)
Male	664	74.9
Female	223	25.1
Total	<u>887</u>	<u>100.0</u>

Training

We highly value our employees and place emphasis on the development of our employees. In order to advance the skills and knowledge of our employees as well as to explore new potentials from our workforce, we invest in continuing education and training programmes for our management and ordinary staff members to update their skills and knowledge periodically. Generally, our training focuses on matters relating to our operation, technical knowledge and work safety standards and environmental protection.

Recruitment and remuneration

We believe that our quality personnel are our key to success and future development. In the future, we will recruit talent from various sources, such as universities, online platforms, third-party recruitment agencies, and other companies, and provide training and promotion opportunities to our staff members of our own accord.

The remuneration package of our employees includes basic salary, performance salary and allowances. We determine employee remuneration based on factors such as qualifications, expertise and years of relevant experience. We must comply with PRC laws and regulations relating to social welfare. In accordance with applicable PRC regulations, we currently

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participate in social insurance contribution plan organised by the relevant local governments. We currently provide employees with a pension insurance programme, medical insurance programme, unemployment insurance programme, individual work injury programme, maternity insurance contributions and employee public housing reserve contributions and other welfare benefit.

Social insurance and housing provident fund contributions

During the Track Record Period, some of our PRC subsidiaries did not make full contributions to the social insurance and housing provident funds for some of our employees as required under PRC laws and regulations. For further details, please see "Regulatory compliance – Non-compliance incidents – (1) Social insurance and housing provident fund contributions" in this section.

Equal employment in the workforce

We promote equal employment opportunities and avoid all forms of illegal employment such as child labour and forced labour as stipulated in our internal regulations on labour management of employees. We respect the diverse backgrounds of our employees and strictly eliminate ethnic discrimination.

During the Track Record Period and up to the Latest Practicable Date, we did not experience any material labour dispute with our employees including any strikes and labour disturbances nor receive any relevant complaints, notice or orders from relevant government authorities or third parties that have materially interfered with our operations, and we believe that our senior management has maintained a good working relationship with our staff.

Gender diversity in the workforce

We recognise gender diversity in the workplace as a key factor in our continuous development and success. Since our incorporation, we have been actively promoting gender equality within our Group. We incorporate gender equality into all aspects of our business operation. We take into account gender diversity when we hire and promote talents. We provide additional trainings to female employees which helps them to excel in our industry where the male-female talent ratio is disproportional. We also invite female employees for advice so that our decision-making process can be transparent. By such measures, our female employees are closely allied and actively monitor any major decision that may have a significant impact on female employees' interests and benefits within our Group. In addition, we are committed to grow our female leaders organically. We pay special attention to our female employees' performance through our annual appraisal and promote suitable female employees to management level in accordance with our gender diversity policy. As at the Latest Practicable Date, we had a measurable number of female employees acting as the principals and leaders of various units in our Group.

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Dispatched staff

As at 31 December 2020, 2021 and 2022, the total number of dispatched staff at four of our subsidiaries was 211, 193 and 10, which accounted for approximately 24.8%, 18.1%, 5.1% of the total number of our workers at those subsidiaries, respectively. For the years ended 31 December 2020, 2021 and 2022, the total cost involved in the labour dispatch arrangements was approximately RMB1.8 million, RMB8.0 million and RMB0.4 million, respectively.

These labour dispatch arrangements were temporary in nature and according to the labour dispatch agreements, dispatched staff were mainly involved in supporting functions of our business operation in respect of warehouse and logistics management, cargo handling and transportation. According to the labour dispatch agreements, (i) each subsidiary was responsible for paying wages to the dispatched staff and ensure their occupational health and safety; (ii) the employment agent was responsible for arranging for their insurance and other welfare conditions as required by the applicable PRC laws and regulations; and (iii) we paid service fees at a rate of RMB20.0 per staff to the employment agent, and the employment agent provided suitable dispatched staff to work for our Group based on our job requirements. As the dispatched staff were employed by an employment agent, they were not our formal employees.

During the Track Record Period, the percentage of dispatched staff that worked at four of our subsidiaries exceeded the legally required threshold. For further details, please see “Regulatory compliance – Non-compliance incidents – (2) Dispatched staff” in this section.

OCCUPATIONAL HEALTH AND SAFETY

We are subject to various PRC laws and regulations regarding labour, safety and work related incidents. For more information, see “Regulatory overview” in this document. We are committed to maintaining a safe working environment and promoting the awareness of occupational health and safety within our Group. We place significant emphasis on quality control on our raw materials and services, proper maintenance of our facilities as well as maintenance of operation and heat usage safety. Our production safety unit is responsible for safety and maintenance matters arising from different operation processes. As at the Latest Practicable Date, our production safety unit comprised 50 employees (including technicians and engineers), a majority of whom had more than three years of experience in the heat services industry. Their responsibilities mainly include (i) keeping track of the relevant regulatory and industry standards regarding safety, maintenance and quality control; (ii) formulating and reviewing our internal safety inspection, facilities maintenance and quality control procedures and standards; (iii) monitoring the implementation of the above procedures and standards in our day to day operation and reporting high-level issues to senior management for instructions; (iv) maintaining detailed records for related matters; and (v) delivering safety training for our employees.

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We have established strict quality control standards on various aspects of our raw materials supply, construction of primary distribution pipelines, facilities repairs and maintenance to ensure the safety and stability of our heat service. We have internal procedure manuals and policies to cover the maintenance of our operation facilities. We strictly follow government regulations when adopting our own safety rules and emergency recovery plans, which are imposed on all of our employees. Failure to comply with those regulations may result in penalties, fines and sanctions. For details, see “Risk factors – Risks relating to our business and industry – We are subject to a broad range of environmental, safety and health laws and regulations in the PRC, compliance with which may be difficult or expensive. Failure to comply with these laws and regulations may render us subject to penalties, fines, governmental sanctions, proceedings and/or suspension or revocation of our licences or permits required for our business operation” in this document.

We conduct periodic inspections and maintenance projects for our heat service facilities to ensure safe and stable operation. Any abnormality noted during the periodic safety checks will be reflected in our safety records and follow-up remedial actions will be taken by the responsible departments and officers accordingly.

We have established a production safety committee, where the general manager serves as the director of the committee. We have also dedicated occupational safety personnel at each of our operating subsidiaries in the PRC. These occupational safety personnel are in charge of (i) conducting regular training sessions for employees on accident prevention and management; and (ii) submitting occupational safety reports to the board of directors and performance evaluation department. We believe our health and safety control measures are adequate and comply with applicable laws and regulations in all material respects. During the Track Record Period and up to the Latest Practicable Date, none of our employees had been involved in any major accident during the course of their employment and the relevant PRC authorities had not imposed any sanctions or penalty on us for incidents of non-compliance of any health and safety laws or regulations in the PRC.

In view of the outbreak of COVID-19 in the PRC and to ensure continuous business operations of our Group, we have adopted enhanced hygiene and precautionary measures since January 2020 whereby our employees shall take all practicable steps to maintain a hygienic and safe working environment. These include the following measures:

- requiring our employees to report their travel history and the health conditions of themselves and their close contacts;
- requiring our employees to record their visits through the “Ding Ding Safe” App (釘釘健康打卡);
- requiring our employees to wear masks and strictly follow the rule of “one-metre” distancing (一米線);
- screening visitors to our business premises through temperature check and inquiry on their exposure history; and
- frequently cleaning and disinfecting our business premises and our operational facilities.

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Our Directors confirm that the additional costs associated with the above enhanced measures did not have a significant impact on our Group during the Track Record Period. For more information relating our response towards COVID-19, see “Effects of the COVID-19 outbreak – Our response towards the COVID-19 outbreak” in this section.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE

To cope with the increasing risk from climate change, environmental protection is viewed as an integral corporate responsibility within our Group. We are dedicated to lowering the negative environmental impact of our business operations. Environmental stewardship is essential for us to fulfil CSR. We uphold the concept of sustainable development, focus on diversity management, defend public interests and expect to generate value for our Shareholders. As such, our Group has followed a policy on environmental, social and governance (“ESG”) responsibilities in accordance with the Listing Rules, which sets out our CSR objectives and provides guidance on how we implement corporate social responsibility in our daily operations.

Our ESG policy

We have developed an ESG policy (the “**ESG Policy**”). Under our ESG Policy, we strive to operate in a manner that protects the environment, safety and health of our employees and communities. Our target is to sustainably connect with our employees, customers, and business partners through a combination of initiatives which create long-lasting benefits. We provide development and training activities for our employees, and solutions for our customers, and encourage our business partners to actively fulfil corporate social responsibilities. We are also committed to providing equal employment and development opportunities for all employees. In the recruitment process, we prohibit discrimination based on differences in gender, ethnicity and religious belief.

Specifically, our ESG Policy includes the following key areas: (i) environmental protection and resource conservation; (ii) measures to deal with extreme weather; (iii) heat services quality and compliance; (iv) investor rights protection and partnership handling; (v) promotion of employment and protection of employee rights; (vi) CSR management; (vii) data security and personal information protection; and (viii) staff training management.

Our ESG working group

Our Board has ultimate responsibility for ESG strategy, management, performance, and reporting, and is responsible for reviewing and approving our Group’s major ESG-related policies and frameworks in accordance with Appendix 27 to the Listing Rules. In addition, our Board is responsible for reviewing the impact of climate change on our Group. In accordance with our ESG Policy, we have established a management structure of the ESG working group composed of our Board of Directors, senior management and relevant departments of our Group (the “**ESG Working Group**”).

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Our ESG Working Group established under the Board of Directors has well-defined duties and responsibilities to oversee our Group’s ESG matters. Our ESG Working Group is headed by Mr. Li Baoshan (李寶山先生), an executive Director and general manager of our Group, and other members include the management of various departments. Directed and supervised by our Board, the ESG Working Group is responsible for handling all ESG related matters, monitoring and assessing any ESG related risks that we may be exposed to, identifying and assessing risks and opportunities for climate change, organising regular meetings to discuss and determine ESG-related issues that need to be further addressed by our senior management, reporting to our Board regularly on ESG-related risks, opportunities and performance, advising our Board in respect of ESG reporting, strategies, initiatives and objectives, and participating in international and national conferences in respect of ESG-related matters.

Environmental, social and climate-related risks and opportunities

We adopt a responsible and sustainable approach to operate our business, actively maintain business transparency, and make a responsible commitment to our stakeholders. Our Group strives to not only protect the rights and interests of our Shareholders, but also safeguard the rights and interests of our employees, customers, suppliers, various communities, and different stakeholders. In order to manage ESG matters more effectively, we have formulated and revised relevant policies, and conducted regular reviews to coordinate relevant efforts across our Group.

In addition, we pay close attention to the latest ESG-related laws and regulations and update our ESG Policy accordingly to ensure that we comply with the latest regulatory laws and regulations. We will use the following methods to identify, manage and assess material ESG-related issues:

- *Identification:* We identify the economic, environmental and social impacts of our business through media analysis, peer benchmarking and communication with key stakeholders (including our major customers, major suppliers, and employees). We discuss ESG-related issues with all stakeholders (including our investors, customers, business partners and our employees) to collect their views on our ESG measures and practices, which can help us better identify and consider the ESG issues and risks inherent in our business operations and formulate effective ESG measures to mitigate those risks.
- *Management and assessment:* We develop responses to ESG-related issues that may affect our business and monitor the implementation of our plans. In addition, we regularly assess ESG-related issues arising from our business operations, including climate-related issues, ESG measures, major action plans, risk management policies, and annual budget for implementing these ESG measures, as well as our business plans.

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Climate-related risks and opportunities

With increasing climate change effects and frequency of extreme weather events, we fully realise that climate change is one of the crucial factors in achieving the sustainability of our business. To ensure the stable and long-term returns for our stakeholders, we have identified and assessed climate-related risks and opportunities that may affect our business and financial performance. We continuously monitor and assess those identified risks to our business and develop action plans to mitigate their impacts. We refer to the recommendations of the Task Force on Climate-related Financial Disclosures (the “TCFD”) to identify climate-related risks and opportunities which are relevant to our business. We will disclose more details of our counter measures and future plans after the [REDACTED].

All of our projects have obtained environmental impact assessments prior to construction. We take corresponding measures in accordance with the requirements of environmental laws and regulations to minimise the impact on the environment during project construction and operation periods. As at the Latest Practicable Date, our heat service projects in operation were located in Shanxi Province, Gansu Province and Inner Mongolia Autonomous Region. These provinces are subject to the temperate continental climate which is characterised by cold winters, windy springs, rainy summers and autumns, rare high temperature and hot weather, dry air and less precipitation throughout the year. We have identified the following short-term (1-3 years), medium-term (4-10 years), and long-term (over 10 years) climate-related risks and their potential impacts on our business and financial performance.

Classification		Timeframe	Climate-related risks assessed	Potential impacts
Physical risks	Acute	Medium and long term	<ul style="list-style-type: none"> Frequency of extreme weather events such as sandstorms, blizzards, etc. 	<ul style="list-style-type: none"> Reduced production capacity due to the electricity shortage Increased operating costs due to inadequate water supply for our water circulation network
	Chronic	Long term Long term	<ul style="list-style-type: none"> Extreme variability in weather patterns Rising mean temperatures 	<ul style="list-style-type: none"> Increased costs due to the damage to heat service facilities Reduced revenues from lower sales, for examples the shortened heating period

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Classification		Timeframe	Climate-related risks assessed	Potential impacts
Transition risks	Policy and law	Short term	<ul style="list-style-type: none"> Increased pricing of greenhouse gas emissions 	<ul style="list-style-type: none"> Increased costs of compliance with laws and regulations
		Short term	<ul style="list-style-type: none"> More stringent obligations to disclose the information of emissions 	
		Short and medium term	<ul style="list-style-type: none"> Regulation on existing products and services 	
	Technology	Medium and long term	<ul style="list-style-type: none"> Costs of transition to technology with lower emissions 	<ul style="list-style-type: none"> Early retirement of the coal-fuelled boilers Research and development expenditures in new and alternative technologies such as solar power and air heat pumps Costs to use/deploy carbon capture and storage technologies
		Long term	<ul style="list-style-type: none"> Substitution of existing heating sources with clean energy featuring lower GHG emissions 	
	Market	Short term	<ul style="list-style-type: none"> Increased cost of raw materials 	<ul style="list-style-type: none"> Increased production costs due to changes in the prices of raw materials (such as purchased electricity and coal) Reduced company profitability owing to the negative impacts on talent management and planning (for example, brain drain) Shareholders may give up from investing in fossil fuel-related businesses
		Medium and long term	<ul style="list-style-type: none"> Increased stakeholders’ attention or negative feedback 	

In order to reduce the risk of future climate change, we plan to apply cleaner heat sources, such as solar energy and air energy to achieve a combination of low-carbon heat source. Therefore, we can gradually reduce our GHG emissions from our own operations. Based on our business development strategy and planning, we have identified the following climate-related opportunities in five main aspects including resource efficiency, energy source, products and services, markets, and business development resilience, with reference to the TCFD recommendations.

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Climate-related opportunities

Type	Climate-related Opportunities	Potential Impacts
Resource efficiency Energy sources	<ul style="list-style-type: none"> • Water recycling • Use low emission energy, such as geothermal energy • The financial support of government for heating services powered by clean energy • Use of new heating technologies and promote the diversification of heat sources • Participation in carbon market 	<ul style="list-style-type: none"> • Reduced operating costs • Reduced exposure to increases in future fossil fuel price • Reduced GHG emissions and therefore less risks posed by increases in carbon costs • Increased capital availability (e.g., investors’ increasing interest in producers with lower emissions)
Products and services	<ul style="list-style-type: none"> • Expansion of geothermal heating services • Development of new services, such as solar power generation and storage, through R&D and innovation • Users’ tendency for cleaner energy 	<ul style="list-style-type: none"> • Increased revenue through the promotion and use of clean energy sources (e.g., geothermal energy, solar energy, air-source energy)
Markets	<ul style="list-style-type: none"> • Use of public-sector incentives 	<ul style="list-style-type: none"> • Increased revenues by entering new or emerging markets in partnerships with local governments
Business development resilience	<ul style="list-style-type: none"> • Participation in renewable energy programs and adoption of energy efficiency measures • Increase the diversification of heating energy 	<ul style="list-style-type: none"> • Increased revenue by using advanced heating technologies to ensure our business resiliency

Our strategies to respond to climate-related risks and opportunities

In response to physical risks (driven by extreme weather events such as blizzards, sandstorms, cold waves, and droughts), we have formulated detailed emergency plans and educated our employees probably at risk on preparedness measures. In case of emergencies (including natural disasters, accidents, public health events, and social security incidents), we issue early graded warnings according to the urgency, the status and the possible consequences of the emergency to ensure the safety of life and property of our employees and residents of surrounding communities.

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In addition, to reduce or eliminate the adverse effects of climate change or extreme weather events on our daily operations, we have taken the following measures:

- we monitor the indoor and outdoor temperatures in a daily routine. By installing indoor temperature measurement equipment in the heat exchange station used by us, we are able to monitor the heating temperature in real time and adjust the flow in the heating pipe network system to reduce the electricity consumption while meeting the user needs;
- we have established an emergency preparedness team to formulate and implement appropriate emergency plans and mechanisms and organise emergency drills and training on a regular basis every year to improve our employees' ability to cope with emergencies; and
- we have purchased insurance for our heat exchange equipment and machinery to mitigate risks of destruction and loss.

In addition to ESG policies and measures as aforementioned, our Group also adopted various metrics and numeric targets on environmental-related matters of our business operation based on historical data to implement our ESG Policy and achieve carbon neutrality by 2060. For further details, see "Environmental, social and governance – Metrics and targets on environmental-related matters" and "Heat sources" in this section. In particular, each unit and department of our Company is required to report the emission volume to the ESG Working Group for assessment. We also promote "low carbon office environment" in our offices, according to which our employees are encouraged to (i) consider twice before printing, (ii) switch off the lightening services when they leave the offices; and (iii) reduce unnecessary traveling if remote discussion can be achieved. Our Directors confirmed the above-mentioned measures adopted by our Group for improving energy efficiency and reducing coal consumption and carbon emission have been effective during the Track Record Period.

Under the low-carbon transformation of the global economy, we expect that clean heat sources such as geothermal energy, solar energy, natural gas and air energy will show strong competitiveness in the future heating market. Therefore, we are investing in developing advanced technologies of waste heat recovery, solar energy, air energy and geothermal energy. For our heating projects that have been completed and put into operation, we have taken the following measures to improve our energy efficiency and reduce coal consumption:

- we have installed high-efficient, energy-saving and environment friendly boilers to mitigate the pollution to the environment;
- we have installed our residual heat recycling and utilisation system inside cogeneration plants to recover the exhaust heat for secondary heating; and
- we also use geothermal energy as a clean heat source for our heating business.

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Environmental protection

We operate our business with a responsible attitude towards the environment, actively fulfil our corporate responsibilities, and promote green and sustainable development. In order to achieve green operation, we have adopted a variety of energy conservation and emission reduction measures to reduce energy consumption and pollutant emissions. Besides, we are actively engaging in developing and utilising the use of clean energy in our business, and thus to reduce GHG emissions during our operation.

We value the ecological value of natural environment, and we are committed to reducing or eliminating the impact that our business may have on the environment. Our production process is clean and efficient, and all projects meet the pollution discharge requirements stipulated by the local governments. During the Track Record Period, we were not subject to any administrative sanctions or penalties for violating environmental laws or regulations. We will continue to strictly implement our environmental protection measures to ensure compliance with the applicable PRC laws and regulations.

For the years ended 31 December 2020, 2021 and 2022, we incurred ESG-related costs of approximately RMB1.4 million, RMB2.1 million and RMB2.1 million, respectively. The costs were mainly related to our Group’s measures to ensure compliance with the applicable environmental and health and safety laws and regulations. Going forward, we expect to incur ESG-related costs of RMB2.3 million, RMB2.3 million and RMB2.5 million for the years ending 31 December 2023, 2024 and 2025, respectively.

