

# ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) REPORT 環境、社會及管治(ESG)報告

# China Conch Venture Holdings Limited 中國海螺創業控股有限公司

(Incorporated in the Cayman Islands with limited liability) (於開曼群島註冊成立的有限公司)

Stock Code 股份代號:586

2018

### ABOUT ESG REPORT

### Statement by the Board of Directors

The Board and all the Directors of the Company guarantee that the report does not contain any false representation, misleading statement, or major omission, and bear individual and joint liabilities for the truthfulness, accuracy and completeness of the content hereof.

### Basis of preparation

The environmental, social and governance report ("ESG Report") was prepared in accordance with Appendix 27 "Environmental, Social and Governance Reporting Guide" of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited. The Reporting Period is from 1 January 2018 to 31 December 2018, while part of the content covers a brief review of the relevant activities in the past. Having regard to the fact that its principal place of business is in mainland China, the Group had made selective reference to the Guidelines on Preparation of China Corporate Social Responsibility Report (中國企業社會責任報告編寫指南)(CASS-CSR 4.0).

### Business of the Group

Conch Venture is a large enterprise group providing "package" solutions for energy saving and environmental protection, and possesses leading technologies in treatment of industrial solid and hazardous waste and municipal waste, grate furnace power generation, energy–saving equipment manufacturing. The scope of business engaged by the Group includes collaborative treatment of industrial solid and hazardous waste and municipal waste by cement kilns, grate furnace power generation, energy–saving equipment manufacturing, new building materials, and port logistics. At the end of the Reporting Period, the Group has a total of 77 subsidiaries and about 2,700 employ–ees with a total asset of RMB 33.216 billion.

### **Publication Cycle**

The ESG Report is an annual report. This is the third ESG report released by the Group since April 2017 when the ESG report was first released. The ESG report for the next reporting period (2019) is expected to be released in April 2020.

### Scope of the Report

The main scope of the ESG Report is Conch Venture and its subsidiaries. In particular, information in relation to the policy and social aspects involves all businesses. For information in relation to the environment, in terms of business segment, it does not cover the port logistics segment which only generates 6.84% of the total revenue of the Group. In consideration of materiality, information in relation to the environment covers the principal business activities and principal place of business.

### Sources of Information

The information in this report came from internal documents and relevant statistical information of Conch Venture and its subsidiaries.

# STATEMENT OF SENIOR MANAGEMENT

2018 is the 40th anniversary of the reform and opening up of China as well as the fifth year after the successful listing of Conch Venture on the main board of Hong Kong Stock Exchange. Five years is only a drop in the ocean of history. However, for Conch Venture, its business segments have undergone exploration and adjustment in such a period, with the number of its subsidiaries grown from 7 at the time of listing to 77, which is attributable to the joint efforts and contributions of all staffs with different roles during the five years.

Over the past five years, many young employees, despite being fresh graduates, have been persevering and down-to-earth, studying hard with the spirit of "being dedicated to one's work", putting the theoretical knowledge into practice under actual circumstances. Now they have gradually grown into the backbone of enterprises that can play an independent role, writing their brilliant chapters of career life with practical actions while contributing to vigorous corporate development.

Due to the characteristics of the industry in which the Group operates, certain projects are situated in geographically remote locations where living conditions are difficult, but we always try our best to equip staff with sports and cultural facilities and open the facilities to the surrounding communities. On the one hand, conductive conditions have been created to enable the staff to pursue continuous learning, enrich their spare time life and build a harmonious community; on the other hand, a solid foundation has been laid for happy, healthy and sustainable work of staff. We have spared no effort in this respect, as we understand that a cohesive team of outstanding professionals is the cornerstone of the survival and development of enterprise, and investing in our team means investing in the future of the enterprise.

One will go fast if travelling alone, but go far when travelling with others. As a large corporate group mainly engaging in environmental protection, we stay in line with the national policies on environmental protection and resource conservation. We also recognise that sustainable development of the whole society is the main driving force for the sustainable and healthy development of Conch Venture. Therefore, in addition to its own development, the Group has always focused on cooperation with partners to seek mutual benefits and win–win results in the course of sustainable development.

Since the inception of Conch Venture, we have been exploring ways to make better use of the enterprise's advantages to promote environmental improvement and social harmony through economic development, and also take advantage of the favourable environment and stable society to expand our scale and enhance economic returns. Such exploration and practices have brought us market recognition. Conch Venture was ranked in the list of top 50 Hong Kong Stock Link of the "Clear the Fog and See the Future" – 2018 "Golden Wing Award" ("廓清迷霧 洞見未 來"— 2018"金翼獎") organized by the "Securities Times" in 2018.

We value the rights and interests of our employees as well as our corporate benefits; we value the harmony with our neighbours as well as our corporate development. Conch Venture, which has just been through five years, is still young as a company, but we are determined to make it a century–old enterprise. Advanced technical expertise and strong business partnership have given us the confidence to make this vision a reality. A journey of a thousand miles begins with a single step. Conch Venture with such ambition will continue to advance step by step on the road of sustainable development.

On behalf of the Board GUO Jingbin Chairman of the Board

Wuhu, China 21 March 2019

# SUMMARY ON ENVIRONMENT, SOCIETY AND GOVERNANCE

### 1.1 ESG Strategy of the Group

The Group is committed to strengthening environmental protection and developing a low–carbon economy with solid technology and a down–to–earth attitude, and regards the concerns of stakeholders as the requirements and direction of its own development. It has incorporated environmental and social responsibilities into its corporate strategy and decision making to become more environmentally friendly and realise social harmony as the Group continues to develop and grow.

### 1.2 ESG Governance Structure of the Group

The Group established a top-down ESG governance structure with involvement of all staff, and established the ESG Report Working Committee led by its senior management and participated by its middle management. Such working committee is organized by Li Daming, executive Director and Deputy General Manager of the Group, and composed of representatives of relevant departments and major subsidiaries which have significant influence on the Group's environment, society and governance. The working committee is responsible for delivering and communicating strategies and measures which may have critical influence on environment, society and governance and gathering information and feedbacks, representing a significant component of our efforts to promote sustainable development.

### 1.3 Stakeholders' Engagement

The Group's environmental, social and governance stakeholders mainly include internal personnel, suppliers, customers, shareholders and investors, governments, and the communities of the places where we operate. Since the publication of the first ESG report, the Group has been focusing on stakeholder participation and updating its materiality assessment regularly. Over the past two years, we have interviewed board members and senior management, being the decision makers and designers of group strategy, listened to the voices of middle management and front–line employees, customers and suppliers, local government departments and community residents. We also launched a questionnaire survey to the members of respective subsidiaries through WeChat to understand and have an update on stakeholders' concerns about the Group's environmental, social and governance issues.

Through interviews and surveys, we sorted out each stakeholder's major concerns, present views and future expectations about business operation and environmental, social and governance issues more comprehensively. Through this opportunity, stakeholders were also provided with more in-depth insight into the Group's commitment to pushing forward sustainable development as well as its measures in force and those to be taken. Comprehensive stakeholder engagement facilitated the identification of the major or priority areas in preparation of the ESG Report, and, more importantly, served as a platform for interaction between the Group and each stakeholder, thus reinforcing the existing communication mechanism. In the future, we will continue to increase the number of representatives of each stakeholder, as well as review and update materiality assessment, so as to ensure that the report fully reflects the Group's latest progress towards sustainable development.

### 1.4 1.4Assessment of Materiality

The following materiality matrix was produced based on analysis and combination of results from the assessment of materiality of each stakeholder:



We consider the following indicators, which are higher than the average in terms of the materiality to business and stakeholders, as the important factors of the Group's sustainable development. The Group will focus attention on the following aspects in fulfilling its environmental and social responsibilities.



# 2 ENVIRONMENT PROTECTION

## **Environmental Policy**

As a large enterprise group of providing "package" solutions for energy–saving and environmental protection, Conch Venture believes that environmental protection is neither just a slogan, nor just about saving water and electricity in daily work and life. The society and the public have higher expectations on us. In terms of research and development of environmental technology, we strive to be "stable", "accurate" and "aggressive". The so–called "stable" refers to making investment in a rational and practical manner, instead of being radical or blindly following the trend. The so–called "accurate" refers to making investment in the most effective and most suitable technology for corporate development. The so–called "aggressive" refers to not being conservative and stingy in investment in environmental protection technology and research and development which are truly beneficial to the enterprise and the society. We firmly believe that the launch of advanced environmental protection technology and products of Conch Venture on the society and the market is an actual action in response to the call for environmental protection. While actively promoting business distribution, we have stepped up publicity efforts to enhance the environmental protection awareness of all social sectors, join hands with them to promote sustainable development, build a beautiful China with one heart and one mind, and create a new era of socialist ecological civilisation.

