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(Incorporated in the Cayman Islands with limited liability)
(Stock Code: 8128)

#### PROPOSED CHANGE OF COMPANY NAME

The Board announces that it proposes to change the name of the Company from "CHINA GROUND SOURCE ENERGY INDUSTRY GROUP LIMITED 中國地能產業集團有限公司" to "CHINA GEOTHERMAL INDUSTRY DEVELOPMENT GROUP LIMITED 中國地熱能產業發展集團有限公司". The Proposed Change of Company Name is subject to, among others, the approval of the Shareholders by special resolution at the forthcoming AGM. A circular containing, among other matters, details of the Proposed Change of Company Name, together with a notice of AGM, will be sent to the Shareholders as soon as practicable.

#### PROPOSED CHANGE OF COMPANY NAME

The board (the "Board") of directors of China Ground Source Energy Industry Group Limited (the "Company") proposes to change the name of the Company from "CHINA GROUND SOURCE ENERGY INDUSTRY GROUP LIMITED 中國地能產業集團有限公司" to "CHINA GEOTHERMAL INDUSTRY DEVELOPMENT GROUP LIMITED 中國地熱能產業發展集團有限公司" (the "Proposed Change of Company Name").

#### REASONS FOR THE PROPOSED CHANGE OF COMPANY NAME

In view of the "Notification on Accelerating the Development and Utilization of Shallow Geothermal Energy to Promote the Reduction and Replacement of Coal in the Northern Heating Area" (Please refer the attachment for the notification) jointly issued by the National Development and Reform Commission, Ministry of Land and Resources, Ministry of Environmental Protection, Ministry of Housing and Urban-Rural Development, Ministry of Water Resources, National Energy Board on 29 December 2017 and the "single-well heat exchange geothermal energy collection technology" originally developed and owned by the Group, the Board considers that the Proposed Change of Company Name is to reflect the Company's full coverage in promoting the development and utilization of geothermal energy as an alternative energy for buildings' heating and to reflect the Company's determination to speed up the development in the emerging industry of integrated heating and cooling with geothermal energy. Accordingly, the Directors are of the opinion that the Proposed Change of Company Name is in the interests of the Company and the shareholders (the "Shareholders") of the Company as a whole.

#### CONDITIONS OF THE PROPOSED CHANGE OF COMPANY NAME

The Proposed Change of Company Name is subject to following conditions being satisfied:

- (a) the passing of a special resolution by the Shareholders approving the Proposed Change of Company Name at the forthcoming annual general meeting (the "AGM") of the Company to be convened and held; and
- (b) the Registrar of Companies in the Cayman Islands granting approval for the Proposed Change of Company Name and the new name being entered in the register of companies by the Registrar of Companies in the Cayman Islands.

Subject to the satisfaction of the conditions set out above, the Proposed Change of Company Name will take effect upon the date on which the Registrar of Companies in the Cayman Islands issues a Certificate of Incorporation on Change of Name confirming that the new name has been registered. The Company will then carry out all necessary filing procedures with the Companies Registry in Hong Kong.

#### EFFECT OF THE PROPOSED CHANGE OF COMPANY NAME

The Proposed Change of Company Name will not affect any of the rights of the Shareholders. All existing share certificates in issue bearing the Company's existing name shall continue to be evidence of legal title and valid for trading, settlement, registration and delivery purposes. Accordingly, there will not be any arrangement for free exchange of existing share certificates for new share certificates bearing the new names of the Company. Once the Proposed Change of Company Name becomes effective, share certificates of the Company will be issued in the new name of the Company and the securities of the Company will be traded on GEM under the new names. It is expected that, after the Proposed Change of Company Name has become effective, new English and Chinese stock short names will be used accordingly, subject to the confirmation of The Stock Exchange of Hong Kong Limited.

#### **AGM**

The AGM will be held for the Shareholders to consider and, if thought fit, pass, among other resolutions, the special resolution to approve the Proposed Change of Company Name. A circular containing details regarding, among other matters, the Proposed Change of Company Name together with the notice of the AGM and the related proxy form will be despatched to the Shareholders as soon as practicable. As no Shareholders have a material interest in the Proposed Change of Company Name, no Shareholders will be required to abstain from voting on the special resolution to approve the Proposed Change of Company Name.

#### **GENERAL**

Further announcement(s) will be made by the Company to inform the Shareholders of the results of the AGM, the effective date of the Proposed Change of Company Name, the new stock short names of the Company for trading of its shares on GEM and other relevant information as and when appropriate.