Reducing coal’s environmental impact and consumption

Our coal-fired boilers mainly come from Lanzhou Shuangliang. For the coal-fired boilers, we have set up exhaust gas collection, treatment and monitoring facilities. We have taken a variety of energy-saving and consumption-reducing measures, such as using clean heat sources and developing an integrated heating management platform to improve resources efficiency, reduce the intensity of resource consumption and GHG emissions, and reduce environmental impacts from operations.

1. In terms of the selection and application of heat sources:
 - according to the “Plan for Winter Clean Heating in the Northern Region (2017-2021) “(《北方地區冬季清潔取暖規劃(2017-2021)》), the coal-fired boilers were retrofitted with extra-low emissions. We have installed flue gas denitrification, desulfurization and dust removal treatment devices. The emission concentrations of NO_x, SO_x and particulate matter are in line with the “Comprehensive Implementation of the Work Plan for Ultra-low Emissions and Energy-Saving Transformation of Coal-fired Power Plants” (《全面實施燃煤電廠超低排放和節能改造工作方案》) extra-low emission standards limits, that is, the emission concentration limits are 50 mg/m³, 35 mg/m³ and 10mg/m³ respectively. These retrofitted coal-fired boilers are more

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environmentally friendly and energy efficient. The retrofitted ultra-low emission devices were certified by the Lanzhou New Area Ecology and Environment Bureau (蘭州新區生態環境局) in 2019, which can reduce the pollution caused by exhaust emissions to the environment;

- develop and adopt clean energy such as geothermal energy as an alternative of fossil fuels and contribute to the GHG emission reduction.
- use of two 15.7MW absorption lithium bromide heat pump to recover the heat from our Lanzhou Shuangliang's boiler desulfurization tower. The annual recovered heat was 160,000 GJ-200,000 GJ, which accounting for about 8% of the total heat supply.
- work with co-generation power plants in the region to recover the circulating water and flue gas waste heat, the project has been put into operation, with a scale of 6*43.5MW and a heating capacity of 2.4 million square meters.

2. In terms of heating system management:

- the heating management platform is established to monitor the heat production system and heating temperature in real time and combine the monitoring parameters to realise automatic regulation of heating equipment, reduce heat loss, and improve energy efficiency and heating safety;
- improve the raw coal sampling methods and use good quality coal for furnace burning;
- conduct thermal insulation treatment on the heating system to improve heat exchange efficiency, and also conduct regular inspection, cleaning and maintenance of heating facilities to reduce heat loss and potential security risks; and
- optimise the heating design scheme and equipment operation mode, reduce the use of high-energy-consuming equipment, and run the circulating water pump in an energy-saving mode to achieve the purpose of reducing energy consumption.

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Metrics and targets on environmental-related matters

Our ESG Working Group has identified the following key performance indicators (“KPIs”) in relation to our business operation, the consumption are as follows:

KPI	Unit	2020	2021	2022
Resource usage				
a. Total energy consumption	kWh in '000s	734,643	600,180	688,601
1. Non-renewable energy consumption	kWh in '000s	697,754	563,940	648,824
Coal	kWh in '000s	695,349	561,632	639,406
Gasoline	kWh in '000s	91	205	84
Diesel fuel	kWh in '000s	236	160	201
Natural gas	kWh in '000s	2,078	1,943	2,299
2. Renewable energy consumption	kWh in '000s	19,389	20,762	30,093
Geothermal energy	kWh in '000s	19,389	20,762	30,093
3. Purchased energy consumption	kWh in '000s	17,500	15,478	16,517
Electricity	kWh in '000s	17,500	15,478	16,517
b. Total water consumption	m ³	135,570	129,161	181,380
GHG emission				
KPI	Unit	2020	2021	2022
GHG emissions (Scope 1)	tCO ₂ e	240,620	194,341	221,103
GHG emissions (Scope 2)	tCO ₂ e	15,613	13,810	14,737
GHG total emissions	tCO ₂ e	256,233	208,151	235,840

Data description:

- Time frame: From 1 January 2020 to 31 December 2022.
- Scope of entities: the production of the five heating projects under the subsidiaries of the Company.
- Calculation of energy consumption: Different types of energy consumption such as coal, gasoline, diesel, natural gas and purchased electricity are converted in a unified unit. The conversion coefficient of each energy unit refers to the “Energy statistics manual (Annex 3 Units and Conversion Equivalents)” issued by International Energy Agency.

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- The GHG emission calculation is based on two emission sources, classified as direct GHG emissions (coal, natural gas, gasoline and diesel for company vehicles) and indirect GHG emissions (purchased electricity). The direct GHG emission coefficients and calculation methods refer to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories (《2006年IPCC國家溫室氣體清單指南》)
- The emission coefficients of purchased electricity refer to the 2019 Annual Emission Reduction Project China Regional Grid Baseline Emission Factors (《2019年度減排項目中國區域電網基準線排放因子》) issued by the Ministry of Ecology and Environment of China (國家生態環境部).

<u>Key performance indicator</u>	<u>Unit</u>	<u>2022 Emissions</u>	<u>2021 Emissions</u>	<u>2022 Emissions</u>
NOx	kg	38,736	43,191	30,297
SOx	kg	2,276	3,903	8,335
Particulate matter	kg	1,836	2,680	3,009

Data description:

- Time frame: From 1 January 2020 to 31 December 2022.
- Scope of entities: Lanzhou Shuangliang Heating Facility.
- The emission calculation is based on the amount of emissions from coal-fired boilers.

Our ESG Working Group has set targets and goals concerning the reduction for the waste production and resource consumption, which we expect to achieve by 31 December 2025. The following table sets out our targets by item.

<u>Item</u>	<u>Target</u>
Resources	
Energy	Reduce 5% of energy use intensity by 2025
Water	Reduce 5% of water use intensity by 2025
Wastes	
Exhaust gases	Reduce 5% of the exhaust gas emission intensity by 2025
GHG emissions	Reduce 5% emission intensity of Scope 1 & Scope 2 GHG emissions by 2025
Hazardous wastes	Reduce 5% of the hazardous wastes emission intensity by 2025
Wastewater	Reduce 5% of the wastewater emission intensity by 2025

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Social matters

Our Group has policies on compensation, dismissal, equal opportunities, diversity and anti-discrimination. Our Group respects the gender, age and ethnicity of each person. Accordingly, our Group gives each job applicant an equal opportunity and we have an internal policy in place to ensure that there is no discrimination as to gender, age and ethnicity. We also attach importance to develop an internal management system within our Group, characterised by anti-bribery, anti-corruption and anti-fraud. By establishing such system, internal rules and regulations are developed to strengthen the anti-corruption management, and to conduct related trainings for our Board and all employees. We are committed to build a corporate culture of fairness, openness, integrity, and honesty, aiming to maintain the good reputation of our Group.

Employees are an important asset to our Group and their growth can contribute to the development of our Group. We have developed a training management system* (《培訓管理制度》) and a mentor and apprentice management system* (《師帶徒管理制度》), which set clear regulations on issues such as departmental responsibilities, types of training, training plans, training implementation and impact evaluation. We strive to enhance the quality of our staff through channels, such as standardising training procedures and expanding training modes, aiming to achieve the simultaneous growth of our staff and our Company. Occupational health and safety is also one of our priorities. For details relating to occupational health and safety, see “Occupational health and safety” in this section.

Our Board has the collective and overall responsibility for establishing, adopting and reviewing the ESG vision and target of our Group, identifying the KPIs and the relevant measurements and evaluating, determining and addressing our ESG-related risks in accordance with Appendix 27 to the Listing Rules, together with other applicable recommendations from the Stock Exchange. Our Board will assess, evaluate the ESG-related risks and review our existing strategy, target and internal controls. If necessary, improvement will be implemented to mitigate the risks that are material to our business operation and Shareholders from time to time. After the [REDACTED], we will publish an ESG report annually in accordance with Appendix 27 to the Listing Rules to qualitatively and quantitatively analyse and disclose important ESG matters, risk management and the accomplishment of key performance objectively.

PROPERTIES

Owned properties

As at the Latest Practicable Date, we had obtained the immovable property rights of two parcels of land and nine buildings (including the relevant parcels of land) in the PRC with an aggregate site area of approximately 117,830.53 sq.m. (excluding commonly owned commercial use land (商業用地共用宗地) and commonly owned urban residential land (城鎮住宅共有宗地)) and an aggregate GFA of approximately 50,472.8 sq.m., which are mainly used for our industrial use, commercial land use and commercial building use.

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A summary of our owned land and buildings as at the Latest Practicable Date is set out below:

No.	Location	Properties held	Owner	Usage	Approximate site area/ commonly owned land (共有宗地) (sq.m.)	Approximate GFA (sq.m.)
1	Building No. 1&2, 168 South Wucheng Road Taiyuan, Shanxi Province	Production House, Nos. 1-6 Building No. 1, 168 South Wucheng Road, Taiyuan, Shanxi Province	Taiyuan Renewable Energy	Industrial use	20,877.73	25,071.78
2	Building No. 1&2, 168 South Wucheng Road Taiyuan, Shanxi Province	1st Floor Parking Lot, Building No. 1, 168 South Wucheng Road, Taiyuan, Shanxi Province	Taiyuan Renewable Energy	Industrial use/ parking lot	20,877.73	2,565.58
3	Building No. 1&2, 168 South Wucheng Road Taiyuan, Shanxi Province	No. 1 Kitchen, Building No. 2, 168 South Wucheng Road, Taiyuan, Shanxi Province	Taiyuan Renewable Energy	Industrial use/ public utilities (50 years)	20,877.73	672.40
4	Building No. 1&2, 168 South Wucheng Road Taiyuan, Shanxi Province	Floor Nos. 1- 12, Research Block, Building No. 2, 168 South Wucheng Road, Taiyuan, Shanxi Province	Taiyuan Renewable Energy	Industrial use/ research centre	20,877.73	19,178.56
5	Building No. 1&2, 168 South Wucheng Road Taiyuan, Shanxi Province	No. 1 Warehouse, Building No. 2, 168 South Wucheng Road, Taiyuan, Shanxi Province	Taiyuan Renewable Energy	Industrial use/ warehouse	20,877.73	204.78
6	North to Bei'er Street and west to Wangcheng Road Hulunbuir, Inner Mongolia Autonomous Region	North to Bei'er Street and west to Wangcheng Road, Hulunbuir, Inner Mongolia Autonomous Region	Hulunbuir Shuangliang	Public facilities	30,000	-

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No.	Location	Properties held	Owner	Usage	Approximate site area/ commonly owned land (共有宗地) (sq.m.)	Approximate GFA (sq.m.)
7	Heping Garden 2-6 No. 101 & 1-7 No. 105, Fendouban South Manzhouli Road Hulunbuir, Inner Mongolia Autonomous Region	No. 105, Heping Garden Nos. 2-7, Fendouban, South Manzhouli Road, Hulunbuir, Inner Mongolia Autonomous Region	Hulunbuir Shuangliang	Other commercial land use/ commercial building use	136,588	264.70
8	Heping Garden 2-6 No. 101 & 1-7 No. 105, Fendouban South Manzhouli Road Hulunbuir, Inner Mongolia Autonomous Region	No. 101, Heping Garden Nos. 2-6, Fendouban, South Manzhouli Road, Hulunbuir, Inner Mongolia Autonomous Region	Hulunbuir Shuangliang	Other commercial land use/ commercial building use	136,588	150.37
9	Fuqiang Garden Nos. 12-0-109 & 11-0- 101 Fendouban, South Manzhouli Road Hulunbuir, Inner Mongolia Autonomous Region	No. 12-0-109, Fuqiang Garden, Fendouban, South Manzhouli Road, Hulunbuir, Inner Mongolia Autonomous Region	Hulunbuir Shuangliang	Other commercial land use/ commercial building use	62,776	209.04
10	Fuqiang Garden Nos. 12-0-109 & 11-0- 101 Fendouban, South Manzhouli Road Hulunbuir, Inner Mongolia Autonomous Region	No. 11-0-101, Fuqiang Garden, Fendouban, South Manzhouli Road, Hulunbuir, Inner Mongolia Autonomous Region	Hulunbuir Shuangliang	Other commercial land use/ commercial building use	62,776	209.30
11	10/F, 11/F, Integrated Building, No. 21 Shanshuiyiyuan Phase 2, Hulunbuir	21-2-2-1001, Fendouban, South Hulunbuir Street, Shanshuiyiyuan, Hulunbuir	Hulunbuir Shuangliang	Office	82,041.10	66.72

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No.	Location	Properties held	Owner	Usage	Approximate site area/ commonly owned land (共有宗地) (sq.m.)	Approximate GFA (sq.m.)
12	10/F, 11/F, Integrated Building, No. 21 Shanshuiyiyuan Phase 2, Hulunbuir	21-2-2-1002, Fendouban, South Hulunbuir Street, Shanshuiyiyuan, Hulunbuir	Hulunbuir Shuangliang	Office	82,041.10	66.17
13	10/F, 11/F, Integrated Building, No. 21 Shanshuiyiyuan Phase 2, Hulunbuir	21-2-2-1003, Fendouban, South Hulunbuir Street, Shanshuiyiyuan, Hulunbuir	Hulunbuir Shuangliang	Office	82,041.10	66.17
14	10/F, 11/F, Integrated Building, No. 21 Shanshuiyiyuan Phase 2, Hulunbuir	21-2-2-1004, Fendouban, South Hulunbuir Street, Shanshuiyiyuan, Hulunbuir	Hulunbuir Shuangliang	Office	82,041.10	66.20
15	10/F, 11/F, Integrated Building, No. 21 Shanshuiyiyuan Phase 2, Hulunbuir	21-2-2-1005, Fendouban, South Hulunbuir Street, Shanshuiyiyuan, Hulunbuir	Hulunbuir Shuangliang	Office	82,041.10	81.15
16	10/F, 11/F, Integrated Building, No. 21 Shanshuiyiyuan Phase 2, Hulunbuir	21-2-2-1006, Fendouban, South Hulunbuir Street, Shanshuiyiyuan, Hulunbuir	Hulunbuir Shuangliang	Office	82,041.10	59.92
17	10/F, 11/F, Integrated Building, No. 21 Shanshuiyiyuan Phase 2, Hulunbuir	21-2-2-1007, Fendouban, South Hulunbuir Street, Shanshuiyiyuan, Hulunbuir	Hulunbuir Shuangliang	Office	82,041.10	61.37
18	10/F, 11/F, Integrated Building, No. 21 Shanshuiyiyuan Phase 2, Hulunbuir	21-2-2-1008, Fendouban, South Hulunbuir Street, Shanshuiyiyuan, Hulunbuir	Hulunbuir Shuangliang	Office	82,041.10	61.37

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No.	Location	Properties held	Owner	Usage	Approximate site area/ commonly owned land (共有宗地) (sq.m.)	Approximate GFA (sq.m.)
19	10/F, 11/F, Integrated Building, No. 21 Shanshuiyiyuan Phase 2, Hulunbuir	21-2-2-1009, Fendouban, South Hulunbuir Street, Shanshuiyiyuan, Hulunbuir	Hulunbuir Shuangliang	Office	82,041.10	65.65
20	10/F, 11/F, Integrated Building, No. 21 Shanshuiyiyuan Phase 2, Hulunbuir	21-2-2-1010, Fendouban, South Hulunbuir Street, Shanshuiyiyuan, Hulunbuir	Hulunbuir Shuangliang	Office	82,041.10	92.22
21	10/F, 11/F, Integrated Building, No. 21 Shanshuiyiyuan Phase 2, Hulunbuir	21-2-2-1011, Fendouban, South Hulunbuir Street, Shanshuiyiyuan, Hulunbuir	Hulunbuir Shuangliang	Office	82,041.10	61.72
22	10/F, 11/F, Integrated Building, No. 21 Shanshuiyiyuan Phase 2, Hulunbuir	21-2-2-1012, Fendouban, South Hulunbuir Street, Shanshuiyiyuan, Hulunbuir	Hulunbuir Shuangliang	Office	82,041.10	61.72
23	10/F, 11/F, Integrated Building, No. 21 Shanshuiyiyuan Phase 2, Hulunbuir	21-2-2-1013, Fendouban, South Hulunbuir Street, Shanshuiyiyuan, Hulunbuir	Hulunbuir Shuangliang	Office	82,041.10	63.46
24	10/F, 11/F, Integrated Building, No. 21 Shanshuiyiyuan Phase 2, Hulunbuir	21-2-2-1014, Fendouban, South Hulunbuir Street, Shanshuiyiyuan, Hulunbuir	Hulunbuir Shuangliang	Office	82,041.10	99.30
25	10/F, 11/F, Integrated Building, No. 21 Shanshuiyiyuan Phase 2, Hulunbuir	21-2-2-1101, Fendouban, South Hulunbuir Street, Shanshuiyiyuan, Hulunbuir	Hulunbuir Shuangliang	Office	82,041.10	66.72

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No.	Location	Properties held	Owner	Usage	Approximate site area/ commonly owned land (共有宗地) (sq.m.)	Approximate GFA (sq.m.)
26	10/F, 11/F, Integrated Building, No. 21 Shanshuiyiyuan Phase 2, Hulunbuir	21-2-2-1102, Fendouban, South Hulunbuir Street, Shanshuiyiyuan, Hulunbuir	Hulunbuir Shuangliang	Office	82,041.10	66.17
27	10/F, 11/F, Integrated Building, No. 21 Shanshuiyiyuan Phase 2, Hulunbuir	21-2-2-1103, Fendouban, South Hulunbuir Street, Shanshuiyiyuan, Hulunbuir	Hulunbuir Shuangliang	Office	82,041.10	66.17
28	10/F, 11/F, Integrated Building, No. 21 Shanshuiyiyuan Phase 2, Hulunbuir	21-2-2-1104, Fendouban, South Hulunbuir Street, Shanshuiyiyuan, Hulunbuir	Hulunbuir Shuangliang	Office	82,041.10	66.20
29	10/F, 11/F, Integrated Building, No. 21 Shanshuiyiyuan Phase 2, Hulunbuir	21-2-2-1105, Fendouban, South Hulunbuir Street, Shanshuiyiyuan, Hulunbuir	Hulunbuir Shuangliang	Office	82,041.10	81.15
30	10/F, 11/F, Integrated Building, No. 21 Shanshuiyiyuan Phase 2, Hulunbuir	21-2-2-1106, Fendouban, South Hulunbuir Street, Shanshuiyiyuan, Hulunbuir	Hulunbuir Shuangliang	Office	82,041.10	59.92
31	10/F, 11/F, Integrated Building, No. 21 Shanshuiyiyuan Phase 2, Hulunbuir	21-2-2-1107, Fendouban, South Hulunbuir Street, Shanshuiyiyuan, Hulunbuir	Hulunbuir Shuangliang	Office	82,041.10	61.37
32	10/F, 11/F, Integrated Building, No. 21 Shanshuiyiyuan Phase 2, Hulunbuir	21-2-2-1108, Fendouban, South Hulunbuir Street, Shanshuiyiyuan, Hulunbuir	Hulunbuir Shuangliang	Office	82,041.10	61.37

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No.	Location	Properties held	Owner	Usage	Approximate site area/ commonly owned land (共有宗地) (sq.m.)	Approximate GFA (sq.m.)
33	10/F, 11/F, Integrated Building, No. 21 Shanshuiyiyuan Phase 2, Hulunbuir	21-2-2-1109, Fendouban, South Hulunbuir Street, Shanshuiyiyuan, Hulunbuir	Hulunbuir Shuangliang	Office	82,041.10	65.65
34	10/F, 11/F, Integrated Building, No. 21 Shanshuiyiyuan Phase 2, Hulunbuir	21-2-2-1110, Fendouban, South Hulunbuir Street, Shanshuiyiyuan, Hulunbuir	Hulunbuir Shuangliang	Office	82,041.10	92.22
35	10/F, 11/F, Integrated Building, No. 21 Shanshuiyiyuan Phase 2, Hulunbuir	21-2-2-1111, Fendouban, South Hulunbuir Street, Shanshuiyiyuan, Hulunbuir	Hulunbuir Shuangliang	Office	82,041.10	61.72
36	10/F, 11/F, Integrated Building, No. 21 Shanshuiyiyuan Phase 2, Hulunbuir	21-2-2-1112, Fendouban, South Hulunbuir Street, Shanshuiyiyuan, Hulunbuir	Hulunbuir Shuangliang	Office	82,041.10	61.72
37	10/F, 11/F, Integrated Building, No. 21 Shanshuiyiyuan Phase 2, Hulunbuir	21-2-2-1113, Fendouban, South Hulunbuir Street, Shanshuiyiyuan, Hulunbuir	Hulunbuir Shuangliang	Office	82,041.10	63.46
38	10/F, 11/F, Integrated Building, No. 21 Shanshuiyiyuan Phase 2, Hulunbuir	21-2-2-1114, Fendouban, South Hulunbuir Street, Shanshuiyiyuan, Hulunbuir	Hulunbuir Shuangliang	Office	82,041.10	99.30
39	ES #20 north to Guihua Road and ES #15 west to Guihua Lu Lanzhou, Gansu Province	ES #20 north to Guihua Road and ES #15 west to Guihua Lu, Lanzhou, Gansu Province	Lanzhou Shuangliang	Public facilities	66,952.80	-

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Property activities

We occupy certain properties in the PRC in connection with our business operation. As at 31 December 2022, certain of our property interests that are for property activities had a carrying amount of 1% or above of our total assets. For details of such properties valued by our property valuer (the “**Valued Properties**”), see the property valuation report as set out in Appendix IV to this document pursuant to Rule 5.01A of the Listing Rules. Save and except for the Valued Properties, our Directors confirmed that as at 31 December 2022, no single property interest of ours that are for property activities had a carrying amount of 1% or above of our total assets and the total carrying amount of property interests not valued did not exceed 10% of our total assets.