During the year, the Group abided by relevant environmental laws and regulations of the places where it operated, firmly established the concept of socialist ecological civilisation, and consciously practiced the concept of green development. We always persist in environmental management and will continue to achieve the goal of energy conservation and emission reduction to ultimately realise comprehensive management of urban environment, in the following ways:

\* increasing resource utilisation efficiency in business activities \*

\* adopting energy-saving equipment in production and office sites \*

\* encouraging employees to conserve resources in daily work \*

\* reducing non-renewable energy consumption through technological innovation \*

### 2.1 Emissions

Various forms of emissions have long been a thorny problem that plagues many enterprises and even the whole society. People rack their brains to minimize the impact of emissions on the environment. Scientific and technologi– cal development and innovative thinking have brought ideas to resolve this problem. In order to reduce emissions, both blocking and dredging are necessary. On the one hand, we have to reduce emissions per unit of production; on the other hand, we have to learn to turn waste into treasure and make full use of all kinds of emissions, so as to

bring about environmental benefits as well as considerable economic benefits to the enterprise. In respect of emission reduction, Conch Venture reduces the impact of emissions on the environment through leading waste solutions, reuse of residual heat and production technology of new environmental protection materials. At the same time, it reduces the density and total amount of emissions, such as exhaust gas, wastewater or waste materials, through technological progress.

Although certain emissions are inevitably generated in our production process due to the characteristics of production technology and industry, we, as an environmentally-friendly enterprise, exercise strict control to ensure that the emissions are in compliance with laws and regulations, and strive to better achieve efficient and clean production. We are always ready for examination by the society, the government and the masses.

### **Compliance Management**

Emission compliance is the bottom line in building ecological civilisation. The Group has established compliance management and prevention mechanism in both internal and external operations. Internally, a comprehensive internal management system has been established, which involves the legal department, internal audit department and inspection management department to prevent deliberate and unintentional violations of laws and regulations. Externally, we communicate timely and learn modestly, and also invite external agencies to regularly provide guidance to us and carry out examination on our compliance with legal and regulations. During the year, the Group continued to strictly comply with laws relating to emissions, such as Air Pollution Prevention Law of the People's Republic of China, Clean Production Promotion Law of the People's Republic of China and Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Waste, as well as relevant regulations, such as the Standard for Pollution Control on Municipal Solid Waste Incineration (GB18485-2014), the Emission Standard of Air Pollutants for the Cement Industry (GB4915-2013) and the Control Standard for Collaborative Disposal of Solid Wastes of Cement Kiln (GB30485-2013). We strictly implemented pollutant emission standards and continuously improved the monitoring and emission control systems to ensure up-to-standard emissions and clean production and compliance of production activities with national laws and regulations, serve local economies and benefit the public. In addition, we actively responded to and were in strict compliance with the Environmental Protection Tax Law of the People's Republic of China effective from 2018, and established a sound environmental data collection system. We have actively assumed our tax obligations and paid environmental protection tax of RMB 404,556,400 in the year. In the year, there were no major punishments to the Group for non-compliant emissions.



### **GREENHOUSE GAS (GHG) EMISSIONS**

On 19 December 2017, the National Development and Reform Commission announced that the national carbon emissions trading system was officially launched with the power generation industry as a breakthrough. This also means a new stage for greenhouse gas emission and management to the country. The introduction of the economic system for greenhouse gas management provides a limitless opportunity and meanwhile puts forward higher requirements for Conch Venture. The Group has to increase the amount of carbon recovered through energy–saving and environmental protection technology on the one hand, and reduce its carbon footprint through reducing emissions on the other hand, so as to ultimately maximize carbon surplus rather than carbon deficit.

In the daily production and operation of the Group, greenhouse gas emissions mainly come from the treatment of municipal waste, the use of natural gas and fuels and vehicle exhaust.

In respect of municipal waste treatment, compared to traditional disposal method of landfilling, grate furnace power generation reduces greenhouse gases produced in landfills, and meanwhile saves standard coal consumption by making full use of the caloric value of waste in power generation, thereby reducing the generation of carbon dioxide. When one tonne of waste is incinerated, 0.27 tonnes of carbon dioxide emissions can be reduced.

	Unit	Value	Remarks
Average on–grid power generation of waste incineration	kwh/ tonne of waste	279	Difference between power gener- ation and power consumption
Amount of standard coal saved	kg/ tonne of waste	89.69	360g standard coal/kWh
Reduction in $\rm{CO}_2$ emissions from lower standard coal consumption of waste incineration	kg/ tonne of waste	205.40	2.29kg CO <sub>2</sub> /t standard coal
Reduction in $\rm CO_2$ emissions by replacing landfill disposals with waste incineration	kg/ tonne of waste	875.00	Amount of $\rm{CO}_2$ corresponding to methane produced from landfills
Average $CO_2$ emissions from waste incineration	kg/ tonne of waste	806.67	Average carbon content of waste being 22%
Total reduction in $\mathrm{CO}_{\mathrm{2}}$ emissions from waste incineration	t/ tonne of waste	0.27	

During the Reporting Period, the Group's grate furnace power generation business and collaborative treatment of municipal waste by cement kilns business treated a total of 1,470,000 tonnes of municipal waste, representing a reduction of 400,000 tonnes of carbon dioxide emissions. More specifically, if the amount of carbon dioxide emission reduced is calculated at the closing price of RMB 20.94 per tonne in Guangzhou carbon market on 22 February 2019, the economic benefits brought to Conch Venture in one year amount to over RMB 8.376 million.

During the Reporting Period, the Group's collaborative treatment of industrial solid and hazardous waste by cement kilns project treated a total of 410,000 tonnes of industrial solid and hazardous waste, which was, based on the average density range of treated hazardous solid waste of 1 – 1.2 tonne per cubic metre, equivalent to a reduction of 410,000 – 492,000 cubic metres of occupied space in landfill. At the same time, as solid and hazardous waste itself contains calcium oxide, calcium– silicon–aluminium–iron and heating value, the collaborative treatment of industrial solid and hazardous waste by cement kilns is equivalently saving the raw material input and fuel use of cement kilns. Taking Fuping project as an example, in 2018, it saved 24,400 tonnes of raw materials such as limestone, sandstone, clay and ferrous materials, 650 tonnes of ammonia water and 13,500 tonnes of standard coal

through the collaborative treatment of industrial solid and hazardous waste, and saved material investment of RMB 9.35 million and reduced 2,846 tonnes of carbon dioxide emissions directly. Due to the reduction of fuel and ammonia water investment, 32,637 tonnes of carbon dioxide, 927 tonnes of sulphur dioxide, 449 tonnes of nitrogen oxides and 407 tonnes of soot emissions were reduced.

Natural gas is a clean and environmentally friendly source of energy, which contains almost no sulphur, dust and other harmful substances. During combustion, it produces less carbon dioxide than other fossil fuels and is likely to cause lower greenhouse effect, and thus can fundamentally improve environmental quality. The Group attaches great importance to the substitution of natural gas for coal and other traditional energy sources and therefore has sped up transition from traditional energy sources to natural gas and expanded application of natural gas. At the same time, greater efforts have been made in the research and development and introduction of natural gas application technologies such as gas turbine technology, and the use of local available natural gas energy resources has been maximized in the construction of new projects, so as to improve the efficiency of natural gas application for maximum production capacity of natural gas per unit.

For disposal of solid waste, hazardous waste and municipal waste, the Group established CV Logistics, a subsidiary engaging in transportation, during the Reporting Period. In terms of selection and purchase of vehicles, we take into account the performance of vehicles and the demand for tonnage by route, and purchase vehicles that meet the national and industrial standards on demand. In designing the routes of vehicles, we carefully consider traffic volume, frequency, and traffic conditions by period and area, so as to reduce unnecessary fuel consumption and minimize the impact on the surrounding residents. In terms of maintenance of vehicles, we have been equipped with dedicated cleaning equipment to keep transport vehicles clean, avoid secondary pollution to the environment in the transport process, and extend the service life of vehicles through scientific scheduling and regular maintenance. During the Reporting Period, the greenhouse gas emissions of the Group were 85,700 tonnes, which resulted from

the usage of electricity, gasoline and diesel.