# By order of the Board China Ground Source Energy Industry Group Limited Xu Shengheng

Joint Chairman & Executive Director

Hong Kong, 28 March 2018

As at the date of this announcement, the Board of Directors of the Company comprises Mr. An Yi, Mr. Xu Shengheng, Ms. Chan Wai Kay, Katherine, Mr. Wang Manquan, Mr. Zang Yiran and Mr. Daiqi as executive Directors, Mr. Zhao Youmin as non-executive Director, Mr. Jia Wenzeng, Mr. Wu Desheng, Mr. Wu Qiang and Mr. Guo Qingui as independent non-executive Directors.

This announcement, for which the directors of the Company collectively and individually accept full responsibility, includes particulars given in compliance with the Rules Governing the Listing of Securities on the Growth Enterprise Market of The Stock Exchange of Hong Kong Limited for the purpose of giving information with regard to the Company. The directors, having made all reasonable enquiries, confirm that to the best of their knowledge and belief the information contained in this announcement is accurate and complete in all material respects and not misleading or deceptive, and there are no other matters the omission of which would make any statement herein or this announcement misleading.

This announcement will remain on the "Latest Company Announcements" page of the GEM website for 7 days from the date of its publication and on the website of the Company at www.cgsenergy.com.hk.

# Attachment

**Document of** National **Development and Reform Commission** The Ministry of Land and Resources Ministry **Environmental** of **Protection** The **Ministry** of Housing and **Urban-Rural Development** The Ministry of Water Resources **National Energy Administration** 

Fa Gai Huan Zi [2017] No.2278

# Circular concerning Promotion of Reduction and Replacement of Fire Coal in Northern Heating Region by Accelerating the Development and Utilization of Shallow Geothermal Energy

Development and Reform Commission, Commission of Economy and Information (Commission of Industry and Information, Department of Industry and Information), Competent Department of Land and Resources, Environmental Protection Department (Bureau), Department of Housing and Urban-Rural Development (Construction Commission, Construction and Transport Commission, Construction Bureau), Water Resources (Water) Department (Bureau) and Energy Bureau of Beijing, Tianjin, Hebei Province, Shanxi Province, Inner Mongolia Autonomous Region, Liaoning Province, Jilin Province, Heilongjiang Province, Anhui Province, Shandong Province, Henan Province, Hubei Province, Hunan Province, Sichuan Province, Chongqing, Shaanxi Province, Tibet Autonomous Region, Gansu Province, Qinghai Province, Ningxia Hui Autonomous Region, Xinjiang Uygur Autonomous Region, Dalian, Qingdao and Xinjiang Production and Construction Corps:

In recent years, some regions have positively developed the heat (cold) supply integrated service of shallow geothermal energy, and have achieved remarkable effects in such aspects as reduction of fire coal consumption and improvement of regional energy utilization efficiency. To implement the Circular of the State Council Concerning the Printing and Issuance of Action Plan for Prevention and Control of Atmospheric Pollution (Guo Fa [2013] No. 37), the Circular of the State Council concerning the Printing and Issuance of Comprehensive Work Program of Energy Saving and Emission Reduction during the "13<sup>th</sup> Five-year Plan" (Guo Fa [2016] No. 74), the Circular of the State Council concerning the Printing and Issuance of

Ecological Environmental Protection Program during the "13<sup>th</sup> Five-year Plan" (Guo Fa [2016] No. 65) and the Circular concerning the Printing and Issuance of Interim Measures for the Management of Consumption Reduction and Replacement of Coal in Key Regions (Fa Gai Huan Zi [2014] No. 2984) and the Guiding Opinions on Promoting the Urban Clean Heating in Northern Heating Region (Jian Cheng [2017] No. 196) of the National Development and Reform Commission and the like, accelerate the promotion of development and utilization of shallow geothermal energy according to the local conditions, advance the fire coal reduction and replacement in the resident heat supply and other fields in the northern heating region, and improve the energy utilization efficiency and cleanliness level of regional heat (cold) supply and the air environmental quality, the following opinions are delivered.

# I. General Requirements

# (1) Guiding Thought

Comprehensively implement the spirit of the 19<sup>th</sup> National Congress of the Communist Party of China, earnestly study and implement the socialist ideology with Chinese characteristics in the new era of Xi Jinping, implement the new development concept, and overall apply relevant policies, support and standardize the development and utilization of shallow geothermal energy, promote the heating cleanliness level of residents, and improve the air environmental quality according to the policy of "enterprise in the dominant position, government promotion and bearable for the residents".