Our Directors confirm that as at 31 December 2022, no single property interest that did not form part of our property activities had a carrying amount of 15% or more of our total assets.

Owning heat service facilities

As at the Latest Practicable Date, we owned and operated primary distribution pipelines with an aggregate length of approximately 546.9 km. As at the same date, we owned one heat exchange station for our heat service operation, which was constructed by us on our land.

Leased properties

As at the Latest Practicable Date, we leased certain properties in the PRC primarily for office use.

A summary of our leased properties as at the Latest Practicable Date is set out below:

No.	Location	Landlord	Tenant	Lease period	Usage	Approximate GFA <i>(sq.m.)</i>
1	Room 202, 2/F, No. 15 Shuangliang Road, Ligang Street, Jiangyin, Jiangsu Province	Shuangliang Spandex	Our Company	From 1 January 2022 to 31 December 2024	Office	212.5
2	7/F, Jiangyin International Hotel, No. 299 Chengjiang West Road, Jiangyin, Jiangsu Province	Jiangyin Hotel	Our Company	From 1 January 2023 to 31 December 2025	Office	50

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No.	Location	Landlord	Tenant	Lease period	Usage	Approximate GFA (sq.m.)
3	7/F, Jiangyin International Hotel, No. 299 Chengjiang West Road, Jiangyin, Jiangsu Province	Our Company	Wise Living Energy	From 1 January 2023 to 31 December 2025	Non-residential usage	30
4	15/F, Incubator No. 1, Xinmin City Environmental, Innovation and Entrepreneurship Complex, Intersection of Miqi Road and Renhe Road, Quliang Town, Xinmi City, Zhengzhou, Henan Province ⁽¹⁾	Shuangliang Group (Henan) Environmental Technology Co., Ltd.* (雙良集團(河南)環境科技有限公司)	Zhengzhou Wise Living	From 18 September 2020 to 17 September 2023	Office	Not specified
5	Room 903-915 and Room 9001, Fuhua Building, No. 1 Zhongchuan Street, New Area, Lanzhou, Gansu Province	Lanzhou New Area Technology and Innovation Management Co., Ltd.* (蘭州新區科技創新發展管理有限公司)	Lanzhou Shuangliang	From 2 October 2022 to 1 April 2023	Office	830

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No.	Location	Landlord	Tenant	Lease period	Usage	Approximate GFA <i>(sq.m.)</i>
6	Room 1012, North Tower, Gansu Chamber of Commerce Building, Beimiantan, Chengguan District, Lanzhou, Gansu Province	Mr. Ma Hongxing	Lanzhou Shuangliang	From 18 July 2018 to 15 August 2023	Office	337.38
7	Room 1012, North Tower, Gansu Chamber of Commerce Building, Beimiantan, Chengguan District, Lanzhou, Gansu Province	Lanzhou Shuangliang	Gansu Smart Energy	Five years from 26 April 2019	Commercial usage	377.38
8	33-102, Zone A, Rainbow City, New Area, Lanzhou, Gansu Province	Lanzhou Track Industrial Investment Co., Ltd* (蘭州軌道實業投資有限公司), formerly known as Lanzhou Subway Business Hotel Management Co., Ltd.* (蘭州市地鐵商務酒店管理有限公司)	Lanzhou Shuangliang	From 1 January 2023 to 31 December 2023	Office and business hall	220

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No.	Location	Landlord	Tenant	Lease period	Usage	Approximate GFA <i>(sq.m.)</i>
9	33-102# Southwestern Corner, Zone A, Rainbow City, New Area, Lanzhou, Gansu Province ⁽²⁾	Lanzhou Shuangliang	Lanzhou Wise Living	1 January 2023 to 31 December 2023	Commercial usage	Not specified
10	33-102# Southwestern Corner, Zone A, Rainbow City, New Area, Lanzhou, Gansu Province ⁽²⁾	Lanzhou Shuangliang	Gansu Shuangliang	1 January 2023 to 31 December 2023	Commercial use	Not specified
11	7/F, 8/F, No. 168, Wuchengnan Road, Tanghuaiyuan Area, Taiyuan, Comprehensive Reform Demonstration Zone, Shanxi Province	Taiyuan Renewable Energy	Shanxi Shuangliang Renewable Energy	1 January 2017 to 31 December 2036	Industrial usage	3,000
12	4/F, No. 168, Wuchengnan Road, Tanghuaiyuan Area, Taiyuan, Comprehensive Reform Demonstration Zone, Shanxi Province	Taiyuan Renewable Energy	Shanxi Demonstration Zone Heat Supply	1 September 2018 to 31 August 2038	Industrial usage	700

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No.	Location	Landlord	Tenant	Lease period	Usage	Approximate GFA <i>(sq.m.)</i>
13	3/F, No. 168, Wuchengnan Road, Tanghuaiyuan Area, Taiyuan, Comprehensive Reform Demonstration Zone, Shanxi Province	Taiyuan Renewable Energy	Shanxi Smart Life	1 January 2017 to 31 December 2036	Industrial usage	100
14	9/F, No. 168, Wuchengnan Road, Tanghuaiyuan Area, Taiyuan, Comprehensive Reform Demonstration Zone, Shanxi Province	Taiyuan Renewable Energy	Shanxi Carbon Trading	1 January 2017 to 31 December 2036	Industrial usage	60
15	9/F, No. 168, Wuchengnan Road, Tanghuaiyuan Area, Taiyuan, Comprehensive Reform Demonstration Zone, Shanxi Province	Taiyuan Renewable Energy	Shanxi Shuangliang New Energy	1 January 2017 to 31 December 2036	Industrial usage	200
16	Room 1101, 11/F, Unit 2, Building A20, Liugangyuan, Nanhuan Road, Pingcheng Area, Datong, Shanxi Province	Mr. Fu Shengliang	Datong Renewable Energy	From 1 January 2019 to 1 January 2034	Office	145.24

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No.	Location	Landlord	Tenant	Lease period	Usage	Approximate GFA (sq.m.)
17	Room No. 804, Science and Technology Business Incubation Centre, Economic and Technological Development Zone, Lanzhou, Gansu Province	Lanzhou Economic and Technological Development Zone Incubator Management Service Co., Ltd.* (蘭州經濟 技術開發區設備 管理服務有限公 司)	Wise Living Energy (Gansu)	From 1 September 2021 to 31 August 2024	Office	24.27
18	15/F, Incubator No. 1, Xinmin City Environmental, Innovation and Entrepreneurship Complex, Intersection of Miqi Road and Renhe Road, Quliang Town, Xinmi City, Zhengzhou, Henan Province ⁽¹⁾	Shuangliang Group (Henan) Environmental Technology Co., Ltd.* (雙良集團 (河南)環境科技 有限公司)	Tech-Thermal (Zhengzhou)	From 10 December 2020 to 9 December 2023	Office	Not specified
19	Room 403, Tumote Youqi New Industrial Park Management Committee Administrative Office, Baotou, Inner Mongolia Autonomous Region ⁽¹⁾	Baotou New Industrial Co., Ltd.* (包頭市新 型實業有限責任 公司)	Wise Living Energy (Baotou)	From 15 November 2022 to 14 November 2023	Office	60

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No.	Location	Landlord	Tenant	Lease period	Usage	Approximate GFA (sq.m.)
20	Room 1601, Section 3, Ziguangyuan Commercial Building, Juhua Century City, Hailar East Street, Xincheng District, Hohhot City, Inner Mongolia Autonomous Region	China Life Insurance Company Ltd. Inner Mongolia Autonomous Region Branch	Inner Mongolia Wise Living	From 1 August 2022 to 31 July 2027	Office	141

Note:

- (1) As at the Latest Practicable Date, no real estate certificates had been obtained for these properties.
- (2) The leases for these properties were terminated on 10 March 2023.

As at the Latest Practicable Date, no real estate certificates had been obtained by the landlords for three out of the 20 leased properties set forth below (namely, properties no. 4, 18 and 19). Save for these three leased properties, real estate certificates of all other 17 leased properties had been obtained by the landlords as at the Latest Practicable Date.

Details of these three leased properties with no real estate certificates are as follows:

- In respect of properties no. 4 and 18, as at the Latest Practicable Date, no real estate certificate had been obtained by the landlord for these properties. The overall development of the industrial park in which these properties are located has not yet completed. The corresponding real estate certificates could be applied for by the landlord of the industrial park upon completion. Since the industrial park is a public-private partnership development project in collaboration with the government, considering the extent of governmental involvement, our Directors consider that the risk of us being evicted from or requested to cease to use these properties due to the lack of real estate certificates is extremely low.
- In respect of property no. 19, as at the Latest Practicable Date, no real estate certificate had been obtained by the landlord for this property, as the relevant procedures for registration of the land had not been processed. The application for real estate certificate for the property built on the land therefore has not yet commenced. Since the landlord is a State-owned company, our Directors consider that the risk of us being evicted from or requested to cease to use this property due to the lack of real estate certificates is extremely low.

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Our PRC Legal Advisers have advised that (i) it is the property owner's responsibility to obtain the relevant real estate certificates, and we as a tenant do not have the authority nor responsibility to apply for any title certificate for such properties; and (ii) the absence of real estate certificates for these four leased properties did not come about as a result of non-compliance of any relevant PRC laws or regulations on the part of our Group. Since such leased properties are primarily for office use, and alternative properties are readily available, we do not expect it to be difficult for us to relocate to alternative premises even if we are evicted from these leased properties. Our Directors are therefore of the view that the potential relocation, if any, from these leased properties will not have a material adverse impact on our business operations.

Further, for heat exchange stations, we have obtained written permissions from or entered into agreements with grantors who granted us the right to use the heat exchange stations and/or the lands, where we were effectively leasing the heat exchange stations. For details, see "– Heat exchange stations for our heat service operation" below.

Failure to register lease agreements

Event of non-compliance and reasons

During the Track Record Period and up to the Latest Practicable Date, none of the 20 of the lease agreements of the aforementioned properties leased by us had been registered by us.

In respect of three of the lease agreements, we were unable to register the corresponding lease agreements with the relevant government authorities as we did not have the relevant real estate certificates as required. In respect of the remaining 17 lease agreements, we were unable to register them with the relevant government authorities primarily because the landlords did not cooperate with us as needed for completing the registration. According to applicable PRC administrative regulations, landlords need to provide us with certain documents (such as their business licenses or identification information) in order to complete the registration.

Legal consequences

According to the Urban Real Estate Administration Law of the PRC (《中華人民共和國城市房地產管理法》), the Commercial Building Leasing Administrative Measures (《商品房屋租賃管理辦法》) and other relevant laws and regulations, the relevant local governments may require the rectification of the non-registration of lease agreements within a certain period of time. If rectification is not made within the specified time, we may be subject to a fine ranging from RMB1,000 to RMB10,000 for each unregistered lease agreement. As advised by our PRC Legal Advisers, the maximum potential penalty we may face in relation to these 20 unregistered lease agreements is RMB200,000 in aggregate.

As at the Latest Practicable Date, we had not received any such request to rectify and register such lease agreements from the relevant government authorities.

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Remedial measures and enhanced internal control measures

As the registration of 20 lease agreements will require the cooperation from the landlords or will require the landlords to obtain the relevant real estate certificates, which is not within our control, we will submit the application documents for lease registration once those documents are in order. We will, as soon as practicable, complete the filing and registration procedures for the relevant lease agreements that the landlords are willing to cooperate, and will also actively communicate with the landlords to ask for their cooperation to register and file the lease agreements and/or documents for all the outstanding unregistered lease agreements.

We have adopted internal control policies requiring our Group to (i) assign a designated person to complete the registration and filing of the lease agreements with the relevant government authorities upon signing; (ii) record such registration and filing of the lease agreements; (iii) regularly follow up on the status of registering and filing outstanding lease agreements and/or documents; and (iv) assign another designated person to conduct regular checks on whether all newly entered lease agreements have been duly registered with the relevant government authorities or the required documents have been in the process of being obtained for completing the registration. Our internal control consultant has reviewed the corresponding enhanced internal control policies which our Group has adopted, and did not have any further recommendation after such review.

Based on the above, our Directors are of the view, and the Sole Sponsor concurs, that the enhanced internal control measures adopted by our Group are adequate, effective and sufficient in preventing recurrence of similar future non-compliance.

Impact on our Group

As advised by our PRC Legal Advisers, under the Civil Code of the PRC (《中華人民共和國民法典》), the non-registration of the lease agreements does not affect the validity and enforceability of the lease agreements. Also, our PRC Legal Advisers have confirmed that no administrative penalty has been imposed by the relevant government authorities on our Group for our non-registration of the lease agreements for the Track Record Period. Our Group has undertaken that if our Group is requested by the relevant government authorities to rectify the non-registration, we will follow the requisite procedures accordingly. Based on the above, our PRC Legal Advisers have advised that the risk of our Group being penalised for such non-compliance under the relevant PRC laws is low.

Our Directors have confirmed that based on the advice of our PRC Legal Advisers aforementioned, the maximum amount of potential penalties of RMB200,000, should it be levied, would merely account for a minimal portion of our total revenue.

Furthermore, pursuant to the Deed of Indemnity, our Controlling Shareholders will indemnify our Group against any claims, fines and other liabilities from such non-registration of the lease agreements. Our Directors are of the view that, based on the advice from our PRC Legal Advisers, such non-compliance does not and will not have any material impact on the operations or financial conditions of our Group.

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Other properties occupied by us

A summary of other properties occupied by us as at the Latest Practicable Date is set out below:

No.	Location	Occupant	Usage	Approximate area <i>(sq.m.)</i>	Approximate GFA <i>(sq.m.)</i>
1	Floor 4-7 of Ao’lin Central Square Block A located at south to Beizhang Village, north to Jinyang Street, west to Tiyu Road and East to Hangxiao area, Taiyuan City, Shanxi Province (the “ Shantou Complex ”)	Taiyuan Renewable Energy	Other commercial land use/ commercial building use	4,405.86 (construction area)	–
2	Building 1 and Building 2, District 2, south advanced business park, Jinsha Botanical Garden, Shuocheng District, Shuozhou City, Shanxi Province (the “ Jinsha Buildings ”)	Shuozhou Renewable Energy	Other commercial land use/ commercial building use	6,055.65 (construction area)	–
3	Plot 4-06-2 Zone 1, Science and Technology Innovation City, Shanxi Transformation and Comprehensive Reform Demonstration Zone Taiyuan City, Shanxi Province (the “ Science and Technology Innovation City Land Plot ”)	Shanxi Demonstration Zone Heat Supply	Public utility land use	9,697.82 (site area)	–

(a) *Shantou Complex*

Failure to obtain relevant complete real estate certificate or complete relevant construction acceptance checks

During the Track Record Period, relevant construction acceptance checks in relation to the Shantou Complex were not completed. As advised by our PRC Legal Advisers, we were neither the land owner nor the owner of construction project, and were not the party responsible for the construction of the Shantou Complex, and were therefore not permitted under relevant PRC laws and regulations to complete the relevant construction acceptance checks. On 28 July 2021, we obtained a written confirmation from the Construction and Public Utilities Department of the Management Committee of Shanxi Transformation and Comprehensive

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Reform Zone* (山西轉型綜合改革示範區管理委員會建設與公用事業管理部) confirming that (i) our use of the Shantou Complex did not constitute a non-compliance under the relevant PRC laws and regulations; and (ii) no penalty had been or will be imposed on us for our use of the Shantou Complex. Our PRC Legal Advisers have confirmed that the Construction and Public Utilities Department of the Management Committee of Shanxi Transformation and Comprehensive Reform Zone is the relevant competent authority to provide the aforementioned confirmation. As such, our PRC Legal Advisers advised that our use of the Shantou Complex without completing the relevant construction acceptance checks did not constitute a non-compliance on our part under the relevant PRC laws and regulations. As advised by our PRC Legal Advisers, as we are not the party responsible for the construction of the Shantou Complex, the risk of our Group being penalised for our occupation or use of the relevant premises and being required to vacate from the relevant premises is remote. During the Track Record Period, our Group had not been penalised in respect of the failure to complete such checks. Our Directors expect that relevant construction acceptance checks in relation to the Shantou Complex will be completed by the end of 2023. We have adopted internal control measures to ensure that the relevant construction acceptance checks are completed in preventing recurrence of similar incidents by seeking the relevant party responsible for construction to provide confirmation to us that the relevant checks have been completed. If such checks are not completed, we will seek to urge prompt rectification works to be done by the relevant constructing party. Our construction department conducts regular review and supervises the process of construction in relation to properties occupied and used by us. When required, we will engage an external legal counsel to verify and provide legal opinions as to the legal status of the properties and/or construction works.

The Shantou Complex was initially developed under a real estate development project by a real estate developer (the “**First Shantou Developer**”) which is an Independent Third Party. In 2010, such real estate development project was transferred to another real estate developer (the “**Second Shantou Developer**”) which is also an Independent Third Party. The Second Shantou Developer then granted an investment company (the “**Investment Company**”), which is an Independent Third Party, the right to engage in the sale of commercial housing on its behalf. In March 2014, we entered into a property sale and purchase agreement with the Investment Company to purchase the Shantou Complex. As at the Latest Practicable Date, we have paid approximately 94.5% of the consideration for the Shantou Complex. According to confirmations issued by the Investment Company and the Second Shantou Developer, it was agreed that we would only be required to pay the remaining portion of the consideration after the real estate certificate for Shantou Complex has been obtained, and that they would not take actions against us for breach of contract for the failure to fully pay the consideration before occupying and using Shantou Complex.

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As advised by our PRC Legal Advisers, according to the Rules for the Implementation of the Provisional Regulations on the Registration of Real Property (《不動產登記暫行條例實施細則》), we would not be able to obtain a complete real estate certificate (不動產權證書) until the Second Shantou Developer had completed the first registration to obtain the real estate certificates for both the land use right and building ownership (土地使用權、房屋所有權對應的不動產權證書) for the whole real estate development project. The Second Shantou Developer went through the necessary procedures and obtained a real estate certificate in respect of the land use right (土地使用權對應的不動產權證書) of the Shantou Complex. However, the Second Shantou Developer had not yet completed the first registration to obtain the real estate certificate in respect of building ownership (房屋所有權對應的不動產權證書) for the whole real estate development project. We were therefore not able to complete the relevant procedures to obtain a complete real estate certificate for the Shantou Complex. As confirmed by our Directors, the Second Shantou Developer is in the process of obtaining the complete real estate certificate for Shantou Complex, and such real estate certificate is expected to be obtained by the end of 2023. We will seek to obtain the complete real estate certificate for the Shantou Complex as soon as practicable when the Second Shantou Developer has completed the first registration to obtain the real estate certificates for both the land use right and building ownership for the whole real estate development project. Our PRC Legal Advisers have advised that when the Second Shantou Developer has obtained the complete real estate certificate, there is no material legal impediment that would prevent us from obtaining the complete real estate certificate for Shantou Complex.