### Exhaust emissions

"Exhaust emissions" are treasure misplaced. Through years of theoretical research and practical exploration, a set of mature system and theory has been formed for the residual heat power generation business, one of the sectors of the business of the Group, reducing exhaust emissions and turning it into treasure. The Group's residual heat power generation technology has the following four characteristics:

### 1、Application of flash evaporation technology

Flash evaporation heat system technology is applied to facilitate full recovery and reuse of low–quality heat energy in exhaust emissions and improvement of thermal efficiency of power generation systems through importing flash–evaporated saturated steam into the steam turbine for supplementary purpose.

### 2、Efficient vertical waste heat boiler

Based on the characteristics of exhaust emissions at kiln tail, vertical waste heat boiler at kiln tail and at kiln head were developed. The heating surface is horizontal direction and equipped with a steam and acetylene soot blowing device, which solves the problem of dust attachment on the heating surface and improve heat transfer efficiency of the boiler.

#### 3、Development of the low parameter steam-supplemented condensing turbine

Advanced three-dimensional flow passage technology is applied and system design is carried out for the flow passage part, main regulating valve and supplementary nozzle of the steam turbine. Under the same intake conditions, the efficiency of the steam turbine designed with full four-dimensional flow passage is about 4%–5% higher than that of the conventional design, reaching over 82%, and its performance reaches the international advanced level.

#### 4、 Development of the residual heat power generation distributed control system combing DEH and DCS

In order to overcome the shortcomings of the traditional power generation control system, the digital electro-hydraulic regulating system (DEH) is applied to the control and protection of steam turbines, and the DCS control system suitable for the production process of residual heat power generation is developed. It is seamlessly connected with the production line process, ensuring the stable, safe and efficient operation of the production line system and the residual heat power generation system.

As at the end of the Reporting Period, the Group had built 231 sets of residual heat power generation equipment with a generator capacity of 2581 MW and a theoretical power generation of 22.6 billion kWh. Compared with thermal power generation, it has saved 8.1396 million tonnes of standard coal, or reduced 21.7053 million tonnes of carbon dioxide emissions.

The Group's exhaust emissions also come from the use of diesel oil and gasoline. During the Reporting Period, the Group consumed a total of 2,329,500 litres of diesel oil (mainly for combustion process of production machines, in-plant loaders, mechanical vehicles and solid waste and hazardous waste transportation vehicles of the logistic subsidiary) and a total of 835,200 litres of gasoline, which consumed 0.13 litres of fuel per kilometre (mainly for the daily use of vehicles of the Company).

As at the end of the Reporting Period, in grate furnace power generation projects completed and operated by the Company, the measured exhaust emissions include: 78.86 tonnes of SO2, 309.89 tonnes of nitrogen oxides, 15.92 tonnes of particulate matters, 47.6 tonnes of HCL, and 26.05 tonnes of CO; the calculated waste emissions of mobile energy included 9.66 tonnes of nitrogen oxides, 0.02 tonnes of sulphur oxides and 0.52 tonnes of particulate matter.

## Sewage discharge

Sewage is produced mainly from grate furnace power generation, collaborative treatment of municipal waste by cement kilns, collaborative treatment of industrial solid and hazardous waste by cement kilns, and new building materials production.

For projects of grate furnace power generation, collaborative treatment of municipal waste by cement kilns and collaborative treatment of industrial solid and hazardous waste by cement kilns, leachate is generated during storage of municipal waste and hazardous waste. For projects of grate furnace power generation, sewage is converted into reclaimed water, which is then used to cool steam-turbine-driven generators. After processing, leachate concentrates are incinerated in grate furnace, and other sewage is recycled for integrated treatment. Through these steps, we are able to achieve zero sewage discharge. For projects of collaborative treatment of municipal waste by cement kilns and collaborative treatment of industrial solid and hazardous waste by cement kilns, less sewage is generated and hence it is fed into the cement kiln incinerating system, which enables zero sewage discharge. For production of new building materials, sewage generated therefrom is of high alkalinity and is recycled through our improved in-plant water recycling system.



### Waste disposal

As the urbanisation rate and living standards increase, harmless waste disposal has become the focus of social attention. As one of the benchmarking technologies of Conch Venture, grate furnace power generation has its unique advantage and approach in eliminating the adverse effects of municipal solid waste on human, society and environment. Incineration treatment methods with obvious reduction are promoted by an increasing number of provinces and have attracted much attention.

As a "rising star" in waste incineration power generation, Conch Venture is highly praised and promoted in the market owing to the strong competitive advantages of the Company: The Company has developed a globally leading technology jointly with Kawasaki HI; the Company is skilled in project operation management and has explored a scientific, standardized and modern management system, with cost control and power generation indicators at the forefront of the industry.

In light of the characteristics of domestic waste, Conch Venture has jointly developed a new type of grate furnace power generation technology with Kawasaki HI, and built domestic-made grate furnace incinerators and residual heat boilers. By now, grate furnace equipment with a capacity of 200–750 tonnes has been developed, which can meet the scale needs of different cities and regions. Such process fully incorporates overseas advanced waste incineration technology. Waste is combusted using heat within it and high temperature flue gas enters into the boiler to generate steam to drive steam turbine to generate power, which is transmitted to the power grid. After tail gas treatment, the waste discharge meets the national standards. Remarkable features of this technology include thorough decomposition of dioxins, high applicability to wastes, no special plant site requirements, high power generation capacity, harmless treatment of waste, and odourless.



During the Reporting Period, municipal waste disposal by grate furnace projects generated 18,400 tonnes of ash, some of which were collected for cement kiln co-processing and the rest were handed over to qualified third parties for professional treatment; 215,300 tonnes of slag were handed over to qualified third parties for professional treatment; 94,700 tonnes of leachate were treated by the in-plant treatment system, and about 80% or above were converted into clean water reaching the Standard for the Quality of Industrial Water Recycled from Urban Waste Water (GB/T19923–2005) and reused as supplementary water for industrial use in factories. About 20% were sprayed back as concentrated liquid into the furnace for incineration treatment to achieve zero effluent discharge. Since the successful launch and on-grid power generation of the first grate furnace power generation project in Jinzhai County, Anhui Province in early 2016, Conch Venture's grate furnace power generation projects have blossomed rapidly all over the country. By the end of 2018, the Group has successfully promoted 24 projects. Five projects have been completed and put into operation, with an annual disposal capacity of 690,000 tonnes of munic-jipal waste.

On 19 November 2018, Guizhou TV News Broadcast and Guizhou Daily reported in-depth on the on-site supervision of the Fifth Central Ecological and Environmental Protection Supervision Group on the municipal waste incineration power generation project of TR Environment, a wholly-owned subsidiary of Conch Venture. The project was highly recognized.

In addition to municipal waste, the Group has independently developed the cement kiln collaborative treatment technology targeting industrial solid waste and hazardous waste. The technology enables thorough waste treatment with no discharge of ash and slag, high degree of resource utilisation, good solidification effect of heavy metals, and realisation of economic benefits and environmental protection. Through the cement kiln collaborative treatment technology for industrial solid and hazardous waste, solid and semi–solid waste is crushed and fully mixed with waste liquor to reach an appropriate viscosity, and then pumped to kiln tail for incineration; low–moisture solid waste is crushed and conveyed to decomposition furnace by belt conveyor for direct incineration and disposal; industrial waste liquor is blended and filtered and sprayed into kiln head through conveyor pump for treatment; a small amount of ash waste is pumped into a special storage bin for storage, metered and solidified in the cement kiln. After waste treatment, exhaust gas are purified by the cement kiln tail gas treatment system and discharged.

### 2.2 Resource utilisation

Natural energy resources are important material foundation for economic growth and social change. The use of natural resources has brought earth–shaking changes to human society and made human material life more comfortable. However, the massive use of natural resources has brought about a series of serious environmental problems. As an innovative energy–saving and environmental protection enterprise, Conch Venture is both a creator and consumer of resources in terms of power generation. Further increasing the efficiency of resource utilisation is the focus of the Group's research and study efforts in addition to improving power generation technology.