#### (2) Fundamental Principle

The shallow geothermal energy (also called geotemperature energy) refers to the low grade thermal energy in the river, lake, sea and other surface water sources, wastewater (reclaimed water) sources and rock & earth mass and groundwater which are within 200m below the surface and whose temperature is lower than 25°C in the natural world, which may be used for the building heat (cold) supply after the collection and extraction by the heat pump system. In the development and utilization of shallow geothermal energy, the following principles should be stuck to:

- 1. Adaptation to the local conditions. According to the features of regional geology, water resource and shallow geothermal energy and energy consumption demands of residents, and based on the urban area, park, suburban county, rural economic development condition, resource endowment, meteorological condition, building distribution, power distribution condition and the like, the shallow geothermal energy contained in the surface water (including river, lake, sea, etc.), wastewater (reclaimed water), rock and earth mass and groundwater is reasonably developed and utilized and the application of shallow geothermal energy in the urban heating is constantly expanded.
  - 2. Safe and stable. The heat (cold) supply involves the people's livelihood. For the

development and utilization of shallow geothermal energy, top priority should be given to the guarantee of safe and stable operation. The engineering construction and operation units should have stable operation conditions, good credit, mature technology, standard construction, good engineering quality and other conditions and meet relevant local regulations for the heat supply management, so as to ensure the safe, stable and reliable heat (cold) supply system and meet the heat supply, energy efficiency, environmental protection and water resource protection requirements.

- 3. Environmentally friendly. The development and utilization of shallow geothermal energy should be subject to the precondition of strict protection of water resources and ecological environment, and no water resources are wasted, no water is polluted, no soil thermal balance is destroyed and no geological disaster is caused.
- 4. Combination of market orientation and government promotion. The decisive role of the market in the resource allocation is brought into full play, and the investment entities are encouraged to participate in the development of shallow geothermal energy based on the starting points of meeting the social heat (cold) supply demands in a high-quality manner and constantly improving the satisfaction of the masses. The government role is better brought into play. For the bottleneck constraint of development and utilization of shallow geothermal energy, the system and mechanism obstacle is removed by the reform method, the government planning guidance, policy incentive and supervision and management roles are effectively brought into play, and the market environment of fair competition favorable for the development and utilization of shallow geothermal energy is built.

#### (3) Main Goals

With Beijing, Tianjin and Hebei Province and surrounding regions and other northern heating regions as key points, by 2020, the shallow geothermal energy will be effectively applied in the heat (cold) supply field, the application level will be greatly promoted, the positive role will be played in the replacement of heat (cold) supply of civil bulk coal, the regional heat (cold) supply energy structure will be optimized, relevant policy mechanism and guarantee system will be further perfected, and the utilization technical development of shallow geothermal energy, consulting evaluation, key equipment manufacturing, engineering construction, operation service and other industrial systems will be further improved.

# II. Overall Promotion of Development and Utilization of Shallow Geothermal Energy

The development and reform, operation, land, environmental protection, housing and urban-rural development, water resources, energy, energy saving and other relevant departments at all levels of relevant region should regard the utilization of shallow geothermal energy as an important content of fire coal reduction and replacement, promotion of new urbanization, improvement of urban-rural energy infrastructure, promotion of heat (cold) supply, equalization of public service and the

like, enhance the organizational leadership and overall planning and coordination, and robustly drive the implementation of utilization engineering of shallow geothermal energy in the region, so as to facilitate the coal reduction and replacement and improve the environmental quality.

# (1) Scientific Planning of Development Layout

The competent department of land and resources of relevant region should, together with relevant departments, conduct the survey and evaluation of shallow geothermal energy resources in the small- and medium-sized towns and rural areas. figure out the geological conditions, reasonably designate the setting block of geothermal mining right, and bring it into the mineral resource planning and overall planning of land utilization, so as to lay a foundation for the scientific allocation and efficient utilization of shallow geothermal energy resources. According to the regional water resource investigation and evaluation and development and utilization planning, mineral resource planning and overall planning of land utilization, and survey of shallow geothermal energy, the water administrative department of the provincial people's government of relevant region, together with the development and reform, land, housing and urban-rural development, energy and other departments, organizes the designation of suitable development area, restricted development area and banned development area of water (ground) source heat pump system, and scientifically plans the construction layout of water (ground) source heat pump system. The provincial energy department of relevant region, together with relevant departments, brings the development and utilization of regional shallow geothermal energy into relevant plan, and conducts the planning environmental impact assessment synchronously pursuant to the law. Relevant departments further improve the design, construction, operation, environmental protection and other relevant standards of development and utilization of shallow geothermal energy, establish and issue the technical specifications and standards of water resource demonstration of construction project of water (ground) source heat pump system, and specify the energy efficiency, recharging, operation management and other relevant requirements of heat pump system of shallow geothermal energy.