We have obtained written confirmations from the Investment Company and the Second Shantou Developer that we are entitled to occupy the Shantou Complex despite the absence of a complete real estate certificate. Our PRC Legal Advisers have confirmed that the aforementioned written confirmations from them are legally binding.

Our PRC Legal Advisers have advised that (i) it is unlikely that we will be ordered to vacate the Shantou Complex, and that our entitlement to occupy, use and further lease some premises of the Shantou Complex is unlikely to be affected; and (ii) our use of the Shantou Complex in the absence of the complete real estate certificate (不動產權證書) caused by the above-mentioned reasons did not constitute a non-compliance on our part under the relevant PRC laws and regulations.

Failure to register six tenancy agreements of the Shantou Complex

Event of non-compliance and reasons

During the Track Record Period and up to the Latest Practicable Date, we leased out certain premises of the Shantou Complex and were unable to register the six tenancy agreements of the corresponding units of the Shantou Complex that we leased out as we did not have the relevant real estate certificate for Shantou Complex as required.

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Legal consequences

Pursuant to the Commercial Building Leasing Administrative Measures* (《商品房屋租賃管理辦法》), parties to tenancy agreements (i.e. landlords and tenants) shall jointly file the tenancy agreements with the relevant government authorities for registration within 30 days after the execution of the tenancy agreements, and provide the relevant real estate certificates (不動產權證書) and identity proof/business licenses of the landlords and tenants. If the administrative measures are violated, according to the Urban Real Estate Administration Law of the PRC (《中華人民共和國城市房地產管理法》), the Commercial Building Leasing Administrative Measures (《商品房屋租賃管理辦法》) and other relevant laws and regulations, the relevant local governments may require the rectification of the non-registration within a certain period of time. If rectification is not made within the specified time, individual owners or tenants may be subject to a fine up to RMB1,000 and corporate owners or tenants may be subject to a fine up to RMB10,000 for each unregistered lease or tenancy agreement. As advised by our PRC Legal Advisers, the maximum potential penalty we may face in relation to these six unregistered tenancy agreements is RMB60,000 in aggregate.

As at the Latest Practicable Date, we had not received any such request to rectify the non-registration of such tenancy agreements from the relevant government authorities.

Remedial measures and enhanced internal control measures

We have adopted internal control policies requiring our Group to (i) assign a designated person to complete the registration and filing of the lease agreements with the relevant government authorities upon signing; (ii) record such registration and filing of the lease agreements; (iii) follow up on the status of registering and filing outstanding lease agreements and/or documents; and (iv) assign another designated person to conduct regular checks on whether all newly entered lease agreements have been duly registered with the relevant authorities or the required real estate certificates have been in process of being obtained for completing the registration. Our internal control consultant has reviewed the corresponding enhanced internal control policies which our Group has adopted, and did not have any further recommendation after such review.

Based on the above, our Directors and the Sole Sponsor are of the view that the enhanced internal control measures adopted by our Group are adequate, effective and sufficient in preventing recurrence of similar future non-compliance.

Impact on our Group

As advised by our PRC Legal Advisers, under the Civil Code of the PRC (《中華人民共和國民法典》), the non-registration of the tenancy agreements does not affect the validity and enforceability of the tenancy agreements. Also, our PRC Legal Advisers have confirmed that no administrative penalty has been imposed by the relevant government authorities on our Group for our non-registration of the tenancy agreements for the Track Record Period. Our Group has undertaken that if our Group is requested by the relevant government authorities to

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rectify the non-registration, we will register the tenancies concerned accordingly. Based on the above, our PRC Legal Advisers have advised that the risk of our Group being penalised for such non-compliance under the relevant PRC laws is remote.

Our Directors have confirmed that based on the advice of our PRC Legal Advisers aforementioned, the maximum amount of potential penalties of RMB60,000, should it be levied, would merely account for a minimal portion of our total revenue.

Furthermore, pursuant to the Deed of Indemnity, our Controlling Shareholders will indemnify our Group against any claims, fines and other liabilities from such non-registration of the tenancy agreements. Our Directors are of the view that, based on the advice from our PRC Legal Advisers, such non-compliance does not and will not have any material impact on the operations or financial conditions of our Group.

(b) Jinsha Buildings

In July 2014, we entered into a series of property sale and purchase agreement and supplemental agreements with a real estate developer ("**Jinsha Buildings Seller**"), an Independent Third Party, for the purchase of the Jinsha Buildings. As at the Latest Practicable Date, we have fully paid the consideration for the Jinsha Buildings. However, as at the Latest Practicable Date, no real estate certificates in respect of land use right and building ownership (土地使用權、房屋所有權對應的不動產權證書) had been obtained for the Jinsha Buildings. At the time of our purchase of the Jinsha Buildings, the Jinsha Buildings Seller owned multiple buildings for the entire development and the Jinsha Buildings only made up one part of the entire development. As advised by our PRC Legal Advisers, we can only obtain a complete real certificate for Jinsha Buildings when the Jinsha Buildings Seller completes the first registration and obtains the real estate certificates for both the land use rights and building ownership (土地使用權、房屋所有權對應的不動產權證書) for the whole real estate development. It would have been unduly cumbersome to obtain a real estate certificate separately for the Jinsha Buildings pending completion of the entire development, and we agreed with the Jinsha Buildings Seller to defer the process until the entire development is completed. According to a confirmation dated 30 March 2022 issued by the Jinsha Buildings Seller, it is in the process of obtaining the complete real estate certificate for the Jinsha Buildings. To the best knowledge of our Directors, the complete real estate certificate is expected to be obtained by the end of 2023. We will seek to obtain such real estate certificate for the Jinsha Buildings as soon as it is practicable when the Jinsha Buildings Seller completes first registration and obtains the real estate certificates for both the land use right and building ownership (土地使用權、房屋所有權對應的不動產權證書) for the whole real estate development. Our PRC Legal Advisers have advised that (i) when the Jinsha Buildings Sellers have obtained the complete real estate certificate of the entire development, there is no material legal impediment that would prevent us from obtaining the complete real estate certificate; (ii) it is unlikely that we will be ordered to vacate the Jinsha Buildings, and that our entitlement to occupy and use the Jinsha Buildings is unlikely to be affected; and (iii) our use of the Jinsha Buildings in the absence of the complete real estate certificate caused by the above-mentioned reasons did not constitute a material non-compliance on our part under the relevant PRC laws and regulations.

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During the Track Record Period, relevant construction checks and fire inspection checks in relation to the Jinsha Buildings were not completed. As advised by our PRC Legal Advisers, since we were neither the land owner nor the owner of the construction project, we were therefore not the party responsible for the construction of the Jinsha Buildings, and were not permitted under relevant PRC laws and regulations to complete the relevant construction acceptance checks or fire inspection checks. On 29 July 2021, we obtained a written confirmation from the Shuozhou City Shuocheng District Housing and Urban-Rural Development Bureau* (朔州市朔城區住房和城鄉建設局), confirming, among other things that our occupation and use of the Jinsha Buildings without a complete real estate certificate was not a non-compliance on our part. Our PRC Legal Advisers have confirmed that the Shuozhou City Shuocheng District Housing and Urban-Rural Development Bureau is the relevant competent authority to provide the aforementioned confirmation. Hence, as advised by our PRC Legal Advisers, our use of the Jinsha Buildings without completing the relevant construction acceptance checks or fire inspection checks did not constitute a non-compliance on our part under the relevant PRC laws and regulations. As advised by our PRC Legal Advisers, as we are not the party responsible for the construction of the Jinsha Buildings, the risk of our Group being ordered to cease to occupy or use this property or penalised is remote. During the Track Record Period, our Group had not been penalised in respect of the failure to complete such checks. We have adopted internal control measures to ensure that relevant construction, acceptance checks and fire inspection checks are completed in preventing recurrence of similar incidents. We will seek to ensure the relevant party responsible for construction to provide confirmation to us that the relevant checks have been completed. If such checks are not completed, we will seek to urge prompt rectification works to be done by the relevant constructing party. Our construction department conducts regular checks on fire safety equipments and reviews on emergency evacuation plan of premises and buildings occupied by us. We also have regular inspections to ensure these properties are equipped with proper fire safety facilities, equipment and safety signs, all of which are in good conditions. When required, we will engage an external legal counsel to verify and provide legal opinions as to the legal status and safety standards of the properties and/or construction works.

(c) Science and Technology Innovation City Land Plot

On June 2021, we won a bid for the land use right of Science and Technology Innovation City Land Plot during a State-owned construction land use right quotation and assignment event held by the Shanxi Transformation and Comprehensive Reform Demonstration Zone Land Administration Bureau* (山西轉型綜合改革示範區土地管理局) (“**Shanxi Demonstration Zone Land Administration**”). On 1 July 2021, we entered into a State-owned construction land use right transfer agreement with the Shanxi Demonstration Zone Land Administration, pursuant to which the land use right of Science and Technology Innovation City Land Plot would be transferred to us for the purpose of public utility land use and for a term of 50 years. A construction land use permit (建設用地批准書) in respect of the Science and Technology Innovation City Land Plot was granted to us by the Shanxi Demonstration Zone Land Administration on the same date. We have fully paid the consideration under the aforementioned construction land use right transfer agreement. Our PRC Legal Advisers have advised that we have legally acquired the land use right of the Science and Technology Innovation City Land Plot through the bidding process, and the relevant land use right transfer agreement was properly approved, legally binding, valid and enforceable.

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As at the Latest Practicable Date, we were still in the process of obtaining the relevant real estate certificate (不動產權證書) for the Science and Technology Innovation City Land Plot from the Shanxi Demonstration Zone Land Administration, and it is expected to be obtained by the end of 2023. Our PRC Legal Advisers have advised that (i) there is no material legal impediment for us to obtain the real estate certificate of the land; (ii) prior to obtaining the real estate certificate of the land, we are entitled to use the land of the Science and Technology Innovation City Land Plot in accordance with the aforementioned construction land use permit; and (iii) we can use the Science and Technology Innovation City Land Plot according to the construction land use permit before we obtain the relevant real estate certificate.

We have constructed a building with includes facilities for extraction of geothermal heat as heat source for our Shanxi Demonstration Zone Project as well as heat-exchange related equipment for its operation as a heat exchange station on this parcel of land. However, we commenced the relevant construction without obtaining the construction planning permit (建設規劃許可) and construction commencement permits (建設施工許可) and did not complete the relevant construction acceptance checks for such heat exchange station prior to putting it into use. As at the Latest Practicable Date, we were still in the process of obtaining the construction planning permit and construction commencement permit for such heat exchange station. We expect to conduct the construction acceptance checks prior to obtaining the abovementioned real estate certificate. For details of the requirements for obtaining the construction planning permit and construction commencement permit, see “– Properties – Failure to obtain certain construction permits and/or complete relevant construction acceptance checks for the construction of certain properties” in this section.

Heat exchange stations for our heat service operation

As part of our heat service operation, we use heat exchange stations which have been installed with heat exchange-related equipment necessary for the provision of our heat service operation under the Concession Agreements.

As at the Latest Practicable Date, there were 465 heat exchange stations in use, comprising 451 third-party owned heat exchange stations and 14 self-owned heat exchange stations. The heat exchange stations we use in our operations are spread across our operating areas covering different areas/regions in Taiyuan City, Shuozhou City, Shanxi Transformation and Comprehensive Reform Demonstration Zone, Lanzhou New Area and Hulunbuir City.

Set out below is a table showing the number of third-party owned heat exchange stations and self-owned heat exchange stations.

	Third-party owned heat exchange stations	Self-owned heat exchange stations
Located on third-party owned land	451	13
Located on our land	–	1

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For the 451 third-party owned heat exchange stations, they are all located on third-party owned land. These heat exchange stations were typically constructed by the property developers, construction companies or owners of the housing estates and buildings within our Concession Areas at the time when these housing estates and buildings were first developed. They are usually situated in the common areas of these housing estates or building areas. As advised by our PRC Legal Advisers, since we are only a grantee using these third-party owned heat exchange stations, (i) we are not required to obtain the underlying construction related permits and title certificates which include the land use right certificates (土地證), property ownership certificates (房產證) or the real estate certificates (不動產證) (which is a certificate for land use right and property ownership combined together pursuant to new PRC laws); and (ii) it is not our obligation to rectify the title defects of these third-party owned heat exchange stations.

For the 13 self-owned heat exchange stations located on third-party owned land:

- (a) 12 of them are in Shuozhou City, located in old housing estates and building areas without centralised heat service facilities when they were first developed. Upon the Shuozhou government's promotion of centralised heat services, we constructed the heat exchange stations at the assigned location by the Shuozhou government for these old housing estates and building areas to facilitate our provision of heat services; and
- (b) one of them is our station with a set of collection devices and equipment (氣水換熱站/首站) located in Shentou Second Power Station for our Shuozhou Project. For details, see "– Heat Sources – Residual heat collected at plants" in this section.

For the one self-owned heat exchange station located on our land, it is part of the building constructed by us on the Science and Technology Innovation City Land Plot which also serves as our geothermal heat source plant, unlike most other heat exchange stations which are typically situated in the common areas of the housing estates or building areas of the heat service end-users. That building on the Science and Technology Innovation City Land Plot has installed both heat exchange-related equipment, as well as facilities for extraction of geothermal heat as heat source for our Shanxi Demonstration Zone Project. For details of this property, see "– Properties – Other properties occupied by us – (c) Science and Technology Innovation City Land Plot" in this section.

Of the 464 heat exchange stations located on third-party owned land, we are a grantee who installs and operates the equipment in the heat exchange stations pursuant to written permissions obtained from, or pipeline connection agreements, construction contracts, heat service agreements or lease agreements we entered into with, the grantors, granting us the right to use the heat exchange stations and/or the land, either with a fee or free of charge. Among these heat exchange stations, 358 were being used by us for free, while the remaining 106 were leased from the grantors to us with rental fees payable by us. The grantors of the heat exchange stations and/or the land are mostly governmental or government-related bodies, public institutions, State-owned companies, property developers, construction companies, property

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management companies and heat service end-users. We obtained written permissions from or entered into the abovementioned agreements with these grantors due to a number of reasons, including but not limited to, (i) they are the land owners; (ii) they are government authorities which are responsible for the city development of the relevant areas which require our provision of heat services; (iii) they are the previous heat service providers, and the heat exchange stations we leased from them had been used by them to provide heat services in our Concession Areas before we were granted the relevant concessions; (iv) they are the property developers, construction companies or property management companies of the relevant housing estates or buildings to which we will provide heat services; or (v) they are the heat service end-users.

As advised by our PRC Legal Advisers, as a grantee using the heat exchange stations and/or land on which they are located, in order to use such heat exchange stations located on third-party land, we should obtain written permissions or enter into the abovementioned agreements with the owners who possess the relevant title certificates in order to obtain proper authorisation for the continuous use of the heat exchange stations and/or the land. For around 40% of the 464 heat exchange stations located on third-party owned land that were in use as at the Latest Practicable Date, we were unable to obtain written permissions or enter into such agreements with the proper owners.

Reasons for the third-party title defects

We consider that the reasons for the third-party title defects are mainly because the parties which requested us to provide heat services lacked complete and valid authority to grant us lawful right to use the heat exchange stations and/or the land. These parties include (i) government bodies and public institutions who did not produce relevant valid title certificates to us when we leased the heat exchange stations and/or the land from them pursuant to the lease agreements; (ii) certain previous State-owned heat service providers who were unable to produce relevant valid title certificates when they were instructed by the local government to lease to us their heat exchange stations they previously used; (iii) property developers, construction companies or property management companies who failed to obtain and/or produce relevant valid title certificates; and (iv) heat service end-users which failed to produce relevant valid title certificates. As such, we believe that the third-party title defects were beyond our control and can only be rectified by relevant owners of such heat exchange stations and/or land.

Further, relevant government authorities have acknowledged the historical underlying circumstances for certain property title issues, for example, certain grantors that did not provide complete title documents were government authorities or public institutions which did not obtain relevant title certificates when they first started using the relevant properties. In some other cases, the heat exchange stations were used for provision of heat services to government or public properties, and those stations were either leased to us for our heat service operation pursuant to government orders, or located within the premises of which the construction was commissioned by the local governments.

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As advised by our PRC Legal Advisers, regardless of whether the grantors which have given us the written permission or entered into agreements with us are the land owners or the heat exchange station owners, the written permissions or agreements remain legally binding and valid as between the relevant grantors and us. If we are prevented from using the heat exchange stations by any rightful third party, we are entitled to seek compensation or damages against these grantors for the breach of their contractual undertakings given under the abovementioned written permissions or agreements.

Notwithstanding the abovementioned title defects, provision of heat services is a public utilities business that is considered a basic necessity that affects the people's livelihood. As a public utility company with social responsibility, we believe we are required to maintain stable heat services to our heat service end-users in our Concession Areas. As confirmed by the relevant competent authorities in respect of our Concessions, without their consent, we cannot cease the provision of our heat services solely because of the title defects of the heat exchange stations used by us, which would otherwise result in a suspension of heat service to our heat service customers.

There are relevant PRC regulations and policies, namely the Measures of City Yellow Line Management (《城市黃線管理辦法》) and the Standard for Urban Residential Area Planning and Design (《城市居住區規劃設計標準》), that provide certain protection to us by stipulating that heat exchange equipment including heat exchange stations cannot (by law) be demolished or relocated without proper authorisation from relevant government authorities.

Besides, the heat service end-users would not be able to engage other heat service providers to operate these heat exchange stations as we were granted a concession to provide heat services exclusively in that area under the relevant concession. Each of the relevant government authorities for our Hulunbuir Project, Taiyuan Project, Shanxi Demonstration Zone Project, Shuozhou Project and Lanzhou New Area Project has confirmed that our continued use of these heat exchange stations with title defects would not affect the validity of our concession operations. If due to changes in municipal planning or other factors, we become unable to properly occupy or use our existing heat exchange stations for our heat services operations, they will assist us in finding alternative premises as heat exchange stations, so as to ensure that the provision of heat services to residents will not be affected.

The title defects in relation to the heat exchange stations we used have been categorised into the following types:

Type IA – third-party owned heat exchange stations located on third-party owned land (without property ownership certificate)

There is a total of 269 "Type IA" heat exchange stations (representing approximately 57.9% of the total number of heat exchange stations). These third-party owned heat exchange stations are located on third-party owned land.

We have either obtained written permissions from or entered into pipeline connection agreements, construction contracts, heat service agreements or lease agreements with the grantors for the use of the heat exchange station and the land on which the heat exchange stations were located. 264 of these grantors have provided us the land use right certificates

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(under the names of relevant grantors), and five of these grantors have provided us the land use right certificates (under the names of the land owners) as well as the authorisation from the relevant land owners authorising the grantors’ use of the land.

Type IB – third-party owned heat exchange stations located on third-party owned land (without both land use right certificate and property ownership certificate)

There is a total of 182 “Type IB” heat exchange stations (representing approximately 39.1% of the total number of heat exchange stations). These third-party owned heat exchange stations are located on third-party owned land.

We have either obtained written permissions from or entered into pipeline connection agreements, construction contracts, heat service agreements or lease agreements with the grantors for the use of the heat exchange stations and the land on which the heat exchange stations were located. Nevertheless, these grantors did not provide us relevant land use right certificates or property ownership certificates.

Set out below is a breakdown of the background of the grantors of these “Type IB” heat exchange stations.