On the one hand, the Group constantly optimises its energy structure, and develops and utilises clean and renewable resources, such as increasing the use and coverage of natural gas resources; on the other hand, we advocate full staff participation to save energy and improve energy efficiency. The strength of each individual may be small, while the collective strength of the Group is indeed immense. Lu Zhaoyi, invited information commissioner of Jinan Municipal Committee, invited member of the Human Resources and Environment Committee and researcher of Shandong Institute of Science and Technology Development Strategy, said after calculation: "If a person travels by bus, by bicycle or on foot instead of by car, annual carbon dioxide emissions will be reduced to 633.5 kg. If a person adopts energy–saving water, electricity and electrical equipment at home which can save 10% energy, annual carbon dioxide emissions will be reduced by 1218.5 kg from 1788.5 kg to 570 kg. If a person travels by train instead of car, carbon dioxide emissions will be reduced by 196.5 kg from 296.5 kg to 100 kg." Generally, a person can reduce carbon emissions by about one tonne a year.

The types and amounts of major resources consumed by the Group in 2018 are as follows:

Type of resources	Total consumption	Unit consumption and remarks
Diesel oil	2,329,500 litres	Used in production combustion and in-plant machinery vehicles. See the following figure.
Water	689,300 tonnes	New building materials: 12.8 litres/ten thousand sq. m. of new materials produced; Grate furnace projects: 0.74 tonne/tonne of municipal waste processed
Gasoline	835,200litres	0.13 litres/ km
Natural gas	1,958,700 m³	0.22 m³/sq. m. of new materials produced
Electricity	88,789,200 kWh	Details set out in the table below

Business segmen	Production volume/ Treatment volume	Electricity consumption	Unit consumption
CKK business	777,000 tonnes	31,506,100 kWh	40.55 kWh/tonne
Grate furnace projects	696,300 tonnes	35,863,900 kWh	51.51 kWh/tonne
New building materials	8,926,900 m²	15,093,000 kWh	1.69 kWh/ m².
Equipment manufacturing	4,533,600 m².	6,326,200 kWh	0.71 kWh/ m².

Note: For solid waste and hazardous waste treatment projects, power consumption took place during the normal production of the cement plant, and thus was not calculated separately.





Figure: Diesel oil consumption distribution in 2018

Water consumption by business segment



Figure: Water consumption distribution in 2018

### Indirect energy

Electricity is the major type of energy used by the Group as well as the key product of the Group. TheGroup comprises a number of power generation enterprises and the number increases quickly annually. The Group's annual power output is far more than power consumption. The Group always adheres to the policy of "tapping new resources and reducing consumption" for all types of resources, including electricity. On the one hand, the Group focuses on improving production technology and broadening the sources of energy for power generation to increase the total output and power generation efficiency. On the other hand, we strive to reduce electricity consumption, improve energy utilisation efficiency and reduce energy loss in the power supply system. The Group seeks power supply by integrating outsourced electricity with self–generated electricity, and coordinates with regional power grids and other departments so as to supply surplus self–generated electricity to the grids. The Group's total electricity consumption and output during the year are disclosed as follows:



#### Figure:

Electricity consumption by business segment



#### Figure:

Total electricity consumption of grate furnace projects in 2017 and 2018





### Figure:

Total electricity output of grate furnace projects in 2016-2018

#### Residual heat power generation



#### Figure:

Total electricity output of residual heat power generation projects in 2016–2018



# Municipal waste treatment volume of collaborative treatment of municipal waste by cement kilns

### Figure:

Municipal waste treatment volume of collaborative treatment of municipal waste by cement kilns in 2016–2018

# Municipal waste treatment volume of collaborative treatment of municipal waste by cement kilns



### Figure:

Breakdown of municipal waste treatment volume of collaborative treatment of municipal waste by cement kilns in 2016–2018

### Water resources

From the cosmic point of view, the abundant water reserve makes the Earth look like a blue crystal ball, but scientific development has resulted in increases in the number of high-rise factories and daily and industrial use of water, worsening the water shortage problem. Due to human beings, the "ball" is no longer crystal and blue, with the possibility of drying up.

The Group's main business segments for which water consumption is calculated separately include new building materials and grate furnace power generation. The Group has a wide range of water sources, including tap water, recycled water, and reclaimed water from sewage treatment plants. Water meters are installed for water consumers to monitor the use of water resources in a timely manner. During the Reporting Period, the Group's new building materials and grate furnace power generation used a total of 689,300 m3 of outsourced water.

As grate furnace power generation projects are water-demanding, at the planning stage of each grate furnace project, the Group designs a water consumption plan according to the local conditions to facilitate in-plant water recycling and also use of reclaimed water from the source. For example, at the design stage, Jinzhai Conch Venture negotiated with a sewage treatment plant in Jinzhai County for a direct pipeline to provide Jinzhai Conch Venture with reclaimed water that has undergone preliminary treatment by the sewage treatment plant. 129,600 m3 of tap water can be saved annually as a result. The Group pays close attention to the effectiveness of this arrangement of substituting reclaimed water for tap water. It worked smoothly in the past two years and has achieved remarkable water saving effect. Therefore, we are summing up our experience in order to apply this design to more similar projects.

We also emphasise water conservation and harmonious coexistence with surrounding environment and communities. In the vicinity of some factories, tap water is not available and villagers are still using well water (underground water). Taking this into consideration, the Company concluded after assessment that using well water would cause shortage of water to the villagers, and therefore did not use well water in those areas.

### 2.3 ENVIRONMENT AND NATURAL RESOURCES

General Secretary Xi said that mountains of gold and silver are not as valuable as lucid waters and lush mountains. With lucid waters and lush mountains, life will get better.

Protecting the environment and natural resources is the fundamental national policy and also our bounden duty, as well as the development driving force and economic source of the Group. Conch Venture was established following the macro–environment and trend of energy conservation and environmental protection. Conch Venture always strives to solve salient environmental issues through business activities, strengthen ecosystem protection and promote green development, and is committed to building a beautiful Anhui, a beautiful China, and even a beautiful world.

The environmental protection segment, energy-saving equipment segment and new building materials segment actively play their respective roles in protecting the environment and natural resources.

As for the environmental protection segment, the Group currently has three kinds of technologies: treatment of industrial solid and hazardous waste by cement kiln, collaborative treatment of municipal waste by cement kiln, and grate furnace power generation. These technologies can fully degrade dioxins, solidify heavy metals, and digest sewage without odour diffusion, thus facilitating the reduction, resource reutilisation and harmless treatment of waste and thoroughly eliminating secondary pollution.

As for energy-saving equipment segment, the Group has leveraged its strong technical expertise and service capabilities to make contributions to energy saving and emission reduction in the cement industry since its establishment, while actively striving for energy saving and emission reduction in metallurgical and chemical industries, such as residual heat recovery from sintering machine, converter and heating furnace in the iron and steel industry, and residual heat recovery from ore-heating furnace in the ferroalloy industry, and has made certain achievements. It is believed that as promotion of energy saving and emission reduction continues in metallurgical and chemical industries, we will enjoy an increasingly strong technological position.



As for new building materials segment, the fibre cement panel developed by the Group boasts the waterproof and anti-corrosion features of cement, but does not easily dry out and shrink as general cement products do. Fibre cement panel does not contain harmful substances such as asbestos. It is a new building material with excellent performance and applicability and has ten major advantages: green and environment friendly, fireproof and flame-retardant, waterproof and moisture-proof, heat-insulating, anti-corrosion and mothproof, sound insulation and absorption, light weight and high strength, good seismic resistance, good weather resistance and construction convenience. In November 2018, to promote new building materials and environmental protection, a subsidiary engaging in the new materials segment exhibited the new material during the 2018 Asian Concrete World Expo and it was well received. High-quality products forge the corporate brand image. Since launch, panels of Conch Venture have been widely used in new buildings in various fields, such as China Pavilion of Shanghai World Expo, Shanghai Tower, National Theatre, Sheraton Beijing Jinyu Hotel, Xi'an Airport, Xiamen Taipingshan Tunnel, etc. In November 2018, in order to promote new building materials and environmental protection, a subsidiary engaging in the new materials segment exhibited the new material during the 2018 Asian Concrete World Expo and it was well received. During the Reporting Period, the panels of Conch Venture were applied to Hefei BOE Hospital, Digital Information Industry Park in Hangzhou, the new campus of Guangling College of Yangzhou University, Vanke Haishang Chuangi LOFT Project in Nanchang, etc.