In the groundwater drinking water source and within the scope of its protection area, it is prohibited to regard the protected target aquifer as the heat pump water source. For the banned exploitation aquifer in the banned exploitation area of groundwater and aquifer which has close hydraulic connection with it, and restricted exploitation aquifer of restricted exploitation area, it is prohibited to regard the groundwater as the heat pump water source; it is prohibited to regard the confined aquifer groundwater as the heat pump water source. For the development and utilization project of shallow geothermal energy, the environmental impact assessment should be conducted subject to the law. If the water fetching is involved, the water resource demonstration should be conducted, and an application for water fetching permit should be submitted to the local water administrative department, and the water may be fetched after the license is obtained. If the construction of groundwater production well is involved, the construction should be carried out subject to the

construction scheme of groundwater fetching engineering approved and determined in the water fetching permit of the water administrative department.

# (2) Development and Utilization according to Local Conditions

Relevant region should fully consider the regional economic development level, regional energy consumption structure, and geographical, geological and hydrological conditions. Based on the local heat (cold) supply demands, if it is suitable to replace the existing non-clean fire coal heating by the shallow geothermal energy, the replacement should be fulfilled as soon as possible. For the urban-rural junction and other areas which cannot be covered by the centralized heating, if it is appropriate to develop the shallow geothermal energy heating, the shallow geothermal energy heating should be positively developed.

Relevant region should, according to the heat supply resource endowment, and local conditions, select the development and utilization ways of shallow geothermal energy. For the regions with good surface water and wastewater (reclaimed water) resource endowment, the surface water source heat pump heating is positively developed. For the heating demand of not high concentration ratio, under the premise that the soil thermal balance is not destroyed, the distributed soil source heat pump heating is positively adopted. For the region where the hydrological and geological conditions are appropriate, under the conditions of 100% recharging and no pollution against groundwater, the heating of groundwater source heat pump technology is positively promoted.

# (3) Promotion of Operation Management Level

The development and utilization of shallow geothermal energy involve the soil environment and groundwater and surface water environment. The project construction and operation should be carried out in strict accordance with relevant national laws and regulations and standards and codes. The operation unit should improve the operation maintenance management of utilization system of shallow geothermal energy and ensure that the system operates in a safe, stable and efficient manner and the heat supply quality, service and the like meet relevant local standard requirements by internet, intelligent monitoring and other technologies. The groundwater quality is strictly protected, the dynamic monitoring and protection scheme of target water source is formulated, the recharged water and temperature collecting layer groundwater are periodically sampled and inspected, and the records are made for the archival management. The rock-soil quality of temperature collecting layer, groundwater level, system operation efficiency and the like should be monitored on a long-term basis. The supply and return water temperature, system COP coefficient, soil temperature and other parameters should be connected to the online monitoring system of energy consumption of the State, so as to realize the real-time and online monitoring. If the groundwater is fetched and recharged, the automatic water monitoring facilities should be installed in the fetching and recharging pipelines respectively, and they are connected to the water resource information management platform of local water administrative department. The annual comprehensive performance coefficient (ACOP) of heat pump unit should meet relevant standard requirements and the average operation performance coefficient (COP) of system heat supply is not less than 3.5.

# (4) Innovation of Development and Utilization Mode

In the development and utilization of shallow geothermal energy, the energy management contract mode is robustly promoted, the overall package of development and utilization project of shallow geothermal energy is encouraged, and the construction-operation-maintenance integrated energy management contract mode is adopted. The system operation maintenance is done by the professional contract energy service company. The operation unit is overall responsible for the system operation, formulates the heat (cold) supply service scheme, and compiles the plan for the factors which affect the stable system operation.

# III. Enhancement of Policy Guarantee and Supervision and Management

# (1) Improve the support policy

The operation electricity price and heating charging of development and utilization project of shallow geothermal energy are subject to the Circular of the National Development and Reform Commission concerning the Printing and Issuance of Policy Opinions on Clean Heating Price in Northern Region (Fa Gai Jia Ge [2017] No. 1684) and other relevant regulations. For the traditional heat supply region, in principle, the heating price of shallow geothermal energy is determined by the government in a scientific and reasonable manner according to the actual heating costs and based on the reasonable earnings. For other regions, the heat (cold) supply price is determined by related parties through negotiation.