Grantors	Number of stations
(1) Shuocheng Housing Bureau (as defined below)	53
(2) Hailar Bureau (as defined below)	8
(3) Previous State-owned heat service providers	70
(4) Others	51
Total	182

We obtained written permissions from, or entered into pipeline connection agreements, construction contracts, heat service agreements or lease agreements with, local government authorities or previous State-owned heat service providers for the use of heat exchange stations, so as to comply with the relevant government authorities’ requests for our provision of heat services to such areas for promotion of city development. However, these grantors did not provide us with relevant title certificates of both the land and heat exchange stations.

For 53 of these heat exchange stations, we have obtained a written confirmation from Shuzhou City Shuocheng District Housing and Urban-Rural Development Bureau (朔州市朔城區住房和城鄉建設局) (“**Shuocheng Housing Bureau**”) confirming that it or its subsidiaries has ownership of the heat exchange stations and has the right to use the land, and that it or its subsidiaries has the right to grant the use of these heat exchange stations to us.

For eight of these heat exchange stations, we have also obtained a written confirmation from Housing and Urban-Rural Development Bureau of Hailar District, Hulunbuir City (呼倫貝爾市海拉區住房和城鄉建設局) (“**Hailar Bureau**”) confirming that these eight heat exchange stations invested and constructed by it were entrusted to us for heat service operations.

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As advised by our PRC Legal Advisers, Shuocheng Housing Bureau and Hailar Bureau are the relevant competent authorities supervising construction related matters of Shuocheng District of Shuozhou City and Hailar District of Hulunbuir City, respectively.

70 of these heat exchange stations were leased to us with the coordination of local government authorities in Shuozhou by three State-owned heat service providers, which were our predecessor heat service providers in Shuozhou City before we were granted the concession. They had been using these heat exchange stations to provide heat services, therefore the local government authorities coordinated for those heat exchange stations to be leased to us upon our taking over of the provision of heat services in the area.

We have also obtained a confirmation from Shuozhou City Natural Resources Bureau (朔州市規劃和自然資源局) (“**Shuozhou Planning and Natural Resources Bureau**”) confirming that each of Shuocheng Housing Bureau and its subsidiaries as well as the three State-owned heat service providers has the right to use the respective heat exchange stations and the land as mentioned above. As advised by our PRC Legal Advisers, Shuozhou Planning and Natural Resources Bureau is the relevant competent authority for real estate confirmation and registration in Shuozhou City.

Grantors of the remaining 51 heat exchange stations are public institutions, property developers, construction companies, property management companies or heat service end-users. We had either entered into construction contracts or heat service agreements with the grantors or obtained written permissions from the grantors as they require heat services to be provided in the relevant real estates or buildings which they are responsible for the construction or management, or they are the heat service end-users. For those with construction contracts or heat service agreements, both the grantors and us were involved in the construction of the heat exchange stations, with the grantors responsible for funding the construction, while we participated in the design and construction management of the heat exchange stations since we would be using the heat exchange stations for our operation during the course of the provision of heat services.

Type IIA – self-owned heat exchange stations located on third-party owned land (without property ownership certificate)

There is a total of three “Type IIA” heat exchange stations (representing approximately 0.6% of the total number of heat exchange stations). These self-owned heat exchange stations are located on third-party owned land.

We have either obtained written permissions from or entered into lease agreements with grantors for the right to use the land on which the heat exchange stations were located. These grantors have provided us the land use right certificates (under the relevant grantor’s name).

Type IIB – self-owned heat exchange stations located on third-party owned land (without both land use right certificate and property ownership certificate)

There is a total of 10 “Type IIB” heat exchange stations (representing approximately 2.2% of the total number of heat exchange stations). These self-owned heat exchange stations are located on third-party owned land.

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We have either obtained written permissions from or entered into pipeline connection agreements or lease agreements with the grantors for the use of land on which the heat exchange stations were located. However, these grantors did not provide us relevant land use right certificates.

Set out below is a breakdown of the background of the grantors of these “Type IIB” heat exchange stations.

Grantors	Number of stations
(1) Shuocheng Housing Bureau	1
(2) Others	9
Total	10

The land in respect of one of the self-owned heat exchange stations was leased from Shuocheng Housing Bureau, so as to comply with its request for our provision of heat services to certain areas for promotion of city development. We obtained a written confirmation from Shuocheng Housing Bureau confirming that it has the right to use the land on which the heat exchange station is located and that it has the right to grant the use of such land to us. We have also obtained a confirmation from Shuozhou Planning and Natural Resources Bureau confirming the same. As advised by our PRC Legal Advisers, Shuocheng Housing Bureau is the relevant competent authorities supervising construction related matters of Shuocheng District of Shuozhou City, and Shuozhou Planning and Natural Resources Bureau is the relevant competent authority for real estate confirmation and registration in Shuozhou City.

Grantors in respect of the remaining nine heat exchange stations included public institutions, construction companies and heat service end-users. We have obtained written permissions, or entered into pipeline connection agreements or lease agreements with them as they required heat services to be provided to the buildings they constructed or resided.

Type III – a self-owned heat exchange station located on our land (without real estate certificate)

There is one “Type III” heat exchange station (representing approximately 0.2% of the total number of heat exchange stations). This heat exchange station is owned by us and located on our Science and Technology Innovation City Land Plot.

As at the Latest Practicable Date, the real estate certificate for this heat exchange station had not been issued. As advised by our PRC Legal Advisers, as we had legally bid for the relevant land and had fully settled the consideration for such land, there is no material legal impediment for us to obtain the title certificate for such land. For details, see “– Properties – Other properties occupied by us – (c) Science and Technology Innovation City Land Plot” in this section.

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Set out below is a breakdown of the 465 heat exchange stations by project and by type of the title defect and their revenue contribution of fee from customers for provision and distribution of heat for the year ended 31 December 2022:

	Shanxi Demonstration																	
	Taiyuan Project			Zone Project			Shuozhou Project			Lanzhou New Area Project			Hulunbuir Project			Total		
Number of heat exchange stations	Revenue contribution (RMB'000)	Percentage of revenue contribution (%)	Number of heat exchange stations	Revenue contribution (RMB'000)	Percentage of revenue contribution (%)	Number of heat exchange stations	Revenue contribution (RMB'000)	Percentage of revenue contribution (%)	Number of heat exchange stations	Revenue contribution (RMB'000)	Percentage of revenue contribution (%)	Number of heat exchange stations	Revenue contribution (RMB'000)	Percentage of revenue contribution (%)	Number of heat exchange stations	Revenue contribution (RMB'000)	Percentage of revenue contribution (%)	
Third-party owned heat exchange stations:																		
Type IA	32	85,919	63.3	10	10,812	62.6	54	51,265	17.5	103	179,697	97.9	70	185,321	85.7	269	513,014	60.7
Type IB	15	49,949	36.7	1	891	5.2	140	177,437	60.7	6	3,849	2.1	20	30,835	14.3	182	262,861	31.1
Sub-total	47	135,768	100.0	11	11,703	67.8	194	228,702	78.2	109	183,546	100.0	90	216,156	100.0	451	775,875	91.8
Self-owned heat exchange stations:																		
Type IIA	-	-	-	-	-	-	3	32,706	11.2	-	-	-	-	-	-	3	32,706	3.8
Type IIB	-	-	-	-	-	-	10	30,911	10.6	-	-	-	-	-	-	10	30,911	3.7
Type III	-	-	-	1	5,560	32.2	-	-	-	-	-	-	-	-	-	1	5,560	0.7
Sub-total	-	-	-	1	5,560	32.2	13	63,617	21.8	-	-	-	-	-	-	14	69,177	8.2
Total	47	135,768	100.0	12	17,263	100.0	207	292,319	100.0	109	183,546	100.0	90	216,156	100.0	465	845,052	100.0

Note: As at the Latest Practicable Date, three, three and one heat exchange stations for our Lanzhou New Area Project, Hulunbuir Project and Shuozhou Project, respectively, have ceased operation. They were in use in 2022 and contributed approximately RMB1.6 million, RMB1.6 million and RMB0.1 million, respectively, to our revenue for the year ended 31 December 2022.

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View of our Directors

Despite there are title defects associated with the heat exchange stations and the land on which the heat exchange stations are located, our PRC Legal Advisers are of the view that the imperfect titles associated with these heat exchange stations and the land are unlikely to have any material adverse effect on our daily operations, would not affect the validity of our Concession Agreements, and would not affect the legality of our heat service operations in any material respect. Our Directors, after considering the advice from our PRC Legal Advisers, are of the view that the risks arising from the title defects, whether individually or collectively, did not have and are unlikely to have a material adverse impact on our provision of heat services, financial position and results of operations. In particular:

- (a) the risk of us being evicted from the heat exchange stations currently used by us, or being requested to remove or relocate our equipment and machinery installed therein leading to the disruption of our operation, is remote because:
 - (i) we have never been evicted nor are we aware of any steps taken to evict us from any heat exchange stations used by us since the establishment of our Company in 2010;
 - (ii) the removal or relocation of the heat exchange equipment from the heat exchange stations would disrupt our provision of heat services to our heat service customers, which in turn will affect the livelihood and work conditions of our heat service customers in our Concession Area. Moreover, as advised by our PRC Legal Advisers, the Measures of City Yellow Line Management (《城市黃線管理辦法》) and the Standard for Urban Residential Area Planning and Design (《城市居住區規劃設計標準》) stipulate that heat exchange equipment including heat exchange stations cannot (by law) be demolished or relocated without proper authorisation from relevant government authorities. It is not in the government's interest to cause disruption of our heat service operation which is considered as a basic necessity for the people;
 - (iii) as advised by our PRC Legal Advisers, in light of the confirmations given by relevant government authorities, as well as the Measures of City Yellow Line Management (《城市黃線管理辦法》) and the Standard for Urban Residential Area Planning and Design (《城市居住區規劃設計標準》), since we have an obligation to ensure stable heat services to our heat service customers despite the existence of the title defects of the heat exchange stations currently used by us, the risk of us being penalised or requested to demolish or relocate the heat exchange stations currently in use or requested to remove our equipment installed therein is remote;
 - (iv) as at the Latest Practicable Date, we were not aware of any authorisation given by relevant government authorities ordering the demolition or relocation of any heat exchange station for our heat service operation due to its title defect. Even

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if we are indeed requested by the government to remove or relocate the heat exchange equipment from the heat exchange stations currently used by us, we believe that the government would assist us or give us sufficient time for identifying a new heat exchange station for relocation;

- (v) as the heat exchange stations are usually situated in the common areas of the housing estates or building areas within our Concession Area and are used to provide heat services to these housing estates or buildings, the owners of these housing estates and buildings rely on our expertise as a heat service provider to operate the heat exchange stations for continuous provision of heat services to their housing estates and buildings. It would not be in the interest of the land owners or owners of the heat exchange stations to evict us from or request us to cease to use those heat exchange stations to provide heat services to these housing estates or buildings as they would not be able to engage other heat service providers to operate those heat exchange stations given that we were granted a concession to provide heat service exclusively in that area under the relevant concession;
 - (vi) during the Track Record Period, our Group had not been requested by relevant government authorities to rectify our usage or the construction of any heat exchange station;
 - (vii) to the best knowledge of our Directors, we have never been involved in any dispute arising from any title defect of the heat exchange stations within our Concession Area which led to the removal of the equipment installed or compensation claims;
 - (viii) as advised by our PRC Legal Advisers, the confirmations from relevant competent government authorities that our continued use of the heat exchange stations with title defects will not affect the validity of our concession operations remain legally binding and valid; and
 - (ix) it is not uncommon for PRC heat service providers to have heat exchange stations associated with certain title defects, as confirmed by the study carried out by Frost & Sullivan; and
- (b) in addition to the above, we believe that the title defects, whether individually or collectively, are unlikely to result in any material adverse financial impact on us due to the following reasons:
- (i) to the best knowledge of our Directors, we have never been penalised, nor threatened to be penalised by the relevant competent government authorities for the above-mentioned title defects;

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- (ii) there is no direct connection between the revenue and profit attributable to the relevant heat exchange stations and the property title issues of them on an aggregate basis, mainly because: (a) the operation of the heat exchange stations is independent from one another, and it is unlikely that a large scale of demolition and relocation or a large number of disputes, legal proceedings or material administrative penalties will arise from the property title issues of such heat exchange stations at the same time; (b) no single heat exchange station is considered material to our operations as a whole; (c) such property title issues of heat exchange stations have never had any material adverse impact on our operations and business development; and (d) we are the exclusive heat service provider in our respective Concession Areas, hence our customers rely on us for continued provision of heat services;
- (iii) we have either obtained written permissions from or entered into agreements with the grantors for the use of the heat exchange stations and/or the land for all of the 464 heat exchange stations located on third-party owned land. Our PRC Legal Advisers have advised that such written permissions or agreements for the use of those 464 heat exchange stations and/or the land are legally binding and valid, notwithstanding that some of the abovementioned grantors may not be the proper owners who have the authority to grant the right of such use;
- (iv) as advised by our PRC Legal Advisers, in the unlikely event that we are evicted from one of the heat exchange stations currently used by us, or are requested to remove or relocate our equipment and machinery installed therein, the operations of other heat exchange stations currently in use from which we have not been evicted would not be affected;
- (v) it is unlikely that there will be large scale demolition and relocation of, or a large number of disputes, legal proceedings or material administrative penalties arising from property title issues for numerous heat exchange stations at the same time;
- (vi) in the unlikely event that any legal action or claim is lodged by a third party against us in relation to the title defects of the heat exchange stations, revenue generated from our heat services will not be confiscated;
- (vii) in the event that the owner or third party with legitimate rights raises objection to our occupation of the relevant heat exchange station, we may consider to enter to an official lease or licence arrangement with that owner or third party for our continued use, or seek alternative sites for our heat exchange station;
- (viii) even if we are requested to demolish the heat exchange station or relocate the equipment and machinery and connecting pipelines installed to a new heat exchange station, we believe we would receive advanced notice and the relevant government authorities will assist us in finding alternative premises as heat exchange stations in a timely manner;

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- (ix) the cost of relocating our equipment and machinery and the connecting pipelines from an existing heat exchange station to a new heat exchange station is relatively modest. Our equipment, machinery and connecting pipelines could generally be dismantled, reassembled and reused at alternative sites. We estimate such relocation cost to be in the range of approximately RMB17,000 to RMB200,000, which we do not believe to be material. We will endeavour to carry out and complete any relocation of heat exchange stations outside heat service period, such that it would not result in any disruption to the provision of heat services;
- (x) as advised by our PRC Legal Advisers, in case we are evicted from a heat exchange station by a third party, we are generally entitled to seek compensation or damages against the grantors for the breach of their contractual undertaking given under the aforementioned written permissions and agreements; and
- (xi) we expect that it will not be practically difficult to find alternative locations for relocation. In particular, Shuangliang Technology (one of our Controlling Shareholders) has undertaken that, for so long as it is our Controlling Shareholder, if we, for whatever reason, are unable to use any heat exchange station for our normal heat service operation, it will find alternative locations that are legally compliant and suitable for the relocation of the heat exchange stations currently used by us, and it will indemnify us of all costs resulting from such relocation, as well as all penalties or compensation that we may be required to pay as a result of the title defects. Additionally, pursuant to the Deed of Indemnity, the Controlling Shareholders have also undertaken to indemnify our Company for any losses arising from the title defects.

Rectification of the title defects

If the grantors are the owners of the land and the heat exchange stations and they held the relevant title certificates, then the title to those land and heat exchange stations could be demonstrated by providing both the land use rights certificates and the property ownership certificates or real estate certificates to us.

According to Article 14 of the Provisional Regulations on Real Estate Registration (《不動產登記暫行條例》), the first application for registration of real estate that has not been registered can only be applied by the relevant owner.

Pursuant to paragraph 2 of article 2 of the Rules for the Implementation of the Provisional Regulations on the Registration of Real Property (《不動產登記暫行條例實施細則》), buildings and structures (such as houses) and fixtures (such as forest and trees) should be registered together with the land use right certificate owners under the real estate registration system in the PRC.

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Article 61 of the Urban Real Estate Management Law (《城市房地產管理法》) stipulates that, where a property is built on real estate land acquired by means of transfer or allocation pursuant to the law, the land use right certificate shall be presented for completion of registration formalities with the real estate administration authorities of a People's Government of county level and above. The real estate administration authorities of the People's Government of county level and above shall issue a property ownership certificate upon verification.

As advised by our PRC Legal Advisers, according to the above provisions, registration of the heat exchange station needs to be carried out with the land use right certificate, and can only be applied by the land use right owner. As such, if the land use right and the property ownership belong to different parties, such property ownership cannot be registered, and neither the land owner nor property owner could rectify such title defects unless either the land use right or the property ownership could be transferred to the same party. In order to carry out such transfer, we must be able to identify the land use right holder, the relevant land use right certificate must have been issued to that holder, and the relevant land use right or property has to be legally permitted to be independently transferred.

As advised by our PRC Legal Advisers, if the relevant title certificates have not been obtained by the proper owners, only the land owner who is also the owner of the heat exchange station located on such land can apply the relevant title certificates in order to rectify the title defects, otherwise the title defects in relation to these heat exchange stations could not be rectified due to separate land and building ownership (房地分離) under relevant PRC laws and regulations.

The title defects in relation to the 451 third-party owned heat exchange stations located on third-party owned land (i.e. Type IA and Type IB) were not caused by us, and their coming into existence was beyond our control.

- As we do not own or construct these 451 heat exchange stations, we are not required to apply for the underlying construction related permits or title certificates which include the land use right certificates (土地證), property ownership certificates (房產證) or real estate certificates (不動產證).
- For the 269 Type IA heat exchange stations, the grantors have provided us the land use rights certificates and the authorisation from the relevant land owners (if applicable) but not the relevant property ownership certificates. Our PRC Legal Advisers advised that such title defects can only be rectified by the owner of the land who is also the owner of the heat exchange station located on such land due to separated land and building ownership (房地分離) under relevant PRC laws and regulations.
- For the 182 Type IB heat exchange stations, the grantors did not provide us relevant land use right certificates or property ownership certificates to prove that they are the land owners or the heat exchange station owners. Our PRC Legal Advisers advised that such title defects can only be rectified by the owners of both the land and the heat exchange stations for the same reason above.

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Our PRC Legal Advisers advised that (i) as we are not the owner of the land and the heat exchange stations but only an occupant of these 451 heat exchange stations, we do not have the authority or responsibility to apply for any title certificate; and (ii) there are no laws or regulations requiring us, and we (as the occupant of the property) do not have a statutory responsibility, to ask relevant owners to apply to real estate registration authorities for any title certificate.

For the 13 self-owned heat exchange stations located on third-party owned land (i.e. Type IIA and Type IIB), three grantors have provided us the land use right certificates (under the relevant grantor's name), while 10 grantors did not provide us with relevant land use right certificates. As advised by our PRC Legal Advisers, we would not be able to apply for the corresponding property ownership certificates and/or real estate certificates for such heat exchange stations due to separated land and building ownership under relevant PRC laws and regulations. Further, as advised by our PRC Legal Advisers, as we are not the owner of the land where we constructed these 13 heat exchange stations, we would not be able to apply for the construction planning permits and complete the corresponding construction acceptance checks due to separated land and building ownership under the relevant PRC laws and regulations. According to Frost & Sullivan, it is not uncommon for PRC heat service providers to have heat exchange stations associated with similar title defects.

If any third party owner of the heat exchange station is not the land owner, the third party owner of the heat exchange station cannot apply for the property ownership certificate, but it may still evict us from or request us to cease to use the relevant heat exchange station. In such event, most grantors (as the land owners or party authorised by the land owners) confirmed that they would use their best endeavours to negotiate with such third party owners of heat exchange stations for our continued use in order to provide heat services.

Legal consequences of the title defects

Our PRC Legal Advisers have advised that there are no laws and regulations providing for any potential penalty that may be imposed on us in connection with our use of the 451 heat exchange stations with title defects owned by third parties. In respect of the 14 heat exchange stations owned by us, see “– Failure to obtain certain construction planning permits and/or complete relevant construction acceptance checks for the construction of certain properties” in this section for the maximum penalty that may be imposed on us.