Meanwhile, the Group regularly organizes a variety of activities to improve employees' awareness of and participation in environmental protection. For example, Jinzhai Conch Venture held promotional activities on 5 June, the World Environment Day, and held talks, which raised the awareness of environmental protection among employees and surrounding residents, and increased the level of comprehensive environmental protection management by the enterprise. In addition, inspired by the fire drill, the Group also actively organized the "environmental safety drill" to simulate accidental leakage of waste leachate when it was pumped from the collection tank to the regulating tank, so as to improve the emergency response speed and capacity of management personnel and employees at all levels.

### From focusing on mainland China to reaching out to the world

Since its establishment in 2013, Conch Venture has been strengthening its foundation in mainland China, consolidating the achievements of development in energy-saving industries, and actively and steadily promoting the growth of the environmental protection industry. At the same time, Conch Venture has been actively responding to the state's call for opening up and the development pace of the Belt and Road initiative. Through enhancing exchanges with the outside world and carrying out overseas investment, Conch Venture has exported its advanced energy-saving and environmental protection technologies and expertise.

In the environmental protection industry, the Group stepped up its effort to drive overseas projects during 2018 and actively followed up project development. On 1 July 2018, the Memorandum of Cooperation of grate furnace power generation project in Thái Nguyên, Vietnam was successfully made.

In May 2018, we visited Morocco to promote waste power generation projects, and submitted pre-qualification bidding documents on 11 September.

Morocco

### In May and October 2018,

Conch Venture went to Kazakhstan twice to conduct research on the waste power generation market and promote the waste power generation project, and successively reached preliminary cooperation intentions to with the local government.

### Kazakhstan

### In July2018,

the Memorandum of Understanding of the grate furnace power generation project in Thai Nguyen, Vietnam was duly signed. The Group's international environmental protection business achieved a new breakthrough.

### Viet Nam

### In mid-August 2018,

we went to Nepal to conduct research on waste power generation projects and exchange with relevant municipal governments on specific cooperation matters.

# Nepal

Thailand

### On 8 October 2018,

the Group participated in the bidding for the 2×500TPD waste power generation project in Bali, Indonesia, and actively participated in the bidding clarification meeting that followed.

Bali, Indonesia

### On 8-12 December 2018,

an invited Thai delegation visited Conch Ventures and waste power generation plants in operation, and exchanged relevant experiences.



In addition, the Group has also exported its residual heat power generation technology to Pakistan, Thailand, Turkey, Myanmar, Vietnam, India, Laos and other countries. Feasibility study and promotion were carried out for foreign cement industries according to their local residual heat resources, construction costs, and energy policies and regulations.

In 2018, Shanghai Conch Kawasaki Engineering Co., Ltd., a subsidiary of Conch Venture, successfully completed and put into operation the projects of coal-fired power station and residual heat power generation project in Beishu, Indonesia, residual heat power generation project in Madewang, Cambodia, and AQC boiler reengineering project in Thailand.

The successful launch of the above mentioned projects will help the customers to effectively reduce the production and operation costs and achieve optimal allocation of production resources. In addition, they have significantly enhanced the brand reputation of Conch Venture in the project locations, and laid a good foundation for the Group and even other PRC enterprises to expand overseas markets in the future. Meanwhile, through helping the places where the projects operate to effectively resolve problems of waste disposal and wastage of residual heat resources, social and environmental benefits are gradually seen during operations of these projects.

# SOCIAL RESPONSIBILITY

Society is the ground for enterprise development. Conch Venture is closely related to environment and society since establishment due to the characteristics of its principal business. The way to be rooted in society, organically combine its corporate business with social development in China, fulfil social responsibilities in multiple fields, and make corporate contribution to the sustainable development of China is a development strategy that Conch Venture constantly explores. The Group always insists on:

\* providing care and competitive compensation for its employees \*

\* providing quality services and products for its customers \*

\* optimising processes for and developing together with its supply chain partners \*

\* engaging local communities and contribute to the well-being of people in places where it operates \*

# 3.1 Employment

Employees are the backbone of our presence, development and expansion. The Group attaches great importance to the staff's perception and development, and provides employees with a desirable working environment, a competitive salary system and complementary benefits. In addition, the Group takes the initiative to build a fair and just diversified talent strategic development platform with great opportunities, enabling employees to be clear about their own positioning so as to inspire their initiative and enthusiasm.

The Group's human resources work closly focuses on attracting and training people. On the one hand, the good social reputation and broad business platform of Conch Venture have been attracting lots of outstanding talents for many years. During the Reporting Period, the Group had 1,296 new employees, 418 of whom were fresh graduates, accounting for 32.25% of the total. On the other hand, Conch Venture pays attention to stabilising the workforce through remuneration package and cohesion.

Training is to create conditions for employees to do their best. During the Reporting Period, the Group established 17 new subsidiaries and had 8 subsidiaries officially put into operation. Continuous expansion of business scale has provided employees with opportunities to learn and grow. For years, the Group has provided open promotion pathways to fairly select and promote talents, creating a broad career platform for those who want to and can contribute. By the end of the Reporting Period, the average age of the Group's managers was 35. It takes an average of 2–3 years for fresh graduates to be promoted to junior managerial positions.





The Group and its subsidiaries protect the legal rights and interests of employees in strict compliance with relevant laws and regulations, such as the Labour Law, the Labour Contract Law, and the Social Insurance Law, and pay wages, social insurance contributions and housing fund contributions on time and in full amount. Furthermore, we have established a mutual assistance mechanism for in-house staff through the labour union to provide help for employees with difficulties. During the year, the Group conducted no violation of labour laws.

The principle of equal opportunities applies to all aspects of employment, including recruitment, training, career development and staff promotion. The Group advocates fair competition and does not discriminate against any employee by sex, age, marital status, religion, race, nationality or health status. As at the end of the Reporting Period, the Group had 2,666 employees. Among them, 2,244 were male employees and 422 were female employees. There were 359 employees holding middle or senior managerial positions, including 16 females. A total of 1,450 employees were from Anhui Province and another 1,216 were from outside Anhui Province. The local employment rate of the Group maintained at above 80.23%.

The Group places emphasis on employee satisfaction, happiness and participation, and encourages employees to give feedback and contribute ideas. In 2018, the Group conducted a satisfaction survey on logistic services among Jinzhai Conch Venture, Conch Venture Industrial, Wuhu Conch Venture Environmental and other subsidiaries, to find that the satisfaction rate averaged about 92%. In order to continuously improve employee satisfaction, our administration department carefully analysed the survey results and timely optimized internal services. Employees can submit comments or suggestions to the human resources department, labour unions and managers at all levels, which are then handled in accordance with the established procedures, so as to ensure fair treatment of all employees and their reasonable requests.

The Group highly cares for and protect female employees, not only by offering labour safety protection and occupational health protection, but also by organising women's care activities. For example, Yaobai Environmental organised its female employees to visit the Shaanxi History Museum on 8 March, Women's Day; Anhui Conch Venture New Building Material Company held interesting sports games on Women's Day to enrich the staff's spare time life. In addition to stressing economic benefits and corporate development, Conch Venture regards spiritual wealth



enhancement as one of its important work. Through set–up of an occupational safety and health system, establishment of free annual physical examination plan and provision of a variety of training courses for employees, the Group provides comprehensive supporting services for employees to maintain physical and mental health. For example, Yangzhou Haichang built new table tennis room, billiards room, gym room, reading room and other exercise venues for employees and arranged designated staff to manage the rooms, which are open at regular hours every day. Each subsidiary organis– es regular outdoor staff exercise activities, such as basketball matches, table tennis matches, and Women's Day activi– ties. On 24 December 2018, Conch Venture held the 2019 New Year's Concert — "Conch Venture's Night" and Dai Yuqiang, a famous tenor, was invited to perform, an event of spiritual culture and corporate connotation for employees.