The utilization project of shallow geothermal energy which is implemented through the energy management contract enjoys the preferential tax policy subject to relevant regulations. The on-budget funds of the central government positively support the construction of utilization project of shallow geothermal energy. Relevant region should enhance support, and bring the shallow geothermal energy heating into the heating industrial support scope. The heat supply enterprise of shallow geothermal energy which meets relevant requirements of heat supply management in the local place enjoys relevant support policies of heat supply enterprise as the heating power product production enterprise and heating power product operation enterprise.

Relevant region is encouraged to innovate the investment and financing mode, heat supply system and heat supply operation mode, the market access of urban heating industry is further let go, the government and social capital cooperation (PPP) mode is robustly promoted, and the social capital is positively supported to participate in the shallow geothermal energy development. The investment entity is encouraged to issue the green bonds to implement the development and utilization of shallow geothermal energy. The financial institution and financing leasing enterprise are

encouraged to innovate the financial product and financing mode to support the development and utilization of shallow geothermal energy.

# (2) Enhance Demonstration Guidance and Technical Progress

Relevant region should organize the implementation of utilization engineering of shallow geothermal energy, select a batch of towns, parks, suburban counties and villages to carry out the demonstration, and bring the demonstration role of "benefiting people's livelihood, controlling coal and promoting energy saving" into play. The National Development and Reform Commission, together with relevant departments, selects the local typical cases and publishes them to the society, and guides the society to select the equipment production, project construction and operation maintenance units which have advanced process technology and good service quality, so as to effectively drive the energy saving and coal reduction and improve the ecological environment. The development and reform commission and housing and urban-rural development department of relevant region should organize in time the declaration of demonstrative engineering project. Besides, the research and development investment and scientific and technological innovation of heating technology of shallow geothermal energy are enhanced, and the equipment technical level is promoted, so as to further improve the stability and reliability of heating system of shallow geothermal energy.

# (3) Establish and Improve Commitment and Assessment Mechanism.

The National Development and Reform Commission, the Ministry of Housing and Urban-Rural Development and the Ministry of Water Resources organize the establishment of information base of development and utilization project of shallow geothermal energy. The project unit registers the project information, including corporate information, project construction information and operation information, and commits that the project meets the requirements of relevant laws and regulations and standards and codes for the development and utilization of shallow geothermal energy, submits the periodical assessment report, and accepts the during-event and post-event supervision. The operation unit annually evaluates the project operation maintenance, and lays emphasis on the assessment of system operation efficiency, supply and return water temperature, groundwater recharging rate, soil temperature fluctuation, and soil and groundwater quality test. As the project information, the evaluation report is submitted to the information base of utilization project of shallow geothermal energy.

# (4) Strengthen Supervision and Inspection

The development and reform, operation, land, environmental protection, housing and urban-rural development, water resources, energy, energy saving and other relevant departments at all levels of relevant region should strengthen the supervision and management of development and utilization of shallow geothermal energy based on the responsibilities, lay emphasis on the long-term dynamic monitoring of temperature, water level, water quality and the like, and supervise and manage the

project heating guarantee, energy efficiency, environmental protection, water resource management and protection, recharging and other links. If the recharging rate of groundwater source heat pump fails to meet relevant standard requirements, the aguifer groundwater quality declines due to the recharging, the surface subsidence is caused by the groundwater exploitation, and other geological and ecological environmental problems occur, the land, environmental protection, water resources and other departments carry out the investigation and treatment subject to relevant national laws and regulations. If the water quality deterioration is caused or the seriously environmental, hydrological and geological problems are caused, the land, environmental protection, water resources and other departments carry out the investigation and treatment subject to the law. If the unit and system heat efficiency fails to meet the standard, the ground temperature changes in a one-way direction for three years consecutively, the price, heat (cold) fee, tax and other relevant support policies of clean heating should not be enjoyed. If the water is not fetched subject to the conditions specified in the approved water fetching permit, the water is polluted, the soil thermal balance is destroyed, the geological disaster is caused, the heat supply commitment is not fulfilled and relevant requirements are still not met after rectification, the dishonest behaviors of project unit will be brought into the national credit information sharing platform, and the joint punishment on the dishonesty will be imposed.



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December 29, 2017