Our PRC Legal Advisers have also advised that, under the relevant PRC laws and regulations, the heat exchange stations with title defects may be requested to be demolished or relocated or we may be requested to remove or relocate our equipment installed therein. Further, we may be subject to claims (such as accounts for rents) lodged by third parties who can prove that they are the actual owners of the heat exchange stations and/or the land. However, due to the fact that heat services is a public utility business which affects the people's livelihood, the risk of the heat exchange stations currently used by us being requested to be demolished or relocated is remote.

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Our PRC Legal Advisers have also advised that the Measures of City Yellow Line Management (《城市黃線管理辦法》) and the Standard for Urban Residential Area Planning and Design (《城市居住區規劃設計標準》) stipulate that heat exchange equipment including heat exchange stations cannot (by law) be demolished or relocated without proper authorisation from relevant government authorities. As at the Latest Practicable Date, we had not been asked nor had we been ordered by relevant government authorities or the owners of the heat exchange stations/land, nor were we aware of any intention on their part to require us, to demolish or relocate any of the heat exchange stations we use for our heat service operation due to their title defects.

Based on the above, we believe it is unlikely that relevant government authorities or the owners of the heat exchange stations and/or the land would order or require the demolition or relocation of the heat exchange stations or our equipment installed therein without finding alternative sites for us generally.

Confirmations from relevant government authorities

As most of the title defects were beyond our control and could only be rectified by relevant owners of such heat exchange stations and/or land, we have sought clarification and confirmation from relevant government authorities regarding, amongst other things, our use of the heat exchange stations.

Written confirmations have been obtained from relevant competent authorities on the following matters relating to our use of the heat exchange stations:

- (a) the title defects of the heat exchange stations did not affect the validity of the respective Concession Agreements, would not affect the legality of our heat service operations, and would not cause an early termination of the respective Concession Agreements. This was confirmed:
 - (i) in respect of our Hulunbuir Project by the Hulunbuir City Housing and Urban-Rural Development Bureau (呼倫貝爾市住房和城鄉建設局), which is the grantor of our Hulunbuir Concession Agreement;
 - (ii) in respect of our Taiyuan Project by the Taiyuan City Bureau of Municipal Affairs Administration (太原市城鄉管理局), which is the grantor of our Taiyuan Concession Agreement;
 - (iii) in respect of our Shanxi Demonstration Zone Project by the Construction and Public Utilities Department of the Management Committee of Shanxi Transformation and Comprehensive Reform Demonstration Zone (山西轉型綜合改革示範區管理委員會建設與公用事業管理部), which is the relevant competent authority responsible for overseeing and coordinating matters relating to heat services within the Shanxi Transformation and Comprehensive Reform Demonstration Zone and an internal department of the concession grantor as advised by our PRC Legal Advisers;

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- (iv) in respect of our Shuozhou Project by Shuozhou City Bureau of Municipal Affairs Administration (朔州市城市管理局), which is the relevant competent authority overseeing matters related to heat services in Shuozhou City, and this authority and the Concession grantor are both internal departments of Shuozhou Municipal Government as advised by our PRC Legal Advisers; and
 - (v) in respect of our Lanzhou New Area Project by Lanzhou New District Urban and Rural Construction and Transportation Bureau (蘭州新區城鄉建設和交通管理局), the relevant competent authority overseeing matters related to heat services and an internal department of the Concession grantor for our Lanzhou New Area Project as advised by our PRC Legal Advisers;
- (b) if due to changes in municipal planning or other factors, we need to relocate or become unable to properly occupy or use the existing heat exchange stations for our heat services operations, the respective authorities will assist us in finding alternative premises as heat exchange stations, so as to ensure that the provision of heat services to residents will not be affected. This was confirmed:
- (i) in respect of our Hulunbuir Project by (1) the People's Government of Hailar District of Hulunbuir City (呼倫貝爾市海拉爾區人民政府), which is the highest competent authority in relation to matters in the concession areas of Hailar District of Hulunbuir city including but not limited to constructions and public utilities matters as advised by our PRC Legal Advisers, and (2) the Hulunbuir City Housing and Urban-Rural Development Bureau (呼倫貝爾市住房和城鄉建設局), which is the grantor of our Hulunbuir Concession Agreement;
 - (ii) in respect of our Taiyuan Project and Shanxi Demonstration Zone Project by the Construction and Public Utilities Department of the Management Committee of Shanxi Transformation and Comprehensive Reform Demonstration Zone (山西轉型綜合改革示範區管理委員會建設與公用事業管理部), which is the competent authority in construction matters in jurisdiction which concession grantee is registered for its place of business and responsible for overseeing and coordinating matters relating to constructions and other auxiliary infrastructure as advised by our PRC Legal Advisers;
 - (iii) in respect of our Shuozhou Project by Shuozhou City Housing and Urban-Rural Development Bureau (朔州市住房和城鄉建設局), which is the relevant competent authority supervising and managing town planning and construction related matters of Shuozhou City as advised by our PRC Legal Advisers; and
 - (iv) in respect of our Lanzhou New Area Project by Lanzhou New Area Zhongchuan Park Management Committee (蘭州新區中川園區管理委員會), the relevant competent authority which is a subordinate authority to the Concession grantor for our Lanzhou New Area Project as advised by our PRC Legal Advisers;

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- (c) the heat exchange stations that have been used and continue to be used by us have complied with PRC laws, regulations, rules and other regulatory documents regarding housing management and construction planning, and there was no violation of housing management and construction planning related regulations. This was confirmed:
- (i) in respect of our Hulunbuir Project up to 27 February 2023 by Hulunbuir City Housing and Urban-Rural Development Bureau (呼倫貝爾市住房和城鄉建設局), which is the grantor of our Hulunbuir Concession Agreement;
 - (ii) in respect of our Taiyuan Project and Shanxi Demonstration Zone Project up to 28 July 2021 by the Construction and Public Utilities Department of the Management Committee of Shanxi Transformation and Comprehensive Reform Demonstration Zone (山西轉型綜合改革示範區管理委員會建設與公用事業管理部), which is the competent authority in construction matters in jurisdiction which concession grantee is registered for its place of business and responsible for overseeing and coordinating matters relating to constructions and other auxiliary infrastructure as advised by our PRC Legal Advisers; and
 - (iii) in respect of our Shuozhou Project up to 27 February 2023 by Shuozhou City Housing and Urban-Rural Development Bureau (朔州市住房和城鄉建設局), which is the relevant competent authority supervising and managing town planning and construction related matters of Shuozhou City as advised by our PRC Legal Advisers;
- (d) no complaint or report had been received by the respective authorities for violation of relevant housing management and construction planning laws in respect of the heat exchange stations, and the respective authorities did not have any dispute, conflict or legal proceeding with us in relation to housing management and construction planning in respect of the heat exchange stations. This was confirmed:
- (i) in respect of our Hulunbuir Project up to 27 February 2023 by (1) the People's Government of Hailar District of Hulunbuir City (呼倫貝爾市海拉爾區人民政府), which is the highest competent authority in relation to matters in the concession areas of Hailar District of Hulunbuir city including but not limited to constructions and public utilities matters as advised by our PRC Legal Advisers, and (2) the Hulunbuir City Housing and Urban-Rural Development Bureau (呼倫貝爾市住房和城鄉建設局), which is the grantor of our Hulunbuir Concession Agreement;
 - (ii) in respect of our Taiyuan Project and Shanxi Demonstration Zone Project up to 28 July 2021 by the Construction and Public Utilities Department of the Management Committee of Shanxi Transformation and Comprehensive Reform Demonstration Zone (山西轉型綜合改革示範區管理委員會建設與公用事業管理部), which is the competent authority in construction matters in jurisdiction which concession grantee is registered for its place of business and responsible for overseeing and coordinating matters relating to constructions and other auxiliary infrastructure as advised by our PRC Legal Advisers; and

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- (iii) in respect of our Shuozhou Project up to 27 February 2023 by Shuozhou City Housing and Urban-Rural Development Bureau (朔州市住房和城鄉建設局), which is the relevant competent authority supervising and managing town planning and construction related matters of Shuozhou City as advised by our PRC Legal Advisers;
- (e) without consent from the relevant authority, we cannot cease the provision of our heat services solely because of title defects of the heat exchange stations used by us, so as to avoid suspension of heat service. This was confirmed:
 - (i) in respect of our Hulunbuir Project by the Hulunbuir City Housing and Urban-Rural Development Bureau (呼倫貝爾市住房和城鄉建設局), which is the grantor of our Hulunbuir Concession Agreement;
 - (ii) in respect of our Taiyuan Project by the Taiyuan City Bureau of Municipal Affairs Administration (太原市城鄉管理局), which is the grantor of our Taiyuan Concession Agreement;
 - (iii) in respect of our Shanxi Demonstration Zone Project by the Construction and Public Utilities Department of the Management Committee of Shanxi Transformation and Comprehensive Reform Demonstration Zone (山西轉型綜合改革示範區管理委員會建設與公用事業管理部), which is the relevant competent authority responsible for overseeing and coordinating matters relating to heat services within the Shanxi Transformation and Comprehensive Reform Demonstration Zone and an internal department of the concession grantor as advised by our PRC Legal Advisers; and
 - (iv) in respect of our Shuozhou Project by Shuozhou City Bureau of Municipal Affairs Administration (朔州市城市管理局), which is the relevant competent authority overseeing matters related to heat services in Shuozhou City, and this authority and the grantor are both internal department of Shuozhou Municipal Government as advised by our PRC Legal Advisers;
- (f) there had not been disputes on property rights over heat exchange stations within the jurisdiction the respective competent authorities which resulted in the need for relocation of any heat exchange station or the need for compensation. This was confirmed:
 - (i) in respect of our Hulunbuir Project up to 27 February 2023 by the Hulunbuir City Housing and Urban-Rural Development Bureau (呼倫貝爾市住房和城鄉建設局), which is the grantor of our Hulunbuir Concession Agreement;
 - (ii) in respect of our Taiyuan Project up to 6 March 2023 by the Taiyuan City Bureau of Municipal Affairs Administration (太原市城鄉管理局), which is the grantor of our Taiyuan Concession Agreement;

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- (iii) in respect of our Shanxi Demonstration Zone Project up to 30 July 2021 by the Construction and Public Utilities Department of the Management Committee of Shanxi Transformation and Comprehensive Reform Demonstration Zone (山西轉型綜合改革示範區管理委員會建設與公用事業管理部), which is the relevant competent authority responsible for overseeing and coordinating matters relating to heat services within the Shanxi Transformation and Comprehensive Reform Demonstration Zone and an internal department of the concession grantor as advised by our PRC Legal Advisers; and
- (iv) in respect of our Shuozhou Project up to 27 February 2023 by Shuozhou City Bureau of Municipal Affairs Administration (朔州市城市管理局), which is the relevant competent authority overseeing matters related to heat services in Shuozhou City, and this authority and the grantor are both internal department of Shuozhou Municipal Government as advised by our PRC Legal Advisers;
- (g) we were not involved in any material non-compliance relating to real property within the jurisdiction of the respective authorities, and had not been penalised by the respective authorities for any violations of real property related PRC laws or regulations within its jurisdiction. This was confirmed:
 - (i) in respect of our Taiyuan Project up to 18 January 2023 by the Construction and Public Utilities Department of the Management Committee of Shanxi Transformation and Comprehensive Reform Demonstration Zone (山西轉型綜合改革示範區管理委員會建設與公用事業管理部), which is the competent authority in construction matters and coordinating matters relating to constructions within the Shanxi Transformation and Comprehensive Reform Demonstration Zone as advised by our PRC Legal Advisers;
 - (ii) in respect of our Shuozhou Project up to 17 January 2023 by Shuozhou City Shuocheng District Housing and Urban-Rural Development Bureau (朔州市朔城區住房和城鄉建設局), which is the relevant competent authority responsible for supervising and managing town planning and construction related matters within Shuocheng District as advised by our PRC Legal Advisers; and
 - (iii) in respect of our Shuozhou Project up to 17 January 2023 by Lanzhou New District Urban and Rural Construction and Transportation Bureau (蘭州新區城鄉建設和交通管理局), which is the relevant competent authority responsible for supervising urban and rural construction, housing security within Lanzhou New Area as advised by our PRC Legal Advisers;

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- (h) we were not involved in any material non-compliance relating to construction within the jurisdiction of the respective authorities, and had not been investigated or penalised by the respective authorities for any violations of construction related PRC laws or regulations within its jurisdiction. This was confirmed:
- (i) in respect of our Shanxi Demonstration Zone Project up to 18 January 2023 by the Construction and Public Utilities Department of the Management Committee of Shanxi Transformation and Comprehensive Reform Demonstration Zone (山西轉型綜合改革示範區管理委員會建設與公用事業管理部), which is the competent authority responsible for overseeing construction within the Shanxi Transformation and Comprehensive Reform Demonstration Zone as advised by our PRC Legal Advisers; and
- (ii) in respect of our Shuozhou Project up to 17 January 2023 by Shuozhou City Shuocheng District Housing and Urban-Rural Development Bureau (朔州市朔城區住房和城鄉建設局), which is the relevant competent authority supervising construction related matters of Shuocheng District as advised by our PRC Legal Advisers.

Our PRC Legal Advisers have advised that the aforementioned authorities are the relevant competent authorities to issue opinions with respect to the aforementioned issues concerning the heat services we provide in their respective administrative regions.

Enhanced internal control measures

We have adopted the following enhanced internal control measures to address current and future problems concerning title defects:

- (1) we have amended our internal control manual, including Measures of Heat Exchange Stations and Origin Stations (《換熱站、首站管理制度》), in order to strengthen our execution and monitoring system in respect of the title defects and to ensure that our Directors, supervisors and senior management are properly updated on a regular basis;
- (2) we have designated our operation department as the department responsible for carrying out overall monitoring and management of the title defects. This includes conducting regular and random checks and inspections on the status of the title defects, following up with the progress of obtaining title certificates and proper authorisations for those heat exchange stations with title defects, and preparing a monthly report based on the progress status for the new heat exchange stations;
- (3) we have compiled a register to record and document the details and status of heat exchange stations with title defects. Designated staff will follow up with the status of the heat exchange stations with title defects at specified times and will make quarterly progress reports to the operation department;

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- (4) we will (i) have an internal control evaluation on the title defects of heat exchange stations from time to time; (ii) evaluate the works of the designated staff in handling such title defects; (iii) assess the overall status of title defects; and (iv) report to our Directors, supervisors and senior management regarding the risks arising from title defects and assess the risks in a timely manner based on the factors such as any claims or eviction by third parties for unauthorised use shall there be any such incidents arising in the future;
- (5) we will ensure that proper authorisations or confirmations in relation to the right to use the land and/or heat exchange stations are obtained during construction of heat exchange stations or installation of equipment in any existing heat exchange stations, and will endeavour to obtain all relevant title certificates before putting heat exchange stations into use. If title certificates are unable to be obtained, our operation department should report to our management team prior to commencement of heat service period. After the grantors grant us the right to use the heat exchange stations, we will also obtain authorisation from our management team before putting them into use for our operation;
- (6) we will ensure that proper disclaimers and an indemnity provision will be included in new written permission and agreements for use of heat exchange stations to be obtained from the grantors before installing our equipment into any new heat exchange stations, so as to ensure that the grantors will be responsible for any damages and losses arising from their title defects;
- (7) for grantors who were unable to provide relevant title certificates, we have sought confirmation from the relevant regulatory authority to confirm that the relevant government authorities will assist us in finding alternative premises as heat exchange stations, so as to ensure that the provision of heat services to residents will not be affected, and we will seek to obtain the same should we have to use any other heat exchange stations with title defects in the future; and
- (8) we will engage external legal advisers to provide legal training to our Directors and senior management on a regular basis in order to keep pace with relevant laws and regulations.

Our internal control consultant has reviewed the corresponding internal control policies, and did not have any further recommendation after such review.

Based on the above, our Directors and the Sole Sponsor are of the view that the enhanced internal control measures adopted by our Group are adequate and sufficient in preventing recurrence of similar future incidents.

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Failure to obtain certain construction permits and/or complete relevant construction acceptance checks for the construction of certain properties

Event of non-compliance and reasons

During the Track Record Period, we failed to obtain certain construction permits and/or complete relevant construction acceptance checks for (a) 14 heat exchange stations owned by us for our Shanxi Demonstration Zone Project and Shuozhou Project, and (b) our peak shaving station for our Lanzhou New Area Project.

In respect of the 14 heat exchange stations (of which one was located on our land and 13 were located on third-party owned land) owned by us, we did not obtain the relevant construction planning permits before commencement of construction and/or complete the relevant construction acceptance checks before putting them into use.

- For that one heat exchange station (i.e. Type III) located on our land in Science and Technology Innovation City Land Plot, we commenced the relevant construction without obtaining the construction planning permit (建設規劃許可) and construction commencement permits (建設施工許可) prior to the construction and did not complete relevant construction acceptance checks of such heat exchange station prior to putting it into use, with a view to expediting the progress of construction to ensure the provision of heat services for the winter heating season to new users in the relevant areas due to urgent needs. As at the Latest Practicable Date, we were in the process of obtaining the construction planning permit and construction commencement permit, after which we expect to conduct the construction acceptance checks and obtain the real estate certificate (不動產權證書). It is expected that the real estate certificate will be obtained by the end of 2023.
- For those 13 heat exchange stations (i.e. Type IIA and Type IIB) which were located on third-party owned land, since we were not the land owner, as advised by our PRC Legal Advisers, we were not permitted under relevant PRC laws and regulations to apply for the construction planning permits and complete the corresponding construction acceptance checks due to separate land and building ownership (房地分離). As at the Latest Practicable Date, we could not obtain the relevant permits before commencement of construction and/or complete the relevant construction acceptance checks as we were not the owner of such land and could not provide the land use rights certificate which is required to obtain such construction permits and complete such construction acceptance checks.

In respect of our peak-shaving station, we did not complete the construction acceptance checks before its commencement of operation. According to the construction plan of such peak-shaving station, six peak-shaving boilers and the corresponding buildings to be constructed. After completion of construction of three peak-shaving boilers and the corresponding buildings, our peak-shaving station commenced operation in response to urgent needs of residents under our Lanzhou New Area Project as it was winter at the material time. As we had not yet completed the construction of all six peak-shaving boilers and all

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corresponding buildings according to the construction plan, we could not complete the requisite construction acceptance check of the constructed buildings where the three constructed boilers are located at the time. We attended a meeting with the government prior to our commencement of operation of the peak-shaving station, and understood that we are required to ensure we have the ability to provide heat services for the upcoming heat service period in order to satisfy the urgent needs of residents of Lanzhou New Area Project. We therefore had to start operating our peak-shaving station despite not having completed the relevant construction acceptance check. It was subsequently agreed with the relevant authorities that the construction acceptance check of the constructed buildings where the three constructed boilers are located will be carried out first according to the respective construction schedule of each of the peak-shaving boilers and the corresponding buildings. As at the Latest Practicable Date, we were in the process of conducting the construction acceptance check covering the constructed buildings where the three constructed boilers are located. It is expected that the construction acceptance check covering the constructed buildings where the three constructed boilers are located shall be completed by the end of 2023.

During the Track Record Period and up to the Latest Practicable Date, there had not been any material safety incidents directly attributable to the safety conditions of the 14 heat exchange stations owned by us and the peak-shaving station during our time of operation.

Legal consequences

According to Urban and Rural Planning Law of the PRC (《中華人民共和國城鄉規劃法》), if a construction project proceeded without obtaining the construction planning permit or violated relevant provisions under the construction planning permit (建設工程規劃許可證), the relevant government authority may stop the construction. It may also request for rectification or demolition of the building or structure within a certain time limit and impose a fine of not more than 10% of the construction cost, and any revenue generated from the building or structure may be confiscated.