### 3.2 Health and Safety

The health of staff members is important to their family, and to Conch Venture, because it is the cornerstone of the development of Conch Venture and the premise of better customer services and harmonious local community relations. Within the Group, no work arrangement can be made at the expense of the safety and health of staff. With the idea of "safety first, prevention first", the Group strictly complies with relevant laws and regulations including the Safety Production Law of the People's Republic of China, the Prevention of Occupational Diseases of the People's Republic of China and the Provisions on the Supervision and Administration of Labour Protection Articles. The Group actively plans, conscientiously implements, scientifically evaluates and continuously improves work concerning the health and safety of its employees, takes health and safety as major considerations in its daily management and strategic decision–making, and resolutely prohibits safety regulation violations. During the Reporting Period, there was no major safety and health regulation violation by the Group.

Adhering to the concept of "safety is of great importance", the Group has established a comprehensive safety obligation mechanism. During the Reporting Period, more than 30 exercises of various emergency drills were completed, involving about 1200 participants successively. According to the actual situation of the enterprise, we often carry out related safety propagation and health education.



During the propagation week of National Occupational Disease Prevention and Control Law in late April 2018, Huoqiu Conch Venture, Yaobai Environmental, Jinzhai Conch Venture, Yanshan Conch Venture and other subsidiaries launched a series of activities to promote knowledge of occupational disease prevention and control, and carried out hygiene inspections.

During the safety week in June 2018, the first safety knowledge contest of Conch Venture was held in Wuhu with the theme of "Life First, Develop Safely" and participated by more than 130 employees.

In view of the difficulty of flood control in summer, a response mechanism was established for the Group's projects situated along rivers to address issues arising from extreme weather. Summer safety inspection was strengthened with attention to early warning information. Emergency duty was also strengthened to ensure timely response and action.

During the fire protection propagation month in November, more than 16 subsidiaries and 500 employees participated in emergency drills and safety knowledge training, which aimed to raise the safety awareness among all employees, guide employees in establishing safety concepts, and further consolidate the foundation of corporate safety management.

Adhering to the "people-oriented" philosophy, Conch Venture implements its staff occupational health and safety system in daily work. Huoqiu Conch Venture Environment Engineering Co., Ltd. relies on third-party inspections to provide a safe production environment for employees; Wuhu Conch Venture Environmental Protection Technology Co., Ltd., implements regular dormitory hygiene inspections to urge its staff to maintain a healthy and comfortable living space. In addition, the Group provides employees with free annual occupation-al health checks.

The health and safety of employees should be protected with hardware facilities. During the Reporting Period, the Group incurred a total expenditure of RMB4.7355 million on the maintenance and operation of safety facilities. Funds dedicated to safety facility investment were set up for projects under construction in accordance with the Measures for Supervision and Administration of the "Three Simultaneities" for Safety Facilities at Construction Projects. The health and safety of employees should also be protected with policies and awareness. The Group pays attention to training and improving staff's safety awareness and operational skills. During the Reporting Period, 100% of the Group's employees involved in special types of work held required certificates and received relevant continued education regularly.

In addition to internal practices, the Group actively participates in various external certification audits. At the beginning of 2018, four subsidiaries successfully passed the first certification audit of their environmental and occupational health and safety management systems. By the end of the Reporting Period, another four subsidiaries passed the audit, namely WH Investment, WH Environmental Protection, Ningguo Conch Venture and Jinzhai Conch Venture, increasing the total number of subsidiaries passing the certification audit to eight. In 2018, no event that has adverse impacts on employees' health and safety occurred due to the failure to meet working environment standards, and no material safety accident occurred.



### 3.3 Development and Training

Development is the absolute truth. Corporate development lies in innovation, and the key to innovation is talents. Conch Venture attaches great importance to the cultivation of innovative talents in science, technology, management and other aspects, providing employees with a comprehensive training system, rich training resources and diversified learning programs. At the same time, Conch Venture emphasizes the integration of theory and practice and advocates learning in practice so as to truly improve the capability to pursue scientific and technological innovation, management efficiently, and provide better services and technical support for customers. In 2018, the Group incurred a total expenditure of RMB361,000 on internal and external training, including 827 technical training sessions (about 3857.5 hours) and 994 non–technical training sessions (about 1437.5 hours) for staff at the head-quarters and non–frontline operating staff at the subsidiaries. For frontline operators, technical training and safety education were offered constantly.

Conch Venture encourages, supports and supervises employees' continuous and lifelong learning. At the policy level, the Group has formulated the Regulations on Staff Training, developed annual training plans, and supervised and inspected implementation by the subsidiaries from time to time, covering attendance records, training content, examination results and trainers' feedback. We believe that for individuals, graduation from school is not the end of learning; for enterprises, employees have to keep pace with technological changes. Therefore, we would truly be responsible to employees and the enterprise by providing a platform for and supporting continuous learning.

We implement policies to ensure that employees can learn through online and offline interactions as doing on-site exercises, visiting and learning from experienced peers, and watching lecture videos. The Group has established a multi-form and multi-level training curriculum system for employees according to different post functions:

# CONCH VENTURE

Professional skills training and test for certification. For example, Conch Venture held group training before registered safety engineer qualification exams and Yaobai Environmental organized special equipment training in its workshop in Fuping.

Safety production training, which focuses on improving employees' production safety awareness and the enterprise's safety management capability. For example, Conch Venture carried out safety management training for persons in charge of high-risk industrial activities and TR Environment organized hazards sources training.

Comprehensive management training, covering compensation training, ISO system training, financial system training, financial training for the solid waste segment, document management training, etc.

Corporate culture training, which strengthens employees' recognition of the Company's culture and development plan. In particular, the fifth listing anniversary celebration of Conch Venture this year provides an important channel for young employees to understand the spiritual culture of the Company and the development of the industry where the Company operates.

### Training curriculum system



Employees are the cornerstone in achieving good performance and ensuring long-term success. The skills, commitment and enthusiasm of employees make Conch Venture more competitive and ready to meet future challenges. The Group has established a comprehensive employee career development channel and promotion system, and taken action and invested resources for employee development and team building. Through promotion mechanism improvement, job transfer and rotation and other means, the Group has built a platform to facilitate employees' career development, set up professional title grades according to the nature of posts, paid attention to and helped employees to carry out career planning, and developed personalised career development channels for employees.

Young employees are an important core force for the future development of Conch Venture. The Group pays attention to the pool of young cadres, focuses on cultivation and training of young cadres at the front line, and constantly selects and appoints talents proven through practices. We hope that young employees will correctly understand various complicated conditions, maintain a spirit of perseverance, and work in a down-to-earth manner, so as to grow together with the Group and make contributions to the sustainable and healthy development of Conch Venture.

### 3.4 Labour Standards

In accordance with national laws and regulations such as Law on the Protection of Minors and Provisions on the Prohibition of Using Child Labour, the Group strictly checks the identity information of candidates in the recruitment and filing procedures. Child labour recruitment is prohibited. Wrongdoings, if found, are reported to the human resources departments and addressed in a timely manner.

We attach great importance to the care for and protection of the future of the motherland, and to the physical and mental health of minors, actively promote the implementation of the compulsory education system, and safeguard all legitimate rights and interests of minors. These are the Group's obligations and responsibilities to the country and society.

We uphold the concept of equality between the enterprise and its employees, fully respect employees' freedom of employment, respect and safeguard employees' privacy, and fully protect human rights. The Group strives to build and develop harmonious and stable labour relations. There are no such acts as detaining employees' valid certificates, collecting deposits, forcing labour or defaulting remuneration, nor any compulsory labour acts during the period of employment,.

Given the nature of the industry, certain positions in the Group require three shifts of employees. However, we have fully considered the work sustainability and the legitimate rights and interests of employees. According to past experience and actual needs, we have carefully planned production to avoid unnecessary overtime work as far as possible, and strived to ensure a balance between work and life for staff. If overtime work or night shift is indeed required due to the nature of work, temporary needs and other unavoidable factors, we actively arrange alternative leave to ensure that employees get adequate rest. We never lopsided towards development at the expense of the health of employees, but earnestly safeguard their labour rights and interests.

During the Reporting Period, no incident of use of child labour or forced labour occurred.

### 3.5 Supply Chain Management

Conch Ventures is not only strict with itself, but also its partners. We strive to achieve sustainable development in Conch Venture the macro–environment, and the supply chain system. We hope to establish common cooperative values with suppliers and achieve long–term and responsible partnership.