According to the Measures for Construction Permission Management of Construction Projects (《建築工程施工許可管理辦法》), for any construction project without a construction permit (施工許可證) being obtained, the relevant government authority may stop the construction, request for rectification within a specified time limit, impose on the owner of the construction project a fine of 1% to 2% of the contract value of the construction project, and impose a fine of not more than RMB30,000 upon the contractor. Further, no construction commencement permit is required for construction projects with an investment amount of less than RMB300,000 or with a construction area of less than 300 sq.m. As at the Latest Practicable Date, there were five heat exchange stations owned by us did not require a construction commencement permit, and for the remaining nine heat exchange stations owned by us, we failed to obtain a construction commencement permit.

Pursuant to the Construction Law of the PRC (《中華人民共和國建築法》), and the Regulations on the Quality Management of Construction Projects (《建設工程質量管理條例》), the relevant government authority may impose an administrative fine in the amount between 2% to 4% of the construction cost contract value to owner of the construction project for the failure to conduct a construction acceptance check (竣工驗收) before use.

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As confirmed by our Directors the maximum potential penalty that may be imposed on the Group amounts to approximately RMB7.6 million, which represents the aggregate amount of (i) 10% of the total construction cost in relation to the 14 heat exchange stations owned by us; (ii) 2% of the total contract value of the project sum in relation to the nine heat exchange stations which we failed to obtain construction permits; and (iii) 4% of the total contract value of the project sum in relation to the 14 heat exchange stations owned by us.

Remedial measures and enhanced internal control measures

We have adopted a set of internal control policies to ensure our construction projects are in compliance with applicable statutory procedures and to prevent any recurrence of similar future non-compliance:

- (a) prior to the commencing construction works, we are required to obtain all the requisite construction permits and approvals from the relevant competent government authorities;
- (b) prior to the commencement of operation of each newly constructed facility or equipment, the relevant constructor shall prepare an acceptance report for review by our supervising engineer, who will subsequently sign the acceptance report;
- (c) if the supervising engineer considers the acceptance procedures are inadequate to meet the acceptance conditions required, a notice will be issued to the relevant contractor to rectify any deficiency identified;
- (d) upon satisfaction of acceptance conditions as determined by our supervising engineer, our supervising unit and project construction unit will further review whether the relevant construction project has gone through all required procedures before commencement of operation or use; and
- (e) we are not allowed to commence operations or use any newly constructed facility or equipment until we obtain the official notice of completion of construction acceptance procedures.

Our internal control consultant has reviewed the corresponding enhanced internal control policies which our Group has adopted, and did not have any further recommendation after such review.

Based on the above, our Directors and the Sole Sponsor are of the view that the enhanced internal control measures adopted by our Group are adequate, effective and sufficient in preventing recurrence of similar future non-compliance.

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Impact on our Group

We have obtained confirmations from the relevant competent government authorities that no penalty will be imposed on us in respect of the above-mentioned non-compliance.

In respect of the heat exchange station constructed for our Shanxi Demonstration Zone Project, we obtained a written confirmation from the Construction and Public Utilities Department of the Management Committee of Shanxi Transformation and Comprehensive Reform Demonstration Zone (山西轉型綜合改革示範區管理委員會建設與公用事業管理部), confirming that, among others, (i) our failure to obtain the requisite construction permits and/or complete construction completion acceptance check for heat exchange stations owned by us does not constitute a material non-compliance; and (ii) it will not impose administrative penalties on us for this reason.

In respect of the heat exchange stations constructed for our Shuozhou Project, we obtained a written confirmation from Shuozhou City Housing and Urban-Rural Development Bureau (朔州市住房和城鄉建設局) confirming that, among others, (i) our failure to obtain the requisite construction permits and/or complete relevant construction acceptance checks for heat exchange stations owned by us does not constitute a material non-compliance; and (ii) it will not impose administrative penalties on us for this reason.

In respect of the peak-shaving station, we obtained a written confirmation from Lanzhou New Area Zhongchuan Area Urban (Rural) Development Management Bureau (蘭州新區中川園區城市(鄉)建設管理局) confirming that (i) given the peak-shaving station is mainly used for heat services operation which is public utility relating to people's livelihood, in order to ensure the normal provision of heat service, we can continue to use such peak-shaving station; (ii) our use of the peak-shaving station does not constitute a material non-compliance; and (iii) no penalty has been or will be imposed on us in this regard.

As we have received confirmations from the relevant competent government authorities, our PRC Legal Advisers are of the view that the risk of us being requested to cease the use of such heat exchange stations and peak-shaving station and/or being penalised as a result of such non-compliance is remote, and that such non-compliance would not have a material impact on the business operation of our Group.

Based on the above-mentioned confirmations received from relevant competent government authorities and the advice from our PRC Legal Advisers, our Directors confirm that such non-compliances do not and will not have any material impact on the operations or financial position of our Group.

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Other facilities owned by us

In addition to the owned properties, leased properties and equipment installed in heat exchange stations set out above, we also own heat service facilities for our operation. Almost all of our facilities are located in Shanxi Province, Gansu Province and Inner Mongolia Autonomous Region, and mainly comprise primary distribution pipelines and facilities and devices we installed in the heat exchange stations used by us. See “Heat distribution – Our heat service facilities” in this section for details.

REGULATORY COMPLIANCE

Save as disclosed in this section, our Directors are of the view that we had complied with all relevant laws and regulation in all material respects during the Track Record Period and up to the Latest Practicable Date.

Licences, permits and certificates

We are subject to laws, regulations and supervision by different levels of regulatory authorities and are required to maintain various licences, permits and certificates in order to operate our business. A summary of such relevant PRC laws and regulations to which our business operations are subject is set out in “Regulatory overview” in this document. Our PRC Legal Advisers have confirmed that we had obtained necessary licences, permits and certificates for our current business operations in all material aspects in the PRC and such licences, permits and certificates are valid and remain in effect as at the Latest Practicable Date. The following table sets out the details of our licences, permits and certificates which are material to our operations:

No.	Licence, permit and certificate name	Serial number	Awarding body	Recipient	Date of award	Validity
1	Pollutant discharge permit (排污許可證)	91620100073586604Y001P	Lanzhou New Area Ecology and Environment Bureau (蘭州新區生態環境局)	Lanzhou Shuangliang	13 September 2021	12 September 2026
2	Work safety licence (安全生產許可證)	(Jin)JZ An Xu Zheng Zi [2020]010334-3/1 (晉)JZ安許證字[2020]010334-3/1	Taiyuan Municipal Administrative Approval Services Management Bureau (太原市行政審批服務管理局)	Taiyuan Renewable Energy	12 November 2020	11 November 2023
3	Work safety licence (安全生產許可證)	(Jin)JZ An Xu Zheng Zi [2017]TY0272-2/2 (晉)JZ安許證字 [2017]TY0272-2/2	Taiyuan Municipal Commission of Housing and Urban-Rural Development (太原市住房和城鄉建設委員會)	Shanxi Shuangliang Renewable Energy	27 December 2017	7 December 2023
4	Work safety licence (安全生產許可證)	(Jin)JZ An Xu Zheng Zi [2020]060028 (晉)JZ安許證字[2020]060028	Shuozhou Municipal Administrative Approval Services Management Bureau (朔州市行政審批服務管理局)	Shuozhou Renewable Energy	29 October 2020	28 October 2023

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No.	Licence, permit and certificate name	Serial number	Awarding body	Recipient	Date of award	Validity
5	Construction industry enterprise qualification (建築業企業資質證書)	D314006270	Taiyuan Municipal Commission of Housing and Urban-Rural Development (太原市住房和城鄉建設委員會)	Shanxi Shuangliang Renewable Energy	14 June 2017	31 December 2023
6	Construction industry enterprise qualification (建築業企業資質證書)	D314006536	Taiyuan Municipal of Housing and Urban-Rural Development Bureau (太原市住房和城鄉建設局)	Taiyuan Renewable Energy	10 December 2019	31 December 2023
7	Construction industry enterprise qualification (建築業企業資質證書)	D314078474	Shuozhou Municipal Administrative Approval Services Management Bureau (朔州市行政審批服務管理局)	Shuozhou Renewable Energy	13 January 2020	13 January 2025
8	Engineering design qualification certificate (Municipal sector (Heating engineering) Grade 2) (工程設計資質證書(市政行業(熱力工程)專業乙級))	A214012131	Shanxi Provincial Department of Housing and Urban-Rural Development (山西省住房和城鄉建設廳)	Shanxi Shuangliang New Energy	4 May 2017	31 December 2023
9	High and new technology enterprises certificate (高新技術企業證書)	GR202114000653	Shanxi Provincial Department of Science and Technology (山西省科學技術廳); Shanxi Provincial Department of Finance (山西省財政廳); Shanxi Provincial Office of the State Taxation Administration (國家稅務總局山西省稅務局)	Taiyuan Renewable Energy	7 December 2021	7 December 2024
10	High and new technology enterprises certificate (高新技術企業證書)	GR201914000016	Shanxi Provincial Department of Science and Technology (山西省科學技術廳); Shanxi Provincial Department of Finance (山西省財政廳); Shanxi Provincial Office of the State Taxation Administration (國家稅務總局山西省稅務局)	Shanxi Shuangliang New Energy	12 December 2022	12 December 2025
11	High and new technology enterprises certificate (高新技術企業證書)	GR202014000500	Shanxi Provincial Department of Science and Technology (山西省科學技術廳); Shanxi Provincial Department of Finance (山西省財政廳); Shanxi Provincial Office of the State Taxation Administration (國家稅務總局山西省稅務局)	Shanxi Demonstration Zone Heat Supply	3 December 2020	3 December 2023

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No.	Licence, permit and certificate name	Serial number	Awarding body	Recipient	Date of award	Validity
12	High and new technology enterprises certificate (高新技術企業證書)	GR2022622000035	Gansu Provincial Department of Science and Technology, Gansu Provincial Department of Finance, Gansu Provincial Taxation Bureau of the State Taxation Administration (甘肅省科學技術廳、甘肅省財政廳、國家稅務總局甘肅省稅務局)	Lanzhou Shuangliang	18 October 2022	18 October 2025
13	Food operation licence (食品經營許可證)	JY31401710001753	Taiyuan Food and Drug Administration Bureau (太原市食品藥品監督管理局)	Shanxi Smart Life	3 August 2022	2 August 2027
14	Heat service operation licence (供熱經營許可證)	Hai Gong Ri Zi No. 2020003 海供熱字第 2020003號	Hailar Region Housing and Urban-Rural Development Bureau (海拉爾區住房和城鄉建設局)	Hulunbuir Shuangliang	22 December 2020	21 December 2025

Non-compliance incidents

During the Track Record Period and up to the Latest Practicable Date, save for the non-compliance incidents as disclosed in “– Properties – Failure to obtain certain construction planning permits and/or complete relevant construction acceptance checks for the construction of certain properties” in this section and below under this paragraph, our Directors are not aware of any non-compliance incidents, which taken as a whole, in the opinion of our Directors, are likely to have a material and adverse effect on our business, financial condition or results of operations. During the same periods, we also did not experience any other material non-compliance of the laws or regulations, which taken as a whole, in the opinion of our Directors, reflects negatively on the ability or tendency of our Company, our Directors or our senior management, to operate our business in a compliant manner.

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Set forth below is a summary of our non-compliance incidents during the Track Record Period and up to the Latest Practicable Date, as well as rectification actions and preventive measures that we have taken in respect of such incidents:

Event(s) of non-compliance and reasons	Legal consequences	Remedial measures and enhanced internal control measures	Impact on our Group
<p>(1) <i>Social insurance and housing provident fund contributions</i></p> <p>During the Track Record Period, some of our PRC subsidiaries did not make full contributions to the social insurance and housing provident funds for some of our employees as required under PRC laws and regulations.</p> <p>For the years ended 31 December 2020, 2021 and 2022, we estimate the shortfall in the amount of contributions made by the Company to its employees' social insurance was approximately RMB0.5 million, RMB1.3 million and RMB1.3 million, respectively, and the shortfall in the amount of unpaid housing provident fund was approximately RMB1.1 million, RMB1.0 million and RMB0.6 million, respectively.</p> <p>We failed to make full contributions to the social insurance and housing provident funds for some of our employees as a result of insufficient understanding and incorrect interpretation by our human resources personnel in relation to the applicable PRC laws and regulations relating to social insurance and housing provident fund contributions.</p> <p>The main reasons that contributions were not made for certain employees are: (i) certain employees had passed their statutory retirement ages, were rehired after retirement and it was thought that no social insurance contributions need to be made for them under the relevant laws and regulations; (ii) certain employees had already made contributions elsewhere before joining our Group, and we were unable to make contributions for them locally without their contributions.</p>	<p>According to relevant PRC laws and regulations, we are required to make contributions to social insurance fund (including pension fund, medical insurance, unemployment insurance), work-related injury insurance, and maternity insurance) and housing provident fund for the benefit of our employees in the PRC.</p> <p>According to relevant PRC laws and regulations in respect of social insurance contributions, if we do not pay the full amount of social insurance contributions as required, the relevant government authorities may demand us to pay the outstanding social insurance contributions by the deadline stipulated by them, and we may be liable to a late payment fee equal to 0.05% of the outstanding amount for each day of delay. We may be liable to an additional fine from one to three times of the outstanding contributions amount if we fail to make such payments by the deadline stipulated by them.</p> <p>In respect of the outstanding housing provident fund contributions, we may be ordered to pay the outstanding housing provident fund contributions within the time period stipulated by relevant government authorities. If payment is not made within such simulated time period, relevant PRC government authorities may apply to PRC courts for compulsory enforcement.</p> <p>As at the Latest Practicable Date, no administrative penalties have been imposed by relevant regulatory authorities regarding the outstanding social insurance and housing provident funds, and we have not been ordered to settle any shortfall. As at the Latest Practicable Date, the late payment fees that we may be liable for amounted to approximately RMB0.2 million, RMB0.3 million and RMB0.04 million for the years ended 31 December 2020, 2021 and 2022, respectively. Our Directors confirmed that if we are ordered to make such payment by competent government authorities, we will do so within the prescribed time period. As advised by our PRC Legal Adviser, we do not expect to incur fines for the outstanding amounts of social insurance contributions if we make such payment within the prescribed time period when we are ordered to do so by competent government authorities. See "Risk factors – We may be subject to penalties for our failure to contribute to social insurance fund and housing provident fund on behalf of some of our employees" in this document for more information.</p>	<p>We will strictly, in the future, follow the relevant PRC laws and regulations in respect of social insurance and housing provident fund contributions. Our human resources manager will be responsible for our compliance with full contribution of social insurance and housing provident fund.</p> <p>From an internal control perspective, we have issued an administrative notice, namely Management Measures of Social Insurance and Housing Provident Fund* (《社会保险、住房公积金管理制度》), pursuant to which our legal department and human resource department will regularly check the compliance status of social insurance and housing provident fund contributions to prevent any shortfall.</p> <p>We have adopted internal control policies requiring our human resource department to (i) provide, on a monthly basis, an updated list of social insurance and housing provident fund contribution to our management for review; and (ii) consult our PRC Legal Advisers on the relevant laws and regulations on social insurance and housing provident fund contributions from time to time.</p> <p>Since 2022, we have been in the process of adjusting the contribution base of social insurance and housing provident funds for our employees with a view to fully comply with the relevant PRC laws and regulations. The adjustment of the contribution base is usually made during a designated time period each year and such time period varies in different regions pursuant to the relevant PRC laws and regulations. As at the Latest Practicable Date, we had completed all adjustment of contribution base of housing provident fund for all of our employees and we expect to make full contribution of social insurance for all of our employees by the end of 2022, depending on when the administrative window of each of Shanxi Province, Gansu Province and Inner Mongolia Autonomous Region opens for our application for the adjustment of the contribution base.</p> <p>Our internal control consultant has reviewed the corresponding enhanced internal control policies which our Group has adopted, and did not have any further recommendation after such review.</p> <p>Based on the above, our Directors and the Sole Sponsor are of the view that the enhanced internal control measures adopted by our Group are adequate, effective and sufficient in preventing recurrence of similar future non-compliance.</p>	<p>Our Directors have considered the following in assessing our exposures arising from our failure to make full contribution to social insurance and housing provident funds:</p> <p>(i) during the Track Record Period and up to the Latest Practicable Date, we had not received any notification from relevant government authorities requiring us to pay any shortfalls or penalties with respect to social insurance and housing provident funds;</p> <p>(ii) during the Track Record Period and up to the Latest Practicable Date, we had not been subject to any administrative penalties, material litigations and legal proceedings, nor were we aware of any material employee complaints or material labour disputes with our employees with respect to social insurance and housing provident funds;</p> <p>(iii) during the Track Record Period and as at the Latest Practicable Date, no penalties had been imposed on us with respect to social insurance and housing provident funds;</p> <p>(iv) we had not received any complaint from our employees and were not aware of any employee lodging any complaint to the relevant authority or bureau, or other competent authorities or initiating any arbitration or court proceedings against our Group in relation to our failure to make social insurance or housing provident fund contributions; and</p> <p>(v) we will make full contributions or pay any shortfall within a prescribed time period if demanded by the relevant government authorities.</p> <p>Based on the above, our PRC Legal Advisers consider that the risk of our Group being penalised or ordered to make retrospective payments or make up the shortfall to the social insurance or housing provident fund contributions as a result of our failure to make the contributions as mentioned above is remote. In light of the above, our Directors believe that our failure to fully contribute to social insurance and housing provident funds during the Track Record Period would not have any material adverse effect on our financial performance or results of operations.</p> <p>Based on the above, there is no imminent need to make provisions for social insurance and housing provident fund contributions on our financial statements. Nonetheless, our Controlling Shareholders have undertaken to fully indemnify our Group if we are ordered by the relevant government authorities to pay the outstanding social insurance and housing provident fund contributions and the aggregate late payment fees and additional fine according to the relevant PRC laws and regulations.</p>

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Event(s) of non-compliance and reasons	Legal consequences	Remedial measures and enhanced internal control measures	Impact on our Group
<p>(2) <i>Dispatched staff</i></p> <p>During the Track Record Period, the percentage of dispatched staff that worked at four of our subsidiaries exceeded the threshold of 10% as required by the Interim Provisions on Labour Dispatch (《劳务派遣暂行规定》) (the “Interim Provisions”) (the “Labour Dispatch Incident”).</p> <p>As at 31 December 2020, 2021 and 2022, the total number of dispatched staff at four of our subsidiaries was 211, 193 and 10, which accounted for approximately 24.8%, 18.1% and 5.1% of the total number of our staff at those subsidiaries, respectively.</p> <p>These labour dispatch arrangements were temporary in nature (e.g. heat supply period). And our dispatched staff were mainly involved in supporting functions of our business operation in respect of warehouse and logistics management, cargo handling and transportation.</p> <p>During the Track Record Period, due to inadequate legal knowledge and inadvertent oversight of relevant legal requirements of certain employees of our four subsidiaries, we did not fully comply with the Interim Provision, and the number of dispatched staff engaged by us exceeded 10% of the total number of our employees.</p>	<p>Pursuant to the Interim Provisions which came into effect on 1 March 2014, an employer shall strictly control the number of dispatched staff to make sure that it does not exceed 10% of the total number of its staff.</p> <p>According to the Interim Provisions and the Labour Contract Law of the PRC* (《劳动合同法》), in the event of violation of the Interim Provisions, the relevant labour authorities would order the violating company to rectify such violation. If violation was not rectified within a specified time limit, relevant labour authorities may impose a maximum penalty of RMB10,000 for each dispatched staff exceeding the limit. If we fail to rectify such violation within the time limit required by relevant labour authorities, the maximum potential penalty that we may face for the Labour Dispatch Incident is RMB2.52 million.</p>	<p>As at the Latest Practicable Date, all of our four subsidiaries completed the rectification process and brought the dispatched staff level below the limit by subcontracting certain services such as logistics, warehouse management and cargo handling previously provided by the dispatched staff to third-party service providers.</p> <p>We expect that we will continue to use dispatched staff from time to time in order to better allocate our resources to the provision of heat services operations. We have implemented certain internal control measures such as preparing a control list to monitor the proportion of dispatched staff and such list will be submitted to human resource department for review every three months. In addition, our human resources department has published our own Measures of Regulation of Dispatch Staff (《劳务派遣管理规定》) as a guiding principle for each subsidiary to closely monitor the percentage of its dispatched staff in order to comply with the Interim Provisions at all times.</p> <p>Our internal control consultant has reviewed the corresponding enhanced internal control policies which our Group has adopted, and did not have any further recommendation after such review.</p> <p>Based on the above, our Directors and the Sole Sponsor consider that we have taken adequate and effective measures to ensure the percentage of dispatched staff working in our Group will remain below the prescribed limit going forward.</p>	<p>During the Track Record Period and up to the Latest Practicable Date, we had not received any notice of rectification from any relevant labour authorities nor is there any pecuniary penalty imposed on us in relation to any violation of the Interim Provisions.</p> <p>We have fully completed the rectification process and have obtained written confirmations from the relevant competent human resources and social security authorities, (being Lanzhou New District Zhongchuan Park Civil Affairs and Social Security Bureau (蘭州新區中川區民政和社會保障局), Shouzhou City Human Resources and Social Security Bureau (朔州市人力資源和社會保障局), Shouzhou Labor Security Supervision Comprehensive Administrative Law Enforcement Team (朔州市勞動保障監察綜合行政執法隊), Human Resources Department of the Management Committee of Shanxi Transformation and Comprehensive Reform Demonstration Zone (山西轉型綜合改革示範區管理委員會人力資源部), and General Enforcement Bureau of the Management Committee of Shanxi Transformation and Comprehensive Reform Demonstration Zone (山西轉型綜合改革示範區管理委員會綜合執法局)) which confirmed that (i) our Labour Dispatch Incident was not a material non-compliance; (ii) there was no complaint lodged against us; and (iii) we has not been and will not be subject to administrative penalties due to the Labour Dispatch Incident.</p> <p>Based on the above, our PRC Legal Advisers are of the view that (i) the risk of us being subject to administrative penalties is remote; and (ii) the above-mentioned subcontracting arrangements are different from and do not constitute labour dispatch arrangements, and are therefore not subject to the Interim Provisions.</p> <p>Accordingly, our Directors are of the view that the Labour Dispatch Incident will not have a material adverse impact on our business or results of operations.</p>