For us, supply chain is not only an integral part to fulfil customer contracts, but also a necessary bridge for fulfilling social responsibilities. Suppliers are not only business counterparties, but also partners on the road of fulfilling social responsibilities. Conch Venture has maintained a good cooperative relationship with suppliers while doing a good job of risk management and control in the procurement process, and has worked hand in hand with them to achieve win–win cooperation.

Conch Ventures is committed to building a responsible supply chain and promoting joint development of upstream and downstream companies in the supply chain. By formulating and implementing the Measures for Purchasing Management (《採購管理辦法》), the Tentative Measures for the Administration of Material Supply (《物資供應管理暫行辦法》) and the Tentative Regulations on Contract Management (《合同管理暫行辦法》), the Group regulates the entire process from supplier exploration and selection to supplier control and evaluation. The Group adheres to stringent supplier selection criteria and open tender procurement processes to ensure the quality and efficiency of supply, and enters into environmental agreements and jointly upholds safety commitments with suppliers to assume responsibilities together.

Sustainability performance of suppliers has always been one of the key supplier selection criteria of the Group. Conch Venture requires suppliers to conduct business in compliance with applicable laws and regulations and sustainable development agreements, and establishes mechanisms to help suppliers continue to improve, so as to promote the growth of suppliers. In order to continuously optimise and stabilise supply channels and prevent operational risks, the Group also conducts comprehensive information check when selecting suppliers, including but not limited to production and technical standards, compliance capabilities and corporate reputation, product quality and system certification.

In this regard, the Group conducts periodic and non-periodic reviews of suppliers through both internal and external audits. The review process includes not only the evaluation of suppliers' manufacturing capability, but also their performance in labour rights protection, health and safety protection, environmental protection, business ethics and management systems. In this process, we also learn a lot from exchanges with and visits to suppliers.

### 3.6 Product Responsibility

### 1. Products and service quality

Product quality is the lifeline of an enterprise, and the foundation of its existence and foothold. Conch Venture always puts product quality first, constantly strengthens product quality control and quality management capability to provide customers with products that meet their expectations and needs for higher customer satisfaction.

We strictly abide by the Product Quality Law of the People's Republic of China (《中華人民共和國產品品質法》), the Regulations on the Liability for Industrial Product Quality (《工業產品品質責任條例》) and relevant laws and regulations, and set our mind to delivering "top quality and dedicated service". The Group has established a three-in-one quality assurance network composed of quality management system, quality training and special quality inspection. We guarantee production efficiency and product quality with fine manufacturing equipment, systematic professional training for employees, and strict quality management standards. In addition, the Group actively listens to customers' ideas, remains sensitive to market demands, insists on introducing and innovating measures, constantly optimises product designs, and launches products with better energy-saving and more stable performance, so as to meet customers' demand for quality, performance and delivery time.

With continued emphasis on building quality control systems, the Group has formulated the Quality Manual, the Product Inspection Management System and the Quality Record Management Policies, and encouraged its subsidiaries to undergo ISO9001 certification. As at the end of the Reporting Period, a total of five subsidiaries of the Group, namely, Conch Kawasaki Equipment, Conch Kawasaki Engineering, Shanghai Conch Kawasaki Engineering, Jinzhai Conch Venture and Conch Venture , had passed ISO9001 certification. During the Reporting Period, no product of the Group had to be recalled due to safety or health concerns.

#### 2. Intellectual property rights

Ownership of intellectual property rights is vital to the success of the Company. Since establishment, Conch Venture has devoted itself to building a sound strategic defensive intellectual property system and intellectual property management framework by developing its own intellectual properties.

The Group dedicates its efforts to promoting the research and development of green products with high technology, and has set up a technical centre to support research and development activities and build research and development capacities. During the Reporting Period, the Group invested a total of RMB 23,278,900 in research and developopment, and acquired 18 new patented. As at the end of the Reporting Period, the Group has acquired a total of 198 patented technologies. The audit department of the Group is responsible for protecting intellectual property rights and providing legal training for technical personnel to enhance their knowledge and awareness of rights protection. Conch Venture will continue to promote the policy and practice of intellectual property protection, improve the awareness of intellectual property protection and management process, and reasonably protect the intellectual property rights of the Company and its customers. Through multi–departmental cooperation and internal reviews, the Group actively safeguards its intellectual property rights and interests and also encourages its partners, customers and third parties to participate in protecting intellectual property rights.

#### 3. Customer relationship management

Apart from maintaining the existing customer base, the Group continuously develops potential customers. The principle of customer relation management is to market truthfully and communicate proactively. We constantly improve products, services and solutions to meet customer needs. To this end, the Group attaches great importance to customer feedback and regularly conducts customer satisfaction surveys and other forms of communication to identify product and service problems of the Group, timely adjust marketing strategies, and continuously improve the quality of products and services. The questionnaire survey of 11 post–processing customers in the new building materials segment in 2018 showed an average satisfaction rate of 95.3%. To address the major problems reflected by the customers in the survey, practical improvement measures were formulated, including improving communication and visiting efficiency, shortening customised processing time, and making use of separate warehousing to dispatch goods to meet supply.

In order to adjust and improve marketing strategies and formulate sales policies and prices, the sales departments of the Group and its subsidiaries are responsible for collecting statistics about customer needs, collecting various

kinds of market information, and forming management opinions on sales market information. Relevant personnel are required to strictly protect the information collected during customer communication and market information, so as to effectively protect customers' information and privacy. Conch Venture has always been committed to being a fair and reliable partner and building harmonious customer relationship for sustainable development.







### 3.7 Anti-corruption

Compliance with laws and abiding by business ethics are the endogenous motivation and fundamental guarantee for the long-term healthy development of Conch Venture. The Group is committed to disseminating messages of anti-corruption and anti-commercial bribery to every employee through various channels. Every member of the Group, from senior management, managers to employees at the grass-roots level, recognises that "those without integrity will achieve nothing". The Group has taken precautionary measures to fully intervene and prevent any possible occurrence of corruption without an exception or tolerance.

The Group strictly abides by the laws and regulations of the place where it operates and the compliance standards and norms formulated by the Group such as the Ethics Guide, the Anti–Corruption Policy and the Gift and Entertain– ment Policy, and has established relevant organisations and systems and formed a systematic management and supervision mechanism to ensure fair and just operation, eliminate corruption, reduce risks, and create a business environment of good faith and harmony.

To tackle fraud in high-risk areas such as procurement, the Group has put forward the Administrative Measures for Complaints and Whistleblowing (《投訴舉報管理辦法》), the Regulations on Risk Management and Internal Monitoring (《風險管理及內部監控工作若干規定》), the Management Measures for Procurement Bidding (《採購招標管理辦 法》), the Tentative Measures for the Administration of Material Supply (《物資供應管理暫行辦法》), the Regulations on Internal Audit (《內部審計工作規定》) and the Regulations on Contract Management (《合同管理辦法》), etc., with reference to relevant national laws and regulations and based on practical experience. At the same time, a firewall against corruption has been established through complete internal control: In respect of policy design, risk management and internal monitoring systems are established, and a check-and-balance mechanism governing the division of labour and authority of each secondary department has been implemented to lower or even eliminate the chances of any misconduct.

In respect of team formation, a two-way exchange or rotation system for key positions is adopted to ensure the effective operation and continuous improvement of the punishment and prevention system.

In respect of supervision and management, the audit department is established to supervise various work and carry out regular, special and daily audits. Reporting channels are also established, through which all staff have the right to report any violation of laws and regulations and any damage to the Group's interests to the management or relevant departments of the Group.

For anti-corruption, the Group insists on the philosophy of "prevention and promotion first". Through classroom training, the Group has effectively promoted anti-commercial bribery. During the Reporting period, the Group held five compliance training sessions with 140 participants. We communicated face-to-face with new employees, newly promoted personnel and senior and middle-level leaders to promote the concept of compliance and internal control, and applied compliance and internal control to all aspects of daily work. In the year, Yaobai Environmental organised special integrity education activities. The Party branch of the Company organised teams and key position holders to read out and sign a Letter of Commitment to Integrity. Conch Venture organised employees to watch the "Role Model 3" movie in order to promote anti-corruption and strengthen integrity through multimedia means.

The corporate culture and remuneration packages have been designed to mobilise every member of the Group to work with the spirit of ownership, exercise strict self-discipline and resist all kinds of temptations that may be harmful to the interests and reputation of the Group. The Group conducts staff education internally to strengthen their awareness of compliance, and works with partners externally to achieve win-win results in the future.