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Event(s) of non-compliance and reasons	Legal consequences	Remedial measures and enhanced internal control measures	Impact on our Group
<p>(3) <i>Failure to obtain mining permit for extracting geothermal heat</i></p> <p>During the Track Record Period and up to the Latest Practicable Date, we failed to obtain mining permit for extracting geothermal heat (探礦許可證).</p> <p>At the relevant time, we attempted to apply for a mining permit in accordance with these PRC laws and regulations but were unable to obtain one. At the relevant time and up to the Latest Practicable Date, there has been no established practice for Shanxi Province to issue such mining permit to heat service providers operating there.</p>	<p>Under the Mineral Resources Law of the PRC (《中華人民共和國礦產資源法》) and the Procedures for Administrative Measures for Registration of the Mining of Mineral Resources (《礦產資源開採登記管理辦法》), a mining permit should be obtained for the mining and extraction of geothermal heat. The Regulations on Authorising the Issuance of Excavation Licenses and Mining Permits (《關於授權頒發勘查許可證探礦許可證的規定》) provides that each province, municipality and autonomous region has the right to adopt its own laws and regulations in respect of the issuance of mining permits in relation to the mining and extraction of geothermal heat. In Shanxi Province, the Regulations of Administration of Mineral Resources of Shanxi Province (《山西省礦產資源管理條例》) provide that mining permits for mining and extracting geothermal heat should be issued at provincial level.</p> <p>According to the Mineral Resources Law of the PRC (《中華人民共和國礦產資源法》), in the event of mining without the relevant mining permit, the relevant government authority may order the violating company to stop mining, confiscate their products extracted from the mining activity concerned, and impose a fine on them. According to the Detailed Rules for the Implementation of the Mineral Resources Law of PRC (《礦產資源法實施條例》), a fine of no more than 50% of the gains from the mining activity concerned may be imposed on the violating Company for mining without the relevant mining permit.</p>	<p>We conducted an interview with the Department of Natural Resources of Shanxi Province* (山西省自然資源廳) (the “Shanxi Natural Resources Department”) and it confirmed to us that no penalty has been or will be imposed on us for our extraction of geothermal heat as heat source for the Shanxi Demonstration Zone Project without a mining permit.</p> <p>We also conducted an interview with the Management Committee of Shanxi Transformation and Comprehensive Reform Demonstration Zone* (山西轉型綜合改革示範區管理委員會), which confirmed that our concession right will not be terminated due to our failure to obtain a mining permit.</p> <p>We have adopted internal control policies requiring our Group to, in the future, (i) commence heat service operations only after all necessary licences, permits or approvals have been obtained from relevant authorities; (ii) designate staff to monitor our Group’s compliance with relevant laws and regulations; and (iii) designate staff to keep record of the licences, permits or approvals obtained to ensure that we are able to renew our licences and permits with the relevant government authorities in time. Our internal control consultant has reviewed the corresponding enhanced internal control policies which our Group has adopted, and did not have any further recommendation after such review.</p> <p>Based on the above, our Directors and the Sole Sponsor are of the view that the enhanced internal control measures adopted by our Group are adequate, effective and sufficient in preventing recurrence of similar future non-compliance.</p>	<p>We conducted interviews with the Shanxi Natural Resources Department and consulted them in relation to our failure to obtain a mining permit for the purpose of extracting geothermal heat. It was confirmed to us that (i) the Shanxi Natural Resources Department would consider a number of factors, including the location of the mining areas, mineral reserves, particular fluidity of minerals and all relevant local circumstances in respect of the extraction of underground resources in Shanxi Province; and (ii) no mining permits for the purpose of extracting geothermal heat had been issued to heat service providers in Shanxi Province, as an established provincial practice.</p> <p>It was confirmed to us that (i) our failure to obtain (and thus the lacking of) a mining permit for the purpose of extracting geothermal heat was in line with the current practice of Shanxi Province and did not constitute a material non-compliance of the relevant rules and laws; (ii) no penalty had been or will be imposed on us for our extraction of geothermal heat as heat source for the Shanxi Demonstration Zone Project without a mining permit; and (iii) revenue generated from the Shanxi Demonstration Zone Project will not be confiscated as a result of us not having a mining permit. Our PRC Legal Advisers have confirmed that Shanxi Natural Resources Department is the relevant competent authority in charge of all matters in respect of the regulation of natural resources and the issuance of mining permits at provincial level and the officer interviewed at the Shanxi Natural Resources Department in relation to the mining and extraction of geothermal heat was competent to provide those confirmations.</p> <p>We also conducted interviews with the Management Committee of Shanxi Transformation and Comprehensive Reform Demonstration Zone* (山西轉型綜合改革示範區管理委員會), which confirmed that (i) our failure to obtain (and thus the lacking of) a mining permit did not give rise to any violation of the Shanxi Demonstration Zone Concession Agreement and our concession right will not be terminated due to our failure to obtain a mining permit; and (ii) in an unlikely event that we are ordered to cease to extract geothermal heat, we are still entitled to use other heat sources to provide heat services under the Concession Agreement. Our PRC Legal Advisers have confirmed that the Management Committee of Shanxi Transformation and Comprehensive Reform Demonstration Zone* (山西轉型綜合改革示範區管理委員會) (being the concession grantor) is the relevant competent authority in charge of all matters in respect of the concession and the officer interviewed was competent to provide the relevant confirmations.</p>

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Event(s) of non-compliance and reasons	Legal consequences	Remedial measures and enhanced internal control measures	Impact on our Group
			<p>Based on the above, our PRC Legal Advisers are of the view that the risks of any material impact on the operations of our Group, due to our failure to obtain a mining permit for the purpose of extracting geothermal heat, and the risk that a penalty will be imposed on us for such non-compliance, are remote.</p> <p>Our Directors are of the view that, based on the advice from our PRC Legal Advisers and the confirmation from the relevant government authority, such non-compliance does not and will not have any material impact on the operations or financial conditions of our Group.</p>

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Suitability for [REDACTED] and Directors' suitability

Each of our Directors has confirmed that the non-compliance incidents did not involve any fraud or dishonesty and did not impugn his/her character, integrity or competence. Having considered the relevant facts and circumstances, the financial condition and/or business operations of our Group as a whole have not been and will not be materially and adversely affected. Moreover, as confirmed by our Directors and our PRC Legal Advisers, our Group's non-compliance incidents were isolated events relating to a wide variety of laws and regulations, and only came about under specific circumstances some of which were not caused by us and beyond our control. We did not deliberately contravene the relevant laws, nor did we intend to conduct any of our business operations in any non-law-abiding manner. As explained above, some of the non-compliance incidents could not be rectified by us, including failure to obtain certain construction permits and/or complete relevant construction acceptance check for the construction of certain properties, failure to register lease and tenancy agreements, failure to obtain a heat service operation license and failure to obtain a mining permit for extracting geothermal heat. For non-compliance incident relating to dispatched staff, our Group had completed the rectification process. For non-compliance incidents relating to social insurance and housing provident fund contributions, our Group has completed all adjustment of contribution base of housing provident fund for all of our employees and made full contribution of social insurance for all of our employees as at the Latest Practicable Date. In any event, our Group had obtained confirmations from relevant competent government authorities acknowledging these non-compliance incidents would not lead to a cessation of or material adverse impact on our business operations. Our PRC Legal Advisers advised that none of the aforesaid non-compliances will have a material adverse impact on our continued operation of our concessions and other business activities.

Having considered the nature and reasons for the historical non-compliance incidents identified and disclosed in "– non-compliance incidents" above, the remedial actions taken and the enhanced internal control measures adopted by us, our Directors are of the view that, and the Sole Sponsor concurs that, (i) our enhanced internal control measures are adequate and effective to prevent recurrence of future non-compliance incidents; and (ii) none of the past non-compliance incident would affect the suitability of our Directors to act as directors of a listed issuer under Rules 3.08 and 3.09 of the Listing Rules or our suitability for [REDACTED] under Rule 8.04 of the Listing Rules.

RISK MANAGEMENT AND INTERNAL CONTROL

We are primarily exposed to the following risks: (i) operational risks, such as access to heat sources, prices of energy resources, weather, quality control and customer services; (ii) regulatory risks, such as government policies on pricing, safety, environmental protection and obtaining of required licences, permits and certificates; (iii) financial risks, such as interest rate risk, credit risk and capital management; and (iv) environmental and social risks, such as climate change, supply chain and human resources.

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Our Directors are responsible for formulating and overseeing the implementation of our internal control measures and the effectiveness of our quality management system. To enhance our internal controls as well as in connection with the [REDACTED], our Group has engaged an independent internal control consultant to perform a review over our internal controls over financial reporting in July 2021 and January 2023, covering entity-level control, revenue and receivables, heating engineering construction, heating equipment production and cost management, purchase and payables, treasury, human resources and payroll, financial reporting, tax, fixed assets, intangible assets, insurance, intellectual property, environmental protection and information technology. The scope of internal control review work performed and the long form report issued have been agreed between the Sole Sponsor, the internal control consultant and our Group.

As a result of the internal control review conducted by our internal control consultant, we have identified certain areas in our internal control system, policies and procedures that require improvement. We have subsequently taken remedial actions in response to the findings and recommendations by our internal control consultant.

The internal control consultant performed a follow-up review on our Group’s internal control system in September 2021 and February 2023, with regard to the remedial actions taken by our Group. The work performed and the follow-up review did not identify any material internal control weakness, and our internal control consultant did not raise any further recommendation. The aforementioned internal control review was conducted based on the information provided by our Company and no assurance or opinion was expressed by the internal control consultant. The following sets out the key measures adopted by our Group under our risk management and internal control system:

- as our business continues to expand, we will refine and enhance our internal control system in response to the evolving requirements of our expanded operations as appropriate. We will continue to review our internal control system to ensure compliance with applicable legal and regulatory requirements;
- See “Regulatory compliance – Non-compliance incidents” in this section for our enhanced internal control measures that we have implemented to prevent recurrence of similar non-compliance incidents. Our Directors and the Sole Sponsor are of the view that the enhanced internal control measures are adequate, effective and sufficient in preventing recurrence of similar future non-compliance;
- Mr. Ma Ke (馬克先生), one of our company secretaries, will act as the principal channel of communication between members of our Group and our Company in relation to legal, regulatory and financial reporting compliance matters of our Group as well as the chief coordinators to oversee the internal control procedures in general. Upon receipt of any queries or reports on legal, regulatory and financial reporting compliance matters, he will look into the matter and, if considered appropriate, seek advice, guidance and recommendation from professional advisers and report to relevant members of our Group and/or our Board;

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- we have established a compliance department which is responsible for monitoring legal and regulatory compliance and the control environment at the group level as well as the subsidiary level. The compliance department comprises our legal and company secretarial teams;
- our Directors believe that compliance creates value for us. We are dedicated to cultivating a compliance culture among all of our employees. To ensure such compliance culture is embedded into daily workflow and set the expectations for individual behavior across our Group, we will conduct regular internal compliance checks and inspections, adopt strict accountability internally and conduct compliance training;
- we will comply with the Corporate Governance Code. We have established three board committees, namely, the audit committee, the remuneration committee and the nomination committee, with respective terms of reference in compliance with the Corporate Governance Code. For details, see "Directors, supervisors and senior management" in this document;
- we have formulated an anti-bribery policy at the group level, which covers the anti-bribery measures, channels for reporting suspected bribery, such as the hot-line and mail box, and disciplinary actions against bribery within our Group;
- in September 2021, we published our ESG risk management and disclosure report which regulates, among other things, our responsibility to the environment and community, corporate governance, health and safety within our Group. Under this report, we are required, among other things, to monitor and manage our emissions and use of resources. See "Environmental, social and governance" in this section for further details regarding our ESG policy; and
- we have formulated a comprehensive internal control policy which covers various major areas of our operations including approval process and authority, compliance, risk management, capital investment management and contract management. For example:
 - (i) in terms of contract management, we have developed a contract management system at a group level which covers, among other things, the signing, approval process, internal monitoring and dispute resolution of the contracts entered into by our Group;
 - (ii) in terms of risk management, we have developed a risk management system at a group level which stipulates, among other things, our risk management framework, internal risk monitoring, risk management process and frequency of compliance checks within our Group. Our Directors are in charge of matters in relation to risk management;

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- (iii) in terms of capital management, we have formulated a fixed assets management system at a group level which regulates, among other things, the addition, disposal and accounting treatment of fixed assets within our Group. We have also developed management measures on internal capital flow at a group level which sets out internal rules governing among other things, group borrowings and capital flows.

Based on the above, our Directors are of the view that our Group has taken reasonable steps to establish a proper internal control system to minimise risks of non-compliance and prevent future recurrence of the non-compliance incidents disclosed in this section, at both working and monitoring levels, and hence, our Directors are of the view that the internal control measures adopted by our Group are adequate and effective in preventing recurrence of future non-compliance by our Group with legal and regulatory requirements. The Sole Sponsor concurs with the views of our Directors if the enhanced internal control measures can be continuously implemented and regularly reviewed.

LITIGATION

From time to time, we may become subject to legal proceedings, investigations and claims incidental to the conduct of our business. During the Track Record Period and up to the Latest Practicable Date, some of the members of our Group were involved in legal proceedings. As advised by our PRC Legal Advisers, these members of our Group were mainly involved in the legal proceedings relating to the disputes in the ordinary course of our business, and none of these litigations would have a material adverse effect on our assets and financial position.

EFFECTS OF THE COVID-19 OUTBREAK

Effects of the COVID-19 outbreak on our business operations

An outbreak of respiratory illness caused by a novel coronavirus (COVID-19) was first reported in late 2019 and continues to spread across the PRC and globally. In March 2020, the World Health Organisation characterised the outbreak of COVID-19 as a global pandemic. As at the Latest Practicable Date, measures responding to COVID-19 relating to temporary travel restrictions and shutdown of certain business operations have been lifted, leading to the gradual resumption of normal commercial and industrial business operations.

During the year ended 31 December 2020, we received a government subsidy of RMB4,335.7 for purchasing supplies such as masks for the prevention of COVID-19. During the Track Record Period, we did not receive any other government subsidy and/or financial assistance in relation to the outbreak of COVID-19.

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In respect of our heat services

Our provision of heat services has not been interrupted since the COVID-19 outbreak as it is a basic necessity in northern China. During the Track Record Period and up to the Latest Practicable Date, our heat service customers included both residential and non-residential heat service customers. For example, northern China experienced the shutdown of certain industrial and commercial business operations from February to April of 2020. However, due to the fact that heat service fees are usually calculated based on actual heat service area (instead of actual consumption of heat) and are prepaid by our customers prior to the commencement of the heat service period, and also our customers were able to resume normal business operation as soon as the local government lifted restrictions once the spread of COVID-19 was under control, our Directors consider that demand for heat service from our heat service customers did not materially fluctuate due to measures imposed by the PRC Government in response to the outbreak of COVID-19 (the “**COVID-19 Measures**”). For the two months ended 30 April in the 2019/2020 heat service period, 2020/2021 heat service period and 2021/2022 heat service period, we had 237,979, 265,823 and 282,438 heat service customers, respectively. Since the COVID-19 outbreak, we have not experienced material dispute with our heat suppliers for the provision of our heat services, nor have we encountered any difficulty in securing sufficient heat sources to ensure the stability of our heat services.

We encountered delays in the settlement of trade receivables by some of our customers since the outbreak of COVID-19 as their business activities have been interrupted. The balance of our trade receivables aged over one year amounted to approximately RMB78.3 million, RMB93.5 million and RMB91.6 million, representing approximately 19.7%, 24.5% and 17.4% of our total trade receivables as at 31 December 2020, 2021 and 2022, respectively. In light of this, our Group has adopted various measures to manage credit risk. We consider that the delays in settlement of trade receivables would not have a material adverse impact on our business and operation in the long term.

In respect of our engineering construction services

Our engineering construction services were not materially affected by the outbreak of COVID-19 during the Track Record Period. Our Directors have confirmed that we closely monitored the construction progress of our contractors for the provision of our engineering construction services, and we managed to complete all engineering construction services to facilitate our provision of heat services during the Track Record Period.

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Our response towards the COVID-19 outbreak

In response to the COVID-19 outbreak and its resurgence from time to time, we have issued internal notices, implemented a series of COVID-19 response plans and adopted enhanced hygiene and precautionary measures for our heat service in our actual heat service area. Our senior management, together with the general managers of various operating entities within our Group, are responsible for overseeing the operation of each department and team and ensure they operate in a safe manner during the pandemic. Our human resources department and administration officers are jointly responsible for monitoring the implementation of our COVID-19 health and hygiene measures. In light of our cross-provincial operation in four provinces and one autonomous region, domestic travel records of our staff and managers are accurately recorded for our internal risk management.

From January 2020 and up to the Latest Practicable Date, we incurred an aggregate cost of approximately RMB89,600 for purchasing protective masks and other medical and cleaning supplies. We consider our response measures towards the COVID-19 outbreak are adequate and effective at each level within our Group.

Our Directors believe that the additional costs associated with the enhanced measures, after taking into consideration the medical and cleaning supplies distributed by the local governments and the promulgation of relevant regulatory policies such as deduction of a portion of the payment of social insurance contribution and announcement and implementation of refund of PRC corporate income tax credits, have no significant impact on our financial position as at 31 December 2020, 2021 and 2022.

In light of the above, our Directors confirm that the outbreak of COVID-19 and its resurgence from time to time has not had a material adverse impact on our Group’s continuing business operations and financial position.

Based on the above, our Directors consider that COVID-19 is unlikely to result in any material adverse impact on our business operation and financial performance in the foreseeable future. We believe our future plans set out in “– Our business strategies” are feasible, and it is unlikely that we would change the use of the [REDACTED] from the [REDACTED] as disclosed in “Future plans and [REDACTED]” in this document as a result of the COVID-19.