Through the above anti-corruption measures based on laws, systems and incentives, Conch Venture has promoted integrity among the management and employees to deter, undermine, and discourage corruption. During the Reporting Period, the Group conducted internal audit on seven of its subsidiaries/projects and did not find any corruption incident.

### 3.8 Community Investment

Enterprises benefit from communities and shall in return bring benefits to communities. As a responsible corporate citizen, Conch Venture, while focusing on its growth, takes building a green, healthy and prosperous community ecology as an important corporate social responsibility. With its professional expertise and economic strength, Conch Venture strives to improve the quality of life near production bases and in project locations, and improve living conditions and standards for vulnerable groups in the society as needed.

"Targeted" has become an important parameter to measure the performance of corporate social responsibility. Supporting the government in targeted poverty alleviation represents an effective use of corporate resources. The Group calls on its subsidiaries to actively participate in local charitable activities to fulfil the social responsibility as a large enterprise and help with local development. Upon knowing the difficulty of the local poverty relief mission, Huang Haibin, the Vice General Manager of HQ Environment, and Sun Youzhong, the Assistant of General Manager, timely appealed for donations among the staff to raise a total of RMB6,801 in October 2018 for targeted poverty alleviation and better production and life of the needy.

Party members fully played the vanguard and exemplary role in serving and contributing to communities. Various subsidiaries of the Group participated in the "1 July" poverty relief activities. Conch Venture Holdings and CV Investment joined Wuhu Municipal Human Resources and Social Security Bureau in the "1 July" poverty alleviation activities in Wucheng Cangtou Community, Wuwei County, Wuhu City, and paid visits to some households, Party members and community workers with financial difficulties.

Conch Venture focuses on community needs and seeks joint development with the community. With its industrial expertise, the Group capitalises on the technology of cement kiln collaborative treatment and grate furnace municipal waste power generation to help local governments of the places where it operates with centralised harmless treatment of municipal waste collected by and transferred from relevant government departments, so as to resolve the problems of land occupation and environmental pollution by municipal waste landfills.

In November 2018, Huoqiu Conch Venture set up the first environmental protection education base of the Group, open for both internal and external visit, free of charge. As of the end of the Reporting Period, 150 people from seven units had visited the base. Through education on science and technology, we have raised the public's awareness of environmental protection and won their understanding of and support for environmental protection projects, creating favourable public opinions on environmental protection projects beneficial to the country and the nation and promoting the social welfare notion of "sharing both joy and sorrow with the disadvantaged and prospering together with the society".

Tree planting and voluntary blood donation are the traditional voluntary community activities that the Group has been organising for many years. In 2018, more than 100 people from our subsidiaries, including Yanshan Conch Venture , Huoqiu Conch Venture and Jinzhai Conch Venture, participated in the voluntary tree planting for the community to help create a green community environment.

Community to the Company is what water to fish. The Group has actively carried out public welfare activities such as targeted poverty alleviation, assistance provision, public facilities improvement, community greening, voluntary blood donation to contribute to a harmonious community. As a corporate citizen, we recognise that our strength is insufficient to drive society development, and participation of stakeholders is needed. Therefore, we join hands with all stakeholders to build our community, to deliver happiness, affection and warmth to people, and to try our best for the harmonious development of society and the improvement of living quality.



# DEFINITIONS

Terms	rms Definitions		
Dioxin	A colourless, odourless and highly toxic fat soluble substance which has a high melting point and is stable and difficult to dissolve in water but soluble in most organic solvents. Thus, dioxins tend to accumulate in living organisms and are harmful to human body.		
Fibre cement panel	Fibre cement panel refers to panel made of cement, being the basic material, and adhesive, reinforced with mineral fibre cement and other fibres, through pulping, moulding, curing etc. It is widely used as fire–retardant materials for cable work in power plants, chemical enterprises and other power–intensive activities as well as indoor decoration of shopping malls, hotels, guesthouses, halls, canopied garment market, light engineering market, theatres and other public premises.		
Collaborative treatment of municipal waste by cement kilns	A technology innovated and developed by the Company for the purpose of municipal waste treatment. It is an ideal alternative to traditional landfill treatment method that takes up large area of lands and results in environment pollution. This technology is the first of its kind in the world, which, without classification of wastes, enables degradation of dioxins without producing any undesirable odours and allows solidification of heavy metals and purification of sewage at the same time.		
Nitrogen oxides (NOX)	Includes a number of compounds such as nitrous oxide ( $N_2O$ ), nitric oxide ( $NO$ ), nitrogen dioxide ( $N_2O_2$ ), dinitrogen trioxide ( $N_2O_3$ ), nitrogen tetroxide ( $N_2O_4$ ) and dinitrogen pentoxide ( $N_2O_5$ ), etc. Except for $NO_2$ , all other NOX variants are extremely unstable and, when exposed to light, moisture or heat, are liable to converting into $NO_2$ and $NO$ , and then from NO into $NO_2$ . Therefore, the gas to which workers are exposed in the working environment is usually a mixture of several types of gas, which is called smoke (gas) and is mainly composed of nitric oxide and nitrogen dioxide, with nitrogen dioxide being the main component. Nitrogen Oxides are all toxic to a varying degree.		
Vertical mills	An ideal large–scale grinding equipment, widely used in cement, power, metallurgy, chemical, non–me– tallic minerals and other industries. It integrates crushing, drying, grinding, grading and conveying, and has high production efficiency. It can grind bulk, granular and powdered raw materials into the inquired powdery materials.		
Greenhouse gases	Includes carbon dioxide ( $CO_2$ ), methane ( $CH_4$ ), nitrous oxide ( $N_2O$ ), hydrofluorocarbons (HFCs), perfluo–rocarbons (PFCs) and sulphur hexafluoride ( $SF_6$ ).		
Residual heat power generation	A technology converting residual heat in production process into electricity. It facilitates energy conservation and environmental protection. Key equipment for the technology is residual boiler, which produces steam for power generation through the use of heat sources or inflammable substances such as waste gases and waste liquor.		
Grate furnace	A kind of waste incineration technology. There are various forms of rate-type incinerators. The greatest advantages of this type of furnace are technologically mature, stable, reliable and widely applicable. Most solid wastes can be directly incinerated in furnace without any pre-treatment.		
Reusable water Reusable water, also known as recycled water, whose quality is higher than sewage but lower running water. It is non-drinkable water which has been purified and achieved national standard can be used within a certain range such as cityscape and daily life.			

# ESG GENERAL DISCLOSURE REFERENCE LIST

ESG index	Key performance	Description	Page	Note
	Environment			
A1	Emissions	Policies on waste gas and greenhouse gas emissions, discharge into water and land, generation of hazardous and non-hazardous wastes, etc.; and compliance with the relevant laws and regulations that have an important impact on the issuer.		2.1
A2	Utilisation of resources	Policies on efficient use of resources (including energy, water and other raw materials).		2.2
A3	Environment and natural resources	Policies on minimising impact on the environment and natural resources made by the issuer.		2.3
	Society			
B1	Employment	Policies on remuneration and dismissal, recruitment and promotion, working hours, holidays, equal opportunity, diversity, anti-discrimination as well as other benefits and welfare; and compliance with the relevant laws and regulations that have an important impact on the issuer.		3.1
B2	Health and safety	Policies on providing a safe working environment and protecting employ- ees from occupational hazards; andcompliance with the relevant laws and regulations that have an important impact on the issuer.		3.2
В3	Development and training	Policies on improving employees' knowledge and skills in performing their duties. Description of training activities.		3.3
B4	Labour standards	Policies on preventing child labour and forced labour; and compliance with the relevant laws and regulations.		3.4
B5	Supply chain management	Policies on managing environmental and social risks of supply chain.		3.5

# ESG GENERAL DISCLOSURE REFERENCE LIST

ESG index	Key performance	Description		Note
	Society			
B6	Product liability	Policies on health and safety, advertising, labelling and privacy relating to products and services provided as well as remedial measures; and compliance with the relevant laws and regulations.		3.6
В7	Anti-corruption	Policies on preventing bribery, extortion, fraud and money laundering; and compliance with the relevant laws and regulations.		3.7
B8	Community investment	Policies on community engagement to understand needs of the communi- ties where the issuer operates and to ensure its business activities take into consideration the communities' interests.		3.